

## Sustainability Report 2017

















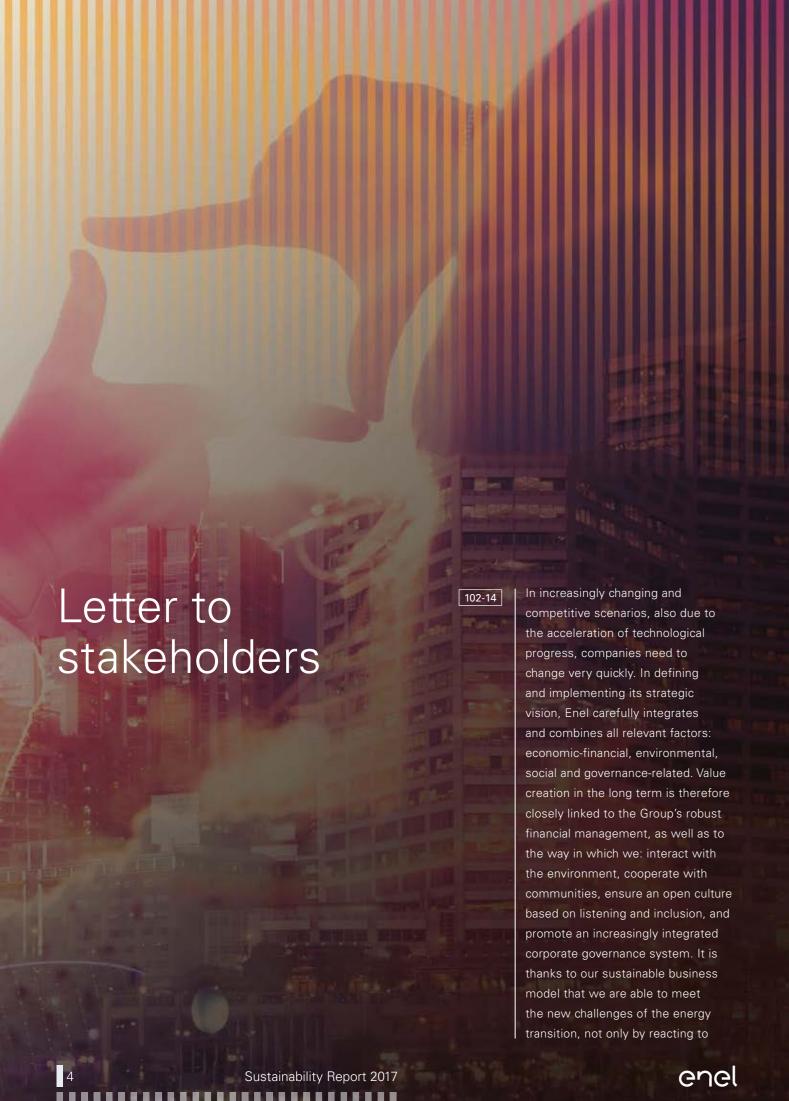








0.21





risks, but by seizing all opportunities without overlooking their social implications.

A clear and defined strategic vision strengthens the trust with which one looks at the future and at the role of Enel, today as in the years to come. Identifying key trends in advance allows to direct the business model and guide the transition in a sustainable manner. The increase in world population, the growing urbanization of metropolitan areas, the unstoppable development of renewables driven by increasingly competitive costs and its positive effects in terms of decarbonization, and digitalization are the main trends underpinning the change in the energy industry. The next few years will see a greater consumption of electrical energy enabled by new technologies and a reduction in the

cost of use, making it financially advantageous to use energy in industrial processes and in civil uses previously powered by other sources. Digitalization of the energy world underlies technological change and it is inseparable from electricity, enabling the current aggregation platforms to provide new services and contributing to the development of new low-carbon businesses. The energy transition is a true transformation process that allows to support effectively a sustainable long-term development trajectory. In a context that has remained challenging throughout the year, Enel has nevertheless achieved significant results thanks to a matrix organization that has allowed complexities to be managed and synergies to be created. In 2017 the Group achieved an ordinary EBITDA of 15.6 billion

euro, with 63 thousand people working in the company, an average customer number of approximately 64 million, over 2 million kilometers of distribution lines and 48 million smart meters installed, 1.7 million of which are new generation meters.

In line with the low-carbon strategy, 45% zero emission generation, with a renewable installed capacity of around 41 GW and a total capacity of around 88 GW.

Significant results related to the commitments to the United Nations' Sustainable Development Goals (SDGs) have been made:

- the 2020 target for access to inclusive and equitable quality education was achieved, reaching around 600 thousand beneficiaries (SDG 4);
- considerable progress has been made in providing affordable,

reliable, sustainable and modern energy, reaching 1.7 million beneficiaries (SDG 7) in Africa, Asia and Latin America;

- > the target for 2020 was achieved in terms of sustained, inclusive and sustainable economic growth, set at 1.5 million beneficiaries (SDG 8);
- > progress has been made towards complete decarbonization, despite a year characterized by low availability of water resources, reaching 400 gCO<sub>2</sub>/kWh<sub>ad</sub> (SDG 13).

Almost 100% participation was recorded in the performance reviews conducted on the Company's people and about 1,500 actions were carried out on the priorities highlighted during the last climate survey. Enhancing diversity continues to be a priority. To speed up the digital transformation of the entire Company, a specific change management program was launched, and, from the organizational point of view, an agile workflow was introduced. This rigorous methodology is made up of quicker and more fluid models that put people at the center, involving them and empowering them in order to create value quickly in a collaborative and effective way. The path towards new forms of energy was reinforced by the new 2018-2020 Strategic Plan, with further steps and acceleration in its implementation. It is a plan that is based on industrial, environmental, social and governance (ESG) pillars, which allows for different cultures and objectives to be combined, for consolidated activities to be managed, and for emerging business opportunities to be seized, contributing to the achievement of the 17 UN SDGs. In the 2018-2020 period, the plan envisages 14.6 billion euro of growth investments, mainly linked to the digitalization of grids

and the development of renewables. The objectives of the Strategic Plan include an increased dividend and an ordinary EBITDA of 18.2 billion euro in 2020, against a profit that will rise to 5.4 billion euro. Operationally speaking, in 2020 renewable installed capacity will be about 48 GW and thermal capacity will equal about 39 GW, resulting in 55% of zeroemission production. Enel confirms and reinforces the commitment it took in September 2015 to the United Nations SDGs:

- > SDG 4 Inclusive and equitable quality education: 800 thousand beneficiaries by 2020, doubling the previous target of 400 thousand beneficiaries;
- > SDG 7 Access to affordable, reliable, sustainable and modern energy: 3 million beneficiaries by 2020, mainly in Africa, Asia and Latin America:
- > SDG 8 Sustained, inclusive and sustainable economic growth: 3 million beneficiaries by 2020, doubling the previous target achieved in 2017;
- > SDG13 Climate action: reduction of CO<sub>2</sub> emissions by 2020 (< 350 gCO<sub>2</sub>/kWh<sub>eq</sub>).

People working in the Company are key to a strategy aiming at strengthening their roles and skills within the organization, through clear and precise objectives in terms of performance evaluation, corporate climate, development of digital skills and promotion of diversity. A way of working based on ethics, transparency, inclusiveness, respect for human rights and maximum attention to safety. Clear objectives are also set for the promotion of a sustainable supply chain, an increasingly integrated and modern governance structure and the spread

of a circular economy approach that combines innovation and competitiveness

Two new strategic enablers have been added: digitalization and customer focus. An investment of 5.3 billion euro has been earmarked over the three-year period to digitalize assets, design agile customerrelated processes, and promote the digital skills of the people working in the Company. This technological transformation cannot occur without a major focus on cyber security. Enel also has the ambitious goal of increasing the free market customer base by about 80% in three years, from 20 million to almost 35 million, by taking advantage of growing demand and capturing the needs of customers. The new global e-Solutions Business Line will play an important role in this by providing accessible, integrated and state-ofthe-art solutions.

This plan features all aspects of the energy of the future: efficiency, flexibility, digitalization, the development of electric mobility and the integration of renewables, as well as the new leading role customers will play as a consequence of their greater awareness and growing needs. The result of this strategy is the creation of long-term sustainable value for all stakeholders.

Everyone with enthusiasm and passion can contribute to the current evolution, because Enel's growth will be based precisely on enhancing different skills and experiences. In line with the Open Power vision, the Group promotes an open innovation model to meet the challenges posed by the sector throughout the value chain. Sharing is a key factor enabling challenges to be faced by connecting



all Company's areas, with startups, industrial partners, small and mediumsized enterprises, research centers, universities and crowdsourcing platforms.

This leads to commitments and tangible results that are also recognized by the financial community, which is increasingly focused on environmental, social and governance-related (ESG) elements. ESG investors are constantly increasing and as of December 31, 2017, they represent over 8.6% of the share capital, up from 2016, which is the result of Enel's oversight on these issues. In 2017, for example, Enel signed a letter of support for the implementation of the voluntary guidelines of the Task Force on Climate-related Financial Disclosures (TCFD) proposed by the Bank of England. These guidelines are intended to raise awareness among companies about the disclosure of likely financial impacts arising from non-financial and climate-related metrics. Furthermore, two green

bonds were issued, one in 2017 and one in January 2018, as instruments dedicated to financing projects useful to the transition to a low-carbon economy.

Innovation, the ability to understand and anticipate events, and resilience in a world where changes are no longer linear are the key elements to creating sustainable value and progress in the long run, promoting economic and social growth.

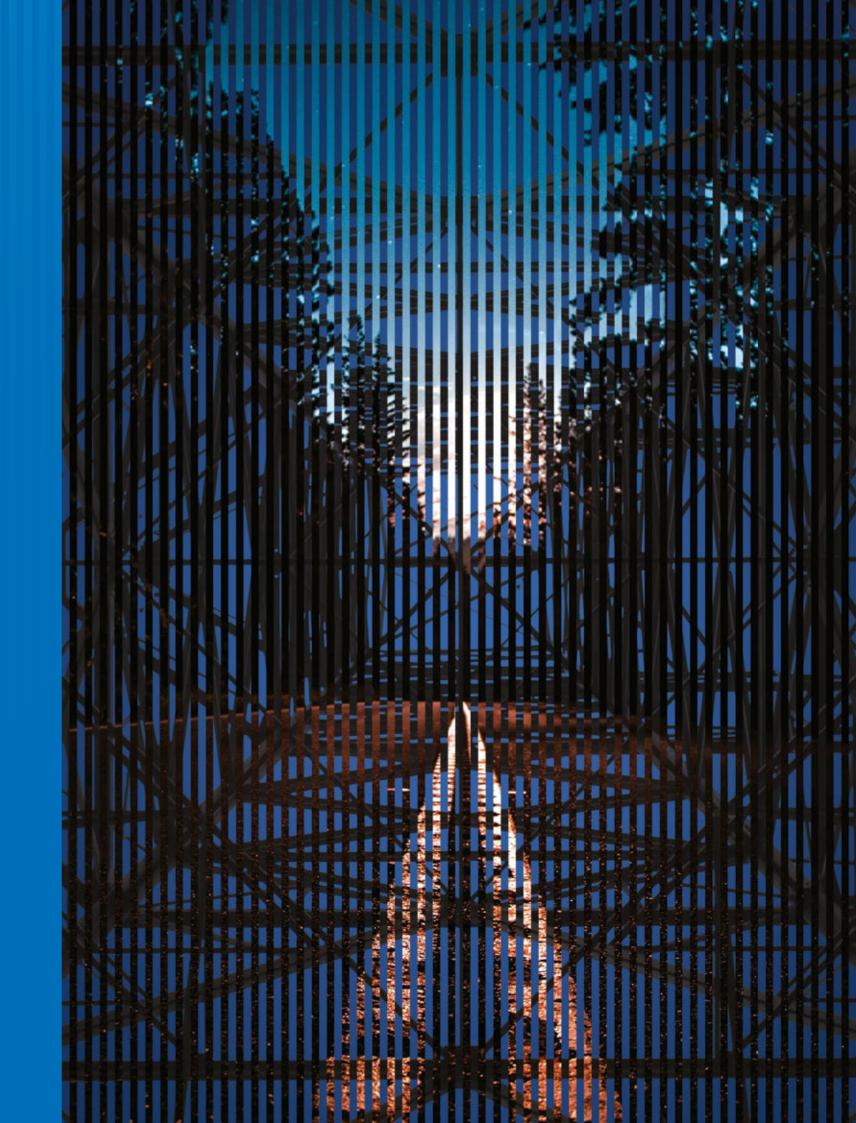
> Chairman of the Board of Directors Patrizia Grieco

Chief Executive Officer and General Manager Francesco Starace

Merce

1 Values including the capacity managed through the joint ventures of the renewables area in Italy, USA and Canada.

# Getting to know Enel



#### About the company

102-2 102-4 102-6



he Enel Group currently operates in over 30 countries on 5 continents, with an installed capacity of around 85 GW, around 2.2 million kilometers of distribution lines and approximately 64 million customers. The Company operates in Europe, North and

Central America, South America, Africa and Asia. The Company's main information is presented on pages 2-3.

An organizational structure based on a Business Line/Geography matrix makes it possible to manage the complexity linked to a rapidly changing scenario, thereby creating synergies and value over the long term. It is an integrated model based on digitalization and low-carbon scenario.



#### Main organizational changes

102-10

The main organizational changes that took place during the 2017 fiscal year are as follows:

- acquisition in January 2017 of 100% of **Demand Energy Networks**, a USbased company specialized in intelligent software solutions and energy storage systems;
- acquisition in February 2017 of about 94.8% of the share capital of Enel Distribuição Goiás (formerly CELG-D)¹, a power distribution company that operates in the Brazilian state of Goiás. The remaining shares were offered to the company's current and retired employees through a process that in May enabled Enel to purchase the shares not



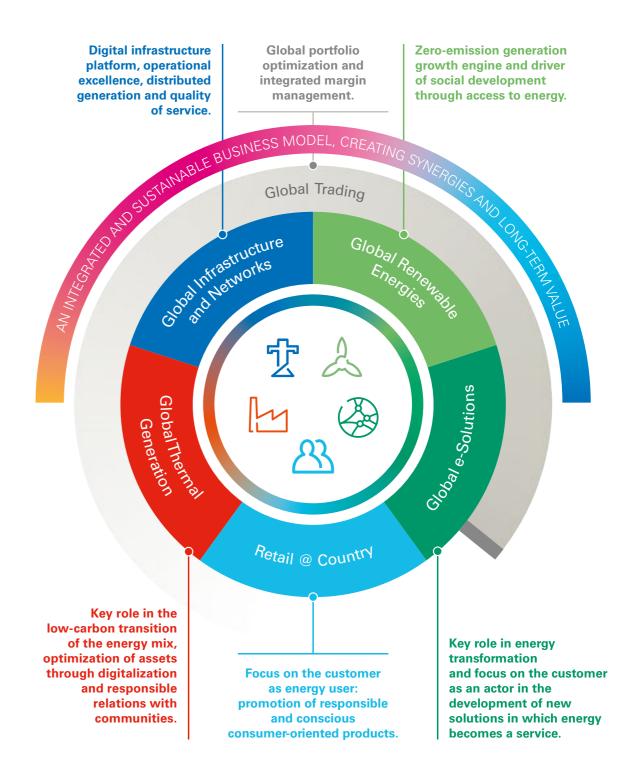
bought by those employees;

- acquisition in May 2017 of 100% of Tynemouth Energy Storage, a British company operating in the electricity storage sector;
- acquisition, in August 2017, of the acquisition of 100% of the EnerNOC Group following the acceptance of Enel Green Power North America's offer to the previous shareholders;
- acquisition in October 2017 of 100% of eMotorWerks, a US company operating in electric mobility management systems.

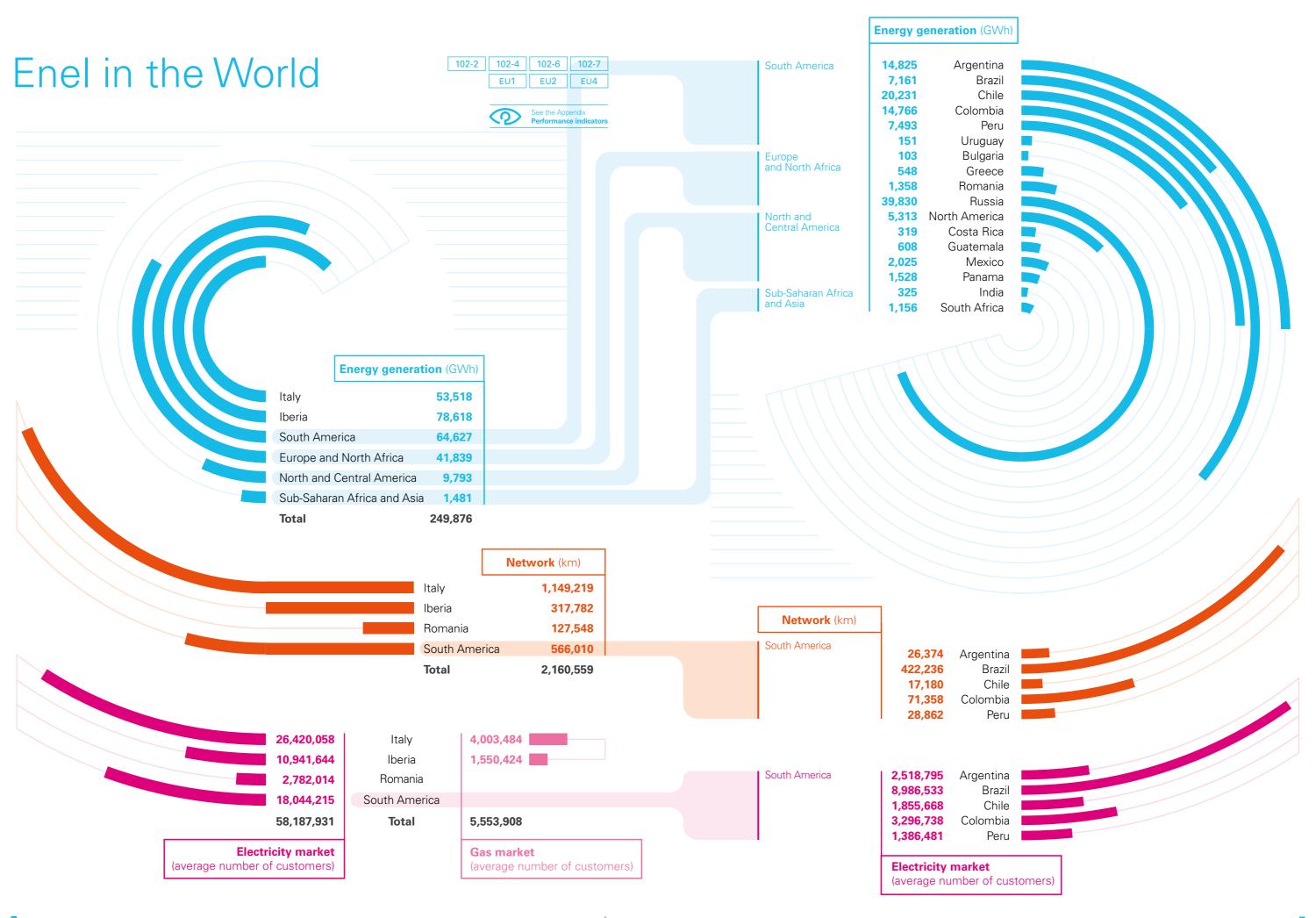
<sup>1</sup> In March 2018 the Brazilian company Celg Distribuição changed its name to Enel Distribuição Goiás.



An integrated model based on digitalization and low-carbon scenario

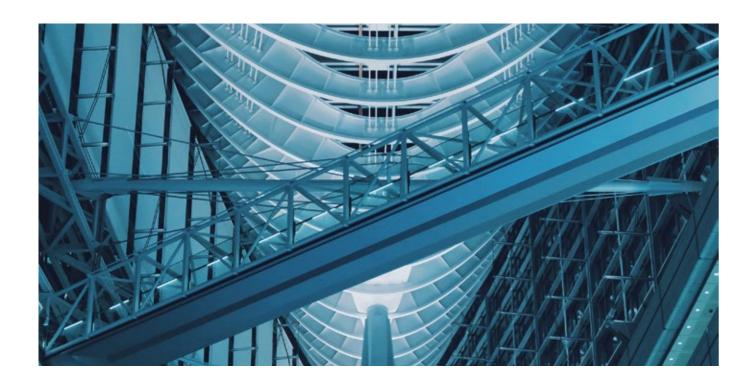


Sustainability Report 2017 Getting to know Enel



## Enel organizational model

102-2 102-5 102-18 102-19



n July 31, 2014, the Enel Group adopted a new organizational structure based on a Business Line/Geography matrix focused on the Group's industrial objectives.

In 2017, the organizational model was expanded with a new Business Line, Global e-Solutions, whose objective will be to manage all products and services not related to commodities.

In particular, the Enel Group's new organizational structure is, just like the previous one, based on a matrix that considers:

> Divisions (Global Thermal Generation, Global Trading, Global Infrastructures and Networks, Renewable Energies, Global e-Solutions), which are entrusted with the task of managing and developing assets, optimizing their performance and return on invested capital in the various

geographical areas where the Group operates; *Divisions* are also entrusted with the task of improving the efficiency of managed processes and sharing best practices worldwide. The Group will benefit from a centralized industrial view of the projects in the various Business Lines. Each individual project will be evaluated not only according to financial returns, but also in relation to the best technologies available at the Group level;

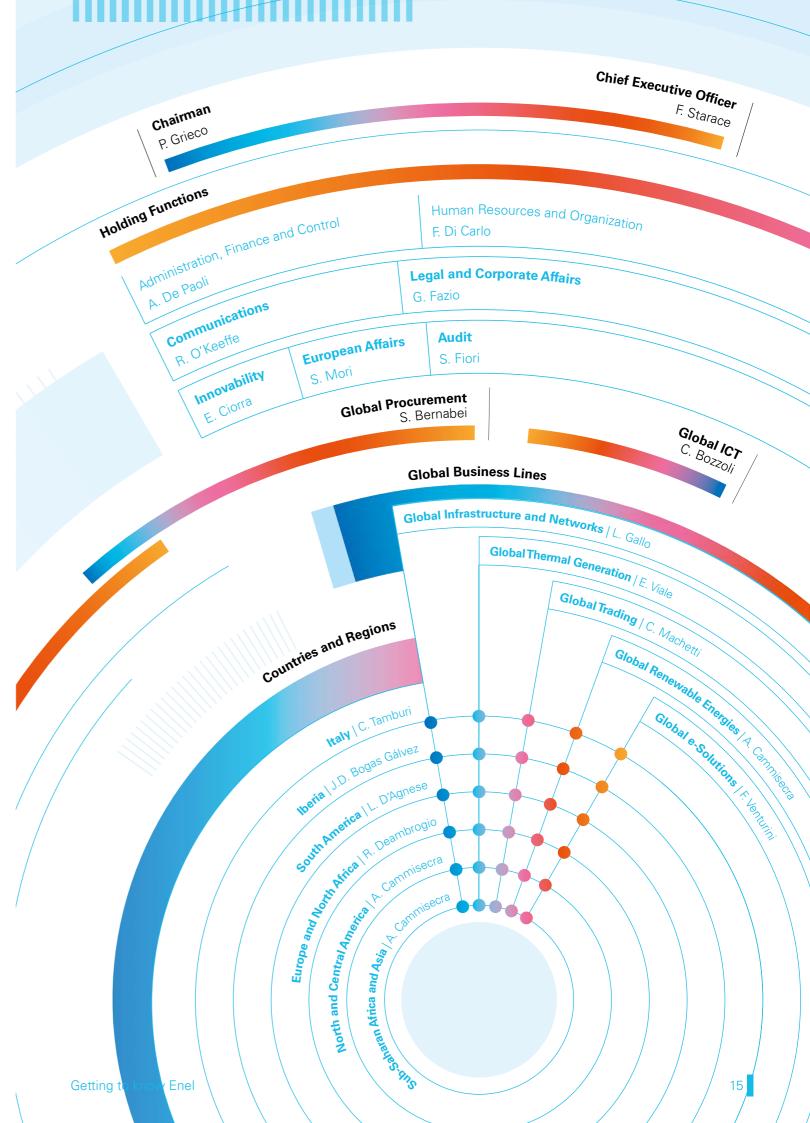
> Regions and Countries (Italy, Iberia, South America, Europe and North Africa, North and Central America, Sub-Saharan Africa and Asia), which are entrusted with the task of managing within each country where the Group operates the relations with local institutional bodies and regulatory authorities, as well as electricity

and gas sales, also providing support in terms of personnel activities and other services to the *Divisions*.

The following are associated with this matrix in terms of business support:

- > Global Service Functions (Procurement and ICT), which are entrusted with the task of managing purchases at the Group level and Information and Communication Technology activities;
- Holding Functions (Administration, Finance and Control, Human Resources and Organization, Communications, Legal and Corporate Affairs, Audit, European Affairs, Innovability: Innovation and Sustainability), entrusted with the task of managing the Group's governance processes.







#### A sustainable year

#### **January**

In line with the Group's financial strategy outlined in the 2017-2019 Strategic Plan, Enel Finance International NV ("EFI"), a wholly-owned subsidiary of Enel SpA ("Enel", with a BBB S&P rating, Baa2 Moody's rating, and BBB+ Fitch rating), has successfully placed on the European market its first green bond, for institutional investors, backed by a guarantee issued by Enel.

#### **April**

Enel and the United Nations' Sustainable Energy for All (SEforALL) have signed a partnership to bring about an "Electrification Accelerator" at the summit taking place in New York City. Thanks to this initiative both parties will actively work towards driving electrification efforts that support global access to affordable, reliable and modern energy services, the aim of Sustainable Development Goal #7 as set out by the UN.

Enel SpA's commitment to fighting all forms of corruption has reached an important milestone: Enel received the ISO 37001:2016 "Anti-bribery management system" certification by Accredia (Italy's National Accreditation Body). The international standard ISO 37001 was published by the International Organization for Standardization with the goal of providing organizations with guidelines about the definition, implementation, maintenance and improvement of an effective and efficient system of anti-corruption management.



Enel's CEO became the new President of eurelectric, the association that brings together over three thousand companies in the European electricity

The World Business Council on Sustainable Development presented the "CEO Guide", a guide written by some of the world's leading CEOs, including Enel's CEO. The "CEO Guide to the Circular **Economy**" lists the positive effects for the business world deriving from the adoption of circular economy practices, including the vast opportunities for growth of the circular economy, a strategy that translates into advantages for companies across the board.



On June 23, in Brussels, Electrification Alliance was launched, an alliance of six organizations from the sector, European Association for Battery, Hybrid and Fuel Cell Electric Vehicles (AVERE), eurelectric, European Copper Institute, the European Heat Pump Association (EHPA), SolarPower Europe and Wind Europe. Numerous companies and utilities from the sector have signed up to the alliance, including Enel. The Electrification Alliance aims to serve as a reference point and coordinate for European policies to drive and accelerate the transition towards an energy efficient system, a lower carbon intensity and the development of innovative technologies, such as intelligent networks and storage systems, capable of increasing the use of renewables in diverse fields, including those central to the fights against global warming, such as systems for air-conditioning and transport.



Enel attended the LESC for a zero-emissions future. Finding sustainable solutions to create a zero-emissions future was the issue at the center of the fifth international conference on sustainable development, the Low-Emissions Solutions Conference (LESC), held on September 20 and 21 at Columbia University in New York

#### **October**

Enel joined forces with the IUCN to underline best practices regarding biodiversity. Biodiversity is an investment in the future, society and Enel. An annual agreement was signed with the International Union for Conservation of Nature (IUCN), one of the world's leading environmental and sustainable development authorities, in order to strengthen best practices regarding biodiversity by supporting the development of new systems and tools to measure the effectiveness of our biodiversity conservation activities.



The 2017 United Nations Climate Change Conference (COP23) was held in Bonn, Germany. Enel was deeply involved, actively participating in negotiations, organization, events, and bilateral meetings with stakeholders. The meeting ended on a positive note, with the commitment to define over the coming months a plan for the development of a draft of the "Paris Rulebook", the implementing regulation for the Paris Agreement (COP21).





Sustainability Report 2017

#### What people are saying about us

#### Enel in the media

Enel constantly monitors how the Group is perceived in the local, national and international press, radio, TV and web, across both general and specialized publications. It has always maintained an open and positive attitude in its relations with the national and international press, which has been widely recognized by journalists. Over the course of the year, the aspects most valued as positive by both national and international media included business issues relating in particular to innovation, electric mobility, financial disclosure, the development of renewables, the main guidelines of the Strategic Plan and the launch of the new Enel X brand dedicated to innovative energy solutions.

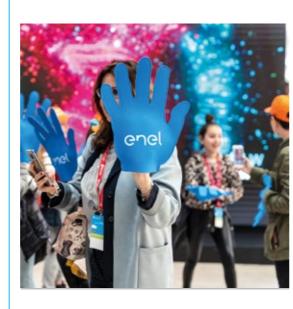
The **Italian media** focused on the topics described above as well as the senior management's reappointment, while financial publications showed interest in the various phases of the reorganization of the Group's companies in South America and the first issue of green bonds in January, in addition to the issue of traditional bonds on the American market. On the innovation and sustainability front, activities reported included scouting and cooperation with startups, the inauguration of the innovation hub in San Francisco, the development of V2G technology and the experiment launched in Genoa at the Italian Institute of Technology. Moreover,

the media emphasized the promotion of the alliance on circular economy presented at the Confindustria headquarters in November, as well as the activities related to achieving the UN sustainable development goals and the agreement signed with Bonifiche Ferraresi for the construction of the first smart agricultural district. Promoted and supported by Enel Cuore, the "Fare scuola" and "Viva gli anziani!" projects for schools and the elderly have been highlighted in the media, together with the "Terre colte" competition for the redevelopment of fallow land.

As part of the activities and agreements for the development of electric mobility, broad visibility was given to the launch of the national plan for the construction of a recharging station that took place at Vallelunga, the installation of fast charging stations on the suburban roads of the European EVA+ project, and participation as a technical partner in Formula E, with the Roman stage of the electric single-seater championship.

The international press has placed CEO's speeches at international events in a positive light. These include those given at the World Economic Forum in Davos in January, the Sustainable Energy for All Forum in New York in April, the St. Petersburg International Economic Forum in June, the Ambrosetti Forum in Cernobbio and the BNEF Future of Energy Summit in London in September, as well as his participation in November at the conference on the energy transition at the European Parliament and the eurelectric event on the vision for the electricity sector in December. Interest from the international press continues

to grow around Enel's commitment to innovation and the development of new technologies, as well as initiatives in the field of e-mobility.



The international press continued to show great interest in Enel's achievements in the renewable energy sector, including the awarding of tenders in Russia, Spain, Argentina, Mexico, Chile, Brazil, Canada and Ethiopia, as well as the start of construction and commissioning of various plants. In terms of financial disclosure, the presentation of the 2018-2020 Strategic Plan and the issue of two bonds and a green bond received a very positive reception, as did Standard & Poor's upgrade of Enel's rating at the end of the year.

#### Brand equity and digital strategy

102-43

Since 2016, the Open Power strategy places the Enel Group as innovative, sustainable and cutting-edge: a group that is active along the entire energy supply chain, placing openness at the center of its strategic and operational approach. Open Power means enhancing infrastructure by sharing knowledge to make it accessible and collaborating with customers, partners and other stakeholders. In the first few months of 2018. Enel expanded its marketing efforts with the creative "What's your power" concept, which created an ecosystem of values that focuses on dialogue with the customer.

The brand's name and people's familiarity with it spread through the commercial and promotional activities involving sports and culture that have always distinguished Enel.

In 2017, Enel continued its partnership with Formula E as the Official Power Partner of the first electric racecar championship and a global change management initiative to promote sustainable mobility. Enel developed and managed its own microgrid in each of the 10 locations of the championship's third season, bringing to each event the typical technologies of a smart grid: smart meters to monitor the championship's consumption in real time, integration of renewable sources and innovative storage systems for the car paddock.

Enel also turned the championship double-



header in New York City into a carbon neutral event, offsetting CO2 emissions with the renewable energy produced by Enel Green Power's Stipa Nayaa wind farm in Mexico. Together, Enel and Formula E are changing the perception of motorsport and energy usage, promoting clean mobility for sustainable cities, tackling together some of the biggest challenges in the world.

Enel monitors its brand equity in the various countries in which it operates in order to better know and understand its customers. This mainly involves periodically monitoring the Group companies' presence in the media (newspapers, audiovisual sources, radio, TV and online media), measuring the perceived image by analyzing the brand's characteristics and their evolution over time, as well as analyzing specific issues related to the brand. In order to support and increase

the effectiveness of digital marketing activities during the year, more than 50 international influencers were involved from different sectors, from sports to journalism to technology.

The main site, www.enel.com, brings all of the Group's main activities and results together, allowing the various categories of stakeholders to remain continuously up-to-date. In particular, the main sustainability and innovation projects are included in the "Stories"

section of www.enel.com, while non-financial information and the materiality assessment are present in the "Investors" section

Ш



#### Social media



### Prizes and awards

In 2017, Enel won several prizes and awards, including:

Fortune - Change the World: Fortune magazine once again included the group in its annual "Change the World" rankings that identify the 50 global firms that are able, through a sustainable approach to business, to contribute to the improvement of life conditions on the planet. In the rankings, led by J.P. Morgan Chase, Enel - the only Italian company and the only global utility included in the table drawn up by the renowned U.S. magazine - takes the 20th spot, in front of companies of the calibre of Unilever, Microsoft, Dell and IBM. Among the reasons for Fortune once again including Enel in the rankings are the Group's concrete efforts to reduce emissions, as well as its many projects linked to innovation (V2G), sustainability and innovative plants such as the geothermal installation in Cerro Pabellón in Chile.

**2016 Prever Award for occupational risk prevention**: Enel received the Prever prize from the General Council for Industrial Relations and Spanish Labor Sciences (Consejo General de Relaciones Industriales y Ciencias del Trabajo - CGRICT) in the international category. This award reflects the results achieved in the field of risk prevention and health protection.

2017 Industry Awards: Enel's commitment to digital progress and the Open Innovation model was recognized in 2017 when it received the "Business Model Transformation Award" during the fourth edition of the World Open Innovation Conference, one of the most important global events in this field. It was held in San Francisco by the Garwood Center for Corporate Innovation and the Haas School of Business of UC Berkeley

Governance Advisors Digital Awards (GADA): Enel received the Governance Advisors Digital Awards aimed at identifying the companies with the highest degree of digitalization. The award/certification was presented in June 2017 by the Governance Advisors, in collaboration with the Department of Management Engineering of the Milan Polytechnic University, Nedcommunity, the Italian Association of Internal Auditors (AIIA) and with the sponsorship of Confindustria Digitale.

**2017 AssoChange Award**: Enel won the sixth edition of the AssoChange award,

dedicated to change management. The award was given to Enel for its ability to promote and implement initiatives aimed at developing an internal culture that is always open to innovation, ideas, projects and technologies, drawing on a broad external ecosystem of innovation and rewarding the entrepreneurial spirit and the management of risk and errors.

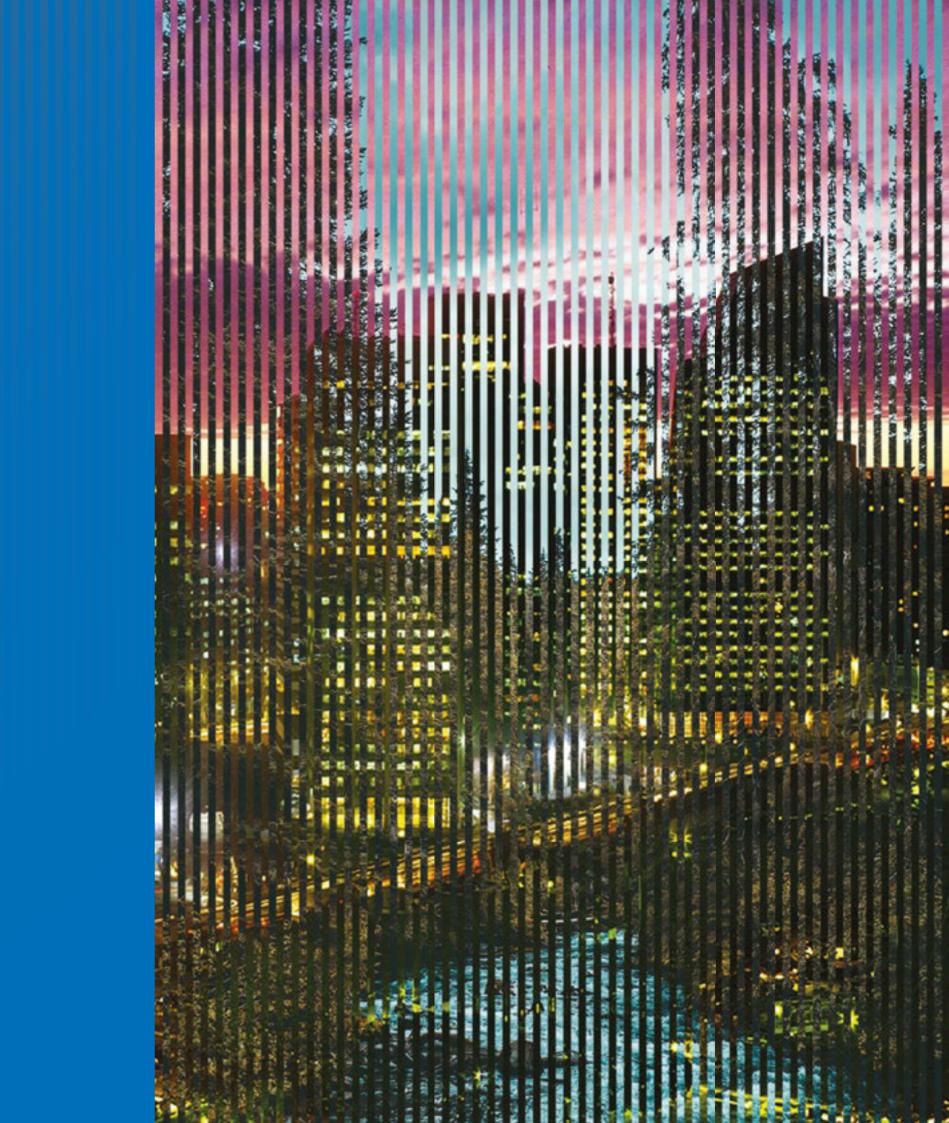
2017 Integrated Governance Index: Enel is one of the top 3 Italian companies, among the top 100 listed on the Milan stock exchange in terms of integrating the principles of sustainability into its corporate strategy. The Integrated Governance award/certification was awarded by TopLegal and ETicaNews, with the support of Methodos, Nedcommunity and Sodali.

