

# Sustainability Report 2010





# Enel Sustainability Report 2010

During the reprinting process of this Report, Enel has been rewarded with the maximum application level of the GRI guidelines. Therefore the Global Reporting Initiative recognized the “A+ checked” level for the application of the GRI-G3 & EUSS standard.



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# Letter to our stakeholders



Enel is one of the world leaders in energy. Thanks to the dedication of more than 78,000 people, we are now an integrated Group operating along the entire electricity value chain in 40 countries.

The international expansion that we have experienced in the last few years has strengthened our conviction that the only way to ensure the success of our projects is to make them an opportunity for growth for both us and the entire community around us. Our development plans are assessed not only in terms of the economic return for the Company, but also for the benefits they can create for all our stakeholders. We believe that the real indicator of success for an energy utility is to always act both responsibly and ethically by keeping the social value of our actions clearly in mind.

Sticking to these criteria requires all the talent and day-to-day commitment of everyone in our Group. It requires a consistent and ambitious strategy based on three lines of action: innovation and excellence as drivers of sustainable growth and transparent reporting of all our activities.

## Innovation for sustainable growth

One of the great challenges that humanity must face in the coming years is to have at its disposal sufficient energy for the economic growth that is enabling millions of people to rise above the poverty threshold, while producing this energy in an environmentally sustainable way. Enel's growth objectives are based on a sustainability strategy that combines, on the one hand, the responsibility of ensuring secure and sufficient energy to meet the demand, which is increasing and shifting according to changes in the global economy, and on the other the necessity of responding to the challenge of climate change by making an essential contribution to the drastic reduction of polluting emissions. We are convinced that operating excellence and technological innovation are the most efficient levers for making this balance possible. Our commitment is therefore addressed to the key fields of energy innovation: from renewable energy sources, energy efficiency, and energy accumulation to the reduction of emissions by conventional technologies, smart grids, and electric mobility.

On the renewable energy front, Enel Green Power remains a world leader in the industry, among other things thanks to the reorganization that preceded its listing on the stock exchange. The Enel Group's installed renewable capacity in Europe and the Americas (hydro, geothermal, wind, photovoltaic, and biomass) already exceeds 34 GW, out of the Group's total capacity of about 97.3 GW.

Also important is our commitment to make conventional energy sources "clean". With a plan for investing almost a billion euro in technology in the period 2011-2015,

we are increasing the energy efficiency of our thermal production and trying out the most promising technologies for capturing and storing CO<sub>2</sub>. We recently inaugurated in Brindisi the largest pilot plant in Europe of this technology, whose development will enable us to continue to use an indispensable source like coal by drastically abating its emissions.

We shall continue to concentrate on zero-emissions technologies and the improvement of traditional sources, with the goal of increasing the share of our generation that does not produce greenhouse gases, which is already about 45%. Meanwhile, and until we have become an industry that is “neutral” with regard to CO<sub>2</sub> emissions, we shall continue to partially compensate for them through the introduction of projects and best practices in Eastern Europe and in less developed countries, using the mechanisms introduced by the Kyoto Protocol (the Clean Development Mechanism and Joint Implementation), in the adoption of which the Group is a global leader.

Our commitment to innovation for sustainability does not end with the generation of electricity. Enel is also a benchmark for smart grids, whose spread will enable us to evolve towards an integrated and multi-directional distribution system that is able to manage the interactions between producers and consumers of energy in real time. Smart grids will ensure more balanced distributed generation and will allow customers themselves to become producers of clean energy. Thanks to the 33 million electronic meters that have been installed in Italy since 2001 and the 13 million that are being installed in Spain, Enel has already put in place – ahead of the other companies – an important component of the infrastructure that will make possible the development of active grids and has begun to provide post-meter services aimed at getting customers to use energy more responsibly and rationally.

The objective of sustainability also regards the streets of our cities. For this reason Enel is laying the foundations for a radical change in the way we move around on them. With our E-Mobility Italy project in Italy and MOVELE project in Spain, we are constructing the recharging infrastructure that will allow people in 6 large Italian and Spanish cities to use zero-impact electric cars.

Responsibility also means using innovation to improve the living conditions of the poorest communities. Electricity is an extraordinary driver of growth and prosperity. For this reason we believe it is our duty to cooperate with the governments of the countries in which we are present to close the energy gap separating the 1.4 billion people in the world who still lack access to electricity. Among the numerous innovative solutions that we have tested, the Ecoelce project in Brazil stands out. Recognized by the UN's 2008 World Business and Development Awards as one of the 25 most sustainable innovations of the last 25 years in the country, the project enables recyclable waste to be “exchanged” for discounts on electricity bills, thus encouraging responsible waste management, while at the same time providing financial support for families.

## Excellence and growth inside the Group

If we want to be engines of innovation in the world that surrounds us, we must first of all be bearers of change ourselves, and therefore focus above all on a strong and shared Group identity that is able to generate value from diversity and sees in integration a powerful engine for disseminating the best practices. The founda-

tions of this culture are those that have characterized Enel for many years: a policy of operating excellence, service quality, and the improvement of results, together with the utmost concern for the protection of the safety of the people who work at and with Enel.

On the last aspect we have set ourselves the most ambitious goal possible, which requires the utmost commitment of everyone, at every level of our organization: to become a Zero accidents company. To achieve it, numerous detailed, cross-company safety projects have been initiated throughout the Group with excellent results, which have created over the years a constant trend of decreasing injury rates. In effect, injury frequency decreased by about 23% with respect to 2009, while the seriousness rate fell by 7%.

## Transparency and accountability

In addition to the potential provided by technology and our efforts to boost the internal growth of the Group, our commitment to sustainability is also focused on the transparency of our corporate actions, which is ensured by a strict corporate governance system and a solid reporting system based on rigorous criteria of objectivity. In effect, the Group's Sustainability Report achieves the A+ level of compliance with the sustainability reporting guidelines of the Global Reporting Initiative (GRI). In keeping with our vision, according to which sustainability consists in the combination of economic, social, and environmental aspects, we have initiated a process that in time will lead us to develop a single reporting system for the Group, in which the economic and financial indicators are integrated with the sustainability ones. In this way, all our stakeholders will have an increasingly integrated view of the Company's overall performance and value. This will be a decisive step and will confirm the integration of sustainability in our way of doing business, which is already recognized by the "ethical" funds among our institutional shareholders (about 17% of the institutional floating capital at the end of 2010) and our presence in the prestigious Dow Jones sustainability indexes for the seventh year in a row. Furthermore, in January 2011 Enel became part of the Global Compact LEAD. This initiative of the United Nations' Global Compact brings together the 56 best companies in the world, which are benchmarks for economic, social, and environmental sustainability.

Precisely the ambition to constitute a benchmark and the courage to assume one's share of responsibility in facing the challenges of global development must guide our day-to-day work to supply reliable, efficient, and sustainable energy. In effect, it is the task of a responsible large company like ours to open new routes to the prosperity of the future and ensure that the energy we produce is the energy of change towards a sustainable future.

Chairman  
*Piero Gnudi*



Chief Executive Officer  
and General Manager  
*Fulvio Conti*







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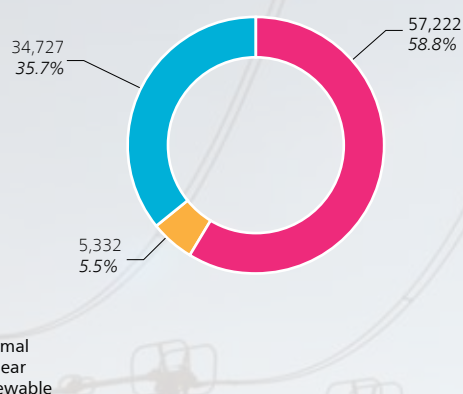


Our I. D.

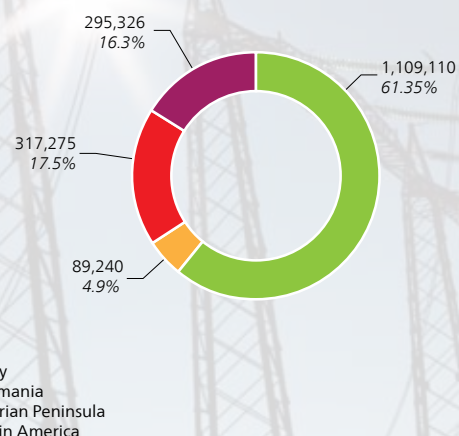


# Our businesses

Total installed capacity 2010 (MW)



Length of distribution lines by country 2010 (km)



## Generation

Electricity generation takes place through a number of technologies which exploit conventional and renewable energy sources. Enel produces electricity in 23 countries with a **balanced mix of sources**, in which renewable ones (hydro, wind, geothermal, biomass, photovoltaic, etc.) play a major role and fossil fuels are diversified among coal, oil, and gas (simple and combined-cycle).

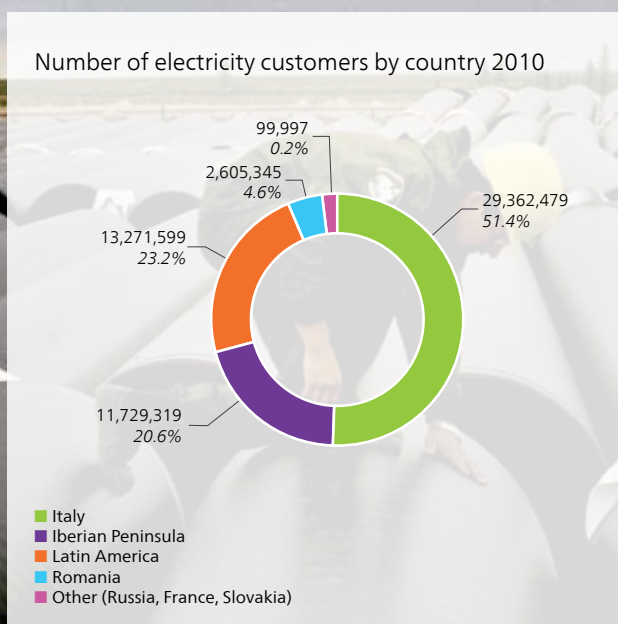
Total Group net efficient power as of December 31, 2010 amounted to 97,281 MW. Our generation plants produced more than 290.2 TWh of net electric energy in 2010.

## Distribution

Thanks to 1,810,950 km of lines on two continents, the Group's distribution companies transport electricity for more than 59 million end users in Italy, Romania, the Iberian Peninsula, and Latin America.

The electric power transported on the Enel Group's distribution network in 2010 amounted to 430.5 TWh, with 245.9 TWh in Italy and 184.6 TWh abroad.





## Sales

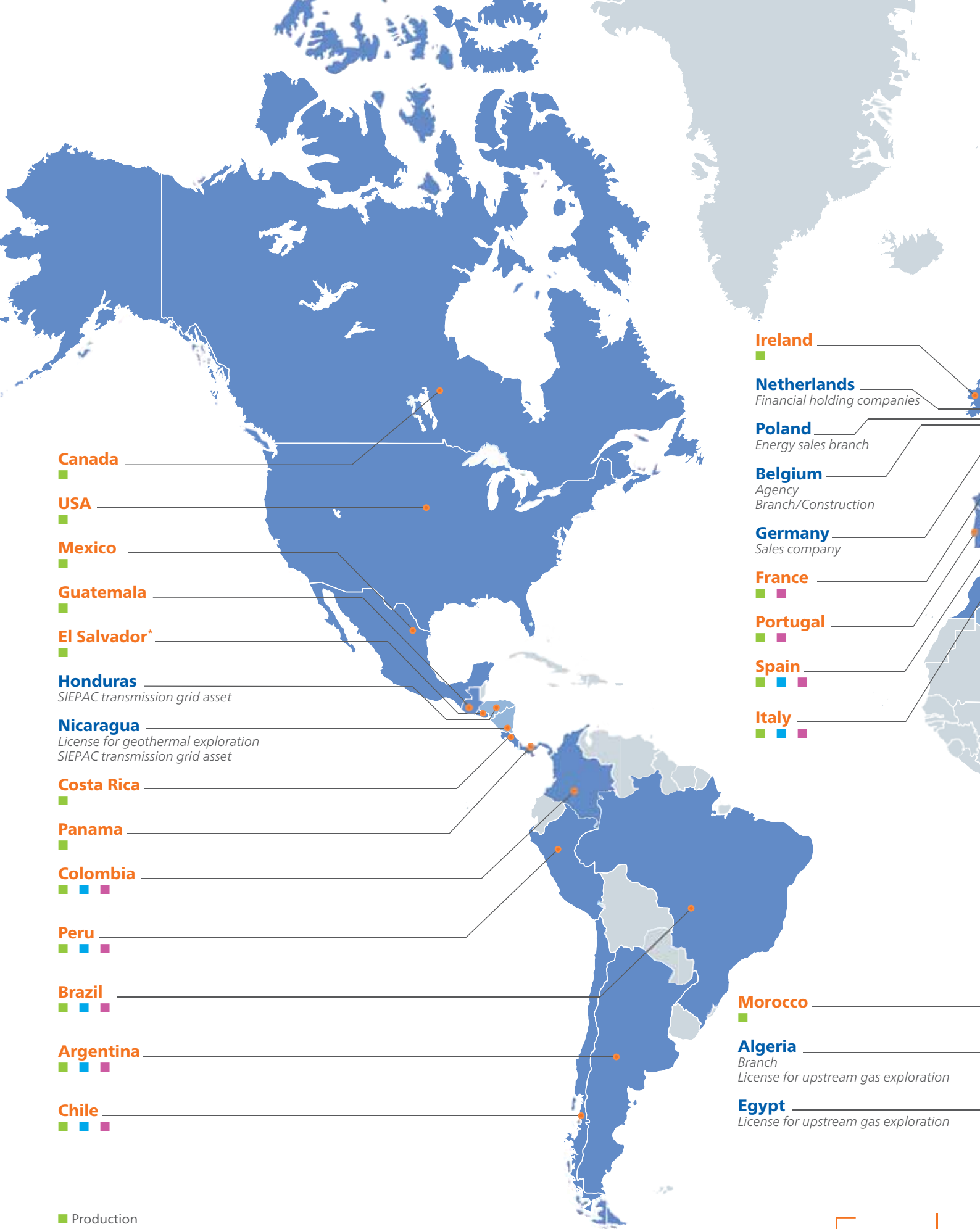
Enel sells electricity in 12 countries. The Group's sales companies do business on both the regulated market, with restricted rates, and the free market, and thus respond to all the needs of the Group's 61,055,278 customers, of whom 57,068,738 are in the electricity market and 3,986,540 in the gas market.

In 2010 the Enel Group sold 309 TWh of electricity, an increase of 21 TWh (+ 7.3%) with respect to 2009. Gas sales to end customers amounted to 8.9 billion cubic meters, a 15.6% increase with respect to 2009.

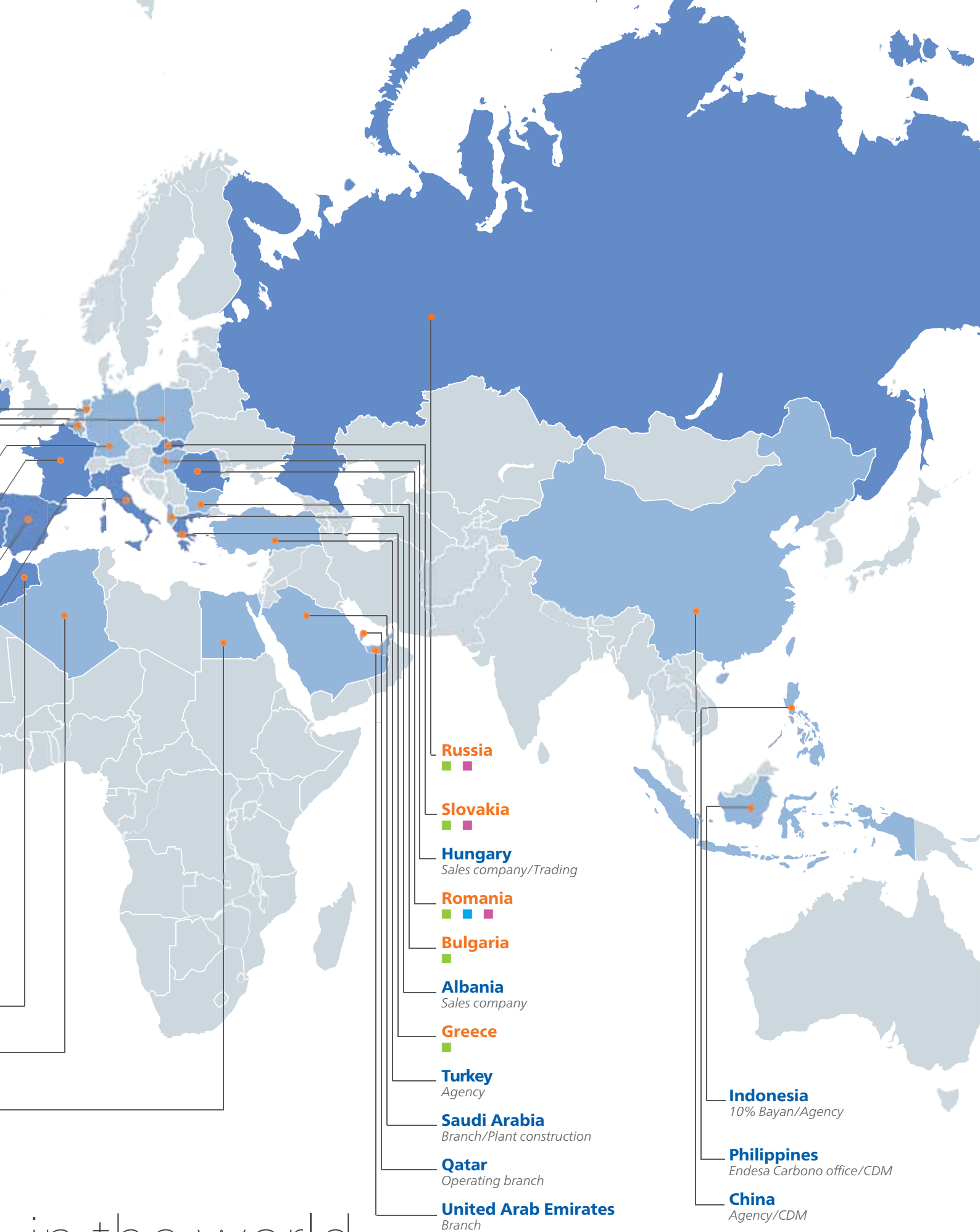
## Upstream

In 2007 Enel started on a path of vertically integrating its supply chain, to the point of even directly exploring gas fields. This integration will enable us to form more solid relationships between producers and end customers by ensuring greater competitiveness, security, and flexibility in supply.

Russia is the first country in which the Company created a vertically integrated presence and when everything is fully operational will produce half the gas burned in their own power plants. Other licenses to explore for gas are active in Algeria, Egypt, and Italy.

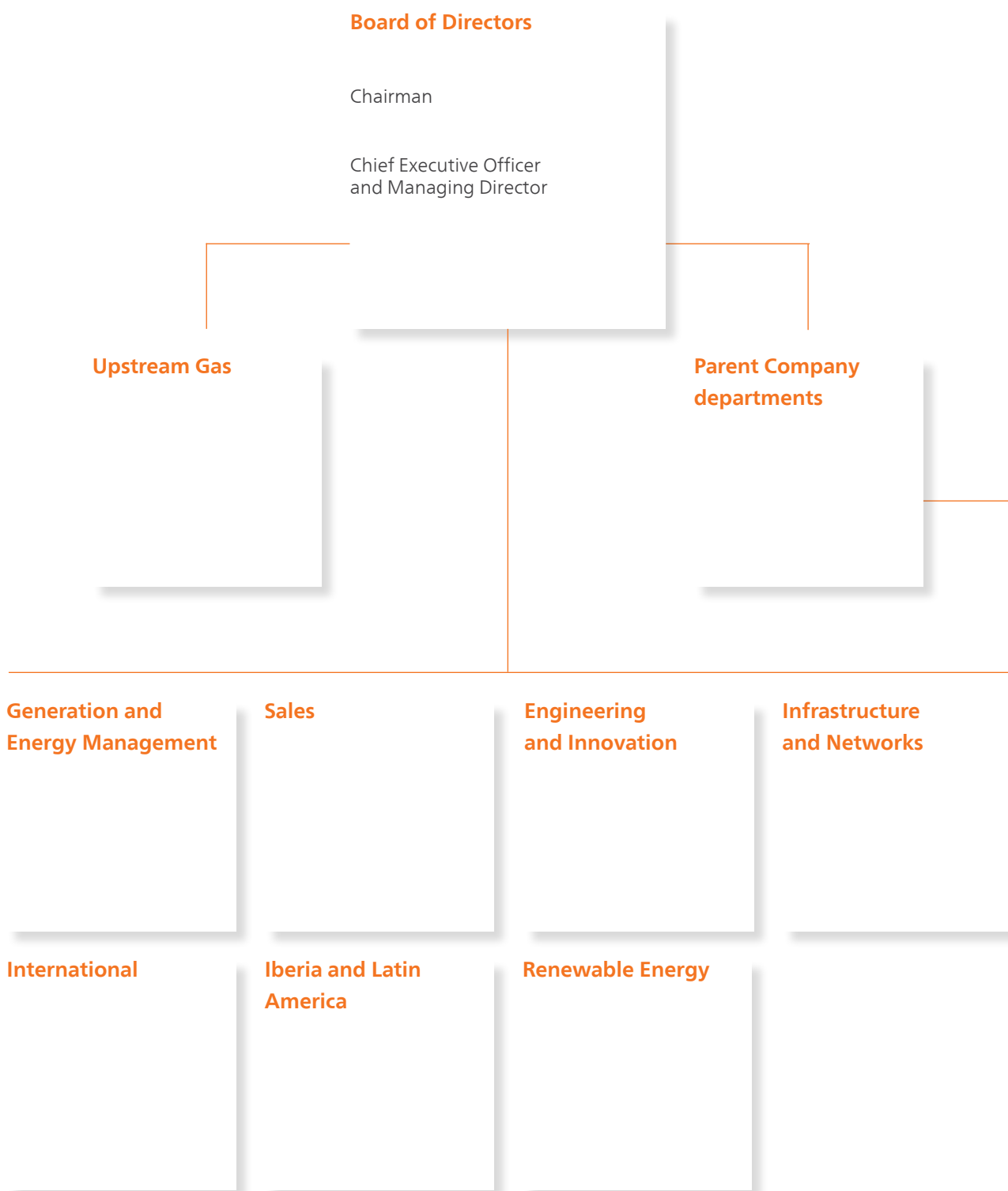


Enel



in the world

# Group organizational chart



Procurement and Services

Regulations,  
Environment,  
and Carbon Strategy

External Relations

Accounting,  
Finance, and Control

Group Risk  
Management

Audit

Information and  
Communication  
Technologies

Legal

Personnel and  
Organization

Corporate Affairs

# Group structure

## Parent Company

**Enel SpA**

### Sales

Enel Servizio Elettrico  
Enel Energia  
Vallenergie

### Generation and Energy Management

Enel Produzione  
Enel Trade  
Enel Trade Hungary  
Enel Trade Romania  
Nuove Energie  
Hydro Dolomiti Enel  
SE Hydro Power  
Enel Stoccaggi  
Enel Longanesi Development  
Sviluppo Nucleare Italia

### Engineering and Innovation

Enel Ingegneria e Innovazione

### Infrastructure and Networks

Enel Distribuzione  
Enel Sole  
Deval  
Enel M@p

### Iberia and Latin America

Endesa

### International

Slovenské elektrárne  
Enel Maritza East 3  
Enel Operations Bulgaria  
Enel Distributie Muntenia  
Enel Distributie Banat  
Enel Distributie Dobrogea  
Enel Energie Muntenia  
Enel Energie  
Enel Productie  
Enel Romania  
Enel Servicii Comune  
RusEnergosbyt  
Enel OGK-5  
Enel France  
Enelco  
Marcinelle Energie

### Renewable Energy

Enel Green Power  
Enel.si  
Enel Latin America  
Enel Green Power España (formerly Endesa Cogeneración y Renovables)  
Enel Unión Fenosa Renovables  
Enel Green Power Romania  
Enel North America  
Enel Green Power Bulgaria  
Enel Green Power France (formerly Enel Erelis)  
Enel Green Power Hellas <sup>(1)</sup>

### Services and Other Activities

Enel Servizi <sup>(2)</sup>  
Enelpower  
Enel.NewHydro  
Enel.Factor  
Enel.Re

(1) In 2010 includes the data of International Wind Parks of Thrace, International Wind Power, Wind Parks of Thrace, Hydro Constructional, International Wind Parks of Crete, International Wind Parks of Rhodes, International Wind Parks of Achaia, and Glafkos Hydroelectric Station.

(2) In 2010 includes the data of Sfera.

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## The Sales Division

has the mission of promoting Enel's presence in the end market for electricity and gas in Italy, developing an integrated offer of products and services addressed to the different kinds of customers, and ensuring that the quality level of the commercial service is maintained.

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## The Generation and Energy Management Division

has the mission of producing electricity in Italy at a competitive cost while respecting the environment.

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## The Infrastructure and Networks Division

has the mission of ensuring the distribution of electricity and gas in Italy and optimizing the networks, as well as ensuring the efficiency of the metering systems and observance of the quality level of the technical service.

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## The Iberia and Latin America Division

is responsible for the development, presence, and coordination of Enel's activities in the electricity and gas markets of Spain, Portugal, and Latin America, as well as for the formulation of the strategy for development in regional markets of interest.

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## The Engineering and Innovation Division

has the mission of managing for the Group the engineering processes regarding the development and construction of generation plants, ensuring the achievement of the qualitative, temporal, and economic objectives assigned. It is also entrusted with coordinating and integrating the Group's research activities, handling the scouting, development, and promotion of opportunities for innovation in all the Group's business areas, with particular regard to the development of initiatives with great environmental value.

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## The International Division

has the mission of supporting Enel's international growth strategy, consolidating the management and integration of its businesses abroad – with the exception of the Spanish, Portuguese, and Latin American markets and the activities regarding renewable energy included in the Renewable Energy Division – and monitoring opportunities for acquisitions that appear in the electricity and gas markets.

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## The Renewable Energy Division

has the mission of developing and managing the activities of energy generation from renewable sources, while ensuring that their integration in the Group is consistent with Enel's strategies.

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## The activities of the operating Divisions

are supported by the "Parent Company" and "Services and Other Activities" areas, which operate with the objective of promoting Group synergy and optimizing the management of services supporting the core business.

# The numbers of energy

Enel Group

Operating  
results

Economic  
results

Countries

40<sup>(1)</sup>

Net electricity production

290.2

TWh

Revenue

+14%<sup>(2)</sup>

Continents

4

From renewable sources

31.8%

EBITDA

+6.8%<sup>(2)</sup>

Subsidiaries and affiliated  
companies

850

Electricity transported  
on the distribution network

430.5

TWh

SRI funds among institutional  
shareholders

16.9%<sup>(3)</sup>

**Data as of December 31, 2010.**  
**Percentage changes are expressed**  
**with respect to 2009.**

(1) Includes all the countries in which there is at least one MW or in which there is sales activity. The countries in which Enel has business relations, projects in progress, or agencies are also included. El Salvador, where Enel has an unconsolidated partnership with LaGeo, is also included.

(2) The 2009 values were reclassified following the 2009 income statement restatement in consequence of the application of several new accounting principles (IFRIC 12 and IFRIC 18) and the termination of the process of purchase price allocation on the acquisition of 25.01% of Endesa's capital.



## Sales

Electricity and gas customers

61.1  
million

Countries in which Enel sells  
electricity

12

Volume of electricity sold

309  
TWh

## Environment

Specific emissions of CO<sub>2</sub>

-5.7%<sup>(4)</sup>

Fuel consumption

-2.7%

Withdrawal of internal water

-5.5%

## People

Total personnel

78,313<sup>(5)</sup>  
People

Employed in Italy

47.7%

Injury rate

-22.8%

(3) Calculated since February 2010 on the number of shares identified as belonging to institutional investors. (Not all institutional investors are identified as SRI).

(4) Calculated considering the total emissions from simple thermal production and the combined production of electricity and heat with respect to the total renewable, simple thermal, nuclear, and combined electricity-heat production (including the contribution of the heat in MWh equivalent).

(5) Includes 2,324 employees regarding the boundary classified as "owned for sale" as of December 31, 2010 (1,330 employees as of December 31, 2009).

# A sustainable year



8

february

**The first Sustainability Day is held.**

Several of the greatest international experts meet in Rome to promote the culture of responsibility through a global discussion.

7

march

**Endesa: energy from algae.** This is a pilot project for absorbing CO<sub>2</sub> with microalgae and producing energy in the form of biomass. Endesa inaugurated it at its thermal power plant in Carboneras (Almería).

22

february

**"Meters and More" is born.** Upon Enel's and Endesa's initiative, the non-profit international association that promotes smart meters and the creation of a universal standard is born.

16

march

**Performance reviews begin.** For the first time the system that annually evaluates employees' behavior and the results they have achieved is extended to Italian white-collar workers. In all, about 4,000 evaluators will evaluate about 30,000 employees.

27

february

**Chile is devastated by an earthquake.** At 3:40 a.m. an earthquake with an intensity of 8.8 on the Richter scale strikes Chile. Enel and Endesa are in the forefront to restore service and collect funds.

23

march

**EGP in Desertec.** Enel Green Power joins Desertec, an initiative that aims to develop a network of solar and wind plants in North African and Middle Eastern countries to produce 15% of European requirements by 2050.



25  
march

**The first Italian Smart Grid Forum is held.** The discussion in Rome is about smart grids, distributed generation, electric vehicles, and consumers of the future. Enel contributes the experience it has acquired at the international level thanks, among other things, to the EU's ADDRESS Project.

15  
april

**Screening by breathing.** Enel presents Elsa, a system for diagnosing respiratory diseases, which was developed by the Company and the Pisa ASL (local health service). The idea comes from instruments used in power plants.

1  
april

**A national workshop on conciliation.** This is the second meeting with consumer associations to discuss on-line conciliation, which has allowed more than 1,000 disputes to be settled in one year.

9  
may

**Voler bene all'Italia.** Enel Green Power supports this event organized by Legambiente to promote the identities and innovations of small Italian municipalities.

26  
may

**Rethink. Rebuild. Report.** Enel attends for the first time the Global Conference on Sustainability and Transparency, organized by the GRI in Amsterdam.

1  
june

**The first green embassy, in Brasilia.** EGP equips the building with photovoltaic panels connected to the electricity grid. The objective is to produce at least 50 kWh, which would satisfy much of the Italian embassy's requirements.

12  
july

**The first hydrogen-fired industrial plant in the world.** Inaugurated in Fusina, it will produce "clean" electricity amounting to the annual requirements of 20,000 families, while avoiding more than 17,000 tons of CO<sub>2</sub> emissions a year.

**Environment Week.** In the International Year of Biodiversity, Enel participates in the largest annual European event on environmental policy, organized in Brussels by the European Commission.

14  
july

**Inauguration of the "Archimede" power plant.** Inaugurated in Priolo Gargallo (Siracusa province), the thermodynamic solar plant is the first in the world to use the molten-salt technology integrated in a combined-cycle plant.

7  
june

**The economy is women.** Avivah Wittenberg-Cox, an expert on gender issues, explains at the Enel Auditorium her female governance model as a response to the economic crisis.

27  
july

**The Italian Nuclear Forum is born.** Enel is one of the founders of this forum, which promotes discussion of nuclear energy among citizens, businesses, and institutions.

23  
june

**The electronic meter speaks Spanish.** Endesa installs in Malaga the first smart meter based on Enel technology. In the next six years more than 11 million Spanish customers of the company will be connected.

9  
september

**Dow Jones Sustainability Index.** For the seventh year in a row, Enel is included in the prestigious Dow Jones Sustainability STOXX Index and the selective Dow Jones Sustainability World Index.

7  
july

**Union makes leadership.** The new Carbon Strategy Unit is born with the integration of Endesa's and Enel's teams operating on the world market of CO<sub>2</sub> credits. The two companies are already world leaders in this field.

22  
september

**Ethics and Enterprise Award.** At the 2010 Ravello Festival Enel receives the Ethics and Enterprise Award for the "Sustainable Development" category.

**Conciliation for small and medium enterprises.** Enel, CNA, Confagricoltura, Confapi, Confartigianato Imprese, Confcommercio-Imprese per l'Italia, and Confesercenti sign an agreement to implement the equal-representation conciliation procedure.

23  
september

**Award-winning meters.** Enel is a world leader in electronic meters, as confirmed by the 2010 European Utility Awards for the best projects promoted by European technological companies.

4  
october

**CSR On line Awards.** Enel is one of the world's top ten companies in terms of online communication of corporate social responsibility. The ranking is drawn up by the Swedish firm Lundquist, which monitors the websites of 91 companies included in the Dow Jones Sustainability Index.

12  
november

**Conti meets Ban Ki-Moon.** The Secretary General of the UN meets our CEO during the G20 meeting in Seoul. During their talk Conti informs him of the Enel Group's willingness to join the Global Compact's LEAD program.

5  
october

**A Roadmap for Industry-Academia collaboration towards sustainability.** Enel is the only European company to participate in the workshop organized by the United Nations University founding a science of sustainability.

16  
november

**European Business Awards.** For the third year in a row, Enel is awarded the Ruban d'Honneur for sustainability.

14  
october

**Everyone has been rescued.** The last of the 33 miners trapped at a depth of six hundred meters in the San José mine in Chile is pulled out. An Enel Green Power squad also participated in the rescue operations.

25  
november

**GRI Organizational Stakeholder.** To investigate the development of sustainability reporting and the most significant experiences of integrated reporting. This is the purpose of the Global Reporting Initiative's Organizational Stakeholder Event, hosted for the first time in Italy by Enel.

23  
october

**An NIAF award for Fulvio Conti.** Enel's CEO and General Manager receives the National Italian American Foundation's "Special Achievement Award in International Business" in Washington.

1  
december

**"Contemporanea" at the MACRO.** The work of the Dutch duo Bik Van der Pol, the winners of the 2010 Enel Contemporanea Award, is exhibited at the new MACRO in Rome, which has just been inaugurated after the renovation.

4  
november

**Diversity and ability in the enterprise.** Enel hosts this CSR Manager Network Italia event, which is dedicated to discussion about issues of diversity management.

10  
december

**The World Energy Outlook.** The 2010 edition of the World Energy Outlook, the prestigious publication of the International Energy Agency (IEA), is presented at the Enel Auditorium in Rome.

11  
november

**Agreement on smart grids and CCS in South Korea.** Enel and Kepco, the largest South Korean electricity utility, sign an agreement in Seoul to develop cooperation on smart grids and CCS technologies.

21  
december

**Group Nuclear Policy.** The Board of Directors approves the Group Nuclear Policy, which gives absolute priority to the safety and protection of workers, the population, and the environment.



# Methodological Note

A photograph of a child running on a red architectural structure. The child is wearing a red shirt and shorts, and is captured in motion. The structure is made of red concrete or stone, with a large tree in the background. The scene is set in a park or garden area.

*Deep Garden* - Enel Contemporanea 2008  
Temporary pavilion created in the lagoon of Venice by the A12 group of artists  
A charming place where you can regain your vital energy

# How this Report was prepared

Information and further details can be requested from:

**Enel SpA**

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<http://www.enel.com/en-GB/sustainability>

## Objectives

Since 2003 Enel has published a Sustainability Report every year, in concurrence with the Group's Annual Report. The preceding one was published on April 29, 2010.

This edition of the Sustainability Report is meant to provide a more organic photograph of the Group's activities and characteristics, as well as the strategies and results of the year, through the "lens" of economic, environmental, and social sustainability as evidence of Enel's commitment to development that is compatible with the challenges of the world in which we operate.

In particular, the structure of the document has changed with respect to the previous year and provides for our sustainability performances to be reported in the body of the text, together with a transparent description of how the different issues are managed, while the tables contained in the appendix provide further details on the approximately 270 indicators monitored by Enel and their performance in the last three years (page 247).

The Sustainability Report is addressed to the stakeholders of the Enel Group (page 90) with the aim of providing evidence of the actions undertaken with regard to the Group's sustainability objectives and thus to respond to their legitimate expectations.

## Content

The Sustainability Report for the year ended December 31, 2010 was prepared in conformity with the Sustainability Reporting Guidelines and Electric Utilities Sector Supplement established in 2009 by the GRI – Global Reporting Initiative, as well as with the AA1000 Accountability Principles Standard (AA1000APS) issued by AccountAbility in 2008, and thus in accordance with the requirements of inclusiveness, materiality, and responsiveness to the legitimate expectations of our stakeholders. The 2011-2015 Sustainability Plan (page 39-45 of this Report) was specifically established in conformity with this standard.

The extent of the detail presented in reporting the different subjects depends on their weight in the Enel Group's objectives and strategies regarding its sustainability performance, as well as their importance for the Group's stakeholders as seen in the stakeholder engagement activities carried out, the evidence provided by the press review, and the requests of public opinion.

## Process

The CSR reporting process includes two essential steps:

- > sustainability planning and auditing, which lead to the identification and sharing of the objectives the entire organization must pursue, which are set forth in the Sustainability Plan (page 39-45)
- > sustainability reporting, which leads to formulating the indicators for the Sustainability Report.

The process of planning, auditing, and reporting sustainability takes place through the collection and processing of accounting and other data regarding specific key performance indicators (KPI). The sustainability KPI require the involvement of both Enel SpA (on cross-cutting topics) and the Group's divisions and companies (on specific topics of their area of activity).

Specifically, in the different organizational entities and professional families there are people in charge of collecting, checking, and processing the KPI concerned. The results are aggregated by the Accounting, Finance, and Control Department's Strategies Unit, which is entrusted with coordinating the entire process of collecting the quantitative data. The External Relations Department's CSR and Relations with Associations Unit is responsible for the qualitative parts and commentary on the results, as well as the coordination and preparation of the Sustainability Report.

The process of collecting the sustainability data is specified in both the Integration Handbook, a policy issued by Enel SpA dedicated to the description of the most important processes in terms of stages, roles, and responsibilities subject to coordination between Enel and the Group's international companies, and the Coordination Handbook, a policy with similar content, but whose scope of application is limited to Endesa. Furthermore, a single procedure for the entire Group will soon be issued, which will detail activities, roles, responsibilities, and timing.

The Sustainability Report is presented at the Company's Annual General Meeting, together with the Annual Report. To this end, the document is submitted for examination to the Internal Control Committee – which checks its completeness and reliability with the assistance of the Audit Department – and is approved by the Board of Directors.

In addition, a limited audit was performed on the document by KPMG SpA (the Report of the Auditors on the review of the Sustainability Report is included in the Appendix).

## Parameters of the Report

The data and other information contained in the 2010 Sustainability Report regard Enel SpA and the consolidated companies in the year ended December 31, 2010. In the text, by "Parent Company" is meant Enel SpA, while by "Group" or "Enel" is meant the set of companies controlled by Enel SpA.

For details on the consolidated companies, see the chapter on "Results by Division" in the Annual Report (page 84 to page 109). Specifically, the data regard the companies that are wholly consolidated in the Annual Report when they singly or in aggregate produce significant impacts concerning the specific indicator reported. Any limitations to the area of consolidation, the reasons, and action plans for the future are expressly stated on page 249 of this Report.

On the other hand, the affiliated companies – which in the Annual Report are valued with the equity method – and the other entities, including joint ventures, on which Enel exercises significant influence are included, if possible, in the calculation of the data in the same proportion as Enel's equity interest. Furthermore, if the same produce significant impacts, they are described in the disclosure on Management Approach.

Several divergences with respect to the numbers and comments can be traced back to changes in the Enel Group boundary in 2010, as reported in the "Significant events in 2010" section of the 2010 Annual Report (pages 22-29). Specifically, the following changes occurred in the Group's organization and composition, in Italy and abroad, with respect to the previous reporting period:

### Organizational changes

#### *Reorganization of renewable-energy activities in Spain*

- > The boards of directors of Endesa and Enel approved, respectively, on March 15, 2010 and March 17, 2010 a transaction that provides for the integration of the activities of ECyR (an Endesa company dedicated to renewable activities in Spain and Portugal, which has been renamed Enel Green Power España) and Enel Green Power (EGP) in the field of renewable energy in Spain and Portugal. The objective of the transaction is to ensure unified management under EGP of the development of all of EGP's and Endesa's activities in the field of renewable sources on the Iberian Peninsula.



This objective is being pursued through Enel Green Power España, 60% of whose capital is owned by EGP and 40% by Endesa after the aforesaid transaction.

## Changes in the Report boundary

### *Agreement Enel Green Power – Sharp – STMicroelectronics for the production of photovoltaic panels (3SUN joint venture)*

- > On January 4, 2010, Enel Green Power, Sharp, and ST-Microelectronics signed an agreement to construct the largest factory in Italy for the production of photovoltaic panels. This agreement was followed by the incorporation of the 3SUN joint venture, of which Enel Green Power owns 33%.

### *Sale of Endesa Hellas*

- > On March 16, 2010, Endesa reached an agreement with its partner Mytilineos Holding for the transfer of Endesa Hellas. Subsequently, on July 1, 2010, they finalized the transaction, which was subject to obtaining several licenses.

### *Agreement between Enel Produzione and SEL for the hydro field in Bolzano province*

- > Implementing the definitive agreement signed on October 20, 2009, on June 1, 2010 Enel Produzione and Società Elettrica Altoatesina ("SEL") incorporated SE Hydro Power, in which Enel Produzione and SEL own, respectively, equity interests amounting to 40% and 60% of the capital.

### *Sale of the transmission grids in Spain*

- > On July 1, 2010, Endesa reached an agreement with Red Eléctrica de España (REE) regarding the sale to a company controlled by REE of the electric-power transmission grids owned by Endesa Distribución Eléctrica, a company entirely owned by Endesa. The sale was finalized on December 13, 2010.

### *Sale of the gas transportation and distribution networks in Spain.*

- > As part of its project of optimizing its activities in the field of transporting and distributing gas in Spain, on September 24, 2010, Endesa reached an agreement for the sale of a controlling equity interest amounting to 80% of the capital of its subsidiary Nubia 2000 – a company incorporated in 2010, to which the assets of Ende-

sa Gas were contributed – to two infrastructure funds managed by Goldman Sachs. Endesa reserved the right to buy back such equity interest by exercising a specific call option between the fifth and seventh year from the closing of the transaction. On December 17, 2010, Endesa finalized the sale of a controlling equity interest amounting to 80% of the capital of its subsidiary Nubia 2000. The transaction included a 35% equity interest in Gas Aragón, which had been previously sold to Nubia 2000.

The effect of changes in the boundary on the economic data and the personnel is reported on page 60 ("Our 2010 results") and in the Performance Indicators (pages 258-298) of this Report. Any significant changes in the boundary or the method of calculating specific numbers are expressly noted in the text or in the tables in the Appendix, together with the effects produced on the final number.

The numbers are calculated precisely on the basis of accounting entries and Enel's other information systems, and are certified by the related persons responsible. The numbers determined through the use of estimates are expressly noted, as is the related method of calculation. Any significant changes in the comparative data with respect to those published in the 2009 Sustainability Report are clearly pointed out in the comments on the indicators.

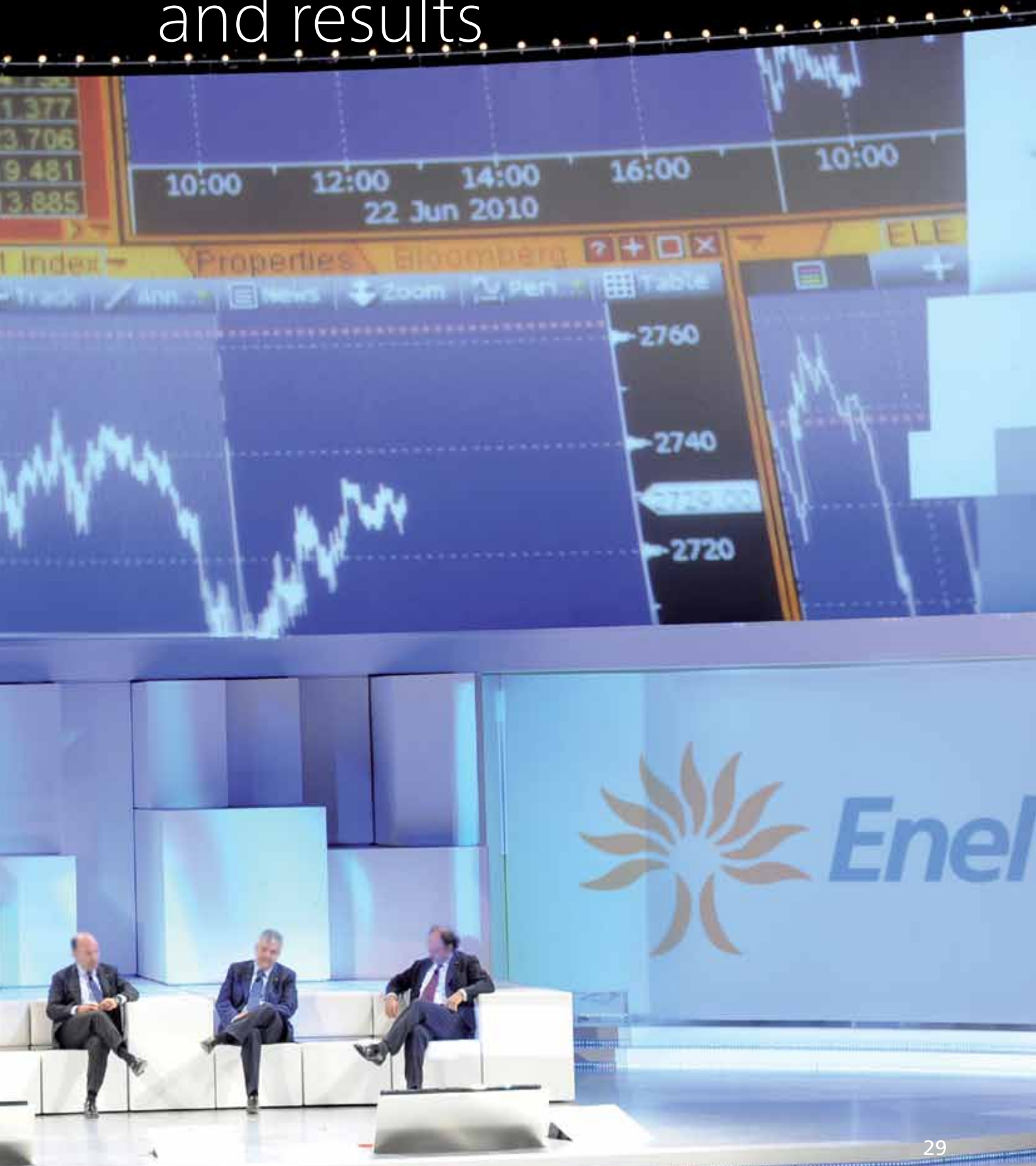
This Report reintroduces the HR9, PR2, PR4, and PR7 indicators, which are "additional" indicators that were not reported in the 2008 and 2009 Sustainability Reports, while it does not include the EN24 and EN27 indicators. For detailed information on the reasons for any exclusion or limitation regarding the indicators, see the relevant sections in the GRI Content Index (pages 249-256).

Enel considers that it has achieved the A+ level in applying the GRI-G3 guidelines.

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# The Enel Group: identity, values, and results



# Our identity

“ Enel’s mission is to generate and distribute value in the international energy market, to the benefit of the needs of our customers, the investments of our shareholders, the competitiveness of the countries in which we operate, and the expectations of everyone who works with us.

Enel acts in the service of communities, respecting the environment and the safety of people, with the commitment to ensure a better world to coming generations.

”

Enel is a **company** that is growing in the global energy market and aims to increase the capabilities and opportunities for development of all the people in the Group. In all the countries in which it operates, Enel’s objective is to behave like **a good citizen of the world**, at the service of its customers and everyone who has relations with the Group.

To achieve and maintain this objective, the actions of every Enel employee, at all organizational levels and in all the countries in which the Group operates, must be based on 16 guiding principles. The pillars on which Enel’s Code of Ethics (page 79) is constructed, these principles constitute the guide for behavior in all relations, both within the Group and without (partners, suppliers, shareholders, institutions, the civil service, etc.).

## The 16 general principles of the Code of Ethics

1. Impartiality
2. Honesty
3. Correctness in case of potential conflicts of interest
4. Confidentiality
5. Relations with shareholders
6. Appreciation of equity investment
7. Value of human resources
8. Fairness of authority
9. Integrity of people
10. Transparency and correctness of information
11. Diligence and thoroughness in the execution of tasks and contracts
12. Correctness and fairness in the management and renegotiation of contracts
13. Service and product quality
14. Fair competition
15. Responsibility to society
16. Protection of the environment





# A sustainable business



## Strategic priorities

Enel has concluded its international expansion and is now one of the world's leading energy companies. Based on the excellent results achieved, the 2011-2015 business plan confirms the validity of the strategic priorities adopted after the phase of international expansion:

### Leadership in core markets

The Enel Group plans to maintain its leadership in Italy and on the Iberian Peninsula as a company that is integrated along the value chain. In particular, in the Italian market the Group will focus on the quality and competitiveness of its energy mix, with investment in the conversion of the Porto Tolle power plant in Rovigo province to clean coal, the construction of a re-gasification plant at Porto Empedocle in Agrigento province, and the starting up of its nuclear program.

In Iberia, the Enel Group will focus mainly on the development of pumping hydro plants and the completion of projects for expanding and increasing efficiency of the existing capacity, which – together with the construction of infrastructure for the transportation of gas (Medgaz) – will make Endesa a well-balanced company in terms of its energy and thus able to maintain the solidity of its profits in the period covered by the plan.

In both Italy and Iberia, the Enel Group will continue to invest in high-value-added services, such as digital meters (in Spain) and smart grids, as well as integrated supplies of gas and electricity, in order to increase the quality of customer relations.

Overall, the Enel Group plans to invest about 18 billion euro in Italy and Iberia during the five years covered by the plan.

## Strengthening and organic growth in the field of renewable energy, as well as in Latin America, Russia, and Eastern Europe.

In the field of renewable energy, Enel Green Power will continue to be a unique company at the global level because of its diversified mix of technologies and geographical presence, the modest dependence of its revenue on subsidies, and its ability to generate solid and constantly increasing cash flows.

In Latin America, the Enel Group will continue to exploit its leading position, generating increasing profits supported by a large amount of investment mainly focused on projects for organic growth in the generation and distribution of electricity. Specifically, the Enel Group will invest in, among other things, the development of the Bocamina II coal-fired plant in Chile and the El Quimbo hydro plant in Colombia.

Given the growth of its economic system, the strategic role of Russia will be reinforced within the Group, which will invest to improve the quality of its generation mix by constructing about 800 MW of additional combined-cycle capacity. The latter will be supplied with gas at a competitive cost by the Group's share of Severenergia's fields. The Enel Group will also continue to invest to optimize its plants and make them more efficient in general.

Slovakia confirmed its strategic importance for the Enel Group, which – within the current regulatory framework – will invest in the completion of units 3 and 4 of the Mochovce nuclear power plant, which will contribute a total of 880 MW of additional production capacity. The first unit will be put into service by the end of 2012 and the second during 2013.

In Romania, finally, the Enel Group plans to invest in projects that will increase both the efficiency of its plants and the number of its customers.

**Further information on the situation in which the Group is operating and the related main risks and opportunities can be found in the 2010 Annual Report in, respectively, the chapter "Reference Scenario" (pages 30 to 69) and the chapter "Main Risks and uncertainties" (pages 110 to 113)**

These strategic priorities will enable the Group to obtain increasing solid operating results, while maintaining an optimal balance sheet and cash flow. During the period covered by the Plan, the Group will generate cash flows capable of supporting the investment program, servicing the debt, and ensuring shareholders an appropriate return on their equity investment, all the while providing the Group with the flexibility to move strategically towards the consolidation of its organic growth and at the same time to maintain its "A" credit rating stable.

Integrated with an attentive policy of corporate social responsibility, this strategy will enable Enel to enhance the potential of its portfolio of assets and continue to create value for all its stakeholders.

To sum up, between 2011 and 2015 the Enel Group plans to invest a total of about 31 billion euro, including 18 billion in Italy and Iberia.

## Consolidation, integration, and operating excellence

The Business Plan is aimed at ensuring – a challenging global situation notwithstanding – the industrial development of strategic activities. In the period covered by the Plan, the process of integration with Endesa will continue, with the achievement of significant operating synergy. As far as operating efficiency is concerned, the Enel Group has made constant progress in pursuing the Zenith program – which is aimed at increasing profits and optimizing the circulating capital and investment – and has set important new goals regarding the overall savings to achieve.

## Leadership in innovation

The Enel Group is committed to investing about one billion euro, including contributions and loans, to develop technologies for the capture and storage of CO<sub>2</sub> (at its pilot plant in Brindisi, Italy), high-efficiency coal, hydrogen-based generation (as at its Fusina plant in Italy), thermodynamic solar energy (such as its Archimede plant at Priolo, in Siracusa province, Italy), digital meters in Spain and Latin America, smart grids, and the smart-city (**Málaga Smartcity**) and electric-mobility projects.

With these important research and innovation objectives, the Group will continue to pursue its strategy for reducing greenhouse-gas emissions, thus confirming its commitment to the fight against climate change (*\*Climate Strategy*).



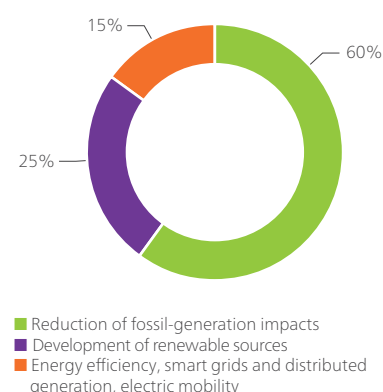
## Enel Impianto Pilota Cattura CO2

# The technological-innovation plan

The ambitious plan for investing about one billion euro in innovation between 2011 and 2015 represents the Enel Group's increasing commitment to the development of a wide range of cutting-edge technologies. In 2010 the Group spent about 87 million euro on research and development involving innovative technologies. About 60% of this sum was devoted to innovation in the field of generation based on fossil fuel (in particular

the capture and storage of CO<sub>2</sub>, the production of energy from hydrogen, and the reduction of emissions and increased efficiency in generating plants), followed by about 25% to the development of renewable energy sources (with a focus on photovoltaic and thermo-dynamic solar, geothermal, wind, and biomass energy), and about 15% to the development of energy efficiency, smart grids, distributed generation, and electric mobility.

Research and Development of innovative technologies  
Total investment: 87 million euro





# Climate Strategy

**The Climate Change Policy Committee aligns the positions of the Group's different "souls" and the different corporate operating plans, facilitating the coordination of activities at the national and international levels. The Committee is chaired by the Head of the Regulations, Environment, and Carbon Strategy Department, which is in charge of establishing Enel's strategic environmental policies and objectives and the consequent initiatives to be implemented in all the Divisions and countries of the Group.**

Enel acknowledges the priority of the fight against climate change among its responsibilities as a large global energy company. The Group has an obligation to identify the best solutions for supplying sustainable, reasonably priced, and accessible energy to all its customers, while at the same time reducing its greenhouse-gas emissions at the global level.

At the center of Enel's strategy, therefore, is a climate strategy based on a long-term vision aimed at developing a wide range of options in all the Company's fields of activity. In effect, the Group's objective requires not only a large increase in its production of electricity with "zero-emissions" technologies (renewable and nuclear energy), but also greater efficiency in production and distribution, the development of new technologies, and use of the emission-rights market. For Enel, this commitment constitutes an opportunity to increase its competitiveness in fields such as renewable energy that are bound to become increasingly important in the international energy scenario.

The fronts on which Enel is acting in pursuing its climate strategy are:

- > **development of zero-emissions sources:** renewable and nuclear energy are playing an increasingly significant role in the generation mix, allowing energy to be produced that is completely free of greenhouse-gas emissions. Evidence of Enel's commitment to renewable sources is the establishment of a new company entirely dedicated to these sources, Enel Green Power (6,102 MW of installed capacity in Europe and the Americas, with an annual production of more than 21.8 billion kWh), in addition to the contribution of the large hydro plants in Italy, Spain, Latin America, and Slovakia (31,033 MW of installed power). Enel can currently count on more than 34,727 MW of installed renewable capacity in all and a net renewable production of 92,299 GWh.
- > **use of the best existing technologies:** The Group invests in technologies for reducing the emissions of "conventional" energy sources. When new high-efficiency, low-emissions plants begin to operate, the carbon footprint of thermal generation decreases.





- > **energy efficiency:** Enel's commitment to efficiency is manifested in continual improvements in its plants (such as high-efficiency coal, EPR nuclear power plants, innovative renewable energy, and renewable energy accumulation), in projects for developing smart grids, where the Company has achieved a position of technological leadership, and in the promotion of a change in the models of consumption by final customers through value-added services for the efficient management of energy demand and a strong boost to sustainable mobility.
- > **global commitment to the reduction of CO<sub>2</sub> emissions:** The Group is engaged in reducing emissions by implementing projects and best practices in the countries of Eastern Europe, as well as less developed ones. The projects include the use of the flexible mechanisms introduced by the Kyoto Protocol (Clean Development Mechanism and Joint Implementation), in which the Group is a global leader, having attained the first place among the private companies active in this field, with about 12% of the total credits issued so far. For further details on the Carbon Strategy, see page 178.
- > **research and innovation:** The Group invests in research and development involving the innovative technologies of solar energy, smart grids, electric mobility, and the capture and storage of CO<sub>2</sub>. Enel is one of the leading utilities in the world with regard to the development of CCS technologies applied in particular to the flue gases emitted by coal-fired power plants.

In addition to constituting a responsibility and an opportunity for growth, the fight against climate change can significantly influence the Group's activities and must be considered in terms of its potential risk for the success of the Company's strategies and for its competitiveness, as well as for the stability of the markets concerned.

In the light of this influence, which is bound to increase in the coming years with the development of international policies on the climate, in 2009 Enel started a strategic assessment process to analyze the effectiveness of the measures adopted to cope with the current and future consequences of climate change. Concluded in 2009, the process involved the Company's management and led to the definition of alternative scenarios on the possible changes in climate-change policies and the analysis of the related impacts. This enabled the Company to develop a number of strategic options, which were taken into account when the Business Plan was prepared.

Currently the main risks that climate change causes for the Group concern regulations, specifically the possibility that Enel's generating plants may not satisfy the regulatory provisions regarding the atmospheric emissions of greenhouse gases. This aspect regards in particular the thermal plants in Europe, which are subject to the Emissions Trading Scheme (EU ETS) provided for by the EU regulations based on the Kyoto Protocol. The Group copes with such risk by effectively managing emissions rights, thanks, among other things, to its Carbon Unit, which was specially instituted in 2010.

In addition, the Group is constantly engaged in fulfilling all the regulatory obligations that may regard its activities in the different countries where they are located and that, like those connected with the control of emissions, may create regulatory risks. In Italy, for example, Enel constantly minimizes costs to fulfill its obligations as both a distributor, with regard to the efficiency of end consumption (the white-certificate system), and as a producer, with regard to the share of electricity produced from renewable sources that must be injected into the grid every year (the green-certificate system).

Finally, additional risks caused by climate change regard the physical effects to which plants are subjected. A reduction of precipitation, for example, can lead to a decrease in production by hydro plants, while an increase in temperature can interfere with the effectiveness of the cooling systems of thermal plants. At the present time, these risks occur occasionally.

Given the crucial importance of environmental risks, monitoring them is a centralized task at the level of the Parent Company. The Environmental and Climate Change Policies Unit of the Regulation, Environment, and Carbon Strategy Department is entrusted with coordinating the process of establishing and defending Enel's positions with regard to the Italian and international bodies concerned and – in agreement with the Parent Company's departments – provides assistance in interpreting environmental regulations in order to ensure full compliance with them.

The Unit also establishes Enel SpA's guidelines and coordinates the Group's environmental risk management in order to ensure environmental compliance and the attainment of the corporate performance objectives in cooperation with the Group Risk Management Department (page 74) to ensure the consistency and complementariness of the respective methods and analyses.

# 2011-2015 Sustainability Plan

The Enel Group's strategic sustainability priorities are integrated in its multiyear 2011-2015 Business Plan, which sets out the Company's growth path within a strategic framework of governance implementation, the fight against climate change, protection of the environment, social development, and transparent relations with all our stakeholders.

In effect, the macro sustainability objectives are closely connected with the entire Group's strategic objectives and are established by the Company's top management. These macro objectives are then transmitted to the different corporate operating areas and are the guidelines according to which each Division/Department of Enel SpA must establish its own sustainability-improving objectives and specify the most important actions planned for the coming years.

This process of agreeing on the objectives at all levels takes place with the assistance of the CSR and Relations with Associations Unit of Enel SpA's External Relations Department, which cooperates with the Accounting, Finance, and Control Department's Strategic Planning Unit in assisting the process of establishing the sustainability priorities and objectives by providing the guidelines that Enel SpA's departments, and the Divisions, and companies of the Group must follow in drawing up their short- and medium-term plans.

These guidelines are referred to in the "Plan Letter" that the Chief Executive Officer sends every year to all the operating heads of Enel SpA's Divisions to initiate the process of establishing the objectives. In addition to the guidelines on the specific objectives and the areas of action, the letter also points out the common premises that distinguish the Enel Group and must be followed and reflected in identifying the lines of action (such as the quality of the corporate atmosphere, concern for the individual, and absolute commitment to health and safety).

On the basis of the "Guidelines" sent by the Chief Executive Officer, the Divisions establish the performance indicators regarding sustainability, which are aggregated at the Enel SpA level and included in the Business Plan. These indicators are then analyzed and monitored through Enel's sustainability control system, which prepares a periodical report.

In order to have increasingly transparent and complete information, in addition to these key indicators Enel monitors about 270 concise indicators – almost 900 considering the various details – which are presented in this Report.





The strategic priorities of the 2011-2015 Business Plan, which are reported on pages 31-32, constitute the basis for the development of the guidelines of the Sustainability Plan, at the level of both Enel SpA and the Divisions:

### Leadership in the Group's core markets

In Italy, Spain, and Portugal, countries in which it has 70% of its customers, the Group will undertake initiatives aimed at consolidating the quality of its relations with end consumers by providing high-value-added innovative services, such as the installation of digital meters also in Spain. In the same countries the Group will improve the competitiveness and the balance of its energy mix by investing about 18 billion euro, out of a total of 31 billion globally. In addition to providing a solid and stable cash flow, these choices will be a benchmark for the development of growth platforms in all the countries in which the Group is present.



## Consolidation and organic growth in the field of renewable energy, as well as in Latin America, Russia, and Eastern Europe

In keeping with its climate strategy, the Group will continue to play a leading role in renewable energy thanks to Enel Green Power, a company that is unique in the world because of its diversified mix of technology and geographical presence. Enel's constant commitment to ensuring a supply of sustainable, reasonably priced, and accessible energy will be confirmed in its new projects for electricity generation and distribution, which will be implemented while discussing with local communities, respecting the human rights of the people involved, and contributing to the development of the countries in which it operates.

## Consolidation, integration, and operating excellence

In the next few years the ongoing process of integration between Enel and Endesa will constitute a key strategy of growth, aimed at achieving significant operating synergy. In this regard, numerous diversity-management initiatives have been planned to encourage multiculturalism and knowledge sharing. This policy will also be implemented with regard to suppliers to promote sustainability criteria along the entire supply chain.

## Leadership in innovation

Thanks to the large investment planned in research and development – about one billion euro – the Group will continue to pursue its strategy of reducing greenhouse-gas emissions, which embodies its commitment to the fight against climate change, with particular concern for issues connected with water scarcity.

The sustainability plan was drawn up taking into account the three principles of the AA1000APS (Accountability Principles Standard) issued in 2008 by AccountAbility, an international institute for research applied to the issues of sustainability:

- > **Inclusiveness**, which means facilitating the participation of stakeholders in developing and achieving a responsible and strategic response to sustainability
- > **Materiality**, which means determining the importance and significance of an issue for an organization and its stakeholders
- > **Responsiveness**, which requires providing responses to the legitimate expectations of the stakeholders involved

Stakeholder engagement was one of the essential elements in the preparation of the Group's Sustainability Plan. In effect, Enel has for some time used a series of instruments and initiatives to collect and analyze information about the expectations of its stakeholders <sup>(1)</sup>, and the latter were integrated with the Group's strategic decisions to establish material macro areas of commitment for every stakeholder category.

For each objective and the related courses of action in the Sustainability Plan, during 2010 Enel carried out a series of projects and initiatives. Detailed reference to the single initiatives implemented during the year can be seen in the Plan.

(1) On the instruments for engaging stakeholders, see the "Stakeholder engagement" section on pages 90-91 of this Report.

Macro-areas of engagement	Objectives	Lines of action in response	In this Report
Materiality	Materiality	Responsiveness	Responsiveness

## Shareholders and Providers of capital

<b>Sustainable dividend and debt-reduction policy</b>	Continual debt reduction	Activation of processes to dispose of non-core assets and strict financial discipline in selecting investment projects	pp. 31-32, 26-27
	Leadership in the markets concerned	Organic growth, structural synergy, and operating excellence	pp. 4-7, 31-32, 37-38, 60-61, 62, 102-103, 105-106, 107, 110, 112-113, 117, 126
	Sustainable development	Growth in renewable energy and geographical diversification	pp. 52-54, 31-32, 33, 34-35, 37-38
<b>Sustainable and lasting value creation</b>	Strategic risk management	Analysis and assessment of risk-control processes	pp. 74-75
<b>Fairness and transparency in conducting business</b>	Maintenance of a corporate governance model that ensures the utmost transparency	Alignment of all Group companies with the same corporate governance model through coordination of the three instruments of self-regulation (Code of Ethics, ZTC Plan, and Compliance Plan 231/01)	pp. 66-73, 78-81, 82-83, 85, 86-88
	Maintenance of complete and correct information to our shareholders and providers of capital	Transparency and frequency of financial communication and relations with institutional and retail investors	pp. 63, 65, 90-91
		Constant attention to relations with ethical investors through dedicated units	pp. 63, 65, 90-91

Macro-areas of engagement	Objectives	Lines of action in response	In this Report
Materiality	Materiality	Responsiveness	Responsiveness

## Customers

<b>Service quality</b>	<b>Customer care and customer relationship</b>	Expansion of points of contact with customers and development of new channels through technological innovation	pp. 48-49, 142-143, 153-154, 154-156, 158-159
		Enhancement of the instruments for surveying and monitoring customer satisfaction	pp. 142-144, 147-148, 154-156, 97-98
		Extension of conciliation procedure to the entire Group and to small and medium enterprises for faster and more effective management of disputes	pp. 158-159, 210
	<b>Personalization of customer service</b>	Development of instruments and services for customers with specific needs in order to increase social inclusion	pp. 151-152, 154-156
	<b>Reduction of supply outages</b>	Improvement of network efficiency through technological innovation and infrastructure rationalization	pp. 47-51, 142-143, 146-147
<b>Sustainability in offers to customers</b>	<b>Promotion of energy efficiency in end uses</b>	Raising end-user awareness of the responsible consumption of resources	pp. 47-51, 160-163, 164, 165, 222-223, 224-225



Macro-areas of engagement	Objectives	Lines of action in response	In this Report
Materiality	Materiality	Responsiveness	Responsiveness

## Communities

<b>Dialogue with society</b>	<b>Transparent information and openness to discussion with communities</b>	Involvement of the local communities affected by large-scale infrastructure construction	pp. 206-207, 211-213, 213-215
		Presence in the most important international networks for the protection of human rights	pp. 80, 82-84
		Creation of a large annual event to encourage a global discussion on issues of corporate social responsibility	p. 95
		Involvement of local communities in initiatives to educate people about energy and the environment	pp. 222-223, 224-225, 213-215
		Promotion of the Company's historical and cultural heritage through events, exhibitions, and dedicated publications	pp. 123, 232
<b>Management of environmental impacts</b>	<b>Minimization of environmental risks</b>	Extension of environmental certification to all the Group's plants	p. 170
	<b>Safeguard of biodiversity and the landscape</b>	Enhancement and preservation of the naturalistic patrimony of the countries in which the Group operates and the green areas near plants	pp. 186-194, 195
<b>Actions of social development</b>	<b>Investment in communities and philanthropic giving</b>	Investment in communities	pp. 220-222, 228-233
		Commitment to the growth and development of communities through education, culture, and sports	pp. 226-227, 230
		Development of business activities with a social purpose	pp. 220, 151-152, 154-156, 160-163, 50, 157
		Promotion of projects to facilitate access to energy	pp. 220-222, 151-152, 154-156
		Social solidarity and philanthropic giving	pp. 228-233
		Promotion of philanthropic initiatives among employees	pp. 220-222

Macro-areas of engagement	Objectives	Lines of action in response	In this Report
Materiality	Materiality	Responsiveness	Responsiveness

## Employees (1-2)

<b>Corporate climate based on shared values</b>	Dissemination of the culture of sustainability	Initiatives to inform people and raise their awareness of sustainability both in and outside the Group	pp. 85, 126-127, 95
		Enhancement of the instruments of internal communication, in particular Enel TV	pp. 126-127
		Integration of sustainability in monitoring and assessment systems	pp. 108-109, 34
		Promotion of sustainability in relations with labor unions in all the countries in which Enel operates	pp. 135-136
	Improvement of the corporate climate	Enhancement of the instruments for surveying and monitoring the corporate climate	pp. 124-125, 126-127
		Extension of the leadership model and performance review to the entire Group	pp. 107, 108
<b>Diversity management and safeguard of the individual</b>	Promotion of diversity and equal opportunity	Implementation of initiatives for the safeguard and promotion of diversity	pp. 128-129, 129-131, 132
	Promotion of corporate welfare initiatives	Provision of supplementary services (medical care, cultural and recreational activities) for employees	pp. 119-120, 121, 127-128
		Creation of instruments and services to improve work-life balance	pp. 128-129
		Expand mobility-management initiatives	pp. 128-129

Macro-areas of engagement	Objectives	Lines of action in response	In this Report
Materiality	Materiality	Responsiveness	Responsiveness

## Employees (2-2)

<b>Occupational health and safety</b>	Adoption of a single safety standard in all work places	Extension of management policies and systems to all Group work places	pp. 116, 117-118
		Intensification of training activities to all professional families	pp. 112, 113, 115
		Intensification of prevention and monitoring activities	pp. 116
	Communication and promotion of the culture of safety	Realization of initiatives and instruments to encourage the sharing of experiences and best practices regarding safety throughout the Group	pp. 112-113, 115, 116
<b>People Development</b>	Training and making the best use of the corporate patrimony of capabilities	Dissemination of the best internal practices and a stance of excellence throughout the Group	pp. 4-7, 31-32, 102-103, 105-106, 107, 110, 112-113, 117, 126
		Dissemination of knowledge-management systems	pp. 112-113, 116, 117, 126-127
		Initiatives to support the new leadership model	pp. 109-110
		Creation of an e-learning training course specifically dedicated to CSR	pp. 85
	Development of assessment and incentive systems capable of attracting and retaining the most talented people	Creation of a talent-management system and activities to develop talent pools	pp. 108, 109-110

Macro-areas of engagement	Objectives	Lines of action in response	In this Report
Materiality	Materiality	Responsiveness	Responsiveness

## Suppliers

<b>Sustainability in relations with suppliers</b>	Promotion of sustainability criteria in the selection of suppliers and in relations with contractors	Formalization of a system for checking that suppliers respect workers' rights	p. 241
		Revision of contracting processes with regard to safety to align contractors with Enel's safety standards	pp. 242-243, 244-245
		Implementation of new sustainability criteria inside the supplier qualification system and inside the vendor rating	p. 239
		Fairness and transparency in the selection process and relations with suppliers	pp. 239, 240-241

## Future generations

<b>Access to electricity</b>	Promotion of initiatives to ensure access to electricity	Construction of electricity generation and distribution plants in developing countries, in particular for rural electrification	pp. 145-147, 220-222
<b>Climate strategy</b>	Diversification of energy sources for electricity generation	Generation of electricity from nuclear energy	pp. 54-57
		Generation of electricity from renewable energy sources	pp. 10, 52-54
	Research and development in technologies for the long-term environmental sustainability of energy	Development of technologies for carbon sequestration and emissions containment	pp. 57-59
		Development of smart grids and electric mobility	pp. 47-51
		Commitment to research for overcoming barriers to the spread of renewable energy	pp. 52-54
		Continual technological improvement of generation plants in countries where the Group is present	pp. 34-35, 172-174, 177, 182, 185



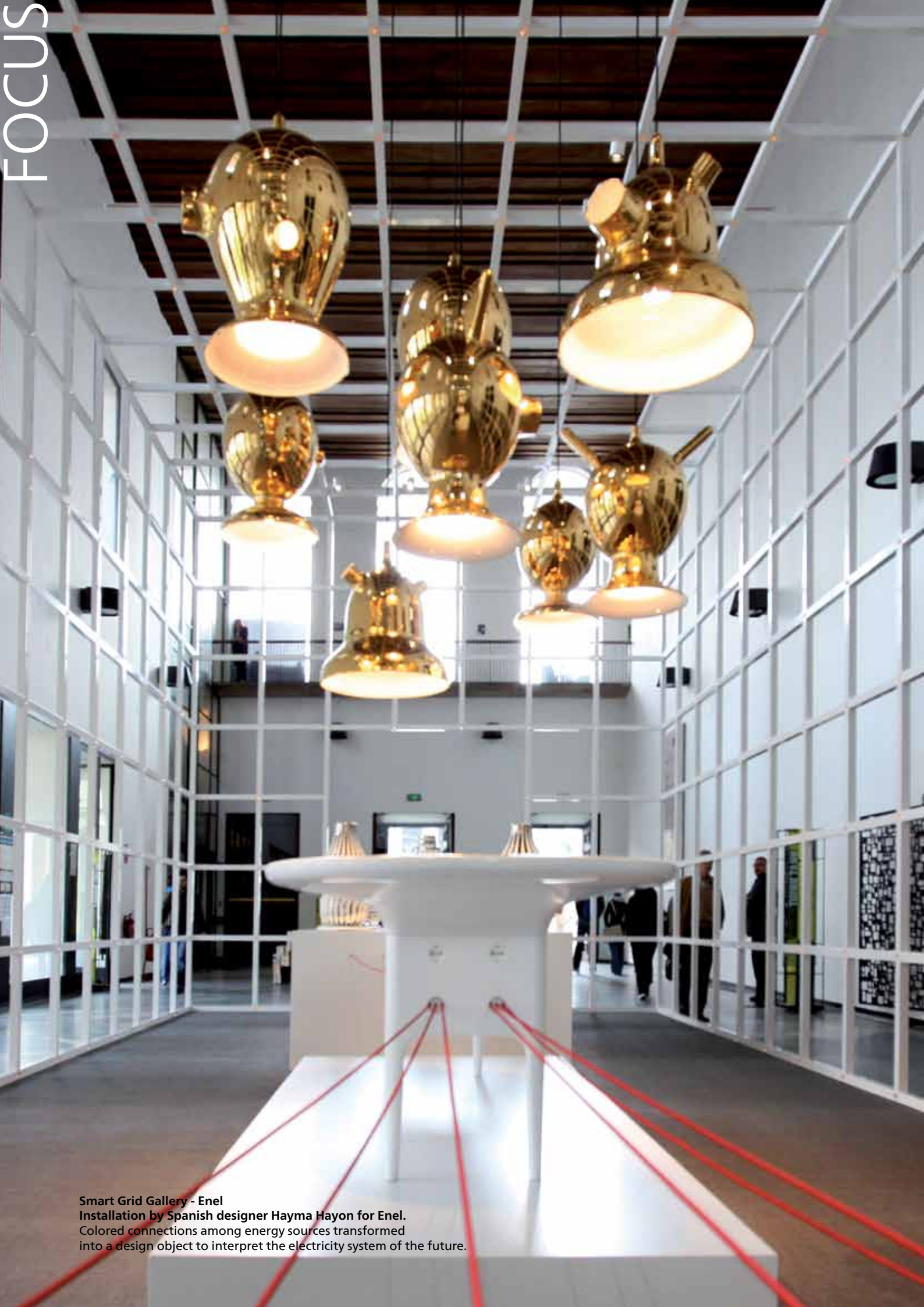
Macro-areas of engagement	Objectives	Lines of action in response	In this Report
Materiality	Materiality	Responsiveness	Responsiveness

## Institutions

<b>Commitment to good citizenship</b>	Promotion of dialogue with local, national, and international institutions	Cooperative relations with national and international public institutions	pp. 87-88
		Proactive role in industry and multi-industry discussions to promote sustainability issues	pp. 92-93

## Organizations representing interest groups

<b>Commitment to good citizenship</b>	Creation of long-term partnerships with associations representing interest groups	Continual and constant listening to the needs and expectations expressed by organizations representing interest groups	pp. 133-138, 155, 165, 210, 211-213, 213-215
		Discussion of critical activities and projects on shared objectives	pp. 133-138, 210, 211-213, 213-216
<b>Development of shared projects</b>	Implementation of projects in close cooperation with associations representing interest groups	Implementation of environmental projects and ones to raise public awareness in favor of sustainable development in partnership with environmental associations	pp. 21, 165, 195
		Implementation of innovative solutions for conciliation with customers in partnership with consumer associations	pp. 155, 158-159
		Promotion of local communities through projects in partnership with small and medium enterprises and local governments	pp. 158-159
		Promotion of cultural and sports events	pp. 226-227, 230



Smart Grid Gallery - Enel  
Installation by Spanish designer Hayma Hayon for Enel.  
Colored connections among energy sources transformed  
into a design object to interpret the electricity system of the future.

# Sustainability in practice

## When the grid is smart

Historically, electricity grid came into being to collect large quantities of energy from power plants and distribute it to a large number of consumer-customers through centralized control, one-way flows of power, and “passive” grids.

However, this classic view of the electricity grid is becoming obsolete. With the gradual increase in production plants using renewable energy sources, the characteristics that the electricity grid must have to correctly exploit their potential are also changing. In effect, generation from renewable sources entails the multiplication of production plants located where the energy source is, which can be small or even very small, distant from one another, and in remote places, such as wind fields.

At the same time, the spread of “industrial” co-generation – i.e., the installation of co-generation plants on the premises of customers that consume large amounts of energy in order to maximize efficiency and fully exploit the energy potential of production sources – is leading to the multiplication of plants on customer premises.

No longer centralized in a few large power stations, but “distributed” all over, this **new model of generation** also requires **different ways of transmitting and distributing the energy produced**. The new grids have to be able to accumulate energy – and thus compensate for the lack of continuity in production from renewable sources – record in real time the energy requirements at the different points on the grid by communicating directly with the end consumers, and then distribute the energy in accordance with their requirements. In this way, demand peaks will be managed correctly (by reducing the load at the points on the grid where there is less demand) and interruptions in the electricity supply will be avoided. The multiplication of production plants will also reduce the distances over which energy must travel to reach its end users, with a sharp reduction of transmission costs and leakage from the grid.

The **electric grid of the future**, therefore, will no longer be only a channel for transmitting and distributing electricity from large power stations to end customers, but a smart grid that is able to integrate producers and consumers, determining in advance consumption demands and flexibly adapting the production of electricity to its consumption.

Smart grids will revolutionize the relationship between consumers and the distribution infrastructure, because customers will be able to become small-scale producers. With micro-generation from renewable sources, individual consumers will be able to produce electricity autonomously, achieving energy inde-

pendence exploiting only renewable sources and selling their excess production to the local distributor.

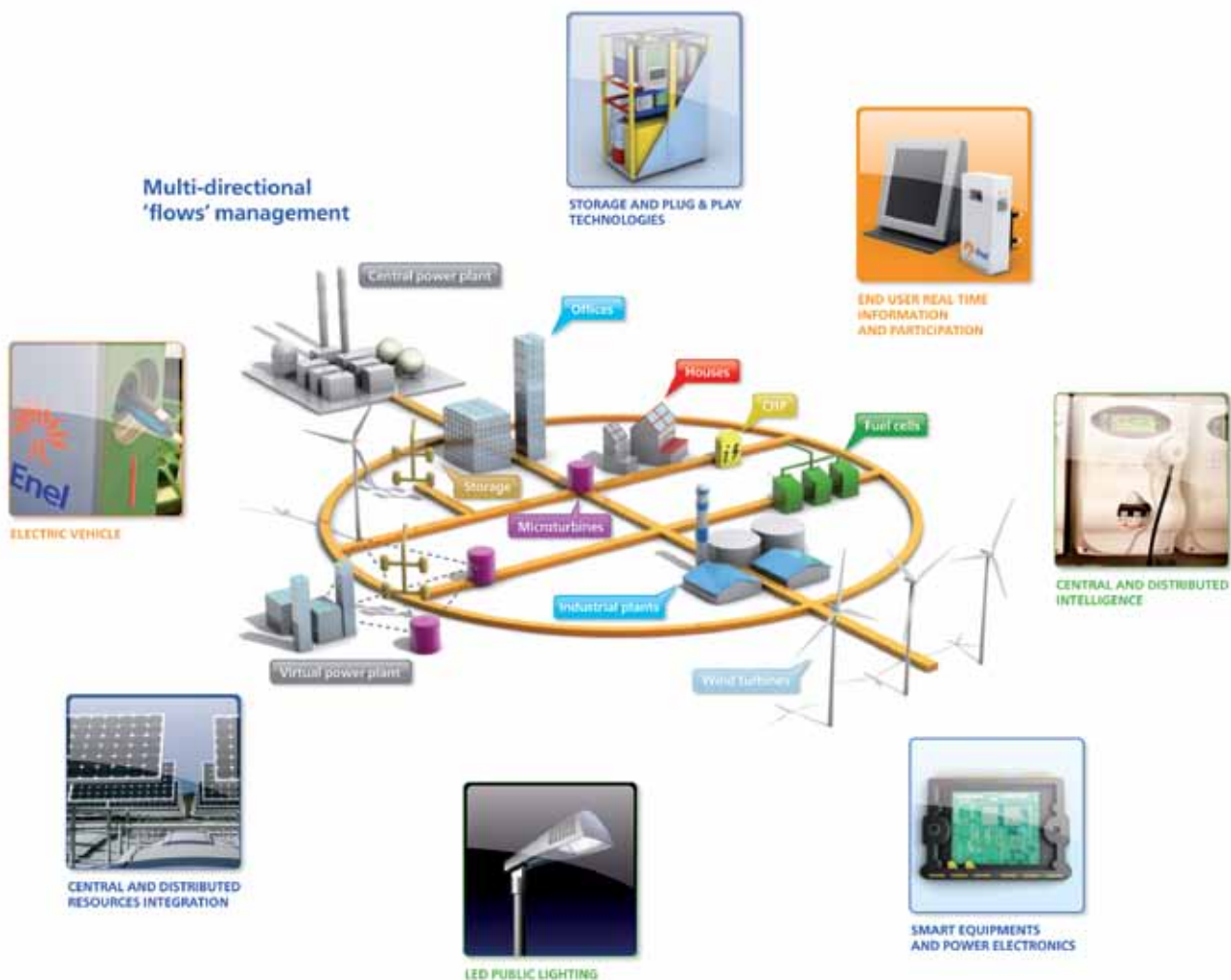
## Where we are

Enel began investing in the development of a smarter grid a number of years ago and has carried out an imposing infrastructure project involving the installation in Italy of **33 million electronic meters**.

The electronic meter is an instrument that constantly measures the electricity withdrawn by every customer, enabling the latter to know the rate in effect at any time and decide to what time of the day it is most advantageous to shift his or her consumption. It thus allows individual consumers to reduce their bills by monitoring their consumption and managing it independently. The meter can also be two-way, measuring not only the electricity consumed, but also produced and injected by each customer, thus becoming a monitoring instrument for customers who are also producers with, for example, solar panels or mini wind plants at the household level.

The electronic meter is also one of the components of a more complex system allowing the remote monitoring of grid loads, the precise measurement of the consumption of end users, management of the contractual relationship with customers: the **Tele-manager** or AMM (Automated Meter Management). In effect, the electronic meter transmits information about consumption to the central system, receives the update of the contractual parameters chosen by the customer, and connects and disconnects customers remotely.

Thanks to these characteristics, the AMM system constitutes an essential element in the development of an entirely smart grid, because it transforms the grid into a means of communication between customers and distribution companies and enables the latter to assess the grid's requirements and optimize the distribution according to the demand peaks. The remote management of the great majority of business transactions and the main activities regarding meters, and thus without the need for technical personnel on the spot, also constitutes a positive contribution to the reduction of CO<sub>2</sub> emissions. Thanks to the success of the AMM system in Italy, Enel will





extend its application to its distribution grids in other countries. Specifically, in 2010 the implementation of this system on Endesa's grid was begun with the delivery of 100,000 mono-phase meters and 300 concentrators. The project provides for the installation of **13 million meters by the end of 2015**. In Romania, Enel has developed a single platform for the remote management of 14,000 meters for a significant number of business, institutional, and industrial customers, and has initiated the necessary preparations for extending the AMM system to household customers.

**Thanks to its technological supremacy in the field of remote management, Enel is recognized as an international benchmark in the development of the electricity infrastructure of the future. In effect Enel Distribuzione has become the leader and coordinator of the ADDRESS Consortium, a research project co-financed by the European Union that plans to develop technical and commercial solutions that will enable even small and medium-sized consumers to actively participate in the energy market by supplying services modulating their consumption and the sale of the electricity produced (2).**

(2) The ADDRESS Consortium consists of 25 partners in 11 European countries: universities, research centers, and companies engaged in the distribution, supply, and sale of electricity and the production of electrical appliances and equipment for the electric grid. For further information: <http://www.addressfp7.org>

## The potential of Smart Grids

### Energy efficiency and post-meter services

#### Smart Info

The project provides for the development of a device that communicates from households with the electronic meter and facilitates customers' use of the information in the meter through a number of **visual aids** already present in the market, such as personal computers, entertainment consoles, electrical appliances, mobile devices, and dedicated displays (3). This ease of use will increase customers' awareness and will foster active management of their consumption, for example by organizing their use of electrical appliances and their household lighting systems more efficiently.

(3) The "Smart Info" project derives from the provisions of the Electricity and Gas Authority in AEEG/com 56/09 resolution, which applied the provisions of article 17, paragraph 1, letter c) of Legislative Decree n. 115 of May 30, 2008, according to which "distribution companies ... must identify ways that enable end customers to check the readings of their meters in a simple, clear, and comprehensible way, through both special displays located in accessible and visible places and access to the same data via other IT or electronic instruments already present on the end customer's premises."

#### Energy@Home

A concrete application of Smart Info as an enabler of automated household services for energy efficiency is the "Energy@Home" project, which was begun in 2010 with Electrolux, Indesit, and Telecom Italia and whose purpose is to try out a **smart system of home automation** in which the electrical appliances of the future can optimize the energy consumption of households by programming themselves to switch on at times other outside demand peaks and at lower cost.

#### Enel Home

In 2010, the Company continued the activities of the "Enel Home" project, whose purpose is to develop added-value services for end customers enabling the latter to manage their energy consumption more effectively and efficiently. Such services include: **online metering**, in which a special device enables consumers to **know in real time how much they are consuming**; **online consultation**, which will allow customers to access personalized information regarding their consumption and rates, as well as offers better adapted to them and advice for making their consumption more efficient; **integrated domotic and security services**, such as automation (lighting, doors/windows/gates, electrical appliances, etc.), comfort (heating and air-conditioning), entertainment (audio/video, telephony, Internet), safety (anti-burglary, video-surveillance, help, etc.), made available through the integration of a modular set of equipment that can be purchased and put together.

#### Navicelli

As part of its activities for developing integrated solutions among generation, accumulation, and grid-management systems, the Group started up the Navicelli project, whose objective is the development and testing of new systems for managing the thermal and electric networks of an energy district of an industrial-tertiary kind. The project has received financial support from the Tuscany Region.

### Sustainable mobility

#### Enel Drive

Enel's Electric Mobility project is a new project regarding the implementation and management of an offer of electricity and an innovative infrastructure for **recharging electrical vehicles**, which was designed with cutting-edge technologies that are able to ensure the necessary safety standards, in addition to an advanced recharging service based on the technology of the electronic meter. This proj-

ect is in keeping with the strategy of developing smart grids. In effect, the infrastructure will have to break down the economic and functional barriers to the spread of electric mobility on a large scale and make possible services and functions that are consistent with the objectives of the future smart grids (load management and energy accumulation).

Specifically, 2010 saw the E-Mobility Italy ([www.e-mobilityitaly.it](http://www.e-mobilityitaly.it)) got fully underway. This project is the result of an agreement entered into by Enel and Daimler in 2008 and is the first pilot test to try out the functions of the Electric Car project. In E-Mobility Italy, Enel is responsible for the development, construction, and functioning of the **recharging infrastructure** and the related **supply of electricity**, while Daimler has supplied more than 100 electric Smarts to private customers and takes care of their maintenance. Three Italian cities – Rome, Milan, and Pisa – were chosen for the trial, because they best represent the different lifestyles and residential models that are typical of Italy.

The project provides for more than 400 recharging stations, in both private parking lots and garages (home stations) and public parking places (public stations) located at strategic points in the three sample cities, along with the related central control system. During 2010 the first cars were delivered, the first recharging systems were made operational, and the supplies of energy and recharging services developed for the customers in this pilot project were started up.

Cooperation agreements for the development of similar projects were also signed with other car manufacturers (Renault-Nissan, Piaggio, and Citroën) and studies on recharging infrastructure dedicated to customers and for vehicle fleets with innovative specific services were also begun. Important frame agreements for the development of sustainable mobility were also signed with Poste Italiane (with the first trial being started up in Pisa) and the Emilia-Romagna Region (with the involvement of Bologna, Rimini, and Reggio Emilia, in which pilot projects will be carried out). Finally, a research project on fast charging was begun.

As far as electric mobility in Spain is concerned, Endesa actively participates in the government's Movele project and has signed agreements with a number of large producers and distributors in the automobile industry (Peugeot, Mitsubishi, Toyota, Piaggio, Bergé) to begin preferential cooperation. The first of these electric vehicles have already been tested at the company's facilities in Madrid.

## From smart grids to smart cities

When smart grids have been fully integrated in the fabric of cities, the latter will become smart cities, where the integrated management of a number of technologies will allow **energy consumption connected with urban requirements to be optimized**, from the air-conditioning of buildings to public transportation and street lighting. In cooperation with Enel and numerous other companies, universities, and national and regional research institutes, Endesa is developing in particular the **Smartcity Malaga** project, which aims to concentrate a large range of advanced and sustainable technologies in a single city: the integration of renewable energy sources in the electric grid, the installation of solar panels on public buildings, the micro-generation of electricity in hotels, micro wind systems, electronic meters, recharging stations for electric cars, energy storage in batteries to satisfy the peaks requirements for air conditioning and heating, remote-managed lighting, and electric transportation.

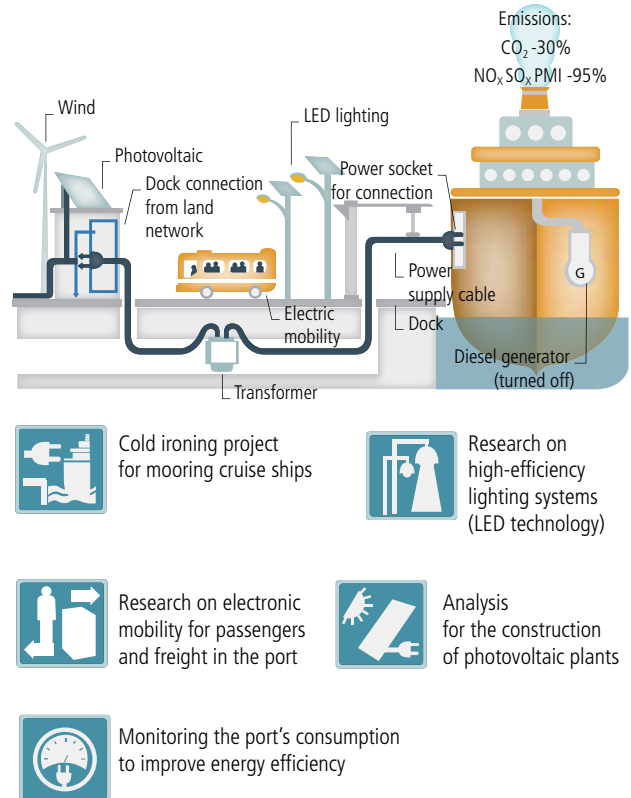
The aim of the project is to demonstrate that the development of these technologies can lead to a saving of 20% of the entire city's energy consumption and an annual reduction of 6,000 tons of CO<sub>2</sub>.

With the Smartcity Malaga project, Endesa won two Smart Metering Awards at the Smart Metering UK & Europe conference, which was held in London in 2010. Like other programs already existing in Stockholm, Dubai, Malta, Ohio, and Colorado, SmartCity has become a global benchmark in the development of advanced energy technologies and is included in the European Union's 20-20-20 Plan.

### Green ports

The "Green Ports" Project was created with the aim of applying the best technologies developed by Enel to ports, with benefits for both the people directly concerned and the cities where they are located. The project provides for the **integrated supply of services to large ports** interested in developing activities with a high environmental value, in order to reduce polluting and climate-altering emissions caused by their maritime traffic.

The project provides for a broad range of **technologically innovative and environmentally sustainable solutions** for the creation of a port with low atmospheric emissions, since as cold ironing for ships, electric mobility for the transportation of people and goods, high-efficiency artistic lighting, plants for producing energy from



renewable sources, and offers of energy combined with making the port buildings more energy-efficient.

Specifically, Enel has signed agreements with the port authorities of Civitavecchia (in 2009), La Spezia (2010), and Venice (2010) in Italy and of Barcelona in Spain. The agreements provide for the conception and design of innovative systems of cold ironing, which can supply power to docked ships and thus allow the generators on board to be switched off. This system is already used in some ports in the United States, Canada, Sweden, and Germany.

Cold ironing technology can resolve much of the pollution problem in port areas. In effect, this method of supplying power makes it possible to reduce CO<sub>2</sub> emissions by more than 30% and those of NO<sub>x</sub> and those of particulate by over 95%, in addition to eliminating acoustic pollution.

In addition to cold ironing, the protocols of understanding provide for the offer of a broad range of environmentally-friendly services: research on systems of electric mobility inside port areas for the transportation of people and goods, the development of renewable energy sources (such as wind and solar) in port areas, the adoption of low-consumption LED lighting systems, a series of artistic lighting initiatives, and in general the improvement of the efficiency of port energy systems.

# The green frontiers of energy

In consequence of the increasing global demand for energy and the high volatility of the price of oil, in the last few years, concern for the environment and the use of ecologically sustainable kinds of energy have grown throughout the world.

**Renewable energy sources** have thus become a key industry, which has experienced unprecedented growth thanks to technological progress and strong political support.

During 2010 the Enel Group increased its installed capacity from renewable sources by 511 MW, which generated a **total production of 92.3 TWh**. Excluding consolidations and net of divestments, the new installed capacity is 390 MW, including 348 MW from wind fields, 33 MW from geothermal plants, 6 MW from hydro sources, and about 3 MW from photovoltaic plants. The contribution of the different countries is shown in the following table:

Country	New installed power
Italy	139 MW
Spain	120 MW
Romania	64 MW
France	34 MW
Bulgaria	21 MW
Greece	10 MW
Latin America	2 MW

## Enel Green Power

Enel Green Power (EGP) is an Enel Group company entirely dedicated to the development and management of generation of electricity from renewable energy sources at the international level. Listed on the stock market since November 4, 2010, the company has a solid history. In effect, Enel Green Power is the result of the reorganization of the Group's operations in the renewable field and half a century of production and continual improvements by the Group in the processes of generating electricity, with an indisputable positive track record in both its environmental performance and its relations with stakeholders, first of all the communities that live near its production sites.

The strong points of Enel Green Power's strategy are the use of the **entire range of the technologies available** – hydro, wind, solar, geothermal, and biomass – which enables Enel to not depend on the performance of a sole source, and **geographical diversification**. In effect, its presence in different areas and markets – in Europe, North America, and Latin America – that are developing at different speeds and in different ways, allows it to mediate between different economic growth trends and political and regulatory policies, thus reducing the risk that investment will be immobilized.

At the end of 2010, EGP's installed capacity was 6,102 MW and its production totaled 21.8 TWh, increases of 27% and 15%, respectively, with respect to the previous year.





## Growth areas

The growth of the production of electricity from renewable energy sources is an essential element of the strategy of sustainable development of the energy industry. Several kinds of generation from renewable sources – such as, for example, photovoltaic – have already achieved a good level of technological maturity, but are still characterized by high costs and low productive efficiency. These limits must be overcome so that they can be effectively exploited on a large scale, especially in a situation with reduced government subsidies. Other kinds are still in the development stage and therefore **research** focuses on improving the existing technologies to lower their costs and increase their efficiency, as well as developing new concepts of generation.

Enel is engaged in all the main technologies of generation from renewable sources, from photovoltaic solar (with applied research and testing the performance of innovative systems in real environments), thermodynamic solar (with the development of plant solutions that ensure increased efficiency and reduced costs), wind (with the creation of models for forecasting production), and biomass to other technologies, such as innovative geothermal, sea energy, the development of low-cost distributed-generation systems and accumulation systems in remote areas.

With regard to solar energy in particular, **Enel.si** controls the entire value chain. With more than 500 franchisees in Italy, it supplies electricity and provides services to its retail customers for distributed generation from renewable sources and energy efficiency. And in Catania construction has begun – in partnership with Sharp and STMicroelectronics – on a factory that will produce photovoltaic panels with the thin-film technology.

The main activities and results of the last few years are described below.

### Thermodynamic solar

Inaugurated in July 2010, the “**Archimede**” plant was completed and its experimental commissioning begun. At the innovative thermodynamic solar plant with parabolic collectors based on ENEA technology, its 5 MW are coupled to the existing combined-cycle power plant at Priolo Gargallo, in Siracusa province. **The first of its kind in the world**, the demonstration plant uses a cutting-edge technology that exploits molten salt as a thermal medium, thanks to which it is possible to obtain greater efficiency than in plants based on different technologies

(such as those utilizing diathermic oil) and thus higher productivity. This technology also enables thermal energy to be accumulated, which can be used to produce electricity even at night and when the sky is overcast. At the same time a feasibility study was undertaken regarding the development of a system based on the results of the Archimede project and focused on reducing production costs.

In Spain, Endesa has developed experiments regarding direct generation of steam (project GDV 500, carried out at Carboneras) to test the key plant components. During 2010, the company initiated testing of the prototype and trials of the systems of energy accumulation on solids (cement) and PCM (phase change materials).

### Innovative photovoltaic

The construction of the solar laboratory in Catania was completed and the accreditation procedure was begun. With its advanced equipment, the laboratory will allow the performance of innovative photovoltaic systems to be characterized and assessed and new solutions to be developed, with greater conversion yields and lower costs. The trials to characterize and compare numerous commercial and innovative systems were completed. As part of Enel Green Power’s joint venture with STMicroelectronics and Sharp, cooperation was begun to develop a program of research and experimentation.

### Innovative geothermal energy

Enel is engaged in research on a high-performance supercritical organic cycle, which will make it possible to construct **more efficient geothermal plants** to exploit low-enthalpy geothermal sources. Activities are in progress at the Livorno Experimental Area for the construction of a prototype 500 kWe pilot circuit in cooperation with Turboden and the Milan Polytechnic Institute.

### Biomass and Fuel from Waste

Enel is engaged in using biomass and fuel from waste (FfW) in **co-combustion in its coal-fired power plants**. Specifically, in Italy biomass is utilized in the Sulcis fluid-bed plant in Carbonia-Iglesias province. In the Fusina power station, in Venice province – which is fired by the co-combustion of biomass (FfW) and coal (5% FfW, 95% coal) – units 3 and 4 were monitored. Conducted as part of an EU project coordinated by Enel, this activity allows the behavior of a “traditional” power station to be studied when it is fired by biomass fuel to produce renewable energy.



## Wind

The collection of data regarding the wind fields that Enel Green Power operates in Italy was completed and a system was developed for **short-term forecasting of production**. Applied to all the Italian wind plants, the system will be used to forecast the production curve in order to facilitate the management of energy flows injected into the electric grid. Also completed was the construction of the Molinetto trial station, in Pisa province, where small wind generators dedicated to distributed household production will be characterized.

## Energy accumulation

Several renewable energy sources, such as wind and photovoltaic solar, are by their nature intermittent. To optimize modulation of the power generated it is possible to couple them to **energy accumulation systems**. The currently available accumulation systems must be optimized to improve their performance and reduce their costs, and it is necessary to examine new forms of electro-chemical accumulation or alternative systems, such as accumulation with compressed air. The strategies for using such systems to maximize its benefits for the electric grid must also be established.

Enel's activities on accumulation are mainly dedicated to experimenting with accumulation systems coupled with plants that run on renewable energy and with the electric grid. In Livorno Enel has completed the construction of a test facility for characterizing of accumulation systems on a pilot scale and – using a generation and load emula-

tor – testing has begun on three promising technologies: Vanadio, Lithium Ions, and ZEBRA.

In Spain, on the Canary Islands, Endesa will test a number of accumulation technologies as part of the STORE project (NaS Sodium Sulfur batteries, Zinc-Bromine batteries).

The Italian and Spanish projects are integrated with each other and will produce important results regarding the technical potential, optimal installation and operation procedures, and profitability of the different accumulation systems.

## The case for nuclear energy

The task of the energy industry is to ensure safe, reasonably priced, and sustainable supplies by using all the best technologies at its disposal, as well as investing in research and innovation to make existing ones more efficient and developing new ones.

Strategic issues of energy independence and the fight against pollution and climate change are the reasons behind Enel's renewed interest in nuclear energy.

In effect, renewable energy sources and technologies for abating emissions from traditional sources alone are not able to cope with the challenges imposed by climate change. Nuclear technology may be the solution for balancing the necessity of considerably reducing polluting

emissions with the need to ensure the availability of energy at the global level.

Nuclear energy can make a decisive contribution to the fight against climate change. In effect, when plants are in operation they generate electricity without producing CO<sub>2</sub>. Even considering their entire life cycle – including construction, decommissioning, and the cycle of nuclear fuel from the extraction of the mineral – nuclear energy is one of the sources with the lowest emissions of CO<sub>2</sub> equivalent.

## The Enel group's nuclear policy

Enel's long-term perspective on nuclear energy is clearly expressed in the Parent Company's Board of Directors' approval and use of the **Group's Nuclear Policy**, which was issued in December 2010 and is published on the corporate website.

The Policy sanctions Enel's commitment to proceed in such a way that all the nuclear investment projects in which the Group participates as either majority or minority shareholder are developed with nuclear safety and the protection of workers, the public, and the environment as the foremost priorities, as well as encouraging excellence in all activities and going beyond mere compliance with the law.

**"With regard to its investment in nuclear technologies, Enel undertakes publicly, as a shareholder, to ensure that its nuclear plants adopt a clear policy of nuclear safety and that such plants are managed according to criteria ensuring absolute priority to the safety and protection of workers, the public, and the environment.**

**Enel's policy regarding nuclear safety promotes excellence in all the plant's activities, according to a vision that intends to go beyond simple compliance with the relevant laws and regulations and ensure the adoption of managerial approaches that incorporate the principles of continual improvement and safety risk management.**

**Enel will do everything in its power as a shareholder to ensure that even the nuclear companies in which it has a minority interest adopt and publicize policies capable of ensuring the best standards regarding nuclear safety, radioactive waste management, and plant protection, as well as the safeguard of workers, the public, and the environment. Enel undertakes to**

**provide appropriate resources for implementing the aforesaid safety policies. Enel also undertakes to support cooperation regarding nuclear safety among all the companies in the industry throughout the world."**

Enel performs this governance activity in its role as a shareholder of the different companies and monitors it through its Nuclear Safety Oversight Unit.

In the particular case of the contract with EDF regarding the Flamanville 3 project – in which Enel is an industrial partner, not a shareholder – the agreements provide for Enel's access to EDF's know-how in the project. This ensures sufficient transparency to enable Enel to check the consistency of EDF's policies and procedures with the Group's Nuclear Policy.

Following the incident that occurred in **March 2011** at **Fukushima, Japan**, Enel is cooperating actively with government institutions at both the European level and the national level in the countries in which it operates in order to establish and implement the advisable safety checks on the plants in operation. The operating safety **monitoring system** and the system of checks **that Enel performs regularly on its plants** ensure the utmost safety of Enel's nuclear plants.

## Enel's experience in nuclear energy

Through its equity interest as a shareholder in Slovenské elektrárne and Endesa, Enel is involved in activities connected with the production of electricity from nuclear energy in Slovakia and Spain. The total installed capacity in the two countries amounts to around 5,500 MW, with 7,630 MW more being developed. In 2010, nuclear generation amounted to 14.2% of the Group's generation mix.

With 3,800 employees dedicated to the operation of the plants and 180 nuclear experts working on new projects, Enel's capabilities extend from research and



design to the construction and operation of plants and the management of fuel.

In addition to its involvement as a shareholder in Slovakia and Spain, in France – at the Flamanville power station in Normandy – Enel is participating with EDF on the construction of a third reactor, using the EPR (European Pressurized Reactor) technology.

In this case in particular, Enel has an important role as observer in the project management through the assignment of its own personnel to numerous key positions. In addition, specific contractual provisions were included to facilitate Enel's acquisition of the know-how that EDF is using in the project.

Enel's entry into these agreements and its involvement over time are based on the necessity of an appropriate prior understanding of such projects in accordance with due diligence principle, as well as constant oversight of the activities connected with the present and future environmental management and safety of the compa-

nies operating the plants in order to check their conformance with the Group's Nuclear Policy.

As part of the international nuclear community, Enel is a member of and plays an active role in both the WANO Moscow Centre (whose board of directors is chaired by the general manager of Enel - Slovenské elektrárne) and, with double representation, the WANO Paris Centre through Endesa-ANAV and Enel SpA (Italy). Enel actively sponsors conferences on nuclear energy and radioprotection – such as the one of the International Occupational Health Association held in Rome in September 2010 – and a number of educational initiatives regarding nuclear energy at the national level (in particular in Spain and Slovakia) as well as the European one.

### Goals achieved

In 2010 there were important developments in the construction of the Flamanville 3 power station in France, where significant progress was made on the civil works,



and in the project to complete units 3 and 4 of the Mochovce plant in Slovakia, for which the environmental impact assessment process – provided for by the procedure for obtaining the license to commission and operate the plant – was successfully concluded.

Further information on Enel's nuclear performance is available online at:

[http://www.enel.com/en-GB/sustainability/our\\_responsibility/enel\\_nuclear/](http://www.enel.com/en-GB/sustainability/our_responsibility/enel_nuclear/)

## CCS: Climate Change Solution

Traditional energy sources, such as coal and gas, will continue to play an essential role in the next few decades in satisfying the growing global demand for electricity. It is therefore necessary to ensure that these generation technologies are increasingly compatible with environmental needs.

The application of the **best technologies currently available** already enables us to reduce polluting emissions (sulfur dioxide, nitrogen oxide, particulate) to much below the limits allowed by the law. As far as the reduction of carbon dioxide is concerned – which is not a pollutant, but contributes to the concentration of hothouse gases in the air – further efforts must be made.

### Acting on efficiency

Increasing the efficiency of coal-fired plants is crucial for the reduction of the environmental impacts of production, because greater efficiency means less fuel is needed to produce the same quantity of electricity, with a consequent decrease in CO<sub>2</sub> emissions.

During 2010, Enel confirmed its commitment in this regard through its leadership in a European project (ENCIO), which is dedicated to research on optimized components for high-efficiency coal-fired plants. In just a few years, the development of technologies and materials capable of reaching an operating temperature of up to 700°C will enable plants with more than 50% efficiency to be built.

In 2010 Enel also finalized its candidacy in VGB PowerTech, a consortium of European utilities dedicated to research applied to generation, to construct a pilot plant at its Fusina power plant in Venice province to test innovative materials at 700°C (nickel alloys) as part of a research program developed with international partners.

### Towards clean coal

Increased efficiency and the use of innovative materials are current and necessary options, but they are not sufficient for resolving the problem of CO<sub>2</sub> pollution in thermal plants.

The **capture and storage of carbon dioxide (CCS)** is the key technology for generating electricity from sources like coal – a fuel necessary to ensure a balanced generation mix – without CO<sub>2</sub> emissions. However, CCS technology has not yet reached commercial maturity, and thus it is necessary to concentrate efforts on the industrial-scale demonstration of the CCS technologies available now – such as post combustion, coal gasification, and combustion in oxygen –



and the improvement of their performance in terms of, for example, their impact on energy efficiency.

Enel is one of the leading companies in **research on and the demonstration of CCS technologies**, with activities on the capture of CO<sub>2</sub> from the flue gases of coal-fired power plants (post-combustion capture), innovative combustion in oxygen, and fossil-fuel gasification (pre-combustion capture), and solutions for storing CO<sub>2</sub>.

The following are descriptions of Enel's main activities regarding the different technologies:

### Post-combustion capture

Post-combustion capture consists in removing CO<sub>2</sub> selectively through a capturing unit and the use of specific agents, such as, for example, amine.

The Enel Group is engaged with a number of projects in the field of post-combustion and geological storage. In 2010 in Italy, construction of the CO<sub>2</sub>-capture pilot plant integrated at the **Federico II power station in Brindisi** was completed, the plant was commissioned, and experimentation on capture with amine was begun. One of the first of its size in the world, this pilot plant can treat 10,000 Nm<sup>3</sup>/h of flue gases to separate 15-20,000 t/y of CO<sub>2</sub> (8,000 actual t/y) and will make it possible to optimize the capture process, increasing Enel's know-how in view

of the construction of an **industrial-scale demonstration plant** (about 250 MWe equivalent) at Porto Tolle. For this project, at the end of 2009 Enel obtained financing of 100 million euro as part of the European Energy Plan for Recovery and has sent its pre-application to the Italian government with the aim of accessing additional financing as part of the EU's NER300 initiative <sup>(4)</sup>.

In Spain, Endesa put into operation at the Compostilla power station a 300 kWt pilot plant for post-combustion capture with amine where activities are carried out to create synergy with the Brindisi plant. At the La Pareda power station at Mieres in the Asturias, a plant for testing the calcium-carbonate-looping technology is being developed and constructed. It is scheduled to go into operation in the first half of 2011.

(4) The NER 300 project, provided for by Directive 2003/87/CE, allocates 300 million CO<sub>2</sub> shares from the "new entry reserve" for the period 2013–2020 to financing projects regarding the capture and storage of CO<sub>2</sub> and innovative technologies in the field of renewable energy sources selected on the basis of a special competition among the initiatives chosen by the member states of the European Union.



### Combustion in oxygen

The combustion of coal in pure oxygen instead of air makes post-combustion separation easier, because the gas obtained consists mainly of CO<sub>2</sub> and water, which are easy to separate in order to isolate the CO<sub>2</sub> and capture it. The CCS technology with oxy-combustion at atmospheric pressure is developed mainly by **Endesa** through its **Compostilla demonstration project**, which is carried out in cooperation with CIUDEN (Fundación Ciudad de la Energía) and Foster Wheeler and also enjoys financing (180 million euro) from the EU as part of the European Energy Plan for Recovery.

The completion of the 30-MWt pilot plant currently under construction is scheduled for the second half of 2011. In addition, geological probes have already begun to characterize the two areas in Castilla and Aragon that are candidates for the geological storage of CO<sub>2</sub>.

Enel's engagement in the field of oxy-combustion in Italy is aimed at assessing innovative systems of oxy-combustion under pressure.

### Pre-combustion capture

As far as pre-combustion capture – based on the use of technologies for gasifying fossil fuels – is concerned, Enel has concentrated its activity on systems for the **generation of electricity from hydrogen** produced by the process of separation. In Italy, during 2010 the Company completed its hydrogen-fired plant at **Fusina**. The 16-MWe plant was inaugurated in July and is the **first turbo-gas power plant in the world fired by pure hydrogen**.

At the Group level, Endesa and Enel jointly operate the gasified-coal-fired Elco-gas plant at Puertollano, Spain.

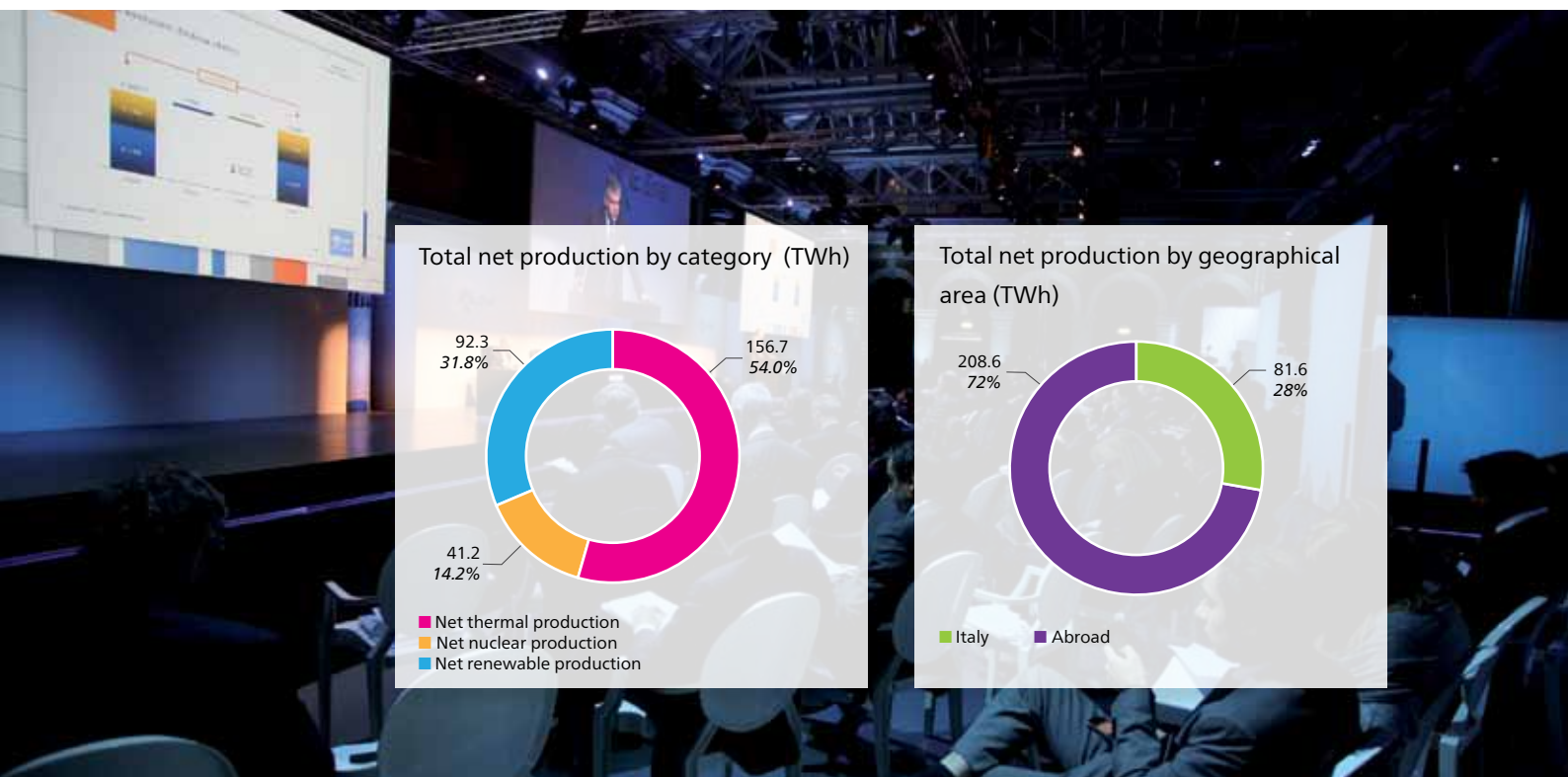
### CO<sub>2</sub> storage

To ensure the feasibility of an industrial solution for the reduction of CO<sub>2</sub> emissions, research at Enel is engaged in every stage of the CCS value chain, including the final one of storage. To this end, the Company has completed the characterization and preliminary selection of the areas suitable to constructing the **permanent geological site for storing the CO<sub>2</sub>** captured by the Porto Tolle demonstration plant.

Enel is also active in the **biological capture of CO<sub>2</sub>** through algae and in exploiting the concept of bio-refinery. A pilot plant with 500 m<sup>2</sup> of photo-bio-reactors has already been constructed at the coal-fired Litoral Almeria power station in Andalusia, Spain. At the same time in Italy, pilot-scale testing of algae cultivation aimed at the biological capture of CO<sub>2</sub> is in progress at Brindisi.



# Our 2010 results



## Operating results

### Electricity production

The Enel Group's total net production in 2010 amounted to **290.2 TWh** (an increase of 8.4% with respect to the previous year), of which 81.6 TWh were produced in Italy and 208.6 TWh were produced abroad.

In Italy, the Enel Group's power plants produced 81.6 TWh compared to 84.0 TWh in 2009 (-2.9%). The decrease in the quantity produced regards mainly thermal and hydro production (-2.4 TWh and -0.3 TWh, respectively), and was partially offset by the increase in wind production (+0.2 TWh). The Enel Group's total net production abroad amounted to 208.6 TWh, an increase of 24.8 TWh with respect to

2009 (+13.5%), which was mainly due to the larger contribution by Endesa (+16.6 TWh), among other things because of a change in the method of consolidation that took place in 2009, but had its full effect in 2010 <sup>(5)</sup>. Additional contributions to the increase came from the Russian generation company Enel OGC-5 (+3.7 TWh), the companies in Bulgaria (+0.9 TWh), and Slovenské elektrárne in Slovakia (+1.1 TWh).

(5) Since the end of June 2009 the results of the subsidiary Endesa have been 100% consolidated.



## Electricity distribution

In 2010, the electricity transported on the Enel Group's distribution networks amounted to **430.5 TWh**, of which 245.9 TWh were produced in Italy and 184.6 TWh were produced abroad.

The quantity of electricity distributed in Italy increased by 4.8 TWh (+2.0%) with respect to the amount recorded in 2009, in line with the demand for electricity on the national grid.

The electricity distributed abroad amounted to 184.6 TWh, with an increase of 32.0 TWh (+21.0%), mainly because of the increase in Endesa's contribution (+27.1 TWh) and the larger quantity transported by the distribution companies in Romania (+0.6 TWh), which benefitted from the country's increased demand for electricity.

## Electricity and gas sales

The Enel Group's sales of electricity in 2010 amounted to **309.0 TWh**, an increase of 21.0 TWh (+7.3%) with respect to 2009. The increase was due to the larger quantity sold abroad (+35.0 TWh) – connected mainly with the change in the method of consolidating Endesa, to which were added the increased sales in France, Russia, and the Latin American countries – and was partially offset by the smaller quantity sold in Italy (-14.0 TWh) because of the decrease in sales to business customers in the free market and to customers in the regulated market.

Gas sales to end customers in 2010 amounted to **8.9 billion cubic meters**, an increase of 1.2 billion cubic meters with respect to 2009 (+15.6%). Specifically, 0.9 billion cubic meters of this increase regarded gas sales abroad – because of the effect of a change in the method of consolidating Endesa – and 0.3 billion cubic meters regarded sales in Italy.

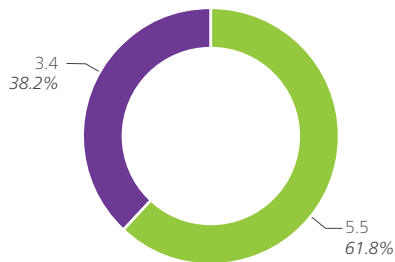
Electricity sold (TWh)



■ Italy \*  
■ Abroad

\*excluding sales to dealers

Gas sold to end customers  
(billions of m<sup>3</sup>)



■ Italy  
■ Abroad \*\*

\*\*Iberian Peninsula and Latin America customers

# Economic results

During 2010 sustained economic growth in Asian and Latin American countries was accompanied by a modest recovery in mature markets, in particular in Europe, which is still grappling with problems in the management of the public accounts of some member states.

Against this background, favored by the diversification of its markets and the decisive contribution of Latin America and all of its international operations, Enel managed to obtain high and increasing cash flows, leading to EBITDA of about 17.5 billion euro. An important contribution to this achievement was also made by the significant results of the **Performance Improvement Program**, the Enel-Endesa synergy plan that accompanies the initiatives aimed at operating excellence along the entire value chain.

In 2010 the Group also strengthened its financial profile, thanks not only to the success of the largest bond issue addressed to private investors ever carried out by an Italian company, but also the positive outcome of the listing of Enel Green Power on the Milan stock exchange and the Spanish exchanges, the largest initial public offering (IPO) in Europe since 2008 <sup>(6)</sup>. Added to that was the finalization of the plan for selling several non-strategic assets, including the Spanish high-voltage grid and Endesa's gas network.

Thus again in 2010 the Enel Group recorded a **positive economic and financial performance** that continued the growth trend of the last few years and was in line with the objective of ensuring the conservation and **growth of the Company's value for all its stakeholders**.

Millions of euro	2010	2009 restated*
Revenues	73,377	64,362
Gross operating margin	17,480	16,371
Operating income	11,258	11,032
Group and third-party net income	5,673	6,590
Group net income for the year	4,390	5,586
Group net income per share at year end (euro)	0.47	0.59

\* The figures have been restated because of the retroactive application of several accounting standards, as well as the conclusion of the process allocating cost to the assets acquired and liabilities assumed by the acquisition of 25.01% of Endesa's share capital.

**Revenues 2010** amounted to **73,377 million euro**, with an increase of 9,015 million euro (+14.0%) with respect to 2009. The positive change was due to the growth of revenue from electricity sales abroad, as well as the change in the method of consolidating the subsidiary Endesa (from proportional to total), which took place at the end of June 2009 following the acquisition of the additional 25.01% of the same company's share capital.

**EBITDA** (gross operating margin) in 2010 amounted to **17,480 million euro**, an increase of 1,109 million euro (+6.8%) with respect to 2009 ensuing from the growth of operations abroad, which also benefitted from the afore-said total consolidation of Endesa's results.

**EBIT** (operating income) amounted to **11,258 million euro** in 2010, with an increase of 226 million euro (+2.0%) with respect to 2009.

The Group's 2010 **net result** amounted to 4,390 million euro, compared to the 5,586 million euro of the previous year (-21.4%). This difference was caused by the fact that the positive operating results were more than offset by the increased net financial expense connected with both the change in the method of consolidating Endesa and the decrease in financial gains, which in 2009 benefitted from an extraordinary gain amounting to 970 million euro.

The Group's ordinary 2010 **net income for the year** was **4,405 million euro**, an increase of 208 million euro (+5.0%) with respect to the 4,197 million euro of 2009.

The **investment** carried out in 2010 amounted to 7,090 million euro (including 6,375 million euro regarding buildings, plants, and equipment), with an increase of 265 million euro with respect to 2009.

(6) Source: Borsa Italiana, <http://www.borsaitaliana.it/borsaitaliana/ufficio-stampa/comunicati-stampa/2010/enelgp.en.htm>

# Enel in the Sustainability Indexes



## Dow Jones Sustainability Indexes (DJSI)

For the **seventh year in a row**, in 2011 Enel is part of the prestigious **Dow Jones Sustainability STOXX Index** and the World index of Dow Jones. The latter considers only the 10% of the world's largest companies that are at the **top in terms of sustainability**.

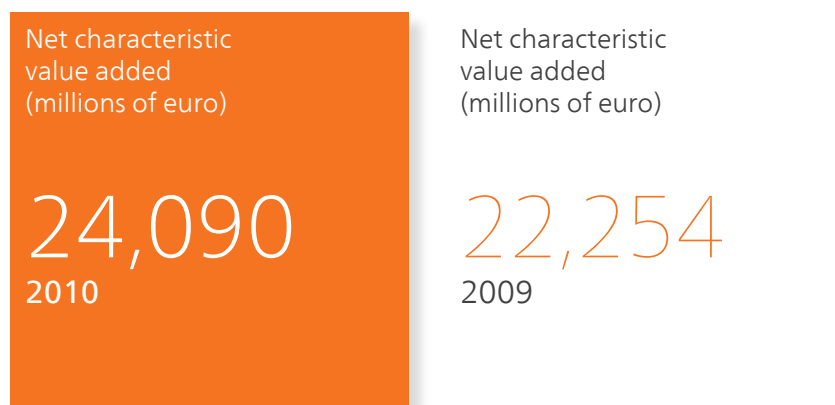
## FTSE4Good

During 2011 the Enel Group was included in the prestigious **FTSE4Good index\***. Created by the FTSE Group, a global index company, the FTSE-4Good series of indexes was designed to favor investment in companies that meet **globally recognized standards of corporate social responsibility**. The companies included in the FTSE-4Good have satisfied stringent social and environmental criteria and have been considered capable of capitalizing the benefits deriving from responsible business behavior.

\* The FTSE Group confirms that Enel was independently assessed according to the FTSE4Good criteria and that it satisfied the requirements for participating in the FTSE4Good Index Series.

# Distribution of the value generated

The economic value created and distributed by Enel provides a useful indication of how the Company has created wealth for its stakeholders.



## Net characteristic value added distributed to:

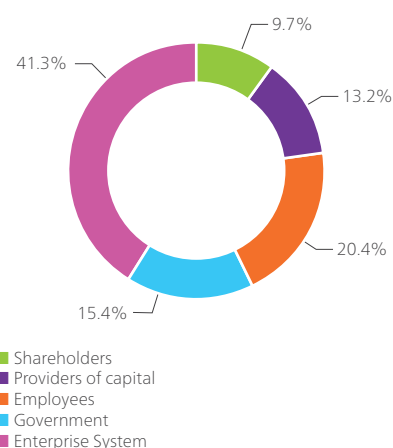
Millions of euro	2010	2009 restated *
Shareholders	2,350	2,734
Lenders	3,184	1,687
Employees	4,907	4,908
Government	3,711	3,462
Investment	9,938	9,463

\* The figures have been restated because of the retroactive application of several accounting standards, as well as the conclusion of the process allocating cost to the assets acquired and liabilities assumed by the acquisition of 25.01% of Endesa's share capital.

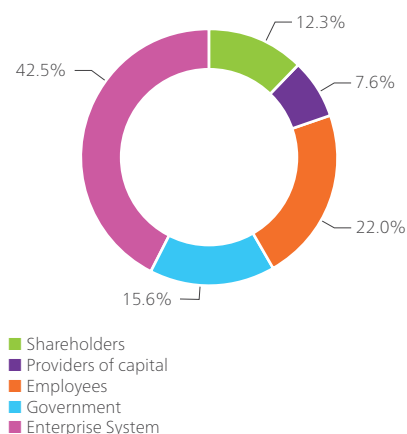
In 2010, the largest amount of the economic value created by the Group (41%) was reinvested in the corporate development and investment plans to support growth and innovation. After the Company, the stakeholders who benefitted the most from the added value generated were the employees (20%) through pay, benefits, pension plans, and the other individual benefits provided for in the Group.

The national and local governments received 13% of the value created in 2010 in the form of taxes and contributions, while the providers of capital (lenders and shareholders) were remunerated for their investments through interest on debt and dividends amounting to 13% and 10%, respectively, of the total value created during the year.

Distribution of added value 2010



Distribution of added value 2009





# Governance

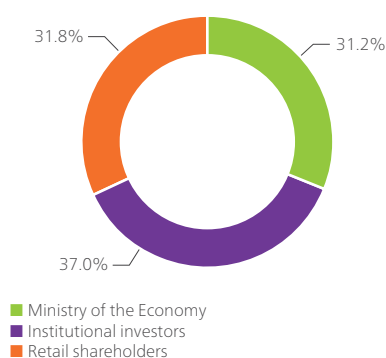
## Our shareholders

The Ministry of the Economy and Finance owns 31.2% of Enel's share capital, institutional investors 37%, and individual investors 31.8%.

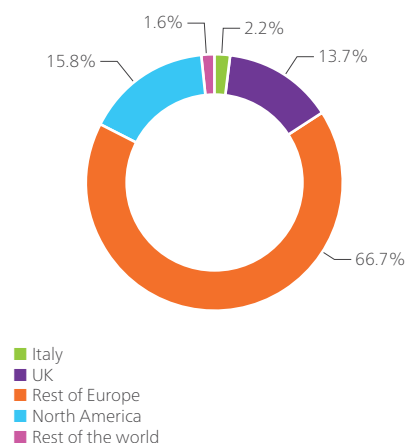
**Socially responsible investors (SRI)** are among the Group's main institutional investors. As of December 2010, 61 ethical funds held about 17% of the shares owned by institutional investors, i.e. about 5% of all Enel shares in circulation. These funds constitute a shareholder base that is stable over time and is geographically very diversified in terms of Europe, Great Britain, and North America.

The significant presence of ethical funds among Enel's shareholders is the result of the Company's constant attention to the issues of corporate social responsibility. In 2010, Enel responded to about 50 requests for information from ethical funds. The Investor Relations Unit also increased its activity considerably with respect to the previous year. It held 550 meetings with institutional investors and responded to about 467 requests for information by retail investors.

Composition of the shareholder base (2010)



Breakdown of shareholders by geographical area (2010)



# The corporate governance system

## Board of Directors

Total members of the BoD

9

including 7 non-executive

Independent Directors  
on the BoD

5

Directors designated  
by minority shareholders

3

Enel's corporate governance system is based on the highest standards of transparency and fairness in corporate management. This system is in accordance with the provisions of the law and the relevant CONSOB regulations, as well as with the recommendations of both the Self-Regulation Code of listed companies – which Enel SpA adopted in 2000 and is available online in its current version at [http://www.borsaitaliana.it/borsaitaliana/ufficio-stampa/comunicati-stampa/2006/codiceautodisciplina\\_pdf.htm](http://www.borsaitaliana.it/borsaitaliana/ufficio-stampa/comunicati-stampa/2006/codiceautodisciplina_pdf.htm) – and the international best practices.

In addition to constituting an instrument that is essential for ensuring the effective management and control of corporate activities, the corporate governance system adopted by Enel is meant to ensure:

- > the creation of value for shareholders
- > the quality of customer service
- > the control corporate risk
- > transparency with regard to the market
- > the reconciliation of the interests of all shareholders, with particular regard to small ones
- > awareness of the social significance of the activities in which Enel is engaged and the consequent necessity – when carrying them out – of considering appropriately all the interests involved

The governance bodies in charge of pursuing these objectives are mainly:

- > the **Board of Directors**, which plays a crucial role in the corporate organization and which is responsible for the Company's strategic and organizational policies, as well as ensuring the existence of the controls necessary to monitor the performance of Enel SpA and the Group;
- > the **Board of Statutory Auditors**, which is entrusted with the tasks of (i) checking compliance with the law and the corporate bylaws, as well as with correct accounting standards in carrying out corporate activities, (ii) checking the process of financial information, as well as the appropriateness of the organizational structure, the internal control system, and the Company's administrative and accounting system, (iii) overseeing the external audit of the Parent Company's annual accounts and the consolidated accounts, as well as the independence of the external auditing firm, and (iv) checking the procedures of the concrete application of the corporate governance rules provided for by the Self-regulation Code of listed companies;
- > **shareholders' meetings**, which are empowered to resolve, among other things – in ordinary and extraordinary sessions – with regard to (i) the appointment and the recall of the members of the Board of Directors and the Board of Statutory Auditors, as well as the related fees and responsibilities, (ii) the approval of the financial statements and the allocation of net in-

come, (iii) the acquisition and disposal of own shares, (iv) stock option plans, (v) amendments to the corporate bylaws, and (vi) the issue of convertible bonds.

With regard to the **Board of Directors**, according to current law all directors must possess the requisites of honorableness provided for (i) the statutory auditors of listed companies, as well as (ii) representatives of companies that own equity interests in financial intermediaries.

Pursuant to the bylaws, the election of the entire Board of Directors takes place according to the mechanism of the “slate vote”, which is aimed at ensuring that three-tenths of the Directors elected to the Board have been designated by minority shareholders, with rounding up to the higher. In addition to the outgoing Board of Directors, slates may be presented by shareholders who – alone or together with other shareholders – own a minimum equity interest established by a CONSOB regulation, which currently amounts to 0.5% of the share capital.

Each slate must include at least two candidates possessing the requisites of independence provided for by the law, and exhaustive information on the personal and professional characteristics of the candidates – accompanied by a statement of whether they qualify as independent pursuant to the law and/or the Self-regulation Code of listed companies – must be filed at the Company’s registered office together with the slates, as well as promptly published on the websites of Enel SpA and Borsa Italiana.

In accordance with a resolution of the Annual General Meeting of June 11, 2008, the incumbent Board of Directors consists of nine members, whose terms expire when the 2010 financial statements of Enel SpA are approved.

The **Chairman** of the Board of Directors (Piero Gnudi) has a proactive role that includes oversight of the functioning of the Board as part of the fiduciary powers that entrusts him with guaranteeing the legality and transparency of corporate activity for all shareholders.

In addition to the powers provided for by the law and the bylaws with regard to the functioning of the governing corporate bodies (shareholders’ meetings and the Board of Directors) and the legal representation of the Company, the Chairman is also entrusted with the tasks of (i) contributing to the establishment of the corporate strategies in agreement with the Chief Executive Officer and the relevant powers entrusted to the latter by the Board of Directors being understood, as well as (ii) overseeing internal auditing in agreement with the Chief Executive Officer,

with the related corporate department remaining under the latter. In this regard, it is in any case provided that decisions regarding the appointment and removal of the head and the other first-line executives of such department are to be made jointly by the Chairman and the Chief Executive Officer.

The Board of Directors consists of both executive and non-executive Directors. Pursuant to the recommendations of the Self-regulatory Code of listed companies, the following are considered **executive directors**:

- > the Chief Executive Officer of Enel SpA (Fulvio Conti) or of strategically significant Group companies, as well as the related Chairman who has been entrusted with individual managerial or who has a specific role in establishing the corporate strategies; and
- > directors who have managerial roles in Enel SpA (or in Group companies that are strategically significant) or with the controlling shareholder if the role also regards Enel SpA.

Directors who do not belong to any of the aforesaid categories qualify as non-executive.

According to the analysis performed by the Board of Directors in June 2008, with the exception of the Chairman and the Chief Executive Officer, the other 7 current incumbents of the Board (Giulio Ballio, Lorenzo Codogno, Renzo Costi, Augusto Fantozzi, Alessandro Luciano, Fernando Napolitano, and Gianfranco Tosi) qualify as non-executive.

As far as the **Chairman** is concerned, it should be pointed out that his characterization as an executive director stems solely from the specific role he is assigned by the current structure of powers with reference to the establishment of the corporate strategies, in that he is not entrusted with any managerial powers.

On the basis of the information provided by the individuals concerned or in any case at the Company’s disposal, in February 2011 the Board of Directors certified that Directors Giulio Ballio, Renzo Costi, Augusto Fantozzi, Alessandro Luciano, and Gianfranco Tosi possessed the **requisites of independence** provided for by the Self-regulation Code of listed companies.

Specifically, the Board considered independent those Directors who do not have, or have not recently had, even indirectly, relations with Enel SpA or parties connected with it that could currently condition their independence of judgment. In assessing the independence of its non-ex-

ecutive Directors, the Board of Directors took into account the cases in which, according to the Self-regulation Code, the requisites of independence must be considered lacking and in this regard applied the principle of the prevalence of substance over form recommended by the aforesaid Code. Furthermore, in the assessment it conducted in February 2010 the Board of Directors established specific quantitative parameters applicable to the commercial, financial, and professional relations that may take place, directly or indirectly, between Directors and Enel. Exceeding such parameters (specified in note <sup>(7)</sup>), together with the cases in which, according to the Self-regulation Code, the requisites of independence are to be considered lacking), should preclude – unless specific circumstances occur, which should be examined concretely – the non-executive director to whom they apply from possessing the requisites of independence provided for by the aforesaid Code. When the Board of Directors last examined the question, in February 2011, ascertained that the aforesaid five non-executive Directors – i.e. Giulio Ballio, Renzo Costi, Augusto Fantozzi, Alessandro Luciano, and Gianfranco Tosi – also possessed the requisites of independence provided for by the law (specifically, the Unified Finance Law) for the statutory auditors of listed companies. (Such requisites are listed in note <sup>(8)</sup>).

Finally, in February 2011, the Board of Statutory Auditors ascertained that, in carrying out the aforesaid assessments of the independence of its non-executive members, the Board of Directors correctly applied the criteria recommended by the Self-regulation Code, following for that purpose a transparent examination procedure, which enabled the Board to learn about potentially significant relations in terms of assessing independence.

To ensure the effective performance of its duties, in January 2000 the Board of Directors set up a **Compensation Committee** and an **Internal Control Committee**, entrusted with proactive and advisory duties and charged with handling sensitive issues that are potential sources of conflicts of interest. These committees consist of at least 3 non-executive Directors, a majority of whom are independent, appointed by the Board itself, which also determines the tasks of the committees with a special resolution.

The **Compensation Committee** is assigned the following advisory and proactive duties: (i) to present to the Board of Directors proposals for the compensation of the Chief Executive Officer and the other Directors who hold par-

ticular offices and monitor the decisions adopted by the Board, (ii) to examine periodically the criteria adopted for the compensation of executives with strategic responsibilities, monitor their application on the basis of the information provided by the Chief Executive Officer, and make general recommendations to the Board of Directors on this matter. As part of its duties, the Compensation Committee also plays a leading role in devising and ascertaining the performance of the incentive systems, including stock-option plans, addressed to executives, understood as instruments aimed at attracting and motivating human resources with the appropriate qualities and experience, as well as developing their sense of belonging and ensuring from them over time a constant effort to create value. As an additional task with respect to those provided for by the Self-regulation Code, the Compensation Committee also assists the Chief Executive Officer and the relevant corporate departments with regard to developing managerial resources, finding talented employees, and promoting initiatives with universities to that end. During 2010, the Compensation Committee consisted of Board members Augusto Fantozzi (an independent Director designated by minority shareholders), Giulio Ballio (an independent Director designated by minority shareholders), and Fernando Napolitano (a non-executive Director).

The **Internal Control Committee** is entrusted with the following proactive and advisory tasks: (i) to assist the Board of Directors in carrying out the duties regarding internal control assigned to it by the Self-regulation Code of listed companies, (ii) to examine, together with the executive in charge of preparing the Company's accounting documents and the external auditors, the correct use of accounting standards and their uniformity for the purpose of preparing the Annual Report, (iii) to express opinions, at the request of the executive Director charged with the task, on specific aspects regarding the identification of the Company's main risks, as well as the planning, implementation, and management of internal control systems, (iv) to examine the work plan prepared by the head of internal control, as well as the periodical reports drawn up by the latter, (v) to assess, within the limits of its assignment, the proposals made by auditing firms to obtain the related assignment, as well as the work plan prepared for the audit and the results presented in the report and in the letter of suggestions, if there is one, (vi) to check the effectiveness of the audit process, (vii) when the financial statements and the half-year report are approved, to report to



the Board of Directors on the activity carried out, as well as on the adequacy of the internal control system, (viii) to perform the additional tasks it is assigned by the Board of Directors, including the assessment of the controls aimed at ensuring the transparency and fairness of transactions with related parties. In this regard, it should be pointed out that in November 2010, the Board of Directors assigned all the relevant duties to the special Related-Parties Committee as from January 1, 2011. It should also be noted that in February 2010 the Board of Directors expressly assigned to the Internal Control Committee the additional task of *assessing the adequacy of the diligence dedicated to the issues of corporate social responsibility, as well as the completeness and transparency of the information provided in this regard through the Sustainability Report*. During 2010 the Internal Control Committee consisted of Board members Gianfranco Tosi (an independent Director, who acts as coordinator), Lorenzo Codogno (a non-executive Director), Renzo Costi (an independent Director designated by minority shareholders), and Alessandro Luciano (an independent Director).

When it approved a new procedure for regulating transactions with related parties, which satisfied the requisites prescribed by the CONSOB in a special regulation approved in March 2010, in November 2010 the Board of Directors established a **Related-Parties Committee** consisting of three independent Directors and appointed as its members Augusto Fantozzi, Giulio Ballio, and Renzo Costi, all of whom were designated by minority shareholders. As from January 1, 2011, this committee will express specific opinions regarding transactions with related parties carried out by Enel directly or through subsidiaries, in the cases and in the ways provided for by the aforesaid procedure adopted by the Board of Directors in November 2010.

This procedure thus replaces the regulation on **transactions with related parties** adopted by Enel in December 2006. Pursuant to this regulation, which was applied until the end of 2010, the Internal Control Committee carried out a preliminary examination of all the different kinds of transactions with related parties, with the exception of those that presented a limited risk for Enel SpA and the Group, such as the transactions carried out between companies entirely owned by Enel SpA, as well as typical or usual ones, those regulated according to standard conditions, and those with a consideration set according to official market quotes or by public authorities. Following the examination by the Internal Control Committee, the Board

of Directors gives its prior approval (if the transaction involves Enel SpA) or its prior assessment (if the transaction involves a Group company) of the most important transactions with related parties, by which is meant: (i) atypical or unusual transactions; (ii) transactions with a value exceeding 25 million euro (with the exception of the previously mentioned ones presenting a limited risk); (iii) other transactions that the Internal Control Committee thinks should be submitted for examination by the Board. Transactions with a value of 25 million euro or less in which the relation exists with a Director or regular Statutory Auditor of Enel SpA or with an executive of Enel SpA or a Group company with strategic responsibilities (or with a related party mediated by such persons) are always submitted to the prior examination of the Internal Control Committee. Finally, a system of communications and certifications is provided for that is meant to promptly reveal, right from the negotiation stage, transactions with related parties that involve Directors and regular Statutory Auditors of Enel SpA, as well as executives of Enel SpA or Group companies with strategic responsibilities (or related parties mediated by such individuals).

With regard to **compensation**, the Directors fees are set at a level that is sufficient to attract, retain, and motivate ones who have the professional qualities required to manage the Company successfully. It is up to the Compensation Committee to ensure that a significant part of the compensation of executive Directors and executives with strategic responsibilities is tied to the economic results achieved by Enel SpA and the Group, as well as to the achievement of specific objectives pre-established by the Board of Directors or, in the case of the aforesaid executives, by the Chief Executive Officer in order to align the interests of these persons with the pursuit of the main objective of creating value for the shareholders in a medium-to-long-term perspective.

The compensation of non-executive Directors is commensurate with the commitment required of each of them, taking into account their participation on committees. It should be noted in this regard that, in accordance with the recommendations of the Self-regulation Code, such compensation is in no way linked to the economic results achieved by Enel SpA and the Group and non-executive Directors do not participate in stock-option plans.

With regard to the compensation of executive Directors, in October 2008, as proposed by the Compensation Committee and after the Board of Statutory Auditors had ex-

pressed its opinion, the Board of Directors determined the total pay of the Chairman and the Chief Executive Officer/General Manager. This pay was established after a careful examination carried out with the assistance of a qualified external consultant, which took into account of the pay received by persons in similar positions as those concerned, including at the international level. The Chairman and the Chief Executive Officer are paid a variable compensation as well as a fixed one. As far as the variable component is concerned, the Group objectives specified for 2010 regarded both (i) quantitative targets – specifically the attainment of the consolidated EBITDA set by the budget (weight: 25%), the reduction of the consolidated financial debt (weight: 20%), the satisfaction level of the customers who accepted the offers of the subsidiary Enel Energia SpA (weight: 10%), the margin of the generation area (weight: 20%), and **occupational safety** (weight: 10%) – and (ii) qualitative targets concerning the effectiveness of the communication and information plan regarding Enel's nuclear capabilities, as well as the assessment of the results of the investigation on the Group "climate" (total weight: 15%).

In his capacity as General Manager, the Chief Executive Officer/General Manager is one of the participants in the long-term incentive plans based on financial instruments (stock options and restricted share units) or to be paid out in cash (long-term incentive) addressed to the executives of Enel SpA and the Group.

Furthermore, in case of justified resignation from their office or revocation without cause, the Chairman and the Chief Executive Officer will receive an indemnity amounting to:

- > in the Chairman's case, the total amount of the fixed and variable compensation he would have received by the end of his term, assuming – as far as the variable part is concerned – the average compensation he received in the last two years or, absent that, 50% of the maximum sum provided for;
- > in the Chief Executive Officer's and General Manager's case, the total amount of the fixed and variable compensation he would have received as Chief Executive Officer and General Manager by the end of the related contractual relations, assuming – as far as the variable part is concerned – the average compensation he received in the last two years or, absent that, 50% of the maximum sum provided for.

In keeping with the most advanced practices of corporate governance common abroad and adopted by the Self-

regulation Code and with the assistance of a firm specialized in this matter, during the last quarter of 2010, the Board of Directors began – and completed in March 2011 – a board review to assess the size, composition, and functioning of the Board itself and its committees.

Conducted through a questionnaire filled out by each Director, which took place during individual interviews carried out by the consultancy, the review was meant to take stock of the functioning of the Board of Directors during its three-year term, which was nearing its end, and focused on the most important aspects of the Board, such as: (i) the structure, composition, role, and responsibility of the body; (ii) the meetings of the Board, with the related flows of information and the decision-making processes adopted; (iii) the composition and the functioning of the Board committees; (iv) the strategies pursued and the performance goals established; (v) the assessment of the appropriateness of the corporate organizational structure. Following up on an initiative introduced after the first board review (conducted in 2004), the Board organized again in 2010 the annual strategic committee, which met in November and was dedicated to the analysis and in-depth examination of the long-term strategies in the Group's different fields of activity by the members of the Board of Directors. After the board review had been completed, the latter emphasized the continuing usefulness of this educational instrument.

With regard to **internal control**, for the last few years the Enel Group has had a special system entrusted with the mission to (i) determine the appropriateness of the different corporate processes in terms of their effectiveness, efficiency, and cost-effectiveness, as well as (ii) ensure the reliability and fairness of the account books and the safeguard of the Company's assets and (iii) ensure that operating procedures comply with both internal and external regulations and with the corporate directives and guidelines aimed at guaranteeing sound and efficient management. The Group's internal control system entails two kinds of activities:

- > "line control", consisting in the set of control activities the single operating units or Group companies perform on their own processes. These control activities are entrusted to the ultimate responsibility of the operating management and are considered an integral part of every corporate process;
- > internal auditing, which is entrusted to the Company's dedicated Audit Department and whose essential pur-

pose is to identify and limit corporate risks of all kinds through monitoring the line controls, in terms of both the appropriateness of the such controls and the results actually achieved by their application. The activity in question is therefore extended to all of the corporate processes of Enel SpA and the Group companies and the related heads are entrusted with both proposing the corrective actions they consider necessary and the implementation of follow-up activities aimed at determining the results of the actions suggested.

The adoption of an appropriate internal control system that is consistent with national and international benchmarks and best practices is the responsibility of the Board of Directors, which to this end avails itself of the assistance of the Internal Control Committee.

During 2010 the Board of Directors discussed:

- > various issues regarding corporate governance in 10 meetings;
- > issues regarding CSR in general – with particular regard to the approval of the 2009 Sustainability Report, the extension of the duties of the Internal Control Committee to include the assessment of the appropriateness of the commitment dedicated to corporate social responsibility, as well as the completeness and transparency of the information provided in this regard through the Sustainability Report; the updating of the Code of Ethics; and an extraordinary contribution to Enel Cuore Onlus to cover its projects in 2010 – in 4 meetings; and
- > issues regarding the Compliance Program pursuant to Legislative Decree n. 231/2001 in 3 meetings.

With regard to **shareholders' meetings**, Enel shares the recommendation contained in the Self-regulation Code to consider them important opportunities for discussion between shareholders and the Board of Directors and to this end – in addition to ensuring the regular participation of its members in the meetings' proceedings – believed it advisable to adopt specific measures aimed at appropriately enhancing this institution, such as, in particular, the provision of the bylaws that facilitates the collection of proxy votes from shareholders who are employees of Enel SpA or its subsidiaries. This clause provides for putting spaces for communication and the collection of proxies at the disposal of the associations to which such shareholders belong that satisfy the requisites provided for by the relevant current regulations, according to the terms and procedures agreed on each time with their legal representatives.

The Italian regulations regarding the functioning of the meetings of shareholders of listed companies were significantly changed following the enactment of Legislative Decree n. 27 of January 27, 2010, by which Italian law adopted Directive 2007/36/CE (regarding the exercise of several rights by shareholders of listed companies). Among other things, this Decree regulates the deadlines for calling shareholders' meetings, the number of sessions, quorums, the exercise of the rights to minority shareholders to call meetings and add items to the agenda, information prior to meetings, representation at meetings, the identification of shareholders, and the introduction of the so-called record date for the purpose of recognizing the right to speak and vote at meetings. It should be noted in particular that (i) shareholders may ask questions about the items on the agenda, which must be answered at latest during the meetings themselves; (ii) shareholders representing at least 5% of the share capital may ask the Directors to promptly call a shareholders' meeting, stating in their request the subjects to be discussed; and (iii) shareholders representing at least 2.5% of the share capital may, within 10 days from the publication of the meeting notice, request that items be added to the agenda, stating in the request the additional items they propose and preparing a report on such subjects. Shareholders can also inform Enel SpA of their proxies electronically by sending a message to the dedicated section of the website specified in the meeting notice. In accordance with the provisions of the Unified Finance Law and the bylaws of Enel SpA, shareholders are also entitled to entrust a representative designated by the Company with a proxy and instructions on how to vote on all or some of the items on the agenda, an action that does not entail any expense for the shareholder. Finally, at the shareholders' meeting that will approve the 2010 financial statements, the Board of Directors of Enel SpA will propose that, in an extraordinary session, the shareholders resolve to amend the bylaws with a clause that entrusts the aforesaid Board with the task of establishing – on each occasion, taking into account the development and reliability of the technical instruments available – the acceptability of participating in shareholders' meetings through electronic devices, specifying on each occasion the related procedures in the meeting notice.

Ever since its shares were listed on the stock exchange, Enel has considered it in its own specific interest, In addition to an obligation towards the market, to engage in **continual conversation**, based on the reciprocal understanding of each other's role, **with small shareholders**, as



well as with institutional investors. This conversation should in any case take place in compliance with the rules and procedures that regulate the disclosure of insider information. The Board also believed – in consideration, among other things, of the size of the Group – that this conversation could be facilitated by the institution of dedicated corporate units. It therefore proceeded to institute (i) an investor relations area, which is currently part of the Accounting, Finance, and Control Department, and (ii) an area within the Department of Corporate Affairs in charge of relations with small shareholders.

In addition, the Board considered that the Company could further facilitate its conversation with investors through its website ([www.enel.com](http://www.enel.com), investor and governance sections), where shareholders can find both financial information (financial statements, half-year and quarterly reports, presentations to the financial community, analysts' estimates, and the performance on the stock market of the financial instruments issued by the Company) and up-to-



date data and documents of interest to small shareholders (press releases, the composition of Enel's governing bodies, the bylaws and shareholders'-meeting regulations, information and documents regarding shareholders' meetings, documents on corporate governance, the Code of Ethics, and the Compliance Program pursuant to Legislative Decree n. 231/2001, as well as a Group organizational chart).

**For further information on corporate governance, see the "Report on corporate governance and the ownership structure" attached to the 2010 Annual Report.**

- (7) According to application criterion 3.C.1 of the Self-regulation Code, a director should normally be considered to lack the requisites of independence in the following cases:
- a) if, directly or indirectly, including through subsidiaries, trustees, or intermediaries, he controls the issuer or is able to exercise a significant influence on it, or participates in a shareholders' agreement through which one or more parties can exercise control of or significant influence on the issuer;
  - b) if he is, or was in the previous three years, a significant representative of the issuer, one of its subsidiaries with strategic importance, or an entity that, even together with others through a shareholders' agreement, controls the issuer or is able to exercise a significant influence on it;
  - c) if, directly or indirectly (for example, through subsidiaries or companies of which he is a significant representative, or as a partner in a professional firm or a consultancy), he has, or had in the previous year, a significant commercial, financial, or professional relationship:
    - > with the issuer, a subsidiary, or any of the related significant representatives;
    - > with a party that, even together with others through a shareholders' agreement, controls the issuer, or – if it is a company or organization – with the related significant representatives;
 or is, or was in the three previous years, an employee of one of the aforesaid entities;
 

In this regard, in February 2010 the Board of Directors of Enel SpA established the following quantitative parameters applicable to the aforesaid commercial, financial, and professional relations:

    - > commercial and financial relations: (i) 5% of the annual revenue of the company or organization of which the director has control or is a significant representative or of the professional firm or consultancy of which he is a partner and/or (ii) 5% of the annual costs incurred by the Enel Group regarding the same kind of contractual relations;
    - > professional services: (i) 5% of the annual revenue of the company or organization of which the director has control or is a significant representative or of the professional firm or consultancy of which he is a partner and/or (ii) 2.5% of the costs incurred by the Enel Group regarding similar assignments;

Exceeding such parameters should in principle preclude – unless there are specific circumstances, which should be examined concretely – the non-executive director to whom they apply from possessing the requisites of independence provided for by the Self-regulation Code. .
  - d) if he receives, or received in the previous three years, from the issuer or a subsidiary or parent company, significant compensation in addition to his fixed fee as a non-executive director of the issuer, including participation in an incentives plan tied to the company's performance, including stock-option plans;
  - e) if he has been a director of the issuer for more than nine of the last twelve years;
  - f) if he is an executive director of another company in which an executive director of the issuer is a director;
  - g) if he is a partner or director of a company or organization belonging to the network of the firm entrusted with the external audit of the issuer;
  - h) if he is a close relative of a person who is in one of the situations previously referred to.
- (8) According to article 148, paragraph 3, of the Unified Finance Law, the following do not qualify as independent:
- a) individuals who are in the conditions provided for by article 2382 of the Civil Code ( i.e. disqualification from holding public offices, incapacitation, or bankruptcy, or who have been sentenced to a punishment that entails disqualification , even temporary, from holding public offices or legal incapacity to exercise executive functions);
  - b) spouses and other relatives (including by marriage) up to the fourth degree of the directors of the company, as well as the directors and the spouses and other relatives (including by marriage) up to the fourth degree of the directors of its subsidiaries, of the companies that control it, and of those subject to joint control;
  - c) individuals who are connected with the company or its subsidiaries or the companies that control it or those subject to joint control or the directors of the company and the parties referred to under letter b) above by relations as employees or self-employed persons or by other relations of a patrimonial or professional kind that could compromise their independence.

# Risk management

In 2009 Enel centralized all the expertise and duties regarding risk management in the new **Group Risk Management** Department, with the objective of ensuring the top management of the actual implementation and control of the risk management processes for the entire Enel Group regarding all financial, operating, and business risks, as well as all the other kinds of risk.

With this new arrangement, the Enel Group's Chief Risk Officer reports directly to the Chief Executive Officer, with complete independence and autonomy with regard to the business areas. The organic and centralized management of most of the activities, which previously were carried out by different organizational units, enables the Group to benefit from a common language, information sharing, and greater opportunities for optimization.

Furthermore, at the beginning of 2010 the Company launched a number of integration projects regarding the development, assessment, measurement, concentration, and quantitative management of risks, with specific focuses on commodity, financial, credit, environmental, and operating risks, in addition to an enterprise risk management (ERM) project aimed at the integrated assessment of key business risks.

The Group Risk Management Department is divided into a number of Units responsible for the monitoring and management of the different risks that concern the Group.

## International Risk Management

The Unit has the task of organizing and coordinating the risk management departments at the most important Group companies abroad, taking care to transfer and ensure compliance with procedures, methods, and guidelines established by the other risk management units. One of its most important activities regards the implementation and management of governance processes.

To guarantee that an unequivocal language is shared at the international level, this Unit supports the development of a common risk culture so as to ensure among countries and within the respective companies the utmost efficiency in managing risk in business activities.

## Enterprise Risk Management

Integration towards a model of enterprise risk management is ensured by the Unit of the same name, which has the task of defining a common structure of risk management, as well as its measurement and the assessment criteria. With the support of the line risk managers for issues within their province, the Unit periodically performs a risk assessment aimed at identifying the top risks for the Group: risks which impact both strategic and business objectives. Together with the key risk indicators, these results enable reports to be produced for the top management on the key business risks, as well as in-depth analysis of the determinants of such risks and their correlations.

## Financial and Strategic Risk Management

The Financial and Strategic Risk Management Unit is responsible for establishing the guidelines for financial risk at the Group level (exchange rates, interest rates, equity, and liquidity), as well as analyzing, assessing, and monitoring risks and controlling the observance of the related operating limits.

The effectiveness and promptness of the control activities are ensured by the adoption of an advanced applicative platform, which allows management of financial effectiveness to be integrated with the activities of risk management (measurement of exposures, analysis of risk indicators such as value at risk, control of limits). Initially introduced at Enel SpA, it is being extended to the other Group companies.

The Unit is also responsible for the development of a business-plan-at-risk process at the Group level, with the objective of assessing – through an integrated reference model and on a stochastic basis – the impact of the most significant risk factors (for example, commodity prices, energy prices, electricity demand, interest rates, exchange rates, inflation, etc.) on the Company's results in terms of profit margins and cash flows, changes in debt, and financial indexes.

The results of these analyses will be important for assisting the top management in establishing a degree of "propensity for risk" at the Group level that is consistent with the Company's targets in terms of income, ratings, and financial sustainability and, in general, the definition and implementation of an appropriate, responsible, and integrated risk strategy at the Group level.

## Operational Risk Management

The Operational Risk Management Unit is responsible for the determination, measurement, and monitoring of all the operating risks connected with the Enel Group's industrial processes and the assessment of the related mitigation actions. In cooperation with the relevant units, the Operational Risk Management Unit performs analyses of the operational risks connected with the Enel Group's main investment projects. With the objective of ensuring the uniform quantitative measurement and management of operational risks, the Operational Risk Management Unit has begun to set up an operational risk central office.

## Commodity Risk Management

The Commodity Risk Management Unit is responsible for analyzing, assessing, and monitoring the Enel Group's exposure to commodity risk (energy, fuels, metals, CO<sub>2</sub>, etc.) at the level of both the Group and the single divisions/companies. It also establishes the guidelines, procedures, measurement methods, risk-determination models, indicators, and instruments to use regarding commodity risk at the Group level.

## Insurance and Environmental Risk Management

The already existing Insurance Unit has been assigned the additional responsibility of managing environmental risk, and in particular to analyze the results of environmental risk assessment and establish the appropriate mitigation strategies. (For the main environmental risks, see page 35). With regard to insurance, it also has the task of redefining the Enel Group's approach to the insurance market, managing the planning process of the captive insurance company, and assisting the Group divisions/companies in the management of significant damages.

## Credit & Counterparty Risk Management

The Unit monitors credit risk. In 2010 it completed its first detailed picture – by country and division/company – of the credit exposures existing throughout the Enel Group. It is also currently developing a new model for assessing the creditworthiness of counterparties, which is valid for

the entire Group and will be constantly updated and managed. This model will be based, among other things, on several basic parameters, such as the probability of default, exposure to default, and the expected rate of loss. With appropriate personalization, it will be applied to commercial customers, counterparties in financial transactions, and on commodities. It will be able to represent complex phenomena like unexpected loss (value at risk) and indicators on the profitability of the credit portfolio compared to the capital at risk. The facts produced with regard to the single portfolios will be the basis for the consequent adoption of techniques for mitigating credit risk.

## Country Risk Management

The Country Risk Management Unit was instituted for the purpose of defining a model for assessing country risk and establishing the guidelines for managing it by identifying the strategies, measures, and instruments for mitigating the risk, preparing specific studies and strategic support for merger & acquisition activities and business development, including the definition of the country-risk premium. The Unit also manages for the Group relations with the agencies that insure export credit.

In addition to the foregoing, a new risk governance policy was developed by establishing the rules, responsibilities, and information flows, as well as new risk committees, whose implementation was gradually begun during 2010. After all the projects and activities have been completed, the Company will have at its disposal a complete, uniform, and multi-dimensional risk analysis (type of risk/company/division/legal entity/risk owner/controls) regarding the entire Group, from which an overall view can be obtained of the exposure in terms of the distribution of the probabilities and impacts.

Consequently, the Group's risk management and risk response strategy will be established and aligned with the strategic targets and objectives at the Group and division level. It will benefit from a complete and integrated vision of the Company's risk position, which will allow the most effective strategies of risk mitigation to be implemented. In this way, the Group's risk management can become an additional, robust, and useful strategic instrument for devising the best long-term strategies and thus avoiding unexpected events that can significantly impact the Company's results. Thus the achievement of these objectives can tangibly contribute to the accomplishment of the corporate mission.



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*Are you really sure that a floor can't also be a ceiling?*

Bik Van der Pol's for Enel Contemporanea 2010

It evokes the man-nature relationship through the principle of the butterfly effect: even a small gesture, like the fluttering of wings, can change the world.



# Responsibility, transparency, ethics



# The principles behind our actions

## The three pillars of our corporate ethics

### Compliance program pursuant to legislative decree 231/2001

The Compliance Program pursuant to Legislative Decree 231/2001 on the administrative liability of legal persons constitutes a concrete commitment to intransigence, transparency, and responsibility in our internal relations and with the external world, and at the same time provides our shareholders with guarantees of efficient and fair management.

**Enel's policy provides that all the Group subsidiaries must adopt the Code of Ethics and the ZTC Plan, implementing the provisions of the two documents in all their activities. All our Italian subsidiaries adopt the Compliance Program, whose guidelines were extended to our subsidiaries abroad in May 2010.**

### Code of ethics

The Code of Ethics is the pillar of Enel's CSR and summarizes the Group's commitments and responsibilities in conducting its activities. It regulates and harmonizes the behavior of all its employees according to standards based on the utmost transparency and fairness with regard to the market and our stakeholders.

### ZTC plan

The Zero Tolerance of Corruption Plan was drawn up to concretely implement the tenth principle of the Global Compact. It lays out our specific commitments regarding the fight against corruption and reflects the Enel Group's participation in the PACI, the Partnering Against Corruption Initiative.

# Code of Ethics

Awareness of the social and environmental impacts of the Group's activities, together with the importance of both a transparent and cooperative approach with our stakeholders and a good reputation – in both internal and external relations – led Enel to adopt a Group Code of Ethics in 2002.

With the Code of Ethics Enel expresses clear commitments to its **ethical responsibilities** in the conduct of its affairs by regulating and harmonizing corporate behavior according to standards based on the **utmost transparency and fairness towards all the Company's stakeholders**.

The principles of the Code range from fairness in the market to the protection of the environment and the safeguard of workers. By specifying the criteria of behavior in relations with the different stakeholders, the Code provides the guidelines and rules that Enel's employees are obliged to follow in order to observe the general principles and avoid the risk of unethical actions.

Updated in February 2010, the Code of Ethics is binding for the behavior of all employees and applies to all the companies in which Enel has a majority interest. In effect, every subsidiary must adopt the Code of Ethics and the Zero Tolerance of Corruption Plan by a special resolution of its board of directors at its first meeting after the acquisition. Furthermore, the Group's main suppliers are required to act in keeping with the general principles expressed in the Code.

The **Audit Department** is entrusted with the task of seeing that the Code of Ethics is applied and observed. It carries out specific activities to monitor and continually improve the situation by analyzing and assessing the processes of ethical-risk control, as well as receiving and analyzing reports of violations of the Code. These activities are carried out with the assistance of the corporate departments concerned.

All stakeholders may **report violations or suspected violations of the Code of Ethics** through dedicated channels. Whoever makes such a report is always protected from any kind of retaliation – understood as an act that could cause even a suspicion of being a form of discrimination or penalization – and is assured that their identity will remain confidential (unless otherwise prescribed by the law).

Enel SpA's Audit Department analyzes the report – possibly talking with the person who sent it and the one responsible for the alleged violation – informs the Chief Executive Officer of the subsidiary concerned of the case, as well as suggesting the measures, if any, to be taken. The most significant cases are presented to Enel SpA's Internal Control Committee or Endesa's Comité de Auditoria y Cumplimiento, which makes the necessary decisions directly and reports them to the Chief Executive Officer and/or the Board of Directors of the Parent Company.

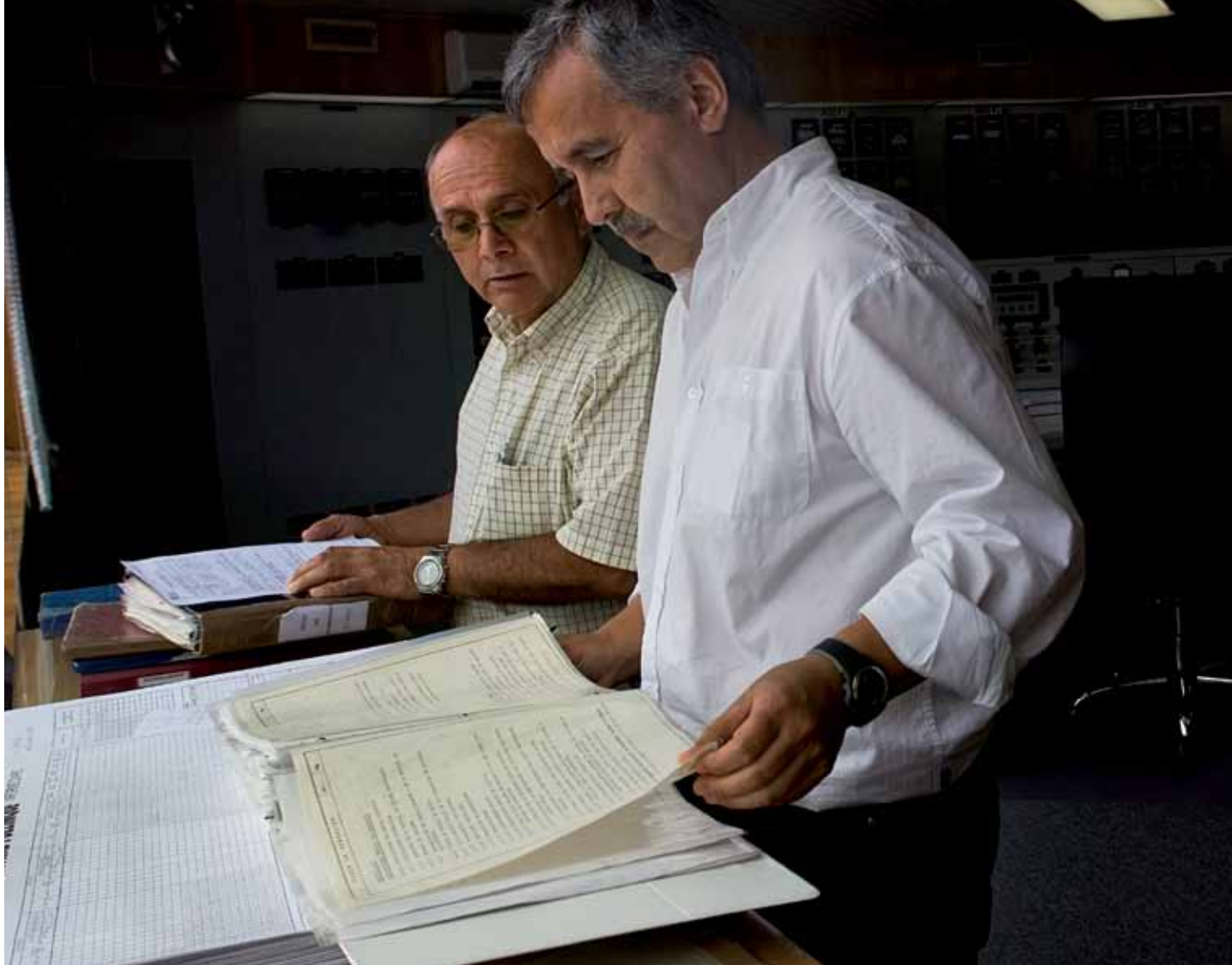
During 2010, throughout the Group 225 reports of violations of the Code of Ethics were received, of which 39 were confirmed and 35 are under investigation.

**The latest edition of the Code of Ethics – which has been extended to the entire Group – and the Zero Tolerance of Corruption Plan were presented at the most recent Group Convention (on June 30, 2010) with a message from the Chief Executive Officer and General Manager, Fulvio Conti, and the Chairman, Piero Gnudi. This launch was followed by a dedicated Communication Plan addressed to all Enel employees and aimed at disseminating the content of the two documents in all the countries in which the Group is present.**

**In addition to the Code of Ethics and the Zero Tolerance of Corruption Plan, every employee and the Group's main suppliers have been given several brochures summarizing the two documents and containing a 'manual' with the 16 General Principles describing the behavioral models to follow in doing one's job.**

Reports of violations or suspected violations of the Code of Ethics can be sent to **[audit.enel.codice.etico@enel.com](mailto:audit.enel.codice.etico@enel.com)** and **[codigoconducta@endesa.es](mailto:codigoconducta@endesa.es)**





## "Zero Tolerance of Corruption" Plan

In observance of the Global Compact's tenth principle, according to which "businesses should work against corruption in all its forms, including extortion and bribery", Enel intends to continue its commitment to the **fight against corruption**. On June 15, 2006 the Board of Directors resolved to adopt the "Zero Tolerance of Corruption", or ZTC, Plan, thus confirming the Group's commitment – which was already stated in the Code of Ethics and the Compliance Program pursuant to Legislative Decree 231/2001 – to ensuring **fairness and transparency in the conduct of its affairs and activities** in order to safeguard its position and image, the work of its employees, and the expectations of its shareholders and all its other stakeholders. Enel's policy requires that all the subsidiaries of the Group adopt the Code of Ethics and the ZTC Plan and implement the provisions of the two documents in all their activities. The ZTC Plan neither replaces nor overlaps with the Code of Ethics and the Compliance Program pursuant to Leg-

islative Decree 231/2001, but constitutes a more radical step in the fight against corruption. It implements the sustainability commitments assumed by Enel and adopts a series of recommendations for the implementation of the principles formulated by **Transparency International** <sup>(1)</sup>. The primary objective of the Plan is to identify and promote actions aimed at developing a **culture of lawfulness** through educational initiatives and making the Group's personnel aware of their responsibilities. The Plan gives substance to Enel's participation in the United Nations' Global Compact and the PACI, the Partnering Against Corruption Initiative, which was initiated by the Davos World Economic Forum in 2005 and has been joined by 60 global companies.

(1) Transparency International is the global NGO in the forefront of the fight against corruption. Its worldwide network includes more than 90 national associations.





## Compliance Program pursuant to Legislative Decree 231/2001

Legislative Decree 231/2001 introduced into Italian law a regime of **administrative** – but in fact criminal – **liability** for companies with regard to several kinds of crimes committed by their directors, executives, or other employees in the interest or for the benefit of said companies. The first company in Italy to do so, in 2002 Enel adopted a Compliance Program in accordance with the requirements of the Decree. All of the Italian subsidiaries adopt this Program, which provides for a part specifically dedicated to crimes against the civil service. On May 12, 2010, Enel SpA's Board of Directors approved the related guidelines for the Company's subsidiaries abroad.

The Program consists of a "general part" (which describes, among other things, the objectives and functioning of the Program, the duties of the internal control body, the flows of information, and the related penalty regime) and distinct "special parts" concerning the different kinds of crimes provided for by Legislative Decree

231/2001, which the Program aims to prevent.

The task of overseeing the functioning and observance of the Program, as well as keeping it up to date, is entrusted at Enel SpA to a collegial control body, whose members have specific professional expertise regarding the application of the Program and are not directly involved in operating activities.

# Enel in the Global Compact

The Global Compact is a United Nations initiative in which a network of companies, associations, government organizations, and NGOs participate. It was begun in 2000 ...

... by the Secretariat General of the United Nations to urge businesses to adopt socially responsible behavior. The companies that have joined it undertake to observe **ten principles** regarding respect for human and union rights, protection of the environment, and the fight against corruption. Participants in the Global Compact are obliged to report annually – with a special Communication on Progress – the results they have achieved under penalty of exclusion from the initiative.

Enel joined the Global Compact in 2004 and Endesa in 2002. In 2010 Enel participated in a survey on the future of sustainability commissioned by the U.N. Global Compact from Accenture. Presented during the UN Global Compact Leaders' Summit on June 24-25, 2010, the final document quotes Enel SpA's Chief Executive Officer and General Manager, Fulvio Conti, who tells about the Group's next steps to fully integrate sustainability into its financial reporting and strategy.

Endesa participates in UN Global Compact specific projects, such as Caring for Climate and Women Empowerment Principles (WEP) and is a founding member of the Global Compact's regional center for Latin America and the Caribbean.

In October 2010, the UN Global Compact invited an exclusive group of companies, including Enel and Endesa, to participate in a new initiative, **the Global Compact LEAD**, with the objective of bringing together the leading companies, which will undertake to implement a global model of sustainability following the guidelines of the Blueprint for Corporate Sustainability Leadership. The Global Compact LEADers will be the focal points of this model at the Business Summit of the G20 in Seoul on November 11-12, 2010. The Enel Group told the Secretary General of the United Nations, Ban Ki Moon, that it would join the Global Compact LEAD. On January 28, 2011, during the World Economic Forum in Davos, Enel and Endesa officially became LEAD members.

## **Endesa: the assessment process based on the principles of the Global Compact**

To ensure the observance of the principles of the Global Compact of the United Nations, which it joined in 2002, in 2007 Endesa started an internal project for monitoring and implementing the principles in the Group:



1. **analysis and evaluation:** analysis of country risk, analysis of international benchmark standards and internal diagnosis of the observance of the principles in all the countries analyzed;
2. **actions and planning:** proposal for action, integration of these proposals in the planning and their harmonization. Once a gap analysis with respect to the international standards has been performed, numerous “corrective actions” are planned to reduce the gaps revealed, aligning them with current activities in the country;
3. **checking:** an internal audit of the observance of the principles of the Global Compact and the improvement following the actions carried out. The beginning of this stage is scheduled for the first months of 2011 in order to check the actual implementation of the “corrective actions”.

**Results:** This process allowed 284 corrective actions to be carried out and the gap revealed to be reduced in several cases by 80%. The actions regarded mainly local gaps revealed during the analysis stage. The actions at the central level led, among other things, to a formal statement of support for the Universal Declaration of Human Rights by the Chief Executive Officer to celebrate the fiftieth anniversary of the Declaration in 2008.

The Blueprint for Corporate Sustainability Leadership is meant to be a guiding model for global corporate sustainability leadership in order to encourage new commitments, develop new ways of sharing best practices, and offer feasible strategies to aim for, focusing on the concept of sustainability strategically integrated into business models and the importance of spreading and extending this concept to the value chain.

# Enel respects the principles of the Global Compact

Businesses should...

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<b>Principle X</b> Work against corruption in all its forms, including extortion and bribery.	239 Fairness and transparency in selection processes; 78-81 The three pillars of our corporate ethics; 86 Four key commitments – The fight against corruption; 87-88 Transparency in institutional relations .	



# Learning about ethics

Enel organizes specific courses aimed at ensuring thorough dissemination of the essential content of the Group's sustainability instruments and their correct understanding by its employees. Beginning in 2002, therefore, courses have been organized on the Code of Ethics and, since 2004, on the Compliance Program pursuant to Legislative Decree 231/2001. Furthermore, since 2005 courses have been offered on corporate social responsibility, which are aimed at **raising employee awareness of the issues of sustainability** and the way in which these are integrated into Enel's everyday activities.

Since 2002, a total of 17,699 permanent employees have received instruction on the Code of Ethics, the Compliance Program pursuant to Legislative Decree 231/2001, or corporate social responsibility. The courses deal with all the issues of sustainability in the Group, from anti-corruption policies and procedures to the principles regarding the safeguard of human rights. The employees thus trained constitute 47% of the Company's personnel in Italy and, specifically, 80.7% of the management (executives and supervisors) and 42.5% of the other employees. In 2010 alone 510 employees completed their ethics instruction. An online course regarding the Code of Ethics, which has been translated into 5 languages, has been assigned to personnel abroad since the end of 2006 and beginning in 2011 will also be extended to the Endesa Group. Both the course on the Code of Ethics and the one regarding CSR were updated during the year and in 2011 will be offered in a new edition.

Furthermore, in order to raise awareness on the issues of ethics, workplace health and safety, and the fight against corruption even in the countries that are most at risk, the Audit Department and the CSR and Relations with Associations Unit promoted a **series of dedicated courses**. The project began in Romania, where a two-day course was held at the end of November 2010 in the main office in Bucharest for the personnel of the Procurement Unit and Enel's main suppliers. In addition to Romania, the project has also involved Russia, where it will be extended in the spring of 2011 to the OGK-5, Konakovskaya, Nevinnomysskaya, Reftinskaya, and Sredneurskaya power plants.

In addition to these **specific courses of instruction**, the subjects of the Code of Ethics, the Compliance Program pursuant to Legislative Decree 231/2001, the Zero Tolerance of Corruption Plan, and corporate social responsibility are included in institutional training courses dedicated to newly hires (such as **JET**) and newly promoted supervisors (**LINK**). Distance training courses on these topics in particular are preliminary to access to institutional training.

Finally, with regard to competition and unfair practices to avoid, the Company put at the disposal of all its employees a completely updated specific **distance training** course. The course uses, among other things, practical cases to explain how employees should behave in relations with competitors, customers, and suppliers, and provides for multiple-choice questions to test what has been learned.

# Four key commitments

## The fight against corruption

Adopted in 2006, the Zero Tolerance of Corruption Plan strengthened the Company's commitment to the fight against corruption – already assumed in the Code of Ethics and the Compliance Program pursuant to Legislative Decree 231/2001 – by assigning precise responsibilities for **monitoring the risks of corruption** and for the correct management of every suspect case.

In particular, all units and departments are responsible, within their province, for an effective process of managing the risk by putting appropriate control and monitoring systems into place. The analysis and oversight of corruption risk is also part of the general process of Group risk assessment, which is carried out periodically by the Audit Department.

During 2010 the Group as a whole recorded 18 incidents of corruption: 4 in Spain, 3 in Argentina, 6 in Brazil, 2 in Colombia, 1 in Peru, and 2 in Slovakia. With regard to these incidents, Enel imposed sanctions provided for by the corporate disciplinary code on the personnel involved and rescinded the contracts with the suppliers.

## The defense of human rights

"Enel shall avoid any kind of discrimination on the basis of the age, gender, sexual preferences, health, race, political opinions, and religious beliefs of its stakeholders. It shall guarantee the physical and moral integrity of employees, working conditions that respect individual dignity and the behavioral rules based on politeness, and safe and healthful work environments. Furthermore, it shall act to prevent incidents of intimidation, mobbing, or stalking, and shall not tolerate requests or threats aimed at inducing individuals to act against the law and the Code of Ethics or act in ways that are detrimental to the convictions and moral and personal preferences of others."

Furthermore, Enel undertakes to respect, promote, and realize in all the countries where it is present the following principles regarding the **fundamental rights of workers**: freedom of association and collective bargaining, the prohibition of child labor, and the prohibition of forced labor. The identification of these principles follows the Tripartite



Declaration of the **International Labour Organization (ILO)** regarding employment, training, conditions of life and work, and industrial relations, as well as several specific ILO Conventions regarding freedom of association, the prohibition of forced labor and child labor, and occupational health and safety.

In 2010 there were no incidents detrimental to the right to non-discrimination or contrary to the prohibition of forced labor and child labor. Two cases of alleged violation of the right to freedom of association in Peru were rejected by the court without consequences for Enel (see chapter 3, page 133).