Aequales ranking for gender equality: in July 2017 the Colombian companies Codensa and Emgesa were among the top Colombian companies in the adoption of best practices for promoting gender equality. Aequales ranking promotes the empowerment of women in the Colombian workplace by assessing companies in 4 different aspects: organizational structure, management of objectives relating to gender equality, corporate culture and talent management.





Sustainability Report 2017 Cencel Getting to know Enel



#### Sound governance (1/3)

102-15

▶ 2017-2019 Plan: Sound governance

**SDGs** 

**Activities/Targets** 

**Categories** 

2017 results



Issue of the Board of Directors' Diversity Policy - In 2017

G Board effectiveness

• Shared by the Committes1 in December 2017 and approved by the BoD in January 2018



Constant alignment with international recommendations and best practice about governance

G Business ethics

 Ensured alignment with international best practices



Structured induction plan for the members of the Board and the statutory auditors during their

G Board effectiveness

- Internal induction initiatives about risk management, cyber security, e-Solutions, corporate responsibility
- Assogestioni and Assonime training program



Monitoring and support in the concrete implementation of the Recommendations on Corporate Governance of the listed subsidiaries

G Business ethics

• Support provided to listed Group companies



**Execution of the Board** Review with the support of an independent advisor

G Board effectiveness

 Process started in November 2017 and completed in February 2018



#### ▶ 2018-2020 Plan: Sound governance

**SDGs Activities/Targets** 





Monitoring implementation of the Board of Directors' Diversity Policy in 2018

G Board effectiveness



**Constant alignment with** international recommendations and best practices on governance

G Business ethics



Structured induction plan for the members of the Board and the statutory auditors during their terms of office

G Board effectiveness



Monitoring and support in the concrete implementation of the Recommendations on Corporate Governance of the listed subsidiaries and promoting adoption of the Group's Corporate Governance manua

G Business ethics



Getting to know Enel

**Execution of the Board** Review with the support of an independent advisor

Board effectiveness









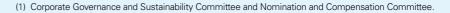














#### Sound governance (2/3)

102-15

▶ 2017-2019 Plan: Sound governance

**SDGs** 

**Activities/Targets** 

#### **Categories**

#### 2017 results



Achievement of ISO 37001 anti-corruption certification for Enel SpA and extension to the main Italian companies in 2017



G Business ethics

- Certification obtained by Enel SpA
  - Roll-out to other group companies in progress<sup>1</sup>



**Continuous improvement** of "Compliance Programs" / Prevention models on penal risks

- G Business ethics
- General section and special parts A and B updated



Further extension of training on Model 231 and Enel Global **Compliance Program** 

- G Business ethics
- **S** Training
- Communication and training in the main risk areas and preparation of the new training





Due diligence on human rights - Risk assessment, impact assessment and remedial actions by 2017

S Social G Governance T Technological

Sustainability Report 2017

- S Human rights
- G Business ethics
- Risk assessment carried out by survey
- Results analysis and impact assessments completed
- Action plans defined



#### ▶ 2018-2020 Plan: Sound governance

**SDGs** 

**Activities/Targets** 

#### **Categories**



Achievement of ISO 37001 anti-corruption certification for main Italian companies and extension to the Group's foreign companies in 2018

- Anti-corruption
- Business ethics



**Continuous improvement of** "Compliance Programs"/
Prevention models on penal risks

G Business ethics



Further extension of training on Model 231 and Enel Global **Compliance Program** 

- G Business ethics
- Training





Due diligence on human rights - Implementation of action plans and continuous results' monitoring S Human rights

G Business ethics

(1) Certification for Enel SpA obtained in April 2017. Extension for the following Italian companies: Enel Italia, Enel Produzione, Enel Energia, Enel Sole, Enel Green Power, e-distribuzione, Enel Trade.







## Sound governance (3/3)

102-15

► 2017-2019 Plan: Economic and financial value creation

SDGs		Activities	Categories	2017 results	Targets
8	9	Cash cost reduction	Operational efficiency	Cash cost in line with 2016, despite perimeter changes and inflation dynamics	• -7% (2017-19)
8	9	Growth EBITDA	Industrial growth	• 0.8 bn euro¹	• 4 bn euro¹ (2017-19)
8	9	Growth investments	Industrial growth	• 5.7 bn euro¹	• 12.4 bn euro¹ (2017-19)



## ► 2018-2020 Plan: Economic and financial value creation

SDGs		Activities	Categories	2020 targets
8	9	Cash cost reduction	Operational efficiency	• -7%
8	9	Growth EBITDA	Industrial growth	• 3.6 bn euro²
8	9	Growth investments	Industrial growth	• 14.6 bn euro²







<sup>(1)</sup> Includes connection fees.

<sup>(2)</sup> Net of connection fees.

#### Sound governance

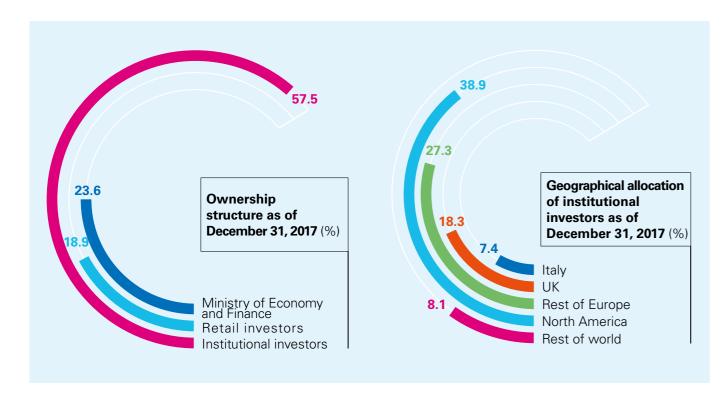
102-5 102-18 102-21 102-26 102-27 102-43



ince 1999 (year of its listing)
Enel is listed on the "Mercato
Telematico Azionario" organized and
managed by "Borsa Italiana SpA" and
has the highest number of shareholders
of any Italian company. Enel's shareholders include the most important international investment funds, insurance
companies, pension funds and ethical
funds, also thanks to the implementation by Enel and the Group of the best
international practices on transparency
and corporate governance.

Socially responsible investment funds continued to grow again in 2017.

Enel's share capital includes 160 Socially Responsible Investors (150 in 2016), who hold about 8.6% of total shares outstanding (8.0% in 2016), equal to 11.3% of the free float (10.5% in 2016).



In addition, the Enel Group includes 13 listed companies whose shares are listed on the Argentine, Brazilian, Chilean, Peruvian, Russian, Spanish and United States Stock Exchanges.

Socially responsible investment funds continued to grow again in 2017. Enel's share capital includes 160 Socially Responsible Investors (150 in 2016), who hold about 8.6% of total shares out-

standing (8.0% in 2016), equal to 11.3% of the free float (10.5% in 2016).



#### Enel and the financial market

Enel deems it in line with its own specific interest - as well as with its duty towards the market - to ensure an ongoing and profitable relationship, based on mutual understanding of their respective roles, with its shareholders in general, as well as with institutional investors, in order to increase the relevant level of understanding about the activities carried out by the Company and the Group; in this context, Enel maintains a fair and transparent dialogue with its investors, in accordance with national and European regulations on market abuse and in line with international best practices. During recent years, this engagement activity has gone along with the increasing participation of institutional investors in the Shareholders' Meetings. In particular, since its listing, Enel deemed it appropriate to establish corporate units dedicated to the dialogue with institutional investors, as well as with its shareholders in general. The Company therefore created the Investor Relations unit, which is currently within the Administration, Finance and Control Function, and an area within the Corporate Affairs unit, which is itself part of the Legal and Corporate Affairs Function.



Furthermore, economic/financial, environmental, social and governance information can be found on the Company's website (www.enel.com, "Investors" section), as well as updated data and documents of particular interest, making a multidisciplinary and integrated vision possible.

Approximately 950 meetings were held with investors in 2017, of which more than 5% were dedicated to specific indepth discussions on ESG (Environmental, Social and Governance) issues, and 85 requests were received from retail shareholders. 20 roadshows were organized, one of which was specifically aimed at ESG investors. Enel also participated in the first Italian Sustainability Day, organized by Borsa Italiana, during which 17 listed companies and 30 portfolio managers met to discuss issues such as investments and sustainable financing activities, analyses, reporting issues and the disclosure of non-financial variables. Two years ago, a specific unit was set up within the Investor Relations unit. In collaboration with the Sustainability unit, this new unit is responsible for managing relations with the financial market on ESG issues.

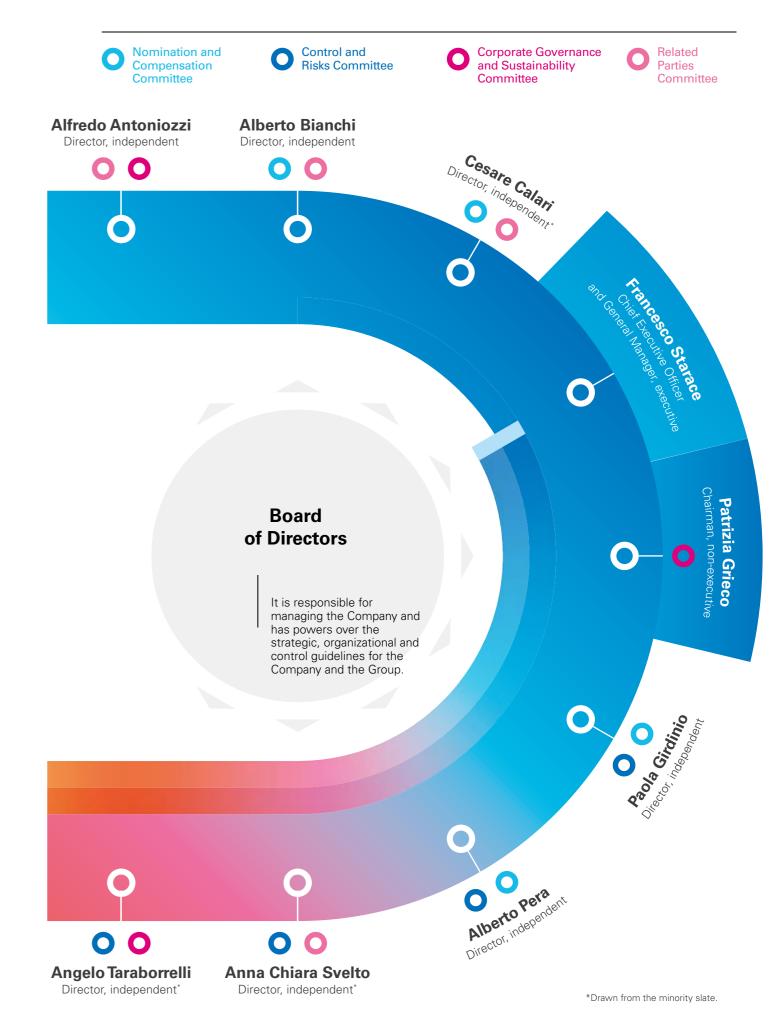
For three years now, after the Group Strategic Plan is presented, a perception study is conducted, which allows the market's perception of the Group's strategy, its execution, the management, the effectiveness of financial and non-financial disclosure, and the measurement of the relevance of ESG issues to institutional investors to be monitored. The study conducted in 2017 highlighted the following areas as being of greatest relevance and interest: group simplification and active portfolio management, operational efficiency, digitalization and its real impact on the Group, industrial growth, the sustainability of renewable returns, the new e-Solutions Business Line and its ability to create value, the retail business (with a focus on the growth of the sector's competition in Italy), and the dividend policy. It should be emphasized that ESG issues are increasingly part of the evaluation elements included by institutional investors in their investment choices. The topics of greatest interest include value creation, good governance, the reduction of CO<sub>2</sub> emissions, and risk analysis and opportunities arising from climate change in general.

## Corporate governance model

The corporate governance structure of the Enel Group complies with the principles set forth in the Corporate Governance Code for listed companies<sup>2</sup>, as last amended in July 2015, and is inspired by Consob's recommendations on this matter and, more generally, international best practice.

The corporate governance system is essentially aimed at creating value for the shareholders over the medium-long term, taking into account the social importance of the Group's business operations and the consequent need, in conducting such operations, to adequately consider all the interests involved.

102-18 102-19 102-20 102-22 102-23 102-24 102-26 102-32 Board of Statutory Auditors It is responsible for monitoring: the Company's compliance with the law and bylaws, as well as compliance with proper management principles in the carrying out of the Company's activities; the process of financial disclosure and the adequacy of the Company's organizational structure, internal auditing system, and administration and accounting system; the Shareholders' audit of the stand-alone and the consolidated Meeting financial statements and the independence of the external auditing firm; and, lastly, how the corporate It is responsible for: the appointment or governance rules removal of members of the Board of provided by the Directors and Board of Statutory Corporate Governance Auditors as well as their compensation Code are actually and responsibilities; the approval of implemented. financial statements and the allocation of net earnings; the purchase and sale of treasury shares; stock-based compensation plans; amendments to The external audit of the the Company's bylaws, and the issue of accounts is entrusted convertible bonds. Independent auditors to a specialized firm enrolled in the relevant registry and appointed by the Shareholders' Meeting, upon a reasoned proposal by the Board of Statutory Auditors.



Getting to know Enel

enel

<sup>2</sup> The code is available in its current edition on Borsa Italiana's website (http://www.borsaitaliana.it/comitato-corporate-governance/codice/2015engclean.en.pdf).

#### **Board** of Directors

102-15	102-18	102-19	102-20	102-22
102-23	102-24	102-26	102-32	102-33
		103-2	103-3	405-1

In January 2018, the Board of Directors

approved a Diversity Policy that describes

the optimal features of the composition of

the Board itself, in order for it to exercise

its functions in the most effective way.



The Board of Directors was appointed by the ordinary shareholders' meeting on May 4, 2017 and consists of nine members. Patrizia Grieco, Francesco Starace, Alfredo Antoniozzi, Alberto Bianchi. Paola Girdinio and Alberto Pera were taken from the list presented by the Ministry of the Economy and Finance shareholder (at that time holding 23.59% of the Company's capital) and voted by the majority of the capital represented at the meeting (about 49.98% of the voting capital), while Cesare Calari, Anna Chiara Svelto and Angelo Taraborrelli were taken from the list presented by a grouping of 21 institutional investors (at the time 1.88% of the Company's capital) and voted by the minority of the capital represented at the meeting (about 49.43% of the voting capital)

In 2017, the Board of Directors met 15 times with an average duration of 3 hours for each meeting, an average director attendance rate of 100%, and was constantly involved in issues related to governance, sustainability, the Code of Ethics and Model 231.

The Board of Directors set up within the Board itself the following four committees:

> Nomination and Compensation Committee: with an appropriate preliminary investigation, this committee is responsible for supporting the Board of Directors, through proper inquiry, the assessments and decisions of the board on the size and composition of the board itself, as well as the remuneration of the executive directors and of the executives with strategic responsibilities;

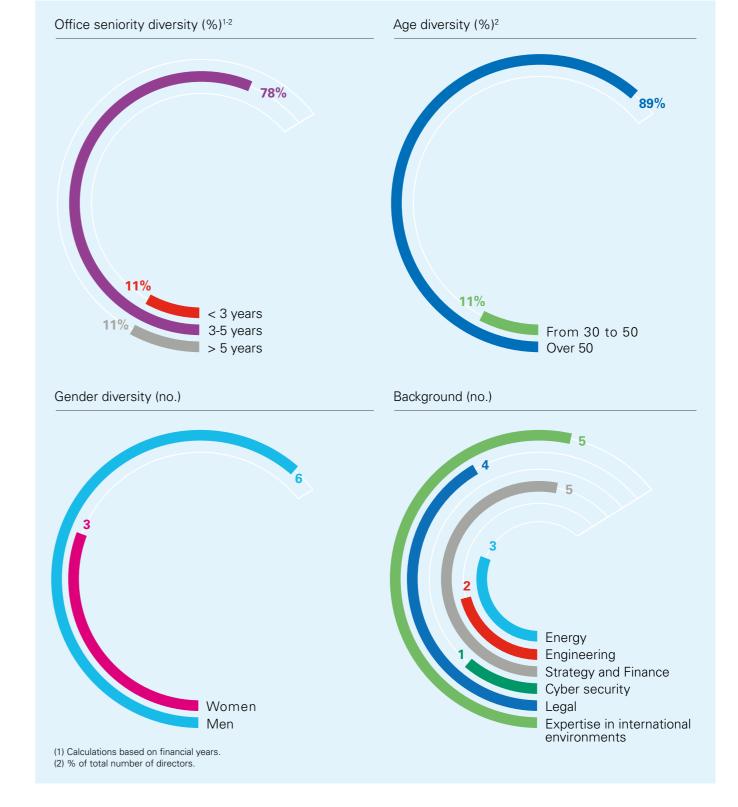
> Control and Risks Committee: with an appropriate preliminary investigation, this committee has the task of supporting, through an adequate review process, the assessments and decisions of the Board of Directors regarding the Internal Control and Risk Management System and the

approval of periodic financial reports;

- Corporate Governance and Sustainability Committee: this committee assists with preliminary functions, both proposing and consultative in nature, the Board of Directors on its assessments and decisions related to the corporate governance of the Company and the Group and to sustainability issues;
- Related Parties Committee: this committee has been assigned the essential task of issuing reasoned opinions on the interest of Enel - as well as of the companies that Enel

With regard to succession plans for executive directors, in September 2016, the Board of Directors, upon proposal of the Nomination and Compensation Committee, together with the Corporate Governance and Sustainability Committee, shared the contents of a specific "contingency plan" aimed at regulating the steps to be taken to ensure that the Company's activities are regularly managed in the event of early cessation of the chief executive officer before the expiry of the ordinary term of office (the so-called "crisis management" case)

controls, either directly or indirectly, and that may be involved in the transactions - in the completion of transactions with related parties, expressing an assessment on the beneficial nature and essential fairness of the relevant conditions, after receiving timely and adequate information in advance.



In January 2018, the Board of Directors, upon proposal of the Corporate Governance and Sustainability Committee and of the Nomination and Compensation Committee, in implementation of the provisions of the Italian Consolidated Financial Act, approved a Diversity Policy that describes the optimal features of the composition of the Board itself, in order for it to exercise its functions in the most effective way taking decisions with the concrete contribution of several qualified points of view capable of examining the issues under discussion from different perspectives.



#### Remuneration policy

102-28 102-35 102-36

Enel's 2018 remuneration policy ("Remuneration Policy") is consistent with the recommendations of the Corporate Governance Code. Such policy is aimed at attracting, keeping and motivating those persons that possess the most suitable professional skills to successfully manage the Company. Furthermore, the Remuneration Policy is aimed at encouraging the achievement of the strategic targets and the Company's sustainable growth; as well as aligning the interests of the management with the main goal of creation of sustainable value for shareholders in the medium-long term, ensuring that remuneration is based on the results actually achieved by the parties concerned and by the Group as a whole. This policy is also structured so as to

guarantee an adequate balance between the fixed and variable components, and, as concerns the variables, between the short- and medium/longterm variables.

In accordance with the recommendations of the Corporate Governance Code, non-executive directors' remuneration is composed only of the fixed component, while all directors who are members of one or more committees set up within the Board of Directors are granted an additional compensation. The remuneration is based on the commitment required of each of them, also taking into account their respective participation in one or more of the committees.

Specifically, the Chief Executive Officer/General Manager's remuneration

- > a fixed remuneration for both the directorship relationship and the executive relationship:
- a short-term variable remuneration (MBO) that may concretely vary, according to the level of achievement of the following annual performance targets: (i) ordinary consolidated net

income; (ii) funds from operations/ consolidated net financial debt; (iii) consolidated cash cost; (iv) safety in the workplace

- > a long-term variable remuneration linked to the participation in specific multiannual incentive plans. Set forth below are the performance objectives characterizing the Long-Term Incentive Plan 2018 ("LTI Plan
  - (i) average TSR (Total Shareholder Return) of Enel compared to the average TSR of EUROSTOXX Utilities Index - EMU for the 2018-2020 period;
  - (ii) ROACE (Return on Average Capital Employed) for the 2018-2020 period;
- (iii) CO2 emissions per kWh of Enel Group in 2020

In addition, according to the 2018 LTI Plan the disbursement of a significant portion of the long-term variable remuneration (equal to 70% of the total) is deferred to the second consecutive fiscal year of the three-year period referenced in the 2018 LTI Plan (i.e. deferred payment).

correct (clawback and malus clauses). The policy is described in the first part

Finally, the Company has the right to

request the return of the variable re-

muneration paid (both short-term or

long-term) or to withhold the deferred

variable remuneration if this is paid or

calculated on the basis of data that are

subsequently found to be obviously in-

of the remuneration report approved by the Enel Board of Directors, based on a proposal by the Nomination and Compensation Committee, which is in turn made available to the public and submitted to the advisory vote of the Shareholders' Meeting, pursuant to article 123-ter of Italian Legislative Decree The aforementioned report also provides information on the 2017 remuneration of directors, the General Manager, statutory auditors and executives with strategic responsibilities

For more information, see the remuneration report available on www.enel.com.



#### Internal control and risk management system

102-11	102-15	102-25	102-28
102-29	102-30	103-2	103-3
201-2	205-1		

The Internal Control and Risk Manage-

ment System ("SCIGR") of Enel and of the Group consists of the set of rules, procedures, and organizational entities aimed at allowing the main corporate risks within the Group to be identified, measured, managed, and monitored. The SCIGR is an integral part of the more general organizational and corporate governance structures adopted by the Company and by the Group and is based on Italian and international best practices. In particular, the system takes into account the recommendations of the Corporate Governance Code and is consistent with the "Internal Controls -Integrated Framework" model issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO Report"), which constitutes the internationally recognized benchmark for the analysis and integrated assessment of the effectiveness of the SCIGR. The SCIGR provides for control actions at every operating level and clearly identifies duties and responsibilities, so as to avoid duplications of tasks and ensure coordination among the main persons involved in the SCIGR itself; it ensures the necessary separation of operating and control activities, so as to prevent or - if that is not possible - attenuate conflicts of interest; quarantees the traceability of the tasks of identifying, assessing, managing, and monitoring risks, ensuring over time the reconstruction of the sources and elements of information that support such tasks.

The SCIGR is divided into three distinct types of activities:

- > "line" or "first level" controls, consisting of all the control tasks that the individual operating units or companies of the Group perform on their processes in order to ensure that operations are carried out properly;
- "second level" controls, which are entrusted to specific corporate Functions and aimed at managing and monitoring typical categories of risk;
- internal audit activity ("third level" controls), aimed at checking the structure and overall functionality of the SCIGR, including by monitoring

the line controls, as well as the second-level ones.

The SCIGR is subject to periodical tests and checks, taking into account the evolution of corporate operations and the situation in question, as well as current best practices.

For a detailed description of the tasks and responsibilities of the main persons involved in the SCIGR, as well as the coordination among such persons, please see the Guidelines of the Internal Control and Risk Management System available on the Company's website (www. enel.com, "Investors" section).

LTI (Long-Term Incentive) Plan

VESTING PERIOD			OF 30% <sup>1</sup>	OF 70% <sup>1</sup>
Year 1	Year 2	Year 3	Year 4	Year 5
Three years of po	erformance assessment		Assessment year	Deferred payment

(1) In the event of achievement of the performance objectives.

Sustainability Report 2017 ene Getting to know Enel 37



#### Main risk types

Due to the nature of its business, the Group is exposed to various types of risks, indicated in the table below together with the activities aimed at mitigating their effects and ensuring their correct management.

In the risk-identification process, the results of the materiality assessment were also considered (see the "Setting priorities" chapter), as well as the data reported in the Global Risks Report 2018, produced by the World Economic Forum (WEF) and involving about 1,000 experts and leaders from around the world. The WEF report shows that environmental risks have increased both

in terms of probability and potential impact: extreme weather events, natural disasters, as well as the possible failure of attempts to contain the consequences of climate change. The speed of technological development generates more and more challenges, and the frequency and intensity of cyber attacks are on the rise, as is the tendency to target critical infrastructures and strategic industrial sectors, highlighting a possible risk, in extreme cases, of companies' and organizations' normal operations grinding to a halt. From a social point of view, the risks related to water crises are significant.

The Precautionary Principle<sup>3</sup> was also applied during the risk identification and assessment phase. This Principle was applied in particular to risks relating to the environment, health and safety. For each type of risk, specific actions have been identified to mitigate their effects and ensure their proper management. Enel also applies this principle to risk management, especially as regards the development and introduction of new products/technologies, the planning of operating activities and the construction of new plants/assets.

#### REFERENCE SCENARIO MITIGATING ACTIONS AND ASSOCIATED MAIN RISKS AND DESCRIPTION OF RISK STRATEGIC OBJECTIVES Strategic risks connected The markets and the businesses where the The business risks stemming from the Group's Group operates are subject to a gradual and with the evolution of the natural presence in competitive markets have increasing competition and evolution, from a been faced with a strategy of integration market, competition and regulation technological and regulatory standpoint, with through the value chain, with a greater drive for different timings from country to country. As a technological innovation, diversification and result, the Group faces an increasing competiti- geographical expansion. Specifically, the ve pressure. actions enacted have produced the evolution of the customer portfolio on the free market, in a Furthermore, the Group operates in regulated downstream integration logic on the final markets or regimes. Thus, changes in the rules markets, the optimization of the productive of functioning of those markets and regimes, as mix, by improving the competitiveness of the well as their provisions and obligations, can plants on the basis of a cost leadership, as well influence the management's evolution and the as the search for new markets with a high Group's results. growth potential and the development of renewable sources through adequate investment plans in different countries. In view of the risks deriving from regulatory factors, the Company has intensified the relations with local government and regulatory bodies, by adopting a transparent, collaborative and proactive approach to face and remove the sources of instability in the regulatory framework. **Country risk** The strong international presence of the Group Definition and implementation of a strategy for - with revenues which come from foreign geographical diversification, also supported by countries for more than 50% by now – exposes econometric models for the evaluation of the the Group itself to possible negative impacts country risk. over income flows and over the protection of company assets arising from macro-economic, financial, geo-politics and social risks connected with the operations in a specific country. Industrial and In order to mitigate these risks, the Group adopts Within the current climatic scenario, extreme environmental risks meteorological events and natural disasters the best prevention and protection strategies also expose the Group to the risk of damage to the with the purpose of reducing the possible assets and infrastructures with the consequent impacts on the communities and the areas possibility of extended unavailability of the surrounding the assets. Thus, constant monitorconcerned assets. ing activities and weather forecast as well as activities for the increase in the resilience for the more exposed assets are constantly carried out. The totality of the Group areas is subject to ISO 14001 certification and the potential risk sources are monitored through the implementation of internationally-recognized Environmental Management Systems (EMS). Failure of mitigation and adaptation to climate The Group is also engaged in a continuous change. Risks connected to: improvement of the existing activities in terms → impacts on the functioning of the assets of environmental impact, through its purposes linked to gradual climate change (e.g. air of reducing emissions, primarily that of "zero-eand water temperature); mission generation" by 2050, and adopts a

Sustainability Report 2017 Getting to know Enel

#### **MAIN RISKS**

#### **REFERENCE SCENARIO** AND DESCRIPTION OF RISK

#### MITIGATING ACTIONS AND ASSOCIATED STRATEGIC OBJECTIVES

- → changes to the regulatory and legal framework connected to the fight against climate change;
- climate change.

growth-oriented strategy through the development of increasingly low-carbon technologies and services in line with COP21 goals.

→ socio-economic transformations linked to In order to mitigate the risks stemming from legal and regulatory aspects linked to climate change, the Group keeps relationships with the Authorities and local and international regulatory bodies characterized by a transparent and collaborative approach.

> The Group also signed the letter supporting the implementation of the guidelines of the Task Force on Climate Related Financial Disclosure (TCFD), which has developed recommendations on the disclosure of financial impacts related to "non-financial" parameters concerning climate change. Therefore, Enel created a working group which is carrying out an analysis on the following three main lines:

- climate models and definition of key climate scenarios:
- mapping of risks and opportunities related to climate change;
- > financial reporting associated with climate

#### Cyber-attack risks

Rapid technological evolution, with an increasing exposure to cybernetic attacks.

More widespread cybernetic attacks and increasing level of sophistication also with regard to changes within the reference framework.

Organizational complexity of the Group and several environments (data, people and industrial world).

Definition of a "Cyber Security Framework" to address and manage the cyber security activities with a "risk-based" approach and according to the "cyber security by design" principle. Such a framework provides for the involvement of business areas, the reception of legal and regulatory provisions, the use of the best possible technologies, the preparation of ad hoc business processes and the increase of human consciousness.

Creation of the Enel CERT (Cyber Emergency Readiness Team), which is active, recognized and accredited by national and international communities, in order to address an industrialized response to cyber threats and accidents.

#### Water crises risk

The risks related to water crises are mainly due to changes in climate and levels of water use. With regard to climate change, the availability of water is strongly influenced by changes in precipitation, seasonal cycles of glaciers and evaporation. Impacts differ according to area, but the general tendency is a lower predictabili- of water. Important activities are also carried ty of frequency and a greater rainfall intensity, with a consequent reduction in the availability of water

With regard to the levels of use of water as a resource, the risk is linked to the competition between industrial production, agricultural use and use of drinking water. Due to the increase in population and agricultural needs, in some areas the demand for water can exacerbate this competition, with the resulting imposition of limits on the use of water in industrial and production activities.

needs of local communities.

In order to manage these risks, Enel conducts meteorological analyses every 3-6 months and is developing long-term analyses in areas where production facilities are located, in particular hydroelectric plants, in order to anticipate possible variations in the availability out in collaboration with the local basin management authorities, with the ongoing objective of adopting a shared water resources management strategy that also considers the



As part of its industrial activities, the Enel Group is also exposed to financial risks such as market risk (which includes risks related to interest rates, exchange rates and commodity prices), credit risk and liquidity risk. The type of governance adopted by the Group in relation to financial risks requires the presence of internal committees and the use of specific policies and operating limits. In relation to the specific areas covered by Italian Legislative Decree 254/16 on the disclosure of non-financial information, the possible risks related to the management of human rights, the an-

ti-corruption, people management and

motivation, occupational health and safety, and relations with communities were also identified. The risk-identification process took place through an analvsis of the main events from the last 3 years. The objectives set by the Strategic Plan for the 2018-2020 period were taken into consideration. With regard to human rights and anti-corruption, the provisions of the regulations in force (for example, Italian Legislative Decree 231/01 in Italy) and/or internationally recognized guidelines (United Nations' Guiding Principles on Business and Human Rights) have been taken into account for the issues at hand.

Further details on the risks presented above are provided in the 2017 Annual Report and in the Consolidated Non-financial Statement pursuant to Italian Legislative Decree 254/16 made available on the Company's website (www. enel.com).

<sup>3</sup> Rio Declaration on Environment and Development (Rio de Janeiro, June 3-14, 1992). Principle 15.



#### Counterparty analysis

The ability to adequately assess counterparties and to promptly intercept any threats and elements of risk is an increasingly essential requirement, not only for protecting an organization's reputation, but for its very survival. In December 2016, the Security unit finalized the first edition of the operating instructions for the counterparty analysis, thus promoting shared criteria and models for these activities, which are performed by the Business Lines, Functions and services. These instructions were then further defined over the course of 2017.

The defined methodology ensures the application of a standard evaluation criterion, monitoring and reporting.

Sustainability Report 2017 ene Getting to know Enel

## transparency

Enel is an industrial group whose main activity translates into the generation, distribution and sale of electricity. For this reason, the choice of countries where the Group operates is guided by business choices and not purely by tax reasons.

In Enel's organizational model, the Tax Affairs unit of the Holding performs, among others things, the role of defining the Group's tax strategy by identifying, analyzing and managing the various optimization initiatives, monitoring the most important tax issues, and providing support to the various Business Lines. Alongside the Holding Function, the Tax Affairs units of the various countries, acting in accordance with the values and principles of the tax strategy defined by the Holding, are responsible for managing compliance, tax planning, and tax monitoring at the local level.



#### The tax strategy

The Enel Group's tax strategy should be viewed as a set of principles and guidelines inspired by values of transparency and observance of the law. Approved by the Board of Directors, it enters into force from the first day after its approval and is published on the Enel Group's website (www.enel.com).

In addition to approving the Enel Group's strategy, the Board of Directors ensures that is applied and understood throughout the Company through the governing



#### **Tax Control Framework**

In addition to defining the methods for managing taxes, the Tax Control Framework, of which the tax strategy is a part, is also one of the tools for preventing offences that could engender criminal liabilities for the Company, as defined by Italian law in Legislative Decree 231 of June 8, 2001, and the associated reputational risks. In this vein, the Tax Control Framework integrates the requirements established by the organizational and management model, adopted by the Group's Italian companies, and the requirements of the Enel Global Compliance Program, aimed at the Group's foreign companies. There are rules and penalties if the Framework is not observed, and it is subject to verification by the supervisory body according to the processes and flows that regulate said body's activities.



#### Tax transparency and reporting

The Group launched an internal process aimed at adopting a model of Total Tax Contribution for Italy and the main countries in which the Group is present, thus highlighting most of the taxes paid by the Group as well as withholdings.

The first reporting year will be 2017 (comparison made to 2016 data).

A complete list of the Enel Group's

subsidiaries is available in the Group Annual Report, available on the Company's website.

Starting from 2018, the Group will present country-by-country reporting in compliance with the OECD Transfer Pricing Guidelines (i.e. the threetiered approach, presented through the Master File, Local File, and Country-by-Country Report); this report will show the tax position of the various Group companies.

Lastly, in order to strengthen transparency with tax authorities, the Enel Group promotes adherence to cooperative compliance strategies.

INCOME TAXES PAID					
КРІ	им	2017	2016	2017-2016	%
Income taxes paid	mil euros	-1,579	-1,959	380	19
Italy	mil euros	-1,000	-993	-7	-1
Iberia <sup>1</sup>	mil euros	-381	-251	-130	-52
Europe and North Africa	mil euros	-28	-689	661	96
North and Central America	mil euros	-32	-60	28	46
South America	mil euros	-677	-47	-630	-
Sub-Saharan Africa and Asia	mil euros	-	-	-	-
Other <sup>2</sup>	mil euros	539	81	458	-

TAXES					
KPI	UM	2017	2016	2017-2016	%
Income taxes <sup>3</sup>	mil euros	1,882	1,993	-111	-6
of which current taxes 4	mil euros	1,984	1,713	271	16
Italy	mil euros	1,264	1,241	23	2
of which current taxes	mil euros	1,090	1,027	63	6
Iberia <sup>1</sup>	mil euros	372	354	18	5
of which current taxes	mil euros	370	241	129	54
Europe and North Africa	mil euros	30	34	-4	-12
of which current taxes	mil euros	21	30	-9	-30
North and Central America	mil euros	-63	157	-220	-
of which current taxes	mil euros	44	39	5	13
South America	mil euros	586	442	144	33
of which current taxes	mil euros	806	677	129	19
Sub-Saharan Africa and Asia	mil euros	7	-3	10	-
of which current taxes	mil euros	-	-	-	-
Other <sup>2</sup>	mil euros	-314	-232	-82	-35
of which current taxes	mil euros	-347	-301	-46	-15

- (2) Includes the Holdings: Enel SpA, Enel Finance International, Enel Iberia and Enel RE.
- (3) A reduction in the tax burden depends on prepaid taxes and deferred tax reversals.
- (4) Does not include tax credits on dividends from foreign subsidiaries of -58 million euro.



Sustainability Report 2017 enel Getting to know Enel

## Values and pillars of company ethics

102-12	102-15	102-16	102-17	102-25
102-33	103-2	103-3	205-1	205-2
205-3	405-1	406-1	407-1	408-1
409-1	412-1	412-2	413-1	414-1

he Enel Group's activities are supported by a sound ethical foundation: its constantly evolving nature is aimed at incorporating best practices at the national and international levels. Everyone who works at Enel and for Enel must respect and apply them in their daily activities. This system is based on specific compliance programs, such as: the Code of Ethics, Human Rights Policy, Zero Tolerance of Corruption Plan (ZTC Plan), Enel Global Compliance Program (EGCP), Model pursuant to Italian Legislative Decree 231/01 and other national compliance models that may be adopted by Group companies in accordance with local regulations. 

The Enel Group's activities are supported by a sound ethical foundation: its constantly evolving nature is aimed at incorporating best practices at the national and international levels.

Everyone who works at Enel and for Enel must respect and apply them in their daily activities.

## Active and passive anti-corruption management system

In compliance with the tenth Global Compact principle, according to which, "companies are committed to combating corruption in all its forms, including extortion and bribery", Enel intends to pursue its commitment to fight corruption in all its forms, whether direct or indirect, by applying the principles expressed in the pillars of its "Anti-corruption Management System".