	2010	2009	2008
Incidents of Discrimination	0	4*	0

\* 2 incidents of mobbing in Argentina and 2 in Spain

The commitment to defend these fundamental rights is not confined to the Group itself. As an international player operating in numerous countries and markets in cooperation with a dense network of suppliers, Enel is constantly engaged in defending human rights along its entire supply chain (see, in particular, chapter 7, page 241).

Furthermore, as part of investment agreements, the acquisition of majority equity interests in other companies entails the extension of the Code of Ethics and therefore all the prin-



ciples it contains, including those regarding human rights. During 2010, Enel SpA's Board of Directors approved three significant investment agreements, only one of which – regarding a 100% acquisition – has been formalized. All of the significant investment agreements in 2010 entail the application of the human rights principles set forth in Enel's Code of Ethics.

In order to monitor its operations in countries considered "at risk", Enel avails itself of the information provided by the ILO's website, supplemented by the assessments of the FTSE4GOOD Advisory Committee and supported by the research conducted by the Ethical Investment Research Service (EIRIS), whose partners include international research institutes such as the Investor Responsibility Center.

(2) By "significant" is meant investment agreements entailing the incorporation of companies, the acquisition of majority or minority equity interests, the creation of or participation in joint ventures, etc.

## Transparency in institutional relations

The relations between Enel and national and international public institutions are characterized by **absolute transparency** and **precise rules of conduct**.

Contacts between the Group and such institutions regard "exclusively forms of communication aimed at assessing the implications for Enel of legislative and administrative activity and to respond to informal requests and supervisory actions (queries, interpellations, etc.) or in any case to make known Enel's position on issues that are important for the Company" (clause 3.27 of the Code of Ethics). Consequently, it does not have direct relations with political parties or finance them in any way, as explicitly established by clause 2.2 of the Zero Tolerance of Corruption Plan ("Enel refrains from any kind of direct or indirect illegal pressure on political representatives, does not finance parties or their representatives or candidates in Italy or abroad, and does not sponsor events whose purpose is exclusively political propaganda. It refrains from applying any kind of direct or indirect pressure on political representatives (for example, by allowing the use of Enel facilities or accepting recommendations for hiring or consultancy contracts)")."

In several countries where Endesa is present, the extension of the Zero Tolerance of Corruption Plan provides for checking – in accordance with local regulations – critical situations that may exist regarding failure to observe the provisions regarding financial contributions to political parties. In the event this occurs, such situations must be submitted for approval by the Comité de Auditoria of Endesa.

As part of its role in the energy industry and in keeping with the commitment stated in the Code, Enel maintains relations with government institutions through dedicated units to make proposals for improving and amending legislative provisions that affect the Group's activities and cooperates with national and European institutions in examining and developing regulations and agreements concerning the electricity industry.

At the Italian level, the macro objective on which the Institutional Affairs Department focused its activity again in 2010 was enhancing Enel's image in the institutions by reinforcing the perception of the strategic role it performs in generating and constituting value for the Italian economic system, not only in Italy itself, but also in the larger European and international markets.

In this perspective, relations with both the executive and legislative branches of the government were further intensified and consolidated in order to represent more incisively the Company's interests and position to the public decision-makers.

Analyzing and monitoring legislation, as well as the constant dialogue with the members of the legislative and

executive branches concerned, led to the preparation and presentation of position papers and proposals to amend or replace with alternatives the provisions of greatest concern to the Company. Specifically, particularly important has been the work done on dossiers regarding renewable energy sources, the gas and electricity market, and nuclear energy, which led to the approval during the year of acts such as the ministerial decrees containing the national guidelines for the single authorization of plants based on renewable energy and the new system of incentives for photovoltaic energy (2011-2013 Energy Account), the decree laws with urgent measures regarding financial stabilization and economic competitiveness (the so-called "Summer Budgetary Measure") and urgent measures regarding energy, and the decree appointing the members of the Nuclear Safety Agency.

The European Institutional Affairs Office constantly analyzes and monitors a series of European legislative acts with a significant impact on Italy's legislation regarding energy, the environment, and the domestic market.

Specifically, in 2010 the Office focused its activity on the new IPPC (Integrated Pollution Prevention and Control) Directive on the emission limits of large industrial plants – which was approved after the second reading after a process lasting about three years – the Directive on Late Payments insactions, , and the Regulations on Gas Supply Security.

With regard to so-called low-carbon technologies, notable business intelligence actions were carried out on the dossiers regarding EU financing of demonstration projects (Recovery Plan and ETS NER 300) and the implementation of the SET PLAN, the strategic plan for energy technologies launched by the European Commission in 2008.

Enel's European Institutional Affairs Office also dedicated its efforts to the organization of various institutional events throughout the year. These events are aimed at enhancing the relations between Enel and representatives of EU institutions and increasing the latter's awareness of several issues that are crucial for the Company: smart grids, Enel-Endesa integration, the reform of generation in Romania, electric cars, the Italian nuclear program, etc. The Office also organized in Brussels the first event dedicated entirely to the European value of Enel's not-for-profit association, Enel Cuore.

In 2010 Enel received 113.5 million euro in contributions, while its remaining debt regarding the EIB (European Investment Bank) loan amounts to 5,001.5 million euro. The increase of about 89 million euro in contributions

with respect to 2009 is largely due to three projects of Enel Distribuzione, Endesa, and Enel Ingegneria e Innovazione.

## Fairness in the market

As a principle on which Enel's practices are based, clause 3.30 of the Code of Ethics states that the Group "shall fully and scrupulously observe the antitrust rules and the resolutions of the market's regulatory authorities. Enel SpA's subsidiaries are obliged to inform Enel SpA's Institutional Affairs Department of all initiatives with antitrust significance they undertake. Enel SpA's Institutional Affairs Department shall provide guidelines regarding antitrust policy to all the Group companies, as well as the necessary assistance to the management."

Furthermore, "Enel shall not deny, hide, manipulate, or delay any information requested by the Antitrust Authority and other regulatory bodies in their supervisory duties and shall cooperate actively during investigative procedures. In order to ensure the utmost transparency, Enel undertakes to not become involved with employees of any Authority or members of their families in situations where there is a conflict of interests."

In Italy, during 2010 the Antitrust Authority (AGCM) initiated a sole procedure regarding the abuse of a dominant position. In effect, on February 2, 2010 the AGCM started a proceeding regarding dominant-position abuse (A/423) against Enel Produzione and Enel SpA for alleged unfair behavior in the wholesale electricity market. After Enel Produzione undertook to remedy such behavior, on December 30, 2010 the AGCM closed the proceeding without declaring any infraction or imposing any penalty.

The only case of a penalty for an ascertained violation of the regulations regarding competition occurred in Russia, where Enel OGK-5 was accused of monopolistic activity regarding heat generation in the Ekaterinburg region. In effect, Enel OGK-5 should have published information concerning heat prices, key financial indicators, technical capacity, etc. In December 2010, the Anti-monopolistic Administrative Committee set a penalty of 200,000 roubles, amounting to about 4,923 euro.

**For further information on this subject, see the "Regulatory and Rate Issues" section of the 2010 Annual Report.**





# In line with our stakeholders



Enel's core business determines the identification of its stakeholders and their interests. In effect, **Enel's stakeholders** are those **categories of individuals, groups, and institutions** whose contribution is required for Enel to carry out its mission or that, in any case, have an interest at stake in its pursuit.

Thus the key stakeholders are the people who make investments connected with Enel's business, first of all its shareholders and then its employees, customers, suppliers, and business partners. In a broader sense stakeholders are also all the individuals and groups, as well as the

institutions that represent them, whose interests are affected by the direct or indirect effects of Enel's activities. This category includes, for example, the local and national communities in which Enel operates, environmentalist associations, and future generations.

Through the numerous corporate units dedicated handling relations with its different stakeholders, the Group pays constant attention to the expectations of each, thanks to which it understands when it should promote initiatives and actions in response to the needs expressed and establishes additional processes of stakeholder engagement.

## Accounting, Finance, and Control Department

### Investor Relations Unit

The unit manages relations with both analysts and institutional investors and retail investors according to dedicated procedures through official meetings, road shows, and the corporate website. Together with the CSR and Relations with Associations Unit, it also handles relations with ethical investors.

### Personnel and Organization Department

#### Planning, Development, and Enel University Unit

The unit surveys the expectations of employees through ad hoc meetings and the climate survey.

#### Industrial Relations Unit

The unit maintains constant relations with labor union representatives.

### Audit Department

The department checks the application and observance of the Code of Ethics and the Zero Tolerance of Corruption Plan, as well as supervising the functioning of and compliance with the Compliance Program Pursuant to Legislative Decree 231/01 (Compliance Program 231/01). It also manages reports regarding the Code of Ethics.

### External Relations Department

#### Institutional and Stakeholder Communication Unit

The unit plans the Group's institutional communication activities and establishes the corporate-identity guidelines. It coordinates local and national communication events, while ensuring constant engagement with communities, among other things through support for educational, social, cultural, and sports activities.

#### CSR and Relations with Associations Unit

The unit coordinates the Group's CSR activities, manages relations with consumers, environmentalists, small and medium-sized businesses, and local-government associations, and promotes the Enel Historical Archives.

#### Advertising and New Media Unit

The unit plans and manages communication campaigns, research on the corporate image and reputation, and handles communication via the new media.

#### Large-scale Infrastructure Projects Unit

The unit discusses with communities affected by significant industrial construction.

#### Internal Communication Unit

The unit promotes participation and engagement by Enel "citizens" with the objective of facilitating integration through innovative instruments and methods.

#### International Affairs Unit

#### International Institutional Affairs Unit Local and Confindustria External Relations Unit

The units manage relations with institutions at the local, national (for each country), and international levels through the relevant units, observing the guidelines established by the External Relations Department.

## Regulations, Environment, and Carbon Strategy Department

### Environmental Policies and Climate Change Unit

The unit establishes the climate strategy for the environmental sustainability of energy.

### Procurement and Services Department

The department organizes training meetings with suppliers, mainly on the topic of safety, to promote sustainability along the entire supply chain.

### Sales Division

The division is present in the end electricity and gas markets with an integrated offer of products and services addressed to the different kinds of customers.

### Infrastructure and Networks Division

The division develops remote-management and remote-control systems, ensuring its assistance in the multi-metering activities (electricity, gas, etc.) achievable with remote-management systems. It is the benchmark for the implementation of "smart grids".

### Engineering and Innovation Division

The division establishes the Strategic Plan for Innovation and the Environment and ensures the monitoring and external promotion of environmentally significant innovation initiatives. It promotes the areas of technological excellence that distinguish the Enel Group.

### Renewable Energy Division

The division manages more than 500 franchises specialized in the field of renewable energy. With its offer of photovoltaic and thermal-solar systems, the Company is in the forefront particularly with regard to solar energy.



- SHAREHOLDERS AND INVESTORS**
  - Investor Relations
  - CSR
- EMPLOYEES**
  - Personnel and Organization
  - Internal Communication
  - Audit
- CUSTOMERS**
  - External Relations
  - Sales
  - Infrastructure and Networks
  - Renewable Energy
- SUPPLIERS**
  - Procurement and Services
- INSTITUTIONS**
  - Institutional Affairs
- ASSOCIATIONS**
  - CSR
- COMMUNITIES**
  - External Relations
  - Infrastructure and Networks
  - Engineering and Innovation
  - Regulations and Environment
- FUTURE GENERATIONS**
  - Engineering and Innovation
  - Regulations and Environment
  - CSR

# Stakeholders map



# The network that multiplies our energy

The Enel Group's international role is also manifested in its active participation in the international associations and organizations that establish long-term goals and commitments to cope with the challenges of climate change and the social and economic pressures that concern the energy industry and the macroeconomic situation in general. In addition, it is involved in the main national and international industry associations and plays a proactive role in the main networks that develop corporate social responsibility projects and promote a way of doing business that is consistent with a sustainability-based perspective.



## **E8**

<http://www.e8.org/>

Headquarters: Montreal (Canada)

An international non-profit organization consisting of the 10 leading electricity companies of the G8 countries. It plays an active role in global matters connected with electricity and promotes the sustainable development of energy.

## **Observatoire Méditerranéen de l'Énergie, OME**

<http://en.omenergie.com/>

Headquarters: Nanterre (France)

The OME promotes cooperation and teamwork among the largest energy companies in the Mediterranean area.

## **World Economic Forum, WEF**

<http://www.weforum.org/>

Headquarters: Geneva (Switzerland)

A foundation that brings together leading representatives of international politics and the global economy to discuss the main issues facing the world.

## **World Business Council for Sustainable Development, WBCSD**

<http://www.wbcsd.org/>

Headquarters: Geneva (Switzerland)

The WBCSD is an association led by the CEOs of about 200 companies from all over the world that are connected with sustainable development.

## **EURELECTRIC**

<http://www.eurelectric.org/>

Headquarters: Brussels (Belgium)

EURELECTRIC is an association that represents the interests of the European electricity industry.

## **World Energy Council, WEC**

<http://www.worldenergy.org>

Headquarters: London (United Kingdom)

One of the most important organizations in the world that are involved in energy, the WEC brings together companies from more than 100 countries and has a role as advisor and mediator that is recognized by the United Nations.

## **International Emissions Trading Association, IETA**

<http://www.ieta.org/>

Headquarters: Geneva (Switzerland)

The IETA facilitates the achievement of the goals provided for by the United Nations Framework Convention on Climate Change (UNFCCC).



### **Verban der Grobkessel Besitzen, VGB**

<http://www.vgb.org/>

Headquarters: Essen (Germany)

VGB Power Tech is an association involved in the technical aspects of the generation of electricity and heat.

### **European Corporate Leaders on Climate Change, EU-CLG**

[http://www.cpi.cam.ac.uk/our\\_work/climate\\_leaders\\_groups/clgcc.aspx](http://www.cpi.cam.ac.uk/our_work/climate_leaders_groups/clgcc.aspx)

Headquarters: Cambridge (United Kingdom)

The CLG is a group created in 2006 as part of Cambridge University's "Programme for Industry" to promote new long-term policies to fight climate change.

### **Global CCS Institute, GCCSI**

<http://www.globalccsinstitute.com>

Headquarters: Canberra (Australia)

The Global Carbon Capture and Storage Institute is an organization whose aim is to promote the development of CCS technology in commercial and regulatory terms, as well as from the point of view of its acceptance by public opinion.

### **European Photovoltaic Industry Association, EPIA**

[www.epia.org](http://www.epia.org)

Headquarters: Brussels (Belgium)

The EPIA is a European association dedicated to the development of the photovoltaic (PV) solar industry.

### **Renewable Energy Certificate System, RECS**

<http://www.recs.org/>

Headquarters: Utrecht (Netherlands)

The RECS was created to foster the international development of renewable energy. The system promotes the use of a standard certificate as proof of the production of a quantity of renewable energy.

### **International Solar Energy Society, ISES**

<http://www.ises.org>

Headquarters: Fribourg (Germany)

The ISES is involved in promoting and disseminating technical information – including in the form of popularization – regarding solar energy.

### **Consumers Forum**

<http://www.consumersforum.it/>

Headquarters: Rome (Italy)

The Consumers Forum is an independent Italian association founded in 1999. Its members include the most important Italian consumer associations, several research firms, and several of Italy's most important companies selling goods and services, as well as a number of Italian institutions.

### **Corporate Social Responsibility Europe, CSR Europe**

<http://www.csreurope.org/>

Headquarters: Brussels (Belgium)

The CSR Europe is a network of companies and organizations that cooperate to incorporate corporate social responsibility in their business practices and strategies.

### **European Academy of Business in Society, EABIS**

<http://www.eabis.org/>

Headquarters: Brussels (Belgium)

The European Academy of Business in Society (EABIS) is an association among enterprises, business schools, and other academic institutions which, with the support of the European Commission, is engaged in incorporating social issues in business strategies.

### **European Wind Energy Association, EWEA**

<http://www.ewea.org/>

Headquarters: Brussels (Belgium)

The European Wind Energy Association (EWEA) is an association that actively promotes the use of wind energy in Europe and throughout the world.

### **Global Reporting Initiative, GRI**

<http://www.globalreporting.org/>

Headquarters: Amsterdam (Netherlands)

The Global Reporting Initiative (GRI) was one of the first associations to develop a broad reporting framework for sustainability. This framework presents the indicators that organizations can use to measure and analyze the economic, environmental, and social performances.

### **World Association of Nuclear Operators, WANO**

<http://www.wano.org.uk/>

Headquarters: London (United Kingdom)

The WANO's objective is to improve the safety of the world's nuclear plants. It aims to maximize the safety and credibility of nuclear plant operation through the exchange of information and by encouraging communication and discussion among its members.

### **World Nuclear Association, WNA**

<http://www.world-nuclear.org/>

Headquarters: Washington (United States)

Accredited at the United Nations, the WNA is an organization consisting of private companies that promotes the peaceful use of nuclear energy as a sustainable energy resource.

### **Alliance for Rural Electrification**

<http://www.ruralelec.org/>

Headquarters: Brussels (Belgium)

The Alliance for Rural Electrification is an organization that promotes and furnishes efficient "renewable" solutions for rural electrification in less developed countries.

### **MIT Centre for Energy and Environmental Policy Research, MIT CEEPR**

<http://web.mit.edu/ceepr>

Headquarters: Cambridge (United States)

The CEEPR promotes empirical research at MIT on questions regarding energy and environmental policy in order to assist the decision-making processes of governments and industries.



**Sustainability Day**  
Business as Unusual.



risk management  
Hydrogen  
SALES  
ozone  
NO<sub>x</sub>  
STAKEHOLDER  
Value Creation  
Biodiversity  
Photovoltaic  
HEALTH  
Endesa Ed  
GENERATION  
Raw Materials  
Inv  
SOCIE  
RESEARCH & INNOVATION  
NGOs  
Passion  
renewable energy  
recycled  
Diversity  
BENEFIT  
ECONOMIC PERFORMANCE  
SMART GRIDS  
people  
community engagement  
POWER  
Working Groups  
We are energy  
HISTORICAL ARCHIVE  
Global  
environment  
zero emissions  
EPR  
CARBON NEUTRALITY  
integration  
COMMUNICATION  
DIALOGUE  
reliability  
Earth  
CO<sub>2</sub>  
playenergy  
public opinion  
Electricity Market  
habitats  
human resources  
CONSOLIDATION  
internationalization  
Planet  
future  
land conservation  
ENERGY EFFICIENCY  
SO<sub>2</sub>  
Training  
Customers  
open plants  
CCS

# Sustainability Day 2010

To share and promote a culture of responsibility, support the creation of new ideas and the establishment of the best practices in the field of sustainability at the global level. These are the objectives of Sustainability Day. Planned and organized by Enel, the first edition was held in Rome on February 8, 2010.

In effect, companies recognize that sustainability plays an essential role in long-term strategy and there is increasing awareness that attention to the practices of environmental and social sustainability and corporate benefit a company's prospects as much as good financial management. These considerations led to the idea of a place where some of the foremost international experts of corporate social responsibility and representatives of different stakeholder categories – from enterprises and NGOs to ethical funds and institutions – could get together and discuss the ways in which sustainability can be integrated with business.

Thus the subtitle of the project: **Business as UnUsual.**

Sustainability Day was presided over by Mervyn King, Chairman of the Global Reporting Initiative, Professor of Corporate Citizenship at the University of South Africa and member of the World Bank's Advisory Group on Corporate Governance.

The second edition of Sustainability Day was held at Endesa's headquarters in Madrid on February 15, 2011. The most significant sustainability projects implemented by Enel and Endesa – from the Code of Ethics and investment in research and innovation to examples of dialogue with local communities, respect for the environment, and corporate governance – were displayed outside the auditorium. Enel also published an issue of **Oxygen**, its magazine promoting scientific dialogue, dedicated entirely to corporate social responsibility and available for the first time in English and Italian on iPad.

For Sustainability Day, every year Enel commissions from the Intelligence Unit of **The Economist** a study that – based on interviews with hundreds of senior executives around the world – takes stock of corporate social responsibility and its contribution to economic growth.

Enel also created a dedicated website for the event – [www.enelsustainabilityday.com](http://www.enelsustainabilityday.com) – where the public could follow the proceedings live, asking the speakers questions via Twitter, and updates, interviews with the participants, and other material were available afterwards. In this way, Sustainability Day becomes an interactive occasion for promoting a culture of responsibility leading to an innovative way of conceiving corporate sustainability at the global level.

The proceedings of each edition were followed online by about 4,000 people.

# What they say about us

## Enel according to the media

Enel's responsibility to its stakeholders makes it necessary to **constantly monitor** how the Group is perceived by the **local, national, and international press**.

Enel's attitude in its relations with the press has always been open and positive. This commitment is reflected in the results of a study carried out in 2010 by Demoskopea, which analyzed the opinions of Italy's leading economic journalists on the quality of the media relations units of the largest Italian companies and assigned Enel **first place in terms of the quality of its relations with the press**.

As far as the Italian situation is concerned, the Group's image as presented in a study by Eikon of the leading national media in 2010 is positive, with a score of between 0.6 and 0.9 on a scale ranging from -1 to +1.

Among the aspects cited as positive by both the Italian and the international media, particular emphasis was given to the issue of 3 billion euro worth of bonds, the listing of Enel Green Power, and the positive performance of its shares on the stock market. Also considered very positively were the Group's initiatives to reduce the environmental impact of production (CO<sub>2</sub> capture and storage), the development of renewable energy sources (photovoltaic and thermodynamic solar), its support of innovation and technological development (the hydrogen-fired Fusina power plant and the Archimede thermodynamic solar plant), smart distribution (smart grids, the introduction of electronic meters in Spain), and efficiency in the end consumption of electricity (LED street lighting, electric cars).

Corporate social responsibility was also the subject of positive articles. Enel is highly esteemed by foreign media for its commitment to supporting communities in needy areas, in particular in Eastern Europe and South America, as well as for the initiatives of Enel Cuore in sup-

port of the charitable initiatives of volunteer and other non-profit organizations. Enel's sponsorship of cultural, musical, and sports activities was also viewed positively by the Italian press.

As far as the negative aspects reported by the media are concerned, one of the most critical subjects in Italy in 2010 was the serious accident on the Torrevaldaliga Nord worksite in Civitavecchia that caused a death in April (page 245).

Other aspects that were treated negatively by the Italian press were the negative performance of Enel SpA's shares on the stock market, the occurrence of extensive breakdowns on the grid because of the weather, and, in general, complaints about the excessive cost of electricity. Local media in particular highlighted problems connected mainly with service: connection delays, power interruptions due to work on the grid or force majeure, and various billing errors.

Doubts were also widespread regarding the Group's ability to reduce its debt following its international expansion in the last few years and Enel's position after the reform of the CO<sub>2</sub> credit market. Another critical subject widely discussed by the Italian and international media was nuclear energy.

Finally, with regard to Enel's international operations, several large projects such as HidroAysén in Chile and the Mochovce nuclear power plant in Slovakia led to protests by environmentalist associations and several representatives of local communities (page 215).

After this Report was closed on January 21, 2011 the Spanish press highlighted an accident that occurred at the Ascó 1 and 2 units of the Ascó nuclear power plant. This accident was assessed as level 1 on the INES scale, with no consequences for the workers, the local population, or the environment.



# Brand Equity

According to GfK-Eurisko's seventh report on brand equity, in 2010 the **positive** trend of Enel's image in Italy continued. The brand equity (BE) indicator is an index – based on an annual statistical study – of the degree to which a brand is perceived by the public, companies, and opinion leaders.

Overall, in spite of the increased competition resulting from the liberalization of the market, Enel's BE index increased slightly with respect to 2009 and by more than four percentage points with respect to the first survey in 2003.

In particular, there was a large increase in the aspects of image connected with corporate ethics (+10 points since 2003), price transparency (+5 points since the market was liberalized in 2007), and the National System (+6 points since 2007), which highlights the perception of Enel as a **highly socially responsible company with a transparent approach**.

An essential strong point of Enel's brand equity is the institutional dimension of its brand. The need for reliability has a considerable influence on the decision to become a customer of an energy company, especially in the household market, and its reliability is a consequence of the Group's institutional strength in terms of market presence, competence, and experience. Enel remains the leader in Italy, maintaining its position as the top brand thanks to its institutional strength and the guarantee of reliability perceived by both household and business customers.

	2010	2009	2008
Customer relations (%)	49	47	48
Price transparency (%)	50	47	46
Technical competence (%)	62	61	59
Institutional aspect (%)	77	76	76
National system (%)	57	57	55
Ethics (%)	45	44	44
Brand equity index	72.4	72.2	71.7

On the Italians' mental energy map, Enel continues to have the most central position, in spite of its competitors' large investment in communication and commercial activity.

In a market in which – because of the competitive pressure – the process of choosing a brand is accentuated and solicited, Enel showed good reactions in generating preferences in the household market, while in the business market it essentially maintained the positions already acquired.

In sum, the GfK Eurisko survey shows that Enel's image reflects a strong institutional role, proactive in the economic or systemic crisis in progress and capable of creating employment. Enel is positioned as a socially responsible company, **a solid Italian enterprise and a multinational** that invests in innovation and research on new energy sources that are cheaper and have less impact on the environment.

# Enel's image

## Service/Relationship with customer

- ① Is attentive to the needs of customers/listens
- ② Provides a high-quality product/supply
- ③ Is managed by competent and reliable people
- ④ Responds quickly to customers
- ⑤ Is likeable
- ⑥ Offers additional services and innovative products
- ⑦ Makes me feel I'm an important/ a special customer

## Price/transparency

- ⑧ The rates are transparent
- ⑨ Provides clear and complete information
- ⑩ Personalized contract arrangements
- ⑪ Offers advantageous prices
- ⑫ Offers easy terms of payment

## Technical competence

- ⑬ Repairs malfunctions quickly and the technical service is appropriate
- ⑭ Is in the forefront technologically
- ⑮ Informs customers about energy and energy conservation
- ⑯ Is concerned about the safety of its employees
- ⑰ Does research in the field of energy, bets on new kinds of energy

## Institutional aspect

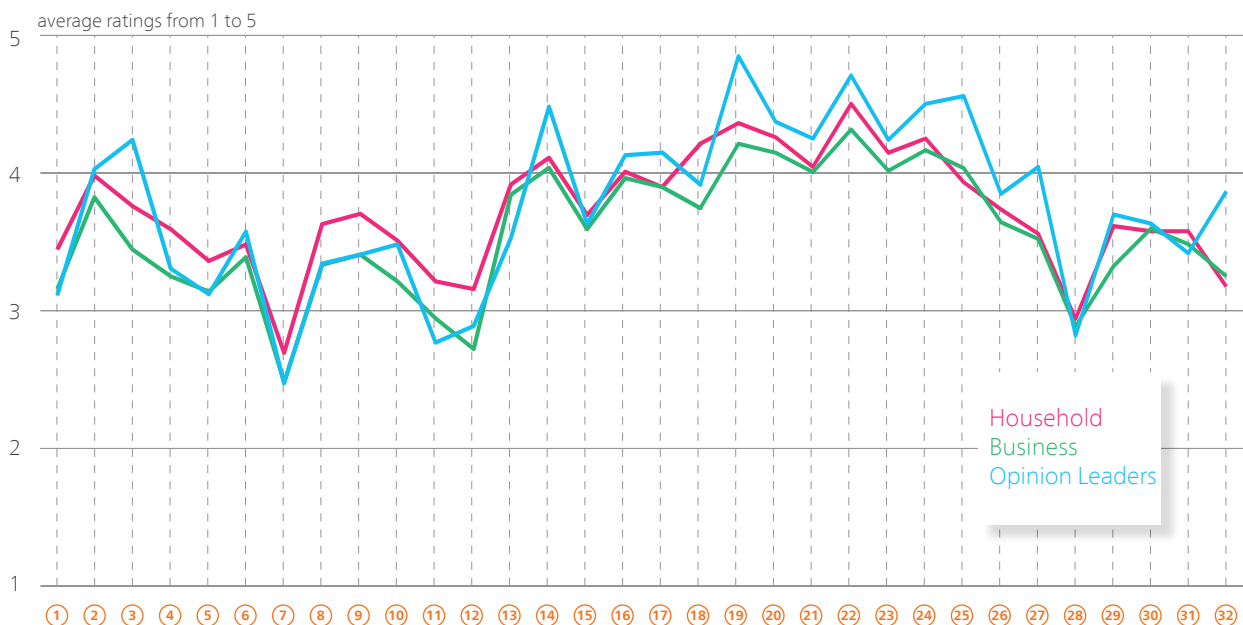
- ⑱ It is possible to communicate with this company by modern means
- ⑲ Is competent in the energy field
- ⑳ Is visibly present in local communities
- ㉑ Has a recognizable corporate culture and style
- ㉒ Is the leading company in its field
- ㉓ Is solid economically/financially
- ㉔ Is significant internationally
- ㉕ Advertises a lot/communicates with the public

## The national economy

- ㉖ Is able to resolve critical energy and other situations
- ㉗ Serves the interests of our country, is Italian

## Ethics

- ㉘ Thinks not only of profit, but also principles
- ㉙ Is able to talk with representatives of local communities
- ㉚ Is sensitive to ecological and environmental issues and respects the environment
- ㉛ Does interesting and useful advertising
- ㉜ Promotes the dissemination of culture and art/ is active in society



# Prizes and awards

Enel has received numerous national and international awards regarding sustainability.

## **Ruban d'Honneur - European Business Awards**

Thanks to the dialogue established with our stakeholders, as well as the Sustainability Day and Safety Week initiatives, the latter of which was launched in all the countries in which Enel is present, the Group has won the Ruban d'Honneur of the European Business Awards in the "Corporate Sustainability" category for two years in a row, 2009 and 2010. Furthermore, in 2009 Enel also won an award in the "Environmental Awareness" category. The European Business Awards are considered to be the "showcase" of European economic success. Instituted in 2006 to recognize the excellence and innovation of companies of the 27 countries of the European Union engaged in economic, industrial, and environmental development, these awards constitute a precious recognition promoted by organizations such as CMS, AXA, Grey EMEA, Siemens, Société Générale, and the Wall Street Journal Europe.

## **Ethics and Enterprise Award – Ravello Festival 2010**

In 2010, Enel received the Ethics and Enterprise Award of the Ravello Festival 2010 in the "Sustainable Development" category, thanks to the agreement on the institution of the Committee on Industrial, Environmental, and Employment Policies, a body that promotes studies and research and is used as an instrument for discussion of Enel's strategies, investment, employment, and the development of renewable energy sources.

## **European Utility Awards 2010**

The first step in constructing a smart grid is the installation of electronic meters, a technology in which Enel is the world leader. Enel's leadership was confirmed by its assignments of one of the European Utility Awards 2010, which are given to the best projects developed by European technological companies. Enel's award was in the Business Performance category for its installation in Italy of 32 million electronic meters integrated with the remote-control system of the grid.

## **Social Sensitivity Award to Enel Cuore Onlus**

In December 2010 Enel Cuore, the Enel Group's non-profit association, received an award for its commitment in favor of the "Hope and Charity" Mission in Palermo to realize the largest soup kitchen in southern Italy, as well as a support network for accommodating and assisting the homeless.

## **Top Employer**

For the second year in a row, the international institute CRF awarded Enel its certification as a top employer company for the high quality of its assessment and training systems, its career opportunities, and its employees' opportunities for development.

## **Igualdad en la empresa**

Endesa received the "Igualdad en la empresa" (Equal Opportunity at the Company) award assigned by the Spanish Ministry of Health, Social Policy, and Equal Opportunity, a seal of excellence that distinguishes the companies committed to ensuring their employees of equal treatment in working conditions, organizational models, and other areas, such as corporate services, products, and advertising.

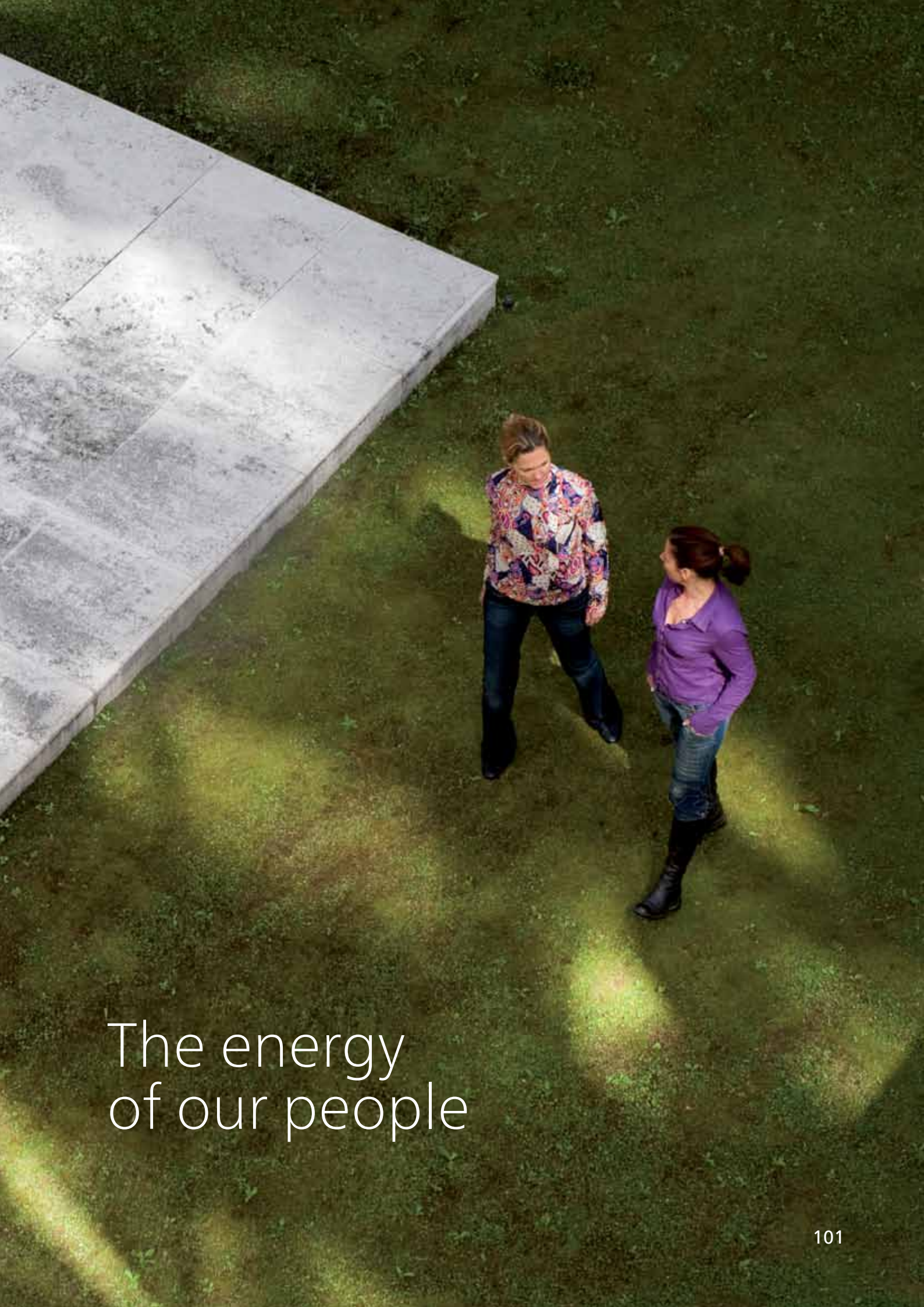
## **Premio Chico Mendes**

For the "Ecoelce" project, Endesa received the Chico Mendes Award, Brazil's most important recognition for corporate social and environmental responsibility.

The background of the page is a photograph of a stone wall. On the wall, the word "Enel" is mounted in large, dark, three-dimensional letters. Below the letters, there is a stylized graphic of a flame or a flower, also made of dark, curved segments. The wall is made of large, light-colored stone tiles. In the bottom left corner, the number "100" is printed in a white, sans-serif font.

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The energy  
of our people



# Our commitments



The features of the Group have changed radically in the last few years. Following the international expansion undertaken, our organization has become a multinational, with more than half of its employees being citizens of countries other than Italy. Therefore, Enel has now undertaken to transform itself into one company, by promoting the distinctive features of the individual “souls” of the Group with a single cosmopolitan framework.

In this situation, the Personnel and Organization Department plays a crucial role in aligning the values and culture of Enel’s people with a single Group identity, while respecting the ambitions and the sustainability commitments established by the Company.

This ambitious Group-level undertaking is translated into concrete initiatives. First of all there is the **new management model**, which defines the single profile expected for management and clarifies how a career is developed in the Group. Transparency, objectivity, meritocracy, knowledge sharing, the development of global capabilities, and multiculturalism are the features that characterize the model.



Together with shared values and behavior consistent with the **leadership model** (assessed by an **assessment process** that in 2011 will involve about 30,000 people), the new system of career management also constitutes a further step towards an authentic “**school of management**” characterized by reputation and the ability to manage complexity and diversity, flexibility cutting across boundaries, a stance of excellence and the ability to act in situations outside the company and to discuss with communities and local, national, and transnational authorities.

Attention to **safety** issues remains a priority, which for Enel means pursuing unflaggingly the achievable goal of “Zero accidents”: safety not limited to Enel personnel, but extended to all the people who come into contact with the Company as suppliers or, in general, in the social fabric. In 2010 Enel continued to implement the **Integrated Nine-Point Safety Improvement Plan** throughout the Group. Begun in 2008, the project embodies the Company’s strategy for achieving the objective of “Zero accidents” and in 2010 focused on behavior, improving the procurement and management processes of contractors, and integration among the Group countries. This year, **International Safety Week** focused the attention of all workers on the subject of safety. For one week numerous initiatives regarding training, communication, and awareness directly involved not only Group employees, but also contractors and communities, for the purpose of promoting a uniform vision and a single approach to safety in all the countries in which Enel does business.

Furthermore, in Russia, Romania and Slovakia a **Safety Culture Survey** was carried out to obtain the point of view of Enel’s employees on this essential issue. Involving about 10,000 people (a participation rate of 85%), the survey recorded perceptions and attitudes regarding safety, while an action plan on training, communication, and organization will be drawn up taking into account the results.

With regard to listening to people’s needs and suggestions, the **2010 Climate Survey** involved all Company employees, including for the first time Endesa’s and those in Russia. With a participation rate of 82% (77% in 2008), the survey will provide additional information about perceptions and opinions regarding the working climate in each of the countries where Enel is present and to establish concrete actions to improve it.

**Diversity and equal opportunity** are other important issues on which further work is needed. During 2010 Enel participated in the WIREs – Women in Renewable Energy Sector – project, which focuses on the role of women in

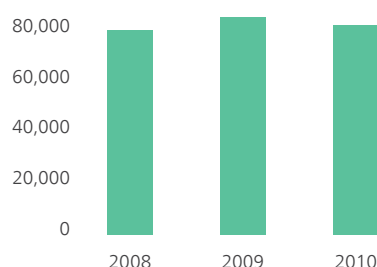
achieving the goals of “sustainable development” that the international community, and in particular the European Union, has set for 2020 and is getting so much attention because of the important economic and social effects of its expansion. As part of the actions undertaken by the “Valore D” (W Value) Association, whose purpose is to support the leadership of women in companies, Enel’s role again in 2010 consisted in support for the association’s initiatives and active participation in the activities planned during the year.

The development of **multiculturalism** and **knowledge management** continue to guide **Enel University** in disseminating excellence at the global level through interdivisional and international training programs established in the Leadership Curriculum. Furthermore, the Group initiated the Twin Exchange Program between Enel and Endesa to facilitate the sharing of experiences and expertise among people in the most technical operating departments.

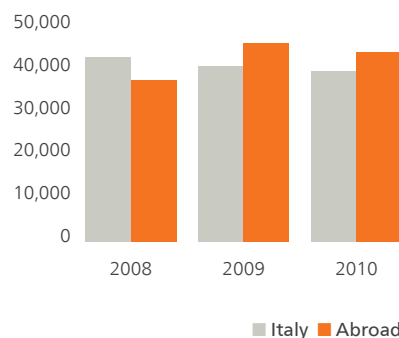
The Group is also continuing **best-practice sharing**, a program using the results of the 50 task forces that have worked on the project to pinpoint per every country hundreds of actions for operating improvement “imported” from other Group areas with well defined and monitored impacts to enhance as much as possible the potential present in the numerous countries in which Enel is active. The practices and policies that Enel dedicates to the people who contribute day after day to its corporate results ensue from the consideration that the value of human resources resides in their ability to satisfy business requirements without losing sight of the objectives of growth and development – the prospects and aspirations – of “Enel citizens”, which must be combined with the development of the Company.

# The numbers

Number of employees



Number of employees Italy-abroad



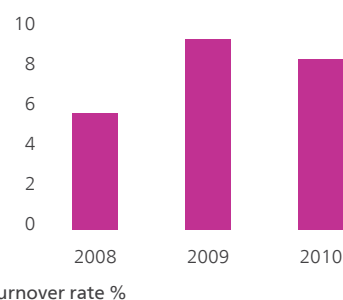
**As of December 31, 2010 the Enel Group had 78,313\* employees, of whom 40,930 (52%) worked in Group companies located abroad.**

(\*) Includes 2,324 employees regarding the boundary classified as "owned for sale" as of December 31, 2010 (1,330 employees as of December 31, 2009).

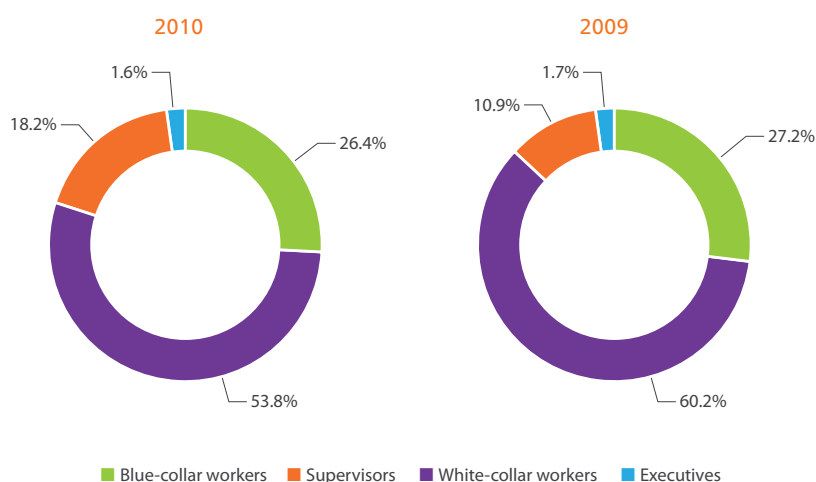
The decrease of 2,895 employees with respect to 2009 was due to the balance of hires and terminations (- 2,560) during the year and changes in the composition of the Group (-335). Terminations were mainly incentivized consensual ones.

The most significant changes in the composition of the Group in this period were the reorganization of its renewable-energy operations (with the transfer of such operations in Spain and Portugal from the Iberia and Latin America Division to the Renewable Energy Division and the consequent incorporation of EGP España), the sale of Endesa Hellas and Endesa Gas, and the finalization of the agreement regarding Enel Green Power's participation in the 3Sun joint venture.

Turnover rate (%)



Employee classification (%)



Contract types \*



\* Excluding for 2008, France, Severenergia (Russia), Endesa Portugal, and minor companies.



# Recruitment and selection



At Enel the recruitment and selection process is based on seeking the most talented people possessing the most appropriate aptitude and specialized technical capabilities for the jobs they will perform. In 2010 the Selection and Relations with Universities Unit focused in particular on the processes of looking for and integrating young high school, vocational school, and university graduates to train in accordance with the different professional careers present at the Company.

In effect, out of 1,075 people hired in Italy during 2010 about 75% were newly graduated: 40% with university degrees – of whom 41% were women – and 60% with high school or vocational school diplomas.

The instruments and channels used to recruit applicants

were first of all the corporate website and in the second place the relations and contacts established with schools and universities with which the Company cooperates actively on specific projects. People with the most critical technical skills – such as those connected with plant design, up-stream gas, and renewable energy sources or regarding environmental impacts or plant safety – were found thanks to, among other things, targeted agreements with specialized headhunting firms, some of which were located abroad. The selection process provided for an assessment of aptitude and motivation, as well as one focused more on the technical and professional questions. The assessment of soft skills for both junior as well as senior personnel reflects the key capabilities – specified by

1,075  
new hires  
in Italy during  
2010

the Group's leadership model – expected from the different corporate populations.

As far as its hiring policies are concerned, Enel does not have a Group policy aimed specifically at giving preference to local people, even though the Company tends to favor residents whenever possible. In several countries – for example, Romania – this possibility is formalized in a specific policy or may be accentuated in compliance with national regulatory provisions that encourage local hiring, as in Russia.

Fitting in newly hired employees is carried out with dedication and attention through a process that balances training and work experiences, ensures increasing understanding of the organization, and gradual integration in corporate situations. Among other things, the Company provides for an international training course for all newly hired university graduates in the different countries in which Enel is present (**JET International**).

To further support the process of internationalization, in 2007 Enel launched the “**Energy without Frontiers**” recruiting project, which provides for the hiring, in Italy and abroad, of 100 foreign young university graduates by 2011. The program includes variable training courses, which – especially for young people hired abroad – may include a period of on-the-job training in Italy. As part of this program, 7 people were hired in 2010, mainly by the staff and nuclear areas of the Engineering and Innovation Division, raising the total number of resources so hired to 81.

In order to facilitate and enhance the organization of international professional careers, Enel began the process of **international internal mobility**, which led to the publication of more than 40 positions to fill through the corporate job posting system. Furthermore, in accordance with the new management model, at the end of 2010 the Company published the **first Group job posting for a managerial position**.

Finally, about 150 internships were created, mainly for young university graduates and in the staff departments of Enel SpA, the Infrastructure and Networks Division, and the Sales Division. In addition, 426 training periods in the local technical units of the Infrastructure and Networks Division were organized for qualified young technicians.

During 2010 the Selection and Relations with Universities Unit continued the activities aimed at promoting Enel's role as employer of choice in Italy on the university campuses of interest, through both participating in job meetings and planning ad hoc recruiting days connected with the presentation of specific business projects or “alternative” teaching initiatives, mainly in technical and engineering faculties. This role was also recognized by the CRF, an international institute that for the second year in a row certified Enel as a “**top employer**”.

Among the events that did the most to consolidate Enel's image as an employer of choice at the international level as well were the Company's participation in the fifth *Foro de Empleo* in Madrid, Energy 21st, and the second edition of *Atomicareer*, the last two of which were held in Brussels and regarded, respectively, the energy industry in general and nuclear energy.

# People Development

## Giving people opportunities

The new challenges that characterize the energy industry and its developments require increasingly diversified and complex capabilities, which are essential for the corporate culture to emphasize excellence of operating processes, innovation, and multicultural innovation.

In order to respond to the incentives of this new scenario and assess correctly the Group's resources, while at the same time managing people in a way that is consistent with the corporate objectives, in 2007 Enel established a new **leadership model**, which lays out the behavior expected of all the Group's employees. The model describes the characteristics of Group's organizational culture and has enabled the behavior expected of Enel citizens to be aggregated around 7 points closely connected with the Group's strategic objectives and corporate life.

The Leadership Model inspires the system of assessing and developing of people, which – in addition to the annual assessment of performance with respect to the MBO system – provides for assessments of capabilities for the different professional families and for the employees' potential. The characteristics of tomorrow's leaders also constitute the basis of the identification of talented people who will participate in the Group's **talent management program**. Finally, the system of incentives is conceived to reward effectively both excellence in the different functional areas – with opportunities being tied to the assessment of capabilities – and the distinctive performances achieved during the year with respect to the goals assigned with the MBO system.

### Leadership model

#### Enel citizen:

- Puts safety first
- Is a Group Citizen
- Drives Improvement
- Behaves as a passionate owner
- Dominates content
- Develops great teams and talents
- Always delivers

## Assessment of the performance, capabilities, and potential of every person

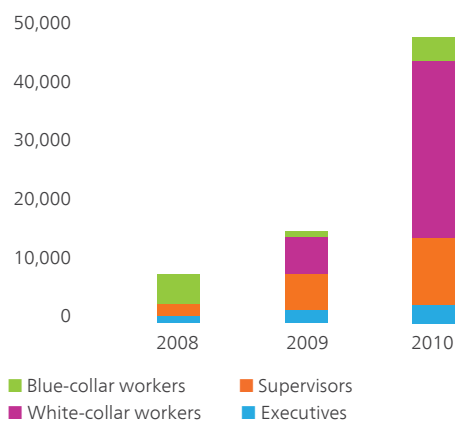
Clarifying the criteria involved in the assessment process and increasing the number of people who receive feedback on their professional performance continue to be objectives for the development of resources, as highlighted by the results of the second climate survey (on this topic, see page 124), which called for more transparency on these issues.

**In 2010 a total of 46,886 employees throughout were assessed, amounting to about 60% of the entire Enel population.** The 2010 Group performance review was the first in which all the white-collar workers of the Italian Divisions participated, in addition to all the management, which had already been involved in past years: a total of 25,535 people assessed. The latest performance review was accompanied by a multi-faceted communication plan, training initiatives with courses differentiated by employee segment, the improvement of online instruments, and a mechanism of distributed tutoring.

In 2010 there were also important changes in the systems for assessing technical knowledge and capabilities. In effect, the professional systems of the Finance, Information & Communication Technology (ICT), and Safety families were updated.

For the Finance family the pilot project begun in 2009 was completed with the assessment of all the population of the Accounting, Finance, and Control area in all the Group countries, with the sole exception of Endesa in this phase, a total of 1,500 people.

Persons assessed by job classification \*



\* The 2010 figure does not include Endesa Greece, Ireland, and Morocco. The 2009 figure includes only Italy and Endesa Iberia, while the 2008 regards only Italy.

With regard to ICT, a mapping and assessment pilot project was implemented that involved about 260 people in Italy and Romania and, for Endesa, several employees in Spain and Colombia.

Finally, for the Safety family about 150 people in the International Division went through a review based on the new mapping of the area's knowledge. Based on the analysis of the results, in 2011 will begin the process of revising the model and pinpointing targeted actions for this professional family.

## Development and opportunities for talented employees

The talent-management system provides for the identification of the "best" resources – the so-called **talent pool** – among the Company's people, found in the various Divisions among the supervisors who in the performance review obtained an excellent assessment in both the quantitative part (the results achieved) and the qualitative one (the conduct adopted to achieve them), and whose age is consistent with the limits established for access to the program. For the employees selected, the program provides courses for growth and specific training, which are useful to develop the capabilities for becoming the leaders of future. Among the dedicated initiatives that are part of the **leadership curriculum** – which aims to disseminate Enel's leadership model and make it operative – there are 'Leadership for Energy Executives' program addressed to the first lines, and the 'Leadership for Energy Management' program for the second-level talent pool.

## An incentive system that rewards excellence

The Group's compensation policies are designed to ensure proper compensation in terms of competitiveness with respect to the market concerned.

Enel has chosen to implement a meritocratic policy aimed at rewarding the capabilities in each professional family. For this reason, every year the resources who receive raises and bonuses with respect to their fixed pay are carefully chosen. At the same time, in order to promote the distinc-



tive performances achieved during the year, much importance is attributed to the MBO system, which involves about 97% of the executives and 17% of the supervisors. In 2010, Enel's commitment to sustainability engaged about 43% of the managers, who are the assignees of about 16% of the MBO objectives connected with environmental and social issues.

Employees working in the commercial area also enjoy a system of incentives, which was revised in 2010 – following an in-depth comparison with other leading companies – to improve both the speed with which the objectives are assigned and its link with the activities of commercial planning.

## Training

Enel considers its employees an important resource and asset and is constantly engaged in ensuring them the opportunity to acquire the necessary technical, professional, and managerial capabilities. To this end it provides training courses differentiated according to their category and individual needs, thus also promoting the professional expertise to form the future leadership of the Company. In accordance with Enel's capability model, training courses focus on three essential objectives:

1. **Professional development**, to increase technical and professional capabilities that distinguish the different areas of competence and professional families
2. **Managerial development**, to expand the ability to integrate and the overall vision of the business. These courses are addressed to people in different areas, who are selected without regard to their professional family
3. **People's development**, to strengthen the attitudes and organizational behavior expected in the different corporate roles.

Every year, in cooperation with the Group's divisions and companies, **Enel University, the internal facility specifically dedicated to education**, develops a **Training Plan** designed and carried out by in-house resources and highly qualified external professional contributions. In addition to these programs, professional rotation is also planned together with testing the expertise acquired, and personalized courses based on individual needs.

With regard to Italy, in 2010 the activities focused on managerial training courses to complete the Leadership Curriculum. The latter consists of the set of training courses that have the general objective of accompanying and sup-

porting people during the most important moments of their professional career, such as when they join the Company, receive promotions and are selected for the talent team or the executive team, etc.

In 2010, the three main areas of work for Enel University regarded the systemization and revision of several key initiatives that complement the Leadership Curriculum, support for the integration of the countries of the International Division, and the development of new technical and functional academies.

Average number of hours of training per employee:

36.3

Total hours of training:

2,889,000

The initiatives carried out in 2010 as part of the Leadership Curriculum regarded:

- > **Programs connected with changes in professional category or roles:** In addition to programs that already existed in 2009 – such as Junior Enel Training International, a program for newly hired new university graduates, and LINK, a course for newly appointed supervisors – at the beginning of 2010 two courses of the program for newly hired employees (Welcome to Enel) began, one addressed to university graduates and the other to people with a vocational-school diploma. In addition, 2010 saw the completion of the Enel Business and Leadership project, a 5-day course provided in cooperation with LUISS and Alma Business School on strategic business topics and leadership, the management of human resources, and multiculturalism, which was addressed to about 500 Enel Group executives.
- > **programs connected with performance review results:** In addition to the 12 training models for super-

visors designed in 2009 and implemented in 2010 for different groups (executives, resource managers, professionals), a number of training modules for white-collar workers were designed (Junior Professional PPR and White-collar Worker PPR), 13 editions were tested in 2010.

- > programs **dedicated to the talent pools**: A special edition of the Leadership for Energy Executives Program

ing the corporate best practices and the creation of local training expertise capable to develop and maintain technical capabilities in the future. Specifically, these initiatives regarded assistance provided for personnel training at the Maritza East III power station in Bulgaria and the Novaky and Vojany power stations in Slovakia, training for the operating personnel of the Nevinnomysskaya power plant in Russia, and training for the maintenance personnel of the

## Leadership Curriculum

	New hires	Change in position	Post Performance Review	Talent
New hires (university-graduate white-collar workers)	Junior Enel Training (JET)			
New hires (Supervisors and non-Jet white-collar workers)	Welcome in Enel			
White-collar workers				
Supervisors		Link	Post Performance Review Training	Leadership for Energy Management Program (LEMP)
Executives		Enel Business & Leadership		Leadership for Energy Executive Program (LEEP)
<b>Application Process</b>	<b>Automatic for everyone</b>	<b>Automatic for everyone</b>	<b>At request of Head/Manager</b>	<b>Automatic for talent pool</b>

(for the Group's top management) was designed and implemented in partnership with the Harvard Business School. Three editions of the other key initiative dedicated to the talent pools, the Leadership for Energy Management Program, were also held in 2010.

As far as assistance with the implementation of corporate best practices in Eastern European countries are concerned, besides the international programs of the Leadership Curriculum (JET International, Enel Business & Leadership, and programs for the talent pools), to which all Group companies have access, Enel continued in every country the specific initiatives of technical training aimed at disseminat-

Reftinskaya and Konakovskaya power stations in Russia. In addition, Enel University completed the development of the training simulator for the Nevinnomysskaya (Russia) and Sulcis (Italy) power stations.

The initiatives of the Best-Practice Sharing and Knowledge Management programs, aimed at strengthening integration between Enel and Endesa, were especially important for the two companies.

Following all these initiatives, 50 assessment task forces identified hundreds of actions "imported" from other Group areas that could be carried out to enhance the potential in the countries where Enel is present.

# Occupational health and safety



## Objective: Zero accidents

**The safeguard of the health and psycho-physical integrity of workers is a strategic value and a priority that characterizes the Company's culture. Enel's commitment to ensuring safe working environments and conditions is absolute and imperative in every one of the countries in which the Company is present.**

Enel's strategy for achieving the "Zero accidents" objective is based on an approach focused on prevention, the promotion of the "safety culture" through intensive training and awareness-raising, the establishment of common and uniform standards throughout the Group, and the implementation of technological and structural interventions.

This objective also entails constant investment to improve the Group's safety standards. In 2010, the economic commitment for health and safety activities – personnel dedicated to safety, training and information initiatives, health supervision, purchase and management of individual protection devices, fire surveillance and medical facilities, studies and research – amounted to about 121 million euro, constituting a per-capita expenditure of 1,559 euro and an increase of about 19.3% with respect to 2009.

# Integrated Nine-Points Safety Improvement Plan

To pursue the “Zero accidents” objective, in 2008 Enel launched the **Integrated Nine-Point Safety Improvement Plan**, which embodies the Group’s strategy and unites all the divisions and countries in a coordinated effort. Based on the top management strong commitment and the adoption of a cross-cutting approach to safety, the project identifies **9 areas of action**, which constitute the levers with the greatest impact for improving the safety process:

1. Promote the culture of safety at all levels.
2. Revise the processes of contract work from the point of view of safety to align contractors with Enel’s safety standards.
3. Develop communication initiatives aimed at keeping up attention to safety.
4. Make the process of reporting and analyzing accidents and the management of emergencies increasingly prompt and effective.
5. Increase safety training throughout employment.
6. Introduce new indicators to improve the monitoring of safety performances and facilitate the active involvement of all workers.
7. Adopt a single safety standard in all workplaces both in Italy and abroad.
8. Revise the organization of safety to increase the integration of safety with business and enhance the resources in charge of safety.
9. Facilitate the sharing of experiences and best practices within the Group.

In 2010 the Company continued to implement the plan in the different areas of action. The activities carried out during the year focused on four main aspects: intensifying the weight of safety in the processes of contract work; promoting the culture of safety and the reduction of injuries by working on behavior; strengthening the engagement

on safety of the top and middle managers; and adopting the same approach to safety throughout the Group, making the safeguard of health and psycho-physical integrity one of the main values to focus on in the process of integration.

## The culture of safety

Much attention was paid again in 2010 to the promotion of safe behavior through the development of a number of projects for raising awareness. In effect, the Company continued to implement **Safety 24/7**, which is aimed at promoting attention to safety even in activities that are apparently low-risk, 24 hours a day every day of the week. With the introduction of two pilot projects at Endesa, the extension to all the Group divisions of the project – which was launched in 2007 – was completed. Furthermore, in Italy the testing of the **Behavioral Based Safety (BBS)** protocol continued in the Infrastructure and Networks Division.

The **Safe Behavior** project was launched in two pilot plants of the Renewable Energy Division. This project provides for the direct observation of behavior through the use of specific checklists with immediate feedback to employees and analysis of the data aimed at pinpointing the actions at risk. The first results at the Larderello geothermal power plant in Italy showed a 37% reduction in the number of accidents with respect to 2009.

The involvement of the management and inciting it to a visible commitment on these matters is another important factor for the dissemination of the culture of safety. For this reason safety constitutes an essential value of the **Enel leadership model**, one of the factors in which the managerial style of the Companies is embodied. In effect, managers must be “bearers of safety” in the situation in which they work by contributing with their example to promote the adoption of safe behavior.

To this end, as part of the general model of training on leadership for safety, which was established in 2009 and is aimed at defining the key capabilities for safety that characterize the role of the “safety leader”, a leading role is played by the **project dedicated to managers**. The objective of the project is to encourage a greater and more informed assumption of the responsibility for safety connected with their role and to promote a vision of safety as a factor of competitiveness and an opportunity to improve organizational life. In 2010 50 editions were carried out, with the participation of about 600 managers.



Furthermore, a Group policy was issued to promote **safety walks** and make the way they are held more systematic and uniform. These walks are visits to workplaces by the management to promote the culture of safety personally by checking the application of regulations and the adoption of safe behavior, as well as the condition and maintenance of facilities and plants. During 2010, about 6,550 safety walks were carried out, more than twice as many as in 2009. **The incentive system for the management** also provides for **specific safety objectives** regarding both the reduction of injuries and the actions taken to improve safety standards. In 2010 44% of the recipients of MBO had at least one track connected linked to the achievement of the safety objectives. The Company also revised the current system of collective incentives regarding safety performances, with the aim of making it cross-cutting through the establishment of a set of indicators that are uniform throughout the Group, encouraging its integration with other incentive systems, and adopting a balanced mix of indicators to promote a preventive approach to safety (also see page 116).

6,550

Safety Walks organized  
at Group plants

## Training

Enel's commitment to **instruction, information, and training regarding safety** is very strong. In 2010, almost 1,200,000 hours of training were provided, amounting to 15 hours per person versus 12.5 hours in 2009. As far as the economic commitment is concerned, about 30 million euro was spent on **information and training activities**, an increase of about 53% with respect to 2009.

Safety has to be part of the know-how of all employees from the time they start to work at the Company and safety must be an essential aspect in their careers. Therefore, particular attention is dedicated to the training of newly hired employees. Topics regarding safety are included in the various specific training courses for them, such as "Jet" and "Welcome In". More technical training is provided for newly hired employees through participation in the course for safety officers or a course on safety issues for staff. In 2010 there were 21 editions of the 2 training courses, in which about 240 new employees participated. For new employees in technical areas, moreover, there is a six-month period of training aimed at increasing knowledge and abilities regarding safety through both classroom and on-the-job activities.

In all the divisions there is also constant training on safety for operating personnel aimed at promoting the adoption of safe behavior and the observance of work procedures and methods.

In addition to Group-level initiatives, the different divisions and companies of the Group provide numerous training and informative activities for their employees and those of contractors regarding the proper use of equipment, the safest work practices, and the specific risks encountered while performing different kinds of jobs.

In Italy, in cooperation with Enel University, the Company organizes the training courses provided by the regulations for performing the role of safety officer (RSPP/ASPP). In addition, Enel also organized the annual refresher courses for employee safety representatives (RLS). For the first time training was organized

about

1,200,000

Total hours of safety  
training

at the Group level for worksite safety coordinators (CSP/CSE) as provided for by health and safety regulations. In cooperation with Enel University, the Associations of Architect and Engineers, universities, and the Association of Industrialists the Company organized five editions of the course, which involved about 110 employees, as well as thirty editions of the refresher course, in which more than 760 employees participated.

In 2010 the **Functional Academy of Safety** was also planned, with the objective of creating a training system aimed at increasing the professional technical knowledge that the employees dedicated to safety must possess and developing the key aspects of the behavior that is typical of the professional family of safety.

Finally, a program of training and awareness-raising initiatives on **safe driving** was begun. In cooperation with ASC Quattroruote, Enel organized on-the-spot driving courses aimed at both preventing and managing driving emergencies, as well as an online course for creating awareness addressed to all employees, which will be launched at the beginning of 2011.

# International Safety Week 2010

HIGHLIGHT



From November 8 to 14, for the third year in a row Enel held **International Safety Week**, a cross-cutting project involving the entire Group that for one week aims to focus the attention of all employees on the issue of safety. Numerous initiatives were carried out during Safety Week on training, communication, and awareness-raising that involved not only Enel employees, but also contractors and communities, with the goal of promoting a single, **uniform approach to safety in all the countries where Enel is present**. This year 73,600 Group employees in 19 countries were involved, with 1,276 events (23% more than in the previous year)

taking place throughout the world: "Everyone for Safety" meeting, workshops and in-depth discussions on health issues (alcohol, smoking, nutrition), safe driving, near misses, first aid, safety walks, emergency simulations and trials, family safety days, and meetings with contractors. The opening event of this year's Week involved the world preview of director Corso Salani's Enel film *I casi della vita* (The Circumstances of Life), which examines the issue of occupational safety by interweaving the narration with the testimonies of Enel employees and their families who have been involved, directly or indirectly, in on-the-job accidents.

19  
Countries

73,600  
people involved

1,276  
events throughout the world

## Communication and information

The corporate communication media are essential instruments for creating an open channel on safety and keeping attention focused on safety issues. Every month, for example, the magazine *Enel Insieme* dedicates an entire page to topics regarding health and safety, highlighting initiatives, projects, and results; the corporate intranet contains a dedicated section with studies, documents, and news on the subject; and the corporate TV periodically presents special in-depth reports and programs.

In 2010 planning of the “safety community” began as part of the “Global in Enel” project regarding the Enel Group’s new intranet, a new safety site aimed at promoting a single common space for news and other significant information from the different countries in which Enel is present, thus strengthening the feeling of belonging and involvement in the corporate strategy.

## Analysis of accidents: injuries, near misses, and emergency situations

Enel continues to implement a preventive approach to safety and accidents. In 2010, the Company began a systematic process in all its countries of reporting, managing, and monitoring **near misses** <sup>(1)</sup>, aimed at adopting prompt countermeasures to avoid accidents. The Company has dedicated much effort, on the one hand, to informing its employees and contractors about near misses and why it is important to report them and, on the other, to overcoming employees’ reluctance to report such events.

With regard to the analysis of accidents, in addition to classification in terms of how they happened (electric shock, falling from high up, slipping), events are also **classified** on the basis of a series of standardized causes (behavior, facilities, organization, and other factors) for the purpose of pinpointing areas that need stronger corrective action. Furthermore, the Company is currently implementing throughout the Group **root cause analysis**, which makes in process of investigating the causes of accidents systematic and uniform, establishes targeted actions to resolve the problems revealed, and prevent the occurrence of other accidents.

Finally, guidelines were issued for the **management of emergencies**, which are aimed at ensuring in all the divisions and companies of the Enel Group an effective process for identifying, assessing, and adopting the ap-

propriate measures in the event of emergencies so as to eliminate – or, whenever that is not possible, reduce – the impact of damage caused to people or property.

(1) **Near miss**: an unforeseen event connected with work that, for fortuitous reasons, did not cause injuries or damage to plants and equipment even though it had the potential to do so.

## Safety KPI

The system of key performance indicators (KPI) adopted by Enel to measure, assess, and monitor accidents – as well as the Company’s overall performance with regard to occupational health and safety – effectively and uniformly provides for both **downstream or trailing indicators**, such as the frequency index and the seriousness index, and **upstream or leading indicators**, such as the number of safety walks, the number of safety checks, the percentage of procedural and behavioral nonconformance recorded, the number of hours of training/information and drilling per employee, the number of hours dedicated to informing the contractor personnel about safety, etc.

In 2010 the Company began **Global Reporting’s** centralized **information system** project for managing data regarding accidents, which provides for the implementation of an analytical system for automating the collection, homogenization, and filing of the data from the different corporate information systems.

## Structural prevention

In 2010 Enel also issued a policy that establishes the **safety standards for the workplaces**, both civil and industrial, of Group companies, to be adopted for existing structures, as well as ones being planned or acquired. The objectives of the structural prevention method are to ensure the fulfillment of mandatory regulatory obligations, adopt uniform safety requirements in every country, strengthen procedural and control standards, and promote the continual improvement of workplace safety.

## Organization

For Enel, occupational safety is a value that cuts across all activities and roles. For this reason in every Group division and company there is a **Safety Unit**, which is in charge of



the operative management of matters regarding occupation health, hygiene, and safety. At the central level there is the Enel SpA Safety Unit, which performs the task of guiding and coordinating the division and company units. It is involved in three specific areas:

- > **Safety Policy and Reporting**, with the task of preparing guidelines and procedures on safety issues and ensuring the monitoring and reporting of the safety KPI
- > **Safety Improvement**, with the task of assisting the implementation of cross-cutting Group-level safety projects and promoting initiatives to improve safety standards
- > **Safety Integration**, with the task of introducing and coordinating the implementation in all the companies abroad of guidelines, policies, and procedures regarding safety and promoting integration among the aforesaid companies

On May 26, 2010 the first meeting of the **Safety Steering Committee** was held. Instituted in 2009, the committee consists of the heads of the Enel Group divisions and Enel SpA's department heads and is entrusted with the tasks of approving corporate strategies and policies regarding safety, promoting cross-cutting initiatives aimed at disseminating and developing the culture of safety, and assessing periodically the effectiveness of the processes of managing safety issues at the Group level.

In accordance with the Compliance Program pursuant to Legislative Decree 231/2001, after Legislative Decree n. 106/09 was issued in August 2009, in May 2010 special part "F" was updated and approved by Enel SpA's Board of Directors. Said part was adopted following the extension of administrative liability of legal persons regarding the crimes of manslaughter and grievous or very grievous bodily harm without malice aforethought committed in violation of regulations regarding accident prevention and the protection of workplace hygiene and safety. Several years ago the Enel Group divisions and companies started a process of equipping themselves with Occupational Health and Safety Management Systems in keeping with the OHSAS 18001 international standard. In 2020 the Company also continued the process of certifying these systems according to the BS OHSAS 18001 standard.

## Integration of the different Group companies

In 2010 Enel continued the process of integrating the different Group companies, focusing particularly on the pro-

cesses of alignment and sharing with Endesa aimed at promoting a common approach to safety, the exchange of experiences and best practices, and the creation of synergy.

In the countries of the International Division, the **Safety Culture Survey** project was carried out. The project aims to assess the level achieved in the development of a solid safety culture through a survey of individual opinions and attitudes towards a number of issues regarding occupational safety.

In the plants of the Renewable Energy Division and the Generation and Energy Management Division and on the construction sites of the Engineering and Innovation Division the Visual Safety project continued. The project is aimed at creating a cycle of continual improvement based on the sharing of best practices.

With regard to **industrial safety in nuclear plants**, the process of sharing best practices among Enel SpA, ANAV/Endesa, and Slovenské elektrárne, with the objective of ensuring a more uniform assessment of industrial safety performances through the establishment of a common set of KPI to use, including those required by the World Association of Nuclear Operators (WANO), was enhanced. Finally, pilot projects were initiated regarding the **peer review** process in Slovakia and Russia. A group of experts from different operators performed inspections of the Vojani (Slovakia) and Nevinnomysskaya GRES (Russia) plants for the purpose of exchanging experiences concerning the best safety managing processes, particularly regarding individual protection devices (IPD), hygiene and health, housekeeping, fire prevention, work permits, equipment, and contractor management.

## Safety for contractors and suppliers

Concern for contractors is a priority for Enel, which is also deeply engaged in protecting the safety of the employees of the firms that work for the Group. In this regard, in 2010, as part of the Integrated Nine-Point Safety Improvement Plan, the Company continued its revision of its contracting processes to increase the weight of safety concerns.

The Company continued to implement supplier qualification model introduced in 2009, which provides for specific and more stringent safety requirements in order to disseminate responsible safety practices within its supply chain. The implementation of the vendor rating system continued and a number of specific initiatives regarding

checking and supervising the execution of work, technical training and raising awareness on the importance of safety, at both the Group level and by the single divisions and companies of the Group, were carried out. For more details about the initiatives, see page 244.

### The Results (2)

All the actions and programs undertaken enabled Enel to **significantly reduce its injury indexes** again in 2010, thus contributing to bring the Group closer to its “Zero accidents” goal.

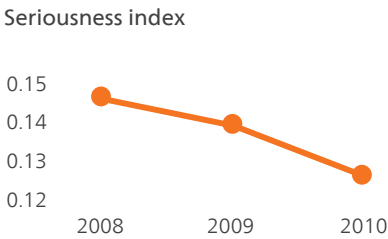
Specifically, the Enel Group’s injury frequency index has decreased by 57% in the last five years, from 6.38 in 2006 to 2.8 in 2010, while its seriousness index saw a reduction of 50% between 2006 (0.26) and 2010 (0.13).

This reduction trend is confirmed by the operating frequency index that was introduced last year. This index focuses on several types of injury more closely connected with a company’s core business and characterized by a high seriousness level (caused by electric shock, falls from high places, crash-crush-cut, noxious agents, and explosions). In 2010 this index stood at 0.84, a decrease of 57% with respect to 2007 (1.96).

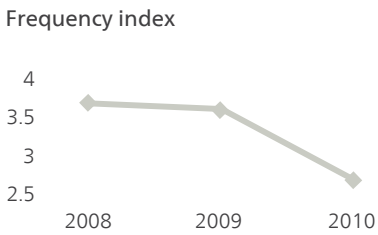
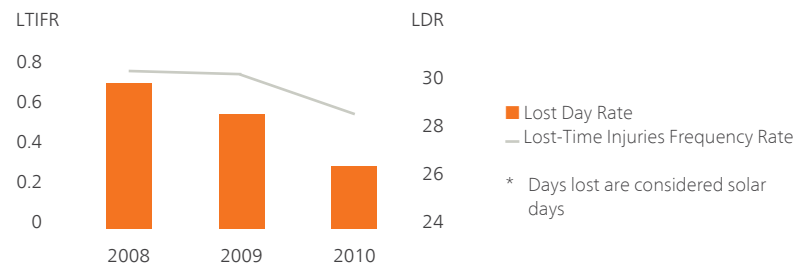
In 2010 three fatal accidents occurred involving employees of the Enel Group: an accident involving electric power at the Konakovskaya GRES plant in Russia and two road accidents, one of which occurred in Vercelli involving an employee of the Infrastructure and Network Division and the other in Romania.

The occupational disease rate (ODR) is not easy to establish. Beginning in 2011, a shared process will be developed that will allow the ODR to be recorded at the Group level with regard to both employees and contractor personnel.

(2) The data reported regard 2010 and were calculated in accordance with the “ILO Code of Practice on Recording and Notification of Occupational Accidents and Diseases”. The data regarding previous years are available in the Performance Indicators section of this Report and in the Sustainability Report of the year concerned.



Enel LTIFR and LDR\*



# Safeguarding health at Enel

Enel's commitment to promoting the health and safety of its employees in every moment of their working life has led to a vision of health that is not limited to the mere absence of injuries, diseases, and discomforts, but aims at the individual's full **physical and mental well-being**.

For this reason, in addition to numerous activities supporting the promotion of safety, much attention is dedicated to initiatives regarding the **prevention** of ailments and diseases – including ones not connected with work – and the provision of **care** and **assistance**.

In 2002, for example, Enel became a no-smoking company, well before the coming into effect of Italian law n. 3/2003, which extended the prohibition of smoking to all premises open to the public, which was followed by the subsequent legislation of many European countries.

Particular attention to the issues of smoking and the consumption of alcohol was given in 2010 during International Safety Week, when a campaign to raise awareness on these problems was begun and a leaflet providing information was distributed. During the week workshops and in-depth reports on the Company's internal media were also organized on proper nutrition, alcohol consumption, and prevention.

In 2010 much attention was also given to the issue of **work-related stress**, with the implementation of a Group project regarding the assessment and management of this risk. In 2009 Enel had already initiated a structured process for the assessment of the risk of work-related stress, which was divided into a preliminary stage dedicated to examining the objective risk indicators and a subsequent one dedicated to in-depth analysis aimed at identifying areas of risk and causal factors, as well as prescribing corrective actions. In effect, the adoption of a systematic approach to the assessment of stress risk contributes to the identification of the most appropriate instruments for promoting the health and well-being of the Company's employees.

Thus there are constant initiatives regarding information and training aimed at the prevention of health risks. Even in the case of activities that do not present particular risks, such as office work, specific training is provided in order to prevent ailments caused by the micro-climate and the use of visual displays.

In addition to Group initiatives, numerous initiatives are organized at the local level by the different divisions and companies of the Group.

In **Spain**, for example, specific training programs were implemented in 2010 on work-related stress, muscular and skeletal ailments, and cardiovascular disease through the distribution of brochures, posters, online training courses, which led to a significant reduction in absenteeism because of illness.

In **Argentina**, campaigns were launched on the prevention of cardiovascular disease, smoking, cholesterol, diabetes, obesity, and prostate tumors. The medical staff organizes individual talks with employees after checkups, during which the results of the clinical tests are presented and remedies or preventive measures may be recommended. A training program was also implemented on the management of work-related stress, which was addressed in particular to customer-service employees. In addition, programs were established on prevention and periodic checkups regarding addiction to alcohol and (PSA Annual Control).

In **Chile**, much attention was dedicated to serious diseases – such as cardiovascular ones, tumors, and mental illness – which entail long periods of inability to work, the loss of autonomy, and a decline in the quality of life. Programs of medical supervision and prevention were carried out, as were campaigns on proper nutrition and programs for quitting smoking. After the earthquake that occurred in February 2010, special programs were set up on mental health, psychotherapy, and actions in crisis situations.

The focus was on serious diseases in **Peru** as well, with the implementation of a program of activities providing for risk control, training, and medical supervision and care, with particular emphasis on heart attacks and tumors. Workshops and training sessions were held on proper nutrition, mental health, and life styles. Information sessions were also organized on gastric diseases, ergonomics, nutrition and life styles, and on AIDS/HIV.

In **Colombia**, specific programs were developed for risk control, training, and medical supervision and care, which focused on cardiovascular disease, ergonomics, diseases of the auditory apparatus, and AIDS/HIV.

In **Romania**, employees benefit from healthcare with regular checkups. There is also a policy of support for employees who are "differently able" and ones who have suffered on-the-job injuries. Every year voluntary campaigns are carried out for voluntary and free-of-charge vaccination against the seasonal flu.

In **Russia**, every year employees undergo medical examinations in order to promptly catch the onset of professional diseases. All plants have medical facilities in which, according to agreements with qualified medical organizations, such as public hospitals, specialists provide health care to both Enel and contractor employees. Employees with chronic diseases are placed under medical supervision. All employees can take out voluntary supplementary health insurance. An assessment is conducted periodically of workplace health and safety risks and specific training initiatives.

In **Slovakia**, there are different employee training courses focused on risk prevention and assessments are performed annually for 42 different kinds of risk (radiation, noise, vibrations, particulate matter, mercury, flue gases, arsenic, etc.)

In **Bulgaria**, periodical medical checkups are performed periodically to promote prevention and campaign for voluntary vaccination against the seasonal flu are carried out. At the Maritza East III power plant there are medical services available around the clock that provide assistance not only to Enel employees but also the personnel of contractors. Information and awareness-raising campaigns are organized periodically on health matters, such as alcohol abuse, influenza, hepatitis, etc. There are also forms of financial assistance for employees who have diseases with long courses.

In **Italy**, the instrument with which health and prevention programs are carried out is the Supplementary Health Care Fund for Enel Employees (FISDE), which was created by an agreement between Enel and the electricity workers' unions in March 1997 as a fund for Enel personnel. All Group employees are enrolled by right in the FISDE as ordinary members and the services provided can be extended to family members and former Enel employees by the payment of membership dues.

The FISDE reimburses the medical expenses specified in the Supplementary Health Care Plan. Members can access the services by using the network of agreements entered into by the FISDE with numerous medical facilities (public and private hospitals, clinics, health centers, dentists, etc.) or be reimbursed for services received at other facilities. The FISDE also promotes preventive medicine by reimbursing expenses incurred for oncologic and cardiovascular prevention.

The FISDE also provides support for families – for example in the case of disabilities (see page 131) and social emergencies (maladjustment, drug addiction, alcoholism, etc.) – by providing a series of services for both individuals and entire families in addition to the more strictly medical ones. Additional programs addressed to employees and their families, as well as to external communities, are provided for by the Social Action Protocol. The following table shows the extension of educational, training, advisory, preventive, and risk-control programs.

#### Programs of the Social Action Protocol

Recipients	Instruction/ training		Counseling		Risk prevention/ control		Treatment	
	YES	NO	YES	NO	YES	NO	YES	NO
Workers	■		■		■		■	
Workers' families		■	■			■	■	
Community		■		■		■		■



# Endesa: a long-term health and safety plan



Most of the initiatives that Endesa undertakes to safeguard the health and safety of its employees are included in the **Apollo Project**, a long-term plan (2005-2012) whose purpose is to radically improve the processes connected with health and safety and which supplements all the projects implemented throughout the Endesa Group. As part of this project, in **Spain** and **Portugal** the **Plan Praevenio** was issued – to be developed in two stages, 2005-2009 and 2008-2012 – which establishes Endesa's strategic plan, with particular regard to the

health and safety of employees and combines a preventive approach with the key idea of considering the health of employees as "social well-being" and not only as a set of performance indicators.

The Plan Praevenio contains more than 100,000 initiatives to improve the processes for risk prevention, medical checkups, medical care, and inspections as part of the plan for combating stress, muscular and skeletal problems, cardiovascular diseases, smoking and drugs, sedentary life styles, etc.



# Once upon a Volt

**Sustainability also means enhancing a company's identity. This is the mission of Enel's Historical Archives, which contain and preserve the historical memory of the Italian electricity industry in more than linear 13,000 meters of documents, 200,000 photographs, thousands of technical drawings, books, and specialized magazines, and hundreds of objects and film clips.**

## The tour numbers:

47 days

19 Italian regions

more than 10,000 km driven by the  
"Once upon a Volt" camper and the different crews

215 people interviewed

more than 500 video stories

This priceless heritage was enriched in 2010 by an innovative multimedia data base created thanks to the **C'era un Volt** (Once upon a Volt\*) project, a "memory tour" that collected experiences, memories, and stories connected with the world of electricity, understood as a factor of change, development, and modernization.

In cooperation with the "Memoro - la Banca della Memoria" ([www.memoro.org](http://www.memoro.org)) Association a tour of Italy was organized, with 20 stops at production plants and 20 in provincial capitals to interview people who wished to donate their memories: the people who actively experienced and contributed to the electrification of the country.

The tour began at the Turin International Book Fair (May 13-17, 2010), whose theme was "Memory Revealed", and proceeded to the remaining 39 stops.

The first result of this tour was the creation of a website, [www.ceraunvolt.it](http://www.ceraunvolt.it), which gathered the stories of more than 215 interviewees, publishing over 500 video and audio clips. This heritage enhances the history of the company that brought light to Italy. The design of the site was conceived to involve users in the interactive web 2.0 mode and facilitate surfing the contents, which can be searched by category and sub-category, tag, interviewee name, and graphic geo-referencing by region and province.

Furthermore, users can comment on and vote the contents, which can be linked to photographs to increase the fascination of the story.

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\* The original title of the project in Italian is "C'era un Volt", a pun based on the expression *c'era una volta* (once upon a time) and playing on the words *volta* (time) and *Volt* (the unit of measurement of electric potential)

# The quality of corporate life



## Listening and discussing

### The climate survey

The Group climate survey plays an essential role as a channel for listening and an instrument for management to improve the climate at every organizational level. In effect, the survey provides a “checkup” on the perceptions of all employees regarding the direction in which the Company is headed and thus enables the management to thoroughly understand both the strong and the problematic points in the different areas and acquire an overall picture of the Enel world and its evolution over time.

The first months of 2010 were dedicated to monitoring the actions that followed the second global climate sur-



vey, which was carried out at the end of 2008. The image provided by this survey was one of a company that was half continuity and half discontinuity, highlighting four critical issues:

1. **change and its management:** In 2008, only 53% of the employees thought that change was being managed appropriately, with 34% perceiving it to be “too fast” in their unit;
2. **alignment and understanding of the corporate vision and strategies:** 43% said they did not know enough about the Company’s strategies, while only 30% were familiar with the activities of its competitors, 33% with the situation of the market, and 39% with the degree of customer satisfaction;
3. **relations with heads:** Immediate heads were perceived as helpful, (85%), as well as able to set an example (78%), honor commitments (77%), and inspire confidence (75%), but were also thought to be less “strong” in terms of more strictly managerial characteristics; change management (66%), work organization (68%), and give feedback on performance (59%);
4. **recognitions and merit:** Even though 66% of the employees consider themselves satisfied with their level of responsibility, only 44% felt recognized and employed in accordance with their potential. Only 37% thought that Enel gave everyone the same opportunities and 29% that promotions were based on merit. Finally, only 52% of the respondents said they knew the criteria on which the assessment of their performance was based.

After the survey, to respond to these problems **412 managers conceived and implemented about 750 corrective actions at the local level**, mainly in the areas of communicating the vision, assessing and regarding merit, management style, development, training, and knowledge sharing.

In consequence of the results, particular attention was dedicated to improving the feeling of fairness and merit through the introduction of several changes in the **performance review system**. First of all, the collection instrument of the review was improved in order to clarify the criteria. With regard to transparency, beginning in 2011 the head’s assessment will be visible for the employee, while fairness will be ensured by a balancing process whereby in an ad hoc meeting in each area the assessments expressed and the ways in which they were arrived at will be presented and discussed.

In these new conditions, at the end of 2010 the third Group climate survey was carried out, which involved the entire corporate population (more than 78,000 employees), including those of Endesa and in Russia for the first time. The participation rate was 82%, versus 77% in 2008.

The new survey will be crucial to verify if there were the hoped improvement in the critical areas of the previous survey. It will be followed by further concrete actions to improve those areas where they are necessary. After the data have been analyzed, in the first months of 2011 all heads will share the results with their employees and will plan a series of managerial and organizational actions.



## Internal communication

In 2010 the changes in internal communication focused on a shift from information and involvement to interaction and discussion. This transformation entailed the development of new channels of communication, the beginning of the process of integrating instruments from a 2.0 <sup>(3)</sup> perspective, closer contact with local situations, and above all a new approach based on listening and exchanging opinions.

An example of this opening up to discussion was the creation of the *Enel Insieme* blog. The house organ accepted the challenge of welcoming the observations and opinions of its readers. Inaugurated in February 2010, the blog represents the main channel for engaging the Company's "citizens" on the issues facing the Enel world. Nuclear and renewable energy, business and energy mix, and safety and policy are the subjects that have most stirred up internal discussion, with a total of 10,345 comments and votes. The goal of involvement was also pursued through offline initiatives. In effect, the same strategic issues discussed on the blog were also tackled in the cascade meetings at the Division, Department, and Country levels that took place after the Top Management Convention. In some of the cascades realized in Italy and abroad – in which about

35,000 people took part – employees were able to participate virtually by sending in questions and observations. Along with the inclusion of Endesa in the cascade process, this "2.0" change was the most important innovation of 2010 series.

The development of more participatory methods and collaborative work instruments constituted the underlying theme of numerous initiatives. The most important of these was the new global intranet, the Enel Group's first integrated communication platform at the international level. Inaugurated on March 8, the **Global InEnel** was conceived to support several strategic priorities such as consolidation and integration, the innovation of the media mix, and the desire for internationalization. The first months of the new intranet furnished extremely interesting data on its ability to reach Enel citizens. From February to December 2010, single visitors increased from 12,304 to 25,633 (+ 208%), active sessions from 32,977 to 204,079 (+ 619%), and page visits from 92,599 to 513,239 (+ 554%).

In keeping with the strategic importance of the subject of safety for the entire Group, raising awareness on safety and health followed an integrated approach at the international level, in particular through the third Interna-

tional Safety Week, while concern for the personal and family dimension was embodied again in 2010 in the “We Are Energy” competition addressed to the children of employees.

Awareness-raising initiatives also distinguished **environmental sustainability**. Sharing an environmental culture at the international level and educating employees in the use of a common language were the objectives of the initiatives implemented for **World Environment Day** (June 4, 2010). Once again the new technologies allowed more than 2,000 people to participate in the video forums on environmental issues. Furthermore, throughout the year the monthly *Enel Insieme* and the daily program schedule of Enel TV ensured continual visibility and attention for these issues with articles, news, and special reports.

(3) Web 2.0 allows a high level of interaction between a website and its users.

## Company welfare

### Benefits

In **Italy**, regardless of the kind of contract an employee has, employment at Enel is characterized by an authentic system of “**internal welfare**”. In effect, both part-time employees and those with beginner contracts, including fixed-term ones, enjoy the same benefits as permanent full-time employees. The only employees who do not enjoy such benefits are fixed-term ones with a contract other than a beginner one, who in any case constitutes only 0.06% of all employees.

The benefits at the disposal of employees range from the organization of sports, cultural, and recreational activities to health services and prevention. For senior employees or retired former employees in particular individual services are available, which also extend to their family in case of decease.

In **Italy** such services are provided by various associations instituted by agreements with national labor unions representing electricity-industry employees, including executives, which are spread throughout the country and differ according to their professional status. Leisure activities are managed by the ARCA for employees regulated by the National Collective Bargaining Contract (CCNL) for workers in the electricity industry, by the ACEM for executives, and the ANSE for senior workers, which also offers

individual services. Supplementary health care and prevention services are provided by the FISDE and the ASEM (for executives).

Abroad the situation varies from country to country, as well as within the same country because of prior agreements at the different companies before they became part of the Enel Group.

In **Slovakia**, all employees have access to specialized medical facilities. As far as recreational activities are concerned, employees can also receive complimentary or discounted tickets to cultural events. Furthermore, the law obliges employers to set up a social fund to finance “non-recurrent social loans” to employees for situations of serious family hardship, such as support for families if the employee dies or an allowance to employees in case of prolonged inability to work, with a minimum limit of six months. Employers must also create a fund to reimburse a pre-established set of expenses. In addition to these benefits there is the possibility of days off or leaves of absence for particular occasions or family circumstances (one day for Mother’s Day, four days for family mourning, etc.)

In **Russia** there is a differentiated welfare system addressed to both full-time and part-time employees, which includes: maternity allowances; supplementary assistance beyond what is required by law for employees and their families in case of injury or death in an accident; financial contributions when employees marry or their children are born; a contribution amounting to 50% of expenses when children are hospitalized; sponsorship of stays in rehabilitation facilities or preventive medicine; energy discount (electricity and heating) amounting to 50% of the cost for employees; summer camp for the children of employees; and sponsorship by the company of recreational activities and wellness programs.

In **Bulgaria** employees also receive the same kinds of benefits, albeit with some differences depending on their job status.

In **Romania** benefits – which in this case too regard all categories of employees – are established by the Labor Code and collective bargaining, and regard financial bonuses connected with particular family events (births, marriages, etc.), coverage of household electricity expense, maternity allowances, and financial assistance in case of serious or fatal on-the-job accidents.

Finally, in all the countries in which it is present Endesa provides a series of individual benefits that go beyond those prescribed by the law, such as aid for employee children's education, loans, supply of energy free of charge, subsidized lunch rooms, health and life insurance, and days of leave in particular family circumstances.

## Pension plans

Another instrument for assisting employees is the **provision of supplementary pension funds** and the payment of various forms of individual benefits connected with the termination bonus.

In **Italy**, in addition to the obligatory system provided for by Italian law there are two defined-contribution supplementary pension funds: the FOPEN, for electricity-industry employees (90% membership) and the FONDENEL, for executives (100% membership).

Furthermore, the Group pays employees individual forms of benefits in the services connected with the termination bonus, additional monthly salaries after reaching the age limit or when the right to a length-of-service pension matures, loyalty bonuses for achieving determined requisites of seniority at the Company, supplementary health care and pensions, discounts on the supply of electricity for household use, and other similar services.

As of December 31, 2010, the liabilities recorded on the balance sheet regarding termination bonuses and pension benefits amounted to 1,232 million euro, while liabilities regarding other benefits amounted to 1,837 million euro, a total of 3,069 million euro.

Another item regards the "Fund for termination incentives", which records the estimate of expense connected with offers for the consensual early termination of employment because of organizational requirements. At the end of 2010, the fund amounted to 2,220 million euro. (For further details, see the 2010 Annual Report, pages 218-219).

As far as **Endesa** is concerned, there are 18,251 employees enrolled in a pension plan in the countries where this kind of institution exists. Pension plans are promoted that correspond to sums set aside amounting to 3,228 million euro, which also include benefits such as, for example, easy terms regarding the payment of electricity bills.

Of this total sum, 1,819 million euro correspond to Endesa's pension plan in Spain and Portugal, 614 million euro regard

electricity accounts of retired employees, and the remaining 795 million euro regard internal pension funds in Latin America and various obligations concerning services connected with the pension funds in Spain and Portugal.

In **Romania**, recent changes in the law (pension law n. 263/2010) made possible for Enel to implement a specific pension plan for its employees. An important step in this direction was the agreement on the so-called "social package" signed in 2010 by the Company and the labor unions.

In **Russia**, OGK-5 has a defined-benefit pension fund financed exclusively by the employer, which manages the supplements to the NPFS "Elektroenergetiki" pension and whose purpose is to guarantee the pension in the amount of 25% of the last salary received by the employee before retiring.

In **Slovakia**, Slovenské elektrárne pays for all employees an additional contribution with respect to the minimum of 2% prescribed by law (from 3% to 5,5% of the salary for employees in the occupational categories most at risk).

## People Care

An innovation in the Company welfare systems constituted by the services provided by Enel's social institutions is People Care, a specific organizational unit active in Italy within the Personnel Department. Its purpose is to furnish new instruments and services to **improve the work/life balance** of Enel employees and **enhance the working environment and system**.

The Company's approach to the subject of work/life balance is part of the Group's will to create a culture in which people are less "employees" and more Enel citizens who are able to combine their personal growth prospects with the development of the Company.

In this perspective, listening becomes an unavoidable methodological instrument. In effect, the main areas of interest of the people who work at Enel on which the People Care Unit has chosen to concentrate its efforts were identified through a special preliminary survey conducted nationwide that highlighted three overriding issues:

1. health and well-being
2. care of the family
3. getting to work and back



With regard to the first area – which is already covered by the FISDE (page 120) – in 2010 Enel's commitment to the days dedicated to donating blood continued in Italy in the conviction that well-being and health are the result of, among other things, actions knowingly performed for the benefit of others. The “**Enel for Life**” project consisted in bringing the medical facilities of transfusion centers inside the Company. In this way, Enel also contributed to disseminate the culture of helping others and bringing attention to the question of health, because every donor received at the address specified the results of blood tests performed in accordance with the procedures for safe donating.

As far as the second area is concerned – the family, which is covered by the services provided by the ARCA (page 127) – the Company wanted first of all to tackle the subject of the use of technology by offering employees the possibility of **acquiring the computer used at work** and freely use it at home, given that they are replaced every four years by a new one.

Another important initiative, which takes care of people through culture, is *Libringiro* (“Books Around”), Enel's virtual library. This is a project aimed at interweaving enthusiasm for reading with that for sharing knowledge by encouraging socializing among colleagues. Accessible on the corporate intranet, but also from home, the system can be used to request and borrow books, as well as to insert comments, reviews, and suggestions. In this way, *Libringiro* becomes the space that Enel makes available for exchanging not only books, but also opinions and advice, and finding information on the most important cultural events, which can be used by employees and their families. As far as the third area is concerned, – getting to work and back – during 2010 the project for providing incentives to use public transportation continued and expanded. Coordinating the activities of the six Enel **mobility managers** in Italy – whose task is to identify and propose actions of sustainable mobility for employees traveling to work from home and back – agreements were entered into with local public transportation companies for employees to purchase annual passes at discounted prices offered by the companies, sometimes in cooperation with the local government (municipal/provincial/regional), to which Enel adds an additional discount ranging from 10% to 20% and takes the total sum out of the employee's monthly salary in twelve interest-free monthly installments. The pass is then delivered to the employee directly at his or her workplace.

In another initiative in the area of home-work mobility, Enel started a **corporate car-pooling** service, which provides for particular benefits for employees who when driving to work and back home put their car at the disposal of colleagues and travel with at least three people in the car. The service is currently active on an experimental basis in Rome and will be started soon in other cities.

In cooperation with the transportation services of the municipalities of Milan, Rome, Bologna, and Florence, **car sharing and bike sharing** are available for employees. These services are managed in the same way as public transportation passes, through a simple online request from the employee's workplace and with the benefit of discounts and paying in installments taken out of the monthly pay.

Finally, employees always have a dedicated e-mail address (**people.care@enel.com**) to which they can address questions, reports, proposals, requests for information, or complaints on any subject. With regard to questions specifically about sustainable mobility, there are other dedicated e-mail addresses, a toll-free phone number, and an online chat.

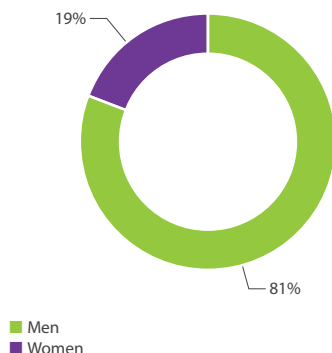
## Equal opportunity

In its processes of selecting, managing, and developing its personnel, Enel avoids any kind of discrimination of its employees and ensures the same opportunities to all of them. All decisions are based on the correspondence between the profiles expected and the profiles of the employees (for example, with regard to promotions or transfers) and on considerations of merit (as in the assignment of incentives on the basis of the results achieved).

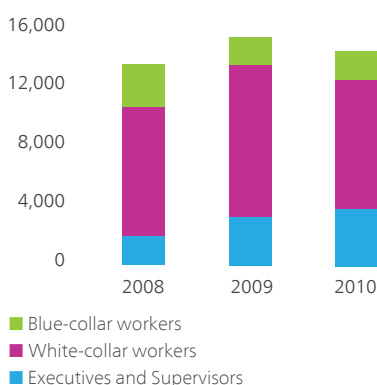
As far as gender equality is concerned, in Italy as in the rest of the world the electricity industry has been characterized traditionally by a distinct prevalence of male personnel. In the last few years, however, women have shown more interest in technical and engineering occupations, in addition to the development of new occupations and specialized capabilities in which there are no factors that hinder access by women.

In 2010 the number of women in the Enel Group decreased from 15,579 to 14,876, with a reduction of 4.5% with respect to 2009. This phenomenon was determined by the decrease in the number of women with clerical and blue-collar jobs, while the number of women in

Personnel composition by gender 2010 (%)



Evolution and composition of female personnel \*



\* Excluding, for 2008, France and Severenergia (Russia) and including only Endesa Spain.

managerial positions (executives or supervisors) increased by 1.4%.

As part of the activities dedicated to raising awareness and promoting a culture of equal opportunity, in 2010 Enel focused its attention on these issues in the field of renewable energy. In effect, through the recently incorporated company Enel Green Power, Enel participated in the **WIRES – Women in the Renewable Energy Sector** – project co-financed by the European Commission and presented and coordinated by Adapt (Association for International and Comparative Studies on Labor Law and Industrial Relations). The purpose of the project is to promote and ensure – through social dialogue – the participation of labor unions and employers in monitoring the “Energy Package”, especially with regard to the impact that it has on the opportunities for employment in the renewable-energy chain.

Studies conducted combining quantitative and qualitative methods and adopting a multidisciplinary approach have shown that women still have a limited share of the employment in so-called green jobs, especially in the production areas connected with the most traditional technologies, such as geothermal and hydro, that supply and demand of green labor still do not completely coincide, and that there is a larger concentration of cross-cutting capabilities and multi-specialist knowledge in the female component of the labor market. During all the proceedings much attention was dedicated to the necessity of combining a more informed stance on the part of young women with an “integrated” development of the educational system that is more in keeping with the requirements of the market. Together with a social dialogue based on an attentive gender approach, these factors could constitute an appropriate instrument for facilitating the entry of women in the green business.

As part of the actions promoted by the “Valore D” Association aimed at supporting the corporate leadership of women, again in 2010 Enel supported the “promotional” initiatives of the association and actively participated in the activities planned during the year, such as the skill-building and role-modeling sessions and the mentorship course, which involved 40 female executives and supervisors from Enel. The Company also worked on internal matters through a session of the “Orienta” managerial training series dedicated to thinking about the issues of equality & diversity management, at which the purposes and objectives that “Valore D” is pursuing were presented.

The Company’s concern for the issues of diversity management also took the form of a new expatriate-management policy, with measures to encourage and assist more involvement of women in work experiences in Enel Group companies abroad.

Endesa has implemented a number of plans to raise awareness of social-responsibility and equal-opportunity issues, which provide for numerous actions. In 2010, the following initiatives were carried out:

- > an education conference on corporate social responsibility and equal opportunity, which was held in 5 cities and involved a total of 836 participants and 10,000 hours of training
- > a conference on equal-opportunity positive actions, which 1,193 women attended in different regions
- > an online training course on “Awareness, equal treatment, and equal opportunity”, which was completed by 1,653 employees

- > a questionnaire sent to female employees to learn about their wishes regarding change in their careers and professional development.

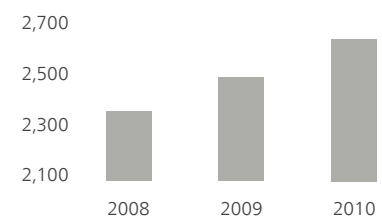
Managing diversity also means providing people with disabilities with instruments, services, and work methods that enable them to perform their job easily and autonomously. The People Care Unit (page 128) dedicates special attention to the needs of employees with disabilities. During 2010 the Unit mapped in depth the kinds of disability and thus the needs that are present among the personnel in order to identify the priority areas for initiatives to improve the working conditions of individual employees and overall organizational well-being.

Among the activities implemented in 2010 was another edition of the basic computer course for employees with sight disabilities in order to enable them to qualify for jobs that require the use of personal computers and the appropriate hardware and software accessories. Employees with serious disabilities have at their disposal the “There is Room for You – Law 104” service, which guarantees a reserved parking space close to an entrance. The service is extended to expecting women during their pregnancy.

As part of the benefits provided by the FISDE (page 120), in addition to the reimbursement of health care expenses, financial support is available for expenses connected with disabilities, such as, for example, the removal of architectural barriers, assistance at home, or fees for retirement homes. Personal services are provided through a network of consultants of the Fund at the regional level, in general psychologists, who help families to find the most appropriate strategies to facilitate the satisfactory integration of disabled members in the environments to which they belong.

Finally, with regard to social activities, mention should be made of stays in summer resorts for disabled people, as well as different kinds of initiatives addressed specifically to parents, such as, for example, parent-training courses and meetings aimed at parental acquisition of specific capabilities.

Disabled employees and belonging to protected categories \*



\* The 2010 figure does not include Endesa Greece, Ireland, and Morocco. The 2009 figure includes only Italy and Endesa Iberia, while the 2008 figure regards only Italy.



# Endesa is an egalitarian company

Endesa received the “**Igualdad en la empresa**” (Equal Opportunity in Enterprises) award assigned by the Spanish Ministry of Health, Social Policies, and Equal Opportunity, a symbol of excellence distinguishing companies committed to ensuring their employees equal treatment and equal opportunity in working conditions, organizational models, and other areas, such as services, products, and corporate advertising.

Among the most important factors that are considered for the assignment of the award is the balanced participation of women and men in decision-making processes and access to positions of greater respon-

sibility. In addition to this are the adoption of up-to-date criteria and systems of compensation and classification allowing for equitable evaluation of the work performed by women and men, whether the work is of the same kind or different.

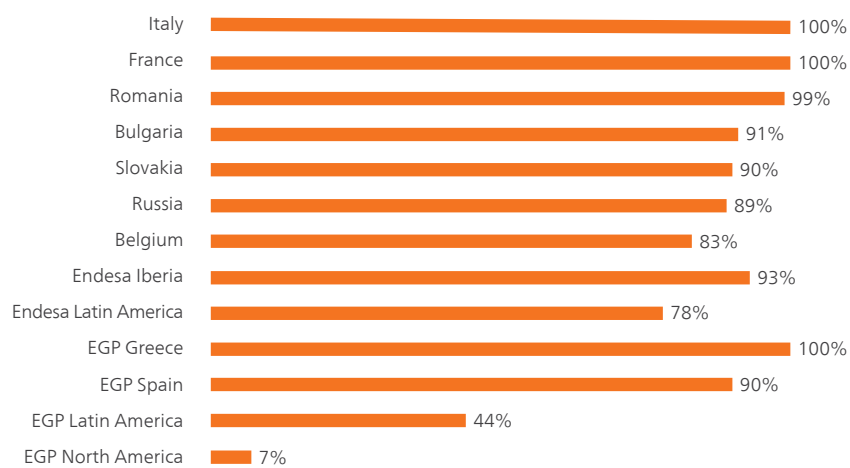
The award recognizes Endesa’s strong commitment to equal opportunity. In 2008 it started an “Equal-opportunity and Conciliation Plan” in keeping with the company’s aim of ensuring the actual application of the principles of equality of treatment and opportunity of men and women, as well as the implementation of ways of achieving a work/life balance.



# Industrial relations

From the beginning, and gradually also in the internationalization process of the last few years, Enel has had an open and totally co-operative relationship with union representatives. This is confirmed by the high percentage of Group employees who are covered by collective-bargaining agreements, not only in Italy (where all of them are), but also in countries where, even at the national level, there is a less consolidated tradition of co-operation between the industrial system and union representatives.

% of employees covered by collective-bargaining contracts in 2010



With regard to the **right to strike**, as early as 1991 Enel and the Italian unions signed an agreement aimed at balancing the exercise of this fundamental right with the need to guarantee an **essential public service** such as electricity. This agreement was rescinded by the unions on June 11, 2009.

When the latest contract was negotiated, an understanding was reached on guidelines for a new agreement to replace the one that the unions had rescinded. As part of these guidelines, the parties agreed on the principle that strikes in the electricity industry must be carried out with procedures that in any case ensure the continuity and security of the service to all users.

In 2010, important results were achieved in particular regarding collective bargaining in **Latin America** with the signing of six agreements between unions and several Enel Group companies (specifically, Edesur, Endesa Costanera, Hidroeléctrica el Chocón, and Central Dock Sud in Argentina and Edelnor SAA, Edegel SAA, and Empresa Eléctrica de Piura SA in Peru).

In 2010 a Peruvian union (Sutrel) filed two claims for damages regarding alleged violations of the freedom of association of the workers of CAM Peru (Compañía Americana de Multiservicios del Perú SRL), an Endesa Group company. One of

the two claims was rejected by the court, while the other was settled following the due investigation without any consequences for Endesa. Moreover, CAM Perù was sold in 2010 and is no longer part of the Enel Group. One of the crucial aspects of the dispute between the Company and the unions regards organizational changes that may take place in the structure of the Group and impact employment of the working conditions of the employees involved.

According to E.U. regulations, which have been adopted by the member countries, in the event a company or a factory, or part of a company or factory, is transferred to a new entrepreneur following a contractual sale or a merger, the transferor and the transferee are obliged to inform the representatives of the workers concerned "in time". **Italian law** (specifically, article 47 of Law n. 428/1990 <sup>(5)</sup>) defines "in time" as at least 25 days in advance.

In **Spain**, the Framework Guarantee Agreement of September 12, 2007 for Endesa SA and its electricity subsidiaries in Spain provides that "the transferor must start a period of consultations with the workers' representatives lasting at least 30 days". For the companies not included in the Functional Area of the Framework Guarantee Agreement the provisions of Article 51.4 of the Workers' Statute of Rights will apply. This article establishes that "the consultation with the legal representatives of the workers will last no less than a period of 30 calendar days or 15 in the case of companies with fewer than 50 employees".

The regulations regarding the minimum notice time vary considerably from country to country. In **Slovakia** the minimum notice period is from two to three months, according to whether the worker has been employed for more or less than 5 years; in **Russia**, two months; in **Romania**, 30 days for managers and 15 days for other employees. In **Argentina**, the minimum period for changes in working conditions is normally 48 hours, but it is not expressly specified in the collective-bargaining agreement. In **Colombia**, the regulations do not provide for a minimum period for rescission of the contract in the following cases: restructuring, outsourcing of operations, expansion plans, new prospects, total or partial acquisitions or disposals. In **Brazil**, every time there are significant organizational changes, the law requires "prompt" information. In **Peru**, no information is required in the event of organizational changes.

In addition to complying strictly with regulations in all the countries in which it operates, Enel's approach is to systematically carry on consultations between the parties at all

levels on issues of common interest and in general to seek in all circumstances an appropriate level of agreement by employees on corporate strategies, as recommended by the industry regulations (article 2, "Industrial Relations", of the CCNL – the National Collective Labor Contract – of July 18, 2006).

In Italy, the Industrial Relations Protocol that Enel signed with the most representative unions regulates union relations, going deeper into the practices already provided for at the industry level. In effect, in the event of significant organizational changes the Protocol provides for a preliminary discussion with the workers' representatives, which must not last longer than three months. Before the discussions begin, Enel is committed to put all the documentation available, in its entirety, at the disposal of the parties in order to ensure that the workers' representatives have a complete view of the project and can thus state their proposals.

Pursuant to the system of rules described, in 2010 numerous discussions on the reorganization of the divisions were held with the unions at both the national and the local level. For in-depth details on the organizational changes that took place during the year and the consequent information furnished to and consultations with the unions, see page 126 of the Annual Report.

(5) Italian law that establishes a general framework regarding informing and consulting workers is Legislative Decree n. 25/2007, which adopts Directive 2002/14/EC.

## The European Social Dialogue and participation in E.U. research projects

Again in 2010 Enel chaired the **Human Resources and Social Affairs Working Group of Eurelectric**, the association of European electricity companies. The association is officially recognized and legitimized by the European Commission as a partner (employer) in the industry social dialogue together with the EPSU and the EMCEF, European union federations, of which the relevant Italian union federations – FILCTEM, FLAEI, and UILCEM – are members. The industry social dialogue took place in 4 meetings, which led to the signing in December 2010 of common position on the possible impacts on employment and on the training necessary for rolling out smart meters.

On December 13, 2010 the final conference took place in Brussels for the presentation of the results of the Eurelectric-European Union Confederations joint project – financed by the European Commission – regarding the principles of a fair transition to a low-carbon scenario, impacts in terms of the expertise necessary, and the role of the social dialogue. With regard to this study, Enel has distinguished itself by signing the following protocols:

1. Joint committee of Enel and the confederated industry labor unions on industrial, employment, and environmental policies (2009);
2. CSR Protocol (2009);
3. the most recent Protocol of Understanding between Enel Green Power and the national and regional (Tuscany) unions on employment policies, with a particular focus on renewable energy (July 2010).

## The CSR Protocol and the Industrial, Environmental, and Employment Political Policies Committee

The discussion and sharing of common principles regarding sustainable development begun in 2009 continued in 2010 with the signing of the CSR Protocol and the one on the Industrial, Environmental, and Employment Committee.

From the point of view of industrial relations, the two protocols are in the tradition of constant involvement and discussion that has led Enel and the unions to agree on and support a model of corporate growth that combines the creation of value and attention to its economic effects.

Within this framework, one of the main purposes of the Protocol is to support and strengthen the “value” of the individual in the sphere of his or her personal and collective interests: human rights, respect for the environment, occupational health and safety, training, and equal opportunity. Thus the discussion of principles regarding the fundamental rights of workers and the commitment to respect, promote, and realize them in all the countries in which Enel operates was crucial.

**The Committee on Industrial, Environmental, and Employment Policies**, an equal-representation body consisting of representatives of the Company and of the unions constitutes a special place for relations between the Company and the unions on the choice of industrial, environmental, and employment strategies that Enel intends to pursue. Being bilateral, it constitutes an instrument of aggregation and construction of “consensus” for the implementation of corporate policies locally. In 2010, the Committee participated actively in the reorganization of the Renewable Energy Division and agreed with its objectives. In September 2010, the agreement that established the Committee and its concrete implementation in 2009 and 2010 received an important external recognition during the Ravello Festival in Italy: the **Ethics and Enterprise Award** for the Sustainable Development category. This was the fourth edition of the award, which is organized by AIDP, Federmanagement, and the organizations of the cadres of the CGIL, CISL, and UIL and is addressed to the companies that – with agreements, projects, and relations – have contributed during the year to promote the culture of ethical values. Enel was also a finalist in the “Corpo-

rate Social Responsibility" and "Occupational Health and Safety" categories, and for the latter category received an honorable mention for its International Safety Week project and its discussion with the European Company Committee on safety issues.

## Information and transnational consultation: the European Company Committee

In July the first 2010 ordinary meeting of Enel's **European Company Committee** was held in Rome. The purpose of the meeting was to examine the economic and financial situation, investment plans, and other topics provided for by the ECC Agreement.

The participants expressed particular satisfaction for the results of the training initiative in May 2010 (see the "High-light" on page 139), which led to a series of proposals for improving the dialogue with the management and the organization of the meetings provided for by the Agreement. After the meeting of the Restricted Committee of the ECC on October 13, 2010, at the end of November and the beginning of December the second ordinary meeting was held, which was attended by the representatives from the personnel departments of the Group companies in Spain, Portugal, Bulgaria, Slovakia, and Romania, in addition to the members of the ECC. The subjects discussed in the meeting were:

- > The Group's performance on accidents – International Safety Week 2010 and Nine Points;
- > Activities and Development Plan of the GEM Division;
- > Projects of the Engineering and Innovation Division and focus on nuclear energy;
- > Presentation of financial data as of September 30, 2010.

## Industrial relations on the issues on health and safety

At Enel there are also agreements with unions in effect regarding the health and safety of workers, such as the National Collective Labor Contract (CCNL) for workers in the Italian electricity industry in compliance with national and

local regulations (article 10, "Environment, quality, and safety in the workplace"), as well as other collective agreements in the other Group countries. Equal-representation committees are also set up in accordance with EU Directives where they apply.

The agreements regulate matters such as:

- > Individual Protection Devices (IPD);
- > Training, information, and drilling;
- > Complaints;
- > The right to refuse unsafe work;
- > The right to periodical inspections (The workers' safety representatives may make inspections of workplaces in accordance with the provisions of article 50 of Legislative Decree 81/08.);
- > Management-worker health and safety committees.

Agreements at the global level are also in effect on:

- > Conformance with standards of the ILO (International Labour Organization);
- > Commitment regarding objectives and standards of performance;
- > Equal-representation bodies for the solution of particular problems.

In **Italy**, Workers' Safety Representatives are constantly involved in the management of corporate safety. In 2010, for example, an intensive program of training and periodical refresher courses was implemented, which involved about 400 Representatives and 30 training sessions in 12 venues all over Italy. Interdivisional groups attended eight-hour courses aimed at examining the main risks in the areas in which the Representatives are employed. The unions discussed the planning and materials of the courses and provided members as instructors for some of them.

In effect, the Company still promotes a participatory and bilateral approach to the issues of training, as ensues from the principles contained in Enel's Protocol of Corporate Social Responsibility.

In **Romania** there are collective contracts and agreements with unions regarding issues of safety, hygiene, and health. There are also bilateral health and safety committees, on which half the members are workers' representatives. These latter participate in a specific annual training program, take part in inspections and the analysis of accidents together with the operating personnel, and can perform periodically checks to ascertain the conditions of occupational health and safety. Any problems reported by



workers to their representatives or by the representatives themselves are analyzed together with the management during the meetings of the bilateral health and safety committees.

In **Russia** there are union representatives elected by the workers in the electricity industry unions. In 2010 Enel OGC-5 and the unions signed a new collective contract aimed at ensuring observance of regulations regarding labor, health, and safety by both workers and employer. The collective contract deals specifically with the following issues: work and rest hours, pay, workers' right to refuse work that may endanger health or safety, bilateral committees with representatives of the corporate management and of the workers, Individual Protection Devices, insurance, training, etc.

In **Bulgaria** the workers have union representatives and a union agreement was signed that deals with the following matters: DPIs, bilateral health and safety committees, participation of union representatives in inspections and the analysis of accidents, promotion of reporting near misses, etc.

In **Slovakia** all the documentation regarding health and safety is shared with union representatives. Investigations of accidents are also carried out in cooperation with the workers' representatives. Furthermore, the unions are members of bilateral committees for monitoring and checking health and safety conditions.

In **Spain** there are collective agreements signed at both the national and the local level that regulate the questions of health and safety and provide for the institution of bodies for consulting workers and allowing them to participate in matters of health and safety.

In **Argentina** there are also union agreements regarding, in particular, the furnishing of DPIs and training activities on risk prevention.

In **Chile**, on the other hand, there are no formal agreements with unions, but bilateral committees are established.

In **Peru**, formal agreements have been signed with the unions regarding health and safety standards, the furnishing of DPIs, and insurance for workers. There is also a bilateral committee that assesses needs and measures to improve DPIs.

In **Colombia** there are union agreements that regulate various aspects of risk prevention and industrial safety (preventive medicine, hygiene and health, DPIs).

In **Brazil** there are local agreements establishing the health and safety standards to observe in order to prevent

injuries and occupational diseases, regulating the participation of workers' representatives in the management of safety, and specifying forms of assistance for workers in case of injuries or illness.

The Enel Group has numerous formal committees consisting of one or more of the most representative employer and worker associations on the national level. Established at the local level, these committees are created in accordance with specific agreements with the workers' representatives both in Italy and abroad and perform functions of orientation and promotion of training initiatives for workers, in addition to constituting the first resort for the resolution of disputes regarding the application of the rights of representation, information, and training.

In Italy the formal committees are:

- > the Safety and Health Committee of the Workers of Enel Distribuzione SpA, which represents 24% of Enel Group workers;
- > the equal-representation committee on worker training of the Infrastructure and Network Division, which represents 24.6% of Enel Group workers;
- > the equal-representation committee of the Generation and Energy Management Division, which represents 8.5% of Enel Group workers;
- > the meeting pursuant to article 35 of Legislative Decree 81/08 attended by the employer (or a representative), the Head of the Prevention and Protection Service, the competent doctor, and the Workers' Safety Representative. Called at least once a year, it represents all the companies in Italy to which Legislative Decree 81/08 – which adopts the EU Directives – applies.

In all subsidiaries abroad there is an ad hoc group of workers and specialists dedicated to safety issues, with regard to both prevention and control:

- > **Russia** – Health and Safety Directorate consisting of 30 people with the task of consolidating the culture of safety. There is also a safety and health committee representing 70% of the workers, on which 57 workers participate;
- > **Romania** – In accordance with national legislation, at each company there are health and safety committees (OHSC), which represent all the workers;
- > **Slovakia** – Health and safety committees that represent all the workers;
- > **Bulgaria** – Health and safety committees consisting of 8 people (4 representing the company and 4 representing the workers) that represent all the workers;

- > **Spain** – All the workers are represented by a formal committee in accordance with the provisions of Endesa's collective agreement;
- > **Chile** – There are 23 workers' safety and health committees in the various companies that operate for Endesa in Chile, representing more than 75% of the workers;
- > **Peru** – There are 16 workers' safety and health committees in the various companies that operate for Endesa in Peru, representing all the workers (100%);
- > **Colombia** – There are two workers' safety and health committees (COPASO), representing all the workers: one at Codensa, which operates at the company level, and one at Emgesa, which is divided into 6 subcommittees that represent plants and groups of plants;
- > **Argentina** – The unions have safety and health committees, which periodically meet with Edesur's Coordinating Unit for Risk Prevention. There are also two distinct committees for the three generation companies in Argentina. The committees represent more than 75% of the workers;
- > **Brazil** – The committees represent all the workers and their purpose is to assess monthly the progress of the annual workplace safety and health plan.

In addition to these bodies, in particularly complex production sites and situations specific bilateral bodies may be instituted that also involve contractors. The most important example is the Safety Committee at the Torrevaldaliga Nord construction site near Civitavecchia, in Rome province. Set up in 2005, it represents about 600 people (100% of the area), with 60 Enel people and 8 people dedicated full-time to workplace safety. The Committee is chaired by an Enel representative (Executive Coordinator) and among its members are representatives of all the companies working on the site. This committee has the task of "establishing policies and objectives regarding the safety of the workers employed on the site in order to ensure the cooperation and coordination of the companies in implementing the measures regarding the prevention of and protection from occupational risks".

# Seminar on the Enel ECC and the exercise of the rights of information and consultation

After the participation of the Restricted Committee of the Enel ECC in Sustainability Day 2010, in keeping with the openness and involvement of the body representing the EU employees of the Group, in May 2010 the **joint training activity** between Enel and the European Company Committee materialized in the seminar on "The Enel ECC and the exercise of the rights of information and consultation". Addressed to the members of the ECC, the seminar constituted the first training initiative implemented pursuant to article 9 of the agreement of December 5, 2008 that established the ECC.

Carried out in partnership with SIND-NOVA, the initiative was developed on behalf of the ECC and with the support of the two European indus-

try federations, the EPSU and the EM-CEF and was co-financed by the DG Employment of the European Commission from the 2009 budget line dedicated to Information and Transnational Consultation (04.03.03.03). (VP/2009/003/0214)

The purpose of the seminar was to improve the functioning of the body through study of and comparison with the good practices adopted by other ECCs and in light of the recent recast of the Directive on ECC (2009/38/CE). Preceded by a preparatory stage and followed by a joint assessment follow-up, the training initiative took place over four days, during which there were talks by experts, group works, presentations of case studies, and discussions among the participants.





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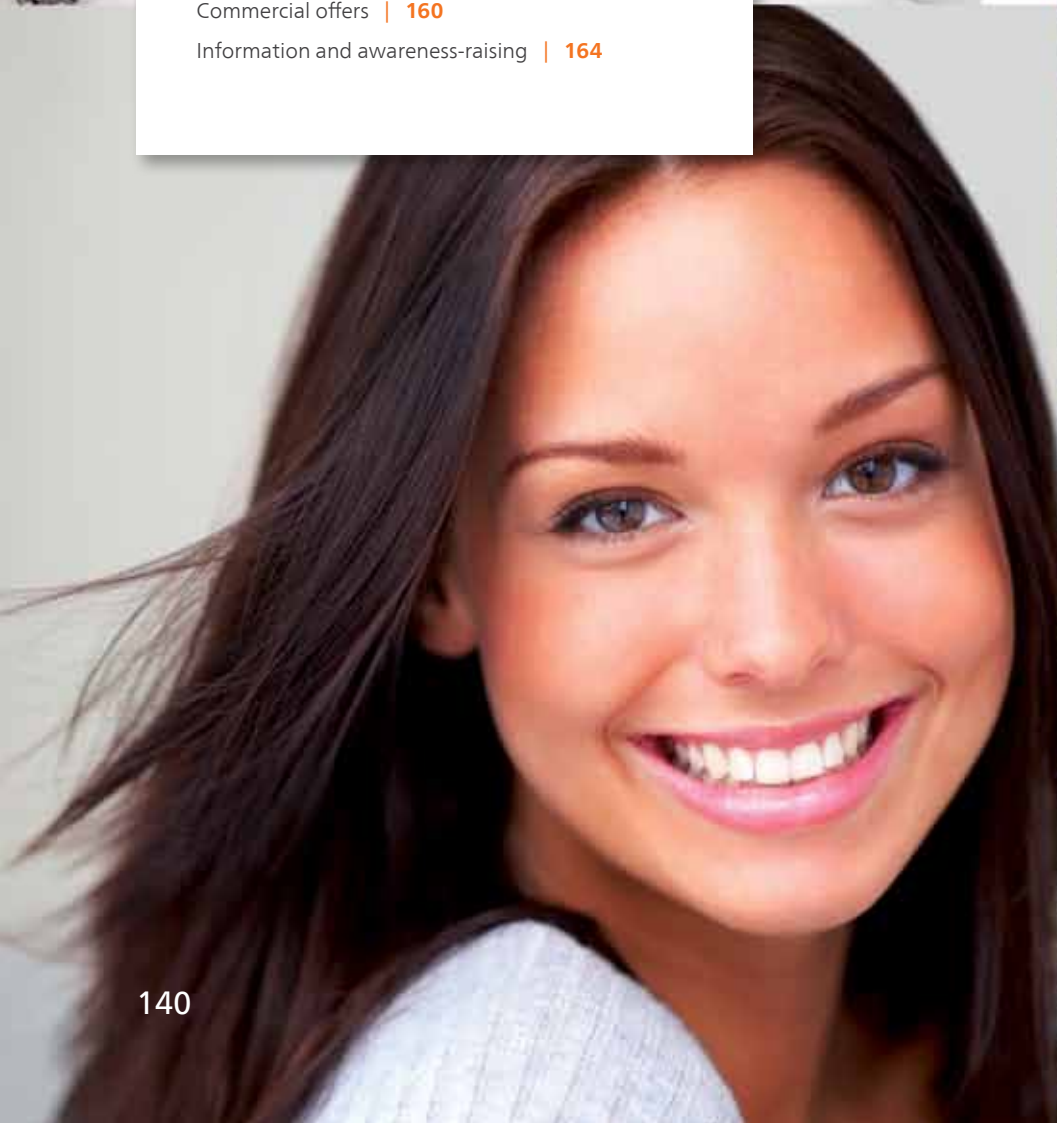
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Enel for its customers





# Our commitments



**Ensuring access to electricity for the largest number of people and satisfying their needs safely and efficiently, with quality and innovation: these are the basis for creating an increasingly customer-centered corporate culture.**

Enel dedicates continual effort to satisfying all its customers by constantly monitoring quality, in terms of the reliability and security of electricity, and the service provided in their numerous contacts (regarding sales or assistance) with the Company. For this reason, throughout the Group the most important data on network efficiency, customer satisfaction, and the most frequent causes of complaints are monitored regularly.

Beginning with the measurement of customer satisfaction, a number of programs have been developed to define specific initiatives aimed at improving customer-service quality. In 2010, as part of the **Passion for Quality** program in **Italy**, numerous measures were implemented, including the extension of the daily activity of the contact centers (now around the clock), the creation of new services available on the websites and the extension of the network of the specialized **Punto Enel** centers. In April 2010, the **Client in Focus (CLIF)** program was inaugurated in **Romania**. This program aims to improve existing services by redesigning processes and procedures, changes in the various customer-relationship-management services and channels, expanding virtual contact points, and introduc-

ing new sales channels. As part of the project, in 2010 a new website made its debut, the services provided by the call centers were diversified, and new payment channels were introduced.

For Enel, **ensuring access to electricity** is an essential objective and responsibility, as seen not only in the development and improvement of network infrastructure, but also in the concrete financial support given to families living in hardship to pay for their electricity. Often in cooperation with the government, Enel Group companies implement programs in the various countries to help families through "social bonuses" or by providing services free of charge.

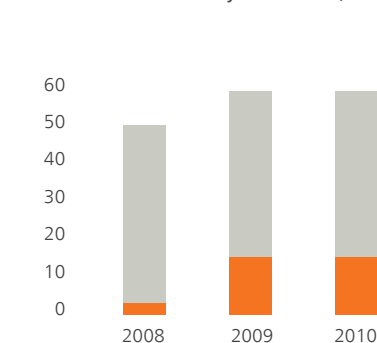
One of Enel's objectives is to communicate clearly and simply, enabling customers to be fully informed about the products proposed. All products and customer services are described in simple and immediately comprehensible language that clearly explains the characteristics of the offers and their related advantages. To prevent linguistic, cultural, or physical barriers from making access to information and services difficult, the Group companies develop programs aimed at overcoming the obstacles to **effective**

**and transparent communication** for all customers. In Spain and Latin America, for example, Endesa developed numerous actions in favor of customers with disabilities and programs to encourage a more informed consumption of electricity.

Concern for customers, but also commitment and awareness-raising for **efficient electricity use and respect for the environment** constitute essential values of Enel Energia's and Endesa's offers for the free market. Many proposals with these values were developed in 2010. With "**All-included Green Energy**" and "*Tarifa Eléctrica Verde*", Enel Energia and Endesa offer their customers the possibility of choosing to consume only electricity produced from renewable energy sources, while products based on *differentiated times of day* encourage customers to reduce consumption at peak times, thus combining benefits for themselves with the increased efficiency of the entire distribution network. Furthermore, with advisory services, dedicated products, and partnership programs, the Company also promotes the rational use of electricity in the industrial world, the civil service, and the management of cities.

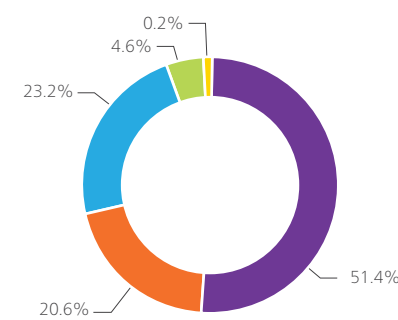
## Our customers

Number of end electricity customers (millions)



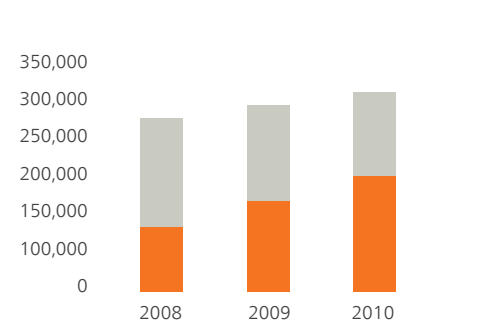
■ Total customers regulated market  
■ Total customers free market

Electricity customers by country (2010)



■ Italy  
■ Latin America  
■ Iberian Peninsula  
■ Romania  
■ Other (includes Russia, Slovakia, and France)

Total quantity sold in the electricity market (GWh)



■ Quantity sold regulated market  
■ Quantity sold free market



## The electricity market in Italy

With the completion of the liberalization of the electricity market, from July 1, 2007 all end customers are entitled to back out of their pre-existing electricity supply contract as captive customers and to choose a trader in the **free market**.

The Electricity and Gas Authority (AEEG) established a series of rules aimed at facilitating the liberalization and competition among companies to the benefit of end consumers. For those who do not

opt for the free market, the AEEG started up the **protected service** (household customers and small businesses) and the **safeguard service** (for medium-size and large businesses), which ensure regulated rates and minimum conditions for supply established by the Authority. The costs incurred by companies to provide the protected service are compensated by the payment of special considerations determined by the aforesaid Authority.



# Objective: quality

## Short- and long-term availability and reliability of electricity

Enel is the leading company in the Italian electricity market and is an important presence in the markets of the other countries in which it operates. This places a big **responsibility** on the Group's distribution companies, because it is their duty to ensure a **continual, efficient, and secure** supply of electricity so that the national economic systems can function without interruptions and people can live their normal daily life.

In order for electricity to be supplied continually and uninterruptedly, two things are necessary: the long-term availability of sufficient energy sources, on the one hand, and reliable and efficient transmission and distribution infrastructure, on the other.

The Group's generating plants, which rely on a **balanced mix of highly efficient traditional sources and numerous sources of renewable energy**, ensure the long-run availability of the energy necessary to Italy's electricity system. Furthermore, to ensure that the electric infrastructure of the other countries is adequate for their needs, Enel is constantly engaged in **extending its distribution networks and making them more efficient**.

In **Italy**, the ownership and management of the networks are divided among a number of companies. Terna SpA is the main owner of the high-voltage National Transmission Grid and is responsible for transmitting and dispatching electricity throughout the country, while Enel Distribuzione – the largest Italian company – is responsible for developing and managing the Distribution Network.

Thus the planning of development is based on a joint analysis of requirements among the different companies. The analysis starts with estimates of the increase in the demand for energy and power for the entire national electricity system, which are calculated on the basis of historical

series, and forecasts of the increased quantity of electricity produced from renewable sources. On the basis of such estimates, an assessment is made of the development requirements of the distribution infrastructure (primary substations, lines, etc.) by comparing estimates and forecasts with the structure and condition of the current network and the plan for the development of the transmission grid, managed by Terna, is elaborated and updated.

Potential problems caused by discrepancies between estimated loads and the current capacity of the network are noted from the energy flows in the primary-substation transformers. The rough projections obtained for each single substation through the extrapolation of the historical series of power withdrawals are first integrated with the precise information of significant connections and subsequently integrated and harmonized with respect to the trends identified at the broader local level.

In effect, the medium-voltage (MV) distribution network generally is sufficiently large enough to ensure the possibility of supplying power in the event of a malfunction. However, methodical monitoring of changes in the load is necessary to ensure the maintenance of the aforesaid conditions. The result of these elaborations generates a "**load map**" on the basis of which it is possible to identify for each year of the plan the areas of significant network saturation, the starting point for identifying the work that will be necessary during the year.

**The total quantity of electricity transported on Enel Distribuzione's networks in 2010 amounted to 245.9 TWh (241.1 TWh in 2009). An average growth of about 1.5% in the total demand for electricity is expected in the next few years.**

In **Romania** Enel's distribution companies – which operate in the Banat, Dobrogea, and Muntenia Sud areas – are making a series of substantial investments aimed at improving the condition of obsolete electric networks that cannot sustain the current growth in demand. When it entered the

Romanian market in 2005, therefore, Enel began to invest in the modernization of the electric network in close cooperation with local authorities and consumer associations so that it could respond in the best possible way to local needs.

Specifically, in 2010 an ambitious program to modernize the network infrastructure in the Muntenia area was implemented with the objective of increasing service quality by focusing all efforts on completing the remote-control program by the end of 2013.

In **Spain and Latin America**, Endesa also monitors the current and potential loads on its network on the basis of the forecasts of electricity demand and carries out work on its lines to improve the reliability of the network. Specifically, in Spain an action plan was begun in 2010 to prevent and mitigate the most serious instances of disconnection, which was made necessary by the unusual number of blackouts and disconnection incidents due to the meteorological events that struck the region in 2010, causing floods, and landslides, knocking down trees, damaging lines, etc.

The plan includes the following:

- > **Foreseeing incidents:** meteorological early-warning system, risk mapping, emergency operating plans, coordination with the Electricity System Operator, knowledge management
- > **Preventing incidents:** availability of secondary substations, management of generating sets, line renovation, management of action plans, information systems for technical disasters, response plans, etc.
- > **Managing incidents:** training for the crisis committee, appointment of a crisis-management head, concern for the municipalities involved, transparency, information on the different channels of communication.

Finally, all the distribution companies in Latin America are continuing to develop quality plans to improve supply continuity for their customers.

In Italy, to reduce the **service outages** suffered by customers, as early as 1999 the AEEG (Electricity and Gas Authority) introduced "target levels" of service continuity, which every distributor is obliged to achieve in the area where it operates.

In 2007, its resolution 333/07 determined the levels of service quality for the 2008-2011 regulatory cycle. The improvement goals regard the length of outages and, for the first time with respect to the previous cycles, the number of long and short outages. This more differentiated approach encourages the simultaneous control of the different components of service quality, specified as the:

- > cumulative length of the long outages without prior notice for low-voltage (LV) customers;
- > total number of long and short outages without prior notice per LV customer;
- > number of long outages without prior notice per medium-voltage customer;
- > maximum length of time to restore service for single MV and LV customers in case of prolonged or extended outages.

Work on the distribution network aimed at reducing outages and their length may regard changes in the structure of the network, replacement of components of MV lines with inappropriate technical characteristics, and increasing the degree of remote control through automation or carrying out actions on secondary substations at a distance.

Specifically, work with an effect on the **number** of outages per customer involves increasing the level of insulation:

- > reduction of the average length of MV lines;
- > replacement of rigid superstructure with suspended superstructure;
- > replacement of overhead lines with underground cables;
- > replacement of substation components isolated in the air;
- > coordination of insulation.

Work with an effect on the **length** of outages per customer, on the other hand, involves increasing the ability to sort out the breakdown along the line, i.e. to redistribute the customers concerned from the portion of the network that has broken down towards functioning sections:

- > automation of the MV network;
- > construction of new MV lines or new network elements (rationalization);
- > construction of satellite centers or primary substations.

Finally, to limit **network losses**, the following actions are normally performed:

- > increasing the conductor section
- > reduction of the "electric length" of lines
- > use of low-loss MV/LV transformers
- > rephasing MV customers

A positive effect on network losses also comes from work done for other purposes, such as the upgrading of existing lines to adapt them to the load or limit voltage drops, the construction of new primary substations with an increase in the number of lines and a simultaneous reduction in the average length of the lines regarding the catchment area,

the installation of new secondary substations with a reduction in the extension of the LV network, and the replacement of existing bare overhead lines with underground cables or with sturdier lines.

Very important for limiting network losses are also the methods of conduction. Particularly on the MV network, judicious management can reduce significantly the amount of energy dissipated in the conductors. The advanced network monitoring system, remote management of operations, and the sophisticated online and offline systems for calculating and simulating electricity data that Enel Distribuzione is in the process of adopting can help limit losses. From the point of view of “commercial” losses, the use of the remote management system combined with electronic meters has led to greater efficiency in controlling energy balances, while at the same time reducing cheating. In 2010 the only penalties for failure to observe the service quality parameters regarded Romania, where the ANRE (National Energy Regulatory Authority) imposed 8 fines totaling 28,000 euro on Enel’s distribution companies operating in that country, while 28 other fines are currently being appealed.

Finally, in Italy there were no legal proceedings in 2010 in which electronic meters were linked to damage to the health and safety of consumers.

For information on the number and average length of the outages that occurred in 2010 and on the percentage of transmission and distribution losses with respect to the total quantity of electricity transported, see the tables in the appendix.

## Product and service quality

With the completion of the liberalization of the Italian electricity industry in 2007, a series of new products appeared – which have grown exponentially in consequence of, among other things, the incentives provided for renewable energy source – as well as new services, activities, and dealers, such as sales companies. Even though the Electricity and Gas Authority (AEEG) has laid out the roles and responsibilities of each of these figures, this multiplicity of players has confused consumers, who often cannot figure out which one to turn to in the event the service requested is not performed or there are delays. That was the clear con-

A common goal:  
enhance the quality  
of our relationship  
with customers  
through work  
methods and ad  
hoc improvement  
programs

clusion of a study carried out by the Infrastructure and Network Division in the first half of 2009, according to which 43% of the customers in the free market – and thus those who consciously chose a new seller among those present in the market – are not able to distinguish clearly the different areas of responsibility in the various stages of provision of the end service. This confusion is confirmed by the analysis of the requests for information that Enel receives.

Service quality now means not only continuity of supply, absence of outages, and network and system efficiency, but also the quality of the relations with customers who contact a company when they have questions, problems, technical or payment difficulties, the need to change their contract, and so forth.

For this reason, in the last three years the Group has begun a series of projects aimed at focusing the attention of all Enel’s people on the common objective of providing a quality service for its customers by proposing work methods and improvement programs to gradually create an “excellent experience” for every customer at every moment of his or her relationship with Enel.

## Surveys

### *Customer Satisfaction*

In Italy, during 2010 a specialized firm carried out 70 customer-satisfaction surveys through interviews of almost 60,000 customers. Interviews were done with customers in the free electricity market, the gas market, and the regulated market, distinguishing between household and business customers. The investigation regarded customers who had contacted Enel by using the Group’s toll-free phone numbers (about 1,500 a month), were acquired through sales channels (about 1,500 a month), or were chosen at random from the customer

In Italy, in addition to the surveys that each company in the energy industry carries out independently, beginning in 2008 the Electricity and Gas Authority also conducts semi-annual surveys of the contacts centers of companies selling electricity and gas with more than 50,000 customers. It then draws up a results list, whose final scores take into account of the quality and accessibility of the service, as well as customer satisfaction. There are currently 30 companies included in the AEEG's contact-center survey and the two Enel companies concerned – Enel Energia (which operates in the free market) and Enel Servizio Elettrico (which operates in the regulated market) – are assessed separately.

The results at the end of 2010 showed an 84/100 customer satisfaction degree for the free market and one of 89.2/100 for the regulated market. Both figures were improvements on 2009.

As far as Brazil is concerned, for the second year in a row Coelce was voted the best energy distributor by the ABRADÉE (Brazilian Association of Electricity Distributors). The 92.2% rate of perceived quality was much higher than the national average.

base (more than 4,500 a year). The results of the survey are reported in the tables in the Appendix.

In addition to the usual periodical surveys of customer satisfaction of all the sales and contact channels, as well as of customer management, Enel continued to use and perfect the "on-the-spot" system of monitoring introduced in 2008. This system gives customers the possibility of expressing their overall opinion regarding a phone call by simply pressing a number from 1 to 5 after their contact with the operator. Furthermore, customers can say if the matter for which they called Enel was handled successfully and if they would recommend Enel to a friend. The particular effectiveness of this survey system lies in the immediate possibility given to customers to assess the contact they just had with the Company in its totality, and thus considering how long they had to wait, and the courtesy, clarity, and competence of the consultant with whom they spoke, as well as his or her ability to solve the problem.

In Romania, Enel Energie and Enel Energie Muntenia conducted customer-satisfaction surveys in the Muntenia, Banat, and Dobrogea areas to obtain information in particular on the communication channels preferred by customers, their opinion of the format of the documentation sent, and the priority areas for improving the service. The results furnished important information for designing "Client In Focus", a project for improving quality started in 2010 (page 150).

In Spain and Latin America, Endesa adopts a number of methods for determining the level of customer satisfaction, such as telephone interviews and mystery shopping. More than 80,000 customer interviews and 400 audits in commercial offices were carried out in Spain, while in Colombia the company developed a perceived-quality system, a system for monitoring the market's perception of quality and the degree of competitiveness of Codensa's supply of products and services in both electricity distribution and other businesses. The structure of the method leads the organization to focus on efforts that can increase customer satisfaction and in general create added value for the product.

## Complaints and requests for information

In addition to conducting surveys, Enel monitors the satisfaction of its customers through the analysis of the complaints it receives. Customers can complain verbally by calling the dedicated toll-free numbers or in writing through a special form available at counters and online.

In Italy, Enel Servizio Elettrico (regulated market) received about 134,700 written complaints and requests for information in 2010 from its customers, to whom it replied in an average of 23.6 days. In the same year, Enel Energia (free electricity and gas market) received about 82,000 written complaints and requests for information (for the electricity and gas service), with an average reply time of 47.5 days.



## Improvement programs

### Passion for Quality

In 2009 Enel Energia, the sales company that sells Enel products in the free market in Italy, implemented the “Passion for Quality” program, which aims to perfect every aspect of its sales service down to the smallest detail by acting simultaneously on several areas.

There are four parameters according to which the program measures its effectiveness: customer satisfaction, the virtuous word-of-mouth cycle among people who speak positively about Enel, the number of complaints,

be acted on in order to improve overall quality. In this way not only employees assigned to customer contact and listening, but also those in upstream activities less directly concerned – such as the development of new products or relations with suppliers – are involved in the effort to improve.

This instrument provides monthly a precise picture of the extent to which the objectives per single resource involved and per single goal assigned have been achieved. It also enables reports to be drawn up summarizing the progress made by goal category, by incentive type, and by business and technical area.

The strategic importance of this project resides in the fact that it enables managers to obtain complete and



and the churn rate. The last parameter is the rate of customer abandonment, which is therefore considered to measure the final effect of quality.

On the basis of the measurement of these parameters, the “Passion for Quality” project established a control system that links the rates of customer satisfaction, complaints, churn rate, and promoter score (sales effectiveness) to indicators of operating performance to

timely information, useful adopting measures and providing systematic feedback to all employees involved. This also facilitates full agreement on corporate objectives, as well as making everyone feel responsible for achieving the targets assigned.

As part of the “Passion for Quality” program, numerous initiatives aimed at improving customer satisfaction were implemented in 2010:

- > The contact centers can now be reached 24/7 for both Enel Servizio Elettrico and Enel Energia. Furthermore, the call tree/IVR – i.e. the automatic responder that directs users to operators – was modified to make access to the services of the call center simpler and quicker (“dynamic IVR”).
- > New stores dedicated to household customers (“**flagship stores**”) were opened and – to improve the quality of the service provided to this kind of customer – a project for restyling the *Punti Enel* (“**New Punto Enel**”) was started. In addition, questionnaires were introduced in the *Punti Enel* to assess the effectiveness of the actions undertaken.
- > A new **Enel Energia website** was created (see also page 155), which includes new online services. The site was designed to be more accessible and to make it easier to use the information and services. Inside the site is “**Vicino a te**” (“Close to You”), a virtual operator which helps customers use the online applications and services.
- > Finally, “**Quality Call**” was introduced, a phone call to customers acquired by the various sales channels, which “welcomes” them to the company and at the same time checks that the information collected during the sale stage is correct.

## Quality & Value

The Infrastructure and Networks Division successfully defends commercial quality by managing about seven million services a year with a service level near 100% (99.5% in 2009). Because providing excellent services is not sufficient if customers’ perception of service quality – as measured by the customer satisfaction index – is not also high, Enel implemented a project to focus the process of commercial quality and customer care.

This is the situation that gave rise in 2010 to **Quality & Value**, a training project that involved all organizational levels, beginning with the management, through interviews and focus groups to identify the crucial issues of the change that everyone must support in his or her role. Carried out in cooperation with Enel University, the initiative was addressed to about three hundred employees at the central and local level and all the people they report to in the new system. The first to be involved were the line heads at the local level, i.e. the people in closest contact with customers, who discussed customer needs, the strong and weak points of

the process of providing the service, possible allies and obstacles to change, and the commitments and actions to undertake concretely.

## Client in Focus

In a situation of market change and pressure from consumers, the regulatory authorities, and the sales companies, a process was begun in **Romania** to create an entire customer-oriented organization by developing an integrated program to improve customer service.

“Client in Focus” (CLIF) was initiated in April 2010 with the following goals:

- > improve current services and activities by redesigning work processes and procedures;
- > develop channels of interaction with customers and ensure the same service level in all of them by modernizing the contact points and focusing more on the virtual ones, launching online services and alternative payment channels, and making the call centers more functional;
- > develop the ability of employees to deal with all customer requests;
- > improve internal and external communication regarding the new services offered.

As of the end of 2010, the results have been the inauguration of a new website and several online services, the diversification of the services offered by the call centers, and the creation of more than 10 new payment channels, including online banking and ATMs. The program will continue in 2011, with the goal of increasing the customer-satisfaction level to 70% by the end of the year, an increase of 10-15% with respect to the current levels.

# Electricity accessibility



Enel is close to citizens in Italy and all the countries in which it operates to improve and maintain **access to electricity** in the poorest areas and for people who are less well off. In **Italy** the electricity distribution industry is regulated by the Electricity and Gas Authority (AEEG), which requires the company that has the network infrastructure in concession to ensure equal conditions to all firms that request to access and use it. The objective is to support liberalization in favor of end customers and healthy competition among the different firms that operate in the free market, such as the producers and sellers of electricity. As in all the European countries where Enel operates as a distributor, the percentage of the population that is not served by the electricity network is zero, while in Latin America – where several areas are characterized by inadequate infrastructure – the

Company carries out **rural electrification** projects. (For further information on this subject, see page 220).

To facilitate access to electricity by people who are financially disadvantaged, since 2008 for electricity and 2009 for gas a “**social bonus**” has been in effect which is financed by the government and with special rates determined by the Authority. The bonus constitutes a reduction for household customers who suffer economic hardship and – only with regard to electricity – who use life-saving electric medical devices. Bonus requests are managed by municipalities, and if approved the bills of such customers show a credit that varies according to the size of the family, their use category, and the climatic zone in which they live (for gas) or the kind of hardship from which they suffer (for electricity). The threshold for admission to the system

for people suffering economic hardship is established on the basis of the ISEE (equivalent economic situation indicator), which must not exceed 7,500 euro or – for large families – 20,000 euro.

At the end of 2010 there were more than 1,500,000 families in Italy that were receiving the electricity bonus, while about 640,000 were entitled to receive the gas reduction. Of these, more than 780,000 families were served by Enel Servizio Elettrico and 100,000 (divided into electricity and gas customers) by Enel Energia.

Furthermore, also as part of initiatives and programs aimed at improving and maintaining access to electricity, in the case of disasters, both natural and otherwise, Enel intervenes, both in compliance with measures of the competent bodies (civil defense, national and local government) and spontaneously in accordance with “common sense” and its commitment to being a “good citizen” in the local communities where the Group operates. In most cases, this involves temporarily suspending payment deadlines, since it has no other instruments it could adopt considering the repercussions on the other companies involved (for example, the distribution companies).

During 2010 Enel established rates reductions and payment facilitations – in keeping with the provisions of government measures – for the people in **Abruzzo** who were hit by the earthquake in 2009 and temporarily suspended payment deadlines for the people hit by the flood in the Veneto region, the landslides in Sicily and Calabria, and the families involved in the Viareggio railroad disaster.

In **Spain**, the government implemented an initiative similar to the social bonus (the *Bono Social*), when continued in 2010. Electricity prices were frozen at the rates on June 30, 2009, so that the customers who benefitted from it avoided the price increase in the last 18 months. The people who received the bonus were customers with a power consumption of less than 3 kW, retired people, families whose working-age members are all unemployed, and large families. At the end of 2010 the number of customers who benefitted from the Bono Social totaled 1,076,677.

In **Argentina**, the Group companies handled the need for access to electricity both directly, through rural electrification projects, and indirectly, through facilitations that provide for financing connection costs (infrastructure construction and adaptation) by gradually reimbursing the sums directly on the customer's bills. Installment payment plans are also provided for insolvent customers.

In **Brazil**, low-income household and rural customers benefit from reductions of up to 65% of the official rates thanks to the federal government's social rates programs. Access to the program is limited to customers recorded in the federal government's unified register for social programs and those who enjoy continuous cash benefits as elderly or disabled people whose income is less than ¼ of the minimum wage. Additional benefits are also provided for indigenous people, who are entitled to larger discounts. In 2010 1,704,680 customers benefitted from the program in Coelce's area and 689,657 customers in Ampla's.

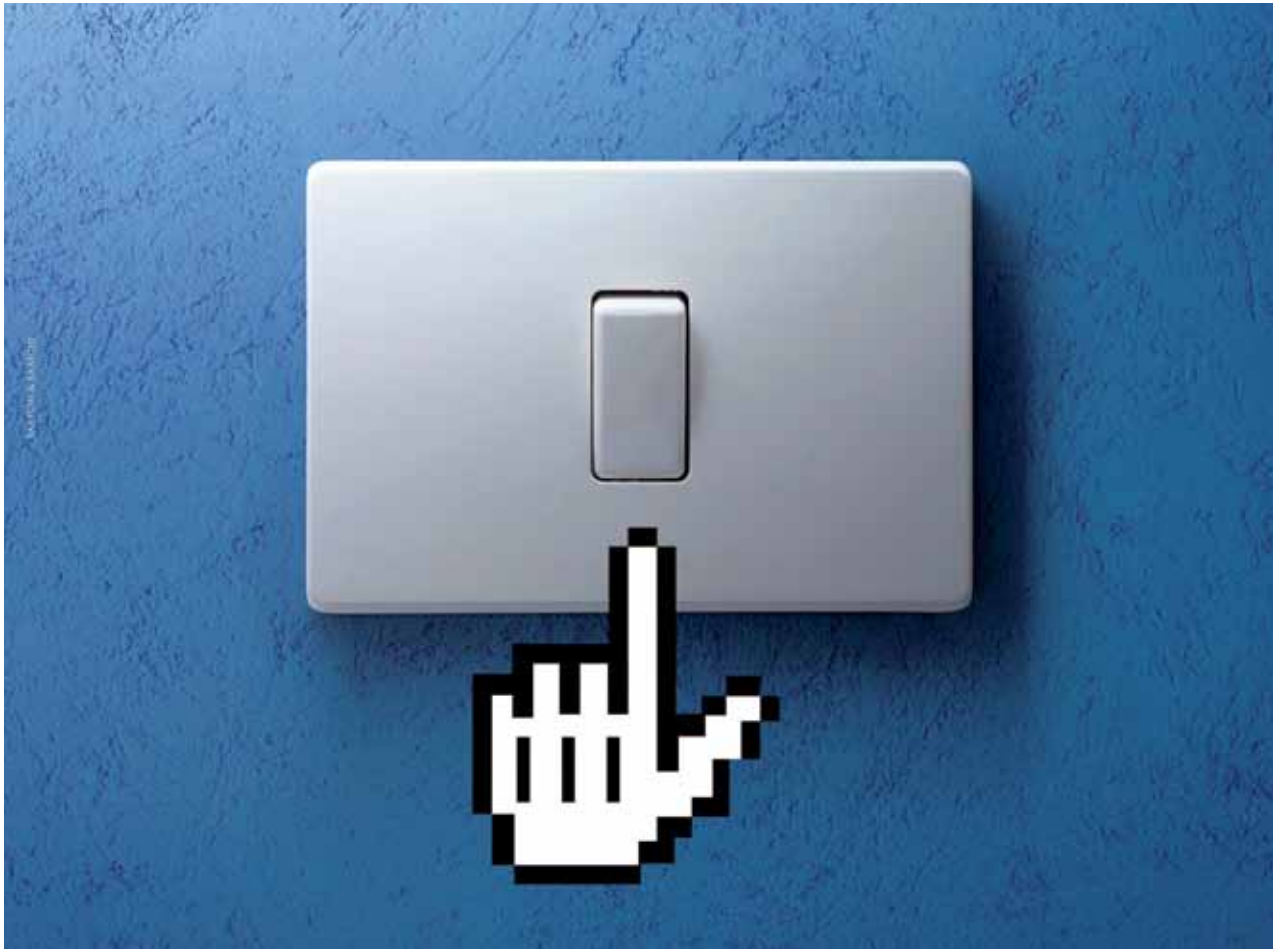
In **Romania**, customers considered “vulnerable” (people who are elderly, have health problems, or live in socially disadvantaged conditions) benefit from facilitations in their electricity supply if so decided by the national or local government. The Enel Group companies contribute financially for these customers, in accordance with the law, and offer services that are free of charge (such as meter and electricity-system checks) or with extendible payment (such as installations).

Furthermore, thanks to the adoption of electronic meters, in most case of disconnection for failure to pay in Italy customers are not completely deprived of electricity, but the available power is reduced to 15% of the contracted one. This allows essential services (lighting, refrigerators) to be supplied with power until the arrears are paid.

For detailed information on disconnected customers see the tables on page 284 at the end of this Report.



# Fairness and transparency in customer relations



## Communication with customers

According to the Code of Ethics (article 3.16), all contracts, messages addressed to customers, and advertising must be:

- > **clear and simple**, using language that is as close as possible to that normally adopted by consumers (for example, avoiding clauses that are comprehensible only to experts, stating prices transparently, and explaining costs clearly),
- > **in accordance with current regulations**, without using elusive or in any case unfair practices (such as, for example, clauses that are unconscionable towards consumers),

- > **complete**, without neglecting any detail that is significant in terms of the customer's decision, and
- > **available on the corporate websites**.

Furthermore, Enel must promptly inform customers of:

- > any changes in their contract,
- > any changes in financial or technical conditions of the provision of the service and/or the sale of products, and
- > the results of tests performed in compliance with the standards required by the supervisory authority.

Endesa also considers it an essential part of its responsibility to customers to guarantee them the right to informa-

tion about the characteristics of the products and services they acquire. Therefore, Endesa complies with the regulatory requirements concerning information in the different stages of the commercial cycle and undertakes to:

- > inform customers about the different kinds of rates and power available when they sign or change their supply contract so that they can find the solutions most congenial to them,
- > generally inform consumers and the public in advance when the supply is cut off because of planned work on the network,
- > inform consumers in advance when the supply is cut off because of failure to pay and carry it out only if the non-payment is evident, and
- > see that there are dedicated times for providing information to customers, especially regarding the management of complaints.

In **Romania**, there is an instrument available to customers on the website that calculates their bills and allows them to compare the different rates so that they can choose the best one with respect to their consumption characteristics. The service is available to household and business customers in the regulated market.

During 2010, the monetary value of fines for unfair business practices amounted to zero. In effect, the two proceedings in Italy on the application of Legislative Decree n. 206/2005, the Consumption Code – which regarded, respectively Enel Energia (PS5150: costs of change to household-customer status) and Enel Servizio Elettrico (PS3317: management of complaints about consumption) – terminated without penalties and with the ascertainment by the Anti-trust Authority (AGCM) of the commitments presented by the companies involved.

As far as the transparency of information and billing in Italy is concerned, with its resolution VIS n. 93/09 the Electricity and Gas Authority (AEEG) started a preliminary investigation of several electricity sales companies, including Enel Energia, to ascertain if they had violated the Authority's provisions regarding the transparency of billing documents. After terminating the investigation, with its resolution VIS n. 109/10, the AEEG imposed an administrative fine on Enel Energia amounting to a total of 872,000 euro.

**For further information on this subject, see the “Regulatory and rates issues” section of the 2010 Annual Report (pages 36 to 48 for Italy and 49 to 69 for the foreign boundary).**

With regard to policies for protecting the **privacy** of customers, Enel adopted an organizational model and procedures totally in accordance with Legislative Decree n. 196/2003. The heads and other personnel entrusted with data processing have been appointed and all the IT devices for ensuring security in the processing and conservation of the personal data of Enel customers have been implemented.

Enel is also deeply engaged in attentively monitoring all the other companies that may have occasion to use the personal data of customers. For this reason, the Company includes specific clauses in contracts with partners who have to use such data to carry out specific activities, such as, for example, sales activities and customer-satisfaction surveys. In 2010 and the two previous years, no infractions of privacy or losses of sensitive data occurred in Italy.

## Breaking down linguistic and cultural barriers

In order for communication with customers to be truly transparent, fair, and effective, it is necessary to **break down the cultural, linguistic, illiteracy, and disability barriers** that can make access to information uneven among the Group's customers.

In **Italy**, for example, during 2010 **Enel Energia** inaugurated its **new website**, which was designed to be customer-friendlier. Among the innovations introduced are the “Web Chat” and “Call Me Now” services, which provide real-time assistance for customers who want to transfer to the free market. In effect, a dedicated team has been put at customers' disposal to help them with filling out the online forms regarding the offers. With the same objective, interactive demos have also been made available to guide customers in reading their bills, utilizing the self-reading service, and in general in using all the services available online in the Customer Area.

# "Whole world" counter



In 2010 Enel promoted and supported the creation in Naples of the "Whole World" counter, a facility dedicated to concretely assisting foreign citizens in using public utility services, which is managed by Federconsumatori, one of the main Italian consumer associations.

The cooperation began because of the need to provide the main **communities of citizens from non-European countries** with the information necessary for **simple and informed access to the services of electricity and gas supply**. Foreign citizens are considered from two points of view:

as "sensitive" people, users of a service of primary importance like energy, and as "customers" possessing the cognitive instruments for analyzing the market and choosing the offer most appropriate for their needs.

Enel established at once a direct channel dedicated to the Federconsumatori with the operators of the local *Punto Enel* to quickly resolve any critical situations connected with energy-supply contracts.

At the beginning of 2011 a day was organized dedicated to instruction provided by Enel personnel and ad-

ressed to cultural intermediaries from the most numerous communities of foreign citizens in Campania. Questions were discussed regarding the liberalization of the energy industry, management of the supply contract, understanding electricity and gas bills, and the introduction of time-of-day rates. Followed by 40 participants representing 17 different countries and cultures, the day was highly regarded and obtained positive feedback. Enel thus intends to repeat it in other Italian cities where there is a significant presence of communities of foreign citizens, involving the local consumer associations that are most active socially.

To facilitate customers' management of their electricity and gas supply contracts, the Company has created numerous **services** that can be requested directly online:

- > **Infoenergia**: to receive constantly free-of-charge information of the supply (when to send the meter reading, issue date, due date, and status of the bill) via sms or e-mail
- > **web bill**: to receive bills directly via e-mail
- > **visualization of bill data**: to check the issue date, due date, and status of the bill
- > **changing how the bill is paid** and the delivery address: to decide to have bills debited to one's bank account and/or change the delivery address
- > **payment with a credit card**
- > **self-reading of meter**: to receive the bill always in line with actual consumption
- > **events calendar**: an application that enables customers to consult the history of the events regarding single supplies
- > **changes in heading of contract**: to request and execute transfers, taking over, or new activations

Several of these services can also be requested **via sms**, specifically self-reading, payment status, web bill, and *Infoenergia*.

In several countries, linguistic differences can affect the accessibility and completeness of the information sent to customers and limit the effectiveness of initiatives aimed at raising customers' awareness of a more responsible and safer use of electricity. Therefore, in **Spain**, for example, Endesa sends its messages to customers and creates its information on safety in using electricity in the languages of the country's **linguistic minorities** (Catalan, Basque, and Galician).

Several disabilities limit considerably proper access to customer information and supporting services. For this reason, many Group companies have implemented solutions to assist customers with problems regarding hearing or seeing. In Argentina, for example, Edesur created an **"audio" billing service**. Since April 2010, customers with a visual disability have been able to request the sending of an audio e-mail file in which a recorded voice reads the bill to them. Edesur has also issued **bills in Braille** since 1996, the first company in Latin America to do so.

In **Brazil**, the Ampla and Coelce distribution companies have adopted a series of measures to break down the barriers to transparent and effective communication. With the assistance of the National Federation for the Education and Integration of the Visually Handicapped (FENEIS), sales per-

sonnel receive special training in Brazilian sign language. Furthermore, the offices dedicated to relations with the public offer a free-of-charge telephone service with channels dedicated to people with hearing problems, while people with visual handicaps can request bills in Braille.

## Advertising

With regard to advertising, the choice of the contact channels most appropriate for the transmission of the content – bills, telephone, daily newspapers, e-mail – is decided on each occasion according to the aims and addressees of the messages. Enel undertakes to not use misleading or untruthful advertising instruments and never uses excessive pressure or urging.

As far as unfair business practices and investigations by the Anti-trust Authority (AGCM) are concerned, in 2010 Enel was not involved in any proceedings regarding misleading advertising.

In addition to observing the provisions of its Code of Ethics on the clarity and truthfulness of its advertising (page 153), in a number of countries Enel is committed to self-regulation codes that go beyond the national regulations. In **Italy**, for example, Enel is a member of the UPA (Associated Advertising Users), an association consisting of the leading and most distinguished industrial and service companies that invest in advertising. The UPA is a member of the IAP (Institute of Advertising Self-regulation), therefore in its advertising Enel refers the IAP's Self-regulation Code of Advertising, which in 2011 reached its 51st edition.

In **Colombia** a brand manual was drawn up which establishes all the criteria to observe in advertising and with which all advertising material and campaigns must comply. In **Chile**, the advertising agency with which Endesa Chile works adheres to the Chilean Code of Advertising Ethics and observes all the principles contained therein. In this way, essential values are respected, such as non-violence, the transparency and truthfulness of information in order to not mislead the public, restrictions on plagiarism and imitations, safety regulations, and other issues. In **Peru**, Edelnor observes the ethical rules of advertising and accepts the Code of Conduct of the National Association of Advertising Agencies.

All marketing and advertising material addressed to the public is endorsed by managers and consultants, and



sometimes by customers themselves through surveys. After campaigns have been realized, surveys on their impact are carried out to ascertain if customers have fully understood the content of the message, if the objective of the campaign has been achieved, etc. All campaigns are subject to the approval of multidisciplinary communication committees.

Furthermore, as part of the activity of business compliance, all institutional and commercial advertising is systematically assessed beforehand, ensuring that they comply with the prescriptions regarding misleading and comparative advertising of the industry regulations and the self-regulation codes to which Enel subscribes in the countries where it operates.

## Energy sources

Particular information obligations are also required by the Italian and EU regulations regarding the source of the electricity sold so that end customers interested in a responsible consumption of energy can make **informed choices when purchasing electricity**.

The European Union's Directive 2003/54/EC on the liberalization of electricity markets specifically provides that "in member States suppliers of electric power must include in or attach to their bills and all the promotional material sent to end customers the following information:

- a) the share of each energy source in the overall mix of fuels used by the electricity supply company during the previous year
- b) alternatively, if the information on the supply company's environmental impact – at least in terms of CO<sub>2</sub> emissions and radioactive waste produced by the generation of electricity with the overall mix of fuels used in the previous year – are at the disposal of the public, the sources through which the information can be accessed (for example, web pages)".

In **Romania**, as soon as the measures for implementing the EU Directive were issued, Enel Energie and Enel Energie Muntenia conformed by establishing a system for providing all their customers with the information required. The information on the energy mix is published and can be consulted on Enel Romania's website and once a year is included on the electricity bill their customers receive.

Spanish regulations also oblige **Endesa** to specify on its bills the origin of the electricity produced. Furthermore,

in 2009 Endesa signed the "Agreement on Self-regulation on environmental issues and advertising". Promoted by the Ministry of the Environment, the Association for Self-regulation regarding Advertising, and other companies in the electricity and automobile industries, this initiative includes a set of rules for the signee companies regarding the development, execution, and dissemination of advertising messages concerning the environment.

The clear description of the sources of the energy sold acquires particular importance with regard to the offer of "**green**" products, i.e. products that include the sale of electricity produced entirely or partly from renewable energy sources. Both Enel and Endesa offer a number of products that guarantee that the electricity is produced from renewable sources or that propose to offset the emissions generated by the production of the electricity and the billing process with **RECS**, **VER**, or **CER** certificates. (For further details, see page 160).

In order to ensure that these certificates are issued correctly, the process is subject to periodical checks and is certified by **Det Norske Veritas** (DNV). The purpose of this certification – which is available on Enel's website – is to ensure customers of the correspondence between the acquisition of these "green" offers and the number of RECS certificates cancelled or of CO<sub>2</sub> neutralized by the cancellation of VERs or CERs.

# Alternative Disputes Resolution

Enel is currently the only electricity company in the European Union that has – in Italy – an equal-representation and voluntary conciliation procedure ...

# 1,600

Conciliation proceedings completed since July 2009

... for more than **28 million household customers** with all the nationally recognized **consumer associations**. A fast, streamlined, and completely **free-of-charge** procedure that takes place **online** and allows the disputes connected with electricity and gas supply contracts that can arise between the Company and its customers to be settled **out of court**.

Started in 2004, this project materialized in 2006 with the signing of a Conciliation Protocol and Regulations for initiating the procedure between Enel and the 17 consumer associations of the CNCU (National Council of Consumers and Users, a body instituted at the Ministry of Economic Development). Conciliation was tried out for a year in the Piemonte region and in 2009 was extended to all of Italy.



From July 2009 to the present over 1,600 conciliation proceedings have been held.

On July 7, 2010 Enel signed a Protocol of Understanding and the Conciliation Regulations of an experimental period in three Italian regions (Lombardy, Emilia Romagna, and Apulia) with the six most important associations representing **small and medium-sized Italian enterprises** (Confartigianato, CNA, Confapi, Confagricoltura, Confindustria, and Confesercenti). With this extension, the more than 2.5 million businesses that are Enel customers can also take advantage of conciliation through the local offices of the business associations to which they belong. In 2010 Enel's Conciliation Project was selected for inclusion in the **Enterprise 2020 Program**, an initiative launched by CSR Europe, and supported by the Euro-

pean Commission, and a growing number of European governments which aims to:

- > support companies in creating sustainable competitiveness, by furnishing a platform for innovation and the exchange of experiences
- > encourage the close cooperation between companies and their stakeholders, by exploring new forms of cooperation for a sustainable future
- > strengthen Europe's leadership in corporate social responsibility, by involving the EU institutions and a broad range of international players

Finally, in the last few months the most important consumer associations in Romania have been sought out and monitored with the objective of selecting the most active and competent ones to begin the Conciliation Project.

# Promoting responsible energy consumption



## Commercial offers

### For families

#### "Green" offers

Several of the commercial offers proposed by the Group companies are addressed to the customers most sensitive to environmental issues, because they provide a **guarantee that the energy source is renewable** or because they include a small amount of financing for renewable sources. **Endesa**, for example, offers a product called **Tarifa Eléctrica Verde**, which it certifies is produced entirely from

renewable sources. On the other hand, in 2010 Enel introduced in Italy the "**All-included Green Energy**", which is based on the concept of "size" (small, medium, large, extra-large), which had already been used by the previous "All-included Energy" offer and was enhanced by the addition of "Zero CO<sub>2</sub>".

In effect, the electricity used in the offer is produced by plants that exploit **renewable sources**, such as water, wind, and the sun, and the CO<sub>2</sub> emissions produced by the billing process and the consumption of the generating plants are offset by a corresponding acquisition and subsequent cancellation of **VER** (Verified Emissions Reductions) or **CER** (Certified Emissions Reductions) certificates. Furthermore, the "All-included Green Energy" formula



provides an incentive for customers to consume electricity and gas rationally, because if their monthly consumption never exceeds the size chosen, during a predetermined period of time they receive a month's consumption of their size free of charge as a reward.

Moreover, Enel Energia's product portfolio (Italy) includes offers offset by RECS (Renewable Energy Certificate System)

that is closer to the real cost of electricity production, and thus save significantly on their bills with respect to the undifferentiated standard rates. In effect, with the standard rates, customers who use electricity at the advantages times also pay part of the costs of those who consume at the more costly times.

The Company explains to customers how to read their bills to see if their consumption has taken place mainly during the time of day when electricity costs less and thus correct any misalignment and ensure themselves the maximum saving possible.

Endesa Chile also promotes energy conservation among its customers through the mechanism of **rates that are differentiated** between peak hours (when most electricity is consumed) and non-hours. The application of these rates requires the installation of meters with which customers can monitor their consumption and optimize their consumption behavior with respect to the established times of day.

Furthermore, Chilectra combines a flexible rate tied to the different time-of-day brackets with a full-service offer for the installation of exclusively electric household appliances (including air conditioners, kitchen appliances, water heaters, etc.) In addition to ensuring greater safety at home thanks to the elimination of gas appliances, the "**Full Electric**" offer enables customers to save significantly if they shift their consumption correctly to the times of days with lower electricity demand.



certificates, such as the "Pure Energy" product line and the business offers with optional cancellation of RECS certificates.

### Time-of-day offers

Commercial offers in which the price is differentiated according to time-of-day brackets steer consumption towards the **evening or night hours**, thus boosting the **overall efficiency of the electricity industry** (greater efficiency of production and distribution) and creating important **environmental benefits**.

Customers who choose the **time-of-day rates** obtain the advantage of paying a **lower price** in the set brackets, one

### Products and services

The commitment of families to energy conservation also requires more attention to the characteristics of the household appliances and equipment they purchase and to ways of improving the performance of those they already have. For this reason, Enel also offers products for **energy conservation** and advisory services for household customers. In Italy, for example, since 2006 Enel Distribuzione has promoted energy conservation by end users. Thanks to this commitment more than 5,000,000 **low-consumption light bulbs** and over 500,000 **water economizers** have been distributed to consumers free of charge. Furthermore, thanks to an agreement with large-scale retailers the **purchase of hundreds of higher-energy-class household appliances has been facilitated**.

With these activities, Enel has assumed an important role in Italy not only as a company with obligations pursuant to

the two decrees on energy efficiency issued by the Ministry of Productive Activities on July 20, 2004, which introduced the white-certificate mechanism, but also as a leader of the electricity industry in the country's productive system. In 2010 **Enel.si** – which develops integrated solutions and services with high value added for energy efficiency and renewable energy sources on the retail market – developed numerous initiatives for raising awareness of energy efficiency and in particular a device for **reducing the stand-by consumption of television sets** and connected equipment, which will be sold in 2011.

**Enel Energia**, instead, developed a service addressed to real-estate owners in the Piemonte, Lombardy, and Emilia Romagna regions who want to sell or rent their property, or renovate it completely or partially: the **"Energy Certification Service"**, which makes available all the information regarding how a building was constructed from the point of view of thermal insulation and energy consumption. The energy certification allows customers to:

- > save on consumption and respect the environment by improving the energy efficiency of the house
- > take advantage of tax deductions (-55% on personal income tax) for renovations
- > enhance the value of their property (real estate classified as A+, A, or B has a greater market value than buildings in a lower energy class)
- > carry out the work more securely, as ensured by the technical personnel of the companies selected by Enel Energia

In addition to these initiatives there is the offer of high-energy-efficiency products (micro cogeneration plants, condensation boilers, heating systems with regulating mechanisms to rationalize consumption circuit-breaking switches with automatic reconnection, voltage stabilizers, etc.), maintenance and assistance services through selected partners, and advisory services regarding rates, subsidies and incentives, environmental impacts, energy audits, etc.

In **Brazil**, Coelce implemented a number of projects to raise the awareness of the public regarding the efficient use of energy (page 223) invested in equipment and household appliances, thanks, among other things, to public financing. Launched in 2009, the **"Light Partnership"** project encourages the use of efficient electric household appliances by proposing that customers exchange used appliance with high energy consumption for new ones that are more efficient and economical. To encourage this exchange, Coelce offers discounts on the purchase of the

new appliances, which can be obtained by making a donation to the social projects included in the program.

Started in 2005 and addressed to low-income household customers, as well as day centers, clinics, hospitals, etc., Ampla's **"Consciência Ampla Eficiente"** program replaces obsolete electric systems. The project also includes the sale of low-cost refrigerators and solutions for lighting and heating.

Thanks to these programs, which involved almost 70,000 customers in 2010, Ampla and Coelce replaced more than 16,000 refrigerators and about 145,000 incandescent light bulbs. This activity generated significant savings for end customers and a decrease in peak demand on the grid.

## For business

The industrial system is responsible for the demand for much of the total energy consumed in a country, especially in certain sectors. For this reason, many products, services, and activities to raise awareness about energy conservation are addressed to business customers.

In 2010 Enel continued its talks with suppliers, industry associations, and local governments about starting and financing projects dedicated to increasing energy efficiency. In Italy, the Company signed **protocols of understanding** with the hotel and pension associations (Federalberghi, AICA, Asshotel, and Confindustria Alberghi), which are additions to those already existing with, among others, Confcommercio and the Tuscan distribution company Consiag.

Enel.si did a **road show** with 12 stops to promote high-efficiency electric motors as part of the EU's "Motor Challenge" program. Furthermore, Enel signed a protocol of understanding with Anima Co.Aer for increasing energy efficiency and developing annual-cycle heat pumps for air conditioning, a technology that uses energy that is about 75% renewable.

Enel performs an important activity in advising companies on optimizing their industrial processes and obtaining **white certificates**. A survey of corporate energy managers on the white-certificate mechanism showed that most of the people concerned – more than 70% – were interested in committing themselves with Enel. In the light of these data, at the beginning of 2011 a meeting was held with several energy managers at Enel's main office in Rome to

examine possible actions with short- and medium-term effects. The Company also started to cooperate with the FIRE – the Italian Federation for the Rational Use of Energy – which works under the Ministry of Economic Development – on promoting the role of energy managers appointed pursuant to Law 10/91.

For its small and medium business customers that do not have an energy manager, in October 2010 Enel Energia launched a dedicated offer called “**Screening Energy**”. The offer consists in an efficiency report that monitors the customer’s consumption for 12 months. The report contains advice on energy conservation and aims to develop a greater awareness of their consumption in customers.

In **Brazil**, Endesa provided numerous consultancies for the implementation of programs on energy conservation and efficient lighting, projects for automating electric and thermal plants in order to better control consumption and to monitor the efficiency of electric motors.

## For cities

Enel seeks occasions for cooperating with public institutions on initiatives and activities regarding the rational use of energy and disseminating the culture of energy conservation. For this reason, it signs **agreements with local governments** – for example, L’Aquila and Naples provinces, the regions of Piemonte and Lazio, the Municipality of Venice and a number of municipalities in Campania – for implementing and financing projects to increase energy efficiency.

In this regard, the Company also develops technologies and services aimed at reducing the energy consumption of cities, for example in the area of **street lighting**. In February 2009, Enel Sole – the Italian leader in this field – launched **Archilede** on the market. This is an innovative lighting system based on **LED** (light-emitting diode) technology, which presents numerous advantages in terms of consumption, the environmental impact of component disposal, the quality of the light emitted, and the degree of dispersion of the upward flow, which is nil and thus also contributes to policies for reducing light pollution. Furthermore, every single light source is autonomously programmable, thus allowing light management commensurate with the actual requirements of the city.

Thanks to the LED project, remarkable results were achieved in the past year. More than 750 municipalities in

**Italy** and **Spain** chose the new LED lighting systems, with a total of about 60,000 lighting devices sold, which in terms of reduced environmental impact translate into energy conservation of 17.5 GWh: the equivalent of the average annual energy consumption of about 7,000 families. The reduction of CO<sub>2</sub> emitted into the air amounted to about 11,700 tons, the same quantity that would be obtained by planting about 2 million trees.

Solutions similar to those proposed in Italy and Spain are also present in **Chile**. The “**Public illumination Efficiency Projects**” aims to modernize the lighting of streets, parks, and public places, and all solutions of decorative and artistic lighting are implemented with LED technologies, thus abating energy consumption by 80% with respect to traditional light bulbs.

Finally, during 2010 Enel developed a range of products conceived specifically for government buildings. With its “**Solidarity with Public Buildings**” program, actions are promoted in **Brazil** to reduce energy consumption in public buildings by modernizing the cooling and lighting systems and encouraging the replacement of old equipment with more modern and efficient equipment. In **Italy**, Enel makes available a series of instruments aimed at facilitating and simplifying the management of the electricity supply for the civil service, including:

- > the possibility of receiving bills electronically
- > the “Easy Click” service, to consult at any time the data regarding consumption or display bills online
- > personalized modes of payment

## Information and awareness-raising

In order to promote the efficient use of energy among customers it is essential to also dedicate effort to providing information and raising awareness of the importance of energy efficiency in daily consumption.

In **Italy**, for example, Enel Energia developed a loyalty program called “**Enel Rewards**”, which uses points, discounts, and prizes as incentives for customers to reduce their energy consumption. In effect, among the various ways of collecting points, there is a bonus dedicated to people who succeed in changing their habits and in reducing their consumption. Furthermore, in 2010 the program’s prize catalogue focused on the subject of ecology, with theme points and the catalogue itself printed on entirely recycled paper.

Endesa started the **Twenergy** ([www.twenergy.es](http://www.twenergy.es)) program, an online community in which the users can interact among themselves and learn how to consume energy responsibly thanks to the advice and numerous suggestions made available. The application of this advice and the consequent improvement in their consumption allows customers to accumulate points which they can use to request gifts or contribute financially to the development of NGO charitable initiatives. During its first year of activity Twenergy had more than a million visits and created a user network of over 18,000 registered people and 70,000 users a month who consult its content.

In 2010 Enel **Romania** inaugurated a new website for its customers where they can find information on the consumption of electric appliances and household systems, useful advice on how to conserve energy at home, and suggestions about how to use household appliances safely. In effect, in addition to encouraging its customers to conserve energy and limit their consumption, Enel urges its customers in all the countries in which it operates to use energy and electric equipment correctly and safely.

The distribution companies in Latin America, for example, adopt a number of instruments – such as brochures attached to bills, informative material at points of sale, and dedicated sections on their websites – to transmit suggestions, advice, and instructions to their customers on the safe use of electricity. In Brazil Ampla and Coelce also raise awareness about safety in their radio, newspaper, and television advertising and produce specific publications, such as the magazine Ampla Awareness and online newsletters.

In **Colombia**, the offer for business clients is based on the concept of “integral energy management” and the effort to educate customers to maximize their productivity and competitiveness by using energy efficiently. During 2010 the companies carried out 10 training courses on, among other things, safety and the dangers of electricity, which were attended by about 700 people. Furthermore, about 6,000 business customers are sent a monthly newsletter containing advice and methods for managing energy consumption safely, efficiently, and reliably. In addition, Codensa created a web platform from which business customers could download content and materials useful for developing campaigns to promote efficiency for their employees, suppliers, or customers. During the 3 months in which the service was available, the platform was accessed about 1,300 times.





# Working with associations for energy efficiency

Enel considers associations representing interest groups an important channel for promoting energy efficiency. In the last few years the Company has carried out projects addressed to the public with environmentalist and consumer associations, to the service sector with the confederations of small and medium enterprises, and to municipalities with the ANCI (the National Association of Italian Municipalities). Following these positive experiences, together with 22 other companies that are leaders in their industries in Italy, Enel promoted the CRESCO

Project – “enterprises and citizens allied to move from preached sustainability to practiced sustainability” – which was launched in February 2010 by the **Sodalitas Foundation**. The Project is also carried out in synergy with the Polytechnic Institute of Milan, with the support of the Lombardy Region, and with the participation of the ANCI, Legambiente, Cittadinanzattiva, and The Natural Step.

The objective of CRESCO is to create “virtuous networks of innovative alliances among enterprises and citizens, young people, and local com-

munities to disseminate the culture and practice of sustainability”.

Enel’s commitment and contribution to this initiative mainly regards the promotion of energy efficiency and the informed use of energy in households, condominiums, and small non-domestic businesses, as well as in street lighting. The Company will soon organize courses on reading and understanding electricity and gas bills for condominium administrators (“Virtuous Condominiums” project) and social workers and members of voluntary associations in selected municipalities.