Enel's Anti-corruption Management System (AMS) is based on the Group's commitment to fight corruption by applying the criteria of transparency and conduct as detailed in the ZTC Plan, which constitutes Enel's anti-corruption policy.

Together with the ZTC Plan, the pillars of the AMS are:

- > the Code of Ethics;
- > Models aimed at preventing the main crime risks (e.g. corrupt relations with public administrations and private individuals, environmental crimes, corporate offences and, for Italian companies, manslaughter, serious personal injury or grievous bodily harm committed in violation of the rules on the protection of occupational health and safety) as described by the applicable regulations on corporate responsibility (the Compliance Program) in the various countries in which the Group operates (e.g. Organizational Model 231 for Italian companies or the "Modelo de prevención de riesgos/Programa de Integridade" for Group companies in Spain and South America);
- > the EGCP, a governance tool aimed at strengthening the Group's ethical

and professional commitment to preventing offences committed outside of Italy that might result in corporate criminal responsibility and risks to reputation. The EGCP applies to the Group's non-Italian companies and supplements any Compliance Programs adopted by the same companies, in compliance with local regulations.

Without prejudice to the provisions of the aforementioned compliance programs and the specific regulatory provisions applicable to the crime of corruption in all its forms, the EGCP complies with the main relevant legislation and the best corporate governance practices, constituting the general conduct framework for Enel's people in the fight against corruption.

The areas with the most potential exposure to corruption (active and/or passive), both in relations with public administrations and in the private sector,

#### Code of Ethics

In 2002, Enel adopted its Code of Ethics, which expresses the commitments and ethical responsibilities it follows in conducting business, by regulating and harmonizing corporate conduct according to standards based on the utmost transparency and fairness towards all stakeholders. The Code of Ethics is valid both in Italy and abroad, while taking into account the cultural, social and economic diversity of the various countries where Enel operates. Specifically, the document is divided into:

general principles for stakeholder relations; they define the values that the Group uses as inspiration in carrying out its various activities;

- criteria of conduct towards each class of stakeholders; such criteria provide the guidelines and standards that Enel's people are required to follow to ensure compliance with the general principles and to prevent the risk of unethical conduct;
- implementation mechanisms that describe the control system designed to ensure compliance with the Code and its continuous improvement.

Enel also requires all affiliates, subsidiary companies, main suppliers and partners to adopt a conduct in line with the general principles of the Code.



Sustainability Report 2017 Getting to know Enel

include: (i) the negotiation and execution of contracts with third parties (public authorities, associations, companies, etc.); (ii) participation in tenders (public and private); (iii) selection of partners/consultants; (iv) management of financial resources; (v) management of gifts and hospitality; (vi) personnel recruitment processes; (vii) incentive mechanisms in top managers' compensation.

In relation to these risk areas, the aforementioned governance tools (ZTC Plan, Code of Ethics and the EGCP/Compliance Program) together with the current body of procedures outline an effective prevention system, which is an integral part of the Group's Internal Control Sys-

The organization of the AMS along with the Internal Control and Risk Management System (SCIGR) guidelines approved by the Board of Directors of Enel SpA provides for the following figures:

> the Chief Executive Officer, as Director responsible for Enel's SCIGR, represents the Company's Senior top management and is responsible for ensuring that risks are correctly identified and mitigated; to this end, he/

she relies on management structures, such as Audit and Legal/Compliance, that report to him/her directly, as well as the management as whole, who are called to contribute to the adoption and dissemination of the rules established in the pillars of the Anti-corruption Management System;

- > the Legal/Compliance Function establishes guidelines on compliance and anti-corruption, providing support and advice for their interpretation and supervising the corresponding actions undertaken by the Group com-
- by performing audits on company processes, the Audit Function assesses the adequacy of the SCIGR, reporting to the competent administrative and control bodies. Corruption risks are identified during the assessment performed by the Audit Function, which aims to guide the annual Audit Plan with a risk-based perspective. This risk assessment also provides for the mapping and assessment of active and passive fraud risk that could affect the organization.

In 2017, Enel SpA's AMS was certified, as

previously described, according to the

international ISO 37001:2016 standard governing anti-corruption management systems (the "Certification"). Again in 2017, similar activities were launched in order for the Group's main foreign and Italian subsidiaries (Enel Italia, Enel Produzione, Enel Energia, Enel Sole, Enel Green Power, e-distribuzione, Enel Trade) to obtain ISO 37001 certification. To date, the Spanish subsidiary Endesa SA and all its subsidiaries have already obtained certification (October 2017). Furthermore, the certification process has been successfully completed for Enel Green Power. The anti-corruption certification

process for the main companies of the

Enel Group is scheduled to be completed

during the 2018-2019 period.



#### **Human Rights Policy**

Respect for human rights is one of Enel's guiding principles. It is a constant focus in all the countries where the Group operates and in every company that belongs to it.

Human rights

On February 5, 2013, Enel decided to accept the United Nations' "Protect, Respect, Remedy" framework through the approval by the Board of Directors' of a policy dedicated to the issue of human rights that strengthens and deepens the commitments already established by the Compliance Programs.

The policy identifies eight principles that the people working in Enel SpA and in its subsidiaries must observe in carrying out all their activities. They concern two

overarching issues: work practices and relations with communities and compa-

Work practices:

- 1. Rejection of forced or compulsory labor and child labor;
- 2. Respect for diversity and non-discrim-
- 3. Freedom of association and collective bargaining;
- 4. Health and safety;
- 5. Fair and favorable working conditions.

Relations with communities and society

- 1. Respect for community rights;
- 2. Integrity: zero tolerance of corruption;
- 3. Privacy and communication.

The policy is available online at www.enel.com

The identification of the principles is inspired by the Universal Declaration of Human Rights and several International Labour Organization (ILO) Conventions on human and social rights, the freedom of association and the right to organize, prohibition of forced and child labor and occupational health and safety. The policy assigns the following tasks to the Sustainability unit: planning and coordinating the adoption of the due diligence4 process jointly with the other relevant Functions, as far as their respective competence is concerned; reporting to the Control and Risks Committee on the adoption of the due diligence process; and annually reporting on Enel's performance and its commitments within its Sustainability Report.

4 In the context of the Guiding Principles on Business and Human Rights (Principles 17-21). this term refers to a continuous management system that a company implements in consideration of the sector in which it operates, its operating contexts, the size of the company and more, to ensure respect for human rights or to avoid being party to their abuse. This implies "identifying, preventing, mitigating and reporting" potentially negative effects caused by the



#### The due diligence process

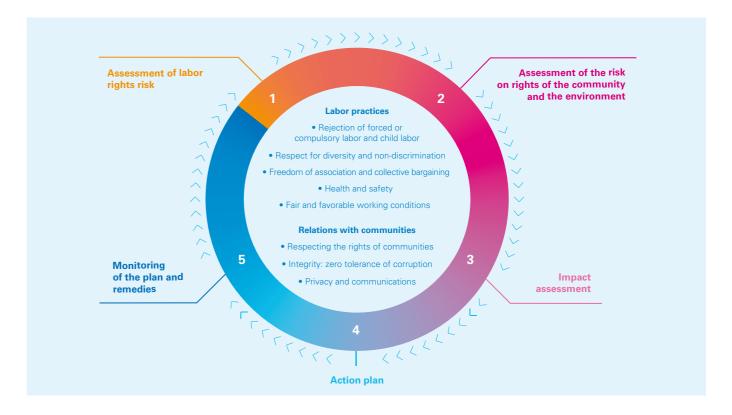
As required by UN guidelines and in accordance with the policy, Enel performed a specific human rights due diligence process on the entire value chain in the various countries in which it operates. Specifically, the process was redefined in 2016 in line with best international practices and includes four phases:

1. risk assessment as perceived by key stakeholders at the individual country level regarding labor, local communitv and environmental rights:

- 2. impact assessment aimed at identifying and analyzing the organizational and risk control systems;
- 3. development of action plans in order to address any areas of improvement that emerged in the previous phase;
- 4. monitoring of action plans and rem-

In 2017, the first three phases were completed. In contrast, in 2018 the action plans will be implemented and the monitoring activities will be launched.





Sustainability Report 2017 ene Getting to know Enel

#### Perceived risk analysis at the country level

To become familiar with the context in which Enel operates in the field of human rights and identify the most relevant issues in terms of risk, numerous experts from different sectors, such as civil society, academic institutions, citizens, customers and suppliers, were consulted in the various countries where Enel operates.

This consultation allowed the Company to classify each of the issues included in the Human Rights Policy according to the level of perceived risk resulting from the combination of the severity and probability of an actual violation.

The risks were then catalogued accord-

ing to a defined scale of values: acceptable risk (minimum level), risk to be monitored, high priority risk, high risk (maximum level). The analysis showed that:

- the issues related to corruption and environmental impacts present a "high priority risk" assessment that requires companies to equip themselves with advanced safeguard and monitoring mechanisms;
- diversity, child labor, the impacts on local communities and best practices in terms of health and safety had an assessment of "risk to be monitored". The issue of diversity is

particularly important in Italy, while in terms of impact on local communities, a greater focus is demanded by South American countries. The issue of health and safety is instead perceived across the board as a fundamental issue in all the countries of the Group.



#### **Impact assessment**

The second phase of the due diligence process was aimed at assessing Enel's practices and policies safeguarding human rights through the use of a standard tool across all the Group's countries. The process makes it possible to identify possible areas for improvement and recommendations for defining action plans.

Specifically, interviews were conducted with senior management at both the

Holding and individual country levels in order to analyze the level of integration of respect for human rights in the daily management of the Company, by identifying potential risks and opportunities. At the same time an assessment of the Company's policies, procedures, systems and practices was carried out in each of the areas of the value chain by analyzing over 100 indicators.

This analysis made it possible to verify

that Enel has a set of sound mechanisms and management systems that ensure respect for human rights and adequately manage existing risks.



#### Areas for improvement and action plans

The due diligence process used to assess the compliance of Enel's practices with Human Rights Policy and its alignment with the UN Guiding Principles identified opportunities for improvement to strengthen the Company's commitment to respect human rights when carrying out its industrial

and commercial activities.

Specific action plans have been developed for each country where Enel operates, together with an improvement plan to be managed at a central level aimed at harmonizing and integrating processes and policies defined at the global level and applied at the local level.

Below is a summary table of the issues covered by the policy, showing an assessment of their perceived risk and their level of protection.

OF POLICIES AND **PERCEIVED RISK PROTECT HUMAN RIGHTS PROCEDURES TO PROTECT HUMAN RIGHTS LABOR PRACTICES** Freedom of association Acceptable risk Strong Enel commits to respect the freedom of associaand collective bargaining tion and collective bargaining of with all people. In particular, Enel recognizes their right to form or take part in organizations aimed at defending and promoting their interests; that they are represented by trade unions or other forms of representation; and the value of collective bargaining as a privileged tool for determining contractual conditions and governing relations between company management and trade **Forced labor** Acceptable risk Strong The contracts govern working conditions in their entirety and clearly show all the terms included in the Fair and favorable working Acceptable risk Strong contracts that provide details on the rights of workers (working hours, salary, overtime, compensations, Child labor Risk to be monitored The terms are translated into workers' mother tongues and are supported with information contained in documents shared with all people. Human resources management systems and procedures ensure the absence of minors in the workforce. Internships and school-to-work programs are also **Diversity and inclusion** For details, see the "Our people and their value" chap-Risk to be monitored Health and safety Risk to be monitored For details, see the "Occupational health and safety" chapter **COMMUNITY AND SOCIETY Relations with** Risk to be monitored Strong For details, see the "Communities and value sharing" the communities chapter. For details, see the "Environmental sustainability" **Environmental impacts** High priority risk Strong chapter. Corruption High priority risk Strona For details, see the paragraph entitled "Active and passive anti-corruption management system'

ASSESSMENT

MAIN POLICIES AND PROCEDURES TO

**ISSUES** 

**AVERAGE** 

Average perceived risk: average of perceived risk levels identified in the countries being analyzed.

Risk reference scale: 1. High risk; 2. High priority risk; 3. Risk to be monitored; 4. Acceptable risk.

Performance value reference scale: Strong (75%-100%); Good (50%-75%); Sufficient (25%-50%); Needs improvement (0%-25%).

During the process, the conditions relating to the supply chain, the relationship with customers and the training of Enel's people were also analyzed.

Sustainability Report 2017 Getting to know Enel

#### **Supplier management**

Supplier management is divided into three basic phases: qualification system, general contract conditions and vendor rating. These processes are also needed to integrate environmental, social and governance aspects into assessments.

The global supplier qualification system enables a thorough assessment of companies wishing to participate in procurement procedures, while the vendor rating system is aimed at monitoring supplier performance in terms of quality, timeliness and sustainability in the execution of contracts. In particular, as set in current regulations, the qualification system requires the submission of specific documents (self-certification regarding the fulfilment of general requirements, financial statements, certifications, etc.) as well as compliance with Enel's Compliance Programs and the ten principles of the Glob-

al Compact. Furthermore, this system provides for an assessment of technical, economic/financial, legal, environmental, safety, human rights, ethical and integrity requirements. In relation to merchandise groups at high health and safety risk, further checks are carried out on specific aspects, such as injury rate trends, policies adopted, compliance with health and hygiene regulations, etc. Through this system, all suppliers<sup>5</sup> considered critical in terms of categories of purchased merchandise at higher environmental and occupational safety risk are evaluated. A risk analysis is performed on 100% of merchandise categories. In 2017, 100% of new qualified suppliers were assessed according to social criteria6.

Supplier relations are governed by specific contractual conditions consisting of a general part, applicable to all contracts regardless of the country in which the

activities take place, and specific annexes for each country.

Thanks to company monitoring procedures, continuous dialogue is in place between Enel and its suppliers, which, in the event of problems or oversight, leads to the definition of improvement measures. In particularly severe cases, the contract is terminated and/or the qualification is suspended.

- 5 First-level suppliers with whom Enel has a direct active contract with a value of > 25,000 euro are considered in this assessment.
- 6 New suppliers for 2017 with an active direct contract with a value of > 25,000 euro amounted to over 5,800, around 30% of which are qualified.



#### **Customer management**

In all the countries where Enel operates, customers have access to various contact channels (mail, website, toll-free numbers). Enel constantly monitors feedback in order to understand the customer's perception and any ongoing critical issues, and implement the

appropriate corrective actions. In Italy, for example, commercial quality control for all contact channels is ensured by carrying out systematic monitoring on sales and management processes. The goal is to ensure compliance with current legislation, privacy and regula-

tions protecting workers' freedom and dignity.



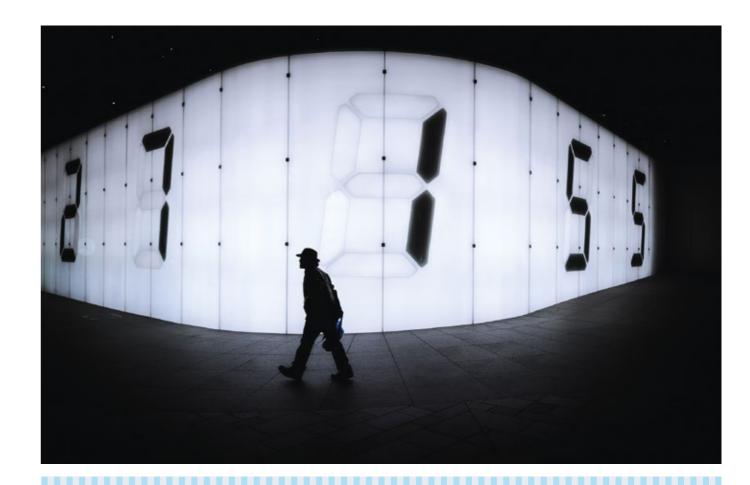
#### **Training**

In 2017, Enel's people received a total of approximately 517,000 hours of training on sustainability issues, among which human rights play a fundamental role,

for an average of 8.2 hours *per capita*. This is a decrease compared to the previous year (9.9 in 2016). Specific training activities on human rights are being

planned and will involve the entire Enel population.





#### Data protection

103-2 103-3 418-1

One of the main challenges of the digital age is the protection of personal data. Today, personal data are an expression of an individual's personality and identity. They therefore must be processed with due caution and guarantees. Enel considers personal data to be both shared and company assets.

In order to respond to this challenge and in line with the new General Data Protection Regulation (GDPR) (EU) 2016/679, the Enel Group has adopted a structure to guarantee that the privacy of all the natural persons with whom it interacts is fully respected by appointing Data Protection Officers ("DPOs"). DPOs are appointed on the basis of their professional qualities, knowledge of the subject and by virtue of their ability to perform their duties in accordance with the principles of independence and impartiality. The DPO structure is integrated into the Group's legal area and reflects the matrix-based model of Enel's organization. Among other things, the DPOs support the business areas in adopting a "privacy by design" approach, thanks to which the protection of personal data is a building block in the design of any business initiative or business process.

The DPOs provide advice to Enel's Data Controllers and Data Supervisors through risk-based methodologies such as the privacy impact assessment, a tool required by EU Regulation that allows the riskiest processing operations to be evaluated and the appropriate security measures to reduce these risks to be adopted. Enel's priority is to go beyond compliance. Data subjects' rights are better protected if the quality, quantity, speed and accuracy of the data, fundamental features of Enel's information assets, are guaranteed. Data quality is a prerequisite for technological innovation and sustainability. The use of highly sophisticated technologies, such as cloud computing, Big Data, AI, Data Analytics and the Internet of Things, allows us to offer more and more customer-tailored products and services, while at the same time requiring great responsibility in terms of privacy protection.



#### Reports made by stakeholders



ny violation or suspected violation of the Enel
Compliance Programs can be reported, even anonymously, through a single platform at the Group level ("Ethics Point") accessible from the following address:
www.enel.ethicspoint.com.
Reports can also be sent by email or

www.enel.ethicspoint.com.
Reports can also be sent by email or regular mail. The Audit Function receives and analyses these reports, performing the related checks and ensuring uniform treatment at the Group level, in compliance with company policies and local regulations.

The report management process is governed by the whistleblowing policy, "Management of anonymous and non-anonymous reports," which



123
Reports



68 Anonymous



27
Violations of th
Code of Ethics<sup>1</sup>

reiterates the guarantee of anonymity and protection against any form of retaliation and also ensures adequate protection against groundless reports made in bad faith for the purpose of harming people and/or companies. In 2017, 123 reports were received concerning the Code of Ethics, an increase over 2016, mainly due to an awareness campaign on the whistleblowing channels in Argentina and the entry of Enel Distribuição Goiás in Brazil.

uring 2017, there were 5 confirmed cases of "conflict of interests" (4) and "corruption" (1). The only case of corruption involved an employee-managed contractual relationship, where the aim was to obtain personal advantages to the detriment of the Company. As soon as the company concerned became aware of it, the case was promptly reported to the legal authorities. In relation to all these incidents, Enel has taken specific measures against the parties involved, in line with the relevant legislation. Such measures entailed four lawsuits against employees and two against contractors. In addition, 22 reports related to labor practices and 1 relating to community and society were received. Of the reports related to labor practices<sup>2</sup>, in 6 cases a violation was found: 1 case of harassment and 5 related to the company climate. A violation was also found due to a community and society report that pertained to environmental protection issues. In relation of all violations Enel has taken specific measures.

## Transparency in institutional processes

nel constantly manages relations with institutions (local, national, European and international), in line with the Enel Compliance Program, providing complete and transparent information with the aim of placing institutional counterparts in the best conditions to make the decisions they are responsible for. Enel also contributes to the consultation processes regarding political and legislative dossiers on energy and environmental issues.

In Italy, institutional interactions in 2017 mainly concerned the complete deregulation of the sale to end customers of the electricity market, electric mobility, energy efficiency, the circular economy, innovation, the SEN (Italian National Energy Strategy), the school/work program, the regulation of contact services to the customer (call centers), ultra-broadband, the conversion to renewable sources of the non-interconnected minor islands, power outages due to natural disasters, and the meter replacement plan (Open Meter 2.0).

In the context of relations with European institutions, Enel actively contributes to every phase of the consultation process on political and legislative dossiers of corporate interest through careful monitoring and analysis. The issues that received the most attention in 2017 include energy and environmental policies, the reform of the European Union Emissions Trading System (ETS) Directive, and the circular economy. For further information, see the "Business model for a low-carbon growth" chapter.

Within a dynamic positioning process aimed at assessing how companies are in-

fluencing environmental policies and legislation around the world. InfluenceMap. an independent British non-profit organization, has ranked Enel among the most supportive and strategically active utility companies. This result is a result of Enel's strong leadership, its influence within leading European associations, and its positive interaction with InfluenceMap itself, who also encourages involved organizations to provide adequate feedback. Finally, the Enel Group has been registered in the EU voluntary transparency register since its creation in 2008. The register aims to provide citizens with a single and direct access point to information on who carries out activities aimed at influencing the EU decision-making process, the interests pursued and the resources invested in these activities (http://ec.europa.eu/ transparencyregister).

of Ethics, paragraph 3.26, Enel does not provide finance to political parties, in Italy or abroad, their representatives or candidates, nor does it sponsor conventions or parties whose sole purpose is political propaganda. It refrains from any direct or indirect pressure on politicians (for example, through granting use of its facilities, acceptance of hiring recommendations, or consultancy contracts).

In line with the provisions of the Code

Enel and its subsidiaries are present in various trade and employer associations whose role includes representing the position of its members in the regulatory processes pertaining to the business activity. The annual contributions paid to the aforementioned organizations in the form of membership fees totaled approximately €9 million in 2017<sup>7</sup>.

In particular, in 2017 the three largest contributions made on a global level concerned UNESA (Asociación Española de la Industria Eléctrica), Confindustria and Elettricità Futura<sup>8</sup>.

The institutional dialogue with the trade and employer associations in which Enel and its subsidiaries took part in 2017 concerned the support of regulatory and consultation processes, among others, on the following main issues:

- development of energy policies: including, among other issues, the strategic outlook of the sector, energy efficiency, the growth of renewables, smart grid development and energy costs<sup>9</sup>;
- increasing the business competitiveness: including, among other issues, tax regulation, labor law issues and environmental policies<sup>10</sup>.

<sup>10</sup> The contribution in 2017 was 3,271,506 euro.





<sup>(1)</sup> Reports received in 2016 were analyzed in 2017; for this reason, the number of confirmed violations in 2016 was reclassified from 18 to 21.

The 2017 violations concern the reports received in 2017. The data provided were last updated on February 8, 2018, in line with the data provided by the CCR (Control and Risk Committee).

<sup>(2)</sup> They include any discrimination reports: in 2017 no such violations were found, while in 2016 two violations were detected, for which the related remedial actions were implemented.

<sup>7</sup> The annual contributions in the last 4 fiscal years have amounted to: 8,999,609 euro in 2017; 8,986,124 euro in 2016; 9,659,299 euro in 2015; 9,252,109 euro in 2014. These figures include the contributions paid by Enel SpA (including the main Italian companies) and its foreign subsidiaries Endesa, Enel Américas and Enel

<sup>8</sup> Specifically: UNESA 2,618,454 euro; Confindustria 2,020,343 euro; Elettricità Futura 730,758

<sup>9</sup> The contribution in 2017 was 5,728,104 euro.

#### Sustainability indexes

nel is included in the main sustainability indexes such as the Dow Jones Sustainability Index World,

FTSE4Good, the CDP (Carbon Disclosure Project) Climate and the CDP (Carbon Disclosure Project) Water, the

STOXX ESG Leaders, the Euronext Vigeo-Eiris and the ECPI.







## Enel's presence in the main energy and sustainability associations

he Enel Group actively participates in national and international sustainability associations and organizations that aim to define long-term

goals and commitments, to promote a sustainable way of doing business and to manage the challenges of climate change and socio-economic pressures that affect the macroeconomic scenario, the energy sector in particular. Below are some examples.





#### Sustainable Energy for All (SE4ALL)

SE4ALL is an international non-profit organization that takes a multi-sta-keholder approach to collaborate with the private sector, civil society, institutions and governments in support of SDG 7 on affordable and clean energy. Enel has been supporting SE4ALL since 2011, and since 2014 the CEO has been a member of the Advisory Board. In addition, since 2017 Enel has been an official Delivery Partner for the organization, after signing an agreement aimed at accelerating the achievement of SDG 7.



#### **CSR Europe**

CSR Europe is the leading European business network dedicated to corporate social responsibility. Enel has been part of it since 2005, and since 2016 it has held the position of Deputy Chair of the Board of Directors.



#### World Business Council on Sustainable Development (WBCSD)

Since 2016, Enel has been a member of the global CEO-led organization and actively participates in its main working groups.



#### United Nations Global Compact (UNGC)

Since 2004, Enel has been a member of the United Nations Global Compact, for which it is a signatory of the ten founding principles related to human rights, labor standards, environmental protection and anti-corruption. In 2011, it became part of the Global Compact LEAD, a group that represents the world's foremost sustainability leaders in the private sector (about 40 in 2017). Furthermore, in June 2015, the CEO was appointed a member of the Global Compact Board. Since the end of 2017, Enel has been a patron of the UNGC platform dedicated to new and innovative financial instruments to accelerate the achievement of the SDGs.

#### European Commission Multi-stakeholder Platform on SDGs

In 2017, the CEO of Enel was elected member of the "High-level multi-sta-keholder platform on the implementation of the Sustainable Development Goals", the platform created and commissioned by the Commission for the adoption of the SDGs in the European Union. Enel is the only Italian company to be part of the new multi-stakeholder platform, which includes 30 members, only 2 of which belong to the private sector.



#### International Integrated Reporting Council (IIRC)

Since 2016, Enel has been a member of the IIRC, a global coalition of companies, investors, regulators, standard-setters and non-governmental organizations for the promotion of the integrated report. Such report is viewed as a tool with which companies communicate their values, decisions and actions to stakeholders clearly and comprehensively by presenting their financial performance and the social, environmental and economic context in which they operate.



#### eurelectric

Main association of the electrical industry at the European level; at the annual meeting, in Estoril in Portugal, Enel CEO was appointed chairman of eurelectric. During the 2017-2019 period, the mission of the new president will be focused on "engaging all the main stakeholders in the sector to make the electricity industry the main driver of European energy policies, to meet the major challenges of the energy transition".



#### Global Reporting Initiative (GRI)

Enel has been a member since 2006, and since 2016 it has been part of the GRI Gold Community and the Stakeholder Council, the multi-stakeholder consulting body that supports the GRI Board of Directors on strategic issues. In 2017, Enel took part in the activities related to the launch of the new reporting standard (GRI Standards).



#### Global Sustainable Electricity Partnership (GSEP)

Non-profit organization aimed at promoting sustainable energy development through specific capacity building projects and activities in emerging and developing countries around the world; its members include world-leading electric companies.



The B20 represents the global business community within the G20 process, the leading international forum for economic cooperation. The main task is to support the G20 through suggestions for concrete actions aimed at consolidating global business interests and promoting international dialogue between governments, civil society and the business community. Enel CEO was appointed Co-Chair of the B20 Energy Climate & Resource Efficiency Task Force during the German Presidency for the year 2017.



Sustainability Report 2017

Setting priorities



#### Materiality analysis

102-46 103-1

nel launched a process aimed at identifying the priority issues for the Group and for the Company's stakeholders in 2012, and said process has been reinforced over time. This is what is known as the materiality analysis. The relative methodology was developed taking into consideration the guidelines of numerous international standards, including the Global Reporting Initiative (GRI), the principles of the Communication on Progress (COP) of the UN Global Compact, the IIRC (International Integrated Reporting Council) model and the SDG Compass, which supports companies in aligning their strategies with the Sustainable Development Goals

The objective of the assessment is to identify and evaluate the issues that are most important to stakeholders, to correlate them with the Group's action priorities and its business strategy in order to verify their "alignment" (or "misalignment") and identify any areas for improvement. Always conducted at an increasingly greater level of detail in terms of both issues and geographical scope, the analysis helps to identify the priorities of the Company and of the stakeholders, both for the entire Group and for each country. It also allows the results to be obtained with specific focus areas, such as the matrix pertaining to the sole category of "Financial community" stakeholders, useful

for identifying the issues to be analyzed in the Annual Report and thus providing an integrated performance report. Based on the results of the analysis, the issues are also determined for preparing the Consolidated Non-financial Statement and the Sustainability Report, and the challenging common goals included in the 2018-2020 Strategic Plan and in the 2018-2020 Sustainability Plan are set. The activities and projects pertaining to the various Group Functions and Business Lines contribute to achieving them (see the "Strategy and Sustainability Plan" chapter for further information).



## Process and changes to the model

102-46

The materiality analysis process is divided into five main phases, as shown in the picture of the following page. Data collection, aggregation and information processing are managed through a dedicated information system. This system grows every year to ensure greater traceability, to share

best practices of engagement and monitoring of stakeholders, and to allow a degree of coverage consistent with the corporate organizational model.

The system makes it possible to obtain specific views not only at the Group and individual company level, but also by Business Line/Company Function and single asset (meaning potential or actual operating sites). It is also possible to analyze the results for each stakeholder category involved in the process.

The Holding Sustainability unit plays a role of direction and coordination, providing guidelines and methodological support for the analysis, conducted by local managers with the involvement

of stakeholders and company-level key figures. The results obtained at the individual company and/or country level are subsequently consolidated by the Holding in order to prepare the Group's materiality matrix (refer to the "Methodological note" for detailed information on the process used).

Since 2016, Enel has further expanded the materiality analysis, launching a project in the main countries of presence to monitor stakeholders' satisfaction on how the Company oversees the various issues, according to the principle of materiality. When compared with the stakeholders' materiality analysis, the results provide an overall view of stakehold-

ers' expectations and help identify the issues on which the Company must focus.

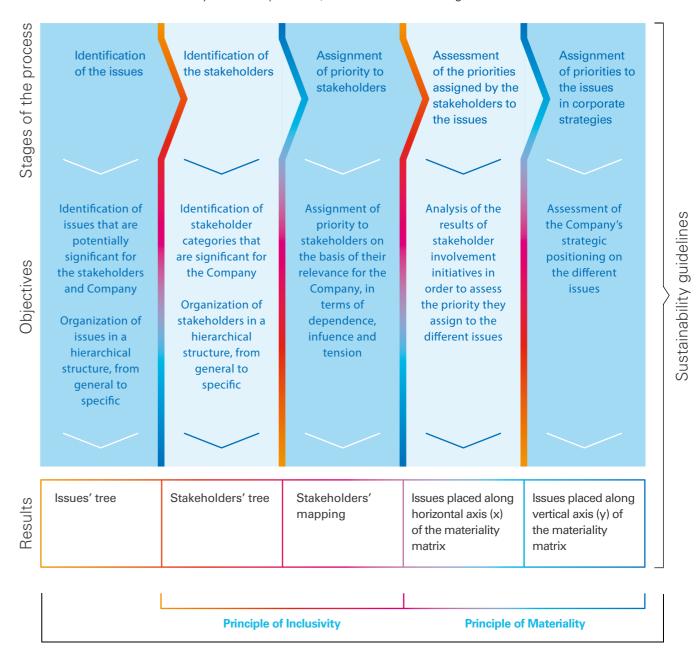
During 2017, a first set of results deriving from the use of CSV (Creating Shared Value) tools on the Group's assets was added to the analysis.

Through an appropriate in-depth review of the overall results, this offers a holistic view of the priorities in a given context, taking stakeholders' expectations into account at all levels of the Enel value chain.

In particular, in 2017 the following

were included in the assessment:

- 202 initiatives;
- 16 countries;
- 40 companies;
- 5 assets.



Standard AA 1000 APS

Sustainability Report 2017 Cinc Setting priorities

Stakeholder engagement

102-40 102-42 102-43

Understanding stakeholders' expectations is one of the crucial phases of the assessment and is perfectly in line with Enel's inclusive Open Power approach.

Understanding stakeholders' expectations is one of the crucial phases of the assessment and is perfectly in line with Enel's inclusive Open Power approach. The units responsible for the relations with stakeholders, who are annually involved in the assessment process, are responsible for:

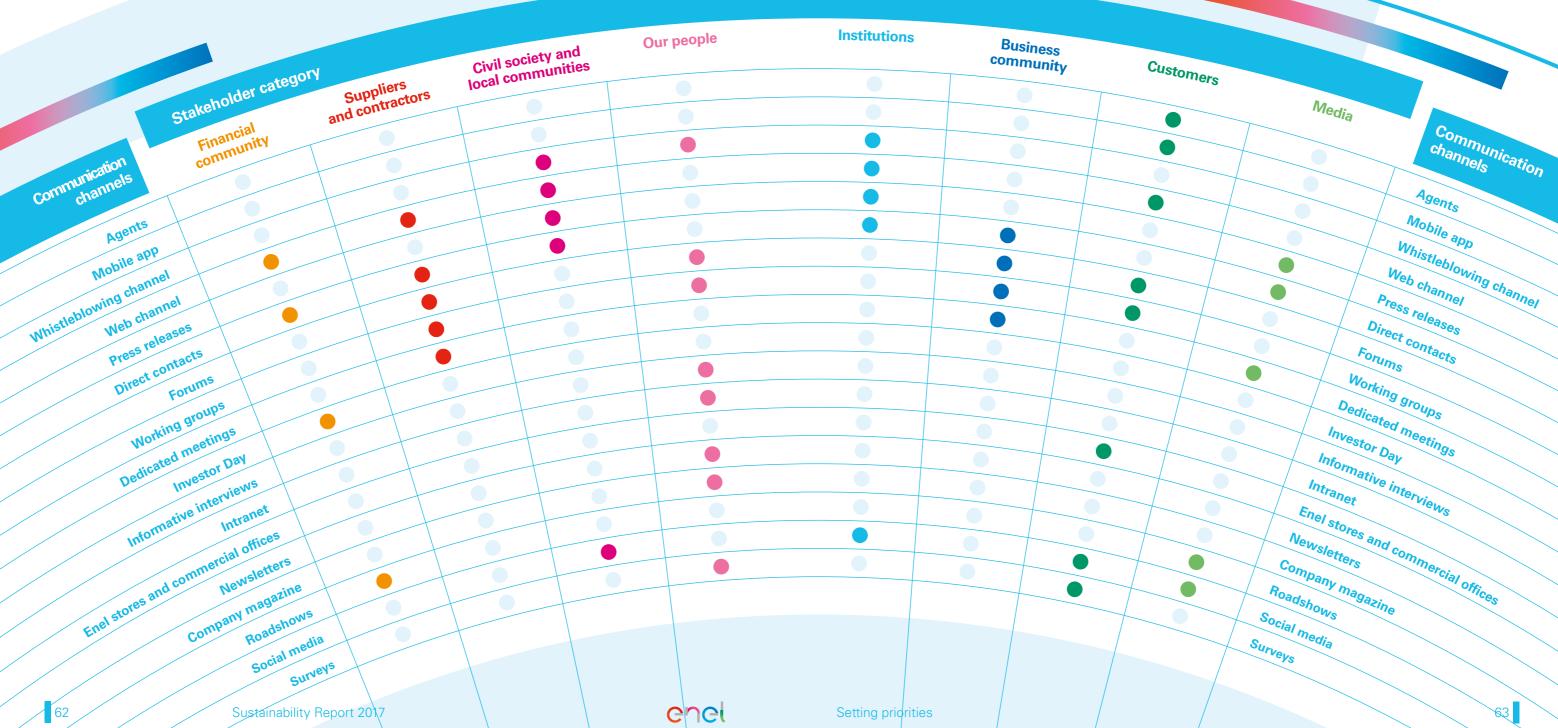
identifying and updating the list of the most relevant categories of stakeholders so as to remain in line

- with the sustainability context in which Enel operates;
- valuating and weighting the different categories according to the following parameters: dependence (importance of the relationship for the stakeholder), influence (importance of the relationship for the Company) and urgency (the relationship's time aspect);
- engaging stakeholders as appropriate according to the communication

channel (generic, specific and interactive channels), the type of relationship with the group of interest, the frequency of interaction and the reference context.

The main stakeholder categories and the respective communication and engagement channels are shown below.

Main types and channels of communication with stakeholders



102-44 102-47

n line with the adopted methodology<sup>1</sup>, during 2017 the set of issues covered by the assessment was updated based on an analysis of numerous internal and external sources. The analysis took into account the different geographical realities and the different actors that participated in the process and also considered the evolution of the sector and of the internal organizational structure. The topics, classified into business and governance issues, social issues and environmental issues, were assessed according to the priority given by the stakeholders and the Company. The result of the materiality analysis is summarized in the materiality matrix, which contains the following informa-

- > on the horizontal axis the **priority** that stakeholders, appropriately weighted based on their materiality, attribute to the various issues. On the right part of the matrix are the issues for which the stakeholders require Group commitment in terms of greater investments, strengthening of existing practices and management systems, formalization of commitments and clear policies;
- > the vertical axis shows the issues on which Enel plans to focus its efforts, with the associated degree of priority, also taking into consideration planned investments, commitments, potential consequences and issues included in the Group's Strategic Plan. The upper part of the matrix shows the issues for which a high level of commitment for the

Considering all the issues being analyzed, those to which the stakeholders have given a higher priority are "Operational efficiency", "Decarbonization of the energy mix" and "Occupational health and safety".

coming years is envisaged as part of the Group's strategic objectives.

The Group's overall matrix takes into account the contributions of the main companies involved in the process, based on their relevance and the type of business in which they operate.

The joint view of the two perspectives makes it possible to identify the issues of greatest importance both for the Company and for the stakeholders (the priority issues), and to verify the degree of "alignment" or "misalignment" between external expectations and internal relevance of these issues. The results essentially show an alignment between stakeholders' requirements and the priorities assigned by the Company to the various issues.