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# The challenges of the environment

# Our commitments

## Our environmental policy

Enel considers the environment, the fight against climate change, and sustainable development strategic factors in operating and developing its business and decisive for consolidating its leadership in energy markets.

The Enel Group's environmental policy is based on three basic principles and pursues ten strategic objectives.

### Principles

Protect the environment

Improve and promote the environmental characteristics of products and services

Create value for the Company

### Strategic objectives

- > **Application** to the entire organization of environmental-management systems recognized at the international level.
- > **Optimal environmental location** of buildings and industrial plants, including the safeguard of biodiversity.
- > **Reduction of environmental impacts** by applying the best technologies available and the best practices during the construction, operation, and dismantling of plants.
- > **Leadership in renewable energy sources** and low-emission electricity generation.
- > **Efficient use** of energy and water resources, as well as raw materials.
- > **Optimal management** of waste and effluents.
- > **Development of innovative technologies** for the environment.
- > **Communication** with the public and institution on the Company's environmental management.
- > Employee **training and awareness-raising** on environmental issues.
- > **Promotion** of sustainable environmental practices by suppliers and contractors.



# Our strategic objectives

Enel translates the aforesaid principles into environmental policy by carrying out a series of initiatives to achieve its strategic objectives.

Strategic objective	Initiatives/programs in progress
Application to the entire organization of environmental-management systems recognized at the international level	<ul style="list-style-type: none"> <li>&gt; Extension of certification to sites that do not have it yet.</li> <li>&gt; Annual maintenance of the ISO 14001 certifications and EMAS registrations already obtained.</li> <li>&gt; Certification of service activities (procurement, real-estate management, training, ICT).</li> <li>&gt; Certification of Sales Division.</li> </ul>
Optimal environmental location of buildings and industrial plants, including the safeguard of biodiversity	<ul style="list-style-type: none"> <li>&gt; Projects on the safeguard of biodiversity (preservation of the habitats of protected species, research centers and observation posts, new plantings of indigenous flora).</li> <li>&gt; Bio-monitoring (terrestrial, marine, fluvial).</li> <li>&gt; Use of cables instead of bare wires for power distribution lines.</li> <li>&gt; Works to mitigate the visual impacts connected with the presence of production and distribution plants and mines.</li> </ul>
Reduction of environmental impacts through the use of the best technologies and practices during the construction, operation, and dismantling of plants.	<ul style="list-style-type: none"> <li>&gt; Environmental impact assessment for the construction of or significant changes in plants.</li> <li>&gt; Investigation and sustainable use of the BAT (best available techniques) in pollution-abatement systems.</li> <li>&gt; Safeguard, monitoring, and enhancement of the quality of surface, subsurface, and underground water in the areas surrounding plants.</li> </ul>
Leadership in renewable energy sources and low-emission electricity generation	<ul style="list-style-type: none"> <li>&gt; Increase in plants generating from renewable energy sources by constructing new plants, acquisitions, and signing agreements for construction.</li> <li>&gt; Development of nuclear technologies.</li> <li>&gt; Construction of new combined cycles.</li> </ul>
Efficient use of energy and water resources, as well as raw materials	<ul style="list-style-type: none"> <li>&gt; Improvement of production-plant efficiency (use of higher-yield components and/or processes, reduction of auxiliary-service consumption).</li> <li>&gt; Reduction of network losses associated with electricity distribution (optimal network design, use of conductors with larger sections and electric components with lower losses).</li> <li>&gt; Mapping and monitoring of all production centers to identify possible water stressing and, if necessary, remedy the situation with more efficient management of the water resource.</li> <li>&gt; Internal recycling of water for industrial use.</li> <li>&gt; Recycling of ash and gypsum from coal and lignite as raw materials in external production processes.</li> <li>&gt; Promotion of energy efficiency in end uses (distribution of higher-energy-efficiency products for the lighting and heating of buildings, use of higher-efficiency light bulbs in public lighting).</li> <li>&gt; Dissemination of systems like smart meters and rate options that encourage the efficient use of electricity.</li> </ul>
Optimal management of waste and effluents	<ul style="list-style-type: none"> <li>&gt; Reduction of waste production.</li> <li>&gt; Reduction of pollutant load of waste water.</li> <li>&gt; Increase in the percentage of recycling of the waste produced, among other things by differentiation practices.</li> <li>&gt; Selection of qualified providers of disposal services.</li> <li>&gt; Use of IT systems to make waste traceable.</li> </ul>
Development of innovative technologies for the environment	<ul style="list-style-type: none"> <li>&gt; Research on and construction of pilot plants regarding: <ul style="list-style-type: none"> <li>- capture and storage of CO<sub>2</sub> (CCS)</li> <li>- smart grids</li> <li>- use of hydrogen as fuel</li> <li>- thermodynamic solar</li> <li>- concentration photovoltaic solar</li> <li>- multi-generation systems</li> <li>- electric mobility</li> <li>- green berthing (electrified docks in ports)</li> </ul> </li> </ul>
Communication with the public and institution on the Company's environmental management	<ul style="list-style-type: none"> <li>&gt; Environmental Report, contributions to the Sustainability Report and the sustainability section in the Annual Report.</li> <li>&gt; Environmental Declarations for the EMAS registered sites.</li> <li>&gt; Communication with analysts and participation in a number of sustainability indexes.</li> <li>&gt; Initiatives with plants open to the public.</li> <li>&gt; Website reporting environmental initiatives.</li> </ul>
Employee training and awareness-raising on environmental issues	<ul style="list-style-type: none"> <li>&gt; Periodical training on environmental matters.</li> <li>&gt; Intranet with in-depth analyses of environmental questions.</li> </ul>
Promotion of sustainable environmental practices by suppliers and contractors	<ul style="list-style-type: none"> <li>&gt; Use of supplier-qualification criteria based on environmental performance.</li> <li>&gt; Checking contract work when in progress and during trials and closing down of activity.</li> <li>&gt; Briefing and training sessions on significant environmental aspects.</li> </ul>

# Environmental management

The gradual application of internationally recognized **environmental management systems** to all Enel Group activities (industrial, planning, coordination, service, etc.) and **ISO 14001 certification** for the entire Group constitute a strategic objective of the Company's environmental policy.

ISO14001 certified systems currently cover most of the installed power, the networks almost entirely, the management of services and real estate (more than 1,000 buildings), and the Sales Division in Italy. The following table shows the ISO 14001 certified activities. (For Europe, the EMAS-registered ones are shown in the tables on page 286.)

## Extent of ISO14001 coverage – plants and networks

	2010
MW net efficient power	82.7%
km of network	94 %
services Italy	100%
Sales Italy and Romania	100%

**Environmental governance** is implemented by an organization spread throughout the operating units and coordinated by Enel SpA's Regulation, Environment, and Carbon Strategy Department. The mission of this department is to coordinate, through its Environmental Policies and Climate Change Unit, Enel Group's environmental policies, ensure the management of compliance risks by monitoring the achievement of performance objectives, ensure the consistency of the Divisions' environmental initiatives, establish the corporate policies regarding climate change and carbon regulation, coordinate the environmental-management systems, and organize the Group's environmental reporting, including ensuring the monitoring of its environmental performance and preparing the annual Environmental Report. The department also develops the Group's carbon strategy.

As part of this Group-level coordination and with regard to the specific issues, each Division has at the different levels offices and individuals in charge of carrying out activities in the environmental field. The staff departments coordinate the management of the respective environmental issues, providing the necessary specialist assistance in accordance with the guidelines of the Parent Company. On

the various industrial sites, the operating units and specific professional figures handle the characteristic aspects of each site.

In the entire Enel Group the human resources dedicated to environmental matters amount to 550 full-time employees.

## Expense for protection of the environment

Environmental expenses (investment and current expenses) are recorded according to a classification system based on the Eurostat criteria, recognized by the United Nations as the benchmark standard, which considers "expenses for protection of the environment" expenses for activities and actions to prevent or reduce phenomena of environmental pollution and deterioration, as well as the restoration of environmental quality, regardless of the reason that determines them (corporate decision, regulatory measure, agreement with a local government, etc.).

The system excludes expenses incurred to limit the use of natural resources and expenses for activities that have a favorable impact on the environment, but are carried out mainly for other purposes, such as, for example, the hygiene and safety of the workplace. The term "expense" is always understood in the algebraic sense, because it may be a question of revenue, as in several cases of delivering waste to be recycled.

Data collection takes place through the Eurostat questionnaire, which is filled out by the individual Group divisions, after which they are aggregated and published for the boundary.

Environmental-protection expense, classified according to this method, is reported in the Appendix.

The criterion used in the following table is the one adopted by the Global Reporting Initiative (GRI) standard for the EN30 indicator. This classification differs from the previously described Eurostat criterion and is a reformulation according to the GRI classification of the data obtained through the Eurostat questionnaire.

## Financial commitment for environmental protection made by the Group in the two-year period 2009-2010 <sup>(1)</sup>

Millions of euro	Current expense			Investment		
	2010	2009	% change	2010	2009	% change
<b>Total environmental expense <sup>(2)</sup></b>	<b>564</b>	<b>445</b>	<b>+27%</b>	<b>353</b>	<b>194</b>	<b>+82%</b>
Expense regarding waste disposal, emission treatment, and environmental restoration	353	246	+44%	235	61	+285%
Expense regarding environmental prevention and management	211	198	+7%	118	133	-11%

(1) Data are not available for 2008, because the method of recording environmental expense and investment according to the GRI-G3 standard was introduced in 2009.

(2) The GRI EN30 criterion used in this table differs from the Eurostat criterion recognized as the standard by the United Nations and used in the tables in the Appendix. According to the latter method, the current expense for 2010 amounts to about 420 million euro and investment to about 353 million euro. In effect, the GRI-G3 method also includes in current expense the items regarding the acquisition of emission certificates and depreciation, which according to the Eurostat/ONU criterion are to be considered other expense, separately recorded that is not part of environmental expense.

## Environmental litigation <sup>(3)</sup>

As of December 31, 2010 Enel had 1,295 legal proceedings pending, almost all of which (about 95%) regarded the electricity distribution network. The significant increase in the cumulative number of proceedings pending with respect to those reported in 2009 (287 proceedings as defendant) is due in particular to the different reporting boundary (for 2008 and 2009 only proceedings in Italy were reported). Beginning in 2010, the figures regard the entire Enel boundary thanks to, among other things, improved legal reporting, which led to more efficient monitoring of the number of environmental proceedings and thus the recording of a larger number of them. In 2010, 531 new proceedings were initiated, while 469 were terminated during the year.

Holding the boundaries equal, in 2010 proceedings as defendant increased by 62 with respect to 2009.

The breakdown by environmental area of the total number of legal proceedings pending shows the clear prevalence (67%) of litigation regarding biodiversity and the landscape. Even though the emissions limits provided for by national regulations are observed, there are situations of litigation connected with the presence of plants and networks, as well as medium- and low-voltage substations inside buildings.

Of the other legal proceedings, 16% regard the question of radiations – almost all of which concern the electricity network and magnetic fields, a situation connected with the fact that especially in Italy there is an exceptional sensitivity to this issue – while 2% regard the soil and surface and underground water, 1.5% noise and vibrations, 1.3% the air and climate, 1.3% waste, and 0.9% effluent. Litigation that regards more than one area amounts to 10% of the total. As far as production is concerned, most of the litigation in progress regards environmental issues in a broad sense, and in any connected with the construction, conversion, or operation of plants producing electricity.

Finally, there are some proceedings pending regarding city planning and the environment connected with the construction and operation of several production plants and distribution lines. An examination of these proceedings leads to the conclusion that, in general, the probability of negative outcomes is remote. For a limited number of cases, however, one cannot exclude unfavorable outcomes, whose consequences could consist in costs connected with changes in plants and the temporary unavailability of the same, as well as the payment of damages.

Monetary value of environmental fines (euro)

**58,000**  
2010

**60,000**  
2009

Non-monetary environmental penalties (n.)

**52**  
2010

**44**  
2009

**For further details on the main environmental proceedings in progress, see page 227 of the Annual Report.**

(3) The proceedings considered are only environmental ones initiated by third-party appeals for the reversal of administrative orders favorable to the Enel Group and civil and criminal ones in which the Group is sued ("litigation as defendant").

# Energy



## Efficiency in direct consumption

The Enel Group consumes energy to power its generation plants, through which it produces new one, which is injected into the distribution network. For Enel, therefore, using energy efficiently means, on the one hand, maximizing the **yield of the generation mix** to reduce as much as possible energy dispersion in production and, on the other, making the **distribution network more and more efficient** to prevent the loss of significant quantities of energy along the transmission lines, thus eliminating the necessity of producing more energy upstream than would have been necessary for the final uses.

Enel's strategy for reducing its energy consumption provides for investment to increase efficiency in all the Group's activities, from production to distribution, and also aims to create greater awareness in behavior.

With regard to production, Enel's medium- to long-term objective is to gradually transform its generation plants towards a mix of sources (thermal, nuclear, and renewable) that uses **increasingly efficient technologies**, e.g., high-efficiency coal, EPR nuclear energy, innovative renewable energy, and renewable energy accumulation. Measures to increase efficiency are continually imple-





mented in all the Group's plants. In 2010, the main activities regarded:

- > **technical measures:** modernization of plants by replacing machinery and components with more efficient solutions, introducing remote-control systems for plant management, etc.
- > **optimization of maintenance activities:** identification of the best time for the maintenance and overhaul of machinery, correct maintenance and cleaning of mechanical parts, etc.
- > **increases in process efficiency:** identification of the optimal times and methods for maximizing plant efficiency, implementation of programs of operating excellence (e.g., the EPRI Nuclear Program), improvement of the

distribution of the production load by making the most efficient units work, optimization of cooling systems, etc. With specific regard to the consumption of the most "energy-devouring" plants – the thermal ones – the policies for improving their efficiency produced a total reduction quantifiable as about 12,095 TJ (2,889 Tcal), which was due to a decrease in simple thermal consumption of about 4,206 Tcal and the simultaneous lower increase in co-generative thermal consumption of about 1,317 Tcal <sup>(4)</sup>. For further details on the measures introduced in 2010 with respect to these three areas see the "Energy Efficiency" section of the Environmental Report. Continual work is also carried out on the distribution network to limit network losses, in particular:

- > installation of new substations (both HV/MV and MV/LV), which determines a reduction of the average length and load of the network and thus of energy losses
- > replacement of classic conductors with intertwined conductors and larger sections of medium-voltage lines
- > correct management of the balance, in particular on the MV network, which can lead to a significant reduction of the energy dissipated because of the Joule effect in the conductors, facilitated by the advanced network monitoring systems and the possibility of remote managements of manoeuvre points that Enel Distribuzione is in the process of adopting

In the future developments in the field of “**smart grids**” capable of managing a large quantity of distributed generation, including from renewable energy sources, and of exploiting accumulation systems optimally will lead to a considerable improvement in the overall efficiency of the network. To this end the technology of **remote management** – which enables end users to display and manage remotely the loads at different points on the network – has already been developed and extended to more than 33 million customers in Italy and about 105,000 customers in Spain.

Furthermore, in 2010 Enel Distribuzione entered into agreements in Italy with the Ministry of Economic Development and the Calabria, Campania, Puglia, and Sicily Regions for carrying out structural work on the distribution network to allow the connection of plants producing from renewable energy sources. Enel Distribuzione will invest a total of 123 million euro, which will enable it to enhance existing plants and construct new primary substations (8 in Puglia, 10 in Sicily, 6 in Campania, and 7 in Calabria) by the end of 2014.

Finally, the Group dedicates much attention to the dissemination of the culture of energy conservation among its employees through **training activities, information, and awareness-raising** aimed at guiding their behavior towards increased energy conservation in their everyday actions. In 2010, campaigns were carried out in both Latin America and Europe on the efficient use of energy in both operating activity in plants and office activities.

(4) The calculation of thermal consumption (simple and co-generative) was made by multiplying the difference with respect to 2009 of the specific consumption of each of the two technologies (+38 and -29 kcal/kWh) by the respective productions (110,671 and 45,401 GWh) and converting to GJ.

## Containment of indirect consumption

With regard to the **environmental management of real estate**, in 2010 Enel Servizi obtained **ISO 14001 certification** for all the buildings it manages in **Italy** (more than 1,000), completing the process begun in 2009 with the certification of six large buildings. As part of the activities provided for by the plan for improving the environmental management system, which included a reduction in consumption through the rationalization of spaces and the replacement of old equipment with new, more efficient equipment, in 2010 Enel Servizi achieved considerable saving in consumption. In **Spain**, Endesa carried out similar certification activity in its office buildings. In the long run, certification will lead to a gradual reduction of energy consumption (electricity, fuel for the cafeteria and heating). In the entire Group, real-estate management generated efficiency quantifiable as 14,915 GJ, which was determined by the difference between the electricity conserved, amounting to 9,020 MWh (32,500 GJ) <sup>(5)</sup>, and the increased consumption of fuel for internal heating and cafeteria services, amounting to 420 toe (17,585 GJ). In addition to these activities there is the project of **digitalizing document flows** and the transmission via certified mail – which entails saving by avoiding consumption for the production of paper, printing, and sending the documents – and projects for automating filing services, as well as for reducing the consumption of energy connected with the use of photocopiers and printers. Finally, both in Italy and in Spain, activities are planned regarding awareness-raising and training for all employees, as well as initiatives to improve water consumption, the differentiated collection of waste, and the rational use of expendables.

To reduce its indirect consumption of energy, Enel also dedicates particular attention to the subject of mobility and the management of the use of Company vehicles. For example, the venues for training courses are chosen after examining all the traveling involved and identifying central places, while employees have been encouraged more and more to use **audio and video conferences** to limit moving around that is not indispensable. Similarly, the Company promotes traveling by train instead of flying. In travel between Rome and Milan, which constitutes about 10% of the economic value of flying in Italy, a “migration” of about 5,000 trips from plane to train was

obtained, amounting to 50% of the total trips by Enel employees between the two cities.

With regard to employee home-work travel, moreover, the Company implements mobility-management. (For further information, see page 129). In particular, the energy saved by the promotion of public-transportation passes amounted to about 800 toe in 2010 <sup>(6)</sup> (33,494 GJ).

To optimize the use of the **corporate vehicle fleet** the Company acts on both employee behavior – for example, through courses on safe and environmentally-sustainable driving – and the ways in which the fleet is managed. In 2010, Enel implemented a system for locating the vehicles of operating personnel in real time, which sends the squad whose vehicle is closest to the address where assistance is required. In 2010 the Company also began to convert the Italian fleet to Euro-5 certified vehicles.

Finally, as far as the indirect impact caused by suppliers and contractors by their use of means of transportation is concerned, whenever there are companies with ISO 14001-certified or EMAS-registered environmental management system, Enel performs an assessment and tries to reward the firms that demonstrate greater environmental sustainability, for example by preferring – all other things equal – certified ones.

(5) The calculation method considers the consumption of 4,436 MWh of electricity, which – because of the about 66% incidence of fossil sources in the Group's production and the 39% average yield of its thermal plants – generates a saving of primary energy consumption amounting to 9,020 MWh.

(6) The calculation method is based on the paper "Reducing CO<sub>2</sub> emissions from cars: a study of major car manufacturers" published by Transport & Environment and considers the average consumption of the various transport models multiplied by the number of users, considering the average home-work distance twice (round trip) and taking into account the standard factors of emission and oxidation of the different fuels.

## Energy consumption

### Direct consumption

The following tables show the most significant energy consumption for the Group deriving from the most "energy-devouring" of its plants: **thermal ones**.

Net specific consumption of  
thermal production (kcal/kWh)

2,191  
2010

2,229  
2009

Net specific consumption of  
combined thermal production of  
electricity and heat (kcal/kWh<sub>eq.</sub>)

2,180  
2010

2,151  
2009

The net specific consumption of thermal production (simple and co-generative) in the last few years has been characterized – at both the Group and national levels – by factors with opposite effects. On the one hand, the primary consumption of electricity has been higher because of the increased use of systems for abating atmospheric emissions and the inclusion of OGK-5 in the data, in addition the fall in energy demand, which forces plants to work in low-efficiency conditions, while on the other hand there have been positive effects connected with the coming into service of new high-yield combined-cycle plants in Italy and Spain and with the acquisition and total consolidation of Endesa.

Most of the Group's consumption of energy comes from the consumption of the single fuels, which – in addition to being expressed in metric units (thousands of tons or millions of cubic meters), for which see page 196 – is calculated in units that express their energy potential: tons or thousands of tons of oil equivalent (toe or ktoe) and thousands of billions of joules (terajoules, TJ), which express such consumption as energy used.

In 2010 the Group recorded a decrease in its consumption of energy deriving from the consumption of fuel, from a total of about 37.1 Mtoe in 2009 (1,533,302 TJ) to 36.1 Mtoe in 2010 (1,511,435 TJ) thanks to a drop in thermal production to the advantage of nuclear and renewable energy.

		2010	2009
Total fuel consumption	TJ	1,511,435	1,533,302
	(Mtoe)	36.1	37.1
Total consumption of fossil fuel	TJ	1,503,661	1,544,929
	(Mtoe)	35.9	36.9
Coal	(Mtoe)	15.6	16.9
Lignite	(Mtoe)	2.1	2.0
Oil	(Mtoe)	2.6	3.1
Gas	(Mtoe)	13.9	12.9
Gas oil	(Mtoe)	1.7	2.0
Other (orimulsion + coking gas + petroleum coke)	(Mtoe)	0.0	-
Total Consumption of non-fossil fuel	TJ	8,374	8,374
	(Mtoe)	0.2	0.2
Biomass, waste, and hydrogen	(Mtoe)	0.2	0.2

## Indirect consumption

The following table shows the primary electricity acquired for the storage and handling of fuel, mining activities, real-estate management and services in the entire Enel Group.

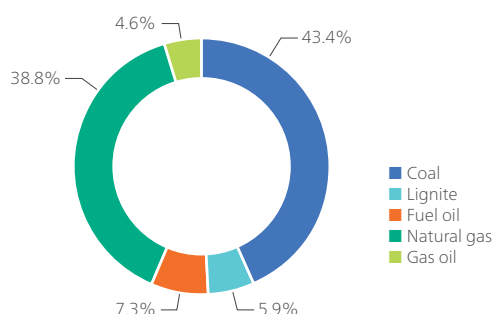
Indirect consumption of electricity by primary source <sup>(7)</sup>

		2010	2009
Fuel storage and handling	GJ	23,436	4,741
	GWh	6.5	1.3
Electricity distribution	GJ	1,589,990	1,513,998
	GWh	441.7	420.6
Real estate, vehicles, and services	GJ	558,965	574,934
	GWh	155.268	159.704
Mining	GJ	48,776	8,078
	GWh	13.69	2.2
Total electricity consumption <sup>(7)</sup>	GJ	2,221,156	2,101,752
	GWh	617	583.8

(7) It is not possible to distinguish energy consumption by type of source (renewable and non-renewable), because the energy was purchased on the market and it is not possible to trace the source.

The increased indirect consumption of electricity distribution, mining, and fuel handling is connected with an increase in the overall volume of the three activities – due mainly to the extension of the monitoring boundary, which in 2010 also includes Endesa – while the decreased indirect consumption in real-estate management is due to the adoption of environmental management systems and the inclusion of energy-conservation objectives in the improvement program. (See also the “Containment of indirect consumption” section.)

% breakdown of fossil fuel consumption (2010)





Enel's **Climate Strategy** (see chapter 1, page 34) translates our commitment to reducing greenhouse-gas emissions through action plans in all the areas of the Group's activities, from production and distribution to sales and emission-rights trading.

The development of "clean" production technologies, in particular, is the core of our environmental strategy. The "Sustainability in practice" Focus in chapter 1 describes in detail the results achieved in the field of renewable energy (page 52-59) and nuclear energy (pages 54-57), as well as in research aimed at reducing the CO<sub>2</sub> emissions of thermal production (pages 57-59). In addition, we continually strive to improve the technologies and efficiency of the productive processes in all of the Group's generating plants (on which see the "Abatement of generation emissions" section).

With regard to distribution, we continue to push forward with the important developments in "smart grids" (pages 47-51) and with making our networks more efficient (page 145).

As far as sales in the free market are concerned, Enel Energia – with the technical assistance of the Carbon Unit – promoted the "All-included energy - *Green zero CO<sub>2</sub>*" campaign, which involves, among other things, the neutralization of the CO<sub>2</sub> regarding the sales process and the indirect consumption of energy in hydro production plants by cancelling VERs (Verified Emission Reductions) (page 160).

In addition to this activity there is our global commitment to the reduction of CO<sub>2</sub> emissions through the introduction of projects and best practices in Eastern European and developing countries, among other things by using the flexible mechanisms introduced by the Kyoto Protocol (Clean Development Mechanism and Joint Implementation), in which the Group is a world leader.

## Abatement of generation emissions

To contain the emissions released by production, continual improvements are made in plants, components, and treatment systems, as well as in processes.

During 2010, the Company continued to replace burners and to improve systems to control the combustion temperature in order to reduce NO<sub>x</sub>. Desulfurizers were put into operation to reduce SO<sub>2</sub> and filters to reduce flue ash, and the installation of systems to reduce H<sub>2</sub>S continued in geothermal plants. Emissions of CO<sub>2</sub> and heavy metals, while to contain mercury emissions, in particular, the Company continued its trials of oxidation on SCR catalyzers at the pilot plant in La Spezia and finished its laboratory experiment with low-temperature catalytic oxidation of mercury. Initiatives were also implemented to limit the impacts of geothermal plants, in particular hydrochloric acid (for which the characterization of the process of abatement in the superheated steam used was successfully completed) and ammonia (for which a detailed process analysis was performed).

Endesa has a number of projects in progress aimed at increasing the environmental efficiency of its conventional power plants. These regard in particular yield optimization, the capture of CO<sub>2</sub> from flue gas, and advanced filter systems. In Argentina, the company increased monitoring of operating parameters and improved burner maintenance to reduce emissions of particulate and NO<sub>x</sub>. It also developed a system for injecting water into combustion chambers to reduce NO<sub>x</sub>.

## Our carbon strategy

Fulfilling the obligations imposed by the EU **Emission Trading System** (EU ETS) is one of the Company's main priorities. For this purpose, in 2010 a **new organizational unit** was created which integrates the expertise of Enel and Endesa and employs more than 40 people in 6 countries. The unit coordinates the strategies for meeting the Group's ETS obligations and develops the portfolio of CO<sub>2</sub> credits in all the significant markets.

In all the European countries in which the Group is active with generation plants using fossil fuels **National Allocation Plans** (NAP) are established for assigning CO<sub>2</sub> quotas, which set the total number of quotas, at both the plant and industry level, assigned by the competent national authorities to implement the EU directives regarding emission trading (n. 2003/87/EC and n. 2004/101/EC). The current NAP, for the period 2008-2012 establish that within certain limits, which vary from country to country – for example, 19.3% in Italy and 42% in Spain – the companies involved in the emission trading system may use to meet their obligations emission credits generated by:

- > “emission reduction units”: emissions avoided by carrying out projects that aim at emission reduction in other countries with emission limits (ERU – Emission Reduction Units regarding Joint Implementation projects)
- > “certified emission reduction”: emissions avoided by implemented high-energy-efficiency industrial projects or projects aimed at using renewable energy in developing countries with emission limits (CER – Certified Emission Reduction regarding Clean Development Mechanism projects).

The **Clean Development Mechanism** (CDM) and **Joint Implementation** (JI) are of the three flexible mechanisms provided for by the Kyoto Protocol. At the global level, at the end of 2010 a total of 3,061 CDM and JI projects were registered, which will enable the atmospheric emission of more than two billion tons of CO<sub>2</sub> to be avoided by the end of 2012 in developing countries. About 85% of the initiatives were financed with private capital.

The use of the flexible mechanisms has been a successful experience for the Group. **Enel and Endesa are now among the most important actors in the global CO<sub>2</sub> market.** Thanks, among other things, to projects implemented in this area, the Group has managed to achieve

the environmental objectives established by the NAPs of the EU countries in which it operates at a lower cost – for equal results, in effect, the marginal cost of abatement measures in developing countries is lower than in developed ones – and has transferred technology to developing countries, thereby contributing to their economic, social, and technological development.

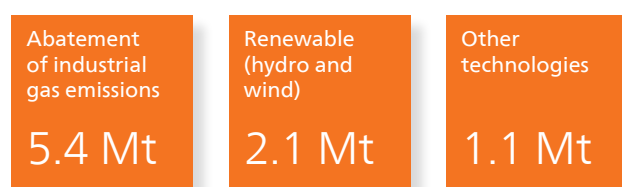
**Overall, the Group's portfolio amounts to 105 projects with direct participation. Most of the initiatives have been developed bilaterally by Enel-Endesa and the host country and have enabled the Group to attain first place among the private companies active in this field, with about 12% of the credits issued so far.**

To diversify the risks involved in implementing the single projects, the Group also invested in some of these funds, whose expected contribution in terms of credits amounts overall to around 13% of the total. The projects of the funds regard, among other things, the re-utilization of exhaust gases, the capture of methane from mines, and the abatement of cement factory emissions. Considering also the contribution of the projects in which the Group participates through the so-called carbon funds, the potential reduction of CO<sub>2</sub> emissions amounts to 200 million tons in the period 2005-2020, of which 87% regard projects already registered.

Most of the Clean Development Mechanism projects currently in the portfolio are located in **China**, where the Group found excellent conditions for operating thanks to the Sino-Italian Cooperation Project initiated in 1999 by the Italian Environment Ministry with the State Environmental Protection Administration (SEPA) and other Chinese institutions. The purpose of the Program is to promote projects for sustainable development through, among other things, the use of technologies furnished by Italian companies operating in the fields of energy and the protection of the environment. Thanks to the SICP, it has been possible to promptly get through to the institutions and easily select the best opportunities for projects. The Group's portfolio in China includes 79 projects in the field of electricity from renewable energy (hydro and wind), the abatement of industrial gas emissions and the increase of energy efficiency in several large factories. Other projects are located in India, Africa, and Latin America and regard technologies of hydro, wind, and biomass generation, the abatement of industrial gases, and methane destruction.

As far as Joint Implementation is concerned, the Group has 7 projects in its portfolio that regard **Uzbekistan** and **Ukraine**, as well as 32 indirect-participation projects in **Europa, Russia, Moldavia, Ukraine**.

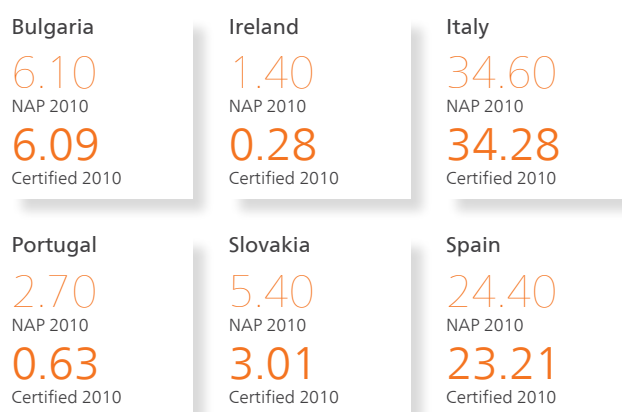
In 2010 alone the greenhouse-gas reductions certified by the UNFCCC for the initiatives implemented by the Group amounted to 8.6 million tons of CO<sub>2</sub> equivalent, broken down by the different technologies of CDM projects:



The details regarding all the projects in which Enel and Endesa appear as project participants are available on the UNFCCC website at:

<http://cdm.unfccc.int/Projects/index.html>

The following table shows the quotas assigned by the National Allocation Plans (NAP), expressed in millions of tons and the emissions produced in 2010 and certified, as provided for by law, by March 31, 2011.



## Greenhouse-gas emissions

Total direct and indirect emissions  
(millions of tons)

	2010	2009	2008
Direct emissions - scope 1 (EN16)	116.4	122.4	111.2
Indirect emissions from electricity consumption - scope 2 (EN16)	0.245	0.232	0.219
Other indirect emissions - scope 3 (EN17)	5.967	6.205	5.406
<b>TOTAL</b>	<b>122.6</b>	<b>128.8</b>	<b>116.82</b>

## Direct emissions

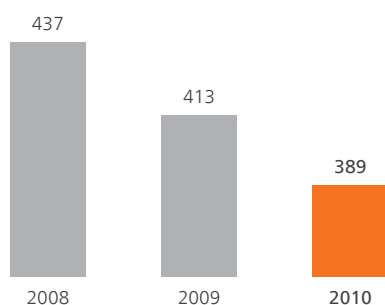
Over the years, the actions that constitute the climate strategy, which are carried out by fully exploiting the synergy and potential of a large integrated Group, have enabled Enel to gradually reduce **total greenhouse-gas emissions**, which in 2010 amounted to 116.4 million tons of CO<sub>2</sub> equivalent (a decrease of 4.9% with respect to 2009).

Greenhouse-gas emissions are influenced almost exclusively by the use of fossil fuel. In effect, almost all (116.2 million tons) of the 116.4 million tons of direct emissions of CO<sub>2</sub> equivalent (scope 1) produced by all Group activities in 2010 was due to generation.

The total production of energy from fossil and renewable sources in 2010 caused a net specific emission (that is, expressed in kg of CO<sub>2</sub> generated for every MWh of energy produced) of 389 kg/MWh<sub>eq</sub>, with a reduction of 5.7% with respect to 413 kg/MWh<sub>eq</sub> in 2009.

Net specific emissions of CO <sub>2</sub>		2010	2009	2008	% change 2010/2009
Total specific emissions of CO <sub>2</sub>	(kg/MWh <sub>eq</sub> )	389	413	437	-5.7
Specific emissions of CO <sub>2</sub> from simple thermal production	(kg/MWh <sub>eq</sub> )	711	741	732	-4.1
Specific emissions of CO <sub>2</sub> from co-generative production	(kg/MWh <sub>eq</sub> )	691	691	720	0.0

## Total specific emissions of CO<sub>2</sub> (kg/MWh<sub>eq</sub>)\*



\* Specific emissions are calculated considering the total emissions from simple thermal production, combined with electricity and heat, compared to the total renewable, simple, thermal, and nuclear production and combined production of electricity and heat (including the contribution of heat in MWh equivalent).

Another climate-altering gas is sulfur hexafluoride (SF<sub>6</sub>), which is used in high- and medium-voltage electrical equipment. Total Group emissions of SF<sub>6</sub> in 2010 amounted to 6.3 kg, corresponding to about 144,000 tons of CO<sub>2</sub> equivalent, of which 1.6 kg was due to generation and 4.7 kg to distribution.

## Indirect emissions

**Scope 2 indirect emissions** are caused by the use of electricity in a number of operating activities (electricity distribution, fuel handling, mining, real-estate management, etc.). As shown in the following table, these emissions are considerably lower than direct ones:

(T)	2010	2009	2008
Fuel storage and handling	2,585	523	583
Electricity distribution	175,377	173,995	167,870
Real estate, vehicles, and services	61,654	63,416	50,272
Mining	5,380	891	0
<b>Total</b>	<b>244,996</b>	<b>231,825</b>	<b>218,725</b>

**Scope 3 indirect emissions** are due to transportation and the production of goods and provision of services in function of the carrying out of productive activities.

Particularly significant are the emissions due to:

- > coal mining, which amount to 4,975 tons of CO<sub>2</sub> <sup>(8)</sup>
- > transportation of coal by ship, which amount to 525,134 tons of CO<sub>2</sub> <sup>(9)</sup>
- > transportation of coal by train, which amount to 439,907 tons of CO<sub>2</sub> <sup>(10)</sup>
- > transportation of raw materials and waste, with the total connected emissions estimated at 26,814 tons of CO<sub>2</sub> <sup>(11)</sup>

These emissions also include those generated by employees when they travel. In 2010, the mobility-management policies implemented enabled the Company to achieve a total reduction in the CO<sub>2</sub> emitted of about 2,400 tons <sup>(12)</sup>. In order to determine other indirect emissions the Group is also concentrating on its suppliers of goods and services. With this objective Enel joined the initiative of the Carbon Disclosure Project (CDP) on the assessment of greenhouse gases in the supply chain in order to compare one's own data with the typical performance of each activity and then initiate a process of gradual reduction of the impacts. This is a pioneering project, which involves a small number of leading global companies in all industries. For a number of years Enel has provided the CDP with the data regarding its greenhouse-gas emissions by filling out a technical questionnaire. However, the questionnaire addressed to suppliers is much simpler in consideration of the lesser importance in terms of the quantity of greenhouse gases they emit. The results are published on the website [www.cdproject.net](http://www.cdproject.net).

In 2010 the Company also implemented the qualification process for green suppliers, introducing investigations that take into account virtuous behavior in terms of greenhouse-gas emissions.

(8) In coal mining the quantities are calculated through emission factors of the IPCC's "2006 IPCC Guidelines for National Greenhouse Gas Inventories", differentiated by surface mining (1.15 m<sup>3</sup>/t) and deep mining (17.5 m<sup>3</sup>/t), multiplied by the tons of fuel extracted (50% surface and 50% deep). The 100-year GWP used (25) is the one suggested by the "IPCC Fourth Assessment Report: Climate Change 2007".

(9) The estimate was made starting from the quantity transported (equivalent to 52% of the total coal used), taking into consideration Panama ships with a capacity of 67,600 tons, which cover an average distance of 700 marine miles a day in 22 days of cruising, with a consumption of 35 tons of fuel oil a day and an emission coefficient of 3.2 kg CO<sub>2</sub> for every liter of oil burned.

(10) The estimate was made starting from the quantity transported (equivalent to 43% of the total coal used), taking into consideration trains with a capacity of 1,100 tons covering an average distance of 1,400 km with a consumption of 6.9 kWh/t for every 100 km and an average Enel emission coefficient (390 gr/ kWh in 2010).

(11) The estimate was made starting from the quantity of raw materials (expendables, gas oil, solid biomass, and CDR) and waste transported, taking into consideration trucks with a capacity of 28 tons covering an average round-trip distance of 50 km with a consumption of 1 liter of diesel fuel for every 3 km and an emission coefficient of 3 kg of CO<sub>2</sub> per every liter of diesel burned.

(12) The calculation method comes from the report "Reducing CO<sub>2</sub> emissions from cars: a study of major car manufacturers" published by Transport & Environment. It considers the average consumption of the different transportation models multiplied by the number of users, taking into account the average round-trip home-work distance and the standard factors of emission and oxidation of the different fuels.



## Other emissions

The significant atmospheric pollutants emitted by Enel's activities, in particular by thermoelectric production, are the **sulfur oxides**, the **nitrogen oxides**, and **particulate**. These pollutants are measured continually in most of the larger plants through analyzers installed on the chimneys and periodically – through analysis and measurement campaigns or by using statistical parameters – in small plants. The related concentration (whether measured, analyzed, or planned) is multiplied by the flow of the flue gas, thus obtaining the mass amount.

The following table shows the specific emissions of macro-pollutants for simple thermal and co-generative thermal technologies in relation to the total production of electricity and heat <sup>(13)</sup>.

The Group's environmental policies have led to positive results, thanks to both investment in pollution abatement in thermal plants and the increase in production from renewable sources.

In effect, in 2010 a reduction of specific emissions of SO<sub>2</sub> and NO<sub>x</sub> was recorded at the Group level (respectively, -2.1% and -4.6%), as well as of particulates in most of the countries in which the Group operates. The specific emissions of the co-generative plants in Russia went against the trend. Increased production by these less efficient plants, together with the larger content of unburnt matter in the coal used during the year negatively affected the total emissions of particulate, which increased with respect to 2009. Renovation work was carried out in these plants, the results of which will begin to be seen in the coming months.

As far as '**minor**' pollutants (for example, metals) are concerned, Enel carries out periodical campaigns to measure their concentrations in the flue ash produced by thermal plants. The results obtained are well within the limits established by law in the different countries in which the Group operates. Hydrogen sulfate (H<sub>2</sub>S) is the only potentially pollutant substance present in significant quantities in geothermal fluid, but thanks to the abatement systems (AMIS, Enel technology), the emissions of this gas are lower than those naturally present in the environment.

The total Group net specific geothermal emissions of H<sub>2</sub>S amounted to 1.97 kg/MWh in 2010, a decrease with respect to the 1.98 kg/MWh produced in 2009.

Finally, constant monitoring of the emissions produced by the Group revealed the presence of **substances that have a harmful effect on ozone**.

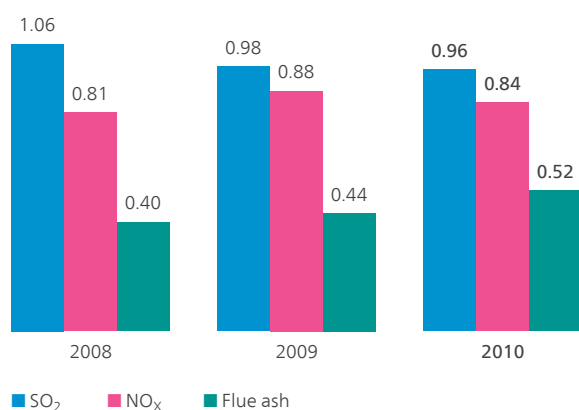
In Italy, Argentina, Peru, and Spain there are substances in air-conditioning systems (R22, Freon 113) that are harmful for the ozone layer, and in Argentina small quantities of Halon 1301 are also used in fire-fighting systems. These gases will be gradually replaced with harmless substances.

The following table shows the values for such gases for 2010.

Gas	Quantity stocked (kg)	Emission (kg)	Ozone Depletive Potential	CFC-11 equivalent (kg)
R22	13,333	400	0.055	22
Freon 113	na	472	0.8	377.6
Halon1301	816	-	-	-
<b>TOTAL</b>				<b>399.6</b>

(13) Total Group production (thermal, nuclear, and renewable)

### Net specific emissions of pollutants (kg/MWh)\*



\* The specific emissions are calculated considering the total emissions from simple thermal production, combined with electricity and heat production, compared to total renewable, simple thermal, and nuclear production, combined electricity-heat production (including the contribution of heat in equivalent MWh).

# Water



*Hexagonal Water Pavilion*  
Jeppe Hein for Enel Contemporanea 2007  
Changeable water sculpture reflecting the flexibility  
necessary in everyday life

## Protection of water resources

Enel is aware that efficient management of water resources is of crucial importance for the safeguard of biodiversity, as well as the development and well-being of society. In order to avoid potential situations of water scarcity caused by consumption that is high with respect to the natural flows available locally, Enel adopted a strategy based on a gradual approach :

> **mapping** of areas with potential situations of water scarcity. In countries with fewer average renewable water resources per person than the benchmark established by the FAO the Company identifies any production sites that would be in areas characterized by water scarcity through, among other things, special software such as that developed by the World Business Council for Sustainable Development

- > **identification** of “critical” production sites, namely ones supplied with freshwater
- > more efficient **management** through changes in plants or processes aimed at maximizing supplies from sewage or seawater
- > **monitoring** of the climate and vegetation data of each site

Enel is also investing to reduce the consumption of water in the **production process**. Water withdrawals are being reduced to a minimum through the adoption of multiple-use systems, such the recycling in desulfurizers of effluent from closed-circuit cooling towers in coal-fired power stations and the installation downstream from the desulfurizers of crystallizers enabling the effluent waste water to be totally recycled, as well as regular and preventive maintenance of the circuits for recycling waste water and the transport of ash.

# Water consumption

Water is used in energy production for a number of purposes.

In **thermal** generation, for example, water is used to desulfurize flue gases and reduce NOx emissions by lowering temperatures. To reduce this consumption, Enel installed systems for crystallizing waste water and recycling the distillate, while part of the water consumed comes from the recycling of waste water used during production or purified by municipal utilities, as in the case of the Fusina power plant in Venice province. Furthermore, part of the desulfurization water is sea water.

In both **thermal** and **nuclear plants** water consumption is necessary for various internal services (steam production, washing, etc.), transportation of combustion ash, and cooling closed-cycle systems (cooling towers). In some cases, thermal and nuclear plants can use water resources for open-cycle cooling, that is, through a constant flow of water from an adjacent waterway, which is entirely returned to the receiving body without chemical alteration. Open-cycle cooling water is not considered consumption, because it is returned to the body of water (river, lake, or sea) with the same chemical characteristics and a slight thermal alteration (recirculated water). The total quantity of water recirculated at the Group level in 2010 amounts to about 15 billion cubic meters.

The water resources used for **hydroelectric** production do not undergo qualitative changes. In both run-of-river and reservoir plants, as well as pumped-storage ones, the water used for electricity production runs through the main machinery and the turbine, after which it entirely returned, without alteration, downstream.

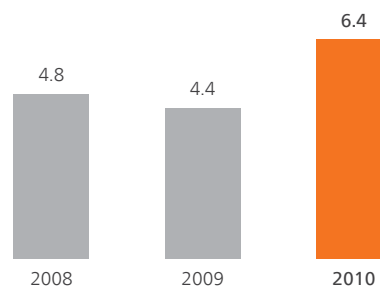
Finally, **geothermal** production uses much smaller quantities of water resources in the preparation of drilling mud.

Overall, the water requirements of the entire Group in 2010 amounted to about 370 million cubic meters, a decrease of about 3.2% with respect to 2009.

Source (millions of m <sup>3</sup> )	2010	2009
Withdrawals of internal water	328.7	348.0
Seawater withdrawals	18.0	17.9
Waste water recycled inside plants	23.7	16.9
<b>Total water requirements for industrial use</b>	<b>370.4</b>	<b>382.8</b>

The industrial requirements are met by withdrawing water from surface bodies (internal or marine) and recycling the waste water from the production process. Specifically, in 2010 about 6% less fresh water was withdrawn from rivers, wells, and aqueducts than in 2009, while the reuse of waste water from the production process increased considerably (+ about 40.2%) and now satisfies 6.4% of total water requirements.

## Water requirements covered by recycled waste water (%)



For the production technologies that use the most water, the effect of Enel's policies also positively affected specific consumption. In effect, water consumption per MWh of electricity produced improved decidedly.

## Net specific water requirements for industrial use

(m <sup>3</sup> /MWh)	2010	2009
Thermal production	0.91	0.93
Nuclear thermal production	6.33	7.55

Information concerning the bodies of water affected by the activities of the Enel Group in the world is recorded in Enel's environmental-reporting data base and published on the corporate website on a dedicated page ([www.enel.com/en-GB/sustainability/environment/biodiversity](http://www.enel.com/en-GB/sustainability/environment/biodiversity)). Specifically, information is collected on all the bodies affected by hydroelectric operations, regardless of the withdrawals, and on all the bodies affected by other activities, from which water is withdrawn for cooling purposes and/or to which water is returned that constitutes more than 5% of the average annual flow and the volume of the reservoir in which the resource is collected.

# Waste-water management

Waste water includes the residues of water used industrially and atmospheric water, potentially polluted by oil, collected inside thermal power stations. Enel is very attentive to the quality of its discharges into water and thus is investing particularly abroad to improve the characteristics of its effluent treatment plants, which have lower standards than those in Italy.

In 2010, work was carried out in **Portugal** to make effluent monitoring before its discharge into water bodies more constant and timely, while in Latin America safety systems were installed to avoid accidental discharges and the sewer and pumping systems that collect polluted water to be sent for treatment were improved.

Polluted industrial water is always treated before being discharged into the receiving bodies of water. Therefore, all sites where polluted water is produced have specific treatment systems for the kind of pollution concerned.

If oily pollutants are present, the treatment systems can be more or less sophisticated according to whether they are simple trap tanks – i.e., systems that separate floating oil from water – or systems equipped with multiple methods of separation in a sequence.

Other waste-water treatment systems are used for water polluted by chemical substances. They generally consist of tanks containing reagents that transform the pollutants into waste that can be separated from water. Several thermal power plants that use large quantities of ammonia to treat flue gas in denitrification ( $\text{deNO}_x$ ) systems have specific systems for treating ammoniacal water.

**The total quantity of waste water discharged by the entire Enel Group in 2010 amounted to 246.9 million cubic meters.**

All the water is discharged into surface bodies of water. Regardless of how the polluted water is treated, in most cases the authorities provide for authorizing only one discharge point, into which all the water is channeled. Therefore, it is impossible to quantify the quantity discharged based on the kind of treatment.

It is possible to quantify the volume of the discharges by production areas, as shown in the following table.

## Waste water by production type

(millions of m <sup>3</sup> )	2010	2009
Thermoelectric	79.5	89.4
Nuclear	167.4	165.9
Fuel oil storage and handling	0.03	0.04
<b>Total volume discharged</b>	<b>246.9</b>	<b>255.4</b>

Part of the waste water is recycled in the plants themselves, thus contributing to cover total water requirements. In 2010, water recycled after treatment in the entire Group amounted to 23.7 million cubic meters, or 6.4% of total requirements (16.9 million cubic meters in 2009, amounting to 4.4% of requirements). This quantity does not include the water recycled at the Fusina power plant in Italy, where in 2010 a total of about 469,100 cubic meters of water from the system for treating city and industrial water of Vesta – the local municipal utility – was used for the closed-cycle cooling of the plant.

Enel constantly **monitors** the impacts caused by water discharges in the areas affected by its activities. The bodies of water affected by the production of electricity (thermal, nuclear, and hydro) have been registered. Detailed information is collected in Enel's environmental reporting data base and published on the corporate website in the section dedicated to the environment (<http://www.enel.com/en-GB/sustainability/environment/policy/biodiversity>).





# The power plant that doesn't leak

In 2010 Enel achieved an internationally significant result in the field of waste-water management at its "Federico II" coal-fired power plant in Brindisi, which no longer discharges even a drop of water into the sea.

The technology used is **softening evaporation crystallization** (SEC), which evaporates the waste water and crystallizes the salts it contains, so that the water can be recycled and the salts managed as solid waste. A mixed task force consisting of external experts and the plant personnel found a solution that can make the SEC technology fully effective by establishing the right degree of saturation for maintaining the plant efficient. In effect, before the Enel

experts intervened proactively, the technology had limits that made it ineffective.

This essential contribution to the technology was also recognized by the Energy Power Research Institute, a non-profit organization in the United States that promotes innovative projects in the energy field, which emphasized how, thanks to the idea of the Enel experts, the problem of effluent discharge could be resolved throughout the world.

With the same formula and the same objective, the task force has already completed its work at the La Spezia power station, and soon Civitavecchia and Sulcis will be able to use this innovation.

# Biodiversity



## Attention to biodiversity

The European Union dedicated 2010 to biodiversity. Organized by the European Commission's Directorate-General for the Environment, from the 1st to the 4th of June, "Environment Week" – the most important annual European event on environmental policy – was held in Brussels. Contributing its experience regarding the safeguard of biodiversity, Enel was the only company in the energy industry that participated in it.

In effect, the **preservation of biodiversity** constitutes one of the strategic objectives of the Group's environmental policy and by now is a consolidated practice. In most cases, the Group's actions to protect biodiversity are carried out on a voluntary basis – through the adoption of ISO 14001

or EMAS management systems – although sometimes national regulations of the various countries influence such strategies, actions, and plans.

Enel's main impacts on biodiversity are connected with the construction of **electric power lines**, which produce significant effects in visual terms and on arboreal vegetation, and the construction and maintenance of **oil and methane pipelines** (on which see the details on page 202). Impacts are also produced by the construction of new **plants**, which can also affect very large areas in or near protected areas.

In effect, in all the countries in which it operates, Enel manages sites and structures located in or near national parks, sites of EU interest, WWF oases, and other areas with a high naturalistic value <sup>(14)</sup>. In these cases,





activities are carried out in balance with the natural environment and the ecosystems, which are well preserved and are often actively monitored by Group companies through agreements with local, national, and international environmental organizations. Special care is dedicated to the protection and safeguard of species on the **Red List of the International Union for Conservation of Nature and Natural Resources (IUCN)**. Listed in the appendix (page 293-296) are the **protected species** present in the areas where several of Enel's plants, mainly thermal, are located, as well as their related level of risk of extinction.

The Company takes numerous preventive and corrective actions to reduce the impact of plants and their respective areas of influence on the surrounding ecosystems.

With regard to *prevention*, Enel performs environmental-impact studies that systematically assess the effects on biodiversity and thus enable the Company to implement solutions to restore or improve the original environment. When constructing **wind plants**, for example, the safeguard of the migration flows of birdlife is always taken into consideration to locate suitable sites.

When electricity *networks are constructed*, studies are performed to identify the best solutions in terms of the structures, materials, components, and routes of the lines so as to **limit as much as possible their visual impact and damage to arboreal vegetation**. To attenuate the visual impact of electric lines when constructing new networks and renovating old ones, whenever possible Enel **puts the lines underground**. The cabling index – i.e., the percentage of underground cable used with respect to the total length of electric lines (page 288) – represents immediately the environmental attenuation of the visual impact of electric lines. For low- and medium-voltage lines, an alternative is the adoption of the **elicord**, which consists of three insulated and intertwined phases and attenuates the overall visual impact, because the cable is less visible than three separate wires. Intertwined cable for overhead electric lines also reduces considerably the impact on arboreal vegetation, because it requires less bulky supports and integrates fully with the vegetation. The choice of routes and running the lines above the vegetation also enable fewer trees to be cut down, while the risk of collision and electrocution for birdlife is avoided by the use of insulated cables and devices to signal high-voltage conductors visually.

On production sites, a series of protective activities continue even during **operation of the plants**:

1. in many places, in agreement with local institutions, campaigns of **terrestrial, fluvial, and marine bio-monitoring** are carried out by independent organizations to checking the influence of the plants on biodiversity and the appropriateness of the compensatory or ameliorative measures taken. So far, all campaign results have shown the absence of negative impacts on biodiversity and the appropriateness of the measures taken to avoid negative effects caused by atmospheric emissions, discharges of heat, noise, and the maintenance of the distribution line corridors;
2. environmental Management Systems in keeping with the ISO 14001 standards are implemented, applying the Group's environmental policy and performing periodical assessments of the impacts on biodiversity;
3. **risk analyses** are performed taking into account the risk of impacts on biodiversity;
4. initiatives are undertaken to make the personnel aware of the risk of impacts, the actions performed to limit it, and the Group's commitment to protecting biodiversity.

With regard to the operation of plants, precautions are adopted, such as reducing water withdrawals and discharges and mitigating the noise made by equipment. In stretches of torrential streams downstream from dams, the release of the **minimum vital outflow** from the dam creates flows that are more constant than natural ones, thus avoiding that such stretches become – at least in certain periods – completely dry. In effect, the regularity of water flows constitutes a definite environmental improvement, helping to ensure the biodiversity of aquatic ecosystems. Reservoirs also perform a very important role as lesser wet areas essential for the migrations of birdlife.

(14) Detailed information on the number and location of the protected areas in which the Group is present is available at [www.enel.com/en-GB/sustainability/environment/biodiversity](http://www.enel.com/en-GB/sustainability/environment/biodiversity). This information has not changed with respect to 2009.

# Enel projects for protecting biodiversity

In all its activities Enel promotes a series of projects for the purpose of supporting the **safeguard of the ecosystems and natural habitats** of the different areas where it is present, not only as an industrial company, but also as an active participant in the local social, cultural, and environmental life.

The following table shows the projects that were started or entirely carried out in 2010, as well as those that were continued or completed in the same year. Institutional interest groups (associations, foundations, universities, research centers, etc.) are involved in the projects and the public is informed about such activities through a number of publications (Environmental Report, Annual Report, Sustainability Report, EMAS environmental declarations, leaflets, and ones on the corporate website.

## IUCN extinction risk legend



For each project, the tables normally show the location/name, content (which, unless there is a specific reference, regards the species listed in the first column), and, in brackets, the organization(s) responsible.

## Europa

Bulgaria		Project
Griffon vulture (Gyps fulvus)	LC	<b>Central Balkans National Park:</b> as part of the project to repopulate the area with this raptor, after the first 40 specimens from Spain were introduced in 2009, a naturalization aviary was installed to facilitate their feeding and reproduction. [Enel Maritza 3, Society for the Protection of Rapacious Birds]
Flora, fauna, ecosystem, landscape		<p><b>Maritza East Power Plant:</b> the bed of the Sokolitsa River was cleaned, freeing it of the sediment that had accumulated and the plants that had grown in the area near the village of Obruchishte (part of the municipality of Galabovo), following a commitment undertaken with the local governments. [Enel Maritza 3]</p> <p><b>Maritza East Power Plant:</b> the area of Lake Rozov Kladenetz and the Sokolitsa River, which are located in the area surrounding the plant, is protected (habitat, fauna, and flora) with particular regard to birdlife (1,265 ha). A discussion with the local authorities is in progress to develop a protection plan, which will probably concern water management with increased recycling of waste water. Considerable attention is dedicated to consumption (system for managing consumption efficiently) and discharges of water (chemical, physical, and biological treatment) to reduce the impacts on the lake ecosystem to a minimum. [Enel Maritza 3].</p> <p><b>Maritza East Power Plant:</b> the company completed the re-cultivation of the asbestos dump through the implementation of a restoration project authorized by the local authorities with sealing, renaturalization, and planting of native species of herbaceous species. Ten thousand arboreal plants planted to create a belt around the second ash-settling tank. [Enel Maritza 3]</p>
France		Project
Montagu's harrier (Circus pygargus)	LC	<b>Area of EU interest for the Preservation of the Birds of the "Barrois":</b> measures aimed at the preservation of nesting species (in particular Montagu's harrier) through cooperation with farmers who abstain from fighting rodents and the use of phytotoxins, the permanent center for environmental initiatives (CPIE), hunters (Aube) who keep an eye on the situation, the League for the Protection of Birds (LPO), and the Ardennes Region, which monitors the birds.



## Italy

### Project

White stork  
(*Ciconia ciconia*)

LC

**Cilento and Vallo di Diano National Park (Sala Consilina, Salerno province)**: Enhancement of the places where the stork lingers, among other things for carrying out teaching and scientific activities.  
[Enel in cooperation with the LIPU and the WWF].

Griffon vulture  
(*Gyps fulvus*)

LC

**Sardinia**: Study and monitoring of the species and its habitat in the area surrounding the city of Bosa in Nuoro province, alert for the threats to its survival, educational activities in schools and for the local inhabitants, and creation of observation posts and a nature path.  
[Enel in cooperation with Legambiente].

European otter  
(*Lutra lutra*)

NT

**Upper Volturno Valley**: monitoring and safeguard of its habitat through an estimate of the population, circumscription of the area, and creation of observation posts and educational panels.  
[Enel in cooperation with the Pianeta Terra association].

Northern pike  
(*Esox lucius*)

LC

**La Casella thermal power station**: annual stocking of the Po River with 1,500 little northern pike. This obligation is provided for in the regulations regarding the withdrawal of water from the Po River.  
[Enel Produzione].

Sea turtle  
(*Caretta caretta*)

EN

**Center for the Rescue of Sea Turtles at Brancaleone (Reggio Calabria province)**: development of the Center, which rescues and takes care of wounded animals, disseminates information and raises awareness about them, and contributes to the national data base. [Enel in cooperation with the CTS (the owner)].

**Centers for the Rescue of Sea Turtles at Oasi di Lago Salso (Foggia province) and Bosco di Rauccio (Lecce province)**: activities to support the centers, study of habitats suitable for laying eggs, and raising the awareness of young people in local schools. [Enel in cooperation with Legambiente].

Red kite  
(*Milvus milvus*)

NT

**Amiata area (Mount Amiata, Mount Penna, and the Upper Albegna Valley), in southern Tuscany (Grosseto province), and the Gola della Rossa e di Frasassi Regional Natural Park in the Marche (Ancona province)**: The main purpose is to complete the reintroduction of the red kite, which is in progress in both the Upper Albegna Valley and the Frasassi Park. The reintroduction of this species provides for the release of young specimens from other European countries, such as France (Corsica) and Switzerland, making more than 40 km of power lines safe, the installation of more than 1,200 protective devices on the heads of the poles on which the kite perches to eliminate the risk of electrocution, monitoring the specimens released by satellite radio, VHF radio, and video systems for monitoring the feeding troughs, carrying out a large-scale campaign to raise awareness (production and dissemination of informative material, creating an educational trail on the protection of chiropters, two dedicated rooms in the Amiata Fauna Park and the Frasassi Park, educational initiatives in schools). A website was created which makes available the video monitoring system's real-time (webcam) images of a colony of troglomorphic chiropters and two feeding troughs used by the red kites. Maps of the movements of kites equipped with satellite radios will be displayed. [Amiata Mountain Community of the Grosseto area, Esino Frasassi Mountain Community, and Enel Distribuzione].



Italy		Project
Eels, trout, cyprinidae, (different species also at risk, including the marble trout – <i>Salmo trutta marmoratus</i> ), salmonidae		<b>Various sites:</b> Fish repopulation by stocking various species of local fish. [Enel Produzione and Enel Green Power].
	LC	
Posidonia oceanica		<b>Torrevaldaliga Nord thermal power plant:</b> marine monitoring of benthic, chemical and physical components of water; campaign of monitoring of the hectare of Neptune grass planted in previous years. Extension of the 435-hectare SIC protected area concerned. [Enel Produzione].
	LC	
Freshwater and wetland ecosystems		<b>Porto Corsini power plant (Ravenna province):</b> monitoring campaign for the Pialassa Baiona on an area of 1,100 hectares. At the end of the reporting period the result is Good. [Enel Produzione].
		<b>Priolo Gargallo power station:</b> implemented an agreement with the R.N.O. Saline di Priolo to keep the salt marsh area wet. Protocol of understanding with the municipality of Priolo Gargallo and the R.N.O. Saline di Priolo for initiatives on environmental education (well water supply). [Enel Produzione].
		<b>Pietrafitta thermal power station:</b> implementation of a program for monitoring the trophic condition of the reservoir water with the method adopted for the definition of the Aspects Register of the ISO 14001 Environmental Management System; continuation of the environmental rehabilitation of the protected area and cultivation of the areas previously reclaimed. Work was done to optimize the regime of meteoric water through special maintenance and restoration of collection and conveyance channels. In addition, the area that in past years was used as a field for fire-fighting drills was partially restored environmentally. [Enel Produzione].
		<b>Brindisi thermal power plant:</b> Brindisi province periodically monitors the expanse of water in front of the power plant. The monitoring consists in a preliminary bathymetric and geo-morphological characterization and the subsequent collection of biological samples for the analysis of biomarkers and samples of sediment for particle-size analysis, toxicity tests, and the characterization of the plankton component. Finally, the data are processed according to "Beyond-BACI (Before and After Control Impact)" procedures, which are useful for quantifying the anthropic effects. [Enel Produzione].
Ecosystem		Determination with the relevant local authorities of the releases for the minimum vital outflow in the Serchio and Lima basin. Semi-annual monitoring of the Serchio and Lima Rivers. [Enel Produzione].
		With regard to work to environmentally reclaim and restore the polluted sites of areas considered at high industrial risk, declared "of national interest" by law 426/98 and whose technical regulations are prescribed by 152/2006, the following took place in 2010 concerning thermal power stations: approval of the plans for characterizing the Assemini and Giugliano plants; work to secure for emergencies the water table at the Piombino and Maddaloni plants, after that already done at the Spezia, Fusina, Porto Marghera, Sulcis, Livorno, and Porto Scuso plants; completion of the planning of the environmental reclamation and restoration at the Brindisi and La Spezia plants; and continuation of the environmental reclamation in the Priolo Gargallo and Augusta power stations. [Enel].
Fluvial ecosystem		<b>Hydro power plants:</b> trials on the minimum vital outflow to check its effectiveness on ecosystems. [Enel Green Power, Enel Produzione].
Flora, freshwater and wetland ecosystems		<b>Santa Barbara thermal power station:</b> campaign of bio-monitoring air quality was carried out with passive sensors (lichens); periodical campaigns to measure algae concentration and composition, the IBE, and several chemical parameters along the S.Cipriano Torrent, with the transmission of the results of the monitoring campaigns to the supervisor body (ARPAT) and the local authorities. [Enel Produzione].
Flora, fauna, ecosystem, landscape		<b>Wood of St. Francis (Assisi, Perugia province):</b> in cooperation with the FAI, the Italian Environmental Fund, Enel makes its contribution with actions to reclaim and safeguard the 60-hectare wood by surveying and cataloguing the significant botanical species, cleaning the underbrush, and doing maintenance pruning. [Enel SpA].



## Portugal

### Project

Iberian wolf (*Canis lupus signatus*)

VU

**Portugal:** agreement with local institutions on the preservation of the Iberian wolf. Enel contributes to the fund created to finance activities regarding reforestation with native species, maintenance of wooded areas, increasing the availability of food and shelters for the hunting of prey, reduction of disturbance through areas where hunting is forbidden, promotion and increase of the diversity and availability of prey. [Enel Green Power and the ACHLI – Association for the Preservation of the Habitat of the Iberian Wolfzone].

## Romania

### Project

Stork  
(*Ciconia ciconia*)

LC

**Danube:** mounting distribution lines on circular supports to facilitate nesting. [Enel Distribute Dobrogea].

## Slovakia

### Project

Rainbow trout  
(*Oncorhynchus mykiss*)

**Safeguard of the fluvial network and the rainbow trout in the High Tatras National Park.** The project consists in eliminating the threat factors caused by humans that endanger the survival of this species through the acquisition and stocking of 90% of the fry necessary for its maintenance, constant monitoring, and regular cleaning of the waterways. [Slovenské elektrárne].

Eagle (*Aquila chrysaetos*, *Aquila pomarina*)

LC

**High Tatras National Park:** activities regarding protection, elimination of threats, collection of blood for genetic analyses and rehabilitation of injured specimens, monitoring and mapping of hunting areas, marking with microchips and location of nesting. A project was started for cooperation with the Touring Club on educational initiatives. Previous cooperative projects with the national parks have resulted in an increase in the number of chamois and marmots (actions carried out in previous years). [Slovenské elektrárne].

Spain		Project
Birdlife		<b>In Aragon:</b> investments were made in infrastructure, providing greater protection for birdlife on the Magallon-Valdeherrín, Ricla-Purroy, Belsierre-Yeba, and Fuentes Claras-Bello medium-voltage lines.
Native shellfish		Engagement at the international level in research on <i>Dreissena polymorpha</i> , an invasive exotic species present in a number of Spanish bodies of water. A native of the Black and Caspian Seas, it is a bivalve striped freshwater mollusk, similar to common mussels, but not edible. Resistant to saltwater, it is known for its great ability to reproduce and propagate itself. River navigation and maritime transportation have facilitated its expansion, causing serious ecological and economic effects, including the impact on the food, growth, mobility, breathing, and reproduction of other species, in particular mussels and clams. [Endesa].
Osprey ( <i>Pandion haliaetus</i> ) and Black kite ( <i>Milvus migrans</i> )		<b>Balearic Islands:</b> in accordance with the Gesa-Endesa cooperation program, the Ministry of the Environment, and the government of the Balearic Islands: completion of 186 projects (128 on Majorca and 58 on Minorca), aimed at reducing collisions with lines. [Endesa Distribución].
	LC	
Mainly rapacious birdlife		The operation of wind plants can produce impacts on biodiversity because of birdlife collisions or disturbance of nesting. All plants are continually monitored to avoid or limit negative impacts. [Enel Green power].
Birdlife		<b>Andalusia and Extremadura:</b> in accordance with the agreement entered into in 2008 with the government of Andalusia for co-financing the LIFE+Nature and Biodiversity project called "Preservation and management of the special protection zones for the birds of the Andalusian steppe", the LIFE committee of the European Commission chose the project, which includes mapping the critical points where birds collide with and are electrocuted by electric power lines. Development of other research projects in cooperation with research centers and public institutions. [Endesa Distribución].
Bonelli's eagle		<b>Catalonis:</b> monitoring of the population, habitat, and preservation of Bonelli's eagle. In 2010, the project determined their age, number of specimens, the territory occupied, and physical condition. In order to analyze how they disperse survive, and the causes of the deaths, 37 specimens were tagged.[Endesa Distribución].
	LC	
Egyptian vulture ( <i>Neophron percnopterus</i> )		<b>Canary Islands:</b> study to assess the effectiveness of the measures taken in the previous two-year period to limit the risk of birds colliding with medium-voltage overhead electric lines in Fuerteventura and Lanzarote. [SEO-BirdLife and Endesa Distribución].
	EN	
Flora, fauna, ecosystem, landscape		<b>Andorra, As Pontes, and Puertollano mining areas:</b> landscape and hydrogeomorphological work to re-establish the original biodiversity in these places. [Endesa].
		<b>Doñana National Park (Andalusia):</b> support for the initiatives of the Doñana 21 Foundation for the preservation of the natural heritage and the maintenance of a center that assists wild birdlife. [EUFER] Development of an anti-shock device to prevent the electrocution of birds. [Endesa].
Flora, fauna ecological balance, and landscape		<b>Ebro-Pyrenees and small-lake region (Ibones):</b> environmental reclamation of the area by removing the remains of obsolete plants, landscape restoration, and restoration of the native vegetation and fauna. [Endesa].

## North America

United States		Project
Flora, fauna, ecosystem, landscape		<b>Caney River hydro power plant (Kansas):</b> with the objective of promoting the preservation of fauna and pastures, a plan was implemented to preserve important ecological areas and encourage the search for new ways of protecting the environment in Kansas. [Enel Green power in cooperation with the National Fish and Wildlife Federation].
Fish fauna		<b>Lawrence hydro power plant:</b> the new pneumatic system for lowering the crest of the dam allows the fish to migrate. [ENA].
Fish fauna ( <i>Pomoxis nigromaculatus</i> , <i>Lepomis gibbosus</i> )		<b>Ware Shoals (South Carolina) hydro plant:</b> in agreement with the local communities, ENA decided to submerge withered Christmas trees in the lake reservoir to provide fish a refuge from predators, thus promoting reproduction and the growth of algae to create an ecosystem that favors the reproduction of insects and thus food. [ENA].



## Latin America

Argentina	
Project	
Birdlife	<b>Arroyito hydro power station:</b> the program of surveillance and control of people in the lake area located down stream from the plant was continued in 2010. These lakes constitute permanent habitats of migratory species of birds, and therefore are particularly important and deserve protection. [Endesa].
Brazil	
Project	
Flora	<b>Cachoeira hydro power plant:</b> project for reconstituting a riverine forest damaged by the farming and grazing activities in the areas surrounding the catchment area. The project regulates the flow of water, acts as a filter for sediment and nutrients, reduces landslides and erosion, and provides food and protection for aquatic fauna, birds, and mammals. In 2010 about 50,000 native species of trees and bushes were sown on a total of 30 hectares in the states of Goiás and Minas Gerais. With about 90,000 specimens of species characteristic of the local savannah, the area reforested in previous years amounts to 54 hectares. Studies are also carried out on wildlife and fish fauna in order to understand the dynamics of migration. [Endesa].
Chile	
Project	
Coruro ( <i>Spalacopus cyanus</i> ) Reptiles ( <i>Homonota gaudichaudii</i> , <i>Liolaemus lemniscatus</i> , <i>Philodryas chamissonis</i> , <i>Tachymenis chilensis</i> )	<b>Canela wind farm:</b> when work is carried out monitoring is done to check the effect of the activities on the population of coruros, endemic underground rodents that are at risk of extinction. In order to avoid killing specimens, in places where plant construction is in progress biologist experts get the coruro population to move out of the area by drilling holes in the rodents' tunnels and disturbing them with noise. [Endesa]. <b>Canela wind farm:</b> in areas where work is being carried out, reptiles are captured, identified, marked, and moved to safe places. A total of 1,228 specimens were captured and relocated. [Endesa].
EN	
Flora, fauna, ecosystem, landscape	<b>Chilean Patagonia:</b> study of the functioning of the aquatic ecosystem and assessment of the value of the biodiversity of ponds and lakes in the steppe. [Endesa]. <b>Cooperation between the San Ignacio del Huinay Foundation (created by Endesa) and the Catholic University in Valparaíso:</b> in this 35,000-hectare area located in the municipality of Hualahuié, which extends from the Comau fjord to Argentina, the Foundation dedicates itself to the preservation of the planet's rain forests and the study of marine invertebrates (49 new species classified). It is currently carrying out microbiological investigations on hot springs, surveys of flora and fauna, and limnological observations of previously unstudied water bodies. These activities have led to the identification of numerous new species and ecosystems in areas of particular interest. [Endesa].
Flora	<b>Atacama Desert:</b> a project for safeguarding Inca plantations as part of agreements with local communities aimed at creating new spaces for development than can improve the inhabitants' quality of life. [GDN Chile, a geothermy company]. <b>Pullinque power station:</b> maintenance of the reforestation of native species in progress for two years on a 100-hectare area. [ELA].
Flora, ecosystem, landscape	<b>Pullinque and Pilmaquen power plants:</b> 7 hectares acquired, for which environmental restoration is planned. [ELA].
Flora ( <i>Baccharis macraei</i> , <i>Chorizanthe paniculata</i> , <i>Erigeron fasciculatus</i> )	<b>Canela wind farm:</b> compensatory reforestation with native species (a total of 24,000 specimens) on about 50 hectares in the area of the wind farm. [Endesa].
Cactaceae	<b>Canela wind farm:</b> a project to move cacti from several areas of the power plant where their preservation is problematic to other areas owned by the company. [Endesa].
Flora	<b>Chilectra:</b> in accordance with the legislation in force, trees were planted on 1.19 hectares in the area surrounding the Andes substation. The project provides for planting covering species to mitigate the environmental impact. [Endesa].

Colombia	
Project	
Mangroves	<b>Cartagena thermal power station:</b> execution of action plans to restore biodiversity of the mangroves of the lagune in the area of the plant (landscape restoration and solutions for periods of drought). [Endesa].
Fish fauna	<b>Betania reservoir:</b> 360,000 specimens of native fish stocked in cooperation with local authorities and communities. [Endesa].
Flora, fauna, and ecosystems	<p><b>Betania reservoir:</b> a project for the preservation, characterization, and promotion of the ecosystems located on the left bank of the Magdalena River. Begun in 2009, the project provides for characterizing flora and fauna, making employees aware of the aims of the project, restoring the landscape, and creating a trail to allow the area to be enjoyed. [Endesa].</p> <p><b>Guavio hydro reservoir:</b> a program of conservation and sustainable production was begun to preserve the water resources, biodiversity, and environment of the area influenced by the reservoir. Monitoring of the birdlife and assessment of the quality of the habitats in order to determine the strategies and potential of their preservation. The local communities participated directly in the activity. [Centro Nacional de Investigaciones del Café and Endesa].</p>
Wetlands, mangroves, forests	<b>Codensa:</b> 20,000 native trees planted in the Bogotá River and the Tenjo, as a voluntarily undertaken measure to compensate the paper used by the company. [Endesa].
Flora	<p><b>Emgesa:</b> continuation of the forest management program, which provides vegetal material for the municipalities surrounding the Betania power plant.</p> <p>Ten hectares were reforested in the area around the Guavio reservoir and local native species were sown on land owned by the San Antonio, Tequendama, Betania, and Guaca Limonar plants (6,271 trees in all). [Endesa].</p>
Costa Rica	
Project	
Flora, ecosystem, landscape	<b>Don Pedro and Río Volcán hydro power plants:</b> financing of the activity of the NGO FUNDECOR to maintain 5,000 hectares of forest areas and thus ensure their preservation and prevent their alteration. Enel owns 6.5 hectares of this protected area adjacent to the two plants. [Enel Latin America].
Guatemala	
Project	
Birdlife	Maintenance of corridors for transmission lines on a total area of about 6 hectares. [Enel Latin America].
Flora, ecosystem, landscape	<b>Matanzas/San Isidro and El Canadá/Montecristo hydro power plants:</b> reforestation with <i>Pinus oocarpa</i> of 5 hectares in the area surrounding the power plants in which the forest is subject to heavy deforestation by the local population; protection of the ecosystem and the reservoirs of the two plants. [Enel Latin America].
Mexico	
Project	
Fish fauna	<b>El Gallo hydro power plant:</b> repopulation of the plant's reservoir in cooperation with the local fishermen and institutions. [Enel Latin America].
Panama	
Project	
Flora, fauna ecosystem, landscape	<p><b>Fortuna Forest Reserve:</b> management of 19,500 hectares of forest, a national protected area with notable animal (large mammals, birds, reptiles, etc.) and vegetal species. Surveillance and patrolling in the critical places as a measure to prevent damage and crimes against the flora and fauna. Information provided through conversations and pamphlets to the local communities, authorities, and representatives about the most important characteristics, as well as the prohibitions and national legislation on the management of the reserve's resources. Periodical measurement of the bathymetry to determine the level of silt accumulation in the reservoir. Promotion of research based on the monitoring of the biodiversity of the Fortuna site, with the involvement of nationally and internationally important institutes. Among other things, these activities have revealed the presence of species at risk of extinction, such as the jaguar. [Enel Latin America with the Smithsonian Tropical Research Institute and the National Conservancy Association].</p>

# The wood of St. Francis

*The wood of St. Francis* - Photo © Maja Galli

In 2010, International Biodiversity Year, Enel began numerous domestic and international cooperative projects with research centers, foundations, and networks of experts. The main activities took place in Europe (Slovakia, Bulgaria, France, and Spain) and in two Latin American countries, Costa Rica and Chile.

A very important project for the safeguard of biodiversity was "La Terra di San Francesco", which was undertaken by Enel and the FAI (**Fund for the Italian Environment**). The project provides for the restoration and reopening to the public of one of properties that represent Italian excellence: the Wood of St. Francis in

Assisi, part of the country's heritage, which was recently donated to the FAI. The FAI's objective is to restore and safeguard the Wood to preserve the original landscape. The project also provides for fixing the paths and restoring the old dry-stone walls in the olive grove and the thirteenth-century architectural complex.

In 2010 Enel contributed to the topographical and botanical survey of the Wood, planning, and the preliminary clean-up. This activity will continue in 2011, considering that the Wood of St. Francis is included in the celebrations that the FAI will dedicate to the 150th anniversary of Italian Unification.

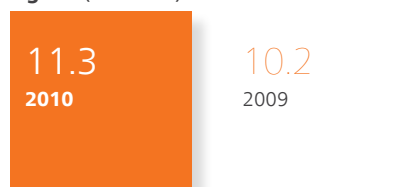
# Raw materials

## Efficiency in fuel consumption

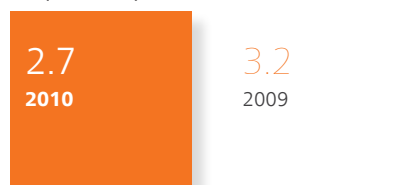
### Coal (millions t)



### Lignite (millions t)



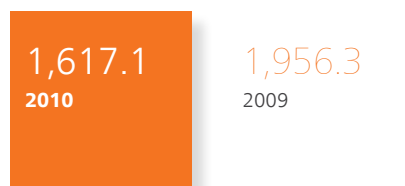
### Oil (millions t)



### Gas (billions m³)



### Gas oil (thousands t)



### Biomass and waste (thousands t)



## Efficiency in fuel consumption

The main raw materials or materials for energy production are used in thermal power plants, geothermal drilling, and in nuclear plants. The fuels are mostly of fossil origin and they are used mainly as a source of energy for thermoelectric production. The main ones are fuel oil, coal, lignite, and natural gas. The non-fossil fuels come mainly from biomass and waste (WDF).

The mix of fossil and non-fossil fuels changed by 0.1% in favor of the latter, because of both a decrease in fossil thermal production (about 3 TWh less than in 2009) and the slight increase in production from biomass (about 12 GWh more) and hydrogen (an increase of about 2 GWh).

Because it is costly, gas oil is used only exceptionally. It is used in power plants with simple-cycle gas turbines not connected to the natural-gas network, as an emergency fuel in other plants with gas turbines, in plants with diesel motors (which supply several smaller islands), in starting up steam thermal plants, in auxiliary boilers, and in emergency generating sets. Small quantities of gas oil also fuel machines used in geothermal drilling and the generating sets installed in most plants.

The trend of the fossil-fuel mix shows a shift to fuels with a **lower content of carbon, sulfur, and unburnt components**, which are responsible for the particulate in emissions. Specifically, there was an increase of about four percentage points in the share of natural gas, a decrease of about one percentage point in that of fuel oil and gas oil, and a decrease of two percentage points in the total share of coal and lignite.

The contribution of **non-fossil fuels** consists of waste (WDF), which issued in co-combustion with coal; solid biomass, used as either the main fuel or in co-combustion with coal; biodiesel, used in several gas turbines located on the smaller islands; biogas, used in several small plants with alternative motors located in Spain; and hydrogen, used in the combined-cycle Fusina plant in Italy. Geothermal fluid is the steam extracted from the earth through special wells, which is used for the production of geothermal energy when there are sufficient levels of pressure and temperature. When the thermodynamic characteristics of the fluid extracted are not compatible with geothermal electricity production, it can be used for other purposes, which in Enel's case are currently limited to the supply of heat,



mainly for heating greenhouses and buildings, but also as process heat in the food industry.

The increase in the consumption of geothermal steam (see the table in the Appendix) is due to the putting into operation of the Radicondoli 2 (16 MW of net efficient power) and Chiusdino (17 MW of net efficient power) plants in the municipalities of the same name in Siena province in Italy.

The energy source for nuclear thermal production is enriched natural uranium. Management of nuclear fuel in the power plant includes three stages:

- > procurement of fresh fuel
- > transportation and storage of the fresh fuel in the plant (dry in the reactor building or in pools), preparation of the reload, reloading, trials during startup, monitoring during operation, unloading from the reactor, and storage in the reactor pools before moving to the temporary-storage pools. Reloading is necessary when, after several years of use in the reactor, the fuel loses efficiency because of the reduced content of U235 entailed by fission
- > establishment of the service for moving the spent fuel to the temporary-storage pools – which can be either inside or outside the power plant – or to reprocessing. Moving it to temporary storage or reprocessing is necessary when the plant has been in operation for certain number of years in order to avoid saturating the storage capacity of the reactor pools.

## Other materials

In addition to fuels and other energy sources, a number of other materials are used in generating plants: electricity, resins, reagents (such as ammonia and lime), additives, etc. In choosing its expendables and raw materials, Enel is constantly committed to identifying materials characterized by a low environmental impact, for example in terms of their content of pollutants and toxic substances or how long it takes them to decompose in the environment. To this end, in many power plants in Italy biodegradable oils are used and polluting and toxic substances are replaced by alternative products.

Furthermore, whenever possible instead of purchasing expendables the Company uses alternative substances produced by recycling or treating other materials used in the production process. In 2010 about 3% of lubrication oils and about 59% of dielectric oils were recycled by decontaminating them from PCB or filtering them, while 1.3% of

the lime used to desulfur flue ash came from the process of softening water for industrial use. In 2010, moreover, about 0.5% of the ferric chloride and 0.7% of the sulfuric acid were replaced, respectively, by mud derived from the treatment of waste water and a by-product (brine) of the cycle of demineralization by osmosis used to produce demineralized water.

In addition to these measures, plants were overhauled whenever possible and various machinery parts were re-used. In wind technology, for example, this practice extends to most of the components. Finally, more than 56% of the paper purchased on the market for printing contains 75% of recycled fiber.

### Resources subject to recycling (%)

	2010	2009	2008
Limestone	1.3	1.1	-
Lubrication oil	3	1.1	-
Dielectric oil	59	11.5	17.8
Ferric chloride	0.5	-	-
Sulfuric acid	0.7	-	-
Printing paper	56	52.2	50.0

For more details on materials and the activities in which they are used, see the “Resources” section of the Environmental Report. On energy consumption and water withdrawals specifically, see the related sections on pages 175 and 183 of this chapter.

The diversity of the processes concerned, the multiple ways some expendables are used, the variety of plants, and the fact that often consumption is independent of operating parameters are some of the factors that make it difficult to interpret most performances at the aggregate level. Lime and ammonia are exceptions, because they are used to abate the particulate emitted by coal-fired power stations and thus are directly proportional to the production of these thermal plants.

# Waste and spills

## Waste produced

Total waste produced  
(thousand t)

11,482 2010

11,322 2009

Non-hazardous waste (thousand t)

11,407 2010

11,250 2009

Hazardous waste (thousand t)

75 2010

72 2009

Special waste is the residue of Enel's activities that are regulated by the laws in force in the different countries in which the Group operates. (In the European Union, the relevant legislative source is **directive 2008/98/EC**). For the classification of waste as non-hazardous and hazardous, Enel refers to the EU regulations.

The methods of disposing of or recycling waste differ according to the kind of waste produced. Some waste is recycled by specialized companies, as in the case of gypsum and combustion ash (which are recycled for use as building materials), oils and batteries (which are regenerated), and paper, plastic, glass, and wood (which undergo specific treatment and recycling processes).

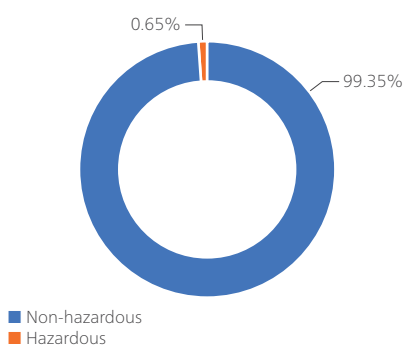
**In 2010, the total weight of the waste produced by the Group was about 11,500 tons, most of which was non-hazardous and consisted of mainly ash and gypsum (10,600 tons).**

The only waste products for which there is a significant relationship with the volume of activity are ash and gypsum from desulfurization relative to simple and combined thermoelectric production. For all other kinds of both hazardous and non-hazardous waste production is a function of many concurrent factors, which makes it impossible to estimate quantities and difficult to interpret performances.

The Group's policies aim to gradually increase the percentage of waste recycled regardless of its dangerousness. In 2010, the percentage of reclaimed waste was 23.4%, whereas the percentage of coal and lignite ash produced by the Enel Group amounted to about 21% (-7%) and that of desulfuration gypsum to about 37% (+18%).

The methods of disposing of or reclaiming waste vary according to the kind of material. As far as disposal is concerned, the most important kinds are non-recycled ash and gypsum, which are taken to special dumps, and biological waste, which is disposed of by incineration on land. Reclamation regards mainly materials that can be reused as fuel or as another means of producing energy (e.g., oil ash), that can be regenerated or reclaimed (such as solvents or waste from chemical laboratories or batteries, or that can be recycled (e.g., several kinds of metal and reclaimed ash and gypsum).

Total waste produced 2010 (%)



For further details on special waste see the “Special waste” section and the related performance indicators in the 2010 Environmental Report.

## Nuclear waste

Nuclear waste is classified in three categories according to how long it takes to decay and the level of its radioactivity. The decay time is measured by referring to its half-life, i.e. the time it takes for its radioactivity to halve. In other words, after a certain period of decay the level of radioactivity falls below natural radioactivity.

The three categories are:

1. **Low activity:** half-life on the order of 20-30 years (short-lived). In terms of volume, this waste constitutes about 90% of the total and has a low concentration of radioactivity. It consists of the waste connected with plant operation, mainly paper, rags, work tools, clothes filters, etc. and can be stored in a surface storage facility.
2. **Medium activity:** half-life on the order of 300 years (long-lived). It consists of components inside the reactor, pipes, and structural parts of the reactor itself, as well as products produced by the reprocessing of the fuel (fuel sheaths and structures).
3. **High activity:** half-life on the order of thousands of years. It consists of fission products and minor actinides from reprocessing or unprocessed spent fuel.

The management of radioactive waste varies according to their type:

- > Low- and medium-radioactivity waste is conditioned, i.e. treated by incorporating them in cement or other solid materials and placing them in special containers that can contain it intact for a long time. These containers are generally stored in surface facilities located in the power plants or suitable buildings, which are usually managed centrally at the national level.
- > Once it is spent, high-radioactivity fuel is usually stored in pools located the power plants for a period of time ranging from 5 to 10 years. After this period the fuel can be sent to reprocessing plants or stored in toto in dry storage facilities or in special pools before it is moved to its final, geological storage facility.

With regard to nuclear energy, Enel is committed to minimizing the production of waste in daily activities, as well as potential future waste produced by decommissioning (on which see the following section).

An examination of the total production of liquid and solid low- and medium-activity in the last five years shows a decreasing trend, which is the result of an important reduction program implemented in of the Group’s plants. The performance of high-activity waste is essentially connected with exhaustion of nuclear fuel and its subsequent unloading and transporting for re-processing.

For the quantitative performance details, see the tables in the Appendix.

For further information on the specific production of radioactive waste (per unit of nuclear electric energy produced in the year), see the “Radioactive waste from nuclear production” section of the 2010 Environmental Report.

## Decommissioning

In every country in which the Enel Group is active in the nuclear field, by law decommissioning and waste disposal are the exclusive responsibility of government organizations. According to the parameters established by the relevant national laws, Group companies are financially responsible for the costs of these activities, and in particular must ensure that no liability or cost falls on future generations by paying into special funds dedicated to decommissioning.

Based on a number of international experiences in the United States (e.g., Shippingport), Great Britain (Berkeley), etc., the costs of decommissioning nuclear power plants can be estimated for single plants reasonably accurately. Independent specialists provide cost estimates that are frequently updated so as to inform both the utilities and the fund managers. Decommissioning and the management of the related fund are generally coordinated by bodies supervised by the relevant government agencies. Furthermore, the nuclear companies concerned must maintain detailed dismantling plans, which are updated every five years. These plans take into account improvements achieved in decommissioning practices at the international level, as well as changes that occur in plant structures and national laws.

Enel is therefore fully informed with regard to the volume, classification, safe management, and disposal of the de-

commissioning waste that the Group is estimated to produce when its plants cease operating.

In **Italy**, all the activities and obligations regarding decommissioning and waste management – including those concerning past Italian nuclear activity – have been the responsibility of **Sogin SpA** since 2000, the year in which Enel's equity interest in Sogin was entirely assigned to the Finance Ministry, transforming it into a 100% government-owned company.

Enel operates nuclear plants in Spain and Slovakia, where decommissioning is regulated by national regulations and managed at the local level.

In **Slovakia**, as in every other country that has nuclear plants or has had them in the past, decommissioning is regulated by special laws, one issued in 1994 and its subsequent amendments, including number 238/2006. They establish the activities to consider in decommissioning and the method of financing and managing the dedicated fund.