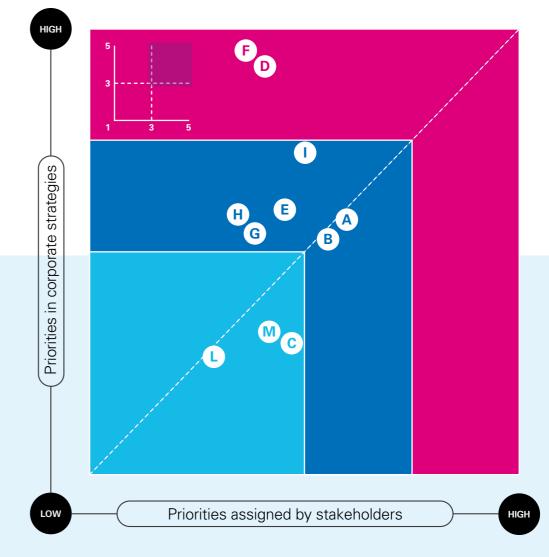
Considering all the issues being analyzed, those to which the stakeholders have given a higher priority are "Operational efficiency," "Decarbonization of the energy mix" and "Occupational health and safety". With regard to the aforementioned issues, the Company commits itself to working proactively to respond to the needs expressed by the stakeholders, by identifying, monitoring and achieving objectives and targets formalized in the Sustainability Plan (see the following chapter for further information).

The issues of "Economic and financial value creation" and "New technologies, services and digitalization" are particularly significant in the company strategies, in line with the provisions of the Strategic Plan



#### 2017 materiality matrix







#### **BUSINESS AND GOVERNANCE ISSUES**

- A Operational efficiency
- **B** Decarbonization of the energy mix
- **C** Customer focus
- **D** New technologies, services and digitalization
- **E** Sound governance and fair corporate conduct
- F Economic and financial value creation



#### **SOCIAL ISSUES**

- **G** Engaging local communities
- H People management, development and motivation
- I Occupational health and safety
- L Sustainable supply chain



#### **ENVIRONMENTAL ISSUES**

- **B** Decarbonization of the energy mix
- M Environmental compliance and management

Sustainability Report 2017 enel Setting priorities 65

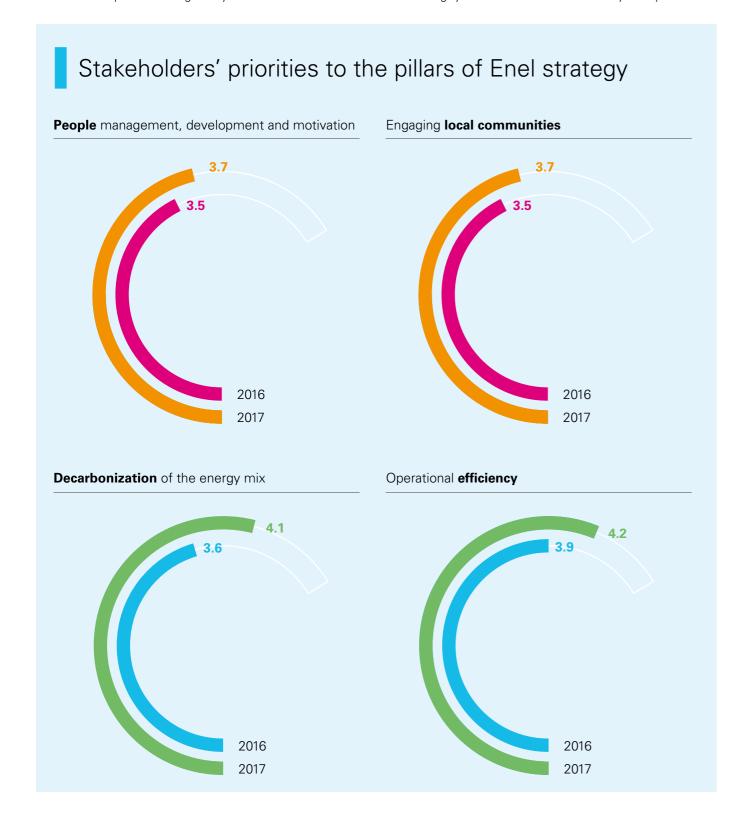
<sup>1</sup> For more information on the methodology used for the materiality analysis, please refer to the "Methodological note".

### The priorities assigned by the stakeholders

In line with the company strategies and with the classification of the issues adopted in the Sustainability Plan<sup>2</sup>, below are the priorities assigned by the

various stakeholders to the "pillars". These pillars are the issues on which the Company intends to put particular attention in the coming years

in terms of investment, monitoring and awareness, also given the macroeconomic changes and the context of sustainability it operates in.



The comparison of the priorities assigned by the stakeholders between 2016 and 2017 shows a general increase in assessments.

With respect to the issues linked to the pillars, it is possible to consider the changes described below.

It should be noted that, in line with the

methodology adopted for 2017, the list of topics covered by the assessment was updated.

"Operational efficiency" and "Decarbonization of the energy mix" emerge as the two top priorities for stakeholders as a whole:

> as regards "Operational efficien-

cy", aspects linked to asset optimization and safety were aggregated, together with energy efficiency;

the "Decarbonization of the energy mix" is a cross-sectional issue that embraces both business aspects and environmental aspects; within this issue, traditional technologies, climate



strategy and renewable energies have been included.

"Engaging local communities" as well as "People management, development and motivation," although of a relatively lesser priority level compared to the issues described above, also show an increase in the priority value attributed by stakeholders:

- "Engaging local communities" considers aspects related to responsible relations with communities as well as the support and development of local communities;
- regarding "People management, development and motivation" – a topic that has remained unchanged from 2016 – there is a focus on the

areas of development and enhancement of diversity.

The stakeholders involved in the materiality analysis also evaluated the issues related to the "enabling factors", as regards company strategies and the taxonomy used in the Sustainability Plan. The issues at hand include "Customer focus" and "New technologies, services and digitalization".

Lastly, the "Economic and financial value creation", "Occupational health and safety", "Sound governance and fair corporate conduct", "Environmental compliance and management" — which includes in turn the management of environmental impacts, the responsible use of water resources, biodiversi-

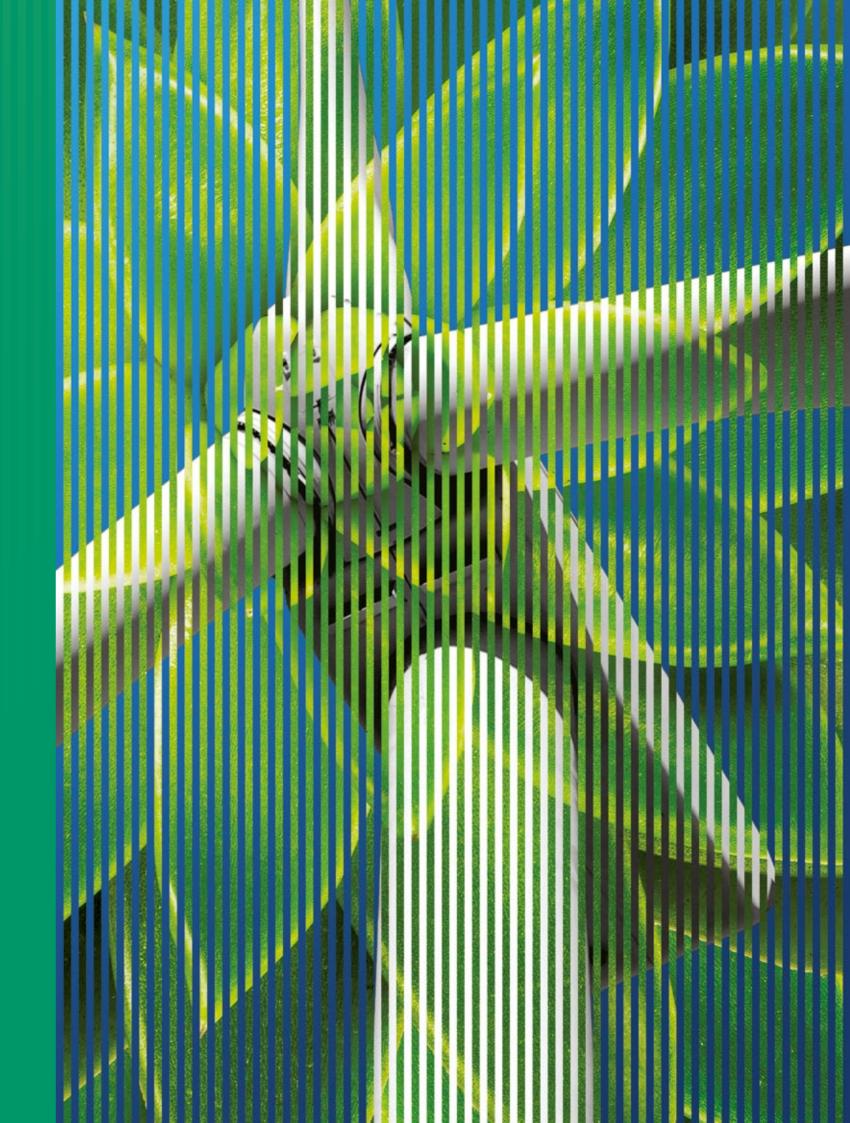
ty, and the protection of natural assets – and "Sustainable supply chain" are key elements at the base of Enel's sustainable business model (the so-called "backbones"), and, just like the pillars, they are subject to stakeholders' assessment.

<sup>2</sup> Please refer to the "Strategy and Sustainability Plan" chapter for an in-depth analysis on the classification of the issues into pillars, backbones and enablers.



Sustainability Report 2017 Setting priorities

# CStrategy and Sustainability Plan



# The sustainable business model

102-15

n a continuously and rapidly evolving scenario that exposes the energy sector to new risks and offers new opportunities, Enel's sustainable business model enhances the synergies between the various business areas and the outside world in order to find solutions to reduce environmental impacts, meet the needs of local communities and improve the safety of people working in the company and its suppliers. It is thanks to its sustainable business model that Enel is able to meet the new challenges of the energy transition, not only by reacting to risks, but by seizing all opportunities without ignoring their social implications. In order to pursue this goal, a clear, defined and long-term strategic vision is needed to strengthen the confidence with which people look to the future and the role of Enel, today as in the years to come. It is necessary to study trends in order to anticipate them.

Further fundamental factors are the knowledge of the context in which Enel operates and the active listening of all the interlocutors, that allow to create sustainable value in the long term by combining economic and social growth. A strategic and operational approach based on the concept of openness, "Open Power", where sustainability and innovation are an indispensable combination.

The principles of ethics, transparency, anti-corruption, respect for human rights and promotion of safety are all framing elements that have always characterized Enel's method of work-

Enel's sustainable business model enhances the synergies between the various business areas and the outside world in order to find solutions to reduce environmental impacts, meet the needs of local communities and improve the safety of people working in the company and its suppliers.

ing and which are based on policies and criteria of conduct that apply to the entire Group.

It is a model that promotes sustainable development fully in line with the guidelines of the United Nations Global Compact, of which Enel has been an active member since 2004. These guidelines reaffirm the importance of increasingly greater sustainability in the company's strategic choices. Confirming the importance of this approach, the Enel's CEO has been a member of the Board of Directors of the Global Compact since June 2015. A key element to this approach is the adoption of ESG (environmental, social and governance) sustainability indicators within the whole value chain, not only to reflect the results achieved, but above all to anticipate decisions and develop a proactive attitude in line with the United Nations' 2030 Sustainable Development Goals (SDGs). Enel constantly strives to manage and measure its overall performance, taking into consideration economic, business and ESG issues in reporting its activities and defining the objectives underlying its strategy.



# 2017 results and progress on the 2017-2019 Sustainability Plan

n a context that has remained challenging throughout the year, significant results have nonetheless been achieved. Thanks to a sys-

temic and matrix-structured organization in which each Business Line has its mission, it was possible to manage the complexities by creating

synergies, even in rapidly changing situations.

## 2017-2019 Sustainability Plan



EBITDA amounted to 15.7 billion euro, up from 2016, mainly deriving from electric or regulated or quasi-regulated systems that help mitigate the Group's risk profile. With a renewable installed capacity of around 41 GW¹ and a total capacity of around 88 GW¹, Enel has become the top operator in renewables and has made significant progress towards a zero-emission portfolio, in line with the 2050 decarbonization commitment made at the UN in September 2015 (SDG 13). During 2017, 45%² of the Group's generation

was a zero-emission production and  ${\rm CO_2}$  specific emissions amounted to 400 g/kWh<sub>eq</sub><sup>2</sup>.  ${\rm SO_2}$  and  ${\rm NO_x}$  specific emissions were equal to 0.81 and 0.77 g/kWh<sub>eq</sub><sup>3</sup> respectively, almost stable compared to the previous year, while dust specific emissions showed an increase at 0.26 g/kWh<sub>eq</sub><sup>3</sup>.

The Group's commitment to improving the living conditions and energy availability of the communities in which it operates also continues, and in 2017 the following results were achieved in relation to the UN SDG commitments: the target for 2020 was surpassed in terms of beneficiaries of inclusive and equitable quality education, reaching around 600 thousand beneficiaries (SDG 4); considerable progress was made towards the target of 3 million beneficiaries in providing affordable and clean energy, reaching 1.7 million beneficiaries (SDG 7) in Africa, Asia and Latin America; and the target for 2020 was achieved in terms of decent work and sustained, inclusive and sustainable economic growth, set at 1.5 million beneficiaries (SDG 8).

Sustainability Report 2017 Strategy and Sustainability Plan



This year saw the involvement and participation of the almost 63 thousand people that work for the Company. 90% of them participated in the self-assessment phase and 99% participated in the assessment phase, while 94% underwent a feedback interview with their manager, 2017 also saw the creation and implementation of numerous actions - about 1,500 regarding the priorities that emerged during the latest climate survey. Enel continued to pursue its commitment to enhancing diversity in all its forms, including gender, age, culture and ability. In particular, in line with the defined trajectory, selection processes included 35% women. To speed up the entire Company's digital transformation, a change management program was launched, and in September 2017 a survey was conducted on the entire Enel population. There were about 25 thousand respondents who provided around 40 thousand suggestions, comments and proposals. A new flexible organizational culture makes it possible to put people at the center, involving them and empowering them in order to create value in a collaborative and effective way.

In the field of health and safety, Enel continues its commitment to increasingly efficient standards and the development of new tools and operating methods. In 2017, the frequency rate (LTIFR) and the severity rate (LDR) for Enel Group employees amounted to 0.24 and 11.65, respectively. In particular, with a decrease in the number of injuries and consequently in the LTIFR, there is a slight increase in the number of lost days due to injury and consequently in the LDR. As regards contractor employees, the LTIFR stood at 0.19 (a reduction of about 6% compared to 2016) and the LDR at 9.86 (an increase of 16% compared to 2016).

The Group's main foreign companies have completed the adoption process of the Enel Global Compliance Program, which aims to strengthen the ethical and professional commitment to preventing illegal activities committed abroad that could result in corporate criminal liability and reputational risks. The human rights due diligence process continued in the various coun-

tries where the Group operates. The Board of Directors' Diversity Policy has been prepared.

The cyber security organization was consolidated; the new Cyber Risk Management method has been implemented in both the Information Technology branch (IT) and in the Operational Technology (OT) branch, and it addresses the new frontier of the Internet of Things (IoT). Enel's CERT (Cyber Emergency Readiness Team) was accredited by 3 national CERTs (Italy, Romania, Argentina), while memorandums of understanding with 3 other national CERTs (Chile, Peru, Colombia) have been signed and will result in accreditation. In addition, 60% of web applications are now covered by advanced cyber security solutions. The applications were selected through a careful prioritization process.

The dashboard that opens the subsequent chapters of this Sustainability Report shows more details regarding the progress made in 2017 toward the 2017-2019 Sustainability Plan's objectives.

<sup>3</sup> Values include managed production. With regard to consolidated production alone,  ${\rm SO_2}$  and  ${\rm NO_x}$  equaled 0.84 and 0.79 g/kWh<sub>eq</sub> respectively, while dust equaled 0.27 g/kWh<sub>eq</sub>.



# Sustainability context

and identifying key trends in advance allows us to direct the business model and guide the ongoing transition in a sustainable manner. The increase in world population, the growing urbanization of metropolitan areas, the unstoppable development of renewables driven by increasingly competitive costs and positive effects in terms of decarbonization, and digitalization are the main phenomena that are changing the energy industry. The United Nations' Sustainable Development Goals complement and reinforce this scenario, giving energy a key role in achieving them. In particular, the latest UN estimate forecasts that the world population in 2050 will be about 10 billion people, with a substantial presence in Asia of about 5 billion and in Africa of over 2 billion, and that the percentage of people living in urban areas will increase up to 66%. Already in 2030 we will face the growing phenomenon of megacities. with several metropolitan areas such as Tokyo (37.2), Delhi (36.1) and Shanghai (30.7) with populations exceeding 30 million, with a shifting economic growth towards the Asia-Pacific region and more generally towards emerging countries. It is also estimated that the Gross Domestic Product (GDP) of the 7 major emerging markets (China, India, Brazil, Russia, Indonesia, Mexico and Turkey), amounting to about 20 thousand billion US dollars in 2017, may increase more than 200% to 2050, against a growth of about 50% for the G7 countries over the

nowing the reference context

The World Energy Outlook-2017 (WEO-

same period of time.

The latest UN estimate forecasts that the world population in 2050 will be about 10 billion people, with a substantial presence in Asia of about 5 billion and in Africa of over 2 billion, and that the percentage of people living in urban areas will increase up to 66%.

2017) from the International Energy Agency (IEA) also shows that renewable sources account for two thirds of global investment in generation capacity as they become the least expensive source for new installations in many countries. The rapid spread of photovoltaics, led by China and India, will make solar energy the main low-carbon source in terms of capacity by 2040, when the share of renewables in the global electricity mix will reach 40%.

The next few years will see a greater consumption of electrical energy enabled by new technologies and a reduction in the cost of use, making it financially advantageous to use energy in industrial processes and in civil uses previously powered by other sources. The WEO-2017 highlights how electricity will grow in final energy consumption on a global scale, reaching up to 40% of the expected increase between now and 2040. Worldwide, increasing access to electricity means that an average of 45 million new consumers are added each year. Since 2012, over 100 million

people a year have gained access to electricity, compared to 60 million annually between 2000 and 2012. In addition to growing in its traditional fields, electricity has also gained ground in heat production and mobility, and its share of final consumption is nearing 25%. Worldwide, up to 280 million electric vehicles are expected to be on the roads in 2040, compared to the current 2 million. The digitalization of the energy world underlies technological change and it is inseparable from electricity, enabling the current aggregation platforms to provide new services and contributing to the development of new low-carbon businesses. In this context, according to the estimates of Bloomberg New Energy Finance (BNEF), the set of renewable and demand response technologies will go, globally, from a current installed capacity of 2 TW to around 10 TW in 2040.





Values including the capacity managed through the joint ventures of the renewables area in Italy, USA and Canada.

<sup>2</sup> Values include managed production. With regard to the consolidated production alone, 43% of the amount generated created zero emissions, and CO<sub>2</sub> emissions amounted to 411 g/kWh<sub>an</sub>.

# 2018-2020 Sustainability Plan

102-15

he energy transition is a veritable transformation process, making it possible to contribute actively to a sustainable long-term development trajectory in order to achieve more inclusive and environmentally friendly growth and find new solutions to customer needs. New forms of energy are required that can outline a new business model, drawing value from the trends of urbanization, an increased demand for electricity and the profound decarbonization that is consequently necessary. In the new 2018-2020 Plan, which is based on industrial pillars and ESGs, the Group is confirming the fundamental principles of its strategy, with greater change and acceleration in its implementation. The Plan promotes combining different cultures and objectives within the same Group, across mature businesses and upcoming activities, promoting the application of a sustainable business model along the entire value chain, with the UN's 17 SDGs. Amounting to 14.6 billion euro over the three-year period, growth investments will mainly concern the digitalization of grids, the development of renewables, the installation of charging stations, software platforms and public lighting, with 80% of them dedicated to mature markets, thereby resulting in a reduction in the risk profile. The Plan also envisages an increasing dividend and a gross operating margin of 18.2 billion euro in 2020, against profits that will rise to 5.4 billion euro.

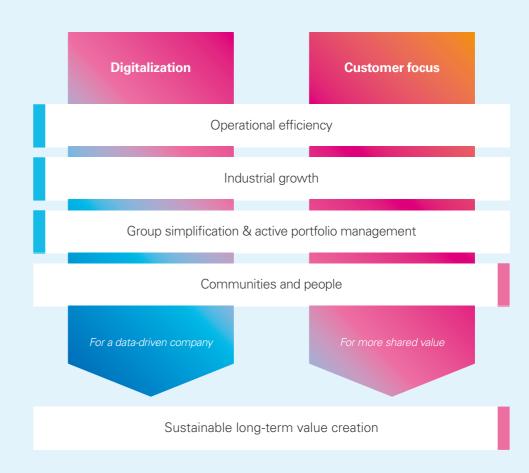
Operationally speaking, in 2020 renewable installed capacity will be about 48 In the new 2018-2020 Plan, which is based on industrial pillars and ESGs, the Group is confirming the fundamental principles of its strategy, with greater change and acceleration in its implementation.

GW and thermal capacity will equal about 39 GW, resulting in 55% of zero-emission production. In line with the commitments made in 2015 to achieve the sustainable development goals (SDG 13), the Plan calls for the reduction of CO<sub>2</sub> specific emissions (< 350 gCO<sub>2</sub>/kWh<sub>22</sub>). In terms of the environment, the targets of a 30% reduction in SO<sub>2</sub> and NO<sub>3</sub> specific emissions are also confirmed, plus a reduction of 70% of dust by 2020, compared to the corresponding 2010 values. Enel also continues to promote the economic and social growth of the local communities in which it operates, confirming and strengthening its specific commitment to the following SDGs: 800 thousand beneficiaries of quality education in the 2015-2020 period, doubling the previous target of 400 thousand beneficiaries (SDG 4); 3 million beneficiaries of affordable and clean energy in the 2015-2020 period, mainly in Africa, Asia and South America (SDG 7); 3 million beneficiaries in terms of decent work and sustained, inclusive and sustainable

economic growth in the 2015-2020 period, doubling the previous target of 1.5 million beneficiaries (SDG 8).

The Company's people are key elements of the strategy, therefore, aims to strengthen their roles and responsibilities within the organization, providing them with the tools for managing the energy transition through clear and precise objectives in terms of performance evaluations. company climate, development of digital skills - with the aim of involving 100% of people in dedicated training by 2020 - and promotion of diversity, with the intention of reaching a share of 50% women for the 2020 selection process. It is a method of working based on principles of ethics, transparency, inclusiveness, respect for human rights and maximum attention to safety. These clear objectives are also linked to the promotion of a sustainable supply chain, an increasingly integrated and modern governance structure and environmental management based on the reduction of emissions, the promotion of biodiversity

## Strategic pillars



and the spread of a circular economy approach that combines innovation and competitiveness. Two particularly significant factors have been added to Enel's strategic levers: digitalization and customer focus. Through a 5.3 billion euro investment over three years, Enel wants to digitalize assets, with particular focus on smart meters, remote control and system connectivity, implement an agile design for the main processes that affect customers, and increase its people's digital skills. This technological transformation could not exist without great attention to cyber security. In this regard, in addition to confirming the goal of obtaining accreditation for the Enel CERT4 from the national CERTs4 of 8 countries and creating affiliations

international organizations5, the Group is expanding its goals by scheduling 350 computer security checks (ethical hacking, vulnerability assessments, etc.) per year. Enel also has the ambitious goal of increasing its customer base by about 80% in three years, from 20 million to almost 35 million, by taking advantage of growing demand and capturing the needs of the customers. This is why the new e-Solutions Business Line was created, aiming to give customers the power to transform energy into value for everyone: an immediate, accessible, always connected and state-of-the-art reality with new offers and integrated solutions. This Plan features all the aspects of energy of the future:

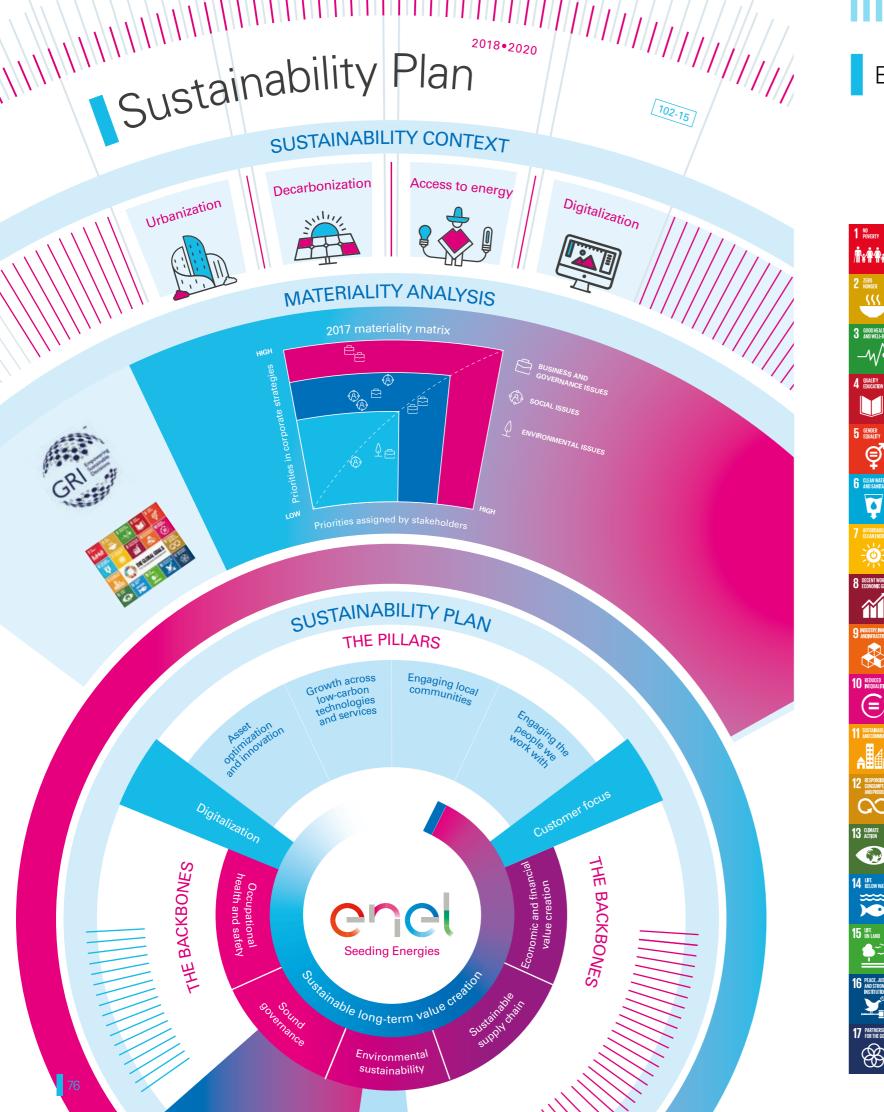
efficiency, flexibility, digitalization, electric mobility and the integration of renewables, as well as the new role of customers - no longer just passive users, but conscious main players with growing needs.





<sup>4</sup> Computer Emergency Response Team

<sup>5</sup> First and Trust Introducer.

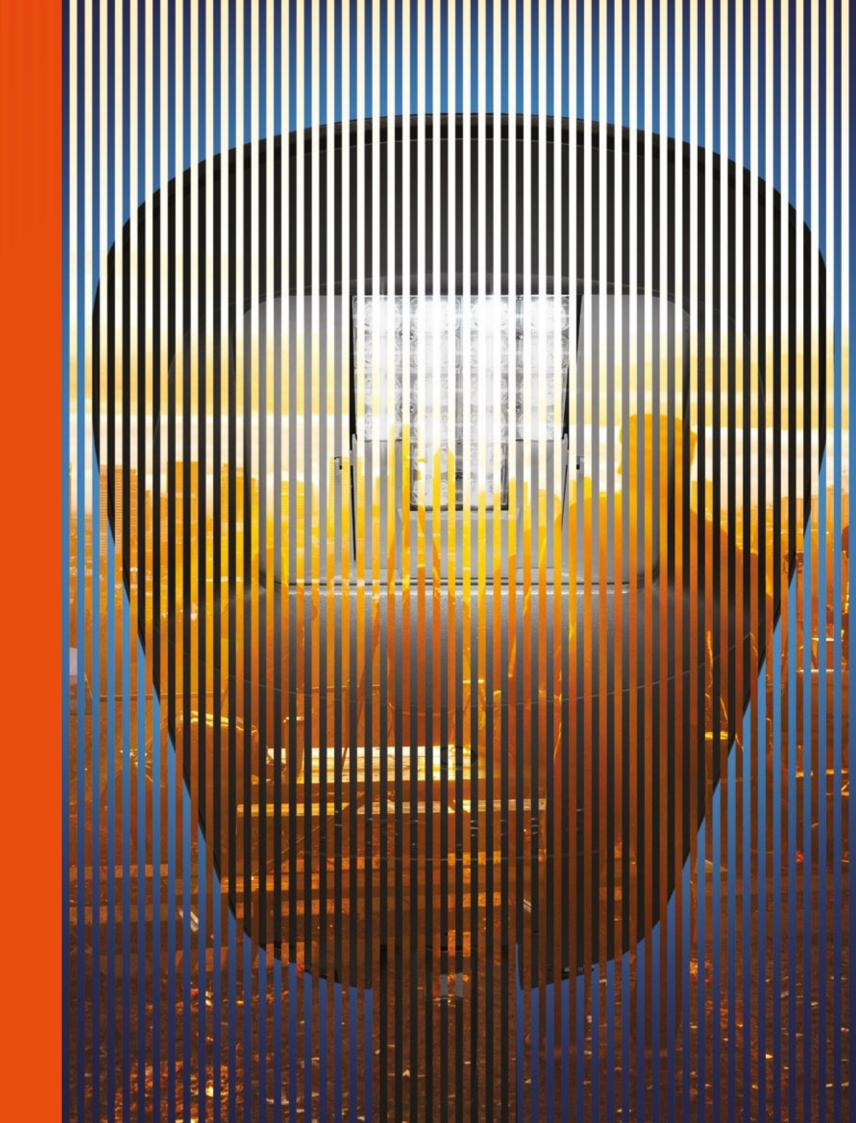


# Enel's commitment to the SDGs

102-15

•	Pillars						Backbon	nes			
1 NO POWERTY	Asset optimization and innovation	Growth across low-carbon technologies and services		Engaging the people we work with	Digitalization	Customer focus	Occupational health and safety	Sound governance	Environmental sustainability	Sustainable supply chain	Economic and financial value creation
POVERTY											
2 ZERO HUNGER						_		_		_	
3 GOOD HEALTH AND WELL-BEING		_				_		_			
			•				_				
5 GENDER COUNTRY				_							
6 CLEAN WATER AND SANITATION											
7 AFFORDABLE AND CLEAN ENERGY			•								
8 DECENT WORK AND ECONOMIC GROWTH			•								
9 INDUSTRY, INVOVATION AND INFRASTRUCTURE											
10 REDUCED NEQUALITIES											
11 SUSTAINABLE CITIES AND COMMUNITIES											
12 RESPONSIBLE CONSUMPTION AND PRODUCTION						_					
13 CLIMATE ACTION		•									
14 LIFE BELOWWATER											
15 UFE ON LAND											
16 PEACE JUSTICE AND STRONG INSTITUTIONS											
17 PARTNERSHIPS FOR THE GOALS		_									
		P	ublic com	nmitment to	the Unite	d Nations	☐ Are	eas covered	by Enel		77

Our commitment



# Communities and value sharing (1/2)

102-15

▶ 2017-2019 Plan: **Engaging local communities** 

**Activities** 2017 results **Targets** Education • ~600 thousand • 400 thousand nclusive and equitable Community quality education relations beneficiaries (2015-17) beneficiaries (2015-20) **Partnerships** Access to energy • 3 mil beneficiaries, mainly Affordable, Community • ~1.7 mil beneficiaries reliable, sustainable in Africa. Asia relations (2015-17)and Latin America and modern energy (2015-20) **Partnerships** Social development Sustained, inclusive Community • ~1.5 mil beneficiaries • 1.5 mil beneficiaries and sustainable relations (2015-17)(2015-20)economic growth **Partnerships** Strengthening of strategic partnerships Over 600 active **G** Partnerships partnerships and promotion of



# ▶ 2018-2020 Plan: **Engaging local communities**

**Activities Categories** 2020 targets S Education • 800 thousand beneficiaries nclusive and equitable Community quality education G Partnerships S Access to energy • 3 mil beneficiaries, Affordable, reliable, mainly in Africa, Asia Community sustainable relations and Latin America and modern energy (2015-20)**G** Partnerships S Social development • 3 mil beneficiaries Community inclusive and sustainable (2015-20)relations economic growth



Strengthening of strategic partnerships and promotion of operational

G Partnerships

**G** Partnerships























# Communities and value sharing (2/2)

102-15

▶ 2017-2019 Plan: **Engaging local communities** 

Engineering & Construction, Operation

& Maintenance)

**Activities** 2017 results **Targets Implementation** of new projects in support of the communities Community relations • 1,210 projects in which Enel operates in order to create shared value (CSV) Partnerships and to foster the energy culture Diffusion of the Creating Shared Value (CSV) Issue of CSV procedures model in the operationa at country level Industrial growth Development Development,

Community

relations



# ▶ 2017-2019 Plan: **Engaging local communities**

**Activities** 2020 targets Implementation of new projects in support of the communities in which Enel Community relations operates in order to create shared value (CSV) and Partnerships to foster the energy culture



Diffusion of the Creating Shared Value (CSV) model in the operationa units (Business Development, Engineering & Construction, Operation & Maintenance)

Industrial growth Community

relations

S

(1) REN: Global Renewables Energies. TGX: Global Thermal Generation



















of the "Sustainable

Construction Site"

model (in REN

and  $TGX^1$ )



# Communities and value sharing

 102-42
 102-43
 102-44

 103-2
 103-3
 413-1



Engaging stakeholders, sharing goals and impact assessment

Looking constantly and proactively to the society's needs and priorities, it is possible to take up new challenges and build an increasingly competitive business model.

Operating in a constantly changing world, where global phenomena come face-to-face with very different cultures and socio-economic contexts, is one of the main challenges that multinational groups have to face.

Responsible community relations is a pillar of Enel's Strategic Plan. Looking constantly and proactively to the society's needs and priorities it is possible to take up new challenges and build an increasingly competitive business model, developing new strategies and innovating in processes, partly scaling the solutions adopted up in the countries where Enel operates.

Enel is committed to respecting the rights of communities and contributing to their economic and social progress, interfacing daily with a wide range of stakeholders. Enel stands out for the use of a global and local approach, considering the different specificities of the country, through listening, cooperation and knowledge of local circumstances. Constant dialogue with communities and inclusive involvement of small and medium-sized enterprises and various organizations operating in the territory

allow us to build projects and solutions that respond to common priorities, promote local development and allow the creation of shared value over the long torm

Searching for shared value for the Company and its stakeholders provides an opportunity to combine competitiveness with the creation of long-term social value. Operating in such a vast geographical area necessarily requires engagement with different businesses and a thorough knowledge of the local area and the needs of the various stakeholders in order to identify targeted solutions. Local needs are connected to corporate objectives through a specific materiality matrix per site, to identify which projects and initiatives respond to shared priorities.

In 2017, with more than 1,200 projects and over 9 million beneficiaries in the various countries where it is present, Enel has made a concrete contribution to the social and economic development and growth of local areas. Initiatives range from the expansion of infrastructure to education and training programs and from initiatives aimed at

social inclusion to projects supporting cultural and economic life, all in line with the commitments to the United Nations Sustainable Development Goals (SDGs). These projects are mainly carried out through partnerships (over 600 in 2017) with international and local organizations to promote the development of local areas through innovative and tailored actions. Enel adopts an "Open Innovability" approach in which sustainability, innovation and openness to dialogue are at the heart of relations with partners. The progress made in terms of the Group's contribution to achieving SDGs

provides further confirmation of the sus-

tainability of the strategy.

The number of beneficiaries takes into account the activities and projects carried out in all the areas in which the Group operates (including companies consolidated at equity, the Group's foundations and non-profit organizations, and companies for which the BSO - Build, Sell and Operate mechanism has been applied).



## Enel's commitment to the SDGs

Goals Targets Progress



Quality education



800 thousand beneficiaries (2015-2020)

Approximately 600 thousand beneficiaries by 2017



Affordable and clean energy



3 million beneficiaries, mainly in Africa, Asia and Latin America

Approximately 1.7 million beneficiaries by 2017



Decent work and economic growth



3 million beneficiaries (2015-2020)

Approximately 1.5 million beneficiaries by 2017



Beneficiaries are the persons for whom a project is carried out. Enel considers only the direct beneficiaries for the current year.

## The Creating Shared Value model

A Creating Shared Value (CSV) model has been in place since 2015, integrating social and environmental factors into business processes and throughout the entire value chain. For the model to be implemented, it had to be defined and established within the Company at both cultural and operational level. In 2016, Policy no. 211 "CSV Process definition and management" was published. It defines how sustainability must permeate company processes across the board,

making it a shared responsibility. Furthermore, in 2017, the individual Group countries implemented the Group policy within specific organizational documents, defining the application methods of the CSV model based on their specific business characteristics and the context in which they operate.

The CSV model has 6 phases, that correspond to specific supporting applications, as shown below.

The CSV model tools and the site ma-

teriality matrix mean it is possible to identify short-, medium- and long-term actions that combine the Company's perspective with the needs of local communities through concrete and recognized initiatives. There is a particular focus at all times on identifying and protecting the local communities involved in the projects, in compliance not only with Convention 169 of the International Labour Organization and local regulations, but above all with the relevant traditions and cultures.

The model applies to the entire value chain, including business development, engineering and construction, and asset management and maintenance.

In order to boost the diffusion of the Creating Shared Value model, 2017 saw a number of internal workshops in which colleagues from various countries looked at practical cases. Thanks to the

proactive approach taken, this generated new solutions and ways to apply the integrated model to the business and to the local environment.

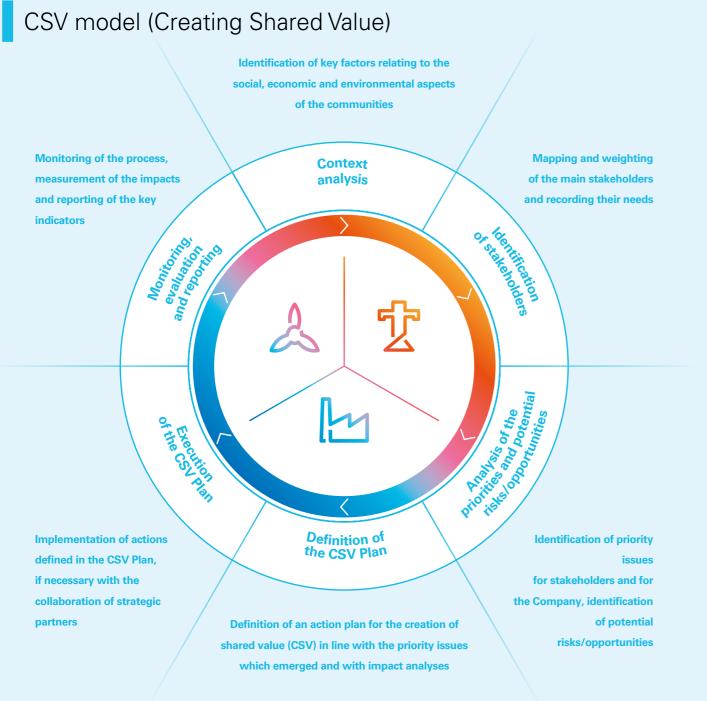
An inclusive approach towards the stakeholders also means circular economy solutions: infrastructure of decommissioned power plants can be can transformed into other ways to benefit the community, while involving various stakeholders. An example is the Futur-e project in Italy, which aims to turn 23 power stations into eco-sustainable places dedicated to science, art, culture or tourism, and new industrial activities. Further details on the project are available at https://corporate.enel.it/en/ futur-e, in a bid to provide maximum transparency to all information concerning the program.

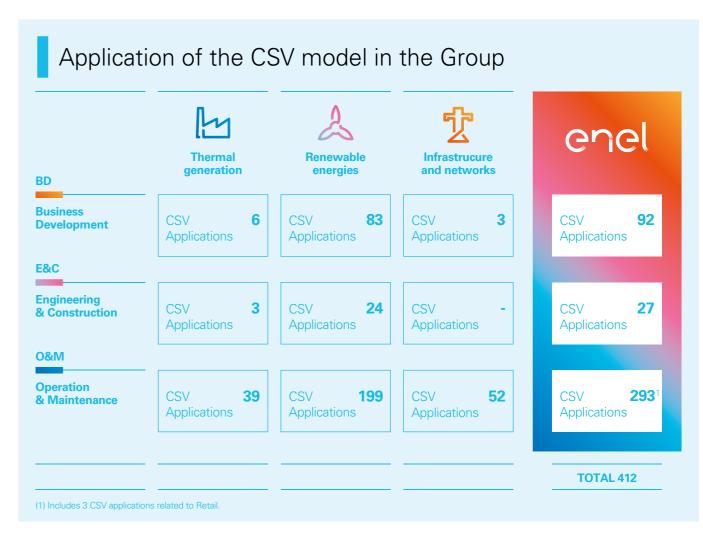
In 2017, there were 412 new applications<sup>2</sup> of the CSV model across the

various stages of the value chain: Business Development (BD), Engineering and Construction (E&C), Operation & Maintenance (O&M).

2 An application is the use of at least one CSV tool in relation to an asset, at any stage of the value chain and in any Business Line. CSV applications in the BD phase include applications relating to BD opportunities (also in initial stages) and business projects leaving the pipeline in 2017. They can also be related to assets in O&M if modernization projects are under way. CSV applications in the E&C phase may relate to assets transferred to the O&M phase at the end of the year. The number of CSV applications in Infrastructure & Networks (I&N) can refer to the concession area but also to areas identified by municipalities and substations. The applications of the CSV model take into account the activities and projects carried out in all the areas in which the Group operates (including companies consolidated at equity, the Group's foundations and non-profit organizations, and companies for which the BSO - Build, Sell and Operate mechanism has been applied)







Below are some examples of CSV projects that have involved various business areas in a number of countries where Enel operates.

### Transforming waste into something of value

#### **ARGENTINA: Infrastructures and Networks - O&M phase**

In Argentina, a circular economy initiative called "Social Recycling" is now underway for the reuse of disused material from distribution network maintenance activities. The initiative supplies wooden materials (such as cable reels, pallets, etc.) to a local foundation that produces furniture from recycled material. This furniture is then sold at cheap

prices, so low-income families to buy it. Furthermore, it was possible to equip a school canteen to the south of Buenos Aires thanks to a specific agreement, creating a comfortable environment for students, most of whom come from foreign families and/or families with financial difficulties. The project enables the inclusion and integration of vulnerable

sections of the population, while creating new jobs and developing specific technical skills.

#### Ш

#### **BRAZIL: Renewable Energies - E&C phase**



oncile business development and the needs of local communities, Enel has launched initiatives in the areas near the plant, including creative recycling workshops to produce furniture and objects commonly used with construction materials, such as pallets and reels. Some local carpentry workshops opened after these training activities came to an end. The project is therefore an example of a circular economy, giving new life to

waste materials, and opening dialogue with the communities involved, allowing the growth of specific skills and the improvement of the economic conditions in those communities.





#### **Customer focus and engagement**

#### **CHILE: Infrastructure & Networks and Market**

Transparency, effectiveness and proximity are key elements of customer relationships. The "Enel Chile in your neighborhood" initiative involves customers in specific projects and initiatives, including the construction of mobile offices in the most deprived areas of Santiago with high populations

and limited access to services.

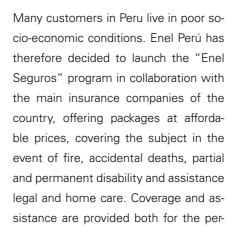
These offices mean customers can save costs and time in paying bills, obtain additional information on the services offered by the company and report any network failures.

This is an inclusive and shared value approach that allows the company to

have direct contact with customers and to promote new, more efficient consumption models and solutions that are increasingly sustainable from an economic, social and environmental point of view.



#### **PERU: Market**



son who has taken out the policy and for their spouse/cohabitant. In the event of the death of an insured family member, the policy also guarantees payment of electricity bills for one year following the death.

This model creates value for all parties involved as it improves the quality of life of those facing difficult economic conditions (200 thousand policies provided so far). It also allows insurance companies

that have joined the initiative to reach a type of clientele they might not usually be able to attract with their standard offers, opening up Enel to new businesses and insuring against the risk of non-payment of bills.





### Local entrepreneurship development

#### **RUSSIA: thermal generation - O&M phase**

The Group company that operates four thermal power plants in Russia, Enel Russia, has launched a project for collaboration and engagement with local stakeholders in recent years, with a view to strengthening relations with the communities living in areas close to the plants. After a local materiality analysis carried out through interviews with citizens and local organizations, Enel Russia started specific collaborations with a number of local social centers. These centers support people involved in cases of domestic abuse, child exploitation and disability, and provide support for families. A model of social entrepreneurship was born from this collaboration which provides support in the creation of goods, products and works of art and their sale, including through courses and events in the area.

The project offers people in difficulty a



greater opportunity for integration into society through the creation of small businesses. At the same time, the company has been able to benefit from the collaboration with the centers by involving staff in voluntary activities and cultural exchanges, and taking advantage

of the additional services offered by the centers themselves such as courses for employees, street art, etc.



#### Futur-e

#### **ITALY: the Santa Barbara project**

The former Santa Barbara mining area is an area of about 1,600 hectares near the Santa Barbara thermal power plant, in the Municipality of Cavriglia in Tuscany. Since 1994, it has been out of use following the depletion of the lignite mining basin. This area has been included in the Futur-e project (https://corporate.enel.it/en/futur-e) transformation program, under which it is to be converted from an unused mine to provide opportunities for land development.

In 2017, Enel launched a project for the recovery and redevelopment of the area together with citizens, institutions, universities and local and national companies. The first meeting attracted about 70 people including representatives of institutions, experts, entrepreneurs, local associations, key local figures and Enel's people. A number of urban plans were identified based on various studies of the local economic context, the expectations of the local communities

and some possible planning scenarios for the development of the area. An international team of 60 students enrolled in their fourth and fifth years at the faculties of architecture and urban planning at Milan Polytechnic and the University of Florence is working on these development scenarios.

A number of international competitions will be launched based on the scenarios defined in the first phase of the project. These will feature a main theme of the

search for a perfect balance between social, environmental and economic sustainability, while focusing on the issue of employment. Enel, institutions and the academic world will assess the proposals to check whether they are suited to the expectations of the local communities and to ensure the sustainable development of the area and the scope for integration with the existing redevelopment project.





### **Protection of biodiversity and power lines**

#### **ROMANIA: Infrastructures & Networks - O&M phase**

Enel Romania is the Group company that manages the distribution network in three main areas of Romania, covering one third of the country's energy distribution. The country has a lot of white storks, which often build their nests on low-voltage power-line pylons, causing injury to themselves due to electrocution and damaging the electricity grid, with consequent interruptions of the electric service.

In 2017, Enel Romania launched a pilot project in collaboration with the Ornithological Society of Romania (SOR) and with the other distribution companies of the country. The aim was to conduct a census of the population of white storks in the country, to collect data and information on the number and location of the nests near the network, and to adopt measures for the protection of the birds and the power lines involved. The company developed a smartphone app to facilitate the collection of this information which involved not only Enel's people but also local communities.

During the pilot stork census campaign, more than 2,800 nests were found in just under a month, most of them located on power-line pylons. Thanks to the information obtained, it was possible to map the areas and power lines at risk, in turn allowing adequate protection measures to be adopted. Specific nest supports were built and installed on the poles concerned and electrical cables were covered with an insulator, ensuring not only the protection of biodiversity but also service improvement thanks to the reduction in the number of repairs on power lines. The initiative is part of the project that has been in place at Enel Romania since 2010 and has seen the installation of over 650 support platforms for the nests to date and the use of more than 3,800 insulation sheets on cables and electric poles of the network.





#### Sustainable construction site

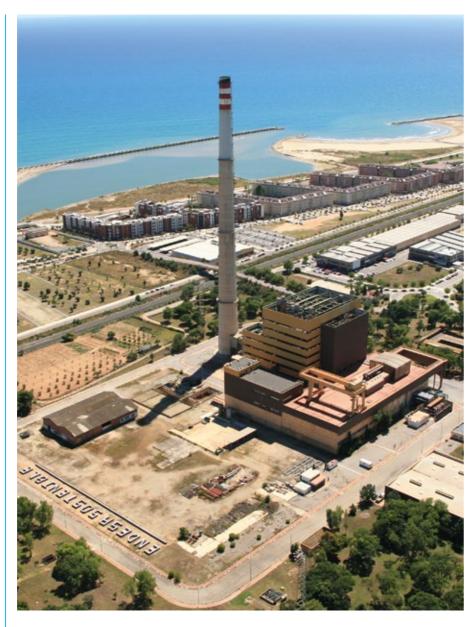
#### **SPAIN: thermal generation - E&C phase**

The Foix power plant, located in Cubelles, near the city of Barcelona in Spain, is a former oil-gas power plant consisting of a 520 MW unit, which was in service from 1979 to 2010. In 2015, the national administration authorized its closedown and decided to dismantle it by March 2019. Decommissioning and dismantling of the power plant began in March 2017 and will last for approximately 21 months. The site is managed according to Enel's "Sustainable Construction Site", which includes actions to reduce the impact on the environment and the preservation of natural resources, including the collection and reuse of rainwater, the use of solar energy and LED lighting in construction sites, the use of low-emission vehicles and sustainable materials, such as biodegradable oil, and the prevalent use of local suppliers to foster economic development. Enel's aim with the sustainable site approach is to foster integration and collaboration with contractors, lo-

In accordance with circular-economy principles, the dismantling of the plant, including the demolition of the chimney (about 180 meters high), is carried out through a selective demolition process that optimizes the separation of different materials to maximize their reuse and recycling. More than 70% of all demolished materials are expected to be recovered, including more than 24 thousand tons of metallic material, more than 47 thousand tons of concrete and about 6 thousand tons of special waste. In addition, about 40

cal suppliers and community members

to achieve common goals.



tons of materials in the disused plant were donated and sold as second-hand parts. This included different machinery and laboratory instruments donated to the local scientific community, part of the 300 m² ceramic mural by local artist Pedro Llorente, installed on the facade of the turbine building, donated to the Municipality of Cubelles, as well as books, an early 20th century

press that still had the anchor symbol of the port. The Foix site is the first example of large-scale application of the selective demolition technique in Enel.

Ш

# Main ongoing projects and relocation management

102-42 102-43 102-44 103-2 103-3 413-2 EU22 DMA EU (former EU19) DMA EU (former EU20)

Enel's 2018-2020 Strategic Plan focuses increasingly on the growth of renewables and the development of low-carbon technologies, including the digitalization of networks, the installation of charging stations, software platforms and public lighting, thus abandoning investments in coal plants and the construction of large infrastructure projects with a high environmental impact. This strategy allows the Group to be more flexible and to minimize the impact on the ecosystem, local area and community.

Operating across such a vast geographical area necessarily implies engagement with different entities and an in-depth knowledge of the local area and the needs of the various stakeholders, in order to identify targeted solutions. Each infrastructure project is therefore considered in view of observations from the communities and the stakeholders involved, which in some cases (mainly involving relocations) can result in criticism or partial uptake. In the latter cases, the Group could be exposed to reputational risks, also in relation to interaction with local suppliers, as well as operational risks linked to delays in the execution of projects or their closure, with possible repercussions also on the supply chain. The involvement of stakeholders in planning processes and in the development of infrastructure is extremely important, especially for those cases in which the construction of a new plant involves the relocation of a part of the population residing in the surrounding areas. Relocation management cannot be separated from the involvement of the populations and the people concerned - or from a careful assessment of the psychological and social problems that can occur at individual and collective level. The approach in selecting potential sites is therefore to minimize the need for relocation of the population as much as possible through an analysis of the economic, political, cultural and socio-demographic aspects, including analysis of the daily life of the communities living in the area of influence, the distribution of the population, organizational forms, the levels of employment and pay. In cases where the relocation option goes ahead, the plan is developed in compliance with international standards on the subject, taking into consideration any impacts on the different forms of physical, human, economic, environmental and cultural resources of the populations concerned. Where it is necessary to implement resettlement projects, these are implemented in compliance with the legislation in force in the country involved and with any local regulations that specify the relocation conditions and the methods for calculating the related economic compensation. Enel's sensitivity on this issue is also reflected in the Human Rights Policy which was approved by the Board of Directors in 2013. Below are the most significant cases underway, the positive and/or negative impacts on the territory (actual or 'feared') and the manner in which the Group companies involved are promoting a proactive dialogue to achieve solutions that are as widely shared as possible in relation to plants built in the past but which have remaining issues



### **Bocamina plant (Chile)**

The Bocamina II plant is a 350 MW coal-fired thermal power plant, built since 2007 in the Municipality of Coronel, Bío Bío Region, Chile. The plant is part of the Bocamina coal-fired power plant complex, whose first unit of 128 MW was built in the 1960s and put into operation in 1970. Construc-

tion of the second unit took place in an area adjacent to the first, where about 1,300 families were living.

Since the construction of the second unit, the first agreements with local communities have been signed in the Municipality of Coronel to manage the relocation processes of families living in the central area. At the end of 2017, 1,099 out of a total of 1,337 families have been relocated. Specific areas requiring attention emerged during the process, including the need to rebuild the school and church that were present in the original site in the new area or any defects in the con-

struction of about 200 houses, which made such a relocation more difficult for families.

Therefore, in January 2017, Enel decided to start a detailed analysis, taking the main international relocation standards into account, including the IFC standard no. 5 "Land Acquisition and Involuntary Resettlement", to define a specific action plan aimed at creating an ever-greater integration between the Company and the Coronel community.

The main actions undertaken concerned

- > the creation of a joint technical working group (community, company and CITEC - University of Bío Bío) aimed at carrying out a census of houses that require improvements and to draw up the relevant
- > the creation of a dashboard summarizing the impacts on the quality of life of families because of the constructive defects of the houses in which they lived since 2010 and the quantification of the related compensation;
- > the reconstruction of the school and the church in the new neighborhoods;
- > the launch of the project "Mi barrio, nuestro barrio" ("My neighbourhood, our neighbourhood") which includes redevelopment projects for new and pre-existing neighbourhoods

A project was started in the Cerro Obligado community in collaboration with a local NGO to combine economic-social development and circular economy with the aim of training 4 women in eco-sustainable construction techniques. Thanks to this project, each of them opened their own neighbourhood carpentry shop where they recycle pallets and other materi-



als for the construction of ecological objects and furniture. The carpentry shop is also equipped with electric vehicles for the deliveries of the works

Furthermore casa abierta Coronel is present, a reference point for the whole community, in line with the Open Power vision of the Group, where it is possible to openly dialogue with the company, receive information, communicate any complaints and evaluate solutions with a group of experts. The basic criteria are transparency, fairness and non-discrimina-

Finally, Enel has invested in environmental projects related to the plant in recent years, including the construction of two "domes" (unique in the country), covering the coal storage area. In mid-2017, it also launched a pilot project to transmit the CO2 emissions data of the Bocamina I plant in real time to the Superintendencia del Medio Ambiente (SMA). Bocamina I is the first plant in Chile to carry out this

Further information is available in the Sustainability Report of Enel Generación Chile (www.enelgeneracion.cl)

## Alto Bío Bío plants (Ralco, Pangue and Palmucho - Chile)

Enel Generación Chile manages 3 hydroelectric plants in the Alto Bío Bío area (Ralco, Pangue and Palmucho), an area that is characterized by the historical presence of Pehuenche indigenous

peoples. Numerically, the Pehuenche population in the area of influence of the plants totals about 3 thousand people, made up of 800 families in 10 communities (Pitril, Callagui, El Avellano, Aukiñ Wallmapu, Quepuca Ralco, Ralco Lepoy, El Barco, Guayalí, Pewen Mapu and Ayin Mapu).



#### Agreement with Alto Bío Bío families

In February 2017, an important collaboration agreement was signed with 25 families from the Aukiñ Wallmapu community to start local development projects. The agreement settles the conflict related to the impacts generated during the construction of the Ralco plant.

In March 2017, Enel Generación Chile officially handed over its ancestral cem-

etery to the community of El Barco. The handover took place thanks to the support of the Director General de la Corporación Nacional de Desarollo Indigena (CONADI) of the Bío Bío Region, thus solidifying the response to a commitment that the Company had taken with the community following the construction of the Pangue power plant.

In June 2017, Enel Generación Chile signed two agreements with the El Avellano and Quepuca Ralco communities. The agreement settles the conflict caused by the impacts on these communities of the construction of the Ralco



#### Diversification program for products derived from

hazelnut processing, Alto Bío Bío

Following requests made mainly by the El Avellano community, a project is now underway to develop Chilean hazelnut-based products. Enel Generación

Chile has promoted this project together with the University of Concepción, the El Avellano community, the Alto Bío Bío Municipality and the Pehuen Foundation, thus allowing a historical activity to become a micro-entrepreneurial activity.



#### Shared and sustainable water management

The Ministry of Public Works and Enel Generación Chile signed an agreement, subsequently ratified also with the local associations that manage the irrigation channels of the Saltos del Laja area, in the Bío Bío Region. The aim of the agreement is to improve the flexibility in the use of water, ensuring the supply to families and the production of energy. The initiative is the result of the joint work of the Canalistas de Laja and Canalistas Zanartu associations, Dirección de Obras Hidráulicas, Dirección General de Aquas, Enel Generación Chile, Ministerio de Agricultura, Ministerio de Energía and Comisión Nacional de Riego.

In December 2017, an agreement was also signed with the Municipality of Antuco to start a pilot project to promote tourism in the area of Salto del Trubunleo during the summer.

To manage contingent or emergency situations in a rapid and coordinated manner, a specific communication system has been set up between the Enel Generación Chile Panque and Ralco power plants, the Angostura power plant in Colbún, the Municipalities of Alto Bío, Quilaco and Santa Bárbara and the Ministerio del Interior y Seguridad Pública (ONEMI) and the Ministry of Energy. Further information is available on the Enel Generación Chile Sustainability Report (www.enelgeneracion.cl).





## **El Quimbo plant (Colombia)**

El Quimbo is the most impressive engineering work carried out by the Enel Group in recent years and one of the largest hydroelectric investments in South America. With an installed capacity of 400 MW, the plant is set in the Huila region, about 350 km south-west of Bogotá. The project involved a total investment of about 1.2 billion US dollars, accompanied by a major assistance plan for local populations, including the construction of new housing units, the construction of new bridges, including the longest rural viaduct of the country, and initiatives to protect biodiversity in the area, such as the restoration of over 11 thousand hectares of tropical vegetation on the left bank of the reservoir and the construction of veterinary res-

Since the beginning of the project, the Group's generation company in Colombia, Emgesa, has shown its absolute willingness to engage with regional and national stakeholders and has developed a specific socio-environmental management plan. Specific initiatives for families who live or own property in the area of influence of the project, as well as for those who work or have commercial activities and services in this area, have been agreed in an open, collaborative manner. The program also addresses those who carried out non-formal economic activities locally. The families surveyed and in possession of the requisites envisaged were given the opportunity to decide between relocation (collective/individual) and the sale of their land.

Of the 152 families who opted for relocation, 40 chose individual relocation, or receiving land for a business project or a home. The remaining 112 families opted for relocation to the 4 collective settlements (Montea, Santiago y Palacio, Llano de la Virgen, San José de Belén), with new homes equipped with essential services and located in an urban context with schools, churches, multifunctional sports facilities, football fields, green areas, waste collection centers and waste water treatment plants.







psychological, family and community support actions for relocated families **157** 

collective training courses

183

individual advice sessions on the realization of agricultural-zootechnical production projects (PPA - proyectos productivos agropecuarios)

As part of these activities, specific training courses have been developed and agreements with institutions and other local entities involving one or more areas have been established, including: basic accounting, measurement methods, techniques for improving pastures and treatments for disease prevention in cattle.

Through the initiative "Sembrando va-

lores, cosechando lideres" ("Sowing values, creating leaders"), Emgesa has developed actions to promote positive values and attitudes in the management of children and young people of resettled populations, and to strengthen the sense of local belonging by giving value to each family member.

In 2017, the company finalized the activ-

ities associated with the "salud y saneamiento básico" program, dedicated to health issues with a positive impact on the communities. In the same way, it also promoted the expansion of communication channels between municipal and regional authorities in response to public health events. In particular, the following activities were carried out:

activities to promote healthy living conditions



Preparation and publication of a brochure to promote awareness and healthy lifestyles

97

training courses on health

courses on healthy lifestyles

Part of the resettlement and recovery process also involves strengthening social and community organizations. Training and institutionalization work in 2017 was carried out on organizations such as the "Junta de Acción Comunal

de Garzón" and the "asociaciones de usuarios", who will have to administer and manage irrigation districts. Similarly, Emgesa has promoted institutional alliances with the municipal administrations, the government of Huila, the

"Agencia de Desarrollo Rural y Asojuntas Garzón", to support community associations and sustainable development processes.



#### Local economic development

.....

100%

of the families of collective resettlements in Nuevo Veracruz and Santiago y Palacio have an agricultural production plan

In 2017, several training sessions were held aimed at providing tools to achieve a self-sufficient productive economy. These had three fundamental aspects: rational use and management of water for consumption and irrigation; production, marketing and industrial development techniques; administration and organization of producers in order to promote production and marketing.

17 PPAs

closed in 2017, after 100% of the agreed investments had been completed and their objectives achieved

The Sirolli "Enterprise Facilitation®" en methodology was also adopted, which involves an inclusive, bottom-up and collaborative approach aimed at creating a network of skills (technical, managerial and marketing) to launch new businesses. The project includes periodic meetings and panels organized by a facilitator

to promote and enhance business ideas

and opportunities by involving potential

entrepreneurs and interested stakeholders. After just one year, more than 170 local business initiatives have been launched thanks to this approach.

over 1,500

technical assistance sessions



#### **Environmental management**

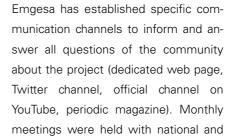
In 2017, programs continued with a view to preventing, managing and monitoring the environmental impact associated with the project. In accordance with the provisions of the Environmental Authorization, the following have been established: 1. a wildlife management plan, which has enabled over 33 thousand animals to be rescued and treated; 2. a management program for fish and fisheries; 3. a habitat recovery plan for wild fauna, which calls for the planting of almost 7 thousand plants and the in-

stallation of various structures for the protection of fauna. Emgesa has also built a research center, whose work continued during the year for the breeding of native species for repopulation. It is also home to a laboratory specialized in forestry seeds, an arboretum and an environmental classroom. More than 1,500 people attended the 120 guided tours of the research center during the year. In July 2017, the "Cerro Matambo" Civil Society Natural Reserve (RNSC) was also set up within the natural na-

tional parks of Colombia. With an area of over 900 hectares, it is the largest park in the Huila Department and the second largest reserve in the dry tropical forests above the Magdalena river basin. In the largest part of the reserve (about 600 hectares), conservation and monitoring activities of natural assets are being developed, while the rest is used for ecological recovery through the reforestation of native species.



#### **Communication channels**



international interest groups, as were periodic monitoring meetings with the Huila government, municipalities, environmental authorities, control bodies and representatives of the company, and guided tours of the project were offered

Further initiatives and information are available in the Emgesa Sustainability Report 2017 (www.emgesa.com.co/en) and on the project website (http://www.proyectoelquimboemgesa.com.co/site/default.aspx).

#### Legal proceedings

In relation to the El Quimbo project for the construction of a 400 MW hydroelectric plant by Emgesa in the Huila region (Colombia), the Ministerio de Minas y Energía and the AUNAP (Agriculture and Fisheries Authority) jointly presented a protection agreement on December 24, 2015 before the criminal court requesting authorization as a precautionary measure. On January 8, 2016, the criminal court decided to accept the precautionary measure requested by the Ministry and AUNAP, and provisionally authorized the El Quimbo to begin operation with immediate effect. The precautionary measure granted by the criminal court would remain in force until the judge of the Huila dealt with the merits of the matter, namely the revocation or confirmation of the precautionary measure previously issued by the local

administrative court. In a ruling of February 22, 2016, the Huila judge initially ruled on the merits by provisionally authorizing production for a period of six months. Pending the proceedings, the same judge asked Emgesa to prepare a technical project to ensure compliance with oxygen levels and the issue of a guarantee of about 20,000,000,000 Colombian pesos (about 5.5 million euro). With the ruling of April 11, 2016, the Huila Administrative Court again confirmed the temporary withdrawal of the precautionary measure until August 2017. Therefore, in the absence of contrary legal measures, the Quimbo plant is continuing to produce energy since the oxygenation system adopted by Emgesa has so far allowed the oxygen levels imposed by the Court to be achieved. The proceeding is currently at

a standstill due to the Court's assessment of a settlement proposal between the parties, presented on November 27, 2017, and of which the competent authorities were also informed. On January 24, 2018, the Huila Court delivered a judgment opposing the acceptance of the settlement agreement that was challenged by the parties.

For more details, please refer to the description contained in the Enel SpA Annual Report at December 31, 2017 available on the website www.enel.com.



# Other significant facts

### HidroAysén (Chile)

HidroAysén is a partnership between Endesa Chile (now Enel Generación Chile) and the Chilean company Colbún for the development of a hydroelectric project with a capacity of 2,750 MW. In 2014, the Chilean government revoked the project license after protests by environmental groups. In line with the strategy adopted, Enel declared at the

beginning of 2015 that the project is not part of the project portfolio under development. In November 2017, Enel and Colbún officially ended operations and proceeded to close the partnership.





### **Bayan (Indonesia)**

As part of the low-carbon strategy and the protection of human rights, in October 2017, Enel sold its 10% stake in the Indonesian coal producer

PT Bayan Resources Tbk ("Bayan"), currently held through Enel's fully-owned subsidiary Enel Investment Holding BV, to Bayan's controlling shareholder Mr. Dato' Low Tuck Kwong.



### **Western Sahara Project**

In March 2016, a consortium of three companies - Enel Green Power, Siemens Wind Power and the Moroccan energy company Nareva - won a bid for the development, construction and operation of five wind farms with a total capacity of 850 MW. Three of the plants will be developed on Moroccan territory (Midelt, Tanger and Jbel Lahdid), the remaining two in Western Sahara, where the Tiskrad wind farm will be developed in Laâyoune, with a potential installed capacity of 300 MW, and the Boujdour wind power plant, in the province of the same name, with an installed potential capacity of about 100 MW. It is expected that all five plants will be built and completed in the period 2018-2021. Their construction will require a total investment of around 1 billion euro.

Currently, Enel Green Power and Nareva are finalizing the contract with ONEE (Office National de l'Électricité et de l'Eau potable) for the final recognition of the best offer. The construction of the first plant located in Midelt will begin during the second half of 2018. According to the updated tender schedule, the Boujdour wind farm will be the second project to be developed and construction should begin in 2019.

In preparing the tender described above, Enel conducted a preliminary analysis of the social, economic and environmental context ("SEECA") with the help of external specialists in the areas where it planned to build the plants. The SEECA identified the relevant socio-economic issues and specific needs of local communities which are, among others: infrastructure development, education development, health care, service development, poverty, social services, land ownership and the use and protection of cultural heritage.

In particular, an assessment of the environmental and social impact (Environmental Social Impact Assessment - ESIA) has been carried out, in line with the standards of the International Finance Corporation (IFC) and the guidelines of the European Investment Bank for the Midelt project and is underway for the Boujdour project, while it will be developed and subsequently implemented for the remaining projects.

A stakeholder consultation process was conducted in Midelt, Boujdour and Jbel Lahdid. A question and answer session was held at the end of every consultation. The process of analyzing the impacts and benefits of the project for local stakeholders will guide the definition and implementation of the Sustainability Plan for each project.

Enel Green Power operates in full compliance with laws applicable to the investment in question. Furthermore, the investment does not involve extractive activities, and the use of local renewable resources will support the social, economic and environmental development of the various areas involved.

Finally, the investment respects the

principles adopted by the international community in relation to the protection of the environment and the reduction of emissions deriving from coal.

Enel Green Power plans to carry out a process to identify which areas require the development of possible actions starting from a socio-anthropological analysis of the territorial context and the definition of a specific Sustainability Plan for each project through the application of the sustainable construction site. Everything is developed and followed while taking into consideration activities that the Company carries out for the protection and respect of human rights in line with international standards such as the relevant due diligence process (for further details see the chapter "Getting to know Enel - Values and pillars of company ethics").

# Value for countries and local areas

103-2 103-3 203-1

Enel makes a tangible contribution to the social and economic development and growth of the local areas and communities in which it operates through various types of interventions, from the expansion of infrastructure to education and training programs, from initiatives aimed at social inclusion to projects supporting cultural and economic life. The London Benchmarking Group (LBG) method, defined by a working group of over 100 international companies, identifies a measurement model that allows for clear determination and classifica-

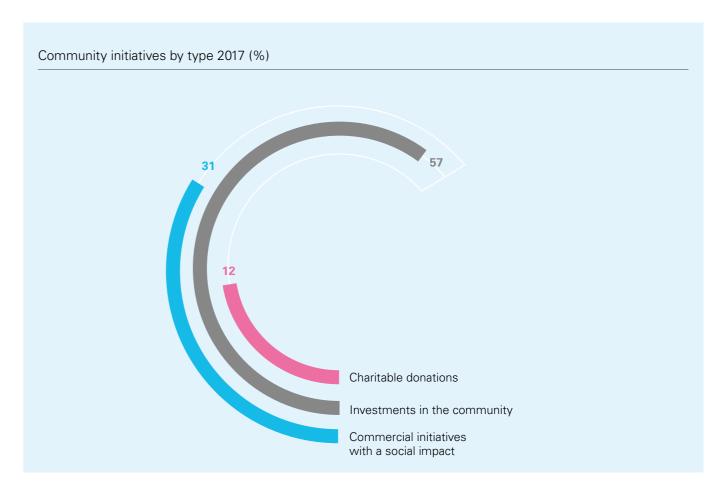
tion of the Company's contributions to the development of the communities in which it is present.

According to the LBG standard, community spending can be distinguished as:

- charitable donations: donations made pro bono and without obligations for the beneficiaries, except to allocate the donation for charitable purposes and non-profit associations. This item for Enel includes all monetary and "in-kind" donations, including those for philanthropy and solidarity activities;
- > investments in the community: medium-long term involvement in community support projects, also in partnership with local organizations, aimed at tackling significant problems both for the local area and for the Company. For example, projects linked to a wider strategy for the benefit of the community, such as "Access to electricity", or specific

- initiatives dedicated to communities close to the plants are included in this category;
- commercial initiatives with a social impact: contributions to activities related to the "core business", in which the Company promotes its own brand and its own "corporate identity". Examples of such initiatives are marketing campaigns that also provide benefits for the community or that include charitable contributions.
  In 2017, Enel's overall contribution to the communities in which it operates was over 90 million euro.







Ш

## **Enel Cuore Onlus**

Enel Cuore Onlus was founded in 2003 by Enel's desire to express its commitment to social solidarity in a transparent manner, support to communities not just through philanthropy but as part of a broader concept of the corporate social role towards which Enel aims. The year 2017 was one in which natural events, in Italy and abroad, had a decisive influ-

ence on the choices of the non-profit organization. Faced with the earthquake that hit Central Italy in August 2016, the earthquake in Mexico and the devastating flooding of Peru, Enel Cuore has immediately committed itself to supporting the affected populations, combining its economic contributions with those of the Enel Group for the reconstruction of schools and meeting places for the affected communities. Enel Cuore's commitment to the issue of unaccompanied foreign minors arriving in Italy on the run from countries at war was strongly felt. As part of the European EPIM (Europe-

an Programme for Integration and Migration) initiative, Enel Cuore committed to enhancing and innovating the methods for taking care of minors and unaccompanied young foreigners in Italy in collaboration with the European foundations and the leading Italian banking foundations, through the "Never Alone, for a possible tomorrow" campaign to support non-profit organizations. Below are some examples of projects. For further information, please see the website www.enelcuore.it.





### "Fare scuola" Project

Intervening and improving the quality of some places related to different school environments over a period of 3 years in 60 nurseries and primary schools in Italy. The territories are identified in such a way as to favor those schools which, in a context of major economic, social and cultural disadvantages, represent a point of reference for the communi-

ties. The project was developed in the 2015-2017 and achieved the intended objective through the implementation of interventions aimed at improving and qualifying the school environments in 60 schools distributed throughout Italy. Furthermore, new types of interventions were started in the schools identified in 2017. These interventions involved

children with severe disabilities and children with special educational needs.

Project carried out in collaboration with the "Reggio Children Foundation - Loris Malaguzzi Centre".



# "Viva gli anziani! Una città per gli anziani, una città per tutti" Project

Preventing and combating social isolation and improving the care and quality of life of the elderly. The project developed in 2016-2017 was aimed at an elderly population aged over 75 in 15 cities. The project aims to offer an alternative to traditional residential solutions. In particular it intends to

promote the use of the sharing economy as a multiplier of resources, to enhance mutual aid systems and to create an integrated network of services, which are an important resource for the quality of life of the elderly.

The growing response received meant

Project carried out in collaboration with the Comunità di Sant'Egidio.



# 2 calls to action to invest in disability: "Mettiamo su casa" and "BES - Bisogni Educativi Speciali"

the project was extended for 2018.

Support and stimulate the third sector in collaboration with other partners by launching two campaigns on their site. The first campaign "Let's make a home!", in collaboration with FISH Onlus (Italian Federation for the Overcoming of Handicap Onlus) and with the National Council of Architects, Planners, Landscapers and Conservatories, aims to build active and positive customized life paths which will gradually accompany the person with intellectual and relational disability towards living and working autono-

my, involving the whole family in this delicate process. Enel Cuore and its partners have given priority to the proposals that envisage innovative and participatory living life models (for example, flexible residency, co-housing, condominium) with attention to home automation, design and the social context of reference. With the second campaign, "School inclusion of children with special educational needs (BES)", Enel Cuore has decided to support and promote the third sector in partnership with schools throughout

Italy to promote and implement projects that specifically deal with children with special educational needs.



# Our people and their value

102-15

▶ 2017-2019 Plan: Engaging the people we work with

SDGs	Activities	Categories	2017 results	Targets
8	Climate survey	S Listening and dialogue	• n.a.	• 100% of people <sup>1</sup> involved 84% participating in 2020
8	Performance appraisal	S People growth	• 100% of people <sup>1</sup> involved 99% appraised 94% interviewed (feedback)	• 100% of people <sup>1</sup> involved 99% appraised 94% interviewed (feedback) in 2020
5	Gender - % of women in selection processes	S Diversity S People growth	• 35% women²	• around 50% women in 2020
3 8	Extension of Travel Security model	S Security	• 83% of international and intercontinental travel <sup>β</sup>	100% of Enel countries with an integrated Travel Security process by 2020
8	Disability - Appointment of focal points	S Diversity	• Focal points appointed in 14 countries <sup>4</sup>	• In all the main countries in 2017
8	Nationality - Expat employees with tutors - Young Mobility Program (< 35 years)	S Diversity S People growth	• 100%	• 100% by 2020
4 17	Scholarships available for employees	<b>S</b> Training	• 162 <sup>5</sup>	• 480 (2017-20)



# ► 2018-2020 Plan: Engaging the people we work with

SDGs	Activities	Categories	2020 targets
4	Promotion of digital skills' dissemination among all employees	<ul><li>S People growth</li><li>S Training</li><li>T Technologies and digitalization</li></ul>	• 100% of people involved
8	Climate survey	S Listening and dialogue	• 100% of people <sup>1</sup> involved 85% participating in 2020
8	Performance appraisal	S People growth	• 100% of people¹ involved 99% appraised 95% interviewed (feedback) in 2020
5	Gender - % of women in selection processes	S Diversity S People growth	• around 50% women in 2020
3 8	Extension of Travel Security model	S Security	• 100% of international and intercontinental trave <sup>β</sup>
8	Disability - Appointment of focal points	S Diversity	In all the main countries
8	Nationality - Expat employees with tutors - Young Mobility Program (< 35 years)	S Diversity S People growth	• 100%
4 17	Scholarships available for employees	S Training	• 390

<sup>(1)</sup> Eligible and reachable people who were part of the workforce and have been active for at least 3 months.