The nuclear fund is an independent legal entity administered by the Ministry of the Economy and endowed with its own organizational structure, including a Board of Trustees, which is entrusted with providing an annual independent estimate of the amount of the fund.

Furthermore, on May 21, 2008 the government approved a strategy regarding how the decommissioning fund is to be covered, for both future costs and the existing shortfall.

Financing the fund is the responsibility of the utilities that manage the nuclear plants and thus of Slovenské elektrárne. Overall the fund is financed by obligatory contributions of the owners of the nuclear plants, fines imposed by the Slovak Republic's Nuclear Safety Authority according to special regulations, interest on deposits originating in financial transactions and held with the nuclear fund, and subsidies and contributions from the European Union's international fund to support the decommissioning of Bohunice (BIDFS). Decommissioning is managed by Javys, a 100%-government-owned company.

Decommissioning in Slovakia currently regards two plants: plant A1 and plant V1, both of which are on the site of Bohunice. The first is a small (143-MW) plant, which was in operation until the 1970s, while the second consists of the Bohunice 1 and 2 440-MW units, which were shut down definitively in 2006 and 2008. Three different alternatives for decommissioning Bohunice V1 are currently being ex-

amined. They will be assessed on the basis of their cost, technical feasibility, the radio-protection and health of workers and the general population, and the safeguard of the environment.

At the end of 2010 the total amount set aside in the Slovak national fund was 2,618 million euro (2,728 million euro as of December 31, 2009) with regard to plants V1 and V2 in Jasklavske Bohunice and EMO 1 and 2 in Mochovce, which includes 196 million euro (261 million euro as of December 31, 2009) in the fund for nuclear waste disposal, 1,571 million euro (1,604 million euro as of December 31, 2009) in the fund for the disposal of spent nuclear fuel, and 851 million euro (863 million euro as of December 31, 2009) in the fund for the dismantling of nuclear plants. The estimated timing of the financial disbursement for the costs takes into account of current applicable knowledge regarding environmental regulations and the operating time used to estimate the costs, as well as the problems connected with the very long period of time in which such costs could occur. The costs included in the funds were discounted using rates between 4.15% and 4.55%. Furthermore, the European Union instituted – as compensation for the closing of the Bohunice V1 power plant – an additional fund, the Bohunice International Decommissioning Support Fund (BIDSF), administered by the European Bank for Reconstruction and Development (EBRD) and managed by Javys and external consultants, which Javys has stated amounts to about 180 million euro.

In **Spain** the regulatory authority, the CSN (Consejo de Seguridad Nuclear), establishes the laws to apply and the Ministry of Industry, Tourism, and Commerce (MITYC) expresses a binding opinion. The laws that regulate the dismantling of nuclear plants are royal decrees 1836/1999, 1522/1984, and 1349/2003.

The company to which ownership of the site is transferred temporarily and will directly manage the dismantlement under royal decree n. 1349/03 and law n. 24/05 is a government-owned company, **ENRESA** (Empresa Nacional de Residuos Radiactivos, SA).

Every four years ENRESA prepares and sends to the Ministry of Industry, Tourism, and Commerce a proposal for a General Plan for Radioactive Waste (PGRR), which is then issued by the same ministry. The PGRR establishes strategies and actions for the management of radioactive waste, as well as for decommissioning and its related activities, including the financial estimates.



The fund is financed in a number of ways:

- > a supplement to the electricity rates, the amount of which is established annually by the MITYC (For example, in 2009 the supplement was 0.258% pursuant to royal decree 40/2009);
- > a supplement to the cost of generation, paid by the utilities in proportion to the energy produced by nuclear plants. The sum is also established annually by the MITYC. (For example, in 2009 it ranged between 0.316 and 0.373 c€/kWh pursuant to royal decree 40/2009);
- > billing other nuclear installations that will have to be decommissioned at the end of their life;
- > debiting companies that produce radioactive waste for other purposes, e.g. in the fields of medicine and industry.

These funds are administered by ENRESA under the supervision of the relevant government bodies.

As far as the Spanish decommissioning fund is concerned, the cumulative allocation at the end of 2010 amounted to 402 million euro (326 million euro as of December 31, 2009) regarding the costs that will be incurred when ENRESA decommissions the nuclear plants. The quantification of the costs is based on the standard contract between ENRESA and electricity companies approved by the Spanish Ministry of the Economy in September 2001 which regulates the process of dismantling and closing nuclear generating plants. The time frame covered corresponds to the 3-year period between the cessation of production and the transfer of the management of the plant to ENRESA (post-operational costs).

With regard to its equity interest in Flamanville 3 in France, instead, Enel's contribution to the decommissioning fund is established by the agreements signed with EdF and is proportional to the Enel's stake in the project for development of the EPR in Normandy (12.5%). This will be a single payment made when the nuclear operation of the plant, scheduled for 2014, begins.

**In 2010 the total allocation in the decommissioning funds regarding the different projects amounted to 3,020 million euro. During 2010 a total of 136 million euro was appropriated.**

## Spills during the production of electricity

During the activities carried out, spills into the environment of various kinds and sizes may occur. Such incidents are often concentrated in areas where frequent thefts of equipment occur to take valuable materials (e.g., copper) from it.

During 2010, oil spills occurred in Argentina, Chile, Colombia, Costa Rica, and Italy, in particular in distribution activities, amounting to a total of about 55 cubic meters. All the actions for making the areas safe and reclaiming them were carried out according to the corporate procedures provided for. Given the modest quantities spilled, the restoration of the areas is generally accomplished quickly by removing the oil and having any contaminated soil treated.

Spillage of ash (Genoa, Italy) and water and ash (Maritza, Bulgaria), as well as of chlorotic acid (Cartagena, Colombia) also occurred without damaging the environment.

For further details on the kinds of spills that occurred during 2010, see the table in the Appendix.

# Transportation and logistics

**The handling of fuel and its transportation to power stations is the most significant impact connected with the Group's logistic activity.**

The transportation of solid fuel (mainly coal, lignite, and biomass) takes place mainly on large ships or barges by sea or river and then by conveyor-belt systems that carry the fuel from ports to power plants. As well as by ships, biomass can be transported for several tens of kilometers on land by truck or train. The impact is usually greater for transportation by road and lower by waterway.

The impacts of handling and transportation are connected with the consumption of primary or electric energy and the emissions thus produced, and increase with the distance the fuel travels. Therefore, in order to minimize such impacts, the location of power plants is often determined according to the location of mines. In these cases transportation from the mine to the plant takes place on conveyor belts.

During the handling and storage phases of loading and unloading ships and barges, railroad cars, and trucks or inside power stations particulate (from both fuel and combustion products) may be dispersed. Such leaks are greatly attenuated by various solutions: humidification, closed coal bunkers, closed ash and gypsum storage facilities, and depressurization of the sealed containers used in transportation by conveyor belt. In particular, in 2010 work was started at the Brindisi (Italy) power plant to improve the infrastructure for unloading coal, while the process of obtaining authorization to construct a closed coal bunker was concluded. In any case, spills of coal into water do not cause problems for the ecosystem because it is an inert material.

Detailed information on the consumption of energy and the indirect emissions of CO<sub>2</sub> connected with fuel handling, the procurement of materials, and waste transportation can be found on pages 176 and 180.



The impact caused by methane <sup>(15)</sup> and oil supply pipelines, instead, is connected mainly with ecosystems. In effect, during both the construction and the subsequent maintenance of pipelines land and marine flora and fauna are damaged. For this reason, there have to be corridors near land pathways where the vegetation is



controlled so that pipelines can be maintained. Furthermore, inefficiencies in the transportation network can cause leaks. Specifically, gas leakage during transportation in pipelines is estimated to be about 0.65% a year.

(15) Methane pipelines are also used for transportation to end users.

**For further information on the impact of handling by Group personnel, as well as the impact of electricity transportation on biodiversity, see, respectively, pages 180, and 186.**





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Citizens of the world

# Communicating globally, acting locally



The complexity of the economic and geopolitical scenarios, the instability of global markets, the challenges of innovation, and the expanded access to information impose two major guiding principles of change on large energy players: internally, vision and adaptability, the sharing of the best experiences, and knowledge of stakeholder expectations; externally, the will to compete, to be competitive, and to assert themselves as authoritative and recognizable interlocutors.

In effect, the Enel Group's achievement of leadership in the energy industry necessarily depends on its reputation: a strong and recognizable brand, a responsible partnership with the local communities and areas that host power plants and other components of its business, authorita-

tiveness in its relations with the governments and authorities of the countries in which it does business, as well as in multilateral situations. A good reputation is based on a stable, continual, and integrated relationship with the different stakeholders, and in particular with society, based on trust and respect for shared values. This is a strategic relationship, considering that in the coming years energy companies will be increasingly close to consumers through smart grids and meters, electric cars, distributed generation, and other products and services that will bring energy closer and closer to end customers.

This is the background of Enel's commitment to an **open and transparent dialogue attentive to the needs of the communities in which it lives and works**. Think globally,



act locally. The word “glocal” sums up the way in which Enel constructs every day its relationship with its stakeholders, creating a network of relations distinctive of an energy multinational present in **40 countries on four continents**, which communicates and discusses with communities differing in culture, language, and social and economic situation.

namics, the legislative system, and procedures. Strengthening institutional relations takes teamwork among the Rome, Brussels, and Washington offices, as well as the use of new instruments: country analysis with a risk-based approach and bilateral advocacy to defend interests in the countries, with Enel and Endesa working in synergy to have more weight and voice in multilateral negotiations



The search for a language that can communicate effectively to local communities, while at the same time using a supra-national language, is also necessary in the light of the difficult global social and economic situation and the particular trends of the countries in which Enel operates. In effect, the global crisis has boosted protectionism and, in several cases, nationalistic policies. Self-government leanings are increasing, even in Europe, and flare-ups of ethnic pride are common in many countries. In this difficult situation, Enel has to consolidate its new image as a multinational and find common ground for dialogue with the institutions of the different countries in which it operates. At present, such dialogue is dialectic and often harsh. It requires deep knowledge of institutional and political dy-

and international organizations. The goal is to develop an international institutional network and enhancing geopolitical analysis and risk mapping in the different countries. Through careful analysis of the contexts in which it acts and a method for obtaining thorough knowledge about its stakeholders, **Enel has initiated a proactive and quantifiable relational model to optimize its community engagement**, centrally sharing several strategic guidelines and adapting to the different local situations. These innovative methods and communication instruments often require rethinking how we work from the point of view of **integration and multiculturalism**.

# In search of new languages

To have a positive and fruitful dialogue with stakeholders you have to adapt to the changes in languages and society. You have to be in tune with them on the new platforms where they move more and more and for longer and longer periods of time. There are now around two billion users ...

An integrated  
Strategy for  
effective  
stakeholder  
engagement





... – almost a third of the world’s inhabitants – who surf the Internet <sup>(1)</sup>. The younger generations, who are the consumers of tomorrow, use the Internet while they watch television and focus their attention on the information media. Consumers have become more demanding and selective. They exchange information and experiences online, a phenomenon that has become influential in their purchases and judgments. Interactivity and user experience are thus the decisive meta-languages for effective stakeholder engagement.

Enel has thus included the **new media** in a strategy of integrated communication through the design and construction of a new **uniform site system** in the countries where it is present, which will gradually include all the Group companies in a network that is completely integrated in terms of content and visual identity. Furthermore, the de-

velopment of **Enel Sharing**, a project initiated in 2009, aims to create pervasive communication parallel to that of the Enel sites through the **social media**. Enel intends to use the new media increasingly, especially the social networks, from an open- source-intelligence viewpoint as a dynamic platform for intercepting requests and rumors, but also needs and duties to constantly improve its corporate action.

(1) Source: Lab Forum 2010

# Relations with associations

**Enel was one of the first large Italian companies <sup>(2)</sup> to create a unit dedicated to the management of relations with associations representing interest groups.**

This approach has often enabled Enel to work in synergy with these stakeholder categories, both for direct support of the construction of large-scale industrial projects and to contribute to the process of growth and expertise to the benefit of the associations themselves, especially with regard to the great changes that have taken place in the energy industry in the last ten years. This activity has contributed to the **consolidation of CSR at Enel**, as well as enabling the latter to emerge in certain circles as best practice in Italy, to the point that it has become a benchmark for the other utilities.

Looking forward, Enel's system of relations with associations representing interest groups is focusing increasingly on the Company's current international aspect. In effect, the management of projects and consequent activities is tending more and more toward a "glocal" approach, which takes advantage of the opportunity of being a global actor to seize occasions for discussing at the local level with families of stakeholders who are often deeply attached to their local communities.

At the same time, Enel increasingly feels the need to further contextualize the relationship model itself in a precise geographical area, such as the European one, partly in consideration of the EU's policies and trends in the coming years. For this reason, especially in 2010, the Enel unit that handles relations with associations initiated a series of contacts with the European Commission, in particular with the Directorate General for Health and Consumers (DG-SANCO), aimed at disseminating these experiences and investigating the possibility of a fruitful exchange with both the other industry companies and EU organizations.

The goal is to share and extend consolidated activities that have become a distinctive component of Enel's actions regarding its stakeholders, such as the promotion of energy efficiency in end uses or **"conciliation" as a method of settling disputes that is alternative to the ordinary judicial system**, will be tried out in the European countries in which legislative and market conditions, as well as those of corporate organization, allow it.

Relations with associations representing interest groups have increased considerably in the last few years, partly be-



cause of Enel's growth at the international level. In 2010, a total of 1,490 meetings with such associations took place, with the number of issued discussed totaling 220.

In Italy, the interest groups most often met during 2010 were consumer associations, with the most discussed issue being conciliation. The procedure was introduced in Italy in 2006 for household customers in the regulated and free markets. (For further discussion of conciliation, see page 158.)

(2) Associations representing collective interests, such as industry associations, environmentalist organizations, etc.



# Agreeing on objectives and assessing impacts



Infrastructure development – both the construction of new plants and the extension of the transmission and distribution networks – requires the attainment of a difficult balance between the opportunities the new works create for growth and development, which in most cases are reflected in positive social and economic effects on local communities, and the inevitable negative effects on the environment surrounding the areas concerned and on the people who inhabit them.

In this context, it is a duty and a commitment for Enel to find the most transparent and proactive forms of discussion and consultation to ensure that such growth will be agreed on with the communities concerned and that the negative impacts are tackled and minimized with a com-

mon point of view. For this reason, during each phase of the authorization processes that precede all projects there is **open discussion** with the national and local institutions, the public, and all the stakeholders concerned.

Supporting the development of a thoroughgoing activity of information and communication on a particularly crucial subject like infrastructure investment is also the idea behind Enel's participation – as a contributing member and a member of the board – in the 2010 activities of **"Pimby", an Italian association that promotes discussion between the civil service and the citizenry** to facilitate infrastructure development in local areas.

The authorization process for the construction and renovation of plants and infrastructure provides for the car-

rying out of Environmental Impact Studies, as well as for studies for the issue of the Environmental Integrated Authorization, in accordance with the requirements and provisions of the law. Enel and Endesa systematically carry out such **environmental and social impact studies** and – to prevent, monitor, and mitigate social and environmental impacts of the works in operation – institute precise procedures and processes certified, whenever possible, by ISO 9001 (quality), OHSAS 18001 (health and safety), and ISO 14001 (environment).

In order to assess the environmental effectiveness of the proposed actions, Environmental Impact Studies always compare the possible alternatives and identify all the technical stratagems for reducing the foreseeable impacts. The results of the assessments may be free consulted by the **stakeholders** concerned. Enel informs the public in national and local daily newspapers of the availability and the period of time during which they may be consulted, while after such period is over the public may request the assessments directly from Enel.

In addition, after the authorization process is over Enel makes agreements with the local authorities and communities for carrying out technical actions to improve the pre-existing environment, which can act as **compensation** for the remaining impacts whenever the latter cannot be mitigated. In cases where the environmental damage cannot be quantified in monetary terms the compensations may take the form of carrying out environmental projects aimed at planting or restoration of natural elements as environmental benefits equivalent to the impacts induced. The situation varies greatly according to the activities (thermal, hydro, geothermal, or wind production, electricity distribution, gas distribution, etc.) and countries concerned.

When the plants are in operation the significant impact data are constantly monitored by **emissions monitoring systems and air-quality monitoring networks**, with procedures for collecting data that are agreed on with the local governments. The monitoring networks are often managed directly by the supervisory bodies concerned, bio-monitoring campaigns are carried out with the participation of the local governments, other information is continuously recorded, and the instruments are periodically calibrated to test their accuracy.

All the data are always made available or transmitted to the local supervisory authorities. The latter constantly watch out for potential sources of impact when the plants are in operation, with particular regard to discharges,

emissions, and waste. Community interests are always defended by this direct supervision and the actions of the civil service, spontaneous committees, and environmental associations.

Thanks to Enel's strong commitment to the correct and transparent management of the authorization processes and the subsequent phases of monitoring, its relations with local communities reflect high and reciprocal esteem. For this reason, Enel is frequently encouraged by the communities themselves to continue to invest in sites, rather than abandon them, where it is closing down business activities.

In a few cases, the construction of new generating plants may entail the **relocation** of residents to other areas. This has serious consequences for the people concerned, because it entails radical changes in terms of employment, social relations, in general of the family and social context. For this reason, in Enel's approach, the management of relocation cannot but involve the people affected and a careful assessment of the psychological and social problems foreseeable at both the individual and group level.

Compliance with the local legislation and regulations on the relocation of local people entailed by the construction of new plants and on the related compensation is also ensured throughout the Group by political consultations. During the stage of identifying the potential sites for the development of energy projects, in addition to environmental impact studies and the establishment of the related mitigation measures, studies are conducted on relevant economic, political, cultural, social, and demographic aspects in order to analyze and understand the elements that characterize the community. Among the elements that it is particularly important to analyze are the daily life of the communities in the zone of influence, the distribution of the population, the organizational forms, and the levels of employment and income.

These preliminary studies allow Enel to establish whether the conditions are favorable to the development of the project and provide the basis for a more informed **consultation of local stakeholders**. In effect, common management of problems, discussion, and proactive listening to the requests of the communities involved are crucial to overcoming dissent and misunderstandings. The goal is the reconciliation of Enel's interests with those of the communities, thus establishing the conditions for sustainable growth. Enel considers it essential to carry out a correct and transparent information campaign on the real necessity of constructing the implant and on the valid alterna-



tives for relocation, with complete information on the advantages and benefits connected with the displacement of the residents.

The only case of relocation in the entire Group, which was started in 2008 and was undertaken to ensure the safety of homes in the area, regards the Bocamina generating plant in Coronel, **Chile**. The relocation plan was implemented in two stages, during which a series of consultations took place, and involved a total of 367 families, 126 of which were relocated in 2010.

The project for the construction of the Neltume hydro plant was also started up in Chile. Two work groups were set up in the city Puerto Fuy-Neltume, with representatives of numerous groups and organizations, as well as the community in general. In addition to the signing of a protocol establishing that all the persons directly or indirectly affected by the construction of the new power plant will be compensated financially, the parties defined a series of procedures for strengthening relations based on cooperation and reciprocal respect.

## Events of 2010

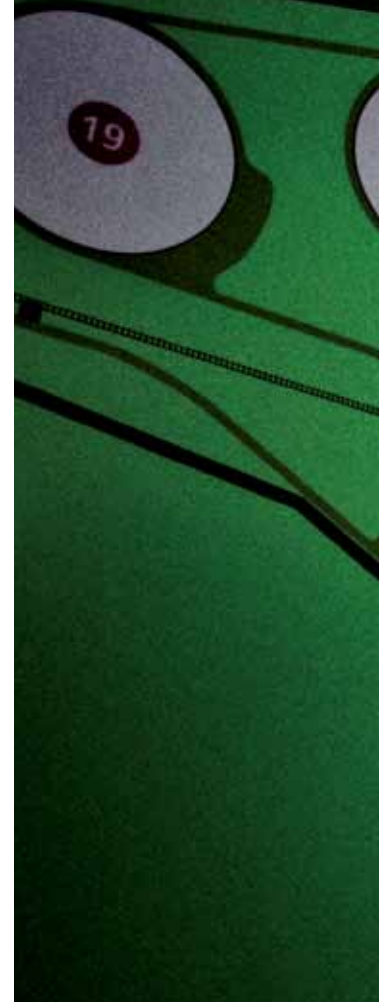
In Italy in 2010, the attentive and careful management of relations with stakeholders enabled Enel to increase approval of the project for the **conversion of the Porto Tolle power plant in Rovigo province to coal**, which led to the achievement of the corporate objectives and the conclusion of the authorization process. A protocol of understanding among Enel, the Regione Veneto, Rovigo Province, and the Municipality of Porto Tolle attributes particular importance to the subjects of safety, environmental protection (such as the mitigation of the power plant's impact on the Po Delta Park), and local entrepreneurship (with the institution of a Labor Negotiating Table with the Regione Veneto). After the Authorization Decree, the institution of an Environmental Observatory is provided for. As far as the project for the **construction of a re-gasification plant at Porto Empedocle, in Agrigento province**, is concerned, implementation of the protocol of understanding between Enel and the Regione Sicilia was initiated and discussions with the stakeholders involved were begun, as part of both the provisions of the Regione Sicilia's Authorization Decree and the concessions for the use of areas belonging to the port necessary for the construction of the plant. The availability of such areas allowed Enel to

begin work on the preparation of the construction site. The definitive completion of the authorization process was made possible in part thanks to the careful management of relations with the local stakeholders, which contributed to maintaining approval of the project by both the public and the local authorities in spite of the complexity of the situation.

Activities for the **Torrevaldaliga Nord power plant in Civitavecchia, in Rome province**, which has been in operation since 2009, were focused on the governance of the mega-community to maintain approval and check compliance with the agreements entered into with government agencies and local communities, such as the Framework Agreement with the Regione Lazio and agreements with the municipalities of the area. There were a number of meetings with representatives of local communities to discuss activities regarding the provisions of both the Authorization Decree and the aforesaid agreements.

Much attention was also dedicated to listening to and discussing with the different stakeholders to monitor the degree of acceptance and agreement with the public on the subject of nuclear energy. Specifically, the Company initiated programs of information and proactive attention aimed at different stakeholders and targets at both the national and local levels. There were a number of media initiatives, workshops, and round tables, with the cooperation of the Italian Nuclear Forum, the Nimby Forum, Enea's periodical workshops, and the information campaigns of the Italian Nuclear Association and Confindustria.

In the other countries in which the Group has operations, particular attention should be dedicated to the process initiated to **renovate the Mochovce power plant in Slovakia**. In April 2010, the Slovakian Ministry of the Environment terminated the EIA (Environmental Impact Assessment) process for the construction of units 3 and 4 of the plant. Two independent committees were set up, both of which consist of representatives and leaders of the communities in the vicinity of the nuclear power plant, with the objective of facilitating the exchange of information on a broad range of questions. The committees meet regularly to discuss issues connected with the development of the project and all aspects regarding the environment, as well as the operation and safety of the plant. Furthermore, the construction of a new center for visitors and a training center in Mochovce to provide better information to the public are planned. The construction of the center will begin in March or April 2011 and should be completed by the end of 2012.



At **Galati, Romania**, on the other hand, the local community was consulted in December 2010 about the construction of a generating plant fired by clean coal.

In the **United States**, Enel Green Power used the “energy for local development” method, which provides for the involvement of communities from the first stages in the development of projects regarding the construction or modernization of plants. In the case of the project in Jewel Valley, which is in the vicinity of Native American reservations, Enel Green Power created permanent channels of communication of the progress of the project, including a dedicated website. As part of the project of modernizing the Lowell hydro plant, the same company supported several cultural and sports initiatives.

In **Guatemala**, Enel Green Power started up in 2009 the **project for the construction of the 90-megawatt Palo Viejo hydro plant**, which has not necessitated any relocation of people.

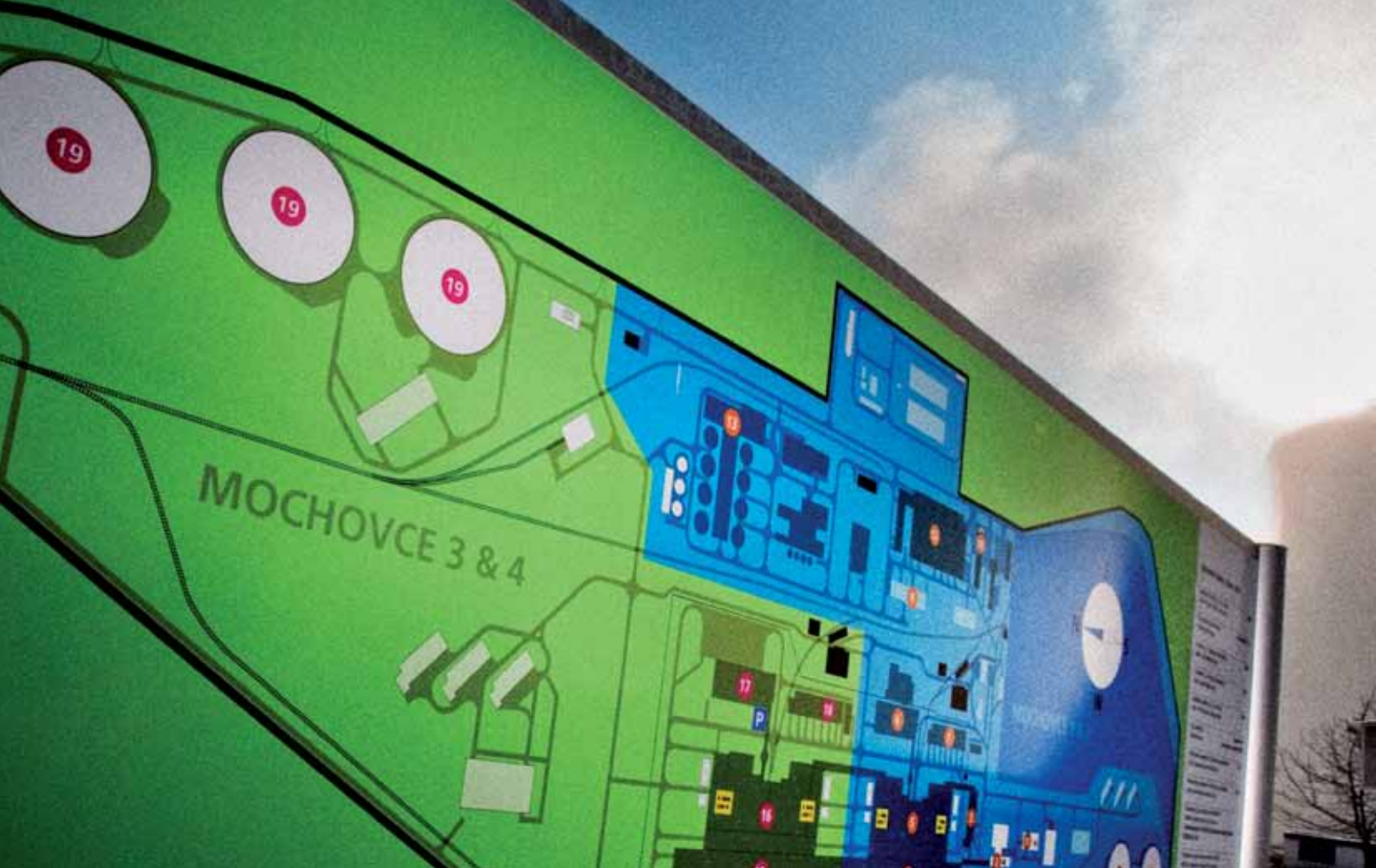
The project was presented to the government and the local communities, and was authorized by the ministries and authorities concerned after a careful assessment of its environmental impact.

Guatemala needs energy to sustain its economic and social development. The natural power of water is a source

of renewable, clean, and safe energy that reduces the country’s dependence on imported fossil fuels, as well as the emissions of carbon dioxide and all other pollutants. Furthermore, the Palo Viejo power plant is the “run of river” kind, which does not entail the construction of an artificial reservoir, the displacement of people, or the occupation of large areas. Once the water has gone through the turbines, it flows back into the river unpolluted and without a drop being lost.

As is its practice, Enel has been engaged in a fruitful dialogue with all the communities concerned, which has led to the establishment of a series of measures to compensate them for the inconvenience caused by the construction of the plant.

As part of its involvement of local communities, in 2008 Enel signed a twenty-year cooperation agreement with the adjacent municipality of San Juan Cotzal, in the Guatemalan department of El Quiché, which establishes the financing of projects for local development (water and street infrastructure, contributions to the municipality’s expenses) and for social purposes (schools, public utility services, programs supporting education, etc.). Now the same community is protesting against the hydroelectric projects in the region. Endesa approved the project for the new El Quimbo hy-



dro power plant in Colombia in October 2010. An information and participation program was developed in each of the twenty-one villages in the area concerned involved in the project. One element of this program was the development of an environmental management plan approved by the Ministry of the Environment.

Together with the Chilean company Colbún, in Chile Endesa is participating in the **HidroAysén** hydro plant project, which will be carried out according to the highest environmental standards and taking into consideration the impacts on the local inhabitants.

The HidroAysén hydro project answers the energy requirements of the country, which has an enormous hydroelectric potential, but still depends on imported fossil raw materials for the production of 70% of its electricity. HidroAysén will satisfy part of the forecast increase in the demand for energy by injecting into the system a large quantity of clean, safe, renewable, and efficient energy, in addition to contributing to the development of the economy and employment in the Aysén region and the sustainable future of the entire country.

From the beginning, in effect, a stream of voluntary information has been produced for the communities involved, aimed at recording expectations and concerns regard-

ing the project. Enel has used a number of communication instruments, such as dedicated web pages, publicity campaigns, and ones dedicated to the dissemination of information locally and has developed the “Casas abiertas permanentes” (“permanent open houses”) project, at both Coihaique and Cochrane in the Aysén region. Furthermore, it has held door-to-door information campaign in all the places that are within the hydro project’s zone of influence and, completely voluntarily, has created “Anticipated Citizen Participation” processes not required by environmental legislation. This has allowed all the necessary mitigation measures to be included in the planning stages, minimizing environmental and social impacts through, among other things, projects to promote the local culture, protect the flora and fauna, and make the most of the natural attractions of the area for tourism. A campaign in progress called “Patagonia sin represas” is being carried out by several local associations that raise doubts about the benefits of the project for Chile and the Aysén region. The bishop of Aysén, Luis Infanti, spoke during the shareholders’ meeting on April 29, 2010, expressing the concerns of the associations participating in the campaign.

(3) Source: CNE, National Energy Commission (Chile).



# Ensuring the safety of communities



Enel is deeply committed to protecting the health and safety not only of its workers and those of its contractors, but also of the people who live in contact with the Group's operations. In effect, being a sustainable company means ensuring the safety of the communities that live from day to day in the vicinity of the corporate infrastructure.

Accidents involving third parties are constantly monitored and analyzed in order to improve the safety systems of the infrastructure. In 2010, third parties suffered, respectively, 44 and 54 serious and fatal injuries, almost all of which were caused by either electricity (80% of the total) or automobile accidents involving Enel's infrastructure (14%). With regard to the electricity-related injuries, it should be noted that many of them occur during construction work in the vicinity of power lines (28%) or as a consequence of attempts to steal electricity (26%).

With preventing these kinds of accidents as one of its objectives and in cooperation with industry associations, the Group created various communication materials to raise the awareness of fishermen and the workers of its





contractors (leaflets and guides for the latter and leaflets, posters, and interactive info kiosks for the former).

The **ISO 14001** guidelines, supplemented by the **OHSAS 18001**, allow the Group to adopt procedures aimed at reducing the risk of fires, leaks of gas and chemical substances, etc. Furthermore, in all the countries in which it operates the constant maintenance of its plants enables it to reduce service interruptions that can have a negative effect on the health and safety of the entire community. Exposure to magnetic fields is constantly monitored. Finally, campaigns informing the public how to use electricity safely are also conducted.

With regard to the widespread concern about magnetic fields, in **Italy** Enel Distribuzione created guidelines on the

calculation of the first approximation distance to simplify and harmonize the approach to the calculation of the safe distance from electric lines and substations. The Company applies and disseminates these guidelines, which can be used by both private individuals when building new settlements and supervisory bodies when checking them. Furthermore, the "Interpretive/supplementary Provisions" of the Decrees of May 29, 2008 ("Approval of the procedures for measuring and assessing magnetic induction" and "Approval of the method of calculation for determining of distances from electric power lines") – which were established through cooperation among Enel, other operators of power lines and substations, and the ISPRA-ARPA inter-agency system – were sent to the Environment Min-

istry and published on the website of the Advanced Institute for Environmental Protection and Research. Enel also performed in 2010 a number of simulations with specific calculation software to estimate the magnetic field during the authorization process regarding new electric lines and substations, as well as upon request by the civil service and private entities for neutral opinions

As far as the other countries are concerned, the Group adopts specific guidelines to align itself with the standards and regulations in force. In **Chile**, even though there is no legislation in this regard, Chilectra acquired equipment for measuring possible interferences in transmission systems. The results of this analysis were very positive, because they were significantly lower than the values specified by the standards of the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

In **Colombia**, in 2010 local communities expressed their concern about the effects of electromagnetic fields on health and noise levels. Checks were then performed, which showed that the levels of emissions and noise were below the limits established by the law.

There were no third-party accidents or deaths in Russia, Slovakia, or Romania, and Enel is not involved in any public proceedings connected with the health or safety of customers or people who benefit from the services provided by Enel.

To ensure the safety of communities even when unforeseeable **emergencies** and accidents occur, the Group has implemented special plans designed to deal with the emergency when it first arises in order to limit its effects and quickly restore normal operating conditions. In this way, it is possible to quickly plan the actions necessary to protect all the people involved – Enel employees, those of contractors, and the community in general – as well as infrastructure and other property. In all the places where Enel operates, whether in cities or worksites, estimates have been made of accident risk and according to the scenario thus produced an adequate emergency plan has been established. This plan includes:

- > a classification of the causes of the probable events
- > what the people on the spot must do
- > the names and roles of the members of the emergency team
- > the numbers to phone for around-the-clock emergency services
- > instructions for requesting outside help
- > procedures for information and training courses for all personnel.

The Group power plants located in different parts of the world have different emergency plans according to the kind of plant and the risks to which it is exposed, be they technical or due to natural causes. In **Slovakia**, there are emergency plans for serious accidents: radiation in the nuclear power plants and water pollution by chemical and biological substances because of natural catastrophes or terrorist attacks. Regular drills – about 12 a year – are held in the nuclear plants (Bohunice NPP, Mochovce NPP), involving all the employees there, as well as contractors. At the thermal power plants (Nováky TPP, Vojany TPP) 5 or 6 emergency simulations a year are carried out, in which the Operation and Maintenance Departments, as well as firefighters, are involved.

In **Romania** actions in case of emergencies are managed according to procedure P-10-01, "Preparation for emergencies and response capacity". In **Bulgaria** there are different emergency plans according to different situations, such as fires, toxic emissions, and the threat of terrorist actions. The emergency plans were established in accordance with the requirements of the Disaster Protection Plan, Order n. 9 on the technical operation of power plants and networks, as well as the OHSAS 18001 regulation.

With the objective of unifying the process of identifying, assessing, and adopting the measures necessary for the management of emergency situations, Group guidelines on this question are in the process of being issued. To this end, Enel has established the minimum information that every emergency plan must contain and the roles involved during the process of monitoring and managing an emergency situation. In 2011, this procedure will be adopted and applied by all the Divisions and companies of the Group.

# Investing in countries and local communities



**The LBG (London Benchmarking Group) method**, devised by a work group in which more than 100 international companies participate, is a measurement model that enables a company's contributions to the communities in which it is present to be determined and classified in a clear and consistent way. In particular, according to the LBG standard, expenditure on contributions to communities can be classified in the following categories:

**1. Charitable donations:** These are pro bono expenses without any obligations for the recipients except to spend the donation for set purposes. The contribution is assigned to non-profit associations whose legal status does not allow them to bill for their services. For Enel, this item includes all donations, including those

contributed to philanthropic and charitable activities through Enel Cuore Onlus, monetary and in-kind.

- 2. Community investment:** Enel's plants are not isolated, but are part of a social and economic context, i.e., places where people work and where the Company can contribute to the well-being of the citizens, for example by financing cultural and sports events.
- 3. Commercial initiatives with a social impact:** Enel sponsors social, environmental, and sports events for art and entertainment. When such events take place, those who benefit from the sponsorship publicize the Company's products, its brand, or its business. These initiatives include, for example, the cultural and sports events financed, with visibility for the Enel brand.

**4. Socially sustainable business initiatives:** Light represents Enel's core business and can also be understood as promoting cultural and economic development through the lighting of works of art and landscapes. An important initiative to remember in this regard is the lighting of historic buildings.

## Promoting social development

The companies of the Enel Group play an important role as drivers of growth and social and economic development in the countries and local communities in which they operate. **Rural electrification** in particular has very important part in social policies, because it gives rural communities and the most disadvantaged people, especially in Latin America, access to electricity.

The result of these efforts has led to a considerable reduction in the percentage of the population in the Group's distribution area that is not served, particularly in **Argentina**, where in 2010 the service was extended to 100% of the population. There were also significant improvements in **Chile**, where the number of people not served decreased from 4,800 to 160 (amounting to about 0.001% of the population). <sup>(4)</sup>

In 2010 Endesa's Latin American companies allocated 4.66 million euro to this kind of projects, extending the service to more than 18,000 households in Brazil, Peru, and Colombia. In **Peru**, for example, Edelnor brings electricity definitively and provisionally to thousands of poor families, the cost of which is incurred entirely by the company. Customers are required only to pay for their connection to the network. In 2010 18,340 more housing lots were reached.

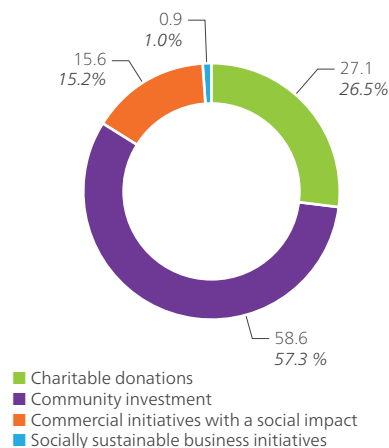
These rural electrification projects demonstrate Endesa's concern for the quality and safety of the electricity supply for all its customers and include not only plans for extending the electricity supply, but also work to improve the lines of the electric network and resolve the problems regarding illicit behavior (such as the theft of electricity or failure to pay bills), especially in the urban areas with a high degree of social marginalization. This stimulates a social and cultural change that promotes the legitimate inclusion of the new customers in the electricity network.

In this process cooperation with national and local institutions is also crucial. Endesa's distribution company in **Colombia**, Codensa, for example, signed an agreement on rural electrification with the EEC electricity company and the Department of Cundinamarca to satisfy the basic needs of the villages and rural areas of the catchment area that do not have electricity. Specifically, the agreement will bring electricity to 282 customers in 4 municipalities through work carried out in 2011.

In **Argentina** a framework agreement was signed in 2009 by the national government, the province of Buenos Aires, and the companies with the objective of financing the electricity consumption of cities with social emergencies in the Buenos Aires metropolitan area. In **Brazil**, Enel participates in the federal government's "Light for Everyone" program, which promotes the electrification of several rural communities, providing the people there with access to the advantages of electricity. The program provides for connecting the homes to

**Enel's contribution to the communities in which it operates, amounting in 2010 to 102.3 million euro, is summarized in the following chart:**

**Contributions to communities 2010 - LBG method\* - (mil euro)**



\* For 2009 includes Italy, Endesa, Slovakia, and Bulgaria; for 2008 only Italy



the electric grid free of charge thanks to the financial participation of the national government, regional governments, and the distribution company. The national government will pay 70% of the cost (15% as a contribution and the remaining 55% as a loan), the regional governments 15% (as a contribution), and the distribution company 15% to cover the indirect costs (its own workforce and transportation).

In addition to extending the electricity service, Enel also can contribute to the quality of life and social development of the communities in which it operates through initiatives regarding education and social inclusion. In **Guatemala**, for example, Enel built a high school, the “Instituto San Felipe Chenla”, for the local indigenous people who live in the vicinity of the future Palo Viejo hydro power plant, as well as contributing to the renovation of schools in Vichibala, Santa Barbara, Santa Cruz, San Rafael Chilasco, and Matanzas.

The case of the province of Nuevo Pachacútec in **Peru** is emblematic for the promotion of social development in an area where the educational level is very low, with a very large percentage of children who work instead of studying and a high risk of social exclusion. In April 2006, a strategic alliance between Edelnor and the “Desarrollo Integral de Nuevo Pachacútec” Foundation led to the creation of the Instituto Superior Tecnológico Pachacútec, which trains technicians specialized in laying electric cables with the aim of employment at Edelnor or in activities connected with it. The institute’s “electricity technician” diploma is recognized by the Peruvian Ministry of Education. At the end of 2010, 150 students were about to earn the title and 55 were involved in internships at companies in the electricity industry. Edelnor is the senior partner in the project and not only finances the institute’s activities, but also contributes to making electricity one of the main pillars of community development, creating allied micro-businesses that participate in the project through the constructions of the school. The institute is part of the “Universidad laboral de Pachacútec” project, an example in which public and private cooperate and join forces with the local population to create development for the less well-to-do.

Another important role that the Group companies can play in the communities in which they operate is to promote behavior that is responsible from the environmental point of view, combined with projects for local development and economic support. In **Costa Rica**, for example, a

program was developed for the payment of environmental services managed by FUNDECOR, an NGO engaged in the safeguard of the country’s biodiversity. Within the framework of the environmental program of the FONAFIFO (National Fund for Forestry Financing) established by the Ministry of the Environment, Energy, and Telecommunications, FUNDECOR acts as an intermediary, identifying the owners of land who could qualify and including them in the ministerial program. The owners of woodlands are encouraged to conserve their land properly by the payment of an incentive. If they decide to contribute to the operating plan for the safeguard of wooded areas and undertake to participate in the program they voluntarily place their land under the Forestry Code. In the last ten years, Enel Green Power has played a key role in paying for the services provided for this environmental program, paying 12 dollars per hectare to the owners of the 5,000 hectares of forest in the areas of the hydrographic basins of the Don Pedro and Rio Volcán rivers.

These forests are essential for the natural regulation of the basin water, which in turn is necessary to make the power stations effective and efficient.

A very significant initiative in **Brazil** is the distribution company Coelce’s **Ecoelce**, a corporate- social-responsibility project that directly benefits the participants through discounts on their electricity bills for customers who leave material at collection points for recycling. The Ecoelce program uses financial incentives to encourage the collection and recycling of waste, thus summarizing the three aspects – social, economic, and environmental – of sustainability. The program has been implemented throughout the state of Ceará and currently has 55 collection points, 33 fixed ones and 22 mobile ones mainly for communities in the hinterland. About 70 communities and 20 municipalities are involved. Since its creation in 2007, Ecoelce has recycled more than 10,000 tons of waste and has benefitted more than 300,000 families through more than 420,000 euro of discounts on their bills. An additional benefit for these communities consists in the 250 jobs directly created by the project, as well as the equal number indirectly created in the Brazilian recycling industry. The project has been extended to the other Brazilian distribution company, Ampla, and is being started up in Chile at Chilectra. Another project that is making a decisive contribution to community development and represents an important value in terms of human experience – including that of

the people who participate actively in it – is **corporate volunteerism**. In **Spain**, **1,900 employees** currently participate in “**Solidarios**” at Endesa. Specific programs exist in every Latin American country. In **Chile**, for example, after the earthquake that struck the country on February 27, 2010, 1,390 employees worked on the reconstruction and restoration of the electricity service in cooperation with Endesa personnel from Argentina, Brazil, Colombia, and Peru. In addition, 22 tons of food were donated and sent to Coronel, as well as 800,000 euro to alleviate the crisis, while 10 million dollars were allocated for the reconstruction of the country after the catastrophe. In **Slovakia**, two corporate volunteerism projects were launched in 2010: “Our City” (to support the communities in the areas where Enel’s plants are located) and “Clean Mountains” (to ensure the cleanliness of the tourist trails of the High Tatra mountains).

In **Panama**, **Enel Fortuna** recognizes the importance of concern for local communities. For this reason, the employees of the hydro power plant themselves are involved in a number of social, cultural, and sports initiatives and activities. The management of relations with communities is focused on the following aspects:

1. promoting community-inspired initiatives when seeking ways to satisfy their main needs;
2. respecting local areas, maintaining permanent and constructive relationships with their communities, administrative authorities, and volunteer organizations;
3. boosting volunteerism.

To achieve these objectives, in January 2001 Fortuna created its **Social Management Committee**, which is entrusted with planning, implementing, coordinating, and monitoring social-welfare activities in local communities, as well as encouraging employees to participate in such activities. The Social Management Committee seeks alternatives to provide the communities with instruments for acting autonomously from the point of view of the environmental, economic, and social sustainability of development.

Enel’s employees in **Bulgaria** participate every year in volunteer initiatives. In the spring of 2010 the first “Volunteerism Day” was held, which involved Enel employees and their families in planting 20 trees at the center for mental disabilities and in cleaning up the park of Lake Zagorka near Stara Zagora.

(4) Source: CNE, National Energy Commission (Chile).

## Disseminating an energy culture

In 2010 Enel carried out many initiatives in the countries and communities in which it is present to enable people to get to know the world of energy.

The promotion of dialogue and scientific discussion continues to be at the center of the activities supported by the Company with **Oriental**, a series of encounters to think about several strategic issues of the international context, and **Oxygen**, Enel’s magazine dedicated to the popularization of science on the questions of energy, innovation, and the environment. Again in 2010 the publication was faithful to its mission to promote “science for everyone”, with a multidisciplinary approach ranging from the most everyday aspects of reality to the most advanced frontiers of research.

2010 also saw the second edition of **Incredible Enel**, a traveling village dedicated to energy, which continued its tour of Italy, involving ten more cities and a total of almost **85,000 visitors**. The village covers 800 m<sup>2</sup> designed to tell about itself and about energy in a novel way, through interactive exhibits, games, laboratories, scientific experiments, events, lectures, discussions, and even a musical about energy. The aim is to answer the questions and satisfy the curiosity of the public at large on complex issues such as the return to nuclear power, the abatement of CO<sub>2</sub> emissions, energy conservation, and the latest advances in the field of research and technological innovation.

As far as training is concerned, cooperation with the Osservatorio Permanente Giovanni Editori and the IULM, Tor Vergata, LUISS Universities continued in the organization of master’s courses, classes, ad hoc research programs, and recruiting. Also as **part of university preparation**, and in cooperation with five Italian universities, in 2010 Enel began to fund several scholarships and degree bonuses for studies in energy or nuclear engineering.

With the objective of familiarizing people not only with the culture of energy, but also power plants and energy infrastructure as physical entities, Enel repeated in 2010 the **Open Plants** project – which began in Italy and currently takes place in many countries – thanks to which production plants open their doors to the public and organize a large number of cultural, musical, and sports events. Again in 2010 the aim was to put the infrastructure and technology constituted by the power stations to use and

thus integrate the plants with the local communities by involving the latter in the life of the former. About 100 power stations hosted numerous entertainment and educational initiatives – from concerts and art exhibitions to sports events and tastings of local products – for their local communities in Italy, Slovakia, Russia, and the United States, attracting about **120,000 people** to spend an unusual day in the production plants.

Furthermore, Enel's power stations throughout the world are always open for visits by students from schools in the vicinity of the power plants, with the aim of explaining to them how the plants work, as well as for visits for scientific and academic purposes, to share technologies and best practices. During 2010, for example, Enel Green Power hosted numerous visits by groups from schools at its wind farms and hydro power plants at Thrash, Litho, and Glafkos in Greece and Bulgaria. The students had the opportunity to discover the world of renewable energy. At its power plants in Russia, Enel put at the disposal of the local communities veritable "historical museums" of electricity, which relate the history of the development of the industry in the country and in the region, as well as the history of the construction and development of the power plants. At the Bohunice and Mochovce nuclear power plants in Slovakia there are two information centers where external guests can learn, or learn more, about nuclear technologies and how the plants work.

To celebrate World Environment Day on June 8, 2010 and as part of International Biodiversity Year, in Bulgaria Enel organized a seminar dedicated to biodiversity for students of the vocational schools in Galabovo. Experts on the subject were invited on this occasion to present the issues of biodiversity to the students and explain to them the initiatives carried out by Enel to protect it.

Concern for the environment is also the theme of **Nature and the Environment**, a program created to develop projects for the protection and enhancement of the environment, and in particular the areas adjacent to Enel's power plants throughout the world by promoting sports and recreational activities – often organized directly inside the plants – cultural itineraries, and nature paths. In 2010, more than **50,000 people** in Italy, France, Greece, and the United States participated in the different initiatives organized as part of this project.

In Brazil, a lot of attention was dedicated in 2010 to the promotion of the rational and safe use of energy. Ampla

and Coelce launched an extensive corporate-social-responsibility program **Comprehensive Awareness**, consisting of 11 different projects. In the "Ampla Consciousness on Wheels" project, for example, a trailer truck drove around providing information on the pathways of energy from production to distribution through games, audiovisual materials, recreational activities, and shows. Participants listened to lectures on fuel efficiency, the environment, and safety. In 2010, the initiatives attracted about **38,000 people** in 30 communities in the Ampla's concession area. Coelce's educational programs, such as "Coelce in Neighborhoods", focused on the safe use of energy and on the precautions to adopt in the vicinity of electrical infrastructure. In 2010, for example, kids were made aware of the risks involved in flying kites near power lines.

In Argentina educational programs on the efficient use of energy are carried out for school children. Edesur has developed a program, "Power Trip", which transmits to primary- and secondary-school students basic knowledge about electricity (such as how distribution works from the source to customers' homes) and the basic concepts of energy efficiency and safety.

In the field of renewable energy, in 2010 Enel Green Power confirmed its commitment to promoting and enhancing the use of renewable energy sources for the production of electricity by launching the **Green Embassy** project. The first stage of the project was completed in Brazil with the installation of photovoltaic panels on the roof of the Italian embassy, thus making it not only self-sufficient, but also capable of injecting electricity into the national grid. Pursuing the same objective, Enel Green Power installed photovoltaic panels on the roof of the official seat of the meeting of the United Nations on Climate Change (COP16) in Cancun, Mexico.

# Educating the younger generations about energy

Enel continues its commitment to the younger generations and the world of education...

The numbers  
of PlayEnergy

11 countries

more than  
8,600 schools

about  
480,000 students

...with PlayEnergy, the education-through-play project for schools whose objective is to disseminate a responsible energy culture among young people, starting with knowledge of the sources and plants all the way to its distribution to households and the correct ways of using it. In 2010, the seventh edition consolidated its international aspect with the presence of 11 of the countries in which the Group is present: Italy, Slovakia, Romania, Bulgaria, Russia, Guatemala, Chile, Costa Rica, Panama, Brazil, and the United States.

In the past year more than 8,600 schools and almost 480,000 students were involved, while 69,000 youngsters registered on the website and more than 33,000 visited Enel's plants. Confirming a success that is repeated every year, more than 120,000 students participated in the final stage of the competition. The projects they presented contained numerous original ideas and efficient solutions





for improving everyday life by protecting the environment from the perspective of integration and multiculturalism. **We are Energy**, the competition that involves the **children of Enel employees** also continued as part of the projects dedicated to the younger generations. Entitled Planet Calls to Action, the sixth edition attracted **3,400 kids** from 7 to 18 years old from 21 countries on the subject of the environment and sustainability, encouraging them to think and propose their own ideas for saving the planet, including through an international web community. Endesa also cooperates intensely with the world of education through programs addressed to all age groups. In **Spain**, **Endesa Educa** increases students' awareness of rationalization and greater efficiency in the use of energy by developing educational activities connected with energy resources. In 2010 the program involved **16,249 children and youngsters** with more than 600 activities.

In **Argentina**, for the fifth year in a row Edesur developed **El viaje de la Energía**, an educational program for disseminating basic knowledge about how electricity works and the process of distributing energy all the way to household, including the promotion of its safe and efficient use. 805 public and private schools participated in it, thanks to the support of 2,461 teachers.

Finally, in **Colombia** Codensa organized for the second year the traveling exhibition **Paseo de la Electricidad Itinerante**, whose purpose is to teach very young children about the process of transforming electricity into an interactive play mode. More than 21,000 children visited the exhibition, which traveled to the 37 municipalities of the Cundinamarca region.

# Supporting local initiatives

**Enel sponsors numerous initiatives promoting culture, art, music, and sports at the national, regional, and local level in all the countries in which the Group has operations.**

## Art

In 2010 the Group confirmed its commitment to modern art as an instrument for understanding the world in which we live. For its fourth edition, the art project **Contemporary Enel** chose the formula of an award. In effect, a prestigious jury chose the winning project among those presented by seven internationally recognized contemporary artists. Furthermore, for the fifth event in the **Enel Ten Great Exhibitions** series, the Galleria Borghese in Rome hosted the “Cranach – The Other Renaissance” exhibition. For the first time in Italy, about 60 works of the greatest representative of German Renaissance painting were juxtaposed with several of the Galleria’s most significant paintings and others expressly chosen from international collections so that artist’s peculiarities and language could be fully appreciated.

Enel continued to cooperate with the **Complesso Monumentale del Vittoriano** – the Vittorio Emanuele II Monument in Rome – sponsoring a series of exhibitions there in 2010. It also sponsored the Piccolo Teatro of Milan as part of its support for the organization of exhibitions and quality cultural undertakings.

In **Slovakia**, Enel sponsored a number of art exhibitions in 2010, of which the most important was the one on the Renaissance in Bratislava, which is organized every ten years. The Company also sponsored the “Dolce Vita” festival to promote Italian culture in Slovakia, as well as supporting projects aimed at highlighting Slovak national traditions, such as the Východná folklore festival and the International Satire Festival. An exhibition of the Slovak artist Matej Kren was organized in Bologna with Enel’s support, an example of the promotion of Slovak culture in Italy.

In order to promote the cultural heritage of the different countries, in 2010 Enel continued its project for lighting historic buildings: Orava Castle, one of the most visited

historical museums in the Northwest of Slovakia and a Unesco World Heritage site, and the building that hosts the Italian Embassy in Moscow.

In 2010 **Enel France** continued to support the **Théâtre de la Comédie Italienne**, one of the last theaters in France performing the *commedia dell’arte*. Enel France also sponsored many other initiatives for disseminating Italian culture in France, from photography (an exhibition of Italian photographers at the French Senate) and music (a concert by the Santa Cecilia Orchestra) and theater (the Franco-Italian Festival).

Finally, together with the Italian Embassy in Bucharest and the Romanian National Museum, Enel supported an exhibition of the photography of Ileana Florescu, an internationally recognized Romanian artist.

## Music

Again in 2010 **Enel** organized numerous events in cooperation with important musical institutions, such as the Auditorium Parco della Musica, the Accademia Nazionale di Santa Cecilia, the Palalottomatica in Rome, the Teatro alla Scala in Milan, and the Teatro San Carlo in Naples and supported internationally significant musical events like the Bologna Festival.

In cooperation with the Italian embassies, in 2010 Enel organized concerts of the internationally famous orchestra of the Accademia di Santa Cecilia in Russia, France, and Chile (2 concerts). An innovation was the involvement of local musician in these concerts, another step in the direction of multicultural dialogue and integration.

The cooperation between energy and great Italian music continued in 2010 with **Correnti Musicali**. With the fascination of mixing apparently distant musical genres transformed Enel’s Porto Tolle, Sulcis, La Spezia, and Brindisi power stations into “musical factories”.

In **Slovakia**, a number of concerts and musical festivals, such as the Bratislava Jazz Days, were organized, as well as charitable events like the “Stars for Harmony” concert, which raised funds for children suffering from cerebral paralysis.

Enel also confirmed its commitment to promoting and supporting culture in **Russia**. In 2010, it continued its project of sponsoring opera – in this case the 234th season – at one of the most famous theaters in the world, the **Bolshoi in Moscow**.

In **Romania**, concerts with pop musicians such as Eros





*Ruins in Largo di Torre Argentina, Rome*  
**Assume vivid astro focus - Enel Contemporanea 2008**  
 Fluorescent neon lights and psychedelic images projected on columns and mosaics recreate a special world to be lived in and explored.

Ramazzotti and Elton John, as well as classical music were organized. Enel sponsored a concert of the Romanian Symphony Orchestra in cooperation with the Foreign Ministry.

## Sports

In addition to science, music, culture, and education, Enel also promotes sports through important partnerships, such as its **sponsorship of the international volleyball championship tournament**, which involved 24 national teams from five continents and 78 matches in 10 Italian cities.

In 2010 Enel also continued its motorcycle GP partnership with **Ducati Corse**, one of the symbols of Italian technological excellence with a strong impact in the countries in which the Group operates (Spain, Portugal, the Czech Republic, France, and Italy).

In **Slovakia**, Enel is the **sponsor of the national volleyball team and the Tour of Slovakia bicycle race**, while in **France** it is the official sponsor of the ROC, the Flamanville rugby team and in March it sponsored matches in France of the RBS Six Nations rugby tournament.

Enel also supported five international tournaments of the **ATP (Association of Tennis Professionals)**, in several of the countries in which the Company is present: Chile, Slovakia, Russia, Romania, the United Kingdom, and Italy.

Copa Chilectra is an initiative that involves employees of Chilectra, the Chilean distribution company. In 2010, the latter – together with UNICEF, Conace, and the Fundación Iván Zamorano – organized the **ninth edition of the Copa Chilectra**, a soccer tournament for both girls and boys, in which more than 45,000 children less than 14 years old played. The objective was to promote active participation in sports to combat the sedentary life style, as well as drug and alcohol addiction, among young people.

# In the heart of philanthropy



## Enel Cuore Onlus

For many years Enel has been working enthusiastically on the issue of sustainability. This commitment has been rewarded with important results. In effect, Enel's growth is based on a strategy of financial solidity and the profitability of its long-term business plan, while fully respecting its stakeholders and balancing the economic, environmental, and social variables that constitute its corporate social responsibility.





In 2003, together with the unit dedicated to CSR, Enel's will to establish an **autonomous not-for-profit** entity through which it could express its commitment to philanthropy in favor of the community led to the creation of **Enel Cuore Onlus**. This was a transparent choice aimed at distinguishing sustainability – which by its nature is connected with strategic and industrial choices – from **corporate philanthropy**, and an organizational model that

provides for strictly separate reporting activities and instruments to characterize Enel's overall commitment for social development as part of its responsibility.

During 2010 Enel Cuore Onlus supported a total of **114 philanthropic social projects** both in Italy and abroad, in particular in Eastern Europe and Latin America in favor of children, the ill, the elderly, and the disabled. The following are several of the projects that are most significant because of their scope.

## Social Services

In the European Year for Combating Poverty and Social Exclusion, particular attention was given to the phenomenon of social marginalization. Several initiatives were aimed at concretely promoting **social cohesion** by developing facilities for taking in extremely marginalized people and reintegrating them into society. In **Italy**, in partnership with the National Railways, Enel Cuore thus confirmed its commitment to the long-term "**A Heart in the Station**" project by opening two new centers in the Turin and Florence railroad stations. It also supported the S. Marcellino Association in renovating the day center in Genoa.

Abroad, Enel Cuore supported the **Un Techo para mi País** Association in a project that provides for building 150 casitas in **Guatemala** and 150 in **Mexico** for the most vulnerable families, who live in precarious homes. The casitas are built by groups of university student volunteers, with whom the future inhabitants cooperate.

## Health

The treatment and care of sick people, in particular the youngest ones, is one of Enel Cuore's main objectives, especially in foreign countries where the health care system is precarious and medical instruments are obsolete and inadequate for people's needs.

In **Russia**, Enel Cuore supported the purchase of diagnostic equipment for the hospital located in the city of Nevinnomyssk, in the Stavropol region, and the renovation of the gynecology (65 beds), maternity (25 beds), and pregnancy disease wards, which were in a precarious state of hygiene because of the total absence of maintenance since they were built.

In **Chile**, Enel Cuore donated an all-terrain ambulance and a towable field hospital to the Red Cross so that it can act quickly in remote areas lacking health services in Alto Loa province and the El Tatio geothermal field, in the Antofagasta region.

## Education

Enel Cuore's commitment to education continues. It builds schools, as well as educational and training centers, so that children and adolescents who live in poverty or in difficult social environments, with the risk of becoming deviants, can be supported in a process providing **access to educational opportunities and instruments** while respecting their rights. This is the framework of Enel Cuore's partnership with the Foundation for the South on the 2010 Youth Education Competition, whose purpose is to identify the best practices to adopt for **fighting educational dispersal in southern Italy**. In L' Aquila, in the Abruzzo region, Enel Cuore is cooperating in the center of the city with the Opera Salesiana San Giovanni Bosco to restore the Oratorio, one of the most active centers of social aggregation before the earthquake in 2009.

In **Guatemala**, Enel Cuore contributed to the **Casa de Amistad**, which supports disadvantaged children. Five hundred street urchins can participate in vocational courses, thus having access to education that otherwise would have been denied them. The school is run by Mojoca, a movement of young street people with the support of Amistrada, Mani Tese, and the Waldensian church.

## Sports

Enel Cuore supports initiatives connected with sports and play as **ways of integrating and socializing disabled and marginalized people**. Together with the Italian Paralympic Committee, for six years it has supported the organization of the **National Paralympic Sports Day**, a national project that promotes, together with the world of education, the utmost dissemination of sports for the disabled in the main squares of Italy. In 2010 the Paralympic Day was extended to Slovakia, where it will be organized together with the Slovak Sports Association for the Disabled.

## Sums donated in 2010

The following are the sums donated to Enel Cuore Onlus during 2010 by companies of the Enel Group, whether members or not.

Donating company	Membership dues 2010	Special contributions from members	Restricted donations*	Totals
Enel SpA	40,000	606,181	-	646,181
Enel Distribuzione SpA	40,000	3,000,000	214,125	3,254,125
Enel Produzione SpA	40,000	2,500,000	16,000	2,556,000
Enel Energia SpA	40,000	-	-	40,000
Enel Sole Srl	40,000	-	-	40,000
Enel Green Power SpA	40,000	-	20,000	60,000
Enel Trade SpA	40,000	-	-	40,000
Enel Rete Gas SpA	-	-	30,000	30,000
<b>Totals</b>	<b>280,000</b>	<b>6,106,181</b>	<b>280,125</b>	<b>6,666,306</b>

\* donations earmarked to support initiatives included in the ZENITH-QUASAR and ZENITH-PEGASO projects.

## The Endesa foundations

### Fundación Endesa

Established in 1998, the **Fundación Endesa** implements projects in four fields of activity: the environment, cooperation in Spain, education and culture abroad, and artistic lighting.

As far as the **environment** is concerned, the projects regard the restoration of natural environments in national parks and the landscape adjustment plan for hydro power stations. A particularly significant initiative regarded the cleanliness of the lakes in the Pyrenee Mountains, called ibones. The Foundation signed an agreement with the Ibercaja Bank and several municipalities in the area to promote ecotourism based on social and environmental values around the 11 lakes of the Aragon region.

In the areas of Spain where Endesa has industrial operations, moreover, the Foundation carries out projects in **cooperation** with local governments to promote economic, social, and cultural development.

As part of its programs for **social, educational, and cultural action**, the Foundation develops projects in Latin American countries, cooperating with both public and private institutions. These activities mainly regard cooperation with universities to promote the Spanish language.

Finally, the projects regarding artistic lighting are implemented in both Spain and Latin America to enhance the historical and artistic heritage.

In addition to these activities, the Foundation manages Endesa's historical archives, which were established in 2005 with the aim of bringing together and making available to everyone – company personnel, researchers in eco-

nomics and the electricity industry, and the general public – historical documents and objects regarding the development of Endesa and its old branches from the beginning. The archives are organized around four areas:

- > the Document Collection, in which all the important documents of the Company and its old branches are catalogued and classified
- > the Graphic Collection, which contains photographs, films, and videos
- > the Industrial Collection, in which the “material elements” preserved because of their historical value (instruments, machines, etc.) are catalogued and described
- > the Bibliographic Collection, which contains books and magazines published or sponsored by the Company or its old branches

## Fundación Sevillana Endesa

The “Fundación Sevillana de Electricidad” or “**Fundación Sevillana Endesa**” is active in the region of **Andalusia** and the province of **Badajoz in Spain**.

Established in 1988, it is concerned mainly with artistic lighting and social and cultural projects, and cooperates with public and private institutions.

## Fundación Pehuén

The **Fundación Pehuén** is a not-for-profit organization that was established in 1992 by the Pangué hydro power station, which belongs to **Endesa Chile**, with the aim of promoting projects of sustainable development for the six Pehuén communities in the Alto Bío Bío region.

The Fundación Pehuén aims to **improve the living conditions of the communities** through educational and health programs, the development of housing, and financial contributions, in addition to promoting the cultural aspects peculiar to the Pehuén communities.

All the projects are financed by the Foundation, with the families of the communities participating with their labor. The communities participate actively in the process of managing the projects. All the programs promoted by the Foundation are conceived and implemented jointly with the members of the communities and break down into

four major areas:

1. **Programs of productive development** for agriculture and tourism and of support for micro-enterprises through the purchase of farming equipment, infrastructure construction, and the reclamation of traditional agricultural areas.
2. **Education and cultural-preservation programs** addressed to the young people of the Pehuén communities through the promotion of education beyond elementary school, as well as the culture and identity of the communities.
3. **Programs for constructing community infrastructure** such as the development of drinking-water and irrigation systems, in addition to supporting feasibility studies for drinking-water systems and electrification.
4. **Programs of social assistance** to families and organizations engaged in combating the poverty of many Pehuén families and for helping in emergency situations and natural catastrophes that have characterized the Pehuén area.

During 2010 the Foundation invested about 500,000 euro to promote 80 projects in the fields of post-elementary education and agricultural development, as well as to prevent the social exclusion of poor families.

## Fundación Endesa Colombia

Created in December 2005 by the founding companies, Codensa and Endesa Internacional, the Fundación Endesa Colombia has the objective of boosting the economic, cultural, and environmental development of the communities located in the zones of influence of Emgesa and Codensa in Colombia by enhancing local capabilities, promoting competitiveness, and providing incentives to use resources well. Thus the Foundation’s social activity offers local inhabitants feasible solutions for improving the quality of their lives, carrying out projects that, among other things, generate resources in the medium run. The main projects concern education and social development.

During 2010 the main activities regarded organic production and fair trade through “self-sustainable production” projects and, in the field of education, 1,064 children and youth from vulnerable families attended artistic dance courses at the “Corporación Colegio del Cuerpo” in Cartagena, an institute that receives funding from the Foundation.





## Fundación San Ignacio de Huinay

Founded in 1998 by **Endesa Chile** and the Pontificia Universidad Católica de Valparaíso, the **Fundación San Ignacio de Huinay** was established for the purpose of developing scientific research and preserving the heritage of **biodiversity** and eco-systems of fjords and “cold forests” in the Huinay region in southern Chile, an area of 34,000 hectares extending from the Comau fjord to the Argentine border. In effect, Chile has one of the largest and most complex constellations of fjords in the world. Even though the country is not much more than 1,500 km long, it has 80,000 km of coasts, including fjords and islands. In 2001 the Centro Científico Huinay was inaugurated. Located in a special place for biodiversity, its laboratories and research equipment facilitate study of the flora, fauna, and marine environment. The Foundation has contributed to scientific and natural progress, with 7 scientific expeditions and 88 research projects. Forty-nine new species have been classified, including two “cold-water” species of coral, whose scientific names are *Tethocyathus endesa* and *Caryophyllia Huinayensis*.





# The rescue of the Chilean miners

**After August 22, 2010, when 17 days after the collapse of the underground mine it became certain that the 33 missing miners were still alive 700 meters below the surface there was a veritable competition to contribute expertise and equipment for their rescue.**

Enel Green Power also participated actively in the rescue operation by coordinating the work for constructing a tunnel wide enough to allow the miners to get through without drilling several holes and putting a gigantic drill at the disposal of the effort. The project was entrusted to **Stefano Massei**, the engineer who is the technical head of Enel Green Power in Chile and one of the world's leading experts of "deviated" – i.e. not only vertical – deep drilling. Massei describes the experience as "very exciting" and says that it left a mark on him both as a professional and as a man. Married, with two children, Massei was the only Italian working to rescue the 33 Chilean miners. He coordinated work on the rescue duct, as well as defining and finding the materials of the C solution at the request of ENAP, the Chilean oil company that is Enel Green Power's partner in explorations aimed at developing the production of electricity in Chile from a renewable and clean source like geothermal energy. Massei brought the important contribution of his thirty years of experience in the field of geothermal drilling – one in which Italy is in the forefront – to the operations to rescue the 33 miners. Massei says: "When the second and third probes began, hope began to change into not exactly certainty, but into much more tangible expectations. Then in the last weeks, when by then there was a high probability of saving the miners, their relatives had joy in their eyes that was something incredible. Everyone was contacting us and thanking us for what we were doing. They had us sign a notebook in which they collected the signatures of all the people who had worked and participated in the rescue operations. It was also an emotional experience, a really important one for me. Obviously the sensations and objectives were not the ones we have when we are looking for a geothermal reservoir. Even in the latter case there is emotion, but where the miners were concerned, it was much stronger and left me with an indelible memory."





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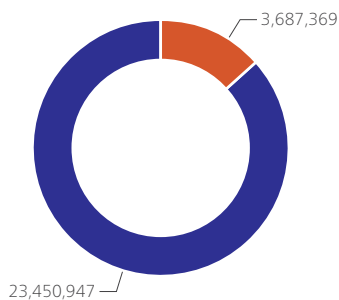




Sustainability  
in the supply chain

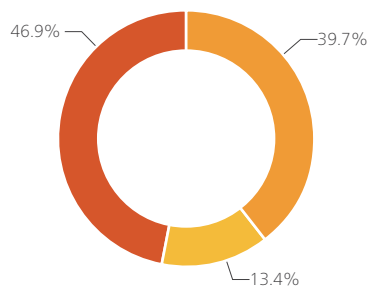
# The numbers

Total FTE days 2010



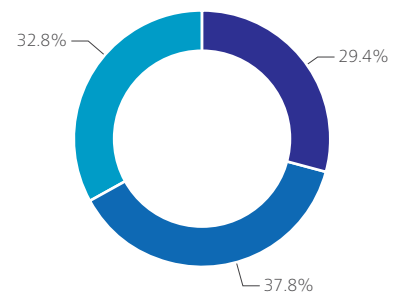
■ in Italy  
■ abroad

FTE days Italy 2010



■ for construction activity  
■ for operation activity  
■ for maintenance activity

FTE days abroad 2010



■ for construction activity  
■ for operation activity  
■ for maintenance activity

**The Enel Group avails itself of the work of external companies (suppliers and contractors or subcontractors) for a number of construction, operation, and maintenance, activities which involves numerous categories of workers: engineers, technicians, machine operators, welders, power-plant mechanics, substation operators, distribution-line workers, maintenance men, painters, electricians, chauffeurs, smiths, etc. In 2010, 107,886 people comprised the workforce used by contractors.**

In order to properly monitor the size of this dense network of cooperation, a process for reporting and monitoring the data regarding the work performed for Enel by contractors was implemented, which has been gradually extended to the entire Group.

The estimate of the days of work – measured in FTE (full time equivalent) days – performed by contractor workers on behalf of the Enel Group in 2010 amounts to a total of **27,138,316 FTE days**.<sup>(1)</sup>

(1) Because of the difficulty of finding such data, the breakdown by contract type of the workers of contractors is not available.

## Construction activities

**8,353,873**  
FTE days

## Operation activities

**9,352,773**  
FTE days

## Maintenance activities

**9,431,670**  
FTE days

## Total

**27,138,316**  
FTE days



# Correctness and transparency in selection processes

**In entrusting contracts for works, services, and supplies to third parties, Enel uses procurement procedures that ensure the utmost transparency, objectivity, and equality of treatment for the participating companies.**

All companies that possess the general and special requisites provided for in the related call for tenders may participate in the competition, with the award going to the company that makes the best bid according to the criteria of the one that is lowest in price and economically most advantageous, as specified in the call for tenders.

The procurement activities are carried out in compliance with local laws and the related procurement procedures, thus ensuring the principles of competition and transparency that are also expressed in Enel's Code of Ethics. Within the Group there are no policies that bind companies to the choice of "domestic" suppliers. The selection of suppliers is based on criteria of quality, security, and cost-effectiveness. With regard to the most significant suppliers (those with contracts amounting to more than 1,000,000 euro), in 2010 the Enel Group acquired about 75% of the total value from local suppliers (residents in a single Group country) and about 25% from suppliers that were foreign (with respect to their home office) <sup>(2)</sup>.

Enel has instituted a **supplier qualification system** that ensures a careful assessment of the companies that intend to participate in Enel's procurement procedures. The qualification procedure requires the presentation of a series of documents (financial statements, certifications, etc.) and provides for agreement with the principles stated in the Code of Ethics, the Zero Tolerance of Corruption Plan, and the Compliance Program pursuant to Legislative Decree 231/01, with specific regard to the absence of even a potential conflict of interest. The qualification system thus constitutes a guarantee for both Enel, because it provides a constantly updated list of companies with ascertained trustworthiness in terms of ethics and security, and suppliers, who thus have improved visibility and a better chance

to be consulted in the Group's procurement tenders.

The qualification procedure is complemented by the **vendor rating system**, which monitors contractors and suppliers with regard to both their behavior during the procurement process and the quality, punctuality, and correctness of their performance during the execution phase.

To bring the qualification system increasingly in line with Enel's sustainability policies, in 2010 the Group introduced, for several product categories of the Sales area, an additional assessment criterion, the so-called "**Sustainability Parameter**", which evaluates the supplier's sensitivity with regard to the concerns of corporate social responsibility and affects the overall assessment of a supplier when performances have already been judged satisfactory with respect to other monitored parameters of quality.

Specifically, the Sustainability Parameter consists of two indicators: the "Turnover Index" and "Training", which objectively measure the level of the supplier's concern for these important aspects of personnel management policies. The Group plans to introduce a new indicator, which also takes into consideration the services that the supplier makes available to its employees, with regard, for example, to people care and support for families. For all the product categories regarding works, suppliers are also assessed with regard to the Safety Index. (For the details, see page 242).

(2) By "local" is meant suppliers from the country in which Enel operates. The percentage calculation considers as sums contracted by "local" suppliers the amounts of the contracts entered into with companies having a registered office or branch in the countries of the Group's foreign companies, even if they belong to multinational groups and/or with related production activities performed abroad.

# Defending rights



## Joint liability in the supply chain

In consequence of provisions of Italian law that have focused attention on guarantees for contractor employees, in the last few years Enel, as a customer, has assumed specific joint liabilities with the companies performing contract work and services with regard to compliance with obligations concerning the payment of wages, as well as pension and other welfare contributions. This obligation

is effective for a rather long period of time, specified as two years from the termination of the contract, and provides for the joint liability of customers and their contractors or subcontractors.

With regard to ethics and sustainability in making investment and procurement decisions, in 2009 Enel Servizi's Operational Purchasing Department and Personnel Administration Department devised a **system for formalizing controls in these areas**.

The project focuses on **joint liability** and creates an additional communication channel between Enel and its suppliers, ensuring that the latter are constant monitored



## The defense of human rights



through the creation of a dedicated portal. In effect, Enel will put a platform at the disposal of its contractors and suppliers to facilitate the computerized collection and management of the documentation regarding the joint liability by dematerializing the documents and their consequent exchange in order to ascertain whether or not the obligatory pension and welfare contributions have been paid. The first companies involved in this project initiated in May 2010, the call-center contractors, must use the portal to periodically furnish the documents to be checked so that respect for workers' rights can be monitored and prevent negligence that will have to be remedied.

The defense of human rights is one of the principles on which Enel's actions are based and is constantly promoted in all the countries in which the Group operates and in every new company that becomes part of the Group. (On Enel's commitment regarding human rights, see chapter 2.)

To ensure that human rights are defended along the Group's entire supply chain, Enel informs its suppliers that the Group respects the principles established in its Code of Ethics, its Zero Tolerance of Corruption Plan, and its Compliance Program pursuant to Legislative Decree 231/2001 in Italy and in its related Guidelines in its foreign companies. Furthermore, according to the kind of supply concerned (raw materials, products, services, contract work) **contracts include specific clauses regarding human rights**, such as the prohibition of child and forced labor, union freedom, freedom of association, the prohibition of discrimination, and obligations concerning safety and the protection of the environment.

Specifically, in contracts entered into in Italy Enel includes a clause that obliges contractors to apply to its workers the National Collective Bargaining Contract, which obliges companies to comply with the national regulations regarding on-the-job health, safety, and hygiene, as well as pay, social-security contributions, and insurance.

Implementing an Italian national anti-mafia law, moreover, Enel includes a special clause in such contracts which makes it obligatory – under pain of nullifying the contract – to ensure the traceability of the financial flows to contractors and subcontractors of the chain of companies involved in various ways in the contract.

To further ensure that suppliers and contractors comply with their specific ethical and social obligations, Enel reserves the right to carry out checks at their production units and operating premises to see if they are being fulfilled.

In 2010 no actions or legal proceedings were undertaken regarding the presumed violation of such rights by suppliers or contractors.

# Safety in contract work

**For Enel, concern for the safety of workers performing contract work is a priority and injuries are not tolerated. The “Zero accidents” goal must also be the goal of the suppliers and contractors that work with the Group.**

In this regard, in 2010, as part of the Integrated Nine-Point Safety Improvement Plan – the action plan embodying the Group’s strategy regard occupational safety, on which see chapter 3, section 3.4.1 – Enel continued its activities for the revision of its tender processes, which are aimed at increasing the weight of the occupational safety aspect.

In particular, implementation of the **qualification** system went ahead, providing for specific and stringent safety conditions, which require a careful assessment of the companies on many points, from their injury record and training to organization and procedures. In Italy in 2010, 88% of procurement came from qualified contractors, an increase of about 10% with respect to 2009.

For **company selection**, guidelines were implemented that provide for the use, wherever possible, of qualified firms, the establishment of criteria of rotation based on safety indicators, the introduction of selection criteria providing for the inclusion of safety parameters connected with the specific tender, the use of the safety parameters necessary for qualification in European calls for tenders that do not require a qualified company.

Furthermore, with a view to promoting a **homogeneous approach to contractors**, guidelines were drawn up aimed at establishing the measures to adopt with respect to companies in the event of fatal or serious accidents and/or compliance failures regarding safety discovered during inspections while the work is being performed. The document applies to the entire Group and specifies the actions to be taken with respect to the different kinds of safety violations observed. The guidelines also establish the actions to undertake in the event a company receives an insufficient score on the parameter dedicated to safety



in the vendor rating system or equivalent systems. In effect, the vendor rating system provides for a specific indicator dedicated to safety.

The result of the assessment performed is shared with supplier, which, if there are critical problems, must take immediate corrective actions under pain of exclusion from Enel’s supplier register. In Italy, 210 product groups are currently subject to vendor rating, with a total of 1,150 contractors. As far as the foreign companies are concerned, the Group has initiated the process of assessing suppliers and the implementation of a qualification

system similar to the requisites of the Enel system.

In addition to the establishment of mechanisms of prevention, instruments were defined to ensure the **maintenance of the requisites regarding safety throughout the entire duration of the relationship**. In particular, specific plans for each Division of the Group were drawn up, which provide for an increase in the number of checks, extraor-

requisites regarding safety, particularly with regard to employee training and the use of individual protection devices. The monitoring takes place during the qualification stage, when health and safety certifications (OHSAS 18001) may be required, when the general conditions and terms of the contract are stipulated (with the provision, for example, of periodical information obligations



dinary programs of inspections, the issue of guidelines on the organizational measures to undertake and the instruments to adopt for performing the operating line checks and the audit of the management system, increasing the number of human resources who perform the activity of overseeing contract work, and the constitution of task forces in areas that are particularly critical with regard to safety.

The companies of the **Endesa** Group also monitor suppliers' and contractors' possession of the necessary

regarding safety), when inspections and audits are performed during the performance of the work, and during the final assessment of the work at the end of job.

Finally, in 2010 specific **training programs** on the subjects of health and safety were held for both Enel employees who manage outsourcing contracts and ones who carry out the checks on contractors or assist those who are involved in managing contractor firms. Specifically, in 2010 190 editions of the training initiatives were held, organized on the basis of a cascade training process.

# Training for suppliers and contractors

The dissemination of a safety culture to all workers is indispensable for ensuring the observance of the safety rules and procedures. For this reason much importance is also attributed to safety training for the Enel Group's suppliers and contractors.

Enel requires all contractor employees who work in the plants and places owned by the Group be adequately trained by their employer and checks the carrying out of such training both in the contractor qualification stage and before the work begins.

For all contractors involved in the construction and maintenance of its distribution network, Enel has established a specific qualification section. For qualified companies, training courses addressed to their technical personnel are provided for, which vary according to the type of activity. All the professional figures employed in the different activities entrusted to them by Enel must possess the related training certificate. In effect, in order to qualify, suppliers are required to provide their technical personnel with training courses differentiated according to the kind of activity, with specific sessions on the implementation of the safety regulations applied to Enel activities. While their technical specifications are established by Enel, the courses are carried out by training schools that are accredited by the national certification institute, Accredia, which oversees the courses and ensures that they are carried out correctly.

In 2009 a new project was begun which provides for a "training booster" for all qualified personnel to keep their professional competence always up to date and includes a specific session on safety. As of December 31, 2010, this training project had involved 6,500 contractor employees at the Group level.

**During 2010, 100% of contractor personnel assigned to work for Enel received safety training by their employer <sup>(2)</sup>.**

In addition to requiring its suppliers and contractors to provide training, every Division of the Enel Group directly develops information, awareness, and training initiatives for contractor employees, which are differentiated according to the kind of work performed. In all, during 2010 about 135 "Contractor Safety Days" took place in all the Divisions, while on November 19 the first Group-level one took place.

The awareness-raising initiatives organized by the Divisions also provide for the distribution of pamphlets and other informative material aimed at disseminating good practices and aligning other companies with Enel's safety standards. The "Safety 24/7" and "Visual Safety" projects, for example, were also extended to contractors through the creation of multi-lingual pocket books. In 2010, an illustrated manual on the correct use of equipment ("Safety in Your Pocket") and a DVD containing the operating practices followed by Enel personnel were distributed throughout the Infrastructure and Networks Division, which also created a *Work Methods* series. A number of specific awareness-raising activities were also carried out, which were addressed to both company heads (such as Safety Days, Safety Walks, etc.) and technical personnel (for example, "Work

Personnel of contractor firms that received safety training

107,886  
workers

Workers trained out of total personnel of contractors firms

100%



Safely" workshops). During the year a multiyear program of training meetings with contractor technical personnel, which will involve a total of about 5,000 people, was also planned and started up.

(2) The data for the Engineering and Innovation Division, the Enel Servizi, the International Division (Romania, Russia, and Slovakia), and Endesa were furnished directly by the Divisions/Companies, while the data for the Renewable Energy, Generation and Energy Management, International (Bulgaria) and the Infrastructure and Networks Divisions were estimated on the basis of the information furnished in the EU17 indicator. The breakdown of resources was carried out on the basis of the data furnished in the EU17 indicator.

## The 2010 results

Enel also monitors injuries, illnesses, and absenteeism in the external companies that perform work on behalf of the Group. The indicators concerned are the LTIFR (Lost Time Injury Frequency Rate) and the LDR (Lost Day Rate), which are communicated to Enel by the aforesaid companies.



The Occupational Disease Rate (ODR) is not easy to record, especially with regard to contractors. In 2011, a shared process will be examined, which allows the statistic to be recorded at the Group level for both Enel and contractor employees.

In 2010 there was a significant decrease in the serious and fatal injuries suffered by contractor workers during the performance of work on behalf of Enel, mainly regarding electrical work on distribution networks and maintenance work in plants. In effect, the total number was 61 injuries (19 fatal and 42 serious) compared to the total of 144 (17 fatal and 127 serious) recorded during 2009.

On April 3, 2010, a worker employed by a contractor, died in an accident at the Torrealvaldliga Nord thermal power plant. A penal proceeding is in progress, of which the preliminary investigation was recently terminated, in which several employees of Enel Produzione and Enel Engineering and Innovation, as well as of the contractor, are being investigated for manslaughter (article 589 of the Criminal Code). Enel is cooperating closely in the investigation, which is aimed at fully reconstructing how the accident took place.

### LTIFR

0.841

in 2010

1.177

in 2009

### LDR

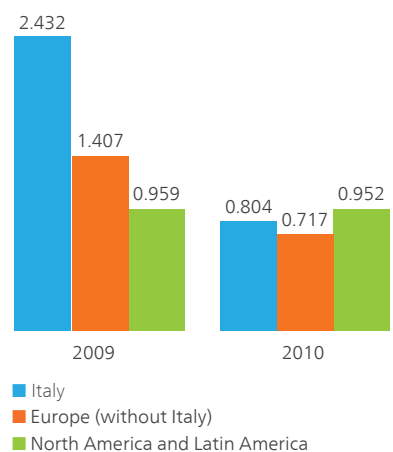
15.13

in 2010

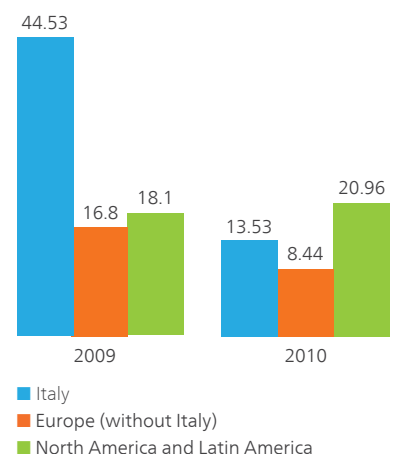
19.27

in 2009

#### LTIFR Enel contractors



#### LDR Enel contractors\*



\*Lost work days are considered solar days



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[GRI content index](#) | 249

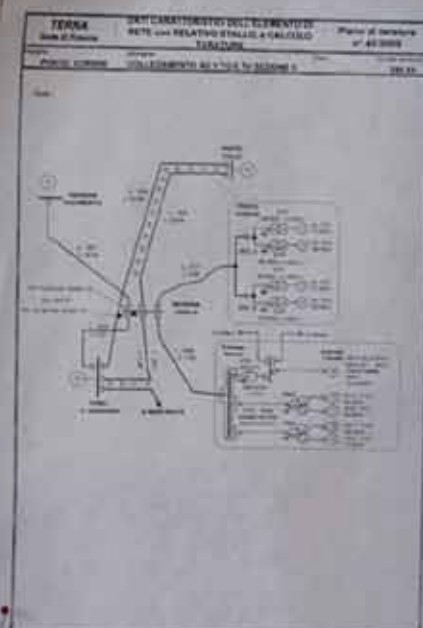
#### [Annex](#)

[Performance indicators](#) | 258

[Glossary](#) | 299

[Report of the external auditors](#)





Nome sede	N° telefono	Attivo
Italia centrale (Città)	6.988901	50
Puerto Corcuera	6.989477	50
Puerto Corcuera	6.989478	50
Albacete	6.990022	50
Albacete	6.990023	50
Albacete	6.990024	50
Albacete	6.990025	50
Albacete	6.990026	50
Albacete	6.990027	50
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Albacete	6.990098	50
Albacete	6.990099	50
Albacete	6.990100	50

Sezione E		
TURBONAS		
1° gennaio 8	24-lug-02	otto ore 22.49
TURBINA A VAPORE		
1° gennaio 8	22-set-02	otto ore 22.52
Ingresso a regime dal 07-mag-03		
Sezione G		
TURBONAS		
1° gennaio 8	17-o8-02	otto ore 2.00
TURBINA A VAPORE		
1° gennaio 8	08-dic-02	otto ore 15.39
Ingresso a regime dal 04-giu-03		

TO C. G. B. B. C. - 11/11/12

# Performance indicators

The key CSR performance indicators are reported on pages 258 to 298 and are an integral part of this Sustainability Report. To facilitate cross-referencing these indicators, with the qualitative information in the Report, the afore-said pages were not bound together with the body of the text, but are presented as loose sheets. These loose sheets are contained in the pocket on the inside back cover. Please make sure that the sheets are complete. In any case, they can also be consulted in the pdf of the Sustainability Report that can be downloaded from the Enel website (<http://www.enel.com/en-GB/sustainability/>).