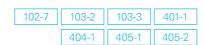
<sup>(2)</sup> Selection processes involving blue collars are not included.

<sup>(3)</sup> Target redefined as "% of Enel people's travels authorized and monitored by integrated Travel Security Process".

<sup>(4)</sup> All the countries monitored about diversity and inclusion.

<sup>(5) 145</sup> in the academic year 2016/17.

# Our people and their value





nel puts the people who work for the Company at the center of its business model. By doing so, the Company encourages an open and inclusive approach that helps people to express their potential – given their experience and background – while also enhancing the diversity that generates new ideas and opportunities. The pro-

found changes in the world of energy, much of which are driven by technology, require a significant cultural and organizational shift, which must be twinned with a more agile and sustainable approach as the Company moves forward. This commitment is reiterated in Enel's new Strategic Plan 2018-2020, which was presented in London in November

2017. The Plan sets out a model whereby human capital management combines with industrial pillars in the long-term sustainable value creation for all categories of stakeholders.



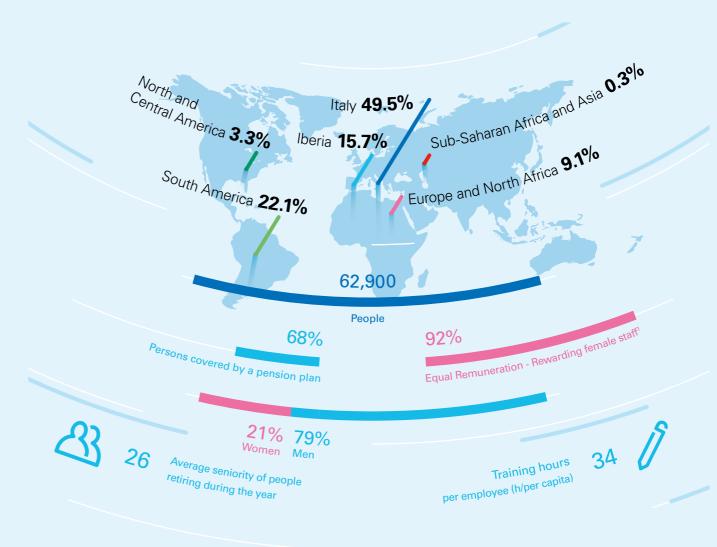




At December 31, 2017 the Enel Group had 62,900 people, of whom 50% were in companies based in Italy. There was an increase of around 800 people since the start of the year, mainly due to reporting boundary changes due to the acquisitions made in 2017 (specifically, Enel Distribuição Goiás and EnerNOC).

These acquisitions more than offset the negative difference between new hires and terminations in the period, which were mainly due to early retirement incentive policies.





(1) Calculated as the ratio between average salary of female Managers + Middle Managers and average total salary (men + women) for Managers + Middle Managers.

### The Open Power model: strategy, values and behaviors

Since 2015, Enel has adopted a specific policy that defines values and conducts, the "Open Power" model, which takes form in various operational aspects, in order to increase the involvement and participation of the people working in the Company. Said policy serves as the point of reference for all people management and development processes. Specifically, there are **4 values** (responsibility, trust, innovation and proactivity) and **10 behaviors**:

- > Adopt and promote safe behaviors and take the initiative in order to improve conditions regarding health, safety and well-being.
- > Take decisions in their daily activities and accept the responsibility that goes with them.
- > Deliver results and aim for excellence.
- > Seek new solutions and do not give up when faced with obstacles or failures.
- > Change their priorities rapidly when required to do so by changes in the scenario.
- > Share relevant information and are cooperative, as well as willing to listen to other people's opinions and ideas.
- > Acknowledge colleagues' merit and provide feedback when asked or independently which improves their work.
- > Ensure customers' and/or colleagues' satisfaction by acting effectively and fast.
- > Strive to include everyone, acknowledge and enhance the value of individual differencies (culture, gender, age, disability, personality, etc.).
- > Fulfill commitments and perform their work passionately and with determination.

Enel launched a storytelling program in 2016 to encourage comprehensive uptake of the Open Power strategy and values, which are based on openness as a key element of the Group's strategic and operational approach. The program used stories as a way to interpret reality through experience; it came to a close in 2017.



# Talent, development and management of people

ompeting in a complex, fast-changing environment such as the energy sector requires the ability to manage a huge amount of information. Digitalization is therefore an essential way to respond effectively and promptly to external circumstances and to make the right decisions throughout the organization. For a company to undergo a digital revolution, there must not only be widespread use of innovative technologies but also a real cultural shift: a rethinking of current processes and services that puts

people at their heart, as they are the keys to addressing the main challenges of the future.

Enel mapped its peoples digital skills in 2016 through a project called "6Digital". To speed up the **digital transformation** of the entire Company, it then launched a change management program in 2017, which will gradually expand to involve all the people of the Group and began with three events (Rome, Madrid, Bogotá) in order to share the main drivers of digitalization. The transformation process implies a

true cultural transformation, affecting assets, Business Lines and Functions. Accordingly, the Company also set up a working group called "People Digital Transformation" to rethink the experience of people working in the Company at the various stages of the **employee journey**. The initiative has involved a survey of what Enel's people need and has led to the development of products and services, exploiting the potential of digital technology.

103-3 404-2 404-3

DMA EU (former EU14)

# **Employee journey**

The "People Digital Transformation" program aims to rethink the experience of employees at the different stages of their journey with the Company, from the moment when the need is perceived up until it is met, following an integrated service logic and making the most of the new opportunities offered by digital technology. In September 2017, Enel carried out a survey of all employees, involving over 25,000 people, which resulted in about 40,000 suggestions, comments and proposals for improvement. The three priorities that emerged were: "Knowing Colleagues Organization and Procedures," "My Training Path" and "On Boarding." On these three employee journeys, Enel worked according to an "agile" approach (see the box "Digital transformation and agile organization") by organizing the work across the various professional areas, with real-time communications and constant interaction between the various company Functions. In particular:

- On Boarding is about the experience that a newly-hired employee has from the moment he/she accepts a job offer until the first year after he/she joined the organization. New hires need to receive a series of services, which may have to be delivered in different ways and through different interfaces and channels. The solutions conceived as a result of the On Boarding initiative aim to create a single point of contact, which helps to simplify the process, and to bring forward some activities to before the new hire actually joins the Company;
- Knowing Colleagues Organization and Procedures is an initiative designed to improve the ways in which people in the Company can get to know each other and obtain organizational and contact information. The information will be initially made available to the Human Resources (HR) Function and subsequently the profiles can be made public;

> My Training Path aims to provide a new experience for accessing available training courses. For example, when a course is assigned it will be possible to know in advance who else is doing it, view their public profile to get to know them better, consult the training materials and ask for feedback from people who have participated at the same kind of course in the past. After the training has been delivered, immediate digital feedback will be requested on the course and it will be possible to quantify the value created by the course over the long term as a result of the new skills acquired.

Enel has also launched a number of other initiatives in parallel, including the use of digital signatures for many authorization processes and distributing digital devices to many people.

## Approaches to supporting cultural change

During 2017, Enel launched and consolidated several projects to support people at an important time for the Company's cultural growth. Below are some examples.

#### **Smart working**

The goal of smart working is to use new technologies to increase work flexibility, counting on people's sense of responsibility and mutual trust between the person and the Company, while also benefiting on environmental sustainability. As a result of the initiative, personnel gain greater freedom and independence in how and where they work, while also gaining greater ownership of results. Launched in Italy in 2016, the project is now also under way in Spain, Colombia, Argentina, Chile, Russia, Mexico and Romania and involves a total of more than 9,000 people of which about 7,000 in Italy alone.



#### **Human Lab**

Human Lab is a hub for co-creation and innovation within the Human Resources Function. The initiative takes a lean, start-up-inspired approach that begins with an exploration phase to gather inputs from universities, research institutes, corporate networks and internal organization. Once the relevant topics have been identified, research activities (workshops, events, business intelligence initiatives) are carried out and then analyzed within the Group. A project is then designed and tested on a group of people in the Company, on a Function or on a Country. If there is a positive feedback, the project can be applied to the rest of the Company or to the target population. Some examples include:

- > "Trip-Cultura in Viaggio": this project is run in collaboration with Ferrovie dello Stato (the Italian state rail operator), allowing training sessions to be held on a high-speed train in Italy to look at issues related to the Open Power vision and values;
- > "Liquid Organization": a voluntary project allowing personnel to work 50% of the time in the Function to which they belong and for the other 50% of the time it is possible to choose one or more different Functions. This increases accountability and gives people the opportunity to develop new skills and contribute to different activities;
- > "Job Shadowing": a project that involves top managers, allowing each of them to "shadow" another manager for a week, observing how they work, manage meetings, exercise leadership, and what cultural activities they pursue in their free time.

### Digital transformation and agile organization

During 2017, Enel carried out specific initiatives to instill "agile" working methods into Enel's current processes, with a view to increasing the Group's transformation speed and capacity. "Agile" work implies universal access to information, increasingly flexible environments, inter-functional working groups focused on individual business objectives, shared performance indicators, and so on. Its aim is to move from a traditional organization with codified instructions and rigid roles to systems in which people work together without constraints on specific projects. Its implementation within Enel can take a variety of different forms, not only through a typical inter-functional working group between business areas and the ICT Function, but also by making traditional organizational structures more flexible and further encouraging an open corporate culture.

The Human Resources Function now contains an organizational unit dedicated to increasing the use of this approach across the Group.

Digital transformation has also led to the emergence of **new skills and jobs** within the Company, including roles such as data scientists (a graduate in mathematics, statistics or computer science, who specializes in predictive mathematical models made using highly advanced programming languages) and data architects or data engineers (who not only know how to extract information from applications, but also have the technical tools to collect, analyze and store the data.

Against this background, the **recruitment process** has focused in the last year on the search for specialists with extensive digital skills, who can assist the Group in its transformation process. Recruitment has been focused around ICT, marketing, communications, infrastructures and networks.

To attract, influence and evaluate potential candidates entering the labor market, during 2017 Enel launched a pilot project in Italy, Spain and Mexico as part of its Global Internship Program. The 6-month program is aimed at university students and recent graduates and is divided into 3 main phases: an initial training session on Enel's strategy and values, a period



working at one of the Company's Divisions, combining a direct experience of the company business with on-the-job training, and a final presentation and project evaluation session. This project adds to the various initiatives that Enel already has in place with universities across the various Group countries, such as "Recruiting Days" and the various events and fairs that they organize to introduce young people to the world of work.

The Enel Group carries out **qualita- tive performance assessments** of
its people through a global performance appraisal process, which aims

to assess how people work in view of company strategy and the Open Power model. The process involves 4 phases: self-assessment and evaluation, in which the assessed employee and the evaluator assign a score to the ten behaviors from the reference model; calibration of the assessments provided and feedback, in which the employee and their manager meet to discuss the assessment and identify how to improve in the coming year. In 2017, 100% of eligible and reachable persons took part in the global campaign<sup>1</sup>, 90% participated in the self-assessment phase, 99% in the



cess is effective, the Group analyzes

assessment phase and more than 94% had the feedback interview with their own manager. Following on from the previous year, Enel carried out **quantitative assessments** for people receiving variable remuneration, through the MBO process for managers and the Annual Bonus process for non-managers. Both processes comprise two phases: assignment of objectives and assessment.

To ensure appropriate recognition of merit and effective managerial continuity, the Enel Group has also adopted a development plan for identifying and marking out successors for managerial positions. The aim of the process is to ensure appropriate organizational safeguards, identifying key positions and drawing up for each of these a list of potential successors and what actions need to be taken to support managerial growth, also taking into account the Enel Group's commitments on diversity and inclusion. To ensure that this pro-

all its managerial positions using the main analysis variables according to international best practices. For each of them, it then identifies "ready" (short-term) and "pipeline" (medium-term) successors, with a particular focus on young people, women and leveraging inter-functional and international experience. This process runs alongside the "talent management" process, which aims to identify development projects for individuals and professional profiles and for positions where successors have been identified. The Enel Group delivered more than 2 million hours of training in 2017, an increase of about 12% over the previous year, with major increases in Argentina, Italy, Peru and South Africa. The initiatives reflect the core importance of technical training for Group's operational people, as well as training on health and safety and on general sustainability issues.

The "From Leader to Coach" pro-

ject, launched in October 2016 and ending in July 2017, continued with the aim of introducing managers to the "coaching" approach. The "Open Leadership" model used in the project is geared towards ensuring listening, feedback and mutual growth in the relationship between managers and their staff. Starting in July 2017, the project expanded with the "C2C - Coach to Colleagues" initiative for Group supervisors - managers who are not in a managerial position and coordinate 1 to 10 people – with a pool of top managers certified to carry out in-classroom training as part of an internal training approach. The HR Business Partners (HR BP) in Spain and Italy also underwent a specific training program called "Jump on the Coach", which aimed at enhancing HR listening and support skills. This multi-level approach to spreading "Open Leadership" enables a culture of coaching to permeate the whole of the organization, in the pursuit of constant active

listening and improvements in people engagement, including through positive relationships between managers and their staff.

To enhance, increase and develop the technical and specialist skills of Enel people who belong to an area and/or professional family, the Enel Group is setting up specific Academies and Schools based on an integrated knowledge system. Academy contents can be developed through three

different levels: general area skills, general Function skills and specialist Function skills. The Academy consists of courses in these three areas, available at different levels of study that are chosen according to the target group. As such, the pathway of an individual participant is personalized and chosen according to their needs and their current level of knowledge. The Schools, on the other hand, have fixed modules and the course is attended by all par-

ticipants, sometimes in collaboration with academic partners enabling the obtainment of certificates.

1 Eligible and reachable: people who were part of the workforce and have been active for at least 3 months during 2017.



102-43

# Listening and dialogue

,

nel prepared a detailed action plan in 2017 in response to the needs that arose from the latest corporate **climate survey**, conducted in 2016. The survey involved the entire population of the Group (with a participation rate of 84%²) and overall showed a high level of satisfaction

within the Company on the various aspects analyzed. The Group-wide action plan called for about 1,500 specific actions to be taken in the priority areas identified, spread across the various themes: Work-Life Balance; Lifestyle Diversity and Work Environment; Open Power Culture; Working Relationships

and Organization; Health and Safety; and Meritocracy.

Compared to eligible and reachable people: people who were part of the workforce and have been active for at least 3 months during 2016.



#### Meritocracy – means more

The global intranet system now has a section on meritocracy that was created in response to the latest climate and safety survey, which showed that clarity and knowledge of meritocracy-related information is a priority for everyone at the Company, in line with Enel's values. The goal is to explain the drivers of Enel's meritocracy policy: compensation policy, career policy and the actions that everyone at Enel must take to ensure that meritocracy is transparent. In particular, the section clearly expresses the fundamental role of managers, as they are capable of inspiring and not just directing, and of giving feedback while explaining their decisions frankly and transparently. The project also involved an internal awareness campaign in 7 languages, as part of which over 63,000 emails were sent.



Of course, another important way for Enel to listen to and engage with people are interviews with **HR Business Partners**, who are responsible for listening to people and identifying their needs, so that they can be integrated with the needs of the organization. In line with this vision, during 2017 Enel continued the interviews and collected

colleagues' feedback, with more than 24,000 interviews carried out across the Group. This listening process enables Enel to map colleagues' level of motivation, priorities, skills profiles, expectations and workload in a structured way, so as to ensure optimal management of people in the Company.

HR Support Points support the work

of the HR BP, offering real-life meeting points where people can go to solve administrative and operational issues surrounding their work.



# Internal communication

Enel considers internal communication an important support to the creation of the company culture and to the growth of people and of the organization, by encouraging and promoting the exchange of information, knowhow and experience. The Company carried out

several global campaigns in 2017, focusing in particular on cyber risk, meritocracy, diversity and inclusion.

Internal communication is also the main vehicle for disseminating Enel's strategy and short-term objectives. The key moment is the "Cascade Process", which starts from the company convention and in 2017 saw over 200 Group top managers share the results achieved in 2016 and the challenges ahead in 2017. Comprising 174 events around the world, the "Cascade Pro-

cess" involved 17 countries and almost 44,000 people. There is also a section of the company intranet dedicated to the project and available in three languages.

In 2017 Enel's internal media platforms were further developed to ensure that the contents reach the entire corporate population in all countries, as well as being accessible from mobile devices and from outside the company network.



# Diversity

103-2 103-3 405-1

iversity and inclusion are two fundamental aspects of the corporate culture and strategy of Enel, which operates in over 30 countries worldwide. Giving a voice and a value to different points of view within the Company enables Enel to analyze and manage risk over the long term and create value. Precisely for this reason, Enel works to encourage a culture that helps people to express their potential, each according to their own level of experience and regardless of gender, age and other diversity areas. Differences generate ideas, progress and innovation.

Enel has had a global policy on "Diversity and inclusion" since 2015. Its ba-



sic principles are: non-discrimination, equal opportunities, inclusion and respect of the work-life balance as an enabling factor for the full involvement of all people in the workplace. The pol-

icy identifies tangible actions to be implemented in every country.



## Internal media

Global Intranet	Media Factory Enel TV	Media Factory Enel Radio	eMagazine	<b>DEM</b> (Direct email)
4,088 news	<b>651</b> videos	<b>8</b> 1 hours/day	<b>454</b> articles	267 DEMs sent
<b>6</b> languages	<b>3</b> languages	<b>2</b> languages	<b>5</b> ² languages	<b>6</b> languages
<b>22,368,520</b> visits	_3 visits	<b>1,500</b> <sup>4</sup> visits/day	108,812 online readings	<b>75%</b> average opening rate
<b>141,228,458</b> pages visited	<b>747,777</b> view on-demand from internet			
	145,988 view video from other media (live+on demand	1)		

(1) There is also Enel Chile, which broadcasts for 3 hours a day. (2) Of which 4 online. (3) In 2017 the traditional Enel TV channel was closed in favor of the full-adoption of the on-demand vision (video on the intranet and video from other media, i.e. DEM), and the video delivery platform was changed, from Enel TV to Media Factory. In 2018 the new eChannel will be launched. (4) There is also Enel Chile, with an average of 230 visits per day.

# Policy on "Diversity and inclusion"

#### **GENDER**

- > Guaranteeing equal representation of genders in internal and external selection processes
- > Developing agreements with universities to promote careers for female students in technical subjects
- > Disseminating the Parental Program aimed at balancing the needs of new parents with their professional development

#### AGE

- > Tutorship programs for expatriates
- > Tutorship programs for new recruits

#### **NATIONALITY**

> Tutorship programs for expatriates

#### **DISABILITY**

> Identification of a focal point

#### **CROSS-CUTTING INITIATIVES**

- > Training courses on values and behaviors which include the principles and guidelines on diversity and inclusion
- > Inclusion of the issues of diversity in the process of assessing performance

In May 2016, Enel appointed a "Diversity Manager" within the Human Resources and Organization Function. The Diversity Manager is responsible for leading, overseeing and valorizing diversity, by promoting inclusion in the Group. A periodic global reporting process was also started, which has enabled an overall view of the progress of the policy actions in the various countries. The results are shared at the various levels of the organization to guarantee complete awareness of progress on the objectives and to promote the sharing of best practices.

#### Diversity as a company asset and source of enrichment

In 2017, Enel carried out a campaign to raise awareness of all the different principles of diversity and inclusion policy, analyzing the different dimensions each month. The campaign was delivered through news and video interviews on the company intranet, printed media, a special issue of the corporate magazine and through an online community where people were able to share and comment on experiences involving diversity. A global event, "Open to



Diversity Day", was organized at the end of the campaign, which involved people working in Italy, Spain, Chile, Argentina, Brazil and Russia in information sessions and activities. The event enabled participants to do an in-depth study of Enel's approach, to reflect on the main issues related to diversity, to experience what it means to put oneself in another person's shoes through role-playing activities, and to learn about various methods and skills that are useful for delivering inclusivity.

The main projects carried out in 2017 are described below.

## Gender diversity -We make the difference

In December 2017, women made up 21% of the entire Group population (20% in 2016) and the percentage of women hired in the last year was about 30% of the total, compared to 22% in 2016.

Starting in 2016, the percentage of female candidates has been monitored through a detailed system used by all the recruitment units in the various countries. This model says that, if it is

not possible to achieve equal gender representation then a written explanation must be provided in order to identify any supporting actions. This approach has made it possible to raise awareness among Line units on the importance of fair selection criteria. The result of the second year of monitoring showed that women accounted for 35%3 of candidates for external recruitment activities – an increase compared to last year (33%) and in line with the objectives set out publicly in Enel Strategic Plan, as presented to the financial community. In particular, Enel has committed to ensuring fair representation of both genders in the initial stages of selection and recruiting processes (about 50% of women in the selection

processes in 2020).

In addition, Enel has launched awareness initiatives to promote **female students' access to STEM subjects** (Sciences, Technologies, Engineering, Mathematics), both through speeches by Enel representatives in schools and universities and through internal events at company offices. In 2017, around 1,800 female students were involved in total in the STEM initiatives, particularly in Spain, Colombia, Greece, Brazil and Italy.

Specific programs have been created for maternity and paternity aimed at enhancing the experience of parenting for male and female workers and the organization. Enel has always been sensitive to issues of **work-life** 

#### balance and support for parenting.

Over time, particularly in Italy, it has introduced numerous measures that go beyond the legal requirements, aimed at improving people's well-being and promoting a positive business climate. For example, Enel pays 100% of salary during the compulsory 5 months of maternity leave in Italy (compared to the 80% required by law), fathers receive 6 additional days of leave within 2 months of the birth, mothers can take 2-hour leaves during the child's first year, etc. In 2017, all Group countries adopted the Parental Program, which aims to promote organizational and personal awareness of the value of parenting and to reconcile personal and professional needs related to this important phase of life, including talks between the person, their direct manager and the HR BP during parental leave. In 2017, 83% of women on maternity were involved in the program with an average of 1.2 interviews with their HR BP and 1 interview with their manager. At the end of 2017, a global flash survey was carried out to assess how much the program was used and the involvement of mothers, as well as its effectiveness.

2017 also saw the launch of the MAAM (Maternity as a Master) project, which supplements the Parental Program with a digital platform and a social community in order to facilitate discussions between peers and experts and enhance the relational, organizational and innovative skills emerging from the experience of parenting. The project now spans Italy, South Africa and India and will be extended gradually to the other Group countries. There were 276 users of the platform in 2017, of whom 30% were fathers.

In addition to the actions set out in the policy, Enel also periodically monitors female presence in managerial posi-



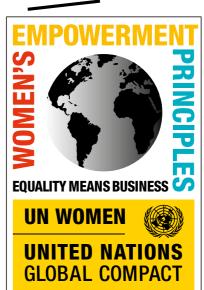
tions and wage fairness. In 2017, the equal remuneration index was at 92%, slightly lower than in 2016. The policy of enhancing diversity and creating a pipeline of future women in top positions involves specific management actions whose results will be seen in full in the medium to long term. In the last year the number of female managers and middle managers has increased by about 11% and, with regard to new appointments as managers in Italy and Spain, the most representative countries in terms of the Group's population, the equal remuneration index is approximately 98%, demonstrating wage fairness in the new

managerial class.

Enel has also launched a global mentoring path for female managers, with the aim of increasing the formal and informal network and facilitating the exchange of experiences within the Group. The course involved a group of female managers of the Group as mentees and a group of senior managers as worldwide mentors. The latter have received specific training to acquire the skills to act as mentors.

Enel remains committed to the Women's Empowerment Principles (WEP) – the initiative promoted by the UN Global Compact and UN Women to promote gender equality. The commitments and results achieved by Enel are summarized in the Communication on Progress (COP) which the Company sends to the Global Compact each year (https://www.unglobalcompact.org/participation/report/cop).





www.weprinciples.org

<sup>3</sup> Selection processes involving blue collars are not included.





# Age diversity -Enthusiasm is ageless

Tutorship initiatives continued in 2017, inspired by the 4 Enel values (TRIP – Trust, Responsibility, Innovation. Proactivity), to support and guide new graduate recruits and to encourage inclusion and networking. The program includes: regular feedback interviews conducted on a quarterly basis with the manag-

er and the HR BP; classroom training and on-the-job training; meetings with people relevant to the job of the new employee; a welcome kit and a TRIP book that acts as a diary of the whole experience. In 2017, about 70% of new recruits were assigned a tutor. At the end of 2017 a global flash survey was carried out to verify the correct assignment of the tutors to the new recruits and to monitor the usefulness and effectiveness of the initiative. The results will be available in 2018.

Knowledge transfer schemes have been set up involving both senior and junior people working in the Company, in order to promote the exchange of knowledge and encourage collaboration between colleagues from different age groups. In 2017, over 800 seniors held training sessions attended by more than 4,500 people. Vice-versa, about 500 juniors held training sessions for more than 1,100 people. Italy and Argentina are the countries that have seen the largest number of these initiatives.



In 2015, Enel signed the European Pact for Youth (P4Y), the European initiative launched in the same year by CSR Europe and the European Commission and signed by the 28 EU countries to promote, develop and consolidate partnerships be-



tween the worlds of school and work, to support the employment of young Europeans and their inclusion in the workforce. During 2017, the results of the two years of P4Y were presented as part of the first European Business-Education Summit hosted by the European Commission. P4Y involves companies, governments and the world of education at European level in order to achieve the following objectives: to set up 10,000 business-school partnerships for the creation of at least 100,000 new work opportunities for young Europeans, through apprenticeship contracts and traineeships, to be supported by the Member States through the development and adoption of National Action Plans for Competitiveness and Employment in the European Union. These objectives have been reached and surpassed, thanks to around 23,000 business-school partnerships and over 160,000 job opportunities created, involving 5.2 million students in just two years.

## Nationality diversity -Energy from all over the world

Enel has launched several tutorship programs to encourage integration between different nationalities and cultures within the Group. In particular, to support internal mobility, 2017 saw the continuation of the International Mobility Program launched in 2016, involving

expatriate colleagues in Italy, Spain, Brazil, Chile and South Africa.



## Disabilities -Beyond barriers

For Enel, managing diversity also means providing people with the tools, services and processes that allow them to carry out their work in full autonomy. In line with the policy, disability focal points were identified in Enel's main countries in 2017. There are 1,982 disabled persons in the Enel Group, of which 1,666 are in Italy.





## All going forward

Below are some examples of the initiatives launched in Italy in 2017 to guarantee access to systems, improve mobility and promote knowledge and inclusion:

- accessibility of IT systems: a cross-cutting working group has been set up to identify the specific needs and requirements of people with disabilities and to design accessible IT systems. In September 2017, Enel launched a specific "Course for IT accessibility experts" for people involved in IT systems, with the aim of training them on legislation on the accessibility of systems, the organizational disability culture and international best practices. Furthermore, a project is underway to verify the accessibility of internal and external company systems and to define any action plans;
- > mobility services: this project takes an integrated approach based on the concept of "independent living" with self-determination, namely the freedom to personally conduct one's own working life. To increase autonomy, a support service has been set up at Enel's offices, made up of the staff of the supervisory teams in some Italian offices, and an internal travel booking system has been set up for business travel;
- > initiatives for inclusion: in 2017, various initiatives aimed at promoting group integration and awareness and diversity-related opportunities were held at the Naples office; these included an LIS course (Italian Sign Language) that was organized to improve Group spirit.



# Work-life balance, people care and corporate welfare

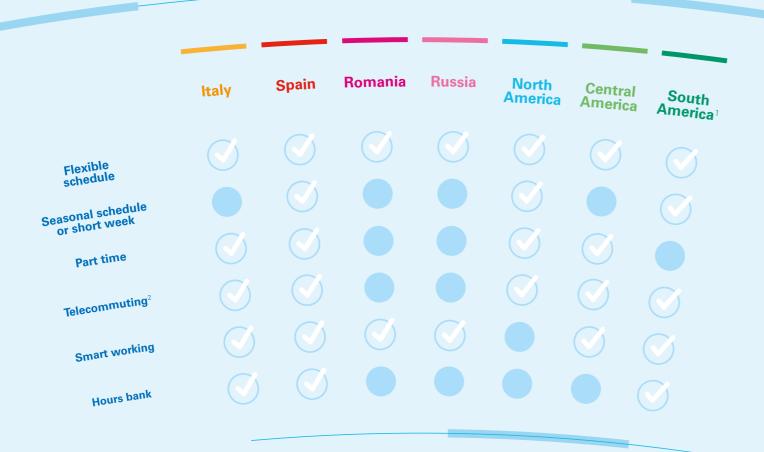
103-2

ork-life balance is one of the general principles of the Policy on Diversity and Inclusion. In this light, Enel promote solutions to improve the balance between private life and work and to support people's effective daily needs in order to respect all the situations, including contingent events, which a person may find themselves

in during their working life. Below are reported the main tools used.

Initiatives focusing on the children of Enel employees continued during 2017. The "Millennials Enel Days" project was extended to Spain after having been launched in Italy in 2016. The project aims to provide students leaving high school or university with

support and guidance in their choice of profession. Several orientation days were organized, attended by the children of Enel employees and the children of other Company stakeholders, aged between 18 and 27 years. In 2017, 9 workshops were held in Italy and 2 in Spain, which were attended by around 600 young people. The first



(1) Argentina (telecommuting, smart working); Brazil (flexible schedule, hours bank and telecommuting); Chile (flexible schedule, telecommuting and smart working); Colombia (flexible schedule, smart working and hours bank); Peru (flexible schedule, telecommuting, seasonal schedule or short week and hours bank).



Italian workshop was dedicated entirely to daughters of employees (about 60 in total), meaning that it also fell under one of the STEM initiatives promoted by the Group.

One of the top projects in 2017 was the 13th edition of the **We are Energy** program – an international competition for children of Enel employees aged 8 to 17 years. In line with the Open Power strategy, the competition (entitled "Open up the Future") called on children to become leaders of change in their communities by describing the United Nations' 17 SDGs from their own perspective. Some 4,500 youngsters from 22 countries entered the competition, of which 110 winners from 16 countries took part in the international meetup in Italy.

Enel Energia remains committed to maintaining the standards required by **Family Audit**<sup>4</sup> certification in Italy and in 2017 was awarded the title "Executive" in light of the good progress made. As a result of the Family Audit, Enel Energia put in place an action plan to make changes in various sensitive areas, so as to promote

organizational wellbeing and work-life balance, while also encouraging the extension of these benefits to all the Group companies in Italy. Accordingly, assessments are underway for the extension of the certification to the other Enel Group companies.

In Italy, the daycare center at the Rome office remained open. The Company also continued to operate educational play centers at some Italian offices during periods when schools are closed (Christmas, Easter, holiday weekends, elections). Open to children aged between 3 and 12 of Enel employees, the centers offer recreational and educational activities including English courses, music, group games and social activities. Finally, "time-saving" services (laundry, maintenance and domestic cleaning services) continued to be operational throughout 2017 in the main Group countries. In many countries, Enel also supports its employees with grants or incentives for personal requirements, whether their own or those of dependent family members. The Company also has deals in place for employees that cover insurance policies, subsidized loans and support for sports and cultural activities. For example, in Italy, the ARCA association provides support for the recreational, cultural and sporting activities of people and their children.

<sup>4</sup> Family Audit is a managerial tool that aims to activate a cultural change in the company through innovative work-life balance initiatives. It is a standard that triggers a virtuous cycle of continuous improvement and offers the possibility of joining a network of companies that aim to become excellent work environments. Family Audit is a registered trademark owned by the Autonomous Province of Trento which acts as a certification body.





<sup>(2)</sup> In Italy telecommuting envisages that the work is largely done from home, with one or two days each week in the office, in Spain and in Latin America it is organized with only one or two days a week working at home.

# Supplementary healthcare and complementary pensions

103-2 103-3 201-3

n most of the countries where the Group operates, supplementary healthcare insurance is available at favorable conditions compared to the alternatives available on the market. In many cases it is the Company itself which guarantees benefits linked to prevention and periodic check-ups (see also the chapter dedicated to "Occupational health and safety"). In Italy health and prevention instruments are supplied through a supplementary fund for Enel employees (FISDE) which provides reimbursements for health services given in the supplementary welfare plan. In line with collective agreements, all employees are members of FISDE. Former Enel employees can continue to receive the same benefits by paying a membership contribution. Employees can also receive benefits from the network

of agreements made with a series of healthcare structures (public and private hospitals, care homes, clinics, dentists, etc.) or with the reimbursement of services provided in other structures.

FISDE also reimburses the costs relating to preventative medicine in the field of health protocols provided to prevent cancer and heart disease. The psychological support service continued thanks to the agreement with the National Council of the Order of Psychologists (CNOP) and the Italian Psychoanalytical Society (SPI).

FISDE also provides support for families, for example in the case of disability and social emergencies (problems of adjustment, alcoholism, drug addiction, etc.).

Supplementary assistance programs for employees and their families and the

community are also provided thanks to the social action protocol attached to the collective bargaining agreement.

Among the support measures for staff there is also the possibility of accessing complementary pension funds and the recognition of various forms of individual benefits for service connected with the termination bonus. At December 31, 2017, the employees covered by the pension plan in the Enel Group numbered 43,074. The pension funds are mainly in Italy (Fopen and Fondenel), Spain and Brazil.



### Management of risks connected to business travel

Since 2016, Enel colleagues who are travelling to destinations which are considered at risk are given a specific memo on the healthcare situation and the security conditions in the countries they are going to. In particular, through the booking system for company travel, before departure, the Security Travel Guide and the Health Guide are sent automatically, while any updates are supplied during travel. In relation to the specific risks in the country of destination, Enel arranges, when necessary, suitable protection measures (expert guides, security details, etc.). To coordinate the whole process, a unit is active 24 hours a day, 7 days a week, which supports travelers, monitors news from around the world and coordinates the response in the case of dangerous or emergency situations.

This model is currently used in Italy and Spain. It is applied to the 83% of international travel of the Group.

# Industrial relations

103-2 103-3 402-1

nel applies the labor law of the various countries and the International Labour Organization's (ILO) Conventions on workers' rights (freedom of association and collective bargaining, consultation, right to strike, etc.), systematically promoting dialogue between the parties and seeking an adequate level of agreement on corporate strategies on the part of personnel. In 2017, the percentage of people covered by collective employment agreements was 92%, a slight decrease compared to 2016 (93%). The Group's industrial relations activities continue to be carried out according to the model set out in the Enel Global Framework Agreement (GFA), signed in Rome in 2013 by the Italian federations and the global federations IndustriAll and Public Services International. The agreement is based on the principles of human rights, labor law and the best and most advanced transnational industrial relations systems used by multinational groups and leading international institutions, including the ILO. These principles include the Remuneration Principle (according to which the minimum remuneration received by Group employees cannot be lower than the minimum set in the relevant collective labor contracts and laws and regulations in force in each country, in accordance with the provisions of the ILO conventions. Enel quarantees that the principle of fair income will be respected in all the countries where it operates . The agreement has also been recognized and praised as an example of best practice among European and non-EU multinationals. Plans have been presented for the renewal of the agreement, which will be updated in line with the Group's new Open Power philosophy and the values that set the Group apart when it comes to relations with organizations representing personnel in all countries. In the event of organizational changes, Enel provides prompt notice as per the table below.



COUNT	RY MINIMUM PERIOD	LEGAL PROVISIONS/ COLLECTIVE AGREEMENTS
Italy	25 days.	Legal provisions
Spain and Portugal	30 days.	Framework Guarantee Agreemer for Endesa SA and subsidiaries i Spain (September 12, 2007)
Russia	60 days.	Legal provisions
Romania	Employers are obliged to inform and consult workers' representatives on development in the company's economic and business situation. For collective dismissals, minimum 30 days notice to unions and 20 days to workers. The maximum period for the collective dismissal procedure is 90 days.	Legal provisions Collective Contract
Argentina	Obligation of periodic update to workers' representatives; traditionally the notice period for changes in working hours, in the role of employees or the work location is 48 hours, although there is no specific regulation.	-
Brazil	Obligation to provide "prompt" information.	-
Colombia	Neither the law nor collective bargaining envisage a minimum notice period in the case of organizational changes.	-
Peru	Neither the law nor collective bargaining envisage a minimum notice period in the case of organizational changes.	-
Chile	Neither the law nor collective bargaining envisage a minimum notice period in the case of organizational changes.	-



# Business model for a low-carbon growth

102-15

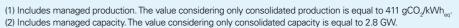
▶ 2017-2019 Plan: Decarbonizing the energy mix

SDGs	Activities	Categories	2017 results	Targets
13	Reduction of CO <sub>2</sub> specific emissions	E Environmental footprint	• 400 gCO <sub>2</sub> /kWh <sub>eq</sub> <sup>1</sup>	• < 350 gCO <sub>2</sub> /kWh <sub>eq</sub> in 2020 (-25% vs 2007)
7 13	Development of additional renewable capacity	I Industrial growth  Climate change	• +3.1 GW <sup>2</sup>	• ~+8 GW³ (2017-19)
13	Reduction of thermal capacity	I Industrial growth  Climate change	• -0.2 GW	• -10.3 GW (2017-19)
13	Implementation of environmental international best practices to selected coal plants	E Environmental management	• ~130 mil euro	• 500 mil euro of investments for environmental retrofit (2017-20)



# ▶ 2018-2020 Plan: Growth across low-carbon technologies and services

SDGs	Activities	Categories	2020 targets
13	Reduction of CO <sub>2</sub> specific emissions	E Environmental footprint	• < 350 gCO /kWh <sub>eq</sub> (-25% vs 2007)
7 13	Development of additional renewable capacity and reduction of thermal capacity	I Industrial growth E Environmental management	• +7.8 GW renewable capacity <sup>4</sup> -7.3 GW thermal capacity
13	Implementation of environmental international best practices to selected coal plants	E Environmental management	• 500 mil euro of investments for environmental retrofit
9 13	Electrification, storage and real-time demand response	T Technologies and digitalization I Industrial growth E Environmental management S Social inclusion	• 0.6 GW storage capacity +5.0 GW demand response
9 11	Roll out of fiber optic network in Italy	T Technologies and digitalization I Industrial growth E Environmental management S Social inclusion	• 7.5 mil households⁵
11 17	<ul> <li>Promotion of activities in line with the UN campaign "Making Cities Resilient"</li> <li>MBA-PhD training about resilience in the countries where the Group operates</li> </ul>	E Environmental management  S Social inclusion  G Partnerships	<ul> <li>300 municipalities involved</li> <li>600 people involved</li> </ul>























<sup>(3)</sup> Includes managed capacity and 0.9 GW non-organic growth.

<sup>(4)</sup> Includes managed capacity.

<sup>(5)</sup> Only A and B areas.

# Business model for a low-carbon growth



The global strategy: from COP21 to COP24

103-2 103-3 201-2

The agreement reached during the 2015 global climate change conference in Paris (COP21) marked a fundamental step forward in the fight against climate change. The conference resulted in a plan to control climate-altering emissions over the medium and long term, with the support of a solid regulatory governance, which has traditionally been uncertain due to continual political changes. The main aim of the agree-

ment is to limit the increase in global temperature to below 2 °C and to strive not to exceed 1.5 °C.

In November 2016, COP22 was held in Marrakech. Participants made progress with the technical discussions on procedures to implement the Paris Agreement for post-2020 and the strength of the political commitment following the Paris Agreement was confirmed. In the short term, implementing instruments will be necessary for the continuity of the operations and to ensure stability for long-term investments. Discussions focused on the transparency of monitoring, reporting and verification procedures, and the criteria for periodic evaluation and potential updating of the objectives set by the parties.

**COP23** took place in Bonn in 2017, resuming the transparency of monitoring, reporting and verification procedures, the criteria for periodic evaluation and

potential updating of the objectives. The Conference also focused on the state-of-play on financial commitments, capacity building initiatives and international technology transfer. On the opening day of the conference, a number of large European energy companies – including Enel – appealed to the European Commission to raise the target for renewable energy consumption in Europe from 27% to 35% of the total by 2030. The European Parliament accepted this proposal in January 2018. The next global climate conference, **COP24**, will take place in Katowice, Poland, in 2018.





# Climate change: risks and opportunities

102-15 103-2 103-3 201-2

The ever-increasing global focus on climate change requires greater awareness of the main risks and opportunities that it presents.

### **Operational and regulatory risks**

In the current scenario, extreme weather events, natural disasters and the failure of initiatives to mitigate and adapt to climate change expose the Group to operational and regulatory risks, especially in terms of damage to assets and infrastructures that could result in their prolonged unavailability (see the chapter "Getting to know Enel - Main risk types").

Political uncertainty increases regulatory risk by reopening the debate on the introduction of alternative and potentially less efficient policy instruments (such as the carbon tax and European standards on CO<sub>2</sub> emissions).

To minimize these long-term risks, Enel has accelerated its decarbonization program by developing new business opportunities in the field of renewable en-

ergy, energy efficiency and new digital technologies in the end-use market. Key opportunities include: the digitalization of networks, the growth in renewable sources and the decarbonization of the energy mix, the development of new products and services for energy efficiency for consumers, and the promotion of electricity in the transport (e-mobility) and housing construction sectors.



### TCFD – Task Force on Climate-related Financial Disclosure

In 2015, on the request of the Central Bank Governors and Finance Ministers of the G20 countries, the Financial Stability Board (FSB) launched the Task Force on Climate-related Financial Disclosure (TCFD). Led by Michael Bloomberg, the Task Force aims to develop specific recommendations on voluntary disclosures on the financial impacts of climate risk. The final recommendations were published in June 2017.

Enel signed the letter of support for the implementation of the TCFD guidelines and has set up a multifunctional working group that is adopting the recommendations by working on three main themes:

- > development of long-term climate models;
- > mapping risks and opportunities related to climate change;
- > financial reporting associated with climate change.

In terms of identifying future scenarios, Enel and ICTP (The Abdus Salam International Center for Theoretical Physics) signed a two-year agreement in early 2018 to carry out the research project "Climate Change and Resilience". The project calls for ICTP to develop a series of simulations of climate scenarios, to allow Enel to carry out analyses on the medium-long term resilience of its assets and its business (2020-2050).

### **Enel's reference regulatory framework and positioning**

The decision-making and regulatory processes of the European Union (EU) are shaping the current energy transition. This, in turn, has an effect on companies' business models and on the behavior of consumers and citizens, and directly impacts national legislation in the countries where the Group operates. Furthermore, given its transnational nature and current global challenges, the European legislative process is becoming increasingly

complex, requiring ever closer cooperation between the EU institutions and other stakeholders. Accordingly, Enel has decided some years ago to set up a European Affairs Function to monitor the relevant issues and represent the Group at European level in dealings with institutions, organizations, associations and other active counterparties. One specific unit is responsible for consolidating and representing the Group's position on pol-

icies relating to climate change, low-carbon policies, international regulation of the carbon market, the environment, and security of supply. The main areas of interest to the Group and the initiatives it was involved in during 2017 are described below.



#### Carbon pricing policies

Although the market is increasingly interconnected in terms of technology and product circulation, the regulatory instruments adopted by individual countries are still too fragmented. The biggest challenge in this area is carbon pricing policies. Today there are many forms of regulation, such as the Emissions Trading Scheme (ETS) used in the EU. New Zealand, California, South Korea and some regions of China, as well as various types of direct taxation or hybrid solutions. Coordinating different policy instruments that also have complementary objectives (including policies on renewable energy and energy efficiency measures) is a crucial factor in identifying cost-effective policies. Establishing an emissions trading system based on a robust regulatory framework ensures certainty over long-term climate goals.

Instruments based on market mechanisms result in prices that are more consistent with macroeconomic cycles and have proven to be more cost-effective in achieving climate

targets in various geographical areas. The debate over the suitability of a "cap and trade" system or a carbon tax needs to be addressed from multiple perspectives, balancing the cost-effectiveness and feasibility of the instruments. Such a debate must also include an assessment of the areas to be covered by the system and limitations due to the current political framework. The EU's ETS1 system makes it possible to exploit an existing harmonized scheme at European level which guarantees technological neutrality and uniform treatment of market operators.

In light of these considerations, the Enel Group does not support the introduction of national carbon taxes, as it would significantly distort competition within the EU single market while increasing the overall cost of achieving the desired environmental result. Environmental taxation is more suited to countries with a weaker institutional framework and sectors characterized by diverse emissions sources. In this regard, Enel welcomes the out-



come of the EU-ETS negotiations for the period 2021-2030 and sees the ETS as a key element of EU climate policy that should be strengthened by ensuring that other policies complement it and allow climate goals to be achieved, while also safeguarding the EU's competitiveness.

Signs of a long-term stable price for investments in low-carbon technologies and consistency between EU and national policies are crucial in restoring the role of the EU-ETS in driv-

ing emissions reductions.

In particular, in the response to the ETS consultation, Enel asked for structural reform of the scheme based on an ambitious climate target for 2030, flexible supply (Market Stability Reserve) and a dedicated program to support innovation (NER400 Innovation Fund).

In regions outside the EU (such as Latin America), Enel resources are increasingly covered by carbon pricing schemes, mainly taking the form of taxes that could be transformed into "cap and trade" schemes in the medium-long term.

1 The European Union Emissions Trading Scheme (EU-ETS) is the main instrument adopted by the European Union, in implementation of the Kyoto Protocol, to reduce greenhouse gas emissions in energy-intensive sectors, meaning those with the highest emissions. It is a "cap and trade" system because it sets a maximum cap on the total level of emissions allowed for all entities bound by the system but allows participants to buy and sell on the market ("trade") CO<sub>2</sub> emissions entitlements ("units") according to their needs, within the established limit.



#### Internal CO<sub>2</sub> reference price

The strategic and industrial planning process also assesses the impact of carbon prices on short-, medium- and long-term investments and decisions. However, because low-carbon growth is one of the four ESG strategic pillars, investment choices in new capacities are automatically and directly in line

with the objective of keeping the global temperature rise below 2 °C. As for the short term, the internal CO<sub>2</sub> reference price is set within the range of 6-12 euro/t, in line with the international recommendation and guidelines for the ETS. The short-term prospects reflect regulatory scenarios and market expectations

and allow the impact of the CO<sub>2</sub> price on Enel's activities to be assessed.



#### Clean Energy Package - proposal to make Europe lead the energy transition

The Clean Energy Package is a package of legislative proposals covering the areas of renewable energy sources, energy efficiency, the electricity market, EU governance and mobility. The measures introduced by the European Commission at the end of 2016 aim to make safe, sustainable and competitive energy available to EU consumers at affordable prices. To achieve this, the Commission believes that it is necessary to radically overhaul the European energy system so that it is an integrated system based on competition and optimal use of resources, and which results in a sustainable, low-carbon and climate-friendly economy that is built to last. Energy efficiency, renewable energy, competitiveness and innovation will

play key roles. The proposals contained in the package will be approved following the standard European legislative procedure, which involves a co-decision process between the European Parliament and the Council of the European

Union. It is estimated that the process will be completed in 2018.







#### Mobility Package - actions for clean, competitive and connected mobility in Europe

In 2017, the European Commission brought in a series of legislative measures ("Europe on the Move") to promote clean, competitive and connected mobility. This package is one of the European commitments under the Paris Agreement to reduce emissions, especially in the transport sector and particularly on roads. Over the last 25 years, emissions in this sector have steadily in-

creased in relation to the growth in mobility demand and represent a quarter of EU greenhouse gas emissions (road transport alone is responsible for 22%). The package is aimed at combating climate change, improving the quality of life of European citizens and ensuring that European industries create jobs, generate sustainable economic growth and drive innovation in renewable ener-

gy technologies. Unlike the Clean Energy Package, the Mobility Package is only in the early stages of the European legislative procedure.

### Ш

#### Energy efficiency, air quality and environmental policies and the circular economy



Energy efficiency is one of the key ways to decarbonize economic systems. Electrical technology is now widely used in many sectors (residential, services, industrial and transport) and some of it, such as heat pumps and electric vehicles, can make a substantial contribution to energy efficiency and have additional benefits. However, delivery of these benefits is often hampered by strong non-economic barriers, including: information barriers, transaction barriers and lack of awareness. Enel is engaging with institutions in this area in order to facilitate specific actions, integrating them into an incentivizing regulatory framework to encourage the spread of efficient technologies on the retail market. As already demonstrated in several countries, funding initiatives supported effectively by information campaigns could play an increasingly important role, allowing operators to promote energy efficiency

The European Union's strategy is also oriented towards achieving air quality levels that do not have a significant impact on human health and the environment. Although electricity production is going through an extensive

technologies.

process of reducing greenhouse gases and pollutants and switching to renewable sources, other sectors and energy uses are lagging behind and show significant room for improvement. The energy used in transport comes almost entirely from fossil fuels. Likewise, the heating and cooling sector could be much more energy efficient and less polluting. Emissions from both sectors could be significantly reduced by increasing their electrification and exploiting the increase in the share of electricity generated from renewable sources in Europe.

Finally, the European Union has made the adoption of models in line with the principles of the circular economy a strategic priority2, as it offers an opportunity for growth and development in terms of competitiveness, innovation, environment and employment. Business models that are less tied to the use of raw materials enable the development of a cost structure that is less exposed to price volatility risk, both in terms of market dynamics and regulatory measures. Limiting environmental impact makes an important contribution to reducing both marine and terrestrial waste and air pollution, and also contributes to curbing global warming as foreseen by the Paris Agreement. The reduction in the quantity of raw materials used and the growth of value-added services could result in a shift in the cost structure from raw materials to labor, i.e. from more automated sectors to sectors mainly involving human work, with consequent growth in employment.

<sup>2</sup> European Union 2015 "Towards a circular economy: A zero waste program for Europe".



## **Action platforms and partnerships**

102-12 102-13

The Group actively participates in industry associations and organizations to promote issues related to the energy transition.

Below are some examples (see also the chapter "Getting to know Enel").

## Alliance of CEO Climate Leaders

The CEO of Enel is a member of the Alliance of CEO Climate Leaders, organized by the World Economic Forum. In 2017, Enel co-signed a declaration that supports effective climate solutions that are promoted by the business, expressing strong support for the recommendations of the TCFD.

## Carbon Pricing Leadership Coalition

Enel is a member of the Carbon Pricing Leadership Coalition (CPLC) launched in 2014 by the World Bank, with the aim of bringing together public and private players to speed up the adoption of effective carbon pricing solutions worldwide.

#### "A more ambitious EU-wide renewable energy target for 2030" declaration

The "A more ambitious EU-wide renewable energy target for 2030" declaration was signed by six European companies in the energy sector: EDP, Enel, EnBW, Iberdrola, Ørsted and SSE. In this joint declaration, the signatories set a more challenging goal for renewable energy, rising from a 27% share to 35% by 2030. This goal is to be achieved through greater electrification of the transport and heating sectors, together with a redesigned electricity market for renewable energies, in line with the decarbonization targets set by the Paris Agreement.

#### Electrification Alliance

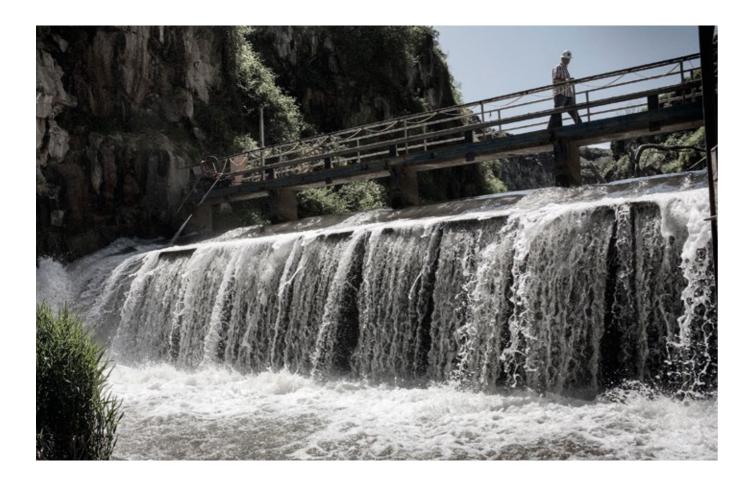
The Electrification Alliance is an initiative of the leading European associations that promote the key role of electricity in the decarbonization process. In 2017, a statement was published reiterating the role of electricity and the commitment to support the reduction of climate-altering emissions, as well as the increase in investments in non-issuing technologies such as renewable energy, energy storage and smart grids, while promoting integration with the heating, cooling and transport sectors. In the early months of 2018, the Alliance focused on defining the EU's post-2020 budget (the Multi-Annual Financial Framework - MFF) and the Mobility Package. With regard to the MFF, the Alliance has requested that public spending in the EU reflects the strategy of the Paris Agreement and is intended to support the related commitments on climate and energy in all EU countries, including the objective of carbon neutrality for infrastructures and the wider EU target for 2030 on renewable energy, as well as the electrification of consumption for smart and efficient use of energy. As for the Mobility Package, the Alliance calls for recognition of the importance of transport electrification as a key factor for achieving road-travel decarbonization in the EU and highlights the need for a more stringent commitment in that regard.

#### **Platform for Electro-Mobility**

The Platform for Electro-Mobility is a joint initiative of companies, associations and NGOs (non-governmental organizations) committed to promoting electric mobility and to collectively developing solutions for the electrification of European transport. Enel was the first utility to participate in the platform.

#### eurelectric new Industry Vision

Under Enel's leadership, eurelectric has repositioned itself in order to accelerate the energy transition by investing in the production of clean energy and in solutions enabling the change to reduce emissions and to reach the goal of becoming carbon-neutral well before the middle of the century. Thanks to this new vision, the electrical sector reaffirms its commitment to leading the transition towards a future of the energy sector in a fully sustainable EU, creating value for customers and for society. The new Vision received the unanimous support of eurelectric members and a significant number of Managing Directors of the EU electricity companies.



# Enel's commitment to low-carbon growth

102-15

Enel is at the forefront of the energy transition and business sustainability thanks to a strategy whose priorities are the development of renewable energy, digitalization and the fight against climate change. Enel aims to achieve the complete decarbonization of electricity production by 2050, in line with the "science-based targets" and as a way of contributing to the achievement of United Nations SDG 13.

The strategy is based on a long-term vision that translates into concrete objectives that involve all business activities:

#### > decarbonization of the energy mix

- Enel is committed to developing the renewable potential in all the countries in which it operates, evaluating development opportunities in new countries with the aim of installing 7.8 GW of additional renewable capacity and reducing thermal capacity by 7.3 GW by 2020. This is in addition to the target of reducing CO<sub>2</sub> emissions by 25% (2020 vs 2007);
- development of new products and services for consumer energy efficiency - New active demand management systems that increase the efficiency of service to consumers by developing innovative services and cutting-edge energy technologies;
- > promotion of electricity in the transport and housing construction sectors - Measures to increase the penetration of electricity (for example, electric mobility and heat pumps) reduce dependence on fossil fuels,

while relying on new digital solutions and the potential of an intelligent infrastructure to increase the efficiency of the system.

Enel is also committed to digitizing resources and processes and increasing connectivity, with a total investment of over 5 billion euro over the next three years. For more information, see the chapters: "Strategy and Sustainability Plan", "Technologies and Innovability" and "Digital-e".

In line with the Group's financial strategy, two green bonds were issued in January 2017 and January 2018 for a total value of 2.5 billion euro, as instruments to fund projects conducive to the transition to "low-carbon economy". Efforts to reduce emissions and their regulation must not have an impact on the workforce and on the various stakeholders in the transition phase ("just transition"). Enel believes that it is essential to engage in dialogue with

### Enel launches its second green bond on the European market

On January 9 2017, Enel Finance International (EFI) successfully placed on the European market its first green bond. The issue totals 1,250 million euro and provides for repayment in one instalment at maturity on September 16, 2024, as well as the payment of a fixed-rate coupon of 1%, payable annually in arrears in the month of September. The issue price has been set at 99.001% and the effective yield to maturity is equal to 1.137%. EFI committed to report information on projects financed through the proceeds of the issue. This commitment is complied with in the green bond report, included as an appendix to this Sustainability Report.

On January 9, 2018 EFI carried out a new issue, successfully placing its second green bond on the European market, once again for institutional investors and backed by a guarantee issued by Enel SpA. The issue amounts to a total of 1,250 million euro, to be repaid in a single instalment at maturity on September 16, 2026 and the payment of a fixed-rate coupon equal to 1.125%, payable annually in arrears in the month of September as from 2018. The issue price has been set at 99.184% and the effective yield at maturity is equal to 1.225%. The green bond was listed on the regulated market of the Irish Stock Exchange and on the regulated market of the Luxembourg Stock Exchange and was admitted to trading on the multilateral trading system "ExtraMOT PRO" organized and managed by Borsa Italiana.

The transaction has received subscriptions amounting to more than 3 billion euro, with the significant participation of Socially Responsible Investors ("SRI"), enabling the Enel Group to continue to diversify its investor base. The net proceeds of the issue – carried out under Enel and EFI "Euro Medium-Term Note Program" – will be used to finance and/or refinance, in whole or in part, the eligible green projects of the Enel Group identified and/or to be identified in accordance with the "Green Bond Principles" published by the International Capital Market Association (ICMA).

The transaction is consistent with:

- > the financial strategy of the Enel Group set out in the 2018-2020 Strategic Plan, which among other things envisages the refinancing of 10 billion euro through 2020, including the issue of green bonds as instruments dedicated to the financing of projects to spur the transition to the low-carbon economy;
- > the commitment made by Enel on December 11, 2017 on the Paris 2017 Climate Finance Day, together with 8 other industrial companies issuing green bonds, to continue to develop the green bond market, today one of the most dynamic segments of sustainable finance.

In this regard, it should be noted that the Enel Group has prepared and published a new Green Bond Framework, which was updated following the presentation of the 2018-2020 Strategic Plan last November, in order to facilitate transparency and the commitments made by the Group with regard to green bonds. In addition, in June 2017 the Enel Group set up a Green Bond Committee to oversee the implementation of the Green Bond Framework and the process of allocating the proceeds of green bond issues.

The new Green Bond Framework and the second party opinion prepared by the independent advisor Vigeo Eiris for this issue are available to the public on the Enel website (http://www.enel.com/investors/fixed-income/main-programs/green-bond).

The transaction was led by a syndicate of banks comprising Banca IMI, BNP Paribas, Crédit Agricole CIB, HSBC, ING Bank, J.P. Morgan, Mediobanca, Natixis, SMBC Nikko, Société Générale, UBI Banca and UniCredit Bank as joint-bookrunners.

the local community and to include in the circular economy model also resources that have since been rendered unproductive by technological development. The conversion plans for 23 power plants in Italy, through the Future project, is seen as an international benchmark for the ability to gener-

ate new social and work opportunities (https://corporate.enel.it/en/futur-e).



### From linear economy to circular economy: the Enel model

In a world with finite resources, a linear model that provides for the extraction of raw materials, the production and consumption of goods and the generation and disposal of waste is proving to be unsustainable. In this context, the application of the principles of the circular economy may once again be a driver of change to be addressed in the Open Power vision. In Enel's vision, circular economy is based on 5 principles that define how and where it is applied:



Enel has launched several projects that enhance a circular approach, including:

- > **Futur-e**: an all-round circular economy project, starting from the closure of 23 thermal plants in order to rethink the use of each plant, transforming it into a new opportunity for the area in which it is located. This important redevelopment is managed through calls for tenders that reward the circularity of the proposals as a way to help relaunch the competitiveness and sustainability of the entire country;
- > Circular Procurement: an effective approach to circularity cannot be limited only to the sector covered by the Company, but must also include suppliers in its model. For this reason, Enel's Global Procurement has started a process

of tracking what has been purchased in and out of its business to obtain thorough knowledge of the flows in terms of components, environmental impact and recyclability of products (see the chapter "Sustainable supply chain");

> Electric mobility: using electric vehicles reduces energy consumption and eliminates local emissions. When the energy used comes from renewable sources, the impact on the environment is completely eliminated. Enel is committed to developing a true ecosystem that fosters the spread of e-mobility.

To improve the circularity of its business, Enel has developed a measurement model, **CirculAbility Model**®, based on the five pillars of circularity and aimed at providing a summary value of the circularity of products, services and assets. This model is still in testing and will make it possible to measure and compare the circularity of the various businesses in the Company, in turn increasing their effectiveness in terms of circularity and sustainability.

Sharing experiences and good practices makes it possible to enhance everyone's commitment to spreading a circular approach. The **Alliance for Circular Economy** was created from this vision on November 29, 2017, as promoted by Enel and Intesa Sanpaolo.

ING YOU AN EN!

Insform y
a batter
els:
thrology
you to
your veh
urn any
energy
the Grit

The manifesto was also signed by Novamont, Costa Crociere, Salvatore Ferragamo Group, Bulgari, Fater and Eataly, thus reaffirming the vision that adopting circular economy is an opportunity for development and growth in all sectors.

Enel is also a member of the "Support to Circular Economy Financing" group of experts, which brings together members of the European Investment Bank, public and private sector, including NGOs, and whose task is to support the European Commission in the development and financing of circular economy in the different member states. In 2017, the group of experts started working on the preparation of guidelines to facilitate the funding of circular economy in the EU.

Further details on Enel's commitment to circular economy are available at the following link: https://corporate.enel.it/en/circular-economy-sustainable-future. The section aims to disseminate the circular principles and to describe some circular application in Enel, as well as to display a few success stories from small and medium-sized Italian companies and large companies. In this study and evaluation process, a scientific committee has been created, also involving environmental groups (Legambiente), Enea and Accenture Strategy. Please refer to pages 194-195 for targets related to circular economy.

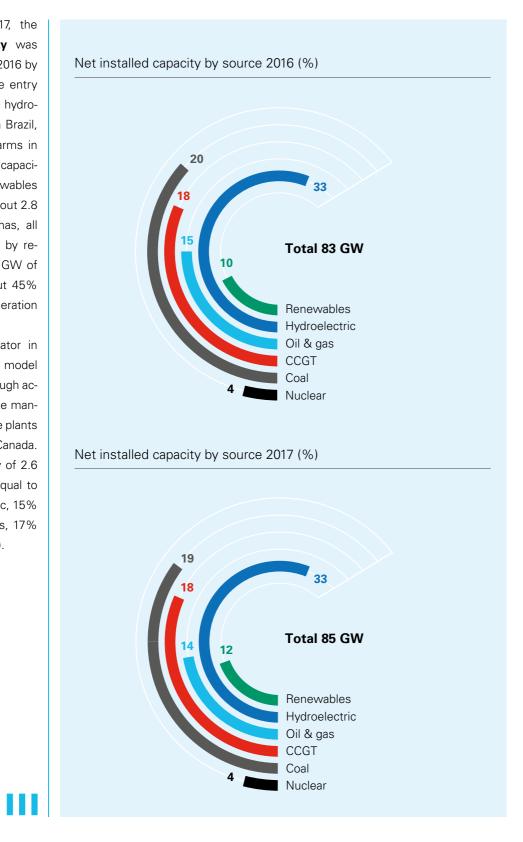
# Development of renewable capacity and reduction of thermal capacity



#### **Net installed capacity**

At the end of December 2017, the Group's net installed capacity was around 85 GW, up compared to 2016 by around 2 GW, mainly due to the entry into operation of new renewable hydroelectric, wind and solar plants in Brazil, solar plants in Peru and wind farms in the United States. The additional capacity from renewable sources (renewables and hydroelectric) amounts to about 2.8 GW in 2017. Today, the Group has, all over the world, plants powered by renewable sources for around 38 GW of installed capacity, which is about 45% of the Group's total power generation capacity.

Enel has also worked as operator in joint ventures with both the BSO model (Build, Sell and Operate) and through acquisitions of company shares. The managed capacity includes renewable plants in Italy, the United States and Canada. Considering a managed capacity of 2.6 GW, the total capacity is thus equal to around 88 GW (32% hydroelectric, 15% other renewables, 14% oil & gas, 17% CCGT, 18% coal and 4% nuclear).

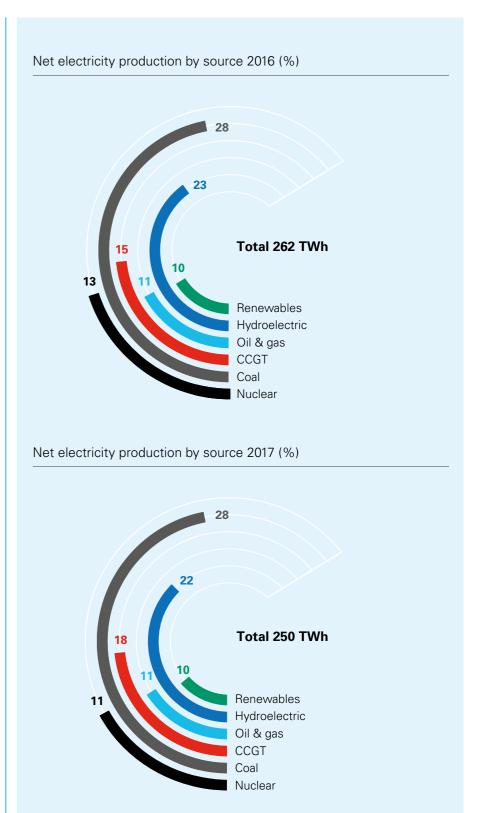


#### **Electricity production**

As for **electricity production**, 43% of the energy produced by the Group in 2017 is zero emissions. Production in 2017, equal to about 250 TWh, decreased by about 12 TWh compared to 2016, mainly due to the removal from the Group's consolidation perimeter of plants in Slovakia (including 2 nuclear, 2 thermal and various hydroelectric plants), one plant in Belgium (CCGT) and some plants in the United States (hydroelectric, wind and geothermal).

With regard to non-renewable sources, thermal production recorded a slight decrease (-0.7 TWh compared to 2016) due to the removal from consolidation of the thermal plants in Belgium and Slovakia; within this production, there was a change in the production mix compared to 2016, with an increase in the use of combined cycles (+4.1 TWh compared to 2016), which partly offset the lower coal and oil & gas production.

In the renewables sector, there was a decrease in hydroelectric production (-4.7 TWh compared to 2016) mainly due to lower water availability in Europe (Italy and Spain), as well as the aforementioned removal from the consolidation perimeter of the hydroelectric plants in Slovakia and in the United States. Production from other renewable sources, on the other hand, recorded an overall increase of 1.5% over the previous year due to higher wind and solar power production in Brazil and Chile and solar power in South Africa.



Sustainability Report 2017

Natural events have influenced the production mix in different countries in different ways. For example, in Spain, the decrease in hydroelectric production favored greater thermal production, both from coal and combined cycle; in Colombia, on the other hand, heavy rains between January and June favored hydroelectric production.

The production facilities have produced a total of about 82 TWh from renewable sources in 2017, which represents over 32% of the energy produced by Enel during the year, thus avoiding the emission of about 52 million tons of CO<sub>2</sub> into the atmosphere. The nuclear facility has made it possible to avoid releasing an additional 19 million tons of CO<sub>2</sub>.

Considering also the managed production of around 7 TWh, the total value is around 257 TWh (22% hydroelectric, 13% other renewables, 11% oil & gas, 17% CCGT, 27% coal, 10% nuclear).





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

103-2 103-3 305-4 305-5

Specific  $\mathrm{CO}_2$  emissions amounted to 411 g/kWh<sub>eq</sub> in 2017, an increase of 4% compared to 2016. The increase in value is not linked to higher  $\mathrm{CO}_2$  emissions, but to a decrease in the Group's energy production due to changes in the scope of operations during 2016 and 2017, as already described in the

previous paragraphs. Considering the managed production, the value of Enel's specific emission is equal to 400 g/kWh<sub>eq</sub>.



enel

KPI	UM	2017	2016	2017-2016	%
Specific CO <sub>2</sub> emissions from total net production <sup>1</sup>	g/kWh <sub>eq</sub>	411	395	16	4.1%

<sup>(1)</sup> Specific emissions are calculated considering the total emissions from simple and combined thermal production of electricity and heat, in proportion to the total renewable, nuclear, simple and combined thermal power and heat generation (including the contribution of heat in kWh<sub>eq</sub>).

# Specific CO<sub>2</sub> emissions, reduction target and performance (gCO<sub>2</sub>/kWh<sub>eq</sub>)

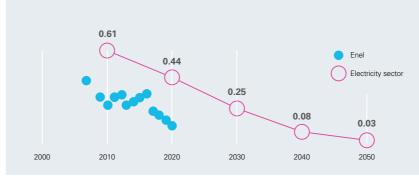
Compared to 2007, which is the base year for Enel's target to reduce specific CO<sub>2</sub> emissions by 2020, specific emissions have decreased by 12%. Considering the managed capacity, specific emissions are down a total of 14%.

The 2020 target for CO<sub>2</sub> emissions lower than 350 g/kWh<sub>eq</sub> has also been recognized as "science-based"<sup>1</sup>, meaning that it is on track for the achievement of global decarbonization targets.

The Group strategy for the period 2018-2020 works towards this objective, envisaging additional capacity from renewable sources of 7.8 GW (including managed capacity), which will bring total renewable capacity to 2020 to a value of 48 GW and consequently an increase in zero emission production from the current 45% to 55%.



#### Sectoral Decarbonization Approach (SDA)



(1) "Science-based target" is an initiative of the Carbon Disclosure Project (CDP), UN Global Compact (UN-GC), World Resources Institute (WRI) and the WWF to stimulate companies to set greenhouse gas emission reduction targets that are in line with scientific requirements to limit the increase in the average global temperature to 2 °C by the end of the century compared to pre-industrial levels. Companies' emission targets are assessed against a decarbonization trend based on the scenarios of the International Energy Agency (IEA) and the International Panel on Climate Change set up by the UN Framework Agreement on Climate Change. The scenarios set out 14 decarbonization trends to be applied to the main sectors of the economy, including for energy generation.

# CDP Climate

An important recognition of Enel's strategy in the fight against climate change and towards a low-carbon economy has been its inclusion once again in the CDP Climate "A-list" in 2017.

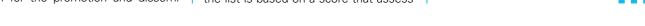
CDP is an international non-profit organization for the promotion and dissemi-

Our commitment

nation of information on environmental issues to investors, companies, cities, states and regions around the world, with the aim of encouraging more informed decisions about climate measures.

The Climate A-list 2017 includes 120 global groups selected from over 2,000 companies participating in the CDP program for the dissemination of information on climate change. Inclusion in the list is based on a score that assess-

es companies' awareness of climate change, methods and progress towards the adoption of measures to combat climate change. Enel is also in CDP Water and obtained important recognition in 2017, with a score of "A-".



# Technologies and Innovability

102-15

# ► 2017-2019 Plan: Aiming at operating efficiency and innovation

DGs	Activities	Categories	2017 results	Targets
7	Innovation in infrastructure on a broad scale: storage, electric cars, smart gri and smart meters		<ul> <li>4.2 mil smart meters installed<sup>1</sup></li> <li>15 V2G columns installed</li> </ul>	<ul> <li>+18 mil smart meters installed (2017-19)</li> <li>V2G project</li> </ul>
9 1	Roll out of fiber optic network in Italy	T Technologies and digitalization I Industrial growth E Environmental management S Social inclusion	• 2.4 mil households²	• 9.5 mil households by 2020
9	Cabling ratio	Operational efficiency Environmental management	• 72%³	• 74% by 2019
9 17	Promoting global partnerships and supporting high-potential startu	G Partnerships I Industrial growth T Technologies and digitalization S Social inclusion	<ul> <li>~50 new partnerships with startups</li> <li>3 new Innovation Hubs (San Francisco, Moscow, Madrid)</li> <li>12 bootcamps</li> <li>2 Hackathons (Rome and Tel Aviv)</li> </ul>	<ul> <li>40 new startups (2017-20)</li> <li>3 new Innovation Hubs in 2017</li> <li>Organization of bootcamps</li> <li>2 Hackathons per year</li> </ul>
1	Promotion of activit in line with the UN campaign "Making Cities Resilient"  MBA-PhD resilience	management S Social inclusion	<ul><li>189 municipalities</li><li>210 people</li></ul>	<ul> <li>400 municipalities (2017-20)</li> <li>600 people (2017-19)</li> </ul>



# ► 2018-2020 Plan: Asset optimization and innovation

SDGs	Activities	Categories	2020 targets
7 9	Innovation of large infrastructures, mainly through digitalization of distribution networks, smart meters installation and charging points	<ul> <li>I Operational efficiency</li> <li>T Technologies and digitalization</li> <li>E Climate change</li> <li>G Partnerships</li> </ul>	<ul> <li>+20 mil smart meters installed</li> <li>4.3 bn euro of investments in asset digitalization</li> <li>+300 thousand charging stations</li> </ul>
9	Digitally integrated and intelligent generation plants	Technologies and digitalization Operational efficiency	Digitalization of 31 GW     of thermal capacity
9	Cabling ratio	Operational efficiency Environmental management	• 63%4
7) (9)	Network losses	Operational efficiency Environmental management	• 5% reduction
9 17	Promoting global partnerships and supporting high-potential startups	G Partnerships I Industrial growth T Technologies and digitalization S Social inclusion	<ul> <li>Opening of at least 3 new Innovation Hubs and 3 Innovation Labs</li> <li>Implementation in the business of 50 projects with startups</li> </ul>

- (1) Includes 1.7 mil second-generation smart meters replaced in Italy.
- (2) Cumulated value 2016-17, related to A and B areas.
- (3) In line with target perimeter, the value does not include data of Enel Distribuição Goiás, acquired during 2017. The value including Enel Distribuição Goiás data is equal to 60%.
- (4) Perimeter change compared to Plan 2017-2019, due to Enel Distribuição Goiás acquisition.





# Technologies and Innovability

DMA EU (former EU8)



o foster new uses of energy and new ways of managing and making it accessible to an ever-increasing number of people in a sustainable manner, Enel has made innovation and digitalization key elements of its strategy. It is a path that involves both traditional business and the development of new models and technologies and which relies on creativity, passion, ideas and technologies not only within, but also outside the Com-

Enel's commitment to digital progress and the promotion of an Open Innovation model was recognized in 2017, when it was awarded the "Business Model Transformation Award" during the fourth edition of the World Open Innovation Conference, one of the most important worldwide events in this field. It was held in San Francisco by the Garwood Center for Corporate Innovation and the Haas School of Business of UC Berkeley.