## Units of measurement

,000	thousands
n.	number
%	percentage
,000 h	thousands of hours
,000 t	thousands of tons
c €/kWh	euro cents per kilowatt-hour
€	euro
c€	euro cent
g/kWh	grams per kilowatt-hour
d	days
GBq per unit	gigabecquerel per unit
GWh	gigawatt-hour
h	hours
h/per-cap	hours per capita
index	assessment rating
kcal/kWh	kilocalories per kilowatt-hour
km	kilometers
kW	kilowatt
kWh	kilowatt-hour
kWp	peak kilowatt
kWh/t	kilowatt-hours per ton
l/kWh	liters per kilowatt-hour
mil euro	millions of euro
mil h	millions of hours
mil m <sup>3</sup>	millions of cubic meters
mil t	millions of tons
min	minutes
Mtoe	millions of tons of oil equivalent
MW	megawatt
MWh	megawatt-hour
sec	seconds
t	ton
toe	tons of oil equivalent
TWh	terawatt-hour

## Acronymis

HV	high voltage
EIB	European Investment Bank
BOD	biochemical oxygen demand
LV	low voltage
CCGT	combined cycle gas turbine
BoD	board of directors
COD	chemical oxygen demand
CSR	Corporate Social Responsibility
EBT	earnings before tax
EBIT	earnings before interest and tax
EBITDA	earnings before Interest, tax, depreciation, and amortization
ELA	Enel Latin America
ENA	Enel North America
EPS	earnings per share
EUFER	Enel Unión Fenosa Renovables
DL	distance learning
GEM	Generation and Energy Management
IPO	initial public offering
IRAP	Imposta Regionale sulle Attività Produttive (regional business tax)
IRES	Imposta sul Reddito delle Società (corporate tax)
IVR	integrated voice response
KM	knowledge management
LBG	London Benchmarking Group
MV	Medium voltage
PCB	Polychlorobiphenyls or Polychlorinated biphenyls
R&D	Research & Development
S&P	Standard & Poor's
SRI	Socially Responsible Investment
RM	Remote management
TSR	total shareholder return



# GRI Content Index

## GRI-G3 and Electric Utilities Sector Supplement

### Legend

C: Core

A: Additional

● Reported for the entire boundary

◐ Reported partially

○ Not reported

Indicator	Indicator type	Description	Level of reporting	References
<b>1. Strategy and Analysis</b>				
1.1	C	Statement from the most senior decision-maker regarding the importance of sustainability for the organization and its strategy.	●	4-7, Annual Report\ 12-17
1.2	C	Description of the key impacts, risks, and opportunities.	●	31-32, 34-35, 36-38, 74-75
<b>2. Organizational profile</b>				
2.1	C	Name of the organization.	●	25
2.2	C	Primary brands, products, and/or services.	●	10-11
2.3	C	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	●	16-17
2.4	C	Location of organization's headquarters.	●	25
2.5	C	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	●	12-13
2.6	C	Nature of ownership and legal form.	●	65
2.7	C	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	●	16-17, 19, 143
2.8	C	Scale of the reporting organization.	●	12-13, 16-17, 18, 19
2.9	C	Significant changes during the reporting period regarding size, structure, or ownership.	●	26-27
2.10	C	Awards received in the reporting period.	●	99
EU1	C	Installed capacity, broken down by primary energy source and by regulatory regime.	●	10, 258-259
EU2	C	Net energy output broken down by primary energy sources and by regulatory regime.	●	18, 60-61, 261
EU3	C	Number of residential, industrial, and commercial customers.  <b>Limitation:</b> The distinction between residential customers and business customers is lacking. The figure is not available in our current recording systems. An estimate would not be reliable. Enel undertakes to report such information in the medium term.	●	11, 143, 260, 281-282
EU4	C	Length of above and underground transmission and distribution lines by regulatory regime.	●	10, 60-61, 259-260
EU5	C	Allocation of CO <sub>2</sub> emissions allowances or equivalent, broken down by carbon trading framework.	●	178-179
<b>3. Report parameters</b>				
3.1	C	Reporting period (e.g., fiscal/calendar year) for information provided.	●	26
3.2	C	Date of most recent report (if any).	●	25
3.3	C	Reporting cycle (annual, biennial, etc.).	●	25
3.4	C	Contact point for questions regarding the report or its contents.	●	25
3.5	C	Process for defining report content.	●	25
3.6	C	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	●	26

Indicator	Indicator type	Description	Level of reporting	References
3.7	C	State any specific limitations on the scope or boundary of the report.	●	26-27
3.8	C	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, or other entities that can significantly affect comparability from period to period and/or between organizations.	●	26
3.9	C	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the indicators and other information in the report.	●	26
3.10	C	Explanation of the effect of any re-statement of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	●	26-27
3.11	C	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in this report.	●	26-27
3.12	C	Table identifying the location of the Standard Disclosures in the report.	●	249-256
3.13	C	Policy and current practice with regard to seeking external assurance for the report. Also explain the connection between the organization and the company that performs the assurance.	●	26
<b>4. Governance, commitments, stakeholder engagement</b>				
4.1	C	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	●	66-67, 68-69
4.2	C	Indicate whether the Chairman or the highest governance body is also an executive officer. (In such case, indicate the position within the management and the reasons for this structure).	●	67
4.3	C	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	●	67-68
4.4	C	Mechanisms for shareholders and employers to provide recommendations or directions to the highest governance body.	●	67, 71-73
4.5	C	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	●	69-70, 108-109
4.6	C	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	●	68-69
4.7	C	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	●	67
4.8	C	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	●	30, 79, 80, 81
4.9	C	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	●	26, 71, 81
4.10	C	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	●	26, 70-71
4.11	C	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	●	74-75
4.12	C	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	●	80, 82-84
4.13	C	Membership in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: - has positions in governance bodies; - participates in projects or committees; - provides substantive funding beyond routine membership dues.	●	92-93
4.14	C	List of stakeholder groups engaged by the organization.	●	90-91
4.15	C	Basis for identification and selection of stakeholders with whom to engage.	●	89
4.16	C	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	●	90-91

Indicator	Indicator type	Description	Level of reporting	References
4.17	C	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	●	36-45
<b>5. Management approach and Performance indicators</b>				
DMA EC		Management approach EC	●	15 \ Accounting, Finance, and Control; Group Risk Management; Regulations, Environment, and Carbon Strategy. 31-32, 60-62, 65, 219-220 Annual Report \ 30-34, 110-113
EU6	C	Management approach to ensuring short- and long-term electricity availability and reliability.	●	145-147
EU7	C	Demand-side management programs, including residential, commercial, and industrial programs.	●	47-49, 160-163, 285
EU8	C	Research and development activity aimed at providing reliable electricity and promoting sustainable development.	●	33, 47-59
EU9	C	Provisions for decommissioning nuclear power sites.	●	199-201
DMA EN		Management approach EN	●	15 \ Regulations, Environment, and Carbon Strategy. 34-35, 168, 170. Annual Report \ 30-34, 110-113
DMA LA		Management approach LA	●	15 \ Personnel and Organization Department. 102-103 Annual Report \ 30-34, 110-113
EU14	C	Programs and processes to ensure the availability of a skilled workforce.	●	109-110
EU15	C	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region.	●	272-277
EU16	C	Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors.	●	111-118, 242-243
DMA HR		Management approach HR	●	15 \ Audit; Procurement and Services; External Relations; Personnel and Organization. 78-81, 82-84, 86-88, 241, 267 Annual Report \ 30-34, 110-113
DMA SO		Management approach SO	●	15 \ Audit; Regulations, Environment, and Carbon Strategy; External Relations. 78-81, 86-88, 206-207 Annual Report \ 30-34, 110-113
EU19	C	Stakeholder participation in the decision-making process related to energy planning and infrastructure development.	●	213-215
EU20	C	Approach to managing the impacts of displacement.	●	211-213
EU21	C	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans.	●	216-218





Indicator	Indicator type	Description	Level of reporting	References
DMA PR		Management approach PR	●	14, 16-17 \ ITALY: Sales Division, Infrastructure and Networks Division. ABROAD: In every country in which Enel distributes and/or sells energy the management of all issues connected with product responsibility is entrusted, respectively, to the distribution company/companies and the sales companies that operate in the country. 142-143 Annual Report \ 30-34, 110-113
EU23	C	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services.	●	151-152
EU24	C	Practices to address language, cultural, low literacy, and disability-related barriers to accessing and safely using electricity and customer-support services.	●	154-156, 164, 165
<b>Economic performance indicators</b>				
EC1	C	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	●	62, 64, 262-263
EC2	C	Financial implications and other risks and opportunities for the organization's activities due to climate change.	●	34-35, 74-75
EC3	C	Coverage of the organization's defined benefit plan obligations.  <b>Limitation:</b> The data regarding Bulgaria are not available in our current recording systems. An estimate would not be reliable. Enel undertakes to report such information in 2012.	●	127-128, 278
EC4	C	Significant financial assistance received from government.  <b>Limitation:</b> The data regarding the non-European countries are not available in our current recording systems. Enel monitors grants only in Europe. Enel undertakes to report such information in 2014. .	●	87-88, 267
EC5	A	Range of ratios of standard entry-level wage compared to local minimum wage at significant locations of operation.  <b>Reason:</b> not significant. It is an additional GRI indicator, which is not relevant to the determination of the A+ application level and is not significant with regard to Enel's specific circumstances.	○	-
EC6	C	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	●	239, 291
EC7	C	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	●	105-106
EC8	C	Development and impact of infrastructure investments and services provided primarily public benefit through commercial, in-kind or pro bono engagement.	●	219-222, 290
EC9	A	Understanding and describing significant indirect economic impacts, including the extent of impacts.  <b>Reason:</b> not significant. It is an additional GRI indicator, which is not relevant to the determination of the A+ application level and is not significant with regard to Enel's specific circumstances.	○	-
EU10	C	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime.  <b>Reason:</b> proprietary information. The information requested regards Business-Plan data that we do not consider advisable to publish for reasons of strategic expediency. The Enel Group guarantees that it will keep the commitments undertaken with the institutions of the countries in which it operates to ensure a production capacity that can satisfy electricity demand over the long term.	○	-
EU11	C	Average generation efficiency of thermal plants by energy source and regulatory regime.	●	282
EU12	C	Transmission and distribution losses as a percentage of total energy.  <b>Limitation:</b> The data regarding the Latin American countries are not available because of the difficulty in standardizing them. Enel undertakes to report such information in 2014.	●	146-147, 283
<b>Environmental performance indicators</b>				
EN1 <sub>COMM</sub>	C	Materials used by weight or volume.	●	196-197, 288-289
EN2	C	Percentage of materials used that are recycled input materials.	●	197



Indicator	Indicator type	Description	Level of reporting	References
EN3	C	Direct energy consumption by primary energy source.	●	175-176, 286
EN4	C	Indirect energy consumption by primary energy source.	●	176, 287
EN5	A	Energy saved due to conservation and efficiency improvements.	●	172-174, 287
EN6	A	Initiatives to provide energy-efficient or renewable-energy-based products and services, and reductions in energy requirements as a result of these initiatives.	●	160-163, 285
EN7	A	Initiatives to reduce indirect energy consumption and reductions achieved.	●	174-175
EN8 <sub>COMM</sub>	C	Total water withdrawal by source.	●	183, 288
EN9	A	Water sources significantly affected by withdrawal of water.	●	183, <a href="http://www.enel.com/en-GB/sustainability/environment/biodiversity/">http://www.enel.com/en-GB/sustainability/environment/biodiversity/</a>
EN10	A	Percentage and total volume of water recycled and reused.	●	183, 184, 288
EN11	C	Location and size of land owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas.	●	186-187, <a href="http://www.enel.com/en-GB/sustainability/environment/biodiversity/">http://www.enel.com/en-GB/sustainability/environment/biodiversity/</a>
EN12 <sub>COMM</sub>	C	Description of significant impact of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	●	186-187
EU13	C	Biodiversity of offset habitats compared to the biodiversity of the affected areas.	●	188-194, <a href="http://www.enel.com/en-GB/sustainability/environment/biodiversity/">http://www.enel.com/en-GB/sustainability/environment/biodiversity/</a>
EN13	A	Habitats protected or restored.	●	188-194
EN14 <sub>COMM</sub>	A	Strategies, current actions, and future plans for managing impacts on biodiversity	●	186-194, 286, 288
EN15	A	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	●	293-296
EN16 <sub>COMM</sub>	C	Total direct and indirect greenhouse-gas emissions by weight.	●	179-180, 287
EN17	C	Other relevant greenhouse-gas emissions by weight.	●	179, 180
EN18 <sub>COMM</sub>	C	Initiatives to reduce greenhouse-gas emissions and reductions achieved.	●	177, 178-179
EN19	C	Emissions of ozone-depleting substances by weight. <b>Limitation:</b> The data regarding ozone-depleting gases reported for 2010 differ in form from those of previous years. For the data regarding 2009 and 2008, see the respective Annual Reports.	●	181
EN20 <sub>COMM</sub>	C	NO <sub>x</sub> , SO <sub>x</sub> , and other significant air emissions by type and weight.	●	181, 287
EN21 <sub>COMM</sub>	C	Total water discharged by quality and destination. <b>Limitation:</b> The differentiation of discharged water by treatment method is not available in our current recording systems. An estimate would not be reliable. Enel undertakes to report this information in 2014.	●	184, 288
EN22 <sub>COMM</sub>	C	Total weight of waste by type and disposal method. <b>Limitation:</b> The differentiation of waste by disposal method is not available in our current recording systems. An estimate would not be reliable. Enel undertakes to report such information in 2014.	●	198-199, 289
EN23	C	Total number and volume of significant spills.	●	201, 297-298
EN24	A	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally. <b>Reason:</b> The data are not available in our current recording systems. An estimate would not be reliable. It is an additional GRI indicator, which is not relevant to the determination of the A+ application level.	○	-
EN25	A	Identity, size, protected status, and biodiversity of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	●	184, <a href="http://www.enel.com/en-GB/sustainability/environment/biodiversity/">http://www.enel.com/en-GB/sustainability/environment/biodiversity/</a>
EN26	C	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	●	160-162, 172-174, 177, 182, 197, 199
EN27	C	Percentage of products sold and their packaging materials that are reclaimed by category. <b>Reason:</b> Insignificant, because Enel does not produce significant quantities of packageable goods to be sold. Therefore this indicator is not significant with regard to Enel's specific circumstances.	○	-
EN28	C	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	●	171, 286

Indicator	Indicator type	Description	Level of reporting	References
EN29	A	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	●	202-203, 176, 180, 288
EN30	A	Total environmental protection expenditures and investments by type.	●	170-171, 286
<b>Social performance indicators: suitable labor practices and working conditions</b>				
LA1 <sub>COMM</sub>	C	Total workforce by employment type, employment contract, and region.	●	104, 238, 269-270, 291
LA2 <sub>COMM</sub>	C	Total number and rate of employee turnover by age group, gender, and region.	●	104, 238, 271-272
EU17	C	Days worked by contractor and subcontractor employees involved in construction, operation, and maintenance activities	●	238, 291
EU18	C	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training.	●	244
LA3	A	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operator.	●	127-128
LA4 <sub>COMM</sub>	C	Percentage of employees covered by collective bargaining agreements.  <b>Limitation:</b> The data regarding contractors and subcontractors (EUSS commentary) are not available. Given the fragmentation of such firms, it is difficult to collect such data. An estimate would be neither reliable nor significant. Enel undertakes to report such information in 2014.	●	133, 279-280
LA5	C	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	●	134
LA6	A	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	●	136-138
LA7 <sub>COMM</sub>	C	Rates of injury, occupational diseases, lost days, and absenteeism and number of work-related fatalities by region.	●	118, 245, 278, 292
LA8	C	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	●	111-118, 119-120, 121
LA9	A	Health and safety topics covered in formal agreements with trade unions.	●	136
LA10	C	Average hours of training per year per employee category.	●	109, 278
LA11	A	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing their career endings.	●	127-128
LA12	A	Percentage of employees receiving regular performance and career development reviews.	●	108, 277
LA13	C	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	●	130-131, 266, 279. Annual Report\ 10
LA14	C	Ratio of basic salary of men to women by employee category.	●	279
<b>Social performance indicators: Human rights</b>				
HR1	C	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.	●	86-87, 267
HR2	C	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	●	241
HR3	A	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	●	85
HR4	C	Total number of incidents of discrimination and actions taken.	●	86-87, 241
HR5 <sub>COMM</sub>	C	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	●	86-87, 133-134, 241
HR6	C	Operations identified of having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	●	86-87, 241
HR7	C	Operations identified as having significant risk for incidents of forced or compulsory labor and measures to contribute to the elimination of forced or compulsory labor.	●	86-87, 241

Indicator	Indicator type	Description	Level of reporting	References
HR8	A	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.  <b>Reason:</b> insignificant. It is an additional GRI indicator, which is not relevant to the determination of the A+ level of application and is not significant with regard to Enel's specific circumstances.	○ -	
HR9	A	Total number of incidents of violations involving rights of indigenous people and actions taken.	● 214	
<b>Social performance indicators: Society</b>				
SO1 <sub>COMM</sub>	C	Nature, scope, and effectiveness of any program and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	● 210, 211-213, 213-215, 290	
EU22	C	Number of people physically or economically displaced and compensation broken down by type of project.	● 211-213	
SO2	C	Percentage and total number of business units analyzed for risks related to corruption.	● 86	
SO3	C	Percentage of employees trained in organization's anti-corruption policies and procedures.	● 85	
SO4	C	Actions taken in response to incidents of corruption.	● 86	
SO5	C	Public policy positions and participation in public policy development and lobbying.	● 87-88	
SO6	A	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	● 87-88	
SO7	A	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	● 88	
SO8	C	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	● Annual Report \ 227-232	
<b>Social performance indicators: Product responsibility</b>				
PR1 <sub>COMM</sub>	C	Life-cycle stages in which health and safety impacts of products and services are assessed for improvement and percentage of significant products and services categories subject to such procedures.	● 216-218	
PR2	A	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcome.  <b>Limitation:</b> Cases, if any, regarding the foreign boundary are not available in our current recording systems. Enel undertakes to report such information in 2014.	● 147	
EU25	C	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements, and pending legal cases of diseases.	● 216-218, 245, 290	
PR3	C	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	● 153-154, 157	
PR4	A	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling by type of outcome.	● 156	
PR5	A	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	● 147-148, 283-284	
PR6	C	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	● 156-157	
PR7	A	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcome.	● 156	
PR8	A	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.  <b>Limitation:</b> The data regarding the Latin American countries are not available because of the diversity and lack of uniformity in the regulation of privacy in those countries compared to European countries. Enel undertakes to report such information in 2014.	● 154, 285	
PR9	C	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	● 147, 154	
EU26	C	Percentage of population unserved in licensed distribution or service areas.  <b>Limitation:</b> The total boundary data are not available because of the difficulty of standardizing the method of estimating this percentage in distribution areas. Enel undertakes to report this information in 2014.	● 151, 220	

Indicator	Indicator type	Description	Level of reporting	References
EU27	C	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime.  <b>Limitation:</b> The data regarding the Latin American countries and Romania are unavailable because of the difficulty of standardizing them. Enel undertakes to report such information in 2014.	 284-285	
EU28	C	Power outage frequency.  <b>Limitation:</b> The data regarding the Latin American countries are not available because of the difficulty of standardizing them. Enel undertakes to report such information in 2014.	 282	
EU29	C	Average power outage duration.  <b>Limitation:</b> The data regarding the Latin American countries are not available because of the difficulties of standardizing them. Enel undertakes to report such information in 2014.	 282-283	
EU30	C	Average plant availability factor by energy source and by regulatory regime.  <b>Limitation:</b> The data regarding the Latin American countries are not available because of the difficulty of standardizing them. Enel undertakes to report such information in 2014.	 282	



# Appendix

## Performance indicators

## Glossary

The following tables present the numbers that Enel considers essential for checking and measuring its sustainability.

The tables contain:

- > a description of the number recorded,
- > the unit of measurement in which it is expressed,
- > the number for 2010,
- > the number for 2009,
- > the number for 2008,
- > the absolute change in the 2010 value with respect to that of 2009,
- > the percentage change in the 2010 number with respect to that of 2009, and
- > the corporate boundary to which the number refers.

When comparing figures from different years, the significant boundary changes described in the "Report Parameters" section on page 26 should be kept in mind.

Criteria for preparing the Key Performance Indicators (KPI):

- > With regard to the boundary, by "Enel" is meant the entire Group.
- > By "abroad" is meant the entire Group, excluding Italy.
- > The economic data under "Economic performance" regarding the years 2009 and 2010 are identical to those presented in the Annual Report.
- > The differences between 2010 and 2009, expressed in both absolute and percentage value were calculated considering the decimal figures not visible in print.

# Performance indicators

## Our I. D.

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>GENERATION</b>							
<b>EU1</b>							
Net efficient thermal power:	(MW)	57,222	55,826	47,629	1,396	2.5	Enel
Coal	(MW)	18,122	17,400	15,054	721	4.1	Enel
CCGT	(MW)	13,248	11,977	9,959	1,271	10.6	Enel
Oil/gas	(MW)	25,852	26,449	22,616	-597	-2.3	Enel
Net efficient nuclear power	(MW)	5,332	5,284	4,466	48	0.9	Enel
Net efficient renewable power	(MW)	34,727	34,216	30,415	511	1.5	Enel
Hydro <sup>(1)</sup>	(MW)	31,033	31,018	27,186	15	0.0	Enel
Wind	(MW)	2,731	2,321	2,446	410	17.7	Enel
Geo	(MW)	775	742	678	33	4.4	Enel
Biomass and co-generation	(MW)	154	101	84	53	52.7	Enel
Other	(MW)	34	35	21	-1	-2.9	Enel
Total net efficient power	(MW)	97,281	95,326	82,510	1,955	2.1	Enel
Italy	(MW)	40,522	40,420	40,323	102	0.3	Italy
Iberian Peninsula (Endesa + Eufer)	(MW)	23,810	22,120	15,913	1,690	7.6	Iberia
Morocco	(MW)	123	123	82	-	-	Morocco
Ireland	(MW)	1,013	1,068	-	-55	-5.1	Ireland
France	(MW)	102	68	12	34	49.9	France
Greece (Elica + Endesa in 2009 and 2008)	(MW)	143	152	105	-9	-6	Greece
Bulgaria	(MW)	850	796	602	54	6.8	Bulgaria
Slovakia <sup>(1)</sup>	(MW)	5,401	5,345	5,705	56	1.0	Slovakia <sup>(1)</sup>
Russia	(MW)	8,198	8,198	8,183	-	-	Russia
Central Europe	(MW)	64	-	96	64	100	Central Europe
North America	(MW)	788	788	749	-	-	North America
Latin America (Endesa + Eufer)	(MW)	16,267	16,248	10,740	19	0.1	Latin America
Total net efficient power	(MW)	97,281	95,326	82,510	1,955	2.1	Enel
<b>Production plants</b>							
Total thermal units	(n.)	500	504	344	-4	-0.8	Enel
Steam units (condensations and back pressure)	(n.)	169	177	139	-8	-4.5	Enel

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
CCGT units	(n.)	59	52	37	7	13.5	Enel
GT units	(n.)	83	82	52	1	1.2	Enel
Units with alternative engines	(n.)	189	193	116	-4	-2.1	Enel
<b>Thermal plants</b>	<b>(n.)</b>	<b>122</b>	<b>122</b>	<b>117</b>	<b>-</b>	<b>-</b>	<b>Enel</b>
<b>Renewable-energy plants</b>	<b>(n.)</b>	<b>1,013</b>	<b>1,063</b>	<b>1,061</b>	<b>-50</b>	<b>-4.7</b>	<b>Enel</b>
Hydro plants	(n.)	811	845	858	-34	-4.0	Enel
- including mini-hydro plants (<10 MW)	(n.)	404	352	378	52	14.8	Enel
Wind plants	(n.)	151	155	161	-4	-2.6	Enel
Photovoltaic plants	(n.)	7	6	4	1	16.7	Enel
Geothermal plants	(n.)	35	34	32	1	2.9	Enel
Biomass plants	(n.)	9	23	6	-14	-60.9	Enel

## DISTRIBUTION

### EU4

<b>Length of electric lines</b>	<b>(km)</b>	<b>1,810,951</b>	<b>1,781,921</b>	<b>1,498,740</b>	<b>29,029.4</b>	<b>1.6</b>	<b>Enel</b>
Total LV lines	(km)	1,128,591	1,108,021	997,297	20,569.8	1.9	Enel
Total MV lines	(km)	645,479	635,123	325,923	10,355.9	1.6	Enel
Total HV lines	(km)	36,882	38,778	175,520	-1,896.3	-4.9	Enel
<b>Distribution lines</b>							
HV lines at year end	(km)	57	57	18,939	0	0.0	Italy
- including underground cable	(km)	0	0	498	0	0.0	Italy
MV lines at year end	(km)	344,029	342,289	340,427	1,740	0.5	Italy
- including underground cable	(km)	135,911	133,860	132,105	2,051	1.5	Italy
LV lines at year end	(km)	765,024	757,337	752,789	7,687	1.0	Italy
- including underground cable	(km)	247,577	246,788	242,760	788	0.3	Italy
<b>Total electricity distribution lines</b>	<b>(km)</b>	<b>1,109,110</b>	<b>1,099,683</b>	<b>1,112,155</b>	<b>9,427</b>	<b>0.9</b>	<b>Italy</b>
HV lines at year end	(km)	6,583	6,023	5,090	560	9.3	Romania
- including underground cable	(km)	247	223	215	24	10.8	Romania
MV lines at year end <sup>(2)</sup>	(km)	34,439	34,042	37,591	398	1.2	Romania
- including underground cable	(km)	11,766	13,941	13,690	-2,175	-15.6	Romania
LV lines at year end	(km)	48,218	47,901	47,559	317	0.7	Romania <sup>(2)</sup>
- including underground cable	(km)	19,931	19,931	19,444	0	0.0	Romania <sup>(2)</sup>
<b>Total electricity distribution lines</b>	<b>(km)</b>	<b>89,240</b>	<b>87,966</b>	<b>90,240</b>	<b>1,274</b>	<b>1.4</b>	<b>Romania <sup>(2)</sup></b>
HV lines at year end	(km)	18,880	21,423	-	-2,543	-11.9	Iberia
- including underground cable	(km)	680	1,076	-	-396	-36.8	Iberia
MV lines at year end	(km)	118,668	117,381	-	1,287	1.1	Iberia
- including underground cable	(km)	38,225	37,000	-	1,224	3.3	Iberia
LV lines at year end	(km)	179,727	174,588	-	5,139	2.9	Iberia
- including underground cable	(km)	84,974	80,650	-	4,324	5.4	Iberia
<b>Total electricity distribution lines</b>	<b>(km)</b>	<b>317,275</b>	<b>313,392</b>	<b>-</b>	<b>3,883</b>	<b>1.2</b>	<b>Iberia</b>
HV lines at year end	(km)	11,362	11,275	-	87	0.8	Latin America
- including underground cable	(km)	663	711	-	-49	-6.9	Latin America
MV lines at year end	(km)	148,342	141,411	-	6,931	4.9	Latin America

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
- including underground cable	(km)	9,626	9,470	-	156	1.7	Latin America
LV lines at year end	(km)	135,622	128,195	-	7,427	5.8	Latin America
- including underground lines	(km)	19,529	19,250	-	279	1.5	Latin America
Total electricity distribution lines	(km)	295,326	280,881	-	14,445	5.1	Latin America
<b>SALE</b>							
<b>EU3</b>							
<b>Electricity market customers</b>							
Italy	(n.)	29,362,479	29,723,135	30,232,777	-360,656	-1.2	Italy
Iberian Peninsula	(n.)	11,729,319	11,699,674	7,810,996	29,645	0.3	Iberia
Latin America	(n.)	13,271,599	12,906,412	8,325,115	365,187	2.8	Latin America
Romania	(n.)	2,605,345	2,564,717	2,557,076	40,628	1.6	Romania
France	(n.)	77	26	15	51	196.2	France
Slovakia	(n.)	136	-	-	136	-	Slovakia
Russia	(n.)	99,784	105,002	104,970	-5,218	-4.97	Russia
Total electricity market end customers	(n.)	57,068,738	56,998,966	49,030,949	69,772	0.12	Enel
<b>Gas market customers</b>							
Gas market Italy	(n.)	2,902,739	2,773,370	n,d,	129,369	4.7	Italy
Gas market abroad	(n.)	1,083,801	1,169,855	n,d,	-86,054	-7.4	Endesa
Total gas market end customers	(n.)	3,986,540	3,943,225	n,d,	43,315	1.1	Enel

(1) The values include the Gabčíkovo hydro plant in Slovakia, (net capacity 739 MW) in carve-out (managed, but not owned, by Enel).

(2) The 2009 value was reclassified, because the lines have been mistakenly considered up to the point of delivery.



# The Enel Group: identity, values, results

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>OPERATING RESULTS</b>							
<b>PRODUCTION</b>							
<b>EU2</b>							
Net thermal production	(TWh)	156.7	149.3	146.3	7.4	5.0	Enel
Coal	(TWh)	73.1	73.9	67.9	-0.8	-1.1	Enel
CCGT	(TWh)	38.2	34.5	44.2	3.7	10.6	Enel
Oil/gas	(TWh)	45.4	40.9	34.2	4.5	11.0	Enel
Net nuclear production	(TWh)	41.2	31.9	32.9	9.2	29.0	Enel
Net renewable production	(TWh)	92.3	86.6	73.9	5.7	6.6	Enel
Hydro <sup>(1)</sup>	(TWh)	80.8	76.1	64.3	4.7	6.2	Enel
Wind	(TWh)	5.6	4.8	4	0.8	17.2	Enel
Geo	(TWh)	5.3	5.2	5.2	0.1	2.4	Enel
Biomass and co-generation	(TWh)	0.6	0.5	0.5	0.1	26.2	Enel
Other	(TWh)	0.03	0.06	-	-0.03	-49.0	Enel
Total net production	(TWh)	290.2	267.8	253.2	22.4	8.4	Enel
Italy	(TWh)	81.6	84	96.3	-2.4	-2.9	Enel
Iberian Peninsula	(TWh)	69.9	61.3	60.6	8.6	14.1	Enel
Morocco	(TWh)	0.7	0.8	0.6	-0.1	-10.3	Enel
Ireland	(TWh)	0.3	0.5	-	-0.2	-40.7	Enel
France	(TWh)	0.1	0.1	0	0	125	Enel
Greece (Elica + Endesa)	(TWh)	0.3	0.3	0.2	0	12.8	Enel
Bulgaria	(TWh)	4.7	3.7	3.7	0.99	26.5	Enel
Slovakia <sup>(1)</sup>	(TWh)	21	19.9	22.5	1.1	5.4	Enel
Russia	(TWh)	42.8	39.1	22.5	3.7	9.5	Enel
Other Europe (Romania)	(TWh)	0.004	--	0.64	0.004	--	Enel
North America	(TWh)	2.6	2.4	1.9	0.2	9.0	Enel
Latin America	(TWh)	66	55.7	44.2	10.3	18.6	Enel
Total net production	(TWh)	290.2	267.8	253.2	22.4	8.4	Enel
<b>Green Energy</b>							
Development of renewable energy <sup>(2)</sup>	(MW)	511	3,801	-53	-3,290	-86.6	Enel
Hydro	(MW)	15	3,832	-705	-3,817	-99.6	Enel
Wind	(MW)	410	-125	639	535	-427.0	Enel
Geo	(MW)	33	64	0	-31	-48.1	Enel
Biomass and co-generation	(MW)	53	17	-8	36	217.3	Enel
Other	(MW)	0	14	21	-14	-100.8	Enel
<b>DISTRIBUTION</b>							
Electricity wheeled	TWh	431	394	394	37	9.3	Enel
Municipalities served by electricity grid	(n.)	13,366	13,054	12,045	312	2.4	Enel

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>SALE</b>							
<b>Volume of electricity sold</b>							
Volume sold in free market	(GWh)	183,133	143,775	97,716	39,358	27.4	Enel
Italy <sup>(10)</sup>	(GWh)	45,678	56,066	55,517	-10,388	-18.5	Italy
Iberian Peninsula	(GWh)	106,894	72,137	32,417	34,757	48.2	Iberia
Romania	(GWh)	923	1,022	981	-99	-9.7	Romania
France	(GWh)	5,578	3,276	1,031	2,302	70.3	France
Russia	(GWh)	14,737	5,243	3,154	9,494	181.1	Russia
Slovakia	(GWh)	2,216	293	-	1,923	656.3	Slovakia
Latin America	(GWh)	7,107	5,738	4,616	1,369	23.9	Latin America
Volume sold in regulated market	(GWh)	125,879	144,175	172,674	-18,296	-12.7	Enel
Italy <sup>(10)</sup>	(GWh)	67,763	71,273	81,714	-3,510	-4.9	Italy
Iberian Peninsula	(GWh)	0	15,371	43,133	-15,371	-100.0	Iberia
Romania	(GWh)	8,103	8,576	6,812	-473	-5.5	Romania
Russia	(GWh)	6,316	14,433	14,264	-8,117	-56.2	Russia
Latin America	(GWh)	43,697	34,522	26,751	9,175	26.6	Latin America
Total volume sold	(GWh)	309,012	287,950	270,390	21,062	7.3	Enel
Italy <sup>(10)</sup>	(GWh)	113,441	127,339	137,231	-13,898	-10.9	Italy
Iberian Peninsula	(GWh)	106,894	87,508	75,550	19,386	22.2	Iberia
Romania	(GWh)	9,026	9,598	7,793	-572	-6.0	Romania
France	(GWh)	5,578	3,276	1,031	2,302	70.3	France
Russia	(GWh)	21,053	19,676	17,418	1,377	7.0	Russia
Slovakia	(GWh)	2,216	293	-	1,923	656.3	Slovakia
Latin America	(GWh)	50,804	40,260	31,367	10,544	26.2	Latin America
Volume of gas sold	(M. of m <sup>3</sup> )	8.9	8.6	8.2	0.3	3.5	Enel
Italy	(M. of m <sup>3</sup> )	5.5	5.2	5.7	0.3	5.8	Enel
Endesa	(M. of m <sup>3</sup> )	3.4	3.4	2.5	-	-	Enel
<b>REVENUE</b>							
<b>EC1</b>							
Revenue <sup>(9)</sup>	(mil Euro)	73,377	64,362	61,184	9,015	14.0	Enel
Sales	(mil Euro)	18,697	20,330	22,609	-1,633	-8.0	Enel
GEM	(mil Euro)	17,540	18,377	22,143	-837	-4.6	Enel
Engineering and Innovation	(mil Euro)	608	903	1,005	-295	-32.7	Enel
Infrastructure and Networks	(mil Euro)	7,427	7,273	6,537	154	2.1	Enel
Iberia and Latin America	(mil Euro)	31,263	21,800	15,805	9,463	43.4	Enel
International	(mil Euro)	6,360	5,568	4,708	792	14.2	Enel
Renewable Energy	(mil Euro)	2,177	1,751	1,852	426	24.3	Enel
Parent Company	(mil Euro)	679	637	727	42	6.6	Enel
Services and Other Activities	(mil Euro)	1,133	1,092	1,169	41	3.8	Enel
Eliminations and adjustments	(mil Euro)	-12,507	-13,369	-15,371	862	-6.4	Enel
EBITDA <sup>(9)</sup>	(mil Euro)	17,480	16,371	14,318	1,109	6.8	Enel
Sales	(mil Euro)	483	393	554	90	22.9	Enel
Generation and Energy Management	(mil Euro)	2,392	3,024	3,113	-632	-20.9	Enel

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
Engineering and Innovation	(mil Euro)	14	17	14	-3	-17.6	Enel
Infrastructure and Networks	(mil Euro)	3,813	4,017	3,719	-204	-5.1	Enel
Iberia and Latin America	(mil Euro)	7,896	6,196	4,647	1,700	27.4	Enel
International	(mil Euro)	1,520	1,452	1,044	68	4.7	Enel
Renewable Energy	(mil Euro)	1,310	1,178	1,188	132	11.2	Enel
Other (Parent Company, Services and Other Activities, eliminations and adjustments)	(mil Euro)	52	94	39	-42	-44.7	Enel
Sales	(%)	2.8	2.4	3.9	0.4	15.1	Enel
Generation and Energy Management	(%)	13.7	18.5	21.7	-4.8	-25.9	Enel
Engineering and Innovation	(%)	0.1	0.1	0.1	0	-22.9	Enel
Infrastructure and Networks	(%)	21.8	24.5	26	-2.7	-11.1	Enel
Iberia and Latin America	(%)	45.2	37.8	32.5	7.3	19.4	Enel
International	(%)	8.7	8.9	7.3	-0.2	-2.0	Enel
Renewable Energy	(%)	7.5	7.2	8.3	0.3	4.2	Enel
Other (Parent Company, Services and Other Activities, eliminations and adjustments)	(%)	0.3	0.6	0.3	-0.3	-48.2	Enel
EBIT <sup>(9)</sup>	(mil Euro)	11,258	11,032	9,541	226	2.0	Enel
EBT <sup>(9)</sup>	(mil Euro)	8,074	9,345	6,379	-1,271	-13.6	Enel
Group net income for the year <sup>(9)</sup>	(mil Euro)	4,390	5,586	5,293	-1,196	-21.4	Enel

## EC1

### Value added by stakeholder <sup>(9)</sup>

Revenue	(mil Euro)	73,377	64,362	61,184	9,015	14.0	Enel
External costs	(mil Euro)	49,567	42,214	41,841	7,353	17.4	Enel
Proceeds /(Expenses) net of commodity risk	(mil Euro)	280	264	-20	16	6.1	Enel
Gross value added continuing operations	(mil Euro)	24,090	22,412	19,323	1,678	7.5	Enel
Gross value added discontinued operations	(mil Euro)	-	-158	240	158	100.0	Enel
Total gross value added	(mil Euro)	24,090	22,254	19,563	1,836	8.3	Enel
Shareholders	(mil Euro)	2,350	2,734	3,031	-384	-14.0	Enel
Providers of capital	(mil Euro)	3,184	1,687	3,162	1,497	88.7	Enel
Employees	(mil Euro)	4,907	4,908	4,049	-1	0.0	Enel
Government	(mil Euro)	3,711	3,462	1,320	249	7.2	Enel
Enterprise system	(mil Euro)	9,938	9,463	8,001	475	5.0	Enel

### Economic value obtained: <sup>(9)</sup>

#### Economic value generated directly

Revenue	(mil Euro)	73,377	64,362	61,184	9,015	14.0	Enel
Economic value distributed:							
Operating costs	(mil Euro)	49,287	41,950	41,861	7,337	17.5	Enel
Personnel and benefit cost	(mil Euro)	4,907	4,908	4,049	-1	0.0	Enel
Payment to providers of capital	(mil Euro)	5,534	4,421	6,193	1,113	25.2	Enel
Payment to governments	(mil Euro)	3,711	3,462	1,320	249	7.2	Enel
Economic value discontinued operations	(mil Euro)	-	-158	240	158	100.0	Enel
Economic value obtained <sup>(9)</sup>	(mil Euro)	9,938	9,779	8,001	159	1.6	Enel

## SHAREHOLDERS

### Composition of shareholder base

Investors							
Ministry of the Economy <sup>(4)</sup>	(%)	31.2	13.9	21.1	17.3	124.5	Enel SpA
Cassa Depositi e Prestiti <sup>(4)</sup>	(%)	-	17.4	10.1	-	-	Enel SpA
Institutional investors <sup>(5)</sup>	(%)	37	37.3	33.1	-0.3	-0.8	Enel SpA
Retail shareholders <sup>(5)</sup>	(%)	31.8	31.4	35.7	0.4	1.3	Enel SpA

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>Location of institutional investors <sup>(6)</sup></b>							
Italy	(%)	15.4	12.3	15.1	3.1	25.2	Enel SpA
UK	(%)	15.9	19.2	23.2	-3.3	-17.2	Enel SpA
Rest of Europe	(%)	42.7	39.9	31.1	2.8	7.0	Enel SpA
Noth America	(%)	21.3	23.4	24.8	-2.1	-9.0	Enel SpA
Rest of the world	(%)	4.7	5.2	5.8	-0.5	-9.6	Enel SpA
Concentration (Top 50)	(%)	19.2	20.1	21.5	-0.9	-4.5	Enel SpA
<b>Institutional investors' investment style <sup>(6)</sup></b>							
Long only	(%)	74.4	67.9	65.2	6.5	9.6	Enel SpA
Index	(%)	9.5	5	21.3	4.5	90.0	Enel SpA
Hedge	(%)	0.7	1.6	0.5	-0.9	-56.3	Enel SpA
Other	(%)	15.4	25.5	3.7	-10.1	-39.6	Enel SpA
<b>Socially responsible investors <sup>(6)</sup></b>							
Presence SRI funds	(n.)	61	67	68	-6.0	-9.0	Enel SpA
Enel shares held by SRI funds <sup>(7)</sup>	(mil)	457.1	513.7	361.3	-56.6	-11.0	Enel SpA
Weight of SRI in institutional funds <sup>(7)</sup>	(%)	16.9	18.6	17.6	-1.7	-9.1	Enel SpA
<b>Breakdown of shareholder base</b>							
Italy	(%)	2.2	2.7	1.2	-0.5	-18.5	Enel SpA
UK	(%)	13.7	5.8	2.6	7.9	136.2	Enel SpA
Rest of Europe	(%)	66.7	71.9	59	-5.2	-7.2	Enel SpA
North America	(%)	15.8	13.8	35.2	2.0	14.5	Enel SpA
Rest of the world	(%)	1.6	5.8	2	-4.2	-72.4	Enel SpA
SRI presence top 10	(n.)	2	1	1	1.0	100.0	Enel SpA
<b>Share performance</b>							
<b>Financial performance of shares</b>							
ENEL	(%)	-6.4	1.5	-44.4	-7.9	-524.1	Enel SpA
FTSEMib (MIB30 in 2008)	(%)	-12	19.5	-48.4	-31.5	-161.8	Enel SpA
FTSEElec	(%)	-6.7	5.8	-40.3	-12.5	-215.7	Enel SpA
Acea	(%)	16.9	-18.5	-32.3	35.4	-191.4	Enel SpA
A2A	(%)	-28.8	4.8	7.6	-33.6	-699.7	Enel SpA
Centrica	(%)	17.6	7.5	-16.7	10.1	135.1	Enel SpA
Endesa	(%)	-19.1	-16.3	-21.3	-2.8	17.2	Enel SpA
Iberdrola	(%)	-12.9	2	-37.1	-14.9	-746.2	Enel SpA
RWE	(%)	-26.3	6.7	-34	-33.0	-492.9	Enel SpA
E.ON	(%)	-21.6	2.8	-41.4	-24.4	-872.8	Enel SpA
Cez	(%)	-9.7	10.1	-42.4	-19.8	-196.3	Enel SpA
GDF-Suez	(%)	-8	-11.7	-11.7	3.7	-31.3	Enel SpA
EDF	(%)	-24.5	1.4	-49.1	-25.9	-1,853.5	Enel SpA
EdP	(%)	-19.5	15.1	-39.7	-34.6	-229.0	Enel SpA
<b>Dividend Yield</b>							
A2A	(%)	5.8	4.8	7.6	1.1	22.1	Enel SpA
ENEL	(%)	7.5	6.2	11.7	1.3	20.8	Enel SpA
Centrica	(%)	4.3	4.6	4.6	-0.2	-5.3	Enel SpA
Iberdrola	(%)	0.5	7	5	-6.5	-92.6	Enel SpA
RWE	(%)	7	5.2	7.1	1.9	36.2	Enel SpA
E.ON	(%)	6.5	5.1	5.3	1.4	27.4	Enel SpA
GDF-Suez	(%)	5.6	4.9	4	0.7	15.1	Enel SpA
EDF	(%)	3.7	1.3	3.1	2.4	183.2	Enel SpA



KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>Enel in the main world stock indexes</b>							
E100	(%)	0.8	0.8	0.7	-	-5.7	Enel SpA
FTSE Italy All Share (MIBTEL in 2008)	(%)	9.3	9.3	7.3	-	-0.2	Enel SpA
FTSE Italy All Share Utilities (MIBPUBLH in 2008)	(%)	59.7	64.2	36	-4.5	-7.1	Enel SpA
BE500	(%)	0.5	0.6	0.6	-	-6.9	Enel SpA
BEELECT	(%)	9.7	9.3	7.2	0.4	4.2	Enel SpA
Enel in the FTSE4GOOD sustainability index	(index)	No	No	No	-	-	Enel SpA
Enel presence in the DJSI	(index)	Yes	Yes	Yes	-	-	Enel SpA
<b>Shareholder return</b>							
EPS	(Euro cents)	47	59	54	-12.0	-20.3	Enel SpA
TSR since IPO	(%)	-5.6	-5.4	-0.5	-0.2	3.3	Enel SpA
TSR last 2 years	(%)	5.4	-17.4	-18.3	22.8	-130.8	Enel SpA
<b>Communication with shareholders <sup>(8)</sup></b>							
Meetings with investors	(n.)	550	360	143	190	52.8	Enel SpA
Information on CSR	(n.)	50	31	30	19	61.3	Enel SpA
Retail shareholder requests for information	(n.)	467	820	608	-353	-43.0	Enel SpA
<b>PROVIDERS OF CAPITAL</b>							
<b>Debt</b>							
Total debt	(mil Euro)	44,924	50,870	49,967	-5,946	-11.7	Enel
Debt to equity	(ratio)	0.8	1.1	1.9	-0.27	-24.2	Enel
<b>Rating</b>							
S&P	(rating)	A-	A -	A -	-	-	Enel
Outlook	(rating)	Stable	Stable	Negative	-	-	Enel
Moody's	(rating)	A2	A2	A2	-	-	Enel
Outlook	(rating)	Negative	Negative	Negative	-	-	Enel
Fitch	(rating)	A-	A -	n.a.	-	-	Enel
Outlook	(rating)	Stable	Stable	n.a.	-	-	Enel
<b>Investment</b>							
Investment	(mil Euro)	11,716.40	6,824.80	6,502.00	4,891.6	71.7	Enel
Valle d'Aosta	(mil Euro)	9.5	11.3	13	-1.8	-16.0	Enel
Piemonte	(mil Euro)	132.5	123.7	147.8	8.8	7.1	Enel
Lombardy	(mil Euro)	202.9	207.2	241.1	-4.3	-2.1	Enel
Trentino Alto Adige	(mil Euro)	14.4	12.3	10	2.1	17.4	Enel
Veneto	(mil Euro)	171.9	163.5	204.6	8.4	5.2	Enel
Friuli Venezia Giulia	(mil Euro)	15.8	15.7	20.7	0.1	0.3	Enel
Liguria	(mil Euro)	52.2	58.2	69.9	-6.0	-10.3	Enel
Emilia Romagna	(mil Euro)	81.6	102.9	127.2	-21.4	-20.8	Enel
Tuscany	(mil Euro)	242.3	251	233.4	-8.6	-3.4	Enel
Marche	(mil Euro)	27.3	26.2	40.7	1.1	4.1	Enel
Umbria	(mil Euro)	29.3	20.5	26.7	8.7	42.6	Enel
Lazio	(mil Euro)	505.4	736.3	963.8	-230.9	-31.4	Enel
Abruzzo	(mil Euro)	35.6	39.1	39.2	-3.5	-9.1	Enel
Molise	(mil Euro)	13.1	17.3	38.9	-4.2	-24.3	Enel
Campania	(mil Euro)	190.6	108	113.9	82.6	76.5	Enel
Apulia	(mil Euro)	198.4	178.2	151.8	20.1	11.3	Enel
Basilicata	(mil Euro)	15.3	23.6	30.4	-8.2	-34.9	Enel

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
Calabria	(mil Euro)	209.9	53.1	56.3	156.8	295.2	Enel
Sicily	(mil Euro)	233.2	158.2	174.5	75.0	47.4	Enel
Sardinia	(mil Euro)	82.4	95.6	137.2	-13.2	-13.8	Enel
<b>Total Italy</b>	<b>(mil Euro)</b>	<b>2,463.60</b>	<b>2,401.90</b>	<b>2,841.10</b>	<b>61.7</b>	<b>2.6</b>	<b>Enel</b>
Spain	(mil Euro)	137	146	192.9	-9.1	-6.2	Enel
Slovakia	(mil Euro)	500.3	331	176.8	169.3	51.2	Enel
Eastern Europe + France + Greece	(mil Euro)	505.6	494.6	346.3	10.9	2.2	Enel
Russia	(mil Euro)	323.6	373.6	223.3	-50.0	-13.4	Enel
North America	(mil Euro)	172.8	-7.6	289.5	180.5	-	Enel
South America	(mil Euro)	121.2	107.8	27.2	13.4	12.4	Enel
Endesa	(mil Euro)	2,866.00	2,962.20	2,382.40	-96.1	-3.2	Enel
<b>Total abroad</b>	<b>(mil Euro)</b>	<b>4,626.40</b>	<b>4,407.60</b>	<b>3,638.30</b>	<b>218.9</b>	<b>5.0</b>	<b>Enel</b>
Adjustments	(mil Euro)	-	15.3	22.6	-15.3	-100.0	Enel
<b>Weight of investment abroad</b>	<b>(%)</b>	<b>39.5</b>	<b>64.6</b>	<b>56</b>	<b>-25.1</b>	<b>-38.9</b>	<b>Enel</b>

## LA13

### CORPORATE GOVERNANCE

#### Board of Directors

Total members BoD	(n.)	9	9	9	-	-	Enel SpA
- including non-executive directors	(n.)	7	7	7	-	-	Enel SpA
Independent directors	(n.)	5	5	5	-	-	Enel SpA
Directors designated by minority shareholders	(n.)	3	3	3	-	-	Enel SpA
Women on BoD	(n.)	-	-	-	-	-	Enel SpA
BoD meetings	(n.)	15	20	17	-5	-25.0	Enel SpA

#### Internal dealing

Shares held by BoD and other "important persons" <sup>(3)</sup>	(.000)	2,857.00	2,258.30	1,168.80	598.7	26.5	Enel SpA
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- (1) The values include the Gabčíkovo hydro plant in Slovakia, (739 MW net capacity) in carve-out (managed, but not owned, by Enel).
- (2) Includes boundary changes and net of divestment.
- (3) The number reported in this regard concerns investment in shares of Enel SpA, Endesa SA, and Enel Green Power SpA made by directors and regular Statutory auditors of Enel SpA, directors of Endesa SA, and 28 other executive positions of Enel SpA and Endesa SA that have regular access to inside information and are empowered to make management decisions that could affect the development and future prospects of the Enel Group, taking into account the different boundaries of the "important persons" and of financial instruments whose regulation with regard to internal dealing are applicable in the years under consideration.
- (4) Since December 16, 2010 the Ministry of the Economy and Finance directly owns 31.2% of Enel SpA's share capital as a result of the trading of equity interests provided for by the decree of the Minister of the Economy and Finance of November 30, 2010.
- (5) Since February 2010 the share of "unidentified" previously attributed entirely to retail shareholders has been redistributed proportionally between institutional investors and retail shareholders. The value as of December 31, 2009 has also been reclassified.
- (6) The 2010 values regard the last survey, carried out in December 2010, while those of 2009 have been reclassified according to the latest survey, carried out in February 2010.
- (7) Calculated since February 2010 according to the number of shares that have been identified as belonging to institutional investors. (Not all institutional investors are identified as SRI funds.) Therefore, 2009 has also been reclassified.
- (8) Values based on the sum of the meetings held during the different road shows and an estimate of the meetings at Enel with institutional investors. As far as the information requests by retail shareholders in 2010 are concerned, 262 are written requests and 205 phone calls. (These numbers do not include the flows managed externally by a specially engaged firm during the placement of Enel Green Power shares - about 17,000 contacts - in the period October 18-29 2010.) The total number of written requests as of December 31, 2010 breaks down as follows: a) performance of Enel shares, 5; b) requests of accounting documents, 126; c) information on share dividends and bonds, 93; d) information on public offerings of Enel shares and related bonus shares, 0; e) information on the Enel Group's activities, 9; f) information on shareholders' meetings, 3; g) information regarding CSR, 1; and h) other, 25.
- (9) The 2009 values were reclassified following the 2009 income statement restatement in consequence of the application of several new accounting principles (IFRIC 12 and IFRIC 18) and the conclusion of the process of purchase price allocation on the acquisition of 25.01% of Endesa's capital.
- (10) Excluding sales to dealers.

# Responsibility, transparency, ethics

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>DMA HR</b>							
<b>ETHICAL AUDITING</b>							
<b>Implementation of the Code of Ethics</b>							
Reports received of injured or potentially injured stakeholders <sup>(1)</sup>	(n.)	225	243	133	-18	-7.4	Enel
Shareholders	(n.)	93	61	39	32	52.5	Enel
Customers	(n.)	42	46	18	-4	-8.7	Enel
Employees	(n.)	43	76	47	-33	-43.4	Enel
Public	(n.)	17	14	6	3	21.4	Enel
Suppliers	(n.)	30	46	23	-16	-34.8	Enel
Violations of Code of Ethics <sup>(2)</sup> , regarding incidents of:	(n.)	39	45	26	-6	-13.3	Enel
corruption	(n.)	18	14	-	4	28.6	Enel
mobbing	(n.)	-	1	-	-1	-100.0	Enel
illegitimate use of corporate resources or instruments	(n.)	8	10	1	-2	-20.0	Enel
other reasons	(n.)	13	20	25	-7	-35.0	Enel
Dismissals for violation of Code of Ethics	(n.)	30	38	5	-8	-21.1	Enel
<b>HR1</b>							
Significant investment agreements approved by the BoD that include clauses on human rights <sup>(3)</sup>	(n.)	3	7	3	-4	-57.1	Enel
% of significant investment agreements approved by the BoD that include clauses on human rights <sup>(3)</sup>	(%)	100	100	100	-	-	Enel
<b>EC4</b>							
<b>Grants</b>							
Grants received during the year	(mil Euro)	113.5	24.2	15.3	89.3	369.3	Enel
Energy networks	(%)	27.3	41.6	79.4	-14.3	-34.4	Enel
R&D	(%)	69.1	14.2	10.9	54.8	385.6	Enel
Renewable energy	(%)	3.6	44	9.2	-40.3	-91.7	Enel
Other	(%)	0	0.2	0.5	-0.2	-100.0	Enel
Number of projects that received disbursements	(n.)	60	113	100	-53	-46.9	Enel
Loans granted by the EIB and others							
Remaining debt regarding loans from EIB and others	(mil Euro)	5,001.50	4,865.20	3,780.40	136.2	2.8	Enel
- Italy	(mil Euro)	3,381.20	3,293.10	2,719.40	88.1	2.7	Enel
- Abroad (Endesa, Slovakia, Russia)	(mil Euro)	1,620.30	1,572.10	1,061.00	48.2	3.1	Enel
Energy networks	(%)	72.3	80.4	72.6	-8.1	-10.1	Enel
R&D	(%)	0.1	0.1	0.2	0.0	-40.9	Enel
Renewable energy	(%)	18.3	12.3	16.4	6	48.4	Enel
Other	(%)	9.4	7.2	10.9	2.2	30.3	Enel
N. of projects in progress approved with loans from the EIB and others	(n.)	65	60	26	5	8.3	Enel

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>Relations with institutions</b>							
Taxes <sup>(4)</sup>	(mil Euro)	3,711	3,462	1,320	249	7.2	Enel
IRES, IRAP and other taxes	(mil Euro)	1,569	1,701	-219	-132	-7.8	Enel
Taxes abroad	(mil Euro)	832	897	804	-65	-7.2	Enel
Other taxes and duties	(mil Euro)	1,072	671	551	401	59.8	Enel
Fees net of contributions received	(mil Euro)	238	193	184	45	23.3	Enel
<b>Corporate image</b>							
Presence index	(n.)	2,470	3,258	3,472	-788	-24.2	Enel
Global visibility index	(.000)	616	1,120	1,269	-504	-45.0	Enel
Qualitative visibility index (from -1 to +1)	(rating)	0.73	0.89	0.91	-0.16	-18.0	Enel

(1) Of the 225 reports received, 35 are under examination.

(2) The violations regarding 2009 were adjusted to take into consideration the results of investigations carried out in 2010 regarding reports received in 2009.

(3) The total number reported for this item also takes into account initiatives aimed at the acquisition of shares of rights in licenses for exploration (still at the preliminary stage). Therefore, the percentage that expresses the significant investment agreements approved by the BoD regards only formalized agreements.

(4) The 2009 values were reclassified following the 2009 income statement restatement in consequence of the application of several new accounting principles (IFRIC 12 and IFRIC 18) and the conclusion of the process of purchase price allocation on the acquisition of 25.01% of Endesa's capital.



# The energy of our people

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>LA1</b>							
<b>NUMBER AND COMPOSITION OF PERSONNEL (*)</b>							
<b>Number</b>							
<b>Personnel</b>							
Total personnel	(n.)	78,313	81,208	75,981	-2,895	-3.6	Enel
Hours worked	(mil h)	143	147.3	134.6	-4.3	-2.9	Enel (1)
<b>Breakdown by geographical area and region</b>							
Italy	(n.)	37,383	38,121	40,327	-738	-1.9	Enel
Valle d'Aosta	(n.)	176	179	177	-3	-1.7	Enel
Piemonte	(n.)	2,416	2,512	2,748	-96	-3.8	Enel
Lombardy	(n.)	4,148	4,226	4,641	-78	-1.8	Enel
Trentino Alto Adige	(n.)	253	350	364	-97	-27.7	Enel
Veneto	(n.)	2,986	3,070	3,309	-84	-2.7	Enel
Friuli Venezia Giulia	(n.)	418	443	466	-25	-5.6	Enel
Liguria	(n.)	1,036	1,088	1,155	-52	-4.8	Enel
Emilia Romagna	(n.)	1,935	1,949	2,069	-14	-0.7	Enel
Tuscany	(n.)	3,375	3,475	3,708	-100	-2.9	Enel
Marche	(n.)	692	707	733	-15	-2.1	Enel
Umbria	(n.)	652	668	753	-16	-2.4	Enel
Lazio	(n.)	6,526	6,332	6,169	194	3.1	Enel
Abruzzo	(n.)	784	824	914	-40	-4.9	Enel
Molise	(n.)	264	267	277	-3	-1.1	Enel
Campania	(n.)	2,716	2,840	3,050	-124	-4.4	Enel
Apulia	(n.)	2,289	2,312	2,462	-23	-1.0	Enel
Basilicata	(n.)	404	427	474	-23	-5.4	Enel
Calabria	(n.)	1,302	1,330	1,433	-28	-2.1	Enel
Sicily	(n.)	3,101	3,166	3,382	-65	-2.1	Enel
Sardinia	(n.)	1,571	1,632	1,695	-61	-3.7	Enel
Italy employees seconded abroad	(n.)	339	324	348	15	4.6	Enel
<b>Abroad</b>	<b>(n.)</b>	<b>40,930</b>	<b>43,087</b>	<b>35,654</b>	<b>-2,158</b>	<b>-5.0</b>	<b>Enel</b>
Iberian Peninsula	(n.)	12,393	13,498	9,257	-1,105	-8.2	Enel
France	(n.)	83	69	48	14	20.3	Enel
Greece	(n.)	56	89	35	-33	-37.1	Enel
Romania	(n.)	4,706	4,878	5,205	-172	-3.5	Enel
Bulgaria	(n.)	511	629	733	-118	-18.8	Enel
Slovakia	(n.)	5,374	5,831	5,962	-457	-7.8	Enel
Belgium	(n.)	36	3	-	33	1,100.00	Enel
Ireland	(n.)	109	164	-	-55	-33.5	Enel

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
Russia	(n.)	4,233	4,390	4,950	-158	-3.6	Enel
North America	(n.)	319	280	267	39	13.9	Enel
South America	(n.)	12,940	13,142	9,059	-202	-1.5	Enel
Other	(n.)	2	5	-	-3	-60.0	Enel
Branches abroad	(n.)	168	109	138	138	126.6	Enel
<b>Composition</b>							
<b>Employee category <sup>(2)</sup></b>							
Executives	(n.)	1,256	1,351	1,139	-95	-7.0	Enel
Supervisors <sup>(3)</sup>	(n.)	14,255	8,817	7,490	5,438	61.7	Enel
White-collar workers	(n.)	42,166	48,928	43,529	-6,762	-13.8	Enel
Blue-collar workers	(n.)	20,636	22,112	23,823	-1,476	-6.7	Enel
Executives	(%)	1.6	1.7	1.5	-0.1	-3.6	Enel
Supervisors	(%)	18.2	10.9	9.9	7.3	67.7	Enel
White-collar workers	(%)	53.8	60.2	57.3	-6.4	-10.6	Enel
Blue-collar workers	(%)	26.4	27.2	31.3	-0.9	-3.2	Enel
<b>Education</b>							
University graduates	(%)	26.3	24.8	19.9	1.5	5.9	Enel <sup>(4)</sup>
Secondary-school graduates	(%)	45.2	44.2	48.6	1.1	2.4	Enel <sup>(4)</sup>
Other	(%)	28.5	31	31.5	-2.5	-8.2	Enel <sup>(4)</sup>
<b>Age</b>							
Average	(years)	44.9	43.2	45.8	1.8	4.1	Enel <sup>(5)</sup>
Less than 35	(%)	19.9	19.7	18.4	0.2	0.9	Enel <sup>(5)</sup>
From 35 to 44	(%)	26.4	26.8	27.7	-0.3	-1.2	Enel <sup>(5)</sup>
From 45 to 54	(%)	37.1	38.2	40.1	-1.1	-2.9	Enel <sup>(5)</sup>
From 55 to 59	(%)	14.4	13.6	12.3	0.8	6.0	Enel <sup>(5)</sup>
Over 60	(%)	2.2	1.7	1.5	0.46	26.8	Enel <sup>(5)</sup>
<b>Years at Enel</b>							
Average	(years)	18.5	17	18.9	1.5	9.1	Enel <sup>(5)</sup>
Less than 10	(%)	29.3	28.7	26.2	0.6	2.0	Enel <sup>(5)</sup>
From 10 to 19	(%)	20.7	21.3	24	-0.7	-3.2	Enel <sup>(5)</sup>
From 20 to 29	(%)	30.3	31.3	31.2	-1.0	-3.2	Enel <sup>(5)</sup>
From 30 to 34	(%)	12.2	12.8	14.5	-0.5	-4.3	Enel <sup>(5)</sup>
Over 35	(%)	7.5	5.9	4.1	1.6	27.3	Enel <sup>(5)</sup>
<b>Contractual relations</b>							
<b>Fixed-term contracts</b>							
Fixed-term contracts	(n.)	1,545	2,180	4,749	-635	-29.1	Enel <sup>(5)</sup>
Beginner/training contracts	(n.)	685	602	545	83	13.8	Enel <sup>(5)</sup>
<b>Total fixed-term contracts</b>	<b>(n.)</b>	<b>2,230</b>	<b>2,782</b>	<b>5,294</b>	<b>-552</b>	<b>-19.8</b>	<b>Enel <sup>(5)</sup></b>
Fixed-term as % of total	(%)	2.9	3.4	7.2	-0.58	-16.8	Enel <sup>(5)</sup>
Permanent contracts	(n.)	75,915	78,317	67,744	-2,402	-3.1	Enel <sup>(5)</sup>
<b>Part-time contracts</b>	<b>(%)</b>	<b>1.6</b>	<b>1.6</b>	<b>1.7</b>	<b>0</b>	<b>0</b>	<b>Enel <sup>(5)</sup></b>
Full-time contracts	(n.)	76,931	79,811	65,819	-2,880	-3.6	Enel <sup>(5)</sup>
Part-time contracts	(n.)	1,214	1,288	1,144	-74	-5.7	Enel <sup>(5)</sup>
Internships and traineeships	(n.)	1,797	1,370	198	427	31.2	Enel <sup>(4) (7)</sup>

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>LA2</b>							
<b>Changes in number</b>							
New hires	(n.)	3,761	4,644	3,065	-883	-19.0	Enel
Boundary changes	(n.)	-335	7,618	80,286	-7,953	-104.4	Enel
Terminations	(n.)	6,321	7,035	4,475	-714	-10.1	Enel
Terminations Italy	(n.)	1,747	1,942	2,193	-195	-10.0	Italy
Terminations Italy	(%)	27.6	27.6	49	0	0	Italy
Terminations abroad ENA	(n.)	48	30	-	18	60.0	ENA
Terminations abroad ENA	(%)	0.8	0.4	-	0.4	93.8	ENA
Terminations abroad ELA	(n.)	182	119	-	63	52.9	ELA
Terminations abroad ELA	(%)	2.9	1.7	-	1.2	70.2	ELA
Terminations abroad Eufer	(n.)	32	7	-	25	357.1	Eufer
Terminations abroad Eufer	(%)	0.5	0.1	-	0.4	408.8	Eufer
Terminations abroad EGP Spain	(n.)	1	-	-	1	-	EGP Spain
Terminations abroad EGP Spain	(%)	0.02	-	-	0.02	100	EGP Spain
Terminations abroad Romania	(n.)	240	416	-	-176	-42.3	Romania
Terminations abroad Romania	(%)	3.8	5.9	-	-2.1	-35.8	Romania
Terminations abroad Bulgaria	(n.)	121	134	-	-13	-9.7	Bulgaria
Terminations abroad Bulgaria	(%)	1.9	1.9	-	0	0	Bulgaria
Terminations abroad Slovakia	(n.)	622	532	-	90	16.9	Slovakia
Terminations abroad Slovakia	(%)	9.8	7.6	-	2.2	29.1	Slovakia
Terminations abroad Russia	(n.)	376	718	-	-342	-47.7	Russia
Terminations abroad Russia	(%)	5.9	10.2	-	-4.3	-42	Russia
Terminations abroad Endesa Iberia + Ireland	(n.)	1,459	768	-	691	90.0	Endesa Iberia
Terminations abroad Endesa Iberia + Ireland	(%)	23.1	10.9	-	12.2	111.4	Endesa Iberia
Terminations abroad Endesa Latam	(n.)	1,366	2,353	-	-987	-41.9	Endesa Latam
Terminations abroad Endesa Latam	(%)	21.6	33.4	-	-11.8	-35.4	Endesa Latam
Terminations abroad France	(n.)	11	8	-	3	37.5	France
Terminations abroad France	(%)	0.2	0.1	-	0.1	53.0	France
Terminations abroad Belgium	(n.)	15	-	-	15	-	Belgium
Terminations abroad Belgium	(%)	0.2	-	-	0.2	100	Belgium
Terminations abroad Greece	(n.)	1	8	-	-7	-87.5	Greece
Terminations abroad Greece	(%)	0.02	0.11	-	-0.09	-79.1	Greece
Terminations other <sup>(7)</sup>	(n.)	100	-	-	100	-	Other, minor countries
Terminations other <sup>(7)</sup>	(%)	1.6	-	-	1.6	100	Other, minor countries
Terminations women	(n.)	1,114	994	275	119	12.0	Enel <sup>(8)</sup>
Terminations men	(n.)	5,107	2,920	1,918	2,187	74.9	Enel <sup>(8)</sup>
Terminations women (out of total)	(%)	18	25	13	-7	-27.6	Enel <sup>(8)</sup>

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
Terminations men (out of total)	(%)	82	75	87	7	9.4	Enel <sup>(8)</sup>
Terminations < 30 years	(n.)	838	251	35	587	233.8	Enel <sup>(8)</sup>
Terminations 30-50 years	(n.)	1,523	686	112	837	122.1	Enel <sup>(8)</sup>
Terminations > 50 years	(n.)	3,860	2,977	2,046	884	29.7	Enel <sup>(8)</sup>
Terminations < 30 years (out of total)	(%)	13	6	2	7	110	Enel <sup>(8)</sup>
Terminations 30 - 50 years (out of total)	(%)	25	18	5	6	34.2	Enel <sup>(8)</sup>
Terminations > 50 years (out of total)	(%)	62	76	93	-14	-18.4	Enel <sup>(8)</sup>
Turnover rate	(%)	8.1	8.7	5.9	-0.6	-6.8	Enel
<b>Average years of service of employees terminated during the year</b>							
- men	(years)	23	26	-	-3	-11.2	Enel <sup>(8)</sup>
- women	(years)	18	18	-	12	65.0	Enel <sup>(8)</sup>
- aged < 30 years	(years)	2	2	-	0	0	Enel <sup>(8)</sup>
- aged 30 - 50 years	(years)	9	10	-	-1	-6.8	Enel <sup>(8)</sup>
- aged > 50 years	(years)	31	29	-	2	6.9	Enel <sup>(8)</sup>
- average	(years)	22	24	-	-2	-8.3	Enel <sup>(8)</sup>
<b>EU15</b>							
<b>Employees entitled to retire in next 5 years</b>							
Executives	(%)	13	8	-	5	58.1	Enel <sup>(9)</sup>
Supervisors	(%)	10	8	-	2	22.1	Enel <sup>(9)</sup>
White-collar workers	(%)	15	12	-	3	27.3	Enel <sup>(9)</sup>
Blue-collar workers	(%)	16	13	-	3	21.3	Enel <sup>(9)</sup>
Average	(%)	14	11	-	3	24.1	Enel <sup>(9)</sup>
<b>Employees entitled to retire in next 10 years</b>							
Executives	(%)	31	19	-	12	62.3	Enel <sup>(9)</sup>
Supervisors	(%)	32	17	-	15	86.3	Enel <sup>(9)</sup>
White-collar workers	(%)	35	27	-	8	29.3	Enel <sup>(9)</sup>
Blue-collar workers	(%)	33	30	-	3	11.3	Enel <sup>(9)</sup>
Average	(%)	32	26	-	6	23.0	Enel <sup>(9)</sup>
<b>Employees entitled to retire in next 5 and 10 years, broken down by country (Listed are the main countries in which Enel operates)</b>							
<b>Employees entitled to retire in next 5 years</b>							
Executives	(%)	13	11	-	2	21.4	Italy
Supervisors	(%)	15	15	-	-	-	Italy
White-collar workers	(%)	20	19	-	1	4.8	Italy
Blue-collar workers	(%)	22	21	-	1	3.5	Italy
Average	(%)	20	19	-	1	3.8	Italy
<b>Employees entitled to retire in next 10 years</b>							
Executives	(%)	24	26	-	-2	-7.2	Italy
Supervisors	(%)	32	32	-	-	-	Italy



KPI	UM	2010	2009	2008	2010-2009	%	Boundary
White-collar workers	(%)	42	41	-	1	1.6	Italy
Blue-collar workers	(%)	42	44	-	-2	-3.7	Italy
Average	(%)	40	41	-	-1	-2.5	Italy
<b>Employees entitled to retire in next 5 years</b>							
Executives	(%)	12	19	-	-7	-37.3	Slovakia
Supervisors	(%)	10	11	-	-1	-7.5	Slovakia
White-collar workers	(%)	7	8	-	-1	-12.7	Slovakia
Blue-collar workers	(%)	6	6	-	-	-	Slovakia
Average	(%)	7	8	-	-1	-14.5	Slovakia
<b>Employees entitled to retire in next 10 years</b>							
Executives	(%)	35	31	-	4	12.9	Slovakia
Supervisors	(%)	31	31	-	-	-	Slovakia
White-collar workers	(%)	22	23	-	-1	-2.8	Slovakia
Blue-collar workers	(%)	20	18	-	2	12.5	Slovakia
Average	(%)	23	23	-	-	-	Slovakia
<b>Employees entitled to retire in next 5 years</b>							
Executives	(%)	9	6	-	3	58.7	Russia
Supervisors	(%)	15	10	-	5	47.2	Russia
White-collar workers	(%)	10	7	-	3	36.9	Russia
Blue-collar workers	(%)	13	12	-	1	8.2	Russia
Average	(%)	12	10	-	2	16.9	Russia
<b>Employees entitled to retire in next 10 years</b>							
Executives	(%)	19	22	-	-3	-13.6	Russia
Supervisors	(%)	27	25	-	2	9.1	Russia
White-collar workers	(%)	21	16	-	5	31.0	Russia
Blue-collar workers	(%)	28	27	-	1	5.5	Russia
Average	(%)	25	23	-	2	10.2	Russia
<b>Employees entitled to retire in next 5 years</b>							
Executives	(%)	0	2	-	-2	-100.0	Romania
Supervisors	(%)	4	4	-	-	-	Romania
White-collar workers	(%)	4	3	-	1	29.1	Romania
Blue-collar workers	(%)	2	1	-	1	38.6	Romania
Average	(%)	3	2	-	1	32.8	Romania
<b>Employees entitled to retire in next 10 years</b>							
Executives	(%)	10	15	-	-5	-33.8	Romania
Supervisors	(%)	17	17	-	-	-	Romania
White-collar workers	(%)	14	15	-	-1	-6.9	Romania
Blue-collar workers	(%)	14	13	-	1	7.5	Romania
Average	(%)	14	14	-	-	-	Romania

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>Employees entitled to retire in next 5 years</b>							
Executives	(%)	0	0	-	-	-	Bulgaria
Supervisors	(%)	11	0	-	11	-	Bulgaria
White-collar workers	(%)	6	6	-	-	-	Bulgaria
Blue-collar workers	(%)	17	2	-	15	720.5	Bulgaria
Average	(%)	14	3	-	11	430.8	Bulgaria
<b>Employees entitled to retire in next 10 years</b>							
Executives	(%)	13	13	-	-	-	Bulgaria
Supervisors	(%)	16	11	-	5	42.9	Bulgaria
White-collar workers	(%)	12	19	-	-7	-37.2	Bulgaria
Blue-collar workers	(%)	35	13	-	22	170.7	Bulgaria
Average	(%)	27	14	-	13	95.1	Bulgaria
<b>Employees entitled to retire in next 5 years</b>							
Executives	(%)	11	0.4	-	11	2,727.8	ELA
Supervisors	(%)	4	0	-	4	0.0	ELA
White-collar workers	(%)	3	1	-	2	384.8	ELA
Blue-collar workers	(%)	14	3	-	11	429.6	ELA
Average	(%)	7	4	-	3	84.8	ELA
<b>Employees entitled to retire in next 10 years</b>							
Executives	(%)	44	1	-	43	5,471.8	ELA
Supervisors	(%)	21	1	-	20	2,591.8	ELA
White-collar workers	(%)	16	2	-	14	689.5	ELA
Blue-collar workers	(%)	19	6	-	13	236.3	ELA
Average	(%)	18	9	-	9	100.6	ELA
<b>Employees entitled to retire in next 5 years</b>							
Executives	(%)	5	6	-	-1	-8.4	Endesa Iberia
Supervisors	(%)	1	5	-	-4	-82.6	Endesa Iberia
White-collar workers	(%)	1	1	-	-	-	Endesa Iberia
Blue-collar workers	(%)	1	2	-	-1	-55.2	Endesa Iberia
Average	(%)	1	2	-	-1	-61.6	Endesa Iberia
<b>Employees entitled to retire in next 10 years</b>							
Executives	(%)	15	18	-	-3	-16.2	Endesa Iberia
Supervisors	(%)	7	16	-	-9	-54.1	Endesa Iberia
White-collar workers	(%)	12	14	-	-2	-17.6	Endesa Iberia

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
Blue-collar workers	(%)	7	15	-	-8	-53.1	Endesa Iberia
Average	(%)	10	15	-	-5	-33.1	Endesa Iberia
<b>Employees entitled to retire in next 5 years</b>							
Executives	(%)	7	27	-	-20	-74.4	Endesa Peru
Supervisors	(%)	10	9	-	1	12.4	Endesa Peru
White-collar workers	(%)	4	15	-	-11	-75.4	Endesa Peru
Blue-collar workers	(%)	8	33	-	-25	-75.0	Endesa Peru
Average	(%)	6	12	-	-6	-51.0	Endesa Peru
<b>Employees entitled to retire in next 10 years</b>							
Executives	(%)	21	27	-	-6	-23.3	Endesa Peru
Supervisors	(%)	19	9	-	10	106.1	Endesa Peru
White-collar workers	(%)	10	15	-	-5	-33.8	Endesa Peru
Blue-collar workers	(%)	19	33	-	-14	-43.1	Endesa Peru
Average	(%)	14	12	-	2	16.5	Endesa Peru
<b>Employees entitled to retire in next 5 years</b>							
Executives	(%)	2	6	-	-4	-70.7	Endesa Brazil
Supervisors	(%)	3	1	-	2	153.9	Endesa Brazil
White-collar workers	(%)	1	1	-	-	-	Endesa Brazil
Blue-collar workers	(%)	0.2	0.3	-	-0.1	-47.0	Endesa Brazil
Average	(%)	1	1	-	-	-	Endesa Brazil
<b>Employees entitled to retire in next 10 years</b>							
Executives	(%)	27	6	-	21	371.0	Endesa Brazil
Supervisors	(%)	6	1	-	5	396.2	Endesa Brazil
White-collar workers	(%)	6	1	-	5	414.1	Endesa Brazil
Blue-collar workers	(%)	3	0.3	-	3	846.7	Endesa Brazil
Average	(%)	3	1	-	2	163.4	Endesa Brazil

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>Employees entitled to retire in next 5 years</b>							
Executives	(%)	0.1	4	-	-4	-98.2	Endesa Chile
Supervisors	(%)	0.3	7	-	-7	-106.4	Endesa Chile
White-collar workers	(%)	0.1	8	-	-8	-98.9	Endesa Chile
Blue-collar workers	(%)	0	0	-	-	-	Endesa Chile
Average	(%)	0.1	7	-	-7	-98.9	Endesa Chile
<b>Employees entitled to retire in next 10 years</b>							
Executives	(%)	13	4	-	9	241.7	Endesa Chile
Supervisors	(%)	52	7	-	45	683.8	Endesa Chile
White-collar workers	(%)	20	8	-	12	154.4	Endesa Chile
Blue-collar workers	(%)	0	0	-	-	-	Endesa Chile
Average	(%)	15	7	-	8	122.3	Endesa Chile
<b>Employees entitled to retire in next 5 years</b>							
Executives	(%)	24	21	-	3	12.7	Endesa Colombia
Supervisors	(%)	7	5	-	2	49.8	Endesa Colombia
White-collar workers	(%)	4	3	-	1	27.9	Endesa Colombia
Blue-collar workers	(%)	4	13	-	-9	-70.2	Endesa Colombia
Average	(%)	4	4	-	-	-	Endesa Colombia
<b>Employees entitled to retire in next 10 years</b>							
Executives	(%)	17	21	-	-4	-19.5	Endesa Colombia
Supervisors	(%)	17	5	-	12	274.3	Endesa Colombia
White-collar workers	(%)	7	3	-	4	141.7	Endesa Colombia
Blue-collar workers	(%)	10	13	-	-3	-21.8	Endesa Colombia
Average	(%)	9	4	-	5	122.8	Endesa Colombia
<b>Employees entitled to retire in next 5 years</b>							
Executives	(%)	4	8	-	-4	-52.2	Endesa Argentina
Supervisors	(%)	8	7	-	1	9.6	Endesa Argentina
White-collar workers	(%)	9	0	-	9	-	Endesa Argentina



KPI	UM	2010	2009	2008	2010-2009	%	Boundary
Blue-collar workers	(%)	3	10	-	-7	-73.0	Endesa Argentina
Average	(%)	9	1	-	8	531.5	Endesa Argentina
<b>Employees entitled to retire in next 10 years</b>							
Executives	(%)	15	8	-	7	99.6	Endesa Argentina
Supervisors	(%)	18	7	-	11	149.9	Endesa Argentina
White-collar workers	(%)	14	0	-	14	-	Endesa Argentina
Blue-collar workers	(%)	9	10	-	-1	-10.0	Endesa Argentina
Average	(%)	12	1	-	11	748.9	Endesa Argentina
<b>LA12</b>							
<b>Reviews</b>							
Reviews	(%)	60.0	18.4	20.6	41.6	225.5	Enel <sup>(11)</sup>
Employees reviewed	(n.)	46,886	14,951	8,345	31,935	213.6	Enel <sup>(11)</sup>
Executives reviewed	(n.)	1,190	868.5	386	322	37.0	Enel <sup>(11)</sup>
Supervisors reviewed	(n.)	12,746	7,818	3,860	4,928	63.0	Enel <sup>(11)</sup>
White-collar workers reviewed	(n.)	29,755	5,284	4,099	24,471	463.2	Enel <sup>(11)</sup>
Blue-collar workers reviewed	(n.)	3,195	982	-	2,214	225.5	Enel <sup>(11)</sup>
<b>Compensation</b>							
Incidence of variable compensation	(%)	8.6	4.9	n,d,	3.8	76.9	Enel <sup>(9)</sup>
Incidence of variable compensation Italy	(%)	7.7	6.9	6	0.8	12.0	Italy
Incidence of variable compensation ENA	(%)	7	12.9	10.5	-6.0	-46.0	North America
Incidence of variable compensation ELA	(%)	25	27	22.5	-1.9	-7.1	ELA
Incidence of variable compensation Eufer	(%)	35.5	18.2	n,d,	17.3	94.8	Eufer
Incidence of variable compensation Romania	(%)	5.3	7.4	8	-2.0	-27.8	Romania
Incidence of variable compensation Bulgaria	(%)	8.1	11.5	40.3	-3.4	-29.7	Bulgaria <sup>(10)</sup>
Incidence of variable compensation Slovakia	(%)	21.8	20.1	6.8	1.7	8.6	Slovakia <sup>(10)</sup>
Incidence of variable compensation Russia	(%)	20.4	17.6	18.7	2.8	15.7	Russia
Incidence of variable compensation France	(%)	10.4	4.6	-	5.9	127.4	France
Incidence of variable compensation EGP Greece	(%)	7.9	-	-	7.9	-	Greece
Incidence of variable compensation Endesa Spain	(%)	7.8	6	-	1.8	29.9	Endesa Spain
Incidence of variable compensation Peru	(%)	25	43.1	-	-18.1	-42.0	Endesa Peru
Incidence of variable compensation Brazil	(%)	3.1	9.2	-	-6.1	-66.4	Endesa Brazil
Incidence of variable compensation Chile	(%)	17.7	20.4	-	-2.7	-13.0	Endesa Chile
Incidence of variable compensation Colombia	(%)	7.1	10.8	-	-3.7	-34.4	Endesa Colombia
Incidence of variable compensation Argentina	(%)	5.1	5.9	-	-0.8	-13.1	Endesa Argentina
Incentive plans	(%)	22.3	22.3	-	-	-	Enel

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>LA10</b>							
<b>Training</b>							
Hours of training per employee	(h)	36.3	38.1	28.9	-1.8	-4.8	Enel <sup>(11)</sup>
Total hours of training (distance + classroom)	(.000 h)	2,889	3,171	1,183	-282	-8.9	Enel <sup>(11)</sup>
Hours of distance training	(.000 h)	241	253	23	-13	-5.1	Enel <sup>(11)</sup>
Hours of classroom training	(.000 h)	2,648	2,917	1,160	-269	-9.2	Enel <sup>(11)</sup>
- for managerial training	(.000 h)	581	738	260	-157	-21.3	Enel <sup>(11)</sup>
- for specialist training	(.000 h)	2,068	2,179	900	-111	-5.1	Enel <sup>(11)</sup>
Average hours of training per executive	(h)	57.4	59.6	-	-2.2	-3.7	Enel <sup>(11)</sup>
Average hours of training per supervisor	(h)	50.2	51.6	-	-1.4	-2.8	Enel <sup>(11)</sup>
Average hours of training per white-collar worker.	(h)	32.4	33.1	-	-0.7	-2.2	Enel <sup>(11)</sup>
Average hours of training per blue-collar worker	(h)	34.8	38.4	-	-3.6	-9.3	Enel <sup>(11)</sup>
Incidence of distance training	(%)	8.3	8	1.9	0.3	4.2	Enel <sup>(11)</sup>
<b>Dissemination of sustainability</b>							
Training on sustainability per employee	(h)	13.5	15.7	12.3	-2.2	-14.0	Enel <sup>(11)</sup>
<b>LA7</b>							
<b>SAFETY <sup>(15)</sup></b>							
<b>Serious and fatal occupational injuries to employees</b>							
Employee occupational injuries	(n.)	25	40	48	-15	-37.5	Enel
Fatal injuries	(n.)	3	3	1	-	-	Enel
Serious injuries	(n.)	22	37	47	-15	-40.5	Enel
Frequency rate	(n.)	2.8	3.6	3.7	-0.8	-22.8	Enel
(Lost-time injuries frequency rate)	(i)	0.55	0.72	0.74	-0.17	-23.1	Enel
Injury seriousness rate	(n.)	0.13	0.14	0.15	-0.01	-7.1	Enel
Lost-day rate	(i)	26.6	28.9	30	-2.3	-7.9	Enel
Absentee rate <sup>(12)</sup>	(i)	5,734	8,818	8,805	-3,084	-35.0	Enel <sup>(12)</sup>
Safety expense per employee	(Euro)	1,559	1,307	1,243	253	19.3	Enel
Training	(mil Euro)	29.7	19.4	19.5	10.3	52.8	Enel
Medical supervision	(mil Euro)	6.3	4.3	3.5	2.0	45.5	Enel
IPD (individual protection device)	(mil Euro)	14.2	17	14.5	-2.7	-16.1	Enel
Personnel cost	(mil Euro)	57.3	46.4	44	10.9	23.4	Enel
Studies, reserach, and other	(mil Euro)	13.7	18.1	7.4	-4.4	-24.3	Enel
Total safety expense	(mil Euro)	121.1	105.2	88.9	15.9	15.1	Enel
Health inspections <sup>(16)</sup>	(n.)	92,955	78,900	56,652	14,055	17.8	Enel
<b>Corporate climate</b>							
Spontaneous resignations of supervisors and executives	(n.)	248	91	25	157	172.9	Enel <sup>(11)</sup>
<b>Knowledge management and Internal communication</b>							
Expense for KM systems	(mil Euro)	1.5	1.4	2.8	0.1	8.9	Enel
Hard copies of Enel Insieme	(n./month)	40,000	40,000	53,000	-	-	Enel
<b>EC3</b>							
Employees covered by Benefit Plan	(n.)	57,473	53,368	34,974	4,106	7.7	Enel <sup>(11)</sup>
Employees covered by Benefit Plan	(%)	73	66	87	8	11.7	Enel <sup>(11)</sup>

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>LA13</b>							
<b>EQUAL OPPORTUNITY</b>							
<b>Equal opportunity</b>							
Female employees	(n.)	14,876	15,579	14,593	-702	-4.5	Enel <sup>(4)</sup>
Executives e Supervisors	(n.)	3,661	3,610	2,275	51	1.4	Enel <sup>(4)</sup>
White-collar workers	(n.)	9,764	10,102	8,492	-337	-3.3	Enel <sup>(4)</sup>
Blue-collar workers	(n.)	1,451	1,867	3,826	-416	-22.3	Enel <sup>(4)</sup>
Incidence of female employees	(%)	19.0	19.2	21.8	-0.2	-0.9	Enel <sup>(4)</sup>
Female executives and supervisors out of total <sup>(14)</sup>	(%)	23.6	35.5	38	-11.9	-33.5	Enel <sup>(14)</sup>
Compensation of female employees	(%)	81.0	80.5	87.1	0.5	0.6	Enel <sup>(4)</sup>
<b>Disabled employees</b>							
Disabled employees / protected categories	(n.)	2,643	2,477	2,315	166	6.7	Enel <sup>(11)</sup>
<b>LA14</b>							
<b>Gross annual pay ratio (average)</b>							
Executives	(%)	75	76	83	-1	-1.4	Enel <sup>(11)</sup>
Supervisors	(%)	90	83	93	7	8.8	Enel <sup>(11)</sup>
White-collar workers	(%)	84	83	92	16	19.4	Enel <sup>(11)</sup>
Blue-collar workers	(%)	82	66	86	16	24.2	Enel <sup>(11)</sup>
Average	(%)	92	86	86	6	7.1	Enel <sup>(11)</sup>
<b>LA4</b>							
<b>RELATIONS WITH LABOR UNIONS</b>							
Union membership rate electricity industry	(%)	49.9	62.7	70.7	-12.8	-20.4	Enel <sup>(17)</sup>
Employees covered by collective bargaining agreements Italy	(n.)	37,364	38,121	40,327	-757	-2.0	Italy
% employees covered by collective bargaining agreements	(%)	100	100	100	-	-	Italy
Employees covered by collective bargaining agreements ENA	(n.)	21	21	22	0	0.0	EGP North America
% employees covered by collective bargaining agreements	(%)	7	8	8	-1	-12.2	EGP North America
Employees covered by collective bargaining agreements ELA	(n.)	226	229	108	-3	-1.3	EGP Latam
% employees covered by collective bargaining agreements	(%)	44	45	24	-1	-2.1	EGP Latam
Employees covered by collective bargaining agreements EGP Spain	(n.)	180	56	47	124	221.6	EGP Spain
% employees covered by collective bargaining agreements	(%)	90	100	100	-10	-9.7	EGP Spain
Employees covered by collective bargaining agreements Greece	(n.)	56	-	-	56	-	EGP Greece
% employees covered by collective bargaining agreements	(%)	100	-	-	100	-	EGP Greece
Employees covered by collective bargaining agreements France	(n.)	83	62	-	21	33.9	France
% employees covered by collective bargaining agreements	(%)	100	100	-	-	-	France
Employees covered by collective bargaining agreements Belgium	(n.)	30	-	-	30	-	Belgium
% employees covered by collective bargaining agreements	(%)	83	-	-	83	-	Belgium

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
Employees covered by collective bargaining agreements Romania	(n.)	4,640	4,832	5,167	-192	-4.0	Romania
% employees covered by collective bargaining agreements	(%)	99	99	99	0	-0.5	Romania
Employees covered by collective bargaining agreements Bulgaria	(n.)	464	573	678	-109	-19.0	Bulgaria
% employees covered by collective bargaining agreements	(%)	91	91	92	0	-0.3	Bulgaria
Employees covered by collective bargaining agreements Slovakia	(n.)	4,814	5,221	5,962	-407	-7.8	Slovakia
% employees covered by collective bargaining agreements	(%)	90	100	100	-10	-10.4	Slovakia
Employees covered by collective bargaining agreements Russia	(n.)	3,748	3,904	4,270	-156	-4.0	Russia
% employees covered by collective bargaining agreements	(%)	89	89	89	0	-0.4	Russia
Employees covered by collective bargaining agreements Endesa Iberia	(n.)	11,328	12,310	13,808	-982	-8.0	Endesa Iberia <sup>(6)</sup>
% employees covered by collective bargaining agreements	(%)	93	92	77	1	1.4	Endesa Iberia <sup>(6)</sup>
Employees covered by collective bargaining agreements Endesa Latam	(n.)	9,690	9,075		615	6.8	Endesa Latam <sup>(6)</sup>
% employees covered by collective bargaining agreements	(%)	78	72		6	8.5	Endesa Latam <sup>(6)</sup>
<b>Litigation with employees</b>							
Total proceedings	(n.)	5,763	2,588	2,455	3,175	122.7	Enel <sup>(13)</sup>
Incidence of litigation as defendant	(%)	89.9	60.1	69.8	29.8	49.5	Enel <sup>(13)</sup>

\* With the exception of the personnel and the breakdown by category, the data do not include the branches (Italian offices abroad), amounting to 168 people in 2010, 109 in 2009, and 138 in 2008. Since these are very low values, the exposition of the data is not deemed significant.

- (1) In 2009 excluding RES and Eufer; in 2008 excluding Endesa Portugal and other, minor companies, Eufer, France, Belgium, and Severenergia (Russia 40%).
- (2) Also includes beginner contracts for white-collar workers and blue-collar workers.
- (3) The number of supervisors increased from 8,817 to 14,255 because a different criterion was used in recording the categories at Endesa, while in 2009 and 2008 they were included in the white-collar workers.
- (4) Excluding in 2008 France and Severenergia (Russia) and including only Endesa Spain.
- (5) Excluding in 2008 France, Severenergia (Russia), Endesa Portugal, and minor companies.
- (6) For 2008 the figure regards all of Endesa (Iberia + Latam).
- (7) This value derives from companies not recorded for CSR purposes (branches and Energiosluzby, which was in Slovakia and "emptied out" early in the year and therefore had no final number). The breakdown by men, women, and age is not available for these "unrecorded" companies.
- (8) For 2009 the boundary is Enel excluding Endesa, while in 2008 it is only Italy.
- (9) The 2010 number does not include ENA and Endesa Greece, Ireland, and Morocco. 2009 does not include ENA and Endesa Morocco.
- (10) Very high bonuses were paid in Bulgaria in 2008. In 2009 Slovakia also includes sales bonuses, individual incentives, and other bonuses, while in 2008 only the MBO bonuses are considered as the variable component.
- (11) The 2010 figure does not include Endesa Greece, Ireland, and Morocco. The 2009 figure includes only Italy and Endesa Iberia, while 2008 regards only Italy.
- (12) Excluding vacations, family reasons, maternity, study leaves, leaves of absence, strikes, military service, paid leaves, etc.
- (13) The 2009 and 2008 data include only Endesa Iberia.
- (14) (Women executives+supervisors) / (total executives + supervisors). The 2008 figure excludes France, Severenergia (Russia), and Endesa. This value decreases in 2010 because of the different criterion of recording supervisors at Endesa, which increased the total number of Enel supervisors from 8,817 in 2009 to 14,255 in 2010.
- (15) The data regarding safety do not include RES, Eufer, and Endesa Portugal.
- (16) Includes, for Russia, checks regarding alcohol levels performed daily on a sample of employees, as well as the medical checkups performed on all drivers before the beginning of their shifts.
- (17) The 2008 figure regards only Italy.



# Enel for its customers

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>EU3 *</b>							
<b>Customers electricity market</b>							
Free market <sup>(1)</sup>	(n.)	3,191,283	2,536,631	1,813,658	654,652	25.8	Italy
Regulated markets <sup>(2)</sup>	(n.)	26,171,196	27,186,504	28,419,119	-1,015,308	-3.7	Italy
<b>Total end customers sale Italy</b>	<b>(n.)</b>	<b>29,362,479</b>	<b>29,723,135</b>	<b>30,232,777</b>	<b>-360,656</b>	<b>-1.2</b>	<b>Italy</b>
Free market	(n.)	11,729,319	11,699,674	907,436	29,645	0.3	Iberia
Regulated markets <sup>(2)</sup>	(n.)	-	-	6,903,560	-	-	Iberia
<b>Total end customers sale Iberia</b>	<b>(n.)</b>	<b>11,729,319</b>	<b>11,699,674</b>	<b>7,810,996</b>	<b>29,645</b>	<b>0.3</b>	<b>Iberia</b>
Free market	(n.)	6,554	6,483	4,232	71	1.1	Latin America
Regulated markets	(n.)	13,265,045	12,899,929	8,320,883	365,116	2.8	Latin America
<b>Total end customers sale Latin America</b>	<b>(n.)</b>	<b>13,271,599</b>	<b>12,906,412</b>	<b>8,325,115</b>	<b>365,187</b>	<b>2.8</b>	<b>Latin America</b>
Free market	(n.)	4,199	1,606	1,433	2,593	161.5	Romania
Regulated markets	(n.)	2,601,146	2,563,111	2,555,643	38,035	1.5	Romania
<b>Total end customers sale Romania</b>	<b>(n.)</b>	<b>2,605,345</b>	<b>2,564,717</b>	<b>2,557,076</b>	<b>40,628</b>	<b>1.6</b>	<b>Romania</b>
Free market	(n.)	77	26	15	51	196.2	France
Regulated markets	(n.)	--	-	-	-	-	France
<b>Total end customers sale France</b>	<b>(n.)</b>	<b>77</b>	<b>26</b>	<b>15</b>	<b>51</b>	<b>196.2</b>	<b>France</b>
Free market	(n.)	136	-	-	136	-	Slovakia
Regulated markets	(n.)	-	-	-	-	-	Slovakia
<b>Total end customers sale Slovakia</b>	<b>(n.)</b>	<b>136</b>	<b>-</b>	<b>-</b>	<b>136</b>	<b>-</b>	<b>Slovakia</b>
Free market	(n.)	n,d,	4,664	4,663	-	-	Russia
Regulated markets	(n.)	99,784	100,338	100,307	-554	-0.55	Russia
<b>Total end customers sale Russia</b>	<b>(n.)</b>	<b>99,784</b>	<b>105,002</b>	<b>104,970</b>	<b>-5,218</b>	<b>-4.97</b>	<b>Russia</b>
Total free market	(n.)	14,931,568	14,249,084	2,731,437	-	-	Enel
Total regulated markets	(n.)	42,137,170	42,749,882	46,299,512	-612,712	-1.43	Enel
<b>Total end customers sale Enel</b>	<b>(n.)</b>	<b>57,068,738</b>	<b>56,998,966</b>	<b>49,030,949</b>	<b>69,772</b>	<b>0.12</b>	<b>Enel</b>
<b>Customers gas market</b>							
Gas market Italy	(n.)	2,902,739	2,773,370	n,d,	129,369	4.7	Italy
Gas market abroad	(n.)	1,083,801	1,169,855	n,d,	-86,054	-7.4	Endesa
<b>Total customers gas market</b>	<b>(n.)</b>	<b>3,986,540</b>	<b>3,943,225</b>	<b>n,d,</b>	<b>43,315</b>	<b>1.1</b>	<b>Enel</b>
<b>EU3 *</b>							
<b>Electricity volume sold</b>							
<b>Total volume sold</b>	<b>(GWh)</b>	<b>309,012</b>	<b>287,950</b>	<b>270,390</b>	<b>21,062</b>	<b>7.3</b>	<b>Enel</b>
Volume sold free market	(GWh)	183,133	143,775	97,716	39,358	27.4	Enel
Volume sold regulated market	(GWh)	125,879	144,175	172,674	-18,296	-12.7	Enel
<b>Sales of "green energy"</b>	<b>(GWh)</b>	<b>11,285</b>	<b>7,968</b>	<b>4,600</b>	<b>3,317.0</b>	<b>41.6</b>	<b>Italy</b>
Customers public lighting	(n.)	3,946	3,974	3,986	-28.0	-0.7	Italy
Light sources public lighting	(.000)	1,966	1,990	1,970	-24.0	-1.2	Italy

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>EU3 *</b>							
<b>Gas volume sold</b>							
Total volume sold	(mil m <sup>3</sup> )	5,503	5,169	5,677	334.0	6.5	Italy
Mass-market customers	(mil m <sup>3</sup> )	3,718	3,301	3,222	417.0	12.6	Italy
Business customers	(mil m <sup>3</sup> )	1,785	1,868	2,455	-83.0	-4.4	Italy
<b>ELECTRICITY AVAILABILITY AND RELIABILITY</b>							
<b>EU11</b>							
<b>Thermal plants</b>							
Coal plant efficiency	(%)	36	35	34.2	1.0	2.9	Italy
CCGT plant efficiency	(%)	51.1	51.5	52.6	-0.4	-0.7	Italy
Oil/gas plant efficiency	(%)	29	31.1	32.3	-2.2	-6.9	Italy
Lignite plant efficiency	(%)	30.6	29.8	29	0.8	2.8	Bulgaria
Lignite plant efficiency	(%)	27	27.1	28.3	-0.1	-0.4	Slovakia
Coal plant efficiency	(%)	28.8	28.8	28.9	0.0	0.0	Slovakia
Coal plant efficiency	(%)	35.9	36.4	35.9	-0.6	-1.6	Russia
Coal plant efficiency	(%)	37.9	35.4	36.4	2.5	6.9	Endesa Iberia
CCGT plant efficiency	(%)	45.1	45.1	51.1	0.0	0.1	Endesa Iberia
Oil/gas plant efficiency	(%)	36.9	34.5	35.5	2.4	7.0	Endesa Iberia
Oil/gas plant efficiency	(%)	37.5	37.6	-	-0.1	-0.3	Russia
<b>EU30</b>							
Coal plant availability	(%)	76.8	71	76.1	5.8	8.2	Italy
CCGT plant availability	(%)	75.7	86	89.1	-10.3	-11.9	Italy
Average plant availability thermal <sup>(8)</sup>	(%)	74.7	78.3	73	-3.6	-4.6	Italy
Average plant availability thermal	(%)	96.6	87.2	96.8	9.4	10.8	Slovakia
Average plant availability thermal	(%)	89.7	95.7	-	-6.0	-6.3	Iberia
Average plant availability thermal	(%)	90.7	99.7	-	-8.9	-9.0	Peru
Average plant availability thermal	(%)	98.9	99.7	-	-0.8	-0.8	Brazil
Average plant availability thermal	(%)	98.5	98.6	-	-0.1	-0.1	Chile
Average plant availability thermal	(%)	71.5	99.6	-	-28.1	-28.1	Colombia
Average plant availability thermal	(%)	95.4	92.5	-	2.9	3.1	Argentina
<b>EU28</b>							
Outage frequency per customer (including external causes)	(n.)	4.3	4.9	5.3	-0.6	-12.2	Italy
Outage frequency per customer (excluding external causes)	(n.)	4.2	4.8	5.1	-0.6	-12.5	Italy
Outage frequency per customer	(n.)	7.4	6.7	-	0.7	9.7	Romania
Outage frequency per customer	(n.)	1.6	1.7	-	-0.1	-5.9	Iberia
<b>EU29</b>							
Service continuity index (excluding external causes)	(min.)	43	45	52	-2	-4.4	Italy
Service continuity index (including external causes)	(min.)	46	48	56	-2	-4.2	Italy

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
Service continuity index	(min.)	584	557	-	27	4.8	Romania
Service continuity index	(min.)	71	70	-	2	2.2	Iberia
<b>EU12</b>							
Network losses	(%)	6	6	6	0.0	0.0	Italy
Network losses	(%)	13.7	17.9	17	-4.2	-23.6	Romania
Network losses	(%)	7.7	7.5	17	0.2	3.2	Iberia
<b>SERVICE QUALITY</b>							
<b>ELECTRICITY MARKET ITALY</b>							
<b>Outlets</b>							
Punti Enel (electricity + gas)	(n.)	131	131	131	-	-	Italy
Qui Enel / Qui Gas	(n.)	1,840	1,722	1,519	118.0	6.9	Italy
<b>Call center 800 900 800, regulated service</b>							
Call center service level	(%)	95	93	89	2.4	2.6	Italy
Average waiting time	(sec)	115	152	194	-36.7	-24.1	Italy
Training per call center employee (IN Enel)	(h/per-cap)	32	28	88	4.0	14.3	Italy
<b>Call center 800 900 860, free market (electricity and gas)</b>							
Call center service level	(%)	94	94	91	0.1	0.1	Italy
Average waiting time	(sec)	118	149	155	-31.1	-20.9	Italy
Training per call center employee (IN Enel)	(h/per-cap)	69	55	128	14.0	25.5	Italy
<b>Connection</b>							
Execution of simple work	(gg)	7.4	7.2	7.9	0.2	2.8	Italy
Supply activation	(gg)	1	0.9	1	0.1	11.1	Italy
<b>PR5</b>							
<b>Customer satisfaction, regulated service</b>							
Customer Satisfaction Index (AEEG survey) (3) (4)	(index)	89.2	88.6	89	0.6	0.7	Italy
Frequency AEEG survey	(n.)	2	2	2	-	-	Italy
Written complaints and requests for information	(.000)	134.7	115.8	82.8	18.9	16.3	Italy
Response time to written complaints	(gg)	23.6	19.7	36.2	3.9	19.8	Italy
<b>Customer satisfaction, free electricity market</b>							
Customer Satisfaction Index (AEEG survey) (3) (4)	(index)	84	79	72	5.3	6.7	Italy
Frequency AEEG survey	(n.)	2	2	2	-	-	Italy
Written complaints and requests for information	(.000)	82	95.5	51.1	-13.5	-14.1	Italy
Response time to written complaints	(gg)	47.5	35	46.9	12.5	35.7	Italy
<b>ELECTRICITY MARKET ROMANIA</b>							
<b>Sales organization</b>							
Agencies	(n.)	76	82	75	-6	-7.3	Romania
Indirect channel	(n.)	1	17	3	-16	-94.1	Romania
<b>Call center</b>							
Call center service level	(%)	94	83	-	11	13.8	Romania

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>PR5</b>							
<b>Customer satisfaction</b>							
Written complaints and requests for information	(.000)	12.7	10.4	-	2	21.7	Romania
Response time to written complaints <sup>(5)</sup>	(gg)	28	7	-	21	300.0	Romania
<b>ELECTRICITY MARKET IBERIAN PENINSULA</b>							
<b>Sales organization</b>							
Agencies	(n.)	29	40	-	-11	-27.5	Iberia
Indirect channel	(n.)	413	447	-	-34	-7.6	Iberia
<b>Call center</b>							
Call center service level	(%)	96	82	-	14	17.4	Iberia
<b>GAS MARKET</b>							
<b>PR5</b>							
<b>Customer satisfaction gas</b>							
Written complaints and requests for information	(.000)	50.6	24.1	20	26.5	109.8	Italy
Response time to written complaints	(gg)	62	20.8	25.5	41.2	197.9	Italy
<b>EU27</b>							
Customers disconnected for failure to pay, by time from disconnection to reconnection: <sup>(7)</sup>	(n.)	65,981	59,596	-	6,385.0	10.7	Electricity Italy
< 48 h	(n.)	28,191	24,905	-	3,286.0	13.2	Electricity Italy
48 h - 1 week	(n.)	15,949	11,649	-	4,300.0	36.9	Electricity Italy
1 week - 1 month	(n.)	14,035	14,791	-	-756.0	-5.1	Electricity Italy
1 month - 1 year	(n.)	7,806	8,251	-	-445.0	-5.4	Electricity Italy
Customers disconnected for failure to pay, by time from disconnection to reconnection: <sup>(7)</sup>	(n.)	16,222	6,613	-	9,609.0	145.3	Gas Italy
< 48 h	(n.)	3,224	831	-	2,393.0	288.0	Gas Italy
48 h - 1 week	(n.)	4,949	2,243	-	2,706.0	120.6	Gas Italy
1 week - 1 month	(n.)	6,035	2,976	-	3,059.0	102.8	Gas Italy
1 month - 1 year	(n.)	2,014	563	-	1,451.0	257.7	Gas Italy
Customers disconnected for failure to pay, by time from disconnection to reconnection: <sup>(7)</sup>	(n.)	514,423	-	-	514,423	-	Endesa Iberia
< 48 h	(n.)	321,146	-	-	321,146	-	Endesa Iberia
48 h - 1 week	(n.)	51,235	-	-	51,235	-	Endesa Iberia
1 week - 1 month	(n.)	60,584	-	-	60,584	-	Endesa Iberia
1 month - 1 year	(n.)	81,458	-	-	81,458	-	Endesa Iberia



KPI	UM	2010	2009	2008	2010-2009	%	Boundary
Customers disconnected for failure to pay, by time from disconnection to reconnection	(n.)	622,933	-	-	622,933	-	Endesa Iberia
< 24 h	(n.)	319,700	-	-	319,700	-	Endesa Iberia
24 h - 1 week	(n.)	301,755	-	-	301,755	-	Endesa Iberia
> 1 week	(n.)	1,478	-	-	1,478	-	Endesa Iberia
<b>EN6</b>							
<b>RATIONAL USE OF ENERGY</b>							
<b>Promotion of energy efficiency</b>							
Energy efficiency certificates	(n.)	1,012,090	788,400	716,728	223,690	28.4	Italy
Photovoltaic	(kWp)	137,300	48,900	29,300	88,400	180.8	Italy
Electronic meters installed	(.000)	33,177	32,540	31,811	637	2.0	Italy
Electronic meters abroad <sup>(6)</sup>	(.000)	105.6	13.7	8	92	671.1	Abroad
<b>PR8</b>							
<b>Litigation with customers electricity market Italy</b>							
Total proceedings	(n.)	116,336	139,588	104,406	-23,252	-16.7	Italy
Incidence of litigation as defendant	(%)	95	95.3	94.2	-0.3	-0.3	Italy
<b>Litigation with customers gas market</b>							
Total proceedings	(n.)	808	479	116	329	68.7	Italy

\* The distinction between residential customers and business customers is lacking.

(1) Includes dual-energy customers.

(2) Since July 1, 2009 the "TUR" market has been in effect. Therefore, regulated customers no longer exist, all of them having shifted to the free market.

(3) Recorded by the AEEG, this index regarding the free electricity market + gas is expressed in one-hundredths and is based on a limited sample of 1,200 customers every six months.

(4) The 2009 values have been updated with the results of the second half of 2009.

(5) The 2010 value is higher than that of 2009 because many complaints received last year regarded delays in the delivery of bills, which were responded to with the very low average time of two days. For other complaints the average response time was 17 days.

(6) The considerable increase in meters abroad is due to the fact that they began to be supplied to Endesa (about 98,000 meters) and E.ON Spain.

(7) Data regarding the free market. This number is available only in aggregate, i.e., considering the number of users from the time of disconnection to reconnection without the intermediate breakdown of time from disconnection to payment and from payment to reconnection, which in any case is very short in Italy.

(8) The average is affected by the oil/gas and gas-turbine plants, which work only at peak times.

# The challenges of the environment

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>ENVIRONMENTAL MANAGEMENT</b>							
<b>EN30</b>							
<b>Research and innovation</b>							
Technological innovation <sup>(1)</sup>	(mil Euro)	68.01	73.8	38.9	-5.8	-7.8	Enel
Research personnel	(n.)	184	192	185	-8	-4.2	Enel
<b>Environmental expense <sup>(2)</sup></b>							
Environmental expense	(mil Euro)	773	589	564	184	31.2	Enel
Total current expense	(mil Euro)	420	395	413	25	6.2	Enel
Total environmental investment	(mil Euro)	353	194	151	159	82.2	Enel
Personnel dedicated to environmental issues	(n.)	550	433	391	117	26.9	Enel
<b>EN28</b>							
<b>Environmental litigation</b>							
Environmental proceedings as defendant	(n.)	1,295	287	213	1,008	351.2	Enel <sup>(10)</sup>
Monetary value of environmental fines	(mil Euro)	0.058	0.06	-	-0.002	-3.3	Enel
Non-monetary environmental penalties	(n.)	52	44	47	8.0	18.2	Enel
<b>EN14</b>							
<b>Environmental certification</b>							
Extent of EMAS registration coverage	(%)	38.3	40.3	40.8	-2.0	-5.0	Enel
Extent of ISO 14001 coverage	(%)	82.7	81.4	77.6	1.3	1.6	Enel
<b>Safety systems</b>							
Inspections on oil tankers	(%)	100	100	100	-	-	Enel
Inspections on coal freighters	(%)	100	100	100	-	-	Enel
<b>ENVIRONMENTAL PERFORMANCE</b>							
<b>EN3</b>							
<b>Total fuel consumption</b>							
	(Mtoe)	36.1	37.1	33.2	-1.0	-2.7	Enel
<b>Total fossil-fuel consumption (excluding biomass, RDF, biodiesel, and biogas)</b>							
	(Mtoe)	35.9	36.9	33.1	-1.0	-2.8	Enel
Coal	(Mtoe)	15.6	16.9	14.5	-1.3	-7.8	Enel
Lignite	(Mtoe)	2.1	2	2.1	0.1	6.0	Enel
Fuel oil	(Mtoe)	2.6	3.1	2.9	-0.5	-16.3	Enel
Natural gas	(Mtoe)	13.9	12.9	11.9	1	7.9	Enel
Gas oil	(Mtoe)	1.7	2	1.6	-0.3	-16.6	Enel
Biomass, refuse, and hydrogen for thermal production	(,000 toe)	213.4	198.9	142	14.6	7.3	Enel
Other (orimulsion + cokery gas + oil coke)	(Mtoe)	0.001	-	-	0.001	--	Enel
<b>Breakdown of fossil-fuel consumption</b>							
Coal	(%)	43.4	45.7	44	-2.4	-5.2	Enel
Lignite	(%)	5.9	5.5	6.4	0.5	9.0	Enel
Fuel oil	(%)	7.3	8.5	8.8	-1.2	-13.9	Enel
Natural gas	(%)	38.8	34.9	35.9	3.9	11.2	Enel
Gas oil	(%)	4.6	5.4	4.9	-0.8	0.5	Enel

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>EN4</b>							
<b>Internal energy consumption</b>							
Electricity consumption for civil uses	(MWh)	155,268	159,704	126,602	-4,436	-2.8	Enel
Other consumption of fuel (for vehicles + internal consumption)	(toe)	29,745	28,336	21,516	1,408	5.0	Enel
<b>EN5</b>							
<b>Efficiency of thermal plants</b>							
Incidence of CCGT power on total thermal	(%)	23	21	21	2	7.9	Enel
Efficiency lignite plants	(%)	31	33	30	-2	-4.9	Enel
Efficiency coal plants	(%)	36	35	35	0.4	1.1	Enel
Efficiency CCGT plants	(%)	48	50	52	-1	-2.7	Enel
Efficiency gas oil plants	(%)	35	34	33	1	2.9	Enel
Efficiency gas plants	(%)	47	31	48	16	51.8	Enel
Average efficiency thermal plants	(%)	39	39	39	0	0.8	Enel
<b>EN16</b>							
<b>Greenhouse-gas emissions</b>							
Total specific emissions of CO <sub>2</sub> <sup>(6)</sup>	(kg/MWh eq.)	389	413	437	-24	-5.7	Enel
Specific emissions of CO <sub>2</sub> by simple thermal production <sup>(4)</sup>	(kg/MWh eq.)	711	741	732	-30	-4.1	Enel
Specific emissions of CO <sub>2</sub> by co-generation production <sup>(4)</sup>	(kg/MWh eq.)	691	691	720	0	0	Enel
Specific emissions of CO <sub>2</sub> by electricity production <sup>(8)</sup>	(mil t)	116.2	122.2	110.6	-6.0	-4.9	Enel
- CO <sub>2</sub> from vehicles	(.000 t)	73.2	70.1	56.8	3.1	4.4	Enel
- CO <sub>2</sub> from internal services	(.000 t)	14.9	13.9	7.3	1.0	7.1	Enel
Other greenhouse gases expressed in CO <sub>2</sub> equivalent (SF <sub>6</sub> , CH <sub>4</sub> )	(mil t eq.)	0.182	0.177	0.553	0.005	2.7	Enel
Total greenhouse-gas emissions (scope 1)	(mil t eq.)	116.4	122.4	111.2	-6	-4.9	Enel
Emissions avoided <sup>(9)</sup>	(mil t)	98.2	98.7	80.1	-0.5	-0.5	Enel
<b>EN20</b>							
<b>Polluting emissions <sup>(4)</sup></b>							
Net specific emissions of SO <sub>2</sub>	(kg/MWh)	1.74	1.71	1.76	0.03	1.8	Enel
Net specific emissions of NO <sub>x</sub>	(kg/MWh)	1.52	1.56	1.34	-0.03	-2.0	Enel
Net specific emissions of H <sub>2</sub> S	(kg/MWh)	1.97	1.98	2.51	-0.02	-0.8	Enel
Specific emissions of flue ash <sup>(5)</sup>	(kg/MWh)	0.94	0.77	0.67	0.17	22.7	Enel
<b>Polluting emissions <sup>(6)</sup></b>							
Net specific emissions of SO <sub>2</sub>	(kg/MWh)	0.96	0.98	1.06	-0.02	-2.1	Enel
Net specific emissions of NO <sub>x</sub>	(kg/MWh)	0.84	0.88	0.81	-0.04	-4.6	Enel
Specific emissions of flue ash <sup>(5)</sup>	(kg/MWh)	0.52	0.44	0.4	0.08	19.3	Enel
<b>Nuclear air emissions</b>							
Noble gases	(GBq per Unit)	23.7	30.6	30.9	-6.9	-22.6	Enel
Iodine	(GBq per Unit)	0.09	0.26	0.16	-0.17	-65.4	Enel
Aerosol	(GBq per Unit)	6.6	18.4	20.1	-11.8	-64.3	Enel

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>EN8 - EN10</b>							
<b>Water consumption</b>							
Water requirements for thermal production	(mil m <sup>3</sup> )	154.4	171.4	171.3	-17.0	-9.9	Enel
Water requirements for nuclear production	(mil m <sup>3</sup> )	215.9	211.2	144.3	4.7	2.2	Enel
Requirements for other industrial uses <sup>(3)</sup>	(mil m <sup>3</sup> )	0.1	0.26	0.02	-0.16	-61.5	Enel
Total water requirements for industrial use	(mil m <sup>3</sup> )	370.4	382.8	315.6	-12.4	-3.2	Enel
Specific requirements for thermal production	(l/kWh)	0.91	0.93	0.91	-0.02	-1.8	Enel
Specific requirements for nuclear production	(l/kWh)	6.33	7.55	6.04	-1.21	-16.1	Enel
Water requirements for industrial use	(mil m <sup>3</sup> )	370.4	382.8	315.6	-12.4	-3.2	Enel
from rivers	(mil m <sup>3</sup> )	307.2	324.4	260.7	-17.3	-5.3	Enel
from wells	(mil m <sup>3</sup> )	12.6	12.8	10.1	-0.2	-1.4	Enel
from aqueducts	(mil m <sup>3</sup> )	9	10.8	8.9	-1.9	-17.3	Enel
Total withdrawal of internal water	(mil m <sup>3</sup> )	328.7	348	279.7	-19.3	-5.5	Enel
from the sea, used as is	(mil m <sup>3</sup> )	8.3	8.6	13	-0.3	-3.4	Enel
from the sea, desalinated	(mil m <sup>3</sup> )	9.7	9.3	7.6	0.4	4.5	Enel
from waste water (share used inside plants)	(mil m <sup>3</sup> )	23.7	16.9	15.2	6.8	40.2	Enel
% of recycled and reused water	(%)	6.4	4.4	4.8	2.0	44.9	Enel
<b>EN21</b>							
<b>Waste water</b>							
Waste water (quantity discharged)	(mil m <sup>3</sup> )	246.9	255.4	176.1	-8.5	-3.3	Enel
from thermal production	(mil m <sup>3</sup> )	79.5	89.4	71.9	-9.9	-11.1	Enel
from nuclear production	(mil m <sup>3</sup> )	167.4	165.9	104.2	1.4	0.9	Enel
for storage and handling of fuel oil	(mil m <sup>3</sup> )	0.03	0.04	0.03	-0.01	-27.0	Enel
<b>Emissions into water <sup>(7)</sup>:</b>							
COD (chemical oxygen demand)	(kg)	592,646	522,726	528,413	69,920	13.4	Enel
BOD (biochemical oxygen demand)	(kg)	155,592	108,787	104,787	46,804	43.0	Enel
Nitrogen	(kg)	375,188	338,421	157,852	36,767	10.9	Enel
Heavy metals	(kg)	128,750	119,452	97,025	9,298	7.8	Enel
Phosphorous	(kg)	26,900	18,958	11,294	7,942	41.9	Enel
<b>Nuclear emissions into water</b>							
Tritium	(GBq per Unit)	71	57.7	58.8	13.3	23.0	Enel
Fission and corrosion products	(GBq per Unit)	9.8	21.7	4.1	-11.9	-54.8	Enel
<b>EN14 - EN29</b>							
<b>Impact on landscape/environment</b>							
LV/MV cable	(%)	61.9	60.4	62.6	1.5	2.5	Enel
LV cable	(%)	78.7	76.2	78	2.5	3.3	Enel
MV cable	(%)	32.5	32.7	34.3	-0.2	-0.6	Enel
<b>EN1</b>							
<b>Resources used in production</b>							
Consumption of fuel for thermal production							
Coal	(mil t)	31.5	32.6	27.9	-1.1	-3.4	Enel
Lignite	(mil t)	11.3	10.2	10.7	1.1	10.7	Enel



KPI	UM	2010	2009	2008	2010-2009	%	Boundary
Fuel oil	(mil t)	2.7	3.2	2.9	-0.5	-15.8	Enel
Gas	(mil m³)	16,405.3	15,265.0	13,893.3	1,140.3	7.5	Enel
Gas oil	(.000 t)	1,617.1	1,956.3	1,658.8	-339.3	-17.3	Enel
Biomass and waste for thermal production	(.000 t)	409.9	370.8	239	39.1	10.5	Enel
<b>Geothermal fluid (total extracted)</b>	<b>(.000 t)</b>	<b>93,280</b>	<b>76,375</b>	<b>59,371</b>	<b>16,905</b>	<b>22.1</b>	<b>Enel</b>
Geothermal fluid (net of reinjected fluid)	(.000 t)	27,486	28,462	29,855	-976	-3.4	Enel
Geothermal steam used in electricity production	(.000 t)	87,968	70,982	53,130	16,986	23.9	Enel
<b>Consumables</b>	<b>(.000 t)</b>	<b>1,176.7</b>	<b>1,246.8</b>	<b>1,271.3</b>	<b>-70.1</b>	<b>-5.7</b>	<b>Enel</b>
Limestone	(.000 t)	1,028.0	1,097.2	1,137.0	-69.2	-6.3	Enel
Ammonia	(.000 t)	15.7	20.6	20.1	-4.9	-23.8	Enel
Caustic soda	(.000 t)	30.6	32.1	21.2	-1.5	-4.7	Enel
Spent lime	(.000 t)	25.3	33.4	36.4	-8.0	-24.1	Enel
Sulfuric/hydrochloric acid	(.000 t)	13.6	15.1	12.4	-1.6	-10.3	Enel
Other	(.000 t)	63	48.4	44.2	14.6	30.2	Enel
Equipment with PCB	(%)	1.9	3.8	5	-1.9	-50.1	Enel
Quantity of PCB contained in equipment with >500 ppm PCB	(t)	6	34	70	-28	-82.7	Enel
Quantity of PCB contained in equipment with 50 to 500 ppm PCB	(t)	6,238	n.a.	n.a.	-	-	Enel
<b>EN22</b>							
<b>Waste management</b>							
Total waste produced	(.000 t)	11,482	11,322	10,180	160	1.4	Enel
Including hazardous waste	(.000 t)	75	72	67	3	3.7	Enel
Reclaimed waste	(%)	23.4	24.8	32	-1.5	-5.9	Enel
Low -/medium-activity radioactive liquid waste	(m³)	80.2	93.6	118.8	-13.4	-14.3	Enel
Low -/medium-activity radioactive solid waste	(t)	29.3	31.7	39.4	-2.4	-7.5	Enel
High-activity radioactive liquid waste	(m³)	4	0	0	4.0	-	Enel
High-activity radioactive solid waste	(t)	2.1	1	4.9	1.1	110.0	Enel
Disposed Asbestos	(t)	17,968	11,329	5,532	6,639.7	58.6	Enel

- (1) This amount regarding operating and investment costs includes both the expenses directly incurred by the Research technical area and the expenses incurred for technological innovation by other areas of the Group. In 2008 the figure regards only the Research technical area.
- (2) Calculated using the Eurostat/U.N. criterion. If the figure were calculated according to the table required by the GRI-EN 30, the value would amount to 917 million euro for 2010 and 639 million euro for 2009.
- (3) In 2009 the values were affected by the 100% consolidation of Endesa (67.05% consolidated in 2008).
- (4) Specific emissions are calculated considering the total emissions from simple thermoelectric production and the combined production of electricity and heat with respect to the total simple thermoelectric production and the combined production of electricity and heat (including the contribution of heat in MWh equivalent) with the exception of the H<sub>2</sub>S, which is referred only to the geothermal production of electricity.
- (5) Flue-ash emission increased considerably in 2010 over 2009 because of the increased production of the Reftinskaya plant in Russia in less efficient units and the higher content of unburned material in the coal used.
- (6) Specific emissions are calculated considering the total emissions from simple thermoelectric production and the combined production of electricity and heat with respect to the total renewable, simple thermal, and nuclear production and the combined production of electricity and heat (including the contribution of the heat in MWh equivalent).
- (7) The analyses are performed from year to year on groups of different plants according to the specific checking requirements and therefore regard the power of plants that are not homogeneous.
- (8) The figure also includes the emissions of uncertified plants or not subject to the emission-trading directive.
- (9) Calculated considering the sum of the emissions avoided in each country or the  $\Sigma$  for each country of the quantity of carbon-free electricity produced (renewable + nuclear production + the contribution of the heat from nuclear co-generation), multiplied by the net specific emissions from thermal production.
- (10) 2010 regards the world boundary, while 2009 and 2008 regard only Italy.

# Citizens of the world

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>SO1</b>							
<b>ASSOCIATIONS, INSTITUTIONS, AND MEDIA</b>							
<b>Extent of the phenomenon</b>							
Meetings with associations	(n.)	1,489	900	800	589	65.4	Enel <sup>(1)</sup>
Issues discussed with associations	(n.)	221	85	50	136	160.0	Enel <sup>(1)</sup>
<b>EC8</b>							
<b>INITIATIVES IN FAVOR OF COMMUNITIES</b>							
<b>LBG approach</b>							
<b>Contributions to communities</b>							
Donation expense <sup>(2)</sup>	(mil Euro)	27.1	47	31.3	-19.9	-42.3	Enel <sup>(3)</sup>
Investment in communities	(mil Euro)	58.6	50.9	24.4	7.7	15.1	Enel <sup>(3)</sup>
Business initiatives with a social impact	(mil Euro)	15.6	11.1	11	4.5	40.3	Enel <sup>(3)</sup>
Socially sustainable business initiatives	(mil Euro)	0.9	0.4	0.1	0.5	122.7	Enel <sup>(3)</sup>
Total (expense + investment)	(mil Euro)	102.3	109.5	66.8	-7.2	-6.6	Enel <sup>(3)</sup>
<b>EU25</b>							
<b>Third-party injuries</b>							
Serious and fatal injuries to third parties	(n.)	98	67	90	31	46.3	Enel

(1) The 2009 and 2008 values do not include Endesa.

(2) Includes 6.67 million euro contributed in 2010 to Enel Cuore Onlus.

(3) In 2009 includes Italy, Endesa, Slovakia, and Bulgaria; in 2008 only Italy.

# Sustainability in the supply chain

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>Information on contractors</b>							
<b>LA1</b>							
Contractor personnel	(n.)	107,886	85,171	-	22,715	26.7	Enel <sup>(5)</sup>
<b>EU17</b>							
Days worked by contractor and subcontractor employees	(.000 gg)	27,138	21,640	-	5,498	25.4	Enel
- in construction activities	(.000 gg)	8,354	2,347	-	6,007	255.9	Enel
- in operation activities	(.000 gg)	9,353	7,042	-	2,311	32.8	Enel
- in maintenance activities	(.000 gg)	9,432	12,251	-	-2,819	-23.0	Enel
<b>EC6</b>							
<b>Suppliers</b>							
Suppliers	(n.)	48,530	51,088	16,633	-2,558	-5.0	Enel
Supplier concentration (top 15) <sup>(1)</sup>	(%)	57.7	41.5	32.1	16.2	39.0	Enel
Local suppliers with total contracts worth >1 mil Euro	(n.)	1,180	1,118	509	62	5.5	Enel
Foreign contractors with total contracts worth >1 mil Euro	(n.)	161	115	45	46	40.0	Enel
Expenditure on local contractors with total contracts worth >1 mil Euro	(mil Euro)	9,779.50	5,879.80	2,360.00	3,899.7	66.3	Enel
Expenditure on foreign contractors with total contracts worth >1 mil Euro	(mil Euro)	3,329.90	1,413.50	708.7	1,916.4	135.6	Enel
Expenditure on local contractors	(%)	75	81	77	-6	-7.9	Enel
Expenditure on foreign contractors	(%)	25	19	23	6	33.7	Enel
<b>Procurement and fuels</b>							
Procurement of materials and services	(mil Euro)	14,983	8,975	3,692	6,008	66.9	Enel
Supplies	(mil Euro)	7,479	1,843	1,873	5,637	305.9	Enel
Work	(mil Euro)	3,380	3,138	622	242	7.7	Enel
Services	(mil Euro)	4,124	3,994	1,197	129	3.2	Enel
Fuel purchases <sup>(1)</sup>	(mil Euro)	5,789	5,014	7,881	775	15.5	Enel
Gas	(mil Euro)	1,979	1,174	1,282	805	68.6	Enel
Oil	(mil Euro)	1,713	1,162	646	551	47.4	Enel
Coal	(mil Euro)	1,536	1,908	5,179	-372	-19.5	Enel
Services	(mil Euro)	561	770	774	-209	-27.1	Enel
<b>Management instruments</b>							
Active qualifications <sup>(2)</sup>	(n.)	4,094	2,541	2,449	1,553	61.1	Enel
Online tenders <sup>(2)</sup>	(%)	54	90	91	-36	-39.7	Enel
Online procurement <sup>(3)</sup>	(%)	70	92	82	-22	-23.6	Enel
Non-tender procurement <sup>(4)</sup>	(%)	23.2	42.5	41.7	-19.3	-45.4	Enel

KPI	UM	2010	2009	2008	2010-2009	%	Boundary
<b>LA7</b>							
<b>Occupational injuries of contractor employees and third parties</b>							
Serious and fatal injuries of contractor employees	(n.)	61	144	80	-83	-57.6	Enel
<b>Training on health and safety</b>							
Contractor and subcontractor employees who attended courses on health and safety	(%)	100	100	-	-	-	Enel
<b>Litigation with suppliers</b>							
Total proceedings	(n.)	1,182	598	584	584	97.7	Enel
Incidence of litigation as defendant	(%)	89.1	83.5	82.2	5.6	6.7	Enel

(1) The 2009 and 2008 data do not include Endesa Latam.

(2) The 2009 and 2008 data regard only Italy.

(3) The 2010 and 2009 data regard Enel, while 2008 regards only Italy. The 2010 figure does not include an Italian tender for the procurement of wind turbines, amounting to 3.6 billion euro.

(4) The data do not include Endesa and ELA.

(5) The 2009 figure was reclassified from 44,586 to 85,171 following adjustments by Endesa, which reconsidered several companies not present in the previous boundary. It also does not include the I&R Division, Enel Servizi, and Slovakia, which are included as from 2010.



# EN15 Protected species whose habitats are in areas where Enel plants are located

Our commitment to biodiversity takes the form, among other things, of concern for the protection of the species on the Red List of the International Union for Conservation of Nature and Natural Resources (IUCN).

The following table lists the species on the IUCN's Red List that are present in protected areas where several Enel plants, mainly thermal, are located. The level of the extinction risk is shown next to each group of species.

## Legend for IUCN extinction risk



Bulgaria	Protected species
Maritza East 3 plant: the Protected Area connects the plant with Lake Rozov Kladenetz via the Sokolitz River	<i>Gavia arctica</i> , <i>Phalacrocorax pygmeus</i> , <i>Pelecanus crispus</i> , <i>Ardeola ralloides</i> , <i>Ardea purpurea</i> , <i>Botaurus stellaris</i> , <i>Egretta alba</i> , <i>Egretta garzetta</i> , <i>Ixobrychus minutus</i> , <i>Nycticorax nycticorax</i> , <i>Ciconia ciconia</i> , <i>Ciconia nigra</i> , <i>Platalea leucorodia</i> , <i>Plegadis falcinellus</i> , <i>Cygnus bewickii</i> , <i>Cygnus cygnus</i> , <i>Tadorna ferruginea</i> , <i>Pandion haliaetus</i> , <i>Aquila pomarina</i> , <i>Buteo rufinus</i> , <i>Circus gallicus</i> , <i>Circus aeruginosus</i> , <i>Circus cyaneus</i> , <i>Circus pygargus</i> , <i>Pernis apivorus</i> , <i>Falco naumanni</i> , <i>Philomachus pugnax</i> , <i>Himantopus himantopus</i> , <i>Dendrocopos syriacus</i> , <i>Anthus campestris</i> , <i>Lanius collurio</i> , <i>Hyla arborea</i> , <i>Accipiter gentilis</i> , <i>Aegithalos caudatus</i> , <i>Cuculus canoru</i> , <i>Hippolais pallida</i> , <i>Acrocephalus arundinaceus</i> , <i>Hirundo daurica</i> , <i>Motacilla flava</i> , <i>Oriolus oriolus</i> , <i>Parus major</i> , <i>Passer hispaniolensis</i> , <i>Upupa epops</i> , <i>Tadorna tadorna</i> , <i>Tringa totanus</i> , <i>Tringa stagnatilis</i> , <i>Tringa nebularia</i> , <i>Tringa ochropus</i> , <i>Tachybaptus ruficollis</i> , <i>Podiceps cristatus</i> , <i>Podiceps grisegena</i> , <i>Podiceps nigricollis</i> , <i>Phalacrocorax carbo</i> , <i>Ardea cinerea</i> , <i>Cygnus olor</i> , <i>Anser albifrons</i> , <i>Anser anser</i> , <i>Anas penelope</i> , <i>Anas strepera</i> , <i>Anas crecca</i> , <i>Anas platyrhynchos</i> , <i>Anas acuta</i> , <i>Anas querquedula</i> , <i>Anas clypeata</i> , <i>Netta rufina</i> , <i>Aythya ferina</i> , <i>Aythya fuligula</i> , <i>Bucephala clangula</i> , <i>Accipiter nisus</i> , <i>Gallinula chloropus</i> , <i>Fulica atra</i> , <i>Charadrius dubius</i> , <i>Vanellus vanellus</i> , <i>Calidris alba</i> , <i>Calidris minuta</i> , <i>Calidris ferruginea</i> , <i>Calidris alpina</i> , <i>Gallinago gallinago</i> , <i>Numenius arquata</i> , <i>Actitis hypoleucos</i> , <i>Larus ridibundus</i> , <i>Larus canus</i> , <i>Larus cachinnans</i> LC
	<i>Aythya nyroca</i> and <i>Aquila clanga</i> NT
	<i>Branta ruficollis</i> , <i>Oxyura leucocephala</i> , <i>Mergus albellus</i> , <i>Milvus migrans</i> , <i>Haliaeetus albicilla</i> , <i>Falco vespertinus</i> , <i>Falco peregrinus</i> , <i>Crex crex</i> , <i>Tringa glareola</i> , <i>Sterna hirundo</i> , <i>Chlidonias hybridus</i> , <i>Caprimulgus europaeus</i> , <i>Alcedo atthis</i> , <i>Coracias garrulus</i> EN
France	Protected species
ZICO zone (Zone d'importance pour la conservation des oiseaux)	kite ( <i>Milvus milvus</i> ), Montagu's harrier ( <i>Circus pygargus</i> ) NT
	white stork ( <i>Ciconia ciconia</i> ), common buzzard ( <i>Buteo buteo</i> ) LC
Haut de Conge, Pannecé	barbastelle ( <i>Barbastella barbastella</i> ) NT
Coulonges, Eparmonts, Haut de Conge, Pannecé, Sources de La Loire, Vallée de l'Arce	Montagu's harrier ( <i>Circus pygargus</i> LC), greater mouse-eared bat ( <i>Myotis myotis</i> ), greater horseshoe bat ( <i>Rhinolophus ferrumequinum</i> ), whiskered bat ( <i>Myotis mystacinus</i> ), Geoffroy's bat ( <i>Myotis emarginatus</i> ), Daubenton's bat ( <i>Myotis daubentonii</i> ), Natterer's bat ( <i>Myotis nattereri</i> ), common noctule ( <i>Nyctalus noctula</i> ), stone curlew ( <i>Burhinus oedicnemus</i> ), lesser horseshoe bat ( <i>Rhinolophus hipposideros</i> ), common pipistrelle ( <i>Pipistrellus pipistrellus</i> ), Nathusius's pipistrelle ( <i>Pipistrellus nathusii</i> ), serotine bat ( <i>Eptesicus serotinus</i> ) LC

CN-Oasi Crava  
Morozzo, Parco del  
Sile, Parco Dolomiti  
Bellunesi, SIC-  
Bardonecchia - Val  
Fredda, SIC-Les  
Arnauuds and Punta  
Quattro Sorelle,  
Sicily, SIC-ZPS  
gruppo del Tenibres,  
SIC-ZPS Stura di  
Demonte,  
ZPS Parco Orobie  
Bergamasche

coal tit (*Parus ater*), grey heron (*Ardea cinerea*), purple heron (*Ardea purpurea*), Montagu's harrier (*Circus pygargus*), tawny owl (*Strix aluco*), common teal (*Anas crecca*), Bonelli's eagle (*Hieraetus fasciatus*), golden eagle (*Aquila chrysaetos*), common vole (*Microtus arvalis*), European snow vole (*Chionomys nivalis*), alpine pine vole (*Microtus multiplex*), bank vole (*Clethrionomys glareolus*), European pine vole (*Microtus subterraneus*), scops owl (*Otus scops*), lesser grey shrike (*Lanius minor*), red-backed shrike (*Lanius collurio*), pied avocet (*Recurvirostra avosetta*), pied flycatcher (*Ficedula hypoleuca*), barn owl (*Tyto alba*), Italian barbel (*Barbus plebejus*), sandwich tern (*Sterna sandvicensis*), Yelkouan shearwater (*Puffinus yelkouan*), green whip snake (*Hierophis viridiflavus*), short-toed snake (*Circaetus gallicus*), calandra lark (*Melanocorypha calandra*), short-toed lark (*Calandrella brachydactyla*), chamois (*Rupicapra rupicapra*), gadwall (*Anas strepera*), Egyptian vulture (*Neophron percnopterus*), roe deer (*Capreolus capreolus*), black-winged stilt (*Himantopus himantopus*), chub (*Squalius cephalus*), red deer (*Cervus elaphus*), white stork (*Ciconia ciconia*), marsh tit (*Parus palustris*), willow tit (*Parus montanus*), crested tit (*Parus cristatus*), great tit (*Parus major*), blue tit (*Parus caeruleus*), little owl (*Athene noctua*), boreal owl (*Aegolius funereus*), Eurasian pygmy owl (*Glaucidium passerinum*), spined loach (*Cobitis taenia*), black redstart (*Phoenicurus ochrurus*), northern pintail (*Anas acuta*), great cormorant (*Phalacrocorax carbo*), rock partridge (*Alectoris graeca saxatilis*), Sicilian rock partridge (*Alectoris graeca*), bicolored white-toothed shrew (*Crociodura leucodon*), lesser white-toothed shrew (*Crociodura suaveolens*), northern wheatear (*Oenanthe oenanthe*), least weasel (*Mustela nivalis*), stoat (*Mustela erminea*), black grouse (*Tetrao tetrix*), beech marten (*Martes foina*), Eleonora's falcon (*Falco eleonorae*), honey buzzard (*Pernis apivorus*), Apollo butterfly (*Parnassius apollo*), red-crested pochard (*Netta rufina*), Eurasian coot (*Fulica atra*), Hazel grouse (*Bonasa bonasia*), little tern (*Sternula albifrons*), Kentish plover (*Charadrius alexandrinus*), white-winged snow finch (*Montifringilla nivalis*), moorhen (*Gallinula chloropus*), wood grouse (*Tetrao urogallus*), little egret (*Egretta garzetta*), mallard (*Anas platyrhynchos*), kestrel (*Falco tinnunculus*), alpine cgough (*Pyrrhocorax graculus*), chough (*Pyrrhocorax pyrrhocorax*), griffon vulture (*Gyps fulvus*), long-eared owl (*Asio otus*), Eurasian eagle owl (*Bubo bubo*), brown long-eared bat (*Plecotus auritus*), Lombardy lamprey (*Lethenteron zanandreae*), Lanner falcon (*Falco biarmicus*), mountain hare (*Lepus timidus*), European hare (*Lepus europaeus*, Linnaeus, 1758), sand lizard (*Lacerta agilis*), wall lizard (*Podarcis muralis*), chiffchaff (*Phylloscopus collybita*), wood warbler (*Phylloscopus sibilatrix*), gray wolf (*Canis lupus*), Dartford warbler (*Sylvia undata*), shag (*Phalacrocorax aristotelis*), marmot (*Marmota marmota*), kingfisher (*Alcedo atthis*), pine marten (*Martes martes*), glossy ibis (*Plegadis falcinellus*), European free-tailed bat (*Tadarida teniotis*), tufted duck (*Aythya fuligula*), greater scaup (*Aythya marila*), ferruginous duck (*Aythya nyroca*), pochard (*Aythya ferina*), common dormouse (*Musccardinus avellanarius*), black kite (*Milvus migrans*), black-crowned night heron (*Nycticorax nycticorax*), common noctule (*Nyctalus noctula*), lesser noctule (*Nyctalus leisleri*), stone curlew (*Burhinus oedicnemus*), grey long-eared bat (*Plecotus austriacus*), ortolan bunting (*Emberiza hortulana*), peregrine falcon (*Falco peregrinus*), alpine rock ptarmiga (*Lagopus mutus helveticus*), collared pratincole (*Glareola pratincola*), wallcreeper (*Tichodroma muraria*), black woodpecker (*Dryocopus martius*), great spotted woodpecker (*Dendrocopos major*), green woodpecker (*Picus viridis*), spotted flycatcher (*Muscicapa striata*), Kuhl's pipistrelle (*Pipistrellus kuhlii*), Nathusius's pipistrelle (*Pipistrellus nathusii*), Savi's pipistrelle (*Hypsugo savii*), common pipistrelle (*Pipistrellus pipistrellus*), common buzzard (*Buteo buteo*), purple swamphen (*Porphyrio porphyrio*), western green lizard (*Lacerta bilineata*), agile frog (*Rana dalmatina*), pool frog (*Rana lessonae*), common frog (*Rana temporaria*), corn crake (*Crex crex*), European hedgehog (*Erinaceus europaeus*), greater horseshoe bat (*Rhinolophus ferrumequinum*), common tern (*Sterna hirundo*), fire salamander (*Salamandra salamandra*), bullhead (*Cottus gobio*), red squirrel (*Sciurus vulgaris*), serotine bat (*Eptesicus serotinus*), northern bat (*Eptesicus nilssonii*), squacco heron (*Ardeola ralloides*), alpine ibex (*Capra ibex*), nightjar (*Caprimulgus europaeus*), great crested grebe (*Podiceps cristatus*), European mole (*Talpa europaea*), little bittern (*Ixobrychus minutus*), European badger (*Meles meles*), wood mouse (*Apodemus sylvaticus*), yellow-necked mouse (*Apodemus flavicollis*), house mouse (*Mus domesticus*), Mediterranean water shrew (*Neomys anomalus*), common shrew (*Sorex araneus*), Eurasian water shrew (*Neomys fodiens*), pygmy shrew (*Sorex minutus*), wryneck (*Jynx torquilla*), woodlark (*Lullula arborea*), alpine newt (*Triturus alpestris alpestris*), marble trout (*Salmo marmoratus*), little grebe (*Tachybaptus ruficollis*), yellow-bellied toad (*Bombina variegata*), hoopoe (*Upupa epops*), vairone (*Leuciscus souffia*), Natterer's bat (*Myotis nattereri*), Geoffroy's bat (*Myotis emarginatus*), lesser mouse-eared bat (*Myotis blythii*), Daubenton's bat (*Myotis daubentonii*), mouse-eared bat (*Myotis myotis*), whiskered bat (*Myotis mystacinus*), red fox (*Vulpes vulpes*), shelduck (*Tadorna tadorna*). **LC**

Porto Corsini plant:  
wetland (Pialassa  
Baiona lagune)

little egret (*Egretta garzetta*), black-headed gull (*Chroicocephalus ridibundus*), Kentish plover (*Charadrius alexandrinus*), pied avocet (*Recurvirostra avosettae*), black-winged stilt (*Himantopus himantopus*), pygmy cormorant (*Phalacrocorax pygmeus*), glossy ibis (*Plegadis falcinellus*), whiskered tern (*Chlidonias hybridus*), Anatidae, Caradriiformes. **LC**

Montalto di Castro plant: The coastal area in front of the plant is protected and two EU-interest sites are specified inside the plant.	turtles ( <i>T. hermanni</i> e <i>E. orbicularis</i> ) NT
	birdlife ( <i>Egretta garzetta</i> , <i>Nycticorax nycticorax</i> ) LC
Torrevaldaliga Nord plant: The area concerned is the EU- interest site located on the Lazio coast between Punta S. Agostino and Punta della Mattonara.	Posidonia oceanica LC
	<i>Pinna nobilis</i> LC
Parco del Sile	ferruginous duck ( <i>Aythya nyroca</i> ) NT
Parco Orobie Bergamasche (Protected Area)	garden dormouse ( <i>Eliomys quercinus</i> ), alpine shrew ( <i>Sorex alpinus</i> ), bent-wing bat ( <i>Miniopterus schreibersii</i> ) NT
Oasi Crava Morozzo (Cuneo province)	ferruginous duck ( <i>Aythya nyroca</i> ) NT
Sicily	Cory's shearwater ( <i>Calonectris diomedea</i> ), Audouin's gull ( <i>Ichthyophaga audouinii</i> ) European roller ( <i>Coracias garrulus</i> ), red kite ( <i>Milvus milvus</i> ) NT
Parco del Sile	Italian agile frog ( <i>Rana latastei</i> ) VU
Parco Orobie Bergamasche	mouflon ( <i>Ovis orientalis</i> ) VU
Parco Dolomiti Bellunesi	mouflon ( <i>Ovis musimon</i> ) VU
Oasi Crava Morozzo	stag beetle ( <i>Lucanus cervus</i> ) VU
SIC - BARDONECCHIA - VAL FREDDA	Apollo butterfly ( <i>Parnassius apollo</i> ) VU
SIC-ZPS STURA DI DEMONTE	stag beetle ( <i>Lucanus cervus</i> ) VU
Sicily	marbled duck ( <i>Marmaronetta angustirostris</i> ) lesser kestrel ( <i>Falco naumanni</i> ) VU
CN-Oasi Crava Morozzo	Brook barbel ( <i>Barbus caninus</i> ) EN
SIC-ZPS STURA DI DEMONTE	white-clawed crayfish ( <i>Austropotamobius pallipes</i> ) EN
Sicily	tawny pipit ( <i>Anthus campestris</i> ) EN

## Chile

### Protected species

El Toro hydro power plant, Pangue and Ralco hydro power plants

Patagonian huemul (*Hippocamelus bisulcus*), catfish (*Trichomycterus chiltoni*), perch (*Percilia irwini*)

EN

Pangue and Ralco hydro power plants, Rapel hydro plant, Pehuenche hydro plant

catfish (*Diplomystes nahuelbutaensis*), cocoi heron (*Ardea cocoi*), Patagonian conure (*Cyanoliseus patagonus*)

LC

Total hydro power plant  
Canela wind farm

cactus species (*Eulychnia castanea*), cactus species (*Eulychnia iquiquensis*, *Carica chilensis*, *Calydorea xiphioides*)

## Colombia

### Protected species

Emgesa

otter (*Lontra longicaudis*)

VU

raccoon (*Procyon lotor*), coral snake (*Micrurus sp.*), green iguana (*Iguana iguana*), boa constrictor (*Boa constrictor*), Brown caiman (*Caiman crocodilus fuscus*)

LC

## Panama

### Protected species

Fortuna Forest Reserve (RFF) <sup>(6)</sup>

jaguar (*Panthera onca*), Geoffroy's spider monkey (*Ateles geoffroyi*), mantled howler (*Alouatta palliata*), bare-necked umbrella bird (*Cephalopterus glabricollis*), yellow-green finch (*Pselliophorus luteoviridis*)

EN

Other low-risk species are included in the following orders and families:

Artiodactyla (*cervidae*, *tuyassuidae*), Carnivora (*canidae*, *felidae*, *mustelidae*, *procyonidae*), chiroptera (*emballonuridae*, *molossidae*, *mormoopidae*, *phylostomidae*, *thyropteridae*, *vespertilionidae*), Didelphiomorpha (*didelphidae*), Lagomorpha (*leporidae*), Perissodactyla, Primates (*cebidae*), Rodentia (*agoutidae*, *cricetidae*, *echimyidae*, *erethizontidae*, *heteromyidae*, *muridae*, *sciuridae*), Xenarthra (*bradypodidae*, *dasypodidae*, *myrmecophagidae*, *dasypodidae*, *myrmecophagidae*), Gymnophiona, Caudata (*plethodontidae*), Anura (*bufonidae*, *centrolenidae*, *dendrobatidae*, *hylidae*, *leptodactylidae*, *microhylidae*, *ranidae*), Lacertilia (*gekkonidae*, *gymnophthalmidae*, *polychrotidae*), serpentes, viperidae, Apodiformes (*apodidae*, *trochilidae*), Caprimulgiformes (*caprimulgidae*), Caradriiformes (*scolopacidae*), Ciconiiformes (*ardeidae*, *cathartidae*), Columbiformes (*columbidae*), Coraciiformes (*alcedinidae*, *momotidae*), Cuculiformes (*cuculidae*), Falconiformes (*accipitridae*, *falconidae*), Galliiformes (*cracidae*, *odontophoridae*), Guiformes (*eurypygidae*, *rallidae*), Passeriformes (*cinclidae*, *corvidae*, *cotingidae*, *dendrocolaptidae*, *coerebidae*, *cardinalidae*, *emberizidae*, *fringillidae*, *icteridae*, *parulidae*, *thraupidae*, *formicariidae*)

LC

(6) The biodiversity of the vegetation of the Fortuna Reserve is classified in three categories according to the Holdridge classification (1967) and Tosi's ecological study (1971): premontane rain forest, lower mountain rain forest, and premontane moist forest.



# EN23 Spills that occurred in 2010

The following table describes in detail the spills that occurred, their environmental impact, and the initiatives undertaken to mitigate them.

Italy	Description of spill	Impacts and their attenuation
Caltavuturo wind park 0.15 m <sup>3</sup>	Spill of nebulized mineral oil inside the wind park in an agricultural area of 6,500 square meters cultivated as an apple orchard.	The analyses performed showed that the concentration of oil is well below the contamination threshold. It seems after an examination that no reclamation work is necessary. A service conference is planned in which any work will be determined and the farmer has been compensated for the damage.
Distribution networks 0.052 m <sup>3</sup>	Spills of mineral oil from equipment.	All the work to make the area safe and reclaim it is done according to the simplified procedure (areas less than 1,000 square meters) of legislative decree n. 152/06, title IV. The incidents are concentrated where there are frequent thefts of equipment to obtain valuable materials (e.g., copper). Given the modest quantities of oil, the areas are usually restored within 30 days by making them safe, with no need to start of process of actual reclamation.
Genoa power plant 1 m <sup>3</sup>	Spill of light coal ash from silos while an obstruction in the unloading ducts was being repaired. The spill lasted about 20 minutes.	During the repair work the following supervisory bodies were present: VV. FF, Polizia Stato, GdF, CP, Autorità Portuale, ASL, and ARPAL. The event caused a spill of coal ash, which was blown southward by the wind and affected the stretch of sea between the Ex Idroscalo bridge and the outer breakwater, because in the period concerned a strong northerly wind was blowing (as shown by the weather station installed on the roof of the power station), giving rise to a narrow and elongated plume that did not affect external inhabited or work areas. The wet ash deposited on the asphalt road leading to the wharf was collected and put in special containers to be placed in temporary storage, while the adjacent streets were cleaned with aspirators. All the sprinklers on the external wall of the coal bunker adjacent to the area concerned by the event were turned on in order to further limit the dispersion of dust. The fallout did not affect unpaved areas.
Petino power plant 0.1 m <sup>3</sup>	Spill of transformer oil following a theft of copper	The details: 4 m <sup>3</sup> retrieved from the transformer oil retrieval tank; 0.1 m <sup>3</sup> spilled on the ground promptly decontaminated according to provisions of article 249 of legislative decree 152/2006 (Spills on permeable solid surfaces).

Bulgaria	Description of spill	Impacts and their attenuation
<b>Maritza East 3 thermal power plant</b> not reported	There was a series of leaks from the circuit transporting lignite ash that entailed spillage of a not well defined quantity of water and ash on both the ground and in the So-lolitza River.	Ash is not a hazardous substance and the investigation carried out showed that there was no impact on the environment. Work was promptly done to limit the leakage. The ash transport system will be reconstructed gradually to limit and eliminate this kind of event. The new ducts will have a layer of basalt, which will enable them to resist abra-sion, thus avoiding holes along the circuit.
Argentina	Description of spill	Impacts and their attenuation
<b>Costanera thermal power plant</b> 0.1 m <sup>3</sup>	Spills of mineral oil after rain, be-cause of the breakdown of the automatic system that stops the discharge of water, from the hydro-carbon separation of the contain-ment basin of the n. 2 fuel oil tank.	No impact was noted. To prevent repetition of the event the pumps were replaced with more powerful ones and a new duct was installed to transport the waste water from the separation chamber to 2 other separation tanks in se-ries with a capacity of about 90 m <sup>3</sup> , thus reducing the risk of hydrocarbon spills to the minimum.
Chile	Description of spill	Impacts and their attenuation
<b>El Toro hydro power plant</b> 0.04 m <sup>3</sup>	Spill of oil in the Polcura River during a plant shutdown, because of a hole in unit 4's cooling circuit.	The hole was sealed. When the plant is shut down the next time the cooling circuit will be changed. As a preventive ac-tion the cooling circuits of the other units of the plant were overhauled and their replacement will be planned.
<b>Chilectra distribution network</b> 1.85 m <sup>3</sup>	When the supports are crash into by cars, the transformers leak dielectric oil. In 2010 20 incidents occurred.	No impact. The earth was removed and treated. The solid contaminated materials soaked with oil, consisting of filter-ing material and residues of earth are treated as oily waste and delivered to specialists. Continuing training initiatives, provided for the Environmental Management System, are implemented to prepare internal personnel and suppliers to act during this kind of environmental emergency. Spe-cific procedures for action have been established and inci-dents have been simulated.
Colombia	Description of spill	Impacts and their attenuation
<b>Cartagena thermal power plant</b> 0.95 m <sup>3</sup>	Four oil spills at the Cartagena ther-mal power plant	No impact. The earth was removed and treated. The contaminated solid materials soaked with oil, consi-sting of filtering material and residues of earth, were trea-ted as oily waste and delivered to specialists.
<b>Cartagena thermal power plant</b> 0.1 m <sup>3</sup>	A spill of chloridic acid at the Carta-gena thermal power plant.	No impact on the environment. The spill caused safety pro-blems to the personnel involved.
Costa Rica	Description of spill	Impacts and their attenuation
0.035 m <sup>3</sup>	Mineral oil spills because of the de-tachment of a wind blade.	No impact. The earth was removed and treated. The contaminated solid materials soaked with oil, consi-sting of filtering material and residues of earth, were trea-ted as oily waste and delivered to specialists.

# Term Definition

**AEEG (Autorità per l'Energia Elettrica ed il Gas or Autorità):** The body that regulates and supervises the services of the electricity and gas industry, established in Italy by law n. 481 of November 14, 1995.

**AGCM (Autorità Garante della Concorrenza e del Mercato):** Also known as Antitrust, the Authority was instituted in Italy in 1990 as an independent institution. With the objective of improving the welfare of citizens, it enforces observance of the rules forbidding agreements between companies to avoid competition.

**Average specific emission of CO<sub>2</sub> equivalent:** Emission of hothouse gases expressed in terms of CO<sub>2</sub> (according to the potential of global warming of the single gases) and relative to the net total production of electricity.

**Benchmark:** The real measurement of technical or economic data in a specified period of time used as the basis for comparison with other similar data.

**Biomass:** Material of non-fossil biological origin that can be used for energy: agricultural and forest residues; waste from the agricultural and food industry; waste water from livestock ranches; organic parts of urban waste; expressly cultivated vegetal species; other vegetal species used to purify organic liquid sewage.

**Business customers:** Small, medium, and large businesses with a VAT registration number.

**Captive customer:** A customer who, pursuant to the Bersani decree, is not included in the category of "eligible customers" and therefore is authorized to enter into supply contracts exclusively with the distributor that provides the service in the area where the user is located.

**Captive market:** The captive market comprises all the customers who may enter into electricity supply contracts exclusively with the distributor that runs the service in the area in which the customer is located. For customers who cannot or do not wish to access the free market, the AEEG regulates the rates of the electricity sold every three months.

**Churn rate:** The rate of abandonment by customers, which shows the percentage weight of customer loss in a determined period of time (customers lost during the period/customers at the beginning of the period).

**Code of Ethics:** A policy document that establishes guidelines of behavior for the

people who belong to the organization concerning their behavior with all stakeholders and explains the basic principles that drive the company's decisions.

**Co-generation:** The combined production of electricity and heat on the conditions established by the AEEG.

**Combined cycle (CCGT):** The technology used in electric power plants comprising one or more sets of gas-turbine generators whose exhaust gas fires a boiler, which can also be fired with a supplementary fuel. The steam produced by the boiler is used to drive a steam turbine coupled to a generator.

**Commodity risk:** Risk regarding the business of electricity production and the sale of electricity/gas connected with changes in the price of oil fuels and the euro/dollar exchange rate.

**Corporate Governance:** The set of rules according to which companies are managed and controlled.

**CSR (Corporate Social Responsibility):** A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis.

**Denitrification and desulfurization systems:** Systems for reducing atmospheric emissions of nitrogen oxides and sulfur dioxide.

**Disclosure:** Information that companies provide for the market, on a voluntary basis or by law, to improve their transparency.

**Dispatching:** The activity aimed at giving instructions to coordinate the operation of plants and the use of the transmission grid and its auxiliary services.

**Distribution:** The transportation and transformation of electric power on the high-, medium-, and low-voltage distribution networks for delivery to end customers.

**Distribution network:** The distribution network includes primary transformation substations, medium-voltage power lines (mainly 15kV and 20 kV), secondary substations, low-voltage (400 V) power lines, and electronic devices for measuring electricity: electronic meters or electronic meter sets.

**DJSI (Dow Jones Sustainability Index):** Index of companies that are committed to sustainable development provided by Dow Jones in association with SAM (Sustainable Asset Management).

**Eco-efficiency:** Production of goods and services at competitive prices that satisfy human needs and the quality of life and at the same time gradually reduces its impacts on the environment and its intensity of resource use through its entire life cycle to a level at least in line with the Earth's absorption capacity. In short, creating more value with less impact.

**Electricity demand :** The quantity of electricity to make available on the grid. It amounts to the total consumption by users plus network losses. It is also called electricity requirement.

**EMAS:** Environmental Management and Audit Scheme, based on EC Regulation 761/2001.

**End customer:** The natural or legal person who buys electricity exclusively for their own use.

**Enriched natural uranium:** The source of energy for the nuclear production of electric power. The uranium found in nature consists essentially



of two isotopes: uranium 238 (99.3%) and uranium 235 (only 0.7%). In effect, uranium 234 constitutes barely 0.056%. Enrichment consists in increasing the content of U235 to values generally between 3% and 5%. In effect, only the U235 is fissile. This characteristic determines the fact that when the nucleus of an atom of U235 is hit by a slow neutron it breaks into two smaller nuclei (fission), releasing energy and other (fast) neutrons. In light-water reactors, these neutrons are slowed down by the “moderating” action of the water (which also has the function of conveying the heat produced), strike other nuclei, and give rise to a chain reaction. Nuclear fuel can generate a quantity of energy more than 50,000 times greater than that released in the combustion of an equal mass of fuel oil.

**Environmental Impact Assessment (EIA):** The analysis of the impact of a project or operation of a company on the environment.

**Free market:** The decree (February 19, 1999) that initiated the liberalization of the Italian electricity market (the so-called “Bersani decree”) implemented EU Directive 96/92. When the liberalization was completed, a new era began for Italian electricity users, who can choose any supplier in the market on the basis of their different offers (price, supply conditions, etc.).

**FTSE4Good Index:** An index that includes European companies that distinguish themselves by their transparent management and application of sustainable criteria. The FTSE4Good index assesses the performance of companies that are globally recognized for their high standards of social responsibility. The index is revised twice a year, in March and September, to possibly include new companies and exclude those that have not maintained the sustainability standards required.

**Green certificate:** A certificate associated with the production of electricity by plants fired by renewable energy put into operation after April 1, 1999. In Italy, green certificates are issued by the Provider of Energy Services (GSE) after the producer reports the previous year’s production from renewable sources. For the producers concerned, they represent an alternative system of meeting the obligation provided for by the Bersani decree to produce and/or import a quantity of electricity from renewable sources amounting to at least 2% of the electricity from nonrenewable sources produced and/or imported in the previous year. Green certificates are freely traded among the owners, producers, and importers of electricity subject to the aforesaid obligation.

**Green energy:** A commonly used term to specify the electricity produced from renewable energy sources, i.e. ones that can renew themselves continually, such as hydro, geothermal, solar, wind, and biomass.

**Greenhouse effect:** The increase in the temperature of the atmosphere and land surface at the planetary level caused by the accumulation in the atmosphere of gaseous substances that absorb terrestrial infrared radiation. These substances (“greenhouse gases”) are produced mainly by the combustion of fossil fuels such as wood, coal, and oil for industrial, household, and transportation purposes and can modify the degree of the heat of the Earth’s atmosphere transmitted, limiting its external dispersion.

**Greenhouse-gas emissions:** Gaseous pollutants released into the air by the combustion of fossil fuels, or in other ways, that amplify the greenhouse effect. The greenhouse effect is generally considered the cause of global climate change.

**Grid availability:** The state in which the National Transmission Grid can be used by the Operator of the National Transmission Grid for the activities within its province.

**Greenhouse gas:** Gas produced by human activities and potentially able to increase the greenhouse effect. The Kyoto Protocol (1997) identifies six greenhouse gases (carbon dioxide, sulfur hexafluoride, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons) and sets goals for limiting them.

**Gasification:** Process that converts coal or other fossils into gaseous compounds (carbon dioxide, methane, carbon monoxide, hydrogen, and mixtures of them that can be burned to produce energy). It takes place by reaction with air, steam, oxygen, or mixtures of them.

**Geothermy:** The natural phenomenon and use for energy of the geothermal heat present in strong concentrations in the strata of the terrestrial crust up to several thousand meters deep and made available through geothermal fluid – mainly water or steam – at relative high pressures and temperatures.

**Gestore dei Mercati Energetici:** GME is the company entrusted with organizing and managing the Italian electricity market according to criteria of neutrality, transparency, objectivity, and competition among producers, while also ensuring the economic management of an appropriate power reserve.

**Gigawatt (GW):** One billion watts (one thousand megawatts).

**Gigawatt-hour (GWh):** One million kilowatt-hours.

**GRI (Global Reporting Initiative):** A multi-stakeholder initiative established in 1997 to develop and promote universally applicable guidelines for preparing “sustainability reports”, credible public documents that describe the economic, environmental, and social impacts that the company or organization generates through its activity. The GRI has been promoted by CERES (Coalition for Environmentally Responsible Economies) in partnership with the UNEP (United Nations Environment Programme) and with the involvement of companies, NGOs, associations of expert accountants, business organizations, and other stakeholders at the international level. The most widely used GRI guideline is the GRI-G3, which was issued in 2006 and will be revised in 2011.

**Grid losses:** There are two kinds of “technical” losses in the electric grid:

- losses caused by the current
- losses caused by the voltage.

The losses caused by the current are Joule-effect losses, i.e. the losses in the conductors of electric lines and the losses in transformer windings (commonly called losses in copper) and are a function of the square of the current, and therefore can be expressed with an R12-type relation. Losses caused by the voltage are dielectric losses (in cable insulation and condensers) and losses in transformer nuclei (commonly called losses in iron, which can be expressed by a V2/R-type quadratic relation).

**Gross efficient power (in MW):** The maximum electric power that can be continuously produced during a sufficiently long time period, supposing that all the parts of the plant, from the terminals to the generators, are functioning.

**Gross production (in kWh):** The total quantity of the electricity generated – including that gener-

ated with pumping – by all the generating sets (thermal first motor and one or more electricity generators coupled mechanically), measured at the outflow terminals of the main generators.

**Gas turbine:** The machine that converts the energy possessed by the gas burned in it into the mechanical energy of rotary motion.

**Hydroelectric:** A hydroelectric plant is one in which the potential energy of water is transformed into electric energy. There are three main types: run-of-river, reservoir, or pumped-storage. They consist essentially of two parts: a power station (turbine-alternators and connected works) and hydraulic works (barriers, dams, reservoirs, uptake works, channels, diversion tunnels, etc.).

**Household (or residential) customers:** “Captive customers” with a low-voltage supply and a single point of delivery for a residence and annexed premises.

**HV:** High voltage.

**ILO (International Labour Organization):** An agency of the United Nations, which promotes social justice and workers’ rights throughout the world.

**Integrated reporting:** The standard proposed by the GRI that integrates the Annual Report with sustainability reporting. It was created to update corporate reporting systems, especially with regard to corporate social responsibility. This system requires documenting financial, environmental, social, and governance results with a single instrument, with the objective of increasing transparency for society and the financial community.

**ISO 14001:** International standard issued by the ISO (International Organization for Standardization) for the adoption of environmental management systems.

**Kilocalorie (kcal):** Unit of heat measurement (thermal energy). 1 kcal is the quantity of heat necessary to raise the temperature of 1 kg of water by 1°C.

**Kilovolt (kV):** One thousand volts.

**Kilowatt (kW):** One thousand watts.

**Kilowatt-hour (kWh):** Unit of measurement of the electric power supplied or demanded, amounting to a thousand watts for one hour.

**Kilowatt-hour equivalent (kWh eq):** Unit of measurement that expresses all the energy produced, both electric and thermal, by converting the contribution of thermal energy into kilowatt-hours.

**KPI (Key Performance Indicator):** Indicator that helps define and measure the progress made for achieving the objectives of a company or organization. In CSR, these indicators regard concern for the environment, the appropriateness of work practices and conditions, respect for human rights, and impact on society in addition to the economic aspect and product responsibility.

**Kyoto Protocol:** In December 1997, more than 160 countries met in Kyoto, Japan to negotiate an obligatory limit to greenhouse-gas emissions in the developed countries, pursuing the objectives of the 1992 General Agreement on climate change. The results of the meeting are contained in the Kyoto Protocol, in which the developed countries agreed to limit their greenhouse-gas emissions to the levels of 1990.

**LBG (London Benchmarking Group):** A model established in 1994 to classify and manage a company's or organization's initiatives with an impact on society.

**LV:** Low voltage.

**Megawatt (MW):** One million watts.

**Megawatt-hour (MWh):** One thousand kilowatt-hours.

**Microgeneration:** Electricity generation with small-sized plants that can be used all over because of their flexibility.

**MV:** Medium voltage.

**National Transmission Grid :** The network of transformation stations and high-voltage power transmission lines throughout the country.

**Net efficient power (in MW):** The maximum electric power that can be produced during a sufficiently long period of time, supposing that all the parts of the plant are functioning, measured where it is injected into the grid, i.e. net of the power absorbed by the operation of the plant and the power lost in the transformers necessary to raise the voltage to the grid value.

**Net production (in kWh):** Gross electricity production net of the energy absorbed by auxiliary generation services and losses in the main transformers.

**Net specific emission:** Total polluting emissions relative to the net thermoelectric production concerned.

**OHSAS (Occupational Health and Safety Assessment Series):** Regulations certifying an international standard for worker safety and health management system. The decision to apply such certification in an organization or company is made on a voluntary basis.

**Orimulsion:** Fossil fuel from the Orinoco River in Venezuela, consisting of extremely fine bitumen mixed with water.

**PACI:** The Partnering Against Corruption Initiative, sponsored by the World Economic Forum, which about 60 companies in the energy, construction, and mining industries – including Enel – joined in Davos in January 2005.

**Photovoltaic:** The direct transformation of the energy of light into electric energy.

**Power transformer (or trasformer):** The static machine that transforms an alternating-current system into another system, generally with different voltage and current values on the same frequency for the purpose of transmitting the electric power.

**Production:** The generation of electricity however it is produced.

**Rating:** An assessment expressed by a firm specialized in analyzing companies in the form of a letter or number representing the economic and financial situation of the companies analyzed.

**Rating agency:** A firm specialized in analyzing and assessing companies for the purpose of establishing a rating expressed in the form of a letter or number representing their economic and financial situation.



**Renewable sources:** The sun, wind, water resources, geothermal resources, tides, the motion of waves, biomass and organic and inorganic waste.

**Risk and crisis management:** Processes and instruments aimed at preventing and managing exceptional and unforeseen events that can have impacts of different kinds and intensities on the company.

**Scope 1, 2, and 3 greenhouse-gas emissions:** According to the definition provided by the World Business Council for Sustainable Development (WBCSD), greenhouse-gas emissions can be classified according to the concept of scope, which distinguishes between direct and indirect emissions and their origin.

**Scope 1:** direct emissions from sources owned or controlled directly by the company, for example emissions stemming directly from production;

**Scope 2:** indirect emissions from the generation of the electricity purchased by the company, emitted by the plant that produced the electricity;

**Scope 3:** other indirect emissions of greenhouse gases that are the consequence of the company's activities, but stem from sources that are neither owned nor controlled by the company, such as, for example, emissions from the extraction of materials or the transportation of fuels that have been purchased.

**Self-producer:** A company that, in addition to its main business activity, produces – individually or with others – at least 70% of its own electricity requirements.

**Social Impact Assessment (SIA):** The systematic analysis of the impact of a project or operation on the social and cultural situation of the communities concerned.

**SRI (socially responsible investment):** Investment considered socially responsible in light of the nature of the company's business. Common issues connected with socially responsible investment include the refusal to invest in companies that produce or sell addictive substances, such as alcohol or tobacco and the search for companies that are attentive to environmental sustainability and clean energy. A socially responsible investment can be made by in single companies or through investment funds or ETFs (exchange-traded funds).

**Stakeholder:** An individual, community, or organization that influences the operations of a company or is affected directly or indirectly by them; that has rights or interests "at stake" therein. In the broadest meaning of the term, the parties concerned can be internal (management and employees of the company) or external (suppliers, customers, economic partners, local communities, governments, future generations, environmental associations, etc.).

**Steam turbine:** The machine that converts the energy possessed by the steam generated in a boiler or by geothermal steam into the mechanical energy of rotary motion.

**Sustainability:** The term sustainability is associated with the concept of development. Sustainable development is a form of positive social evolution (comprising economic, social, and environmental aspects) that safeguards the possibility for future generations to continue the aforesaid development. The objective is to maintain economic growth that is compatible with social justice and the ecosystems.

**Sustainability index:** A stock-market index geared to the trading of shares of listed compa-

nies selected on the basis of their possession of the requisites of economic, environmental, and social responsibility (criteria of inclusion) and/or excluding companies that do business in industries such as pornography, tobacco, or weapons, which are considered a priori unethical.

**Switching rate:** Percentage obtained by calculating the balance between customers acquired and customers lost and dividing by the total number of customers at the end of the period.

**Terawatt-hour (TWh):** One billion kilowatt-hours.

**Thermal yield of a thermoelectric power plant or Thermal yield:** The electric energy produced in proportion to the energy of the primary sources used.

**Thermoelectric:** A plant for producing electricity from fossil fuels (coal, natural gas, fuel oil, and orimulsion).

**Thermoelectric production unit:** The coordinated, essentially self-sufficient system of converting the thermal energy of fuels into electric energy. It consists of one or more steam generators, thermoelectric prime motors, one or more generating sets and main transformers, the regenerative cycle, and other circuits and auxiliary services.

**TOE:** Tons of oil equivalent. A conventional unit amounting to 10 million kcal, which expresses the quantity of any energy source by comparing its energy potential with that of crude oil.

**Transmission:** The transportation of electricity along interconnected high- and very-high-voltage grids from production plants or – in the case of imported power – from the delivery point of the same to the distribution system.

**Triad:** The set of three wires that constitute the three phases of an electric power line.

**Unavailability for service:** Represents the fraction of power that is unavailable (with respect to the nominal power), for planned and/or unplanned reasons, during periods in which the plant is meant to produce.

**United Nation Global Compact:** An international initiative of the UN's General Secretariat, whose aim is to encourage cooperation among the UN agencies, multinational companies, labor unions, and the general public in supporting ten universally recognized social and environmental principles (human rights, labor/workers' rights, protection of the environment, etc.).

**Value added (also gross product):** Represents the wealth created overall by the enterprise and distributed to its stakeholders (employees, financial partners, the national and local governments, partners/shareholders, communities) or reinvested in the company (depreciations and retained earnings).

**Volt:** The unit of measurement of electric tension.

**Watt:** The unit of measurement of electric power.

**WBCSD (World Business Council for Sustainable Development):** The international network of companies created in 1995 to establish closer cooperation among enterprises, governments, and all the other organizations interested in sustainable development and protection of the environment.

**Wheeling :** The use of the National Transmission Grid and the distribution networks for the transportation of electric power from a point of injection to a point of withdrawal.



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(Translation from the Italian original which remains the definitive version)

**Limited assurance report on the sustainability report prepared in  
accordance with AA1000 Accountability Principles Standard 2008  
("AA1000APS - 2008")**

To the board of directors of  
Enel S.p.A.

- 1 We have reviewed the 2010 sustainability report of the Enel Group (the "Group"). The parent's directors are responsible for the preparation of the sustainability report in accordance with the principles of "Inclusiveness", "Materiality" and "Responsiveness" set out in AA1000 Accountability Principles Standard 2008 ("AA1000APS - 2008"), issued by AccountAbility (the Institute of Social and Ethical Accountability), described in the paragraph on "Methodological note", and the reliability of the data and information on the sustainability performance disclosed in the sustainability report. They are also responsible for determining the Group's objectives in respect of sustainability performance and reporting, including the identification of stakeholders and material issues, and for establishing and maintaining appropriate performance management and internal control systems from which the reported data and information are derived. Our responsibility is to issue this report based on our review.
- 2 We carried out our work in accordance with the criteria established for review engagements by "International Standard on Assurance Engagements 3000 - Assurance Engagements other than Audits or Reviews of Historical Financial Information" ("ISAE 3000"), issued by the International Auditing and Assurance Standards Board. This Standard requires that we comply with applicable ethical requirements (the Code of Ethics for Professional Accountants issued by the International Federation of Accountants, IFAC), including independence requirements, and that we plan and perform the engagement to obtain limited assurance about whether the sustainability report is free from material misstatement.

We conducted our work also in accordance with AA1000 Accountability Assurance Standard (2008) ("AA1000AS - 2008"), "Type 2", which covers not only the nature and extent of the organisation's adherence to AA1000APS - 2008 principles, but also evaluates the reliability of the data and information on sustainability performance. Under the guidelines issued by AccountAbility, the "moderate level of assurance" used in the AA1000AS - 2008 standard is in line with the "limited level of assurance" established in ISAE 3000.

A limited assurance engagement on a sustainability report consists of making inquiries, primarily of persons responsible for the preparation of information presented in the sustainability report, and applying analytical and other evidence gathering procedures, as appropriate. These procedures included:

- interviews and discussions with management personnel of Enel S.p.A. and the personnel of other group companies (Endesa SA, Enel Distribuzione S.p.A., Enel Green Power S.p.A., Enel Produzione S.p.A., Enel Servizi S.r.l., Enel Servizio Elettrico S.p.A., Enel OGK-5 OJSC and Slovenské elektrárne AS), in order to understand the processes used to adhere to and check compliance with the "Inclusiveness", "Materiality" and "Responsiveness" established by AA1000APS - 2008 standard and the effectiveness of such processes;
- interviews with the audit management in order to analyse the checks carried out by them over the company's internal processes which are relevant for the purposes of our engagement;
- analysis of the main risks to which the Enel group is exposed with respect to sustainability issues;
- analysis and understanding of the stakeholder involvement process, in terms of methods used and completeness of the persons involved, by reading the minutes of meetings or any other information available about the salient features identified;
- analysis and understanding of the processes and tools used to identify the salient features for each category of stakeholder;
- analysis of the documentation supporting the activities carried out by the "CSR and relationships with associations" unit, which is in charge of preparing the sustainability report, in order to understand how strategies and procedures relating to salient features are applied;
- sample-based analysis of the initiatives taken by the Group to satisfy stakeholders' expectations;
- selection of the data and information on the sustainability performance through an analysis of their significance for the users of this report, based on qualitative and quantitative considerations, and analysis of the functioning of the processes underlying the generation, recording and management of the data and information on sustainability performance. In particular, we have performed the following procedures:
  - interviews with personnel of the "CSR and relationships with associations" unit and the subsidiaries to gather information on the IT, accounting and reporting systems used in preparing the information on the sustainability performance, and on the processes and internal control procedures used to gather, combine, process and transmit data and information to the office that prepares the sustainability report;



- sample-based analysis of documentation supporting the preparation of the data and information on the sustainability performance;
- obtaining the representation letter signed by the legal representative of Enel S.p.A. on the compliance of the sustainability report with the guidelines indicated in paragraph 1 and on the reliability and completeness of the information and data contained therein.

Our multidisciplinary team included experts in social-environmental techniques and in financial statements audit.

A review is less in scope than an audit carried out in accordance with ISAE 3000 and, therefore, it does not enable us to obtain assurance that we would become aware of all significant matters and events that might be identified during an audit.

The sustainability report includes the corresponding information and data of the prior year sustainability report for comparative purposes, with respect to which reference should be made our report dated 26 April 2010.

- 3 Based on the procedures performed, nothing has come to our attention that causes us to believe that the 2010 sustainability report of the Enel Group is not prepared, in all material respects, in accordance with the principles of inclusiveness, materiality and responsiveness as established in the AA1000 AccountAbility Principles Standard 2008 ("AA1000APS – 2008") issued by AccountAbility (Institute of Social and Ethical Accountability), as set out in paragraph "Methodological note" of the sustainability report and that the data and information on the sustainability performance are not reliable.

Rome, 20 April 2011

KPMG S.p.A.

(signed on the original)

Marco Maffei  
Director of Audit



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(Translation from the Italian original which remains the definitive version)

## Limited assurance report on the sustainability report prepared in accordance with AA1000 Accountability Principles Standard 2008 ("AA1000APS - 2008")

To the board of directors of  
Enel S.p.A.

- 1 We have reviewed the 2010 sustainability report of the Enel Group (the "Group"). The parent's directors are responsible for the preparation of the sustainability report in accordance with the principles of "Inclusiveness", "Materiality" and "Responsiveness" set out in AA1000 Accountability Principles Standard 2008 ("AA1000APS - 2008"), issued by AccountAbility (the Institute of Social and Ethical Accountability), described in the paragraph on "Methodological note", and the reliability of the data and information on the sustainability performance disclosed in the sustainability report. They are also responsible for determining the Group's objectives in respect of sustainability performance and reporting, including the identification of stakeholders and material issues, and for establishing and maintaining appropriate performance management and internal control systems from which the reported data and information are derived. Our responsibility is to issue this report based on our review.
- 2 We carried out our work in accordance with the criteria established for review engagements by "International Standard on Assurance Engagements 3000 - Assurance Engagements other than Audits or Reviews of Historical Financial Information" ("ISAE 3000"), issued by the International Auditing and Assurance Standards Board. This Standard requires that we comply with applicable ethical requirements (the Code of Ethics for Professional Accountants issued by the International Federation of Accountants, IFAC), including independence requirements, and that we plan and perform the engagement to obtain limited assurance about whether the sustainability report is free from material misstatement.

We conducted our work also in accordance with AA1000 Accountability Assurance Standard (2008) ("AA1000AS - 2008"), "Type 2", which covers not only the nature and extent of the organisation's adherence to AA1000APS - 2008 principles, but also evaluates the reliability of the data and information on sustainability performance. Under the guidelines issued by AccountAbility, the "moderate level of assurance" used in the AA1000AS - 2008 standard is in line with the "limited level of assurance" established in ISAE 3000.

- sample-based analysis of documentation supporting the preparation of the sustainability report to obtain evidence of processes, their adequacy and that the internal control system correctly manages data and information in relation to the objectives described in the sustainability report;
- analysing the compliance of the qualitative information included in the sustainability report with the guidelines referred to in paragraph 1 of this report and its overall consistency, in particular with reference to the sustainability strategy and policies and the determination of material issues for each stakeholder category;
- analysing the stakeholder involvement process, in terms of methods used and completeness of persons involved, by reading the minutes of the meetings or any other information available about the salient features identified;
- obtaining the representation letter signed by the legal representative of Enel S.p.A. on the compliance of the sustainability report with the guidelines indicated in paragraph 1 and on the reliability and completeness of the information and data contained therein.

A review is less in scope than an audit carried out in accordance with ISAE 3000 and, therefore, it does not enable us to obtain assurance that we would become aware of all significant matters and events that might be identified during an audit.

The sustainability report includes the corresponding information and data of the prior year sustainability report for comparative purposes, with respect to which reference should be made our report dated 26 April 2010.

- 3 Based on the procedures performed, nothing has come to our attention that causes us to believe that the 2010 sustainability report of the Enel Group is not prepared, in all material respects, in accordance with the Sustainability Reporting Guidelines & Electric Utility Sector Supplement issued in 2009 by GRI - Global Reporting Initiative, as set out in the "Methodological note" section of the sustainability report.

Rome, 20 April 2011

KPMG S.p.A.

(signed on the original)

Marco Maffei  
Director of Audit





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**25,672**  
kWh of energy



**20,128**  
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(\*) The figures reported regard all of Enel SpA's 2010-2011 financial publications in their pre- and post-Shareholders'-Meeting versions, the Environmental Report, and the Sustainability Report.