## The innovative ecosystem

In line with the Open Power vision, the

Group promotes an open innovation approach to face the challenges of the energy transition. This approach is based on sharing, which enables challenges to be faced by connecting all areas of the Company with startups, industrial partners, small and medium-sized enterprises, research centers, universities and crowdsourcing platforms. Collaborations are born within the Open Innovation ecosystem, which in 2017 was renamed "Open Innovability" as Enel strongly believes that Innovation and Sustainability are an inseparable pairing. 2017 was the year of the launch of the "Open Innovability" online crowdplatform (openinnovability. sourcina enel.com), aimed at the outside world and the Company's people who want to contribute to the development of business with innovative and sustainable solutions and transform proposals into concrete projects. More specifically, Enel proposes "call for projects" and "challenges", many of which are directly inspired by the United Nations' 2030 Agenda for Sustainable Development Goals (SDGs): "Water as a way to fuel development," "Education as a global right," "Clear the way for clean energy," "Turning the tide on climate change", and "Energy for those in need".

business needs, such as those relating to renewable energies ("Technologies for renewable generation") or to new technologies ("Development goes online"), as well as proposals aimed at inclusive development ("Ideas for social progress", "Growing the economy and job quality", and "Open minds to the future"). Open Innovability offers a space to anyone who thinks they have an interesting contribution to offer, even if they do not respond to any of the "challenges" active at the time ("I have a project" section). Enel's focus is not only aimed at partnerships with large companies, but also at collaborations with startups and top small and medium-sized enterprises. In two quarters, more than 6,000 users registered on the site and about 600 project proposals were received for the 21 challenges

Other 'challenges' respond to specific

Enel has about 200 innovation proiects<sup>1</sup> and 124 innovation partnership agreements both globally and locally. In addition to Enel's 'traditional' activities, such as renewables and conventional generation, the Company has promoted the development of new business in the fields of e-mobility, recharging infrastructures, energy efficiency, Industrial IoT (Internet of Things), smart homes, smart grids and smart meters. In particular, 43 collaboration agreements including 7 Global Partnerships were launched in 2017, including one with Intesa Sanpaolo, which aims to support the innovation of small and medium-sized enterprises (SMEs) and promote the development of the circular economy and Open Inno-



vation. In addition to receiving technical and economic support from Enel, SMEs and startups that collaborate with Enel on innovation projects will also be able to take advantage of financial support from the network of innovation experts. On the subject of electric mobility, the EVA+ initiative was launched with Verbund, Renault, Nissan, BMW, Volkswagen, Audi (see the "Electric mobility" box), and a collaboration with Nissan started in December 2015. Lastly, also in 2017, Enel and Ferrovie dello Stato Italiane signed a Memorandum of Understanding to develop innovative joint projects in the transport and energy

In 2017, 3 Innovation Hubs were launched (San Francisco, Moscow and Madrid) and 1 Innovation Lab in Catania, bringing the total number of

ecosystems to 7 and expanding Enel's global presence in the best innovation ecosystems. The Innovation Hubs enable a new model of collaboration with startups and small businesses in which the Group provides its knowledge and experience, testing infrastructures and a global network of partners to develop and adopt innovative technological solutions and new business models. During the year, thanks to the Innovation Hub network, 12 bootcamps were organized on different technological areas such as IoT, smart home, cyber security, electric mobility, drones, etc. This allowed the Group's Business Lines to evaluate more than 100 new solutions and business models. The first Innovation Lab was also inaugurated in Catania to encourage research and innovation in the renewable energy sector through the

creation of a technology campus and an accelerator that will host local, national and international startups, small enterprises, universities and research centers. The first call for startups on renewable technologies was met with more than 200 companies, and 5 projects were selected to be developed in 2018. In general, in 2017 the Group evaluated more than 1,000 proposals and initiated about 50 collaborations with startups and small enterprises.

These collaborations and intellectual exchanges gave rise to cutting edge innovative solutions, which also led to the filing of specific patents. An example related to occupational health and safety is the fabric for gloves to be used in low voltage work, the result of a collaboration between Global Thermal Generation and the Italian Institute of Technol-

ogy (IIT), which led to the co-ownership of a patent and an innovative agreement for the joint management of the associated rights.

Enel developed the partnership program We4U, World energy 4 Universities, with national and international universities and research centers, with the aim of maintaining a constant, multidisciplinary dialogue focused on the challenges of the energy transition, with 24 projects initiated in 2017. The partners include the Politecnico Milano, Politecnico Torino, Luigi Bocconi University, Scuola Superiore Sant'Anna, IIT, Ricerca sul Sistema Energetico (RSE), UC Berkeley, Massachusetts Institute of Technology (MIT), Universidad Pontificia Comillas and, more recently, Columbia University and Strathmore University.

The Group's medium-long-term innovation strategy is approved in a meeting chaired by the Chief Executive Officer attended by the directors of the company Functions. Each Business Line approves and monitors the projects for which it is responsible by means of Innovation Committees, while cross-functional projects are approved by a committee headed by the director of the Innovability Function, which is composed, among others, by the innovation managers of all the Business Lines.

1 The decrease in the number of Innovation proiects compared to the previous year (300 projects in 2016) is mainly due to the rationalization of the new e-Solutions Business Line downstream of the confluence of most projects in its project portfolio previously managed by the market areas of each country. Innovation project means an innovative solution identified through testing that creates added value for the Company, can be replicated and meets a specific need. Innovation can be in the customers served, in how they are served, in the type of product or service they are offered, in a new combination of the previous points, i.e. in a new business model or in a technological solution applied at a point along the value chain. The idea or proposal for an innovative solution becomes a project following a formal approval to proceed with the test and following the allocation of a project budget. In case of approval, there is the possibility that the commercial or large-scale adoption of the validate ed solution can follow the test



rate data, in less time and with greater safety for the operators in wind farms inspections in North America. Another project developed in the field of renewable energy is the use of drones in the monitoring and control of individual photovoltaic panels that are part of systems, such as in the Chilean La Silla plant

On the issue of **storage**, Enel Green Power built and commissioned the first 100% emission-free microgrid: Cerro Pabellón (Chile) is powered by solar energy and is able to operate autonomously 24/7, thanks to the coupled energy storage of hydrogen accumulation and lithium batteries. In Spain, in Almería, the subsidiary Endesa is developing the Litoral project at the Carboneras thermal plant: the storage system, consisting of 24 inverters, 16 containers, 8 of which for batteries and the remaining for the power unit, will be the largest in Spain, with a total capacity of 20 MW for 11.7 MWh and an expected lifespan of 10 years. The storage system will be used to offer secondary reserves, freeing production capacity at the plant.

Regarding **augmented reality**, Enel has created an Innovation Community dedicated to augmented and virtual reality with the aim of scouting products and platforms in this sector, monitoring their rapid technological evolution and defining use cases for Enel. Some small-scale trials were launched in 2017, which should demonstrate in 2018 their practical feasibility in an industry where technology is rapidly evolving in terms of cost and performance and the sustainability of potential applications aimed at improving workers' operational efficiency, in particular those on the ground.

## Innovation Community

Enel has set up specific cross-functional working groups (Innovation Community) in order to address the significant issues relevant to business and new technologies in an innovative way and to create value. The active communities concern the following issues: **Storage**,

## Augmented Reality, Blockchain and Drones.

Regarding **Blockchain**, Enel has sought and promoted collaborations with various parties, since the success of any project in this field depends on the ability of the participants to create a network effect from which all members can benefit. The Enerchain project, which involved about 40 utility companies and traders (the number is



constantly growing), was born with the aim of redesigning the channel through which traders make transactions on the market, so they may be independent of third parties. In October 2017, Enel along with E.ON carried out the first transaction in the energy market based on a Blockchain platform, and in February 2018, Enel, through Endesa, exchanged an energy product with Gas Natural Fenosa on the Spanish market,

same spirit, a collaboration group with about 20 utility companies in eurelectric was also formed. Enel also actively participates in other working groups. In recent years, Enel has also intensified the **use of drones** in the monitoring and maintenance of its assets, inspecting solar fields, wind farms, hydroelectric dams and reservoirs, closed components in traditional plants and



The process of change cannot ignore the development of specific activities in the field of entrepreneurship and innovation culture. Three projects have been launched globally:

"#nomoreexcuses", a communication campaign co-created with personnel from all over the world with the aim of identifying the causes, in the form of "excuses" or alibis, of the cultural resistance to change. Each cause was given a response aimed at encouraging a way to overcome it and promoting behavioral attitudes that foster innovation;

- "Innovation School", a targeted training on innovation, aimed at spreading not only new working methods (such as design thinking, lean start-up, agile and creative problem solving), but also to encourage soft skills that support and facilitate the dissemination of the culture of innovation and creativity;
- "Enel Innovation World Cup", a project launched in 2016 with the aim of identifying new business models for Enel, starting from entrepreneurial ideas by Enel's people in each



Ш

country, executed over the course of 2017. Of the 12 finalist projects, 3 were included in the Enel X project portfolio to be developed.

As part of promoting creativity and lateral thinking, the project "Enel Idea Factory" continued in 2017. Launched in 2014 with the aim of supporting all areas of the Company in solving chal-

lenges through new working methods and creative techniques, it also promotes integration and collaboration between the business units and supports the dialogue between the internal and external stakeholders to the Company. In 2017, 15 creative sessions were held involving 336 participants (including 44 external participants) who generated around 350 ideas and gave rise to various business initiatives. For the purpose of disseminating and promoting the innovation culture and creativity, four "Idea Hubs" have been created in Spain, Colombia, Chile and Brazil.





## Main projects

The main thermal generation innovation activities in 2017 pertained to the improvement of the flexibility and efficiency of generation plants and the minimization of environmental impacts and emissions. They also involved the application of advanced diagnostic and monitoring systems and IoT applications, as well as the development of accumulation systems and new business models. An example is the installation at the Torrevaldaliga Nord plant (Italy) of a drone system aimed at providing an environmental and security monitoring service, able to perform autonomous flight, assisted by video analysis algorithms and the definition of three-dimensional routes via software. An anti-drone system has also been installed, to protect the system against the physical risk of intrusion by hostile drones.



The digital revolution of the grids has focused on improving the efficiency and quality of service for customers in the various countries in which Enel operates. The microgrids in Paratebueno (Colombia) are an important example. They have allowed sustainable electricity to be brought to certain villages and will be used to test new technologies to be replicated in other areas.

In Spain, as part of the "La Graciosa" project, Enel has worked to demonstrate the effectiveness of the use of storage systems in order to maximize the penetration of renewable energy while maintaining the highest quality of service in distribution networks.



#### Electric mobility

Electric mobility is an essential innovation for the future, but technology and a widespread distribution network are not enough to accelerate this revolution; we must start from a cultural revolution. The development of electric mobility makes it possible to obtain various benefits, including a lower environmental impact, the decarbonization of transport, the improvement of air quality and noise pollution in cities, an increase in energy efficiency, the greater integration of renewable energy, and the dissemination of innovative solutions. Furthermore, investments in e-mobility will reduce total energy imports in Europe and create additional demand for domestically generated sustainable electricity by expanding the use of renewable energy in transport.

The Enel technology solution is based on an interconnected network composed of 3 functional areas: interconnected charging stations, smart charging services and aggregation services between home, vehicles and the network. In particular, urban areas will be covered by Quick charging stations (22 kW) that have a total average charging time of approximately 1.5 hours, while in suburban areas the Fast (50 kW) and Ultra Fast (150 kW) charging stations will be installed, with average charging times of about 40 and 20 minutes, respectively. As of 2017, over 1,100 public charging stations and almost 26,000 private (wallboxes) were installed. This path will also unfold through the EVA+ (Electric Vehicles Arteries in Italy and Austria) project, co-funded by the EU Commission. In particular, it provides for the installation of 180 multi-standard fast charging points in Italy and 20 in Austria that are compatible with all electric vehicles on the market. In addition to Enel, the project partners include Verbund, Renault, Nissan, BMW, Volkswagen and Audi.

Enel has therefore developed an infrastructure consisting of charging stations designed to meet the different customer needs of charging and all connected to the EMM platform (Electro Mobility Management System), which uses the cloud to remotely monitor and manage all the functions of charging stations, both private and public, creating a smart network.

## The first electric mobility Hub and the new Enel X Juice Station



In line with the Open Power approach, an innovative Hub dedicated to the development of technologies for electric mobility has been set up. This Hub, located at the ACI Vallelunga racetrack in Rome, aims to connect and involve national and international research institutes and startups. The structure will allow the new infrastructures to be tested directly in the field, taking advantage of the specialist skills of ACI Vallelunga in the field of road safety and sport racing, to transfer the high performance developed through competitions on the racetrack to daily life.

In this context, on November 9, 2017 Enel presented the prototype of the new charging station, which will be installed starting in mid-2018. In addition to ensuring efficient and universal charging, the new generation of stations will offer the possibility of remote control and pay-as-you-go options, which will improve the customer experience thanks to a new color interface and will enable easier maintenance.

## Fim Enel MotoE, the new era for motorcycles

Beginning in 2019, thanks to the collaboration agreement signed with Dorna Sports, the company that manages the commercial rights of the Grand Prix motorcycle racing, Enel will be Title Sponsor of the Fim Enel MotoE World Cup and Sustainable Power Partner of the MotoGP. This single-brand cup will start in 2019 and will initially be held in Europe. The spotlight will be on the electric supersport bike built by Energica, an Italian company among the world leaders in the development of the electric two-wheelers.

Motorsport competitions represent an opportunity to spread the culture of electric mobility and also serve as a laboratory to accelerate the evolution of technology and the continuous improvement of systems to the benefit of sustainable mobility. Enel's partnership with Dorna will also include services to reduce the carbon footprint of the different stages of the cup by adopting smart energy management solutions and digital meters. This ensures that Dorna and the MotoE teams take advantage of the latest generation technologies in the management of complex electrical systems. Thanks to Enel X, which will be the Official Technology Partner of MotoE™, the Energica electric motorcycles will be powered by renewable energy generated on site through state-of-the-art portable photovoltaic systems or by using renewable energy available on local distribution networks. Produced entirely from renewable sources, the energy will be used as zero-emission fuel for the motorcycles, which will be recharged using the Enel X Juice Roll, a rapid smart charging system. This technology allows recharging either in the pit stops, connected to the grid, or in any other part of the circuit, in battery mode, through a mobile charger with integrated storage capacity. The mobile chargers can be easily transported from the pit stop to the paddock or even on the starting grid, and will be connected to Enel's smart e-mobility platform to optimize the charging process.



Enel has also developed an adaptive lighting system (Lighting 4.0) to make urban public lighting systems more efficient and safer. The project allows for light to be automatically adjusted according to the intensity of traffic, thanks to an advanced camera system, in order to maximize energy efficiency and reduce waste. Energy savings can reach up to 49% compared to a non-optimized plant, a significant share if we consider that public lighting is the third largest expense in municipal budgets. The solution proposed by Enel has gathered the interest of the Municipality of Bologna, which intends to develop a pilot project by integrating a sensor developed by a startup into the Archilede Active Control remote control system already installed in the city. The solution will remain active for a few months in order to realistically monitor the obtainable benefits in terms of energy savings.

In addition to the Bologna test, other pilot projects on adaptive lighting are planned, such as in the Municipality of Pomezia, where evolved and resilient remote control solutions based on radiofrequencies will be tested.

The Lighting 4.0 project also provides for the mapping and testing of various other value-added services, based on video analysis, sensors and artificial intelligence solutions, which can be run from public lighting infrastructures, aimed at increasing city safety, optimizing vehicle traffic and mobility, and to support administrations in planning services by assessing citizens' real requirements

Another solution, developed in synergy with electric mobility, is the Enel X Juice Light Pole. This project is aimed at developing an innovative product consisting of the integration of two distinct technologies: public lighting poles and charging stations for Enel X electric vehicles. The Enel X Juice Light Pole will be able to provide several services to different types of users through a single infrastructure. Following the release of the first products, Enel will produce several prototypes (Proof of Concept - PoC) in order to measure customer interest and satisfaction in such a way as to make the product evolve along a path of continuous improvement.

The Group also focuses on access to energy, the integration of renewables into the electricity system, and the use of new technologies in order to contribute to improving local communities' access to energy by providing power to isolated areas thanks to the combined use of diversified generation technologies and storage systems. Key elements include the search for solutions that improve the efficiency and flexibility of renewable resources also in urban contexts and the development of new untapped renewable resources, such as marine energy.

Work continued on the European RESCCUE (RESilience to cope with Climate Change in Urban arEas) project, an initiative that Enel participates in through the Spanish subsidiary Endesa, created to develop innovative models and tools to improve the ability of cities to cope with the problems arising from current and future climate scenarios.



#### Resilient and sustainable cities

Enel is a member of the United Nations' Private Sector Alliance for Disaster Resilient Societies (ARISE) with the role of Vice President, and since 2017 it has been a member of the Global Steering Committee of Making Cities Resilient Campaign. The cities that have signed the campaign in 2017 in the countries where Enel is present include 22 in Europe and 167 in South America<sup>1</sup>. In Italy, through the Enel Foundation, Enel presented the "Scorecard on Resilience to Disasters for Cities", a tool that allows local administrations to monitor the adoption of the Sendai Framework<sup>2</sup> for risk reduction and assess disaster resilience. The Scorecard is available at the following link: https://www.unisdr.org/campaign/resilientcities/home/toolkitblkitem/?id=4.

- (1) UNISDR Making Cities Resilient Campaign
- (2) The Sendai Declaration and the Framework for Disaster Risk Reduction 2015-2030 were approved during the Third United Nations World Conference on Disaster Risk Reduction, in Sendai, Japan. The text is available at the following link: https://www.unisdr.org/we/coordinate/sendai-framework.

## Digital-e

102-15

## ▶ 2017-2019 Plan: Digitalization

**Digitalization Activities Categories** 2017 results **Targets** Technologies and digitalization Operational efficiency • 4.7 bn euro capex (assets, • ~1 bn euro (2017-19)customers, people) Industrial growth Social inclusion Coverage of web applications posted on the internet with T Cyber security • 60% • 100% by 2019 advanced cyber security application





- T Cyber security
- Acknowledgement in 3 countries and memorandum of understanding in 3 more countries
- Acknowledgement in 8 countries<sup>2</sup> by 2018





Disseminating the information security culture and changing people's behaviour in order to reduce risks

T Cyber security

• 15 events held

• 15 cyber security knowledge sharing events per year



Activities to reduce CO<sub>2</sub> emissions

- Technologies and digitalization
- S Social inclusion
- -35 mil pages printed³
- Dissemination of video communication systems
- Monitoring of data in Italy and plans for monitoring in other countries
- -17.2 mil pages printed (2015-19)
- Development of telepresence and video communication systems
- Launch of activities to reduce PC, laptop and monitor downtime in Italy







## ▶ 2018-2020 Plan: Digitalization

SDGs
Activities

Categories

T Technologies and digitalization
I Operational efficiency
I Industrial growth
S Social inclusion

Coverage of web applications posted on the interpet with





Coverage of web applications posted on the internet with advanced cyber security application solutions

T Cyber security

• 100%





Setting up of Enel's CERT<sup>1</sup> and acknowledgement by national CERTs<sup>1</sup>

- T Cyber security
- Acknowledgement in 8 countries<sup>2</sup> in 2018 and affiliation with international organizations<sup>4</sup>





Disseminating the information security culture and changing people's behaviour in order to reduce risks

- T Cyber security
- 15 cyber security knowledge sharing events per year





Information security verification activities (Ethical Hacking, Vulnerability Assessment, etc.)

- T Cyber security
- 350 verification activities per year



Activities to reduce CO<sub>2</sub> emissions

- Technologies and digitalization
- S Social inclusion
- -15 mil pages printed (2017-20)
  Dissemination of telepresence and video communication
- Launch of activities to reduce PC, laptop and monitor downtime

- (1) Computer Emergency Response Team.
- (2) Italy, Spain, Romania, Argentina, Brazil, Peru, Colombia, Chile.
- (3) 2015-17 cumulated data.
- (4) First and Trust Introducer.

Our commitment



## Digital-e

nel is facing a great cultural and organizational change. The challenge is to make the most of the opportunities offered by new technologies and the large amount of data available. Digitalization is therefore an essential tool to respond effectively and promptly to external events and to make thought-out decisions at all levels of the organization. This process affects both the traditional business and the

development of new models enabled by the adoption of new technologies (such as the Internet of Things [IoT], Big Data, Blockchain technology, robotic process automation and artificial intelligence). Data has become a new asset and learning how to manage it optimally is an important key to generating value.

In 2016, Enel added digitalization to its Strategic Plan, announcing investments of 4.7 billion euro over the 2017-2019 period, of which about 1 billion euro was spent in 2017. The new Strategic Plan, presented in London in November 2017, confirmed the central focus on this choice, bringing investments to 5.3 billion euro in the 2018-2020 period.



# Digital transformation: assets, customers and people

o be a leader in the global energy transition, a model has been developed that envisages investments in grids that make it possible to integrate distributed generation and the participation of demand in energy markets, as well as the digitalization of both renewable and conventional plants, improving technical and operational performance.

At the same time the digitalization of sales channels plays a key role in improving relations and quality of service and in the ability to meet the demands of increasingly connected and demanding customers.

This change also involves a more agile-based work approach for people, aimed at encouraging greater positive Enel's digital transformation aims to develop along three main lines: assets, customers and people, using the cloud, platforms and cyber security as enablers.

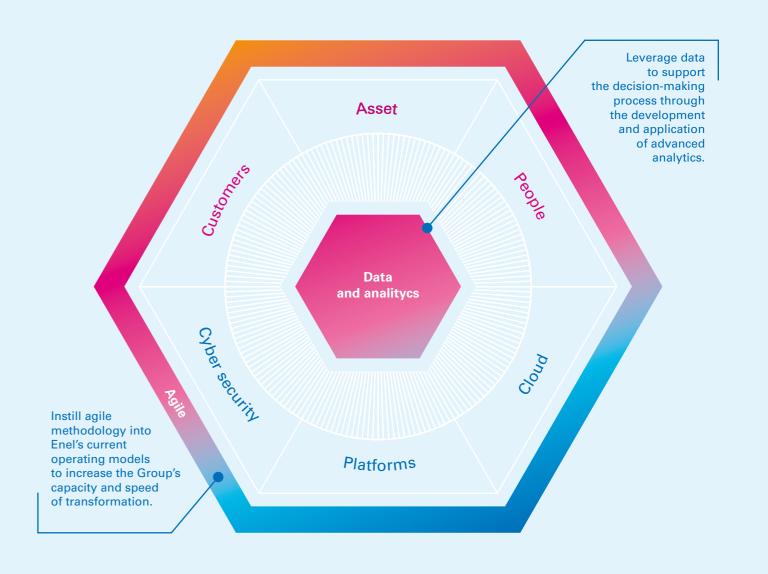
and constructive interaction between the various organizational areas. Enel's digital transformation therefore aims to develop along three main lines: assets, customers and people, using the cloud, platforms and cyber security as enablers.

Sustainability Report 2017

The main projects and initiatives are shown below.



## The guidelines and the enabling factors





### **Digital Plant**

One of the building blocks of the Digital Plant project is the connectivity and the ability for distributed intelligent sensors to communicate effectively,

in real time, from any part of the plant wirelessly.

Thanks to the adoption of IoT systems, the various components of the plant communicate data and access information, thus providing a digital fingerprint of the plant that allows its operations to be monitored and optimized. At the Global Thermal Generation plants, in Italy in Torrevaldaliga Nord and in Spain in Besós, a high-coverage communication

network for the transmission of data sent by innovative temperature and humidity sensors was installed. The results obtained have confirmed the validity of one of the most innovative communication technologies supporting the IoT, and this will allow evaluating a possible extension to other plants.





## Machine learning and predictive analysis

IT tools and machine learning techniques have been adopted and promoted, enabling predictive analyses to be carried out for the maintenance of the electricity distribution network and the components of power generation plants, identifying in advance any critical issues detected during equipment operation, thus preventing failures. This

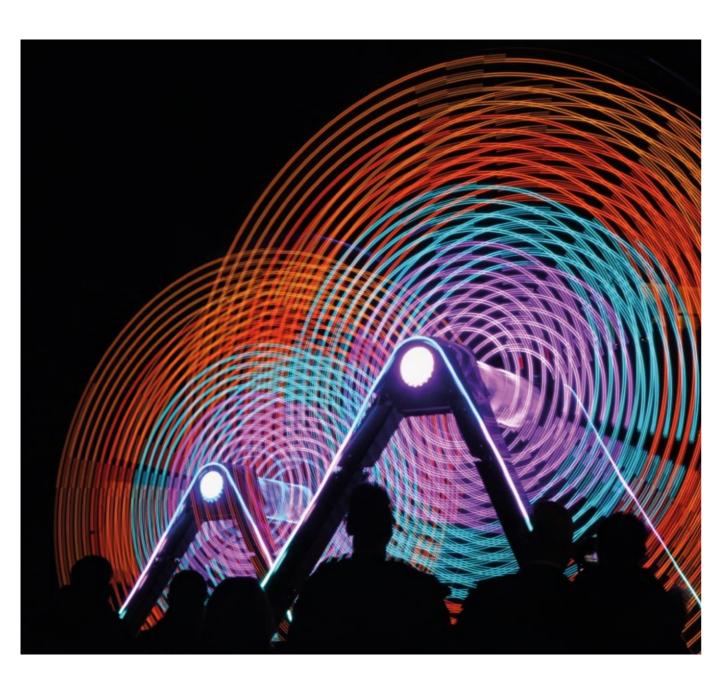
has allowed the quality of service to be improved, making it more sustainable over time, and has improved use of internal resources and increased safety at work, by concentrating the inspections on the equipment most exposed to the risk of failure.

#### **Storage**

Work is underway to further develop storage system management software to further optimize simultaneous use for multiple applications and markets; the aim is to maximize the use of the battery asset and consequently optimize the returns on investment, with a nod to circular economy as well.







## **Digitaly**

Enel has launched the Digitaly project, which has made it possible to analyze the main processes of e-distribuzione, the Enel company that oversees distribution in Italy, to identify the possibility of applying new technologies and operational simplifications. One of such initiatives includes **digital image recognition**, which uses an advanced algorithm to analyze a photo recognizing certain characteristics, thus making it possible to remotely monitor the distribution network through, for example, the use of drones. Another example is **natural language understanding**, a system that allows devices to understand natural language, not only with the ability to write what is said on a computer and to respond using words, but also to understand the context. From February 2018, the new chatbot, "Eddie," is now available on the e-distribuzione site. This virtual assistant is designed to inform customers about any interruptions or disruptions due to scheduled maintenance or to provide indications on the times and methods for the disbursement of compensation and more.

#### Customers

Enel has also begun developing connected devices aimed at monitoring domestic energy consumption and reducing it, where possible. Many initiatives have been launched and further developed in the area of electronic invoicing; they include the Bolletta Web project in Italy, as well as the One Billing project in Spain. In this way it has been possible to achieve the objectives set by the Strategic Plan for greater digitalization for customers. For more information, see the "Customer focus" chapter.



## People

A process of transformation must revolve around people, and their needs must be satisfied. A process of digital transformation was therefore started for

the people working at Enel, a new way of rethinking business processes based on the experience of working for the Company, following an integrated mind-set focused on services and making the most of new opportunities offered by digital technology. The project aims to improve digital skills and the engage-

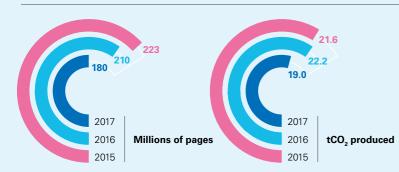
ment of people in the provision of products and services, in a more integrated and intuitive way. For more information see the "Our people and their value" chapter.





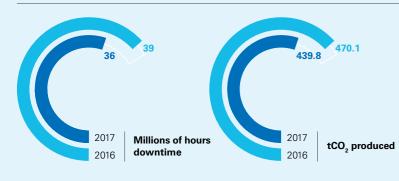
## The contribution of shared IT services to decarbonization

#### Printing services



A printing service has been operating in all Enel offices for some time now. In addition to using new-generation printer models designed for more environmentally friendly use, the service was conceived on an advanced business model that has allowed Enel to evolve from the concept of product to that of service. The unique aspects of this service, together with a more rational use of printed documents, has led to a reduction in paper consumption over the years and consequently a lower impact on the environment. In particular, based on the number of printed pages and the printers' technical specifications, the quantity of CO<sub>2</sub> associated with the electrical consumption of printers while printing is calculated monthly by applying each country's emission coefficient (data source: Enerdata), which considers the specific mix of energy sources present¹.

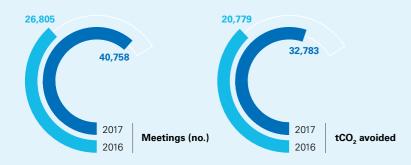
#### PC Power Management - Italy



In 2017, electricity consumption outside normal working hours² continued to be monitored. This pertained to the IT workstations (desktops, laptops, monitors) of Enel's people working in Italy. This measurement is possible thanks to a Microsoft³ feature available on the workstations which made it possible to identify when they were turned on and not used. Following the analyses carried out, specific awareness actions have been defined aimed at mitigating electricity consumption.

In 2017, the computer stations in the various Group countries were brought back to the same configuration platform, making more extensive reporting possible from 2018 onwards.

#### Video communication



In 2017, the cloud-based video communication service (Blue Jeans) used internet connectivity to share content and was even accessible on the move, from one's personal computer, smartphone or tablet. This made it possible to save on travel and business trips by reducing carbon dioxide emissions.

In 2017, 40,758 meetings were held using this service (26,805 in 2016), avoiding 284,172,487 km (181,594,130 km in 2016) of air travel and 2,508,607 km (1,812,737 km in 2016) by car, saving the emission of 32,783 tCO $_2$  (20,779 tCO $_2$  in 2016). [Data source: Blue Jeans]

- (1) Accessed from Enerdata on May 16, 2017. It considers data in the following areas: Italy, Spain, Russia, Romania, Brazil, Chile, Peru, Colombia.
- (2) Monday-Friday (from 7pm to 7am); Saturday and Sunday. The monitoring excluded servers and personal computers that, by their nature, must always remain on (for example, GESI application, Enel Points, Power Exchange, etc.). Specifically, the indicator represents the amount of CO<sub>2</sub> associated with the electrical consumption of desktops, laptops and monitors, to which the average CO<sub>2</sub> emission value is then applied per unit of electricity produced (gCO<sub>2</sub>/kWh) relative to the mix of sources in Italy.
- (3) System Center Configuration Manager.

## Cloud

During 2017, the cloud was a fundamental strategic enabler for Enel, allowing the use of both infrastructure and app-type resources when

required, by making full use of the access possibilities offered by the network, thus allowing the wastefulness reduction related to the consumption of unused resources. The AWS (Amazon Web Services) cloud that Enel uses requires an average use of about 16% of the energy required by a traditional on-premise infrastructure, al-

lowing for an average reduction in  ${\rm CO}_2$  emissions of about 88%. It is housed in green data processing centers that are powered by more than 40% renewable energy.



### **Platforms**

#### **IoT Platform**

New information can develop from the interaction with data that are managed separately; for example, energy generation and market data. At Enel, the environment that enables this interaction is the Amazon Web Services IoT platform, which gathers applications that interact with objects spread all over the world, from temperature sensors in plants to electronic meters in homes. The interface of communication with people is Salesforce, a platform that enables interaction via voice, PC or smartphone. It is therefore a cloud-based IoT platform that is scalable, modular, open and applicable to different contexts (residential, industrial, etc.), perfectly covering every possible IoT pillar: from Industry 4.0 to smart building, from smart home to e-mobility and so on. The IoT platform enables easy development and integration of applications for different sectors: energy efficiency (construction, cities, industry, home), social applications (health monitoring, safety) and sustainable transport



(electric vehicle charging). An example applicable to buildings and industries is EIS (Energy Intelligence Software), which allows for energy consumption as well as all the commodities involved in the production/life cycle to be constantly monitored, and to check if there are any anomalies in consumption and then correct them. Thanks to intelligent algorithms and predictive technologies, EIS offers customers the possibility of reducing their energy costs by automatically suggesting changes to behaviors and processes and identifying areas of efficiency.

There are also two innovative IoT platforms:

> **JuiceNet**, for the intelligent management of charging electric vehicles and other distributed storage systems. The platform allows remote

control and aggregation of unidirectional and bidirectional electricity flows (vehicle-to-grid, V2G) for grid balancing. The acquisition of eMotor-Werks marks Enel's entry into the US electric mobility market, one of the largest in the world;

> Demand Response, a platform that allows the aggregation of consumption and/or generation resources (Demand Response/Virtual Power Plants) to provide capacity or balancing services to the electricity system, thus generating value for asset owners and increasing the efficiency of the entire system.



## Unified Virtual Data Lake

The analysis of the available information and data can change the way of working and creating value, allowing better decision making. Enel has an enormous amount of data, and managing and leveraging it better can help make new investment choices and streamline plant maintenance and operation, by facilitating preventive actions, reducing costs, etc.

Enel aspires to be a data-driven company and during 2017 it launched a number of measures aimed at improving data governance and creating a data lake, which is a unified architecture that simplifies and enhances the archiving, man-

agement and analysis of information, using data from diversified and non-homogenous sources. In December 2017, following a test phase, the Unified Virtual Data Lake and specific training activities were launched.



### e-API Ecosystem

In an increasingly connected and interdependent world, digital applications and services can no longer arise simply from work, information and services held by a single party. Different parties must be able to interact in a flexible and simple way, within modern, digital multi-stakeholder ecosystems. In this context, an API (Application Programming Interface) is an interface made available by one computer system that can be retrieved by another computer system directly, thus creating a direct and totally 'automatic' interaction between two or more digital applications.

The e-API Ecosystem is based on the interoperability between computer systems that operate autonomously within the same digital ecosystem. In this context, in 2017 Enel developed solutions in

the Italian Market, the Iberia Market and the new e-Solutions Division that made it possible to retrieve information automatically and immediately, without wasting time and overall resources.



## Cyber security

hanges in technology and the energy scenario, increasingly characterized by numerous small interconnected and geographically distributed renewable plants with data stored in the cloud, represent opportunities for system improvement, while at the same time entailing new risks. Cyber attacks have changed dramatically in recent years: the number has grown exponentially, as has their degree of sophistication and impact, and it is increasingly difficult to identify their source in a timely manner. The multiplicity and complexity

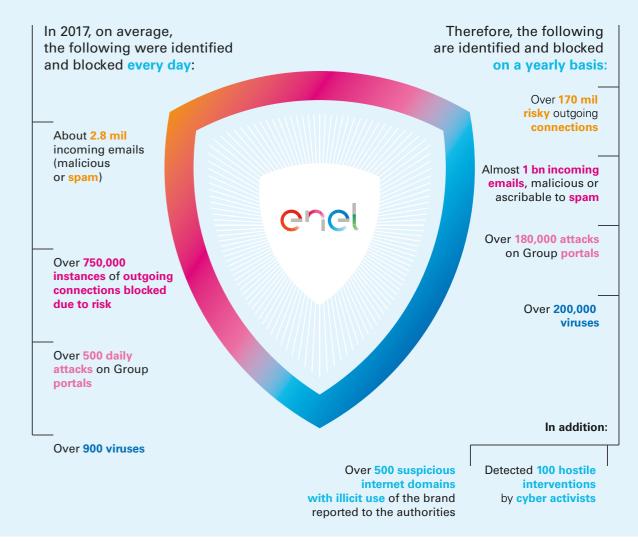
of the environments in which Enel operates (data, industry, and people) and the technological components (for example, business-critical systems such as SCADA [Supervisory Control and Data Acquisition], smart grids and electronic meters) that are increasingly integrated into the Group's digital life have made it necessary to define a structured system of cyber security. Hence, a new cyber defense model based on a system vision that integrates the IT sector (Information Technology, from the cloud to the data center and the cellular phone), the

OT (Operational Technology, everything related to the industrial sector, such as the remote control of plants) and the IoT (Internet of Things, or the extension of communication and intelligence to the world of objects).

Every day Enel identifies and blocks many incoming emails (malicious or categorized as spam), viruses, or attempts of risky connections.



## Cyber security



## Reference regulatory framework

New laws and regulations direct companies towards adopting effective cyber security policies. The following are the main relevant documents:

> European Regulation no. 2016/679, known as the GDPR (General Data Protection Regulation), on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, also in response to the challenges posed by technological developments and new models of economic growth. The GDPR stems from precise requirements of legal certainty, harmonization and greater simplicity of the standards on the transfer of personal data. Beginning on May 25, 2018, it is directly applicable in all EU Member States;

- > NIS¹ Directive 2016 2009/140/EC on the security of network and information systems. It is the first unequivocal set of rules on IT security at the EU level and is based on three key elements:
- improve the cyber security capabilities of the individual member states;
- increase the level of cooperation

- between member states;
- establish the obligation to risk management and report incidents of a certain scale to the operators of essential services and digital service providers;
- > NERC CIP v5, standards for critical infrastructure protection prepared by the North American Electric Reliability Corporation.

There are also local regulations and standards in the various countries where Enel operates, such as Ley 8, 2011 in Spain and Acuerdo 788 in Colombia.

<sup>1</sup> NIS - Network and Information Security.





# The new organizational and operational model

Since September 2016 there is a specific Cyber Security unit that reports directly to the Chief Information Officer (CIO), whose manager holds the role of Group Chief Information Security Officer (CISO).

During 2017, the organizational structure was further bolstered by the appointment of **Cyber Security Risk and Response Managers**, who guarantee the involvement of the Business Lines in activities related to IT security. This is a defining feature of the Enel model that allows daily involvement of each individual Division in the key processes of risk assessment and definition of the response criteria in case of attack and the priority of the actions to be taken. 2017 was also the year of the publication of the **Cyber Security Framework**, which

allows IT security activities to be addressed and managed with a risk-based approach and according to the "secure by design" principle. The framework provides for the involvement of the business areas, the implementation of regulatory and legal standards, the use of the best available technologies, and increasing people's awareness.





# Definition of the cyber security strategy and risk management

In line with the provisions of the framework, the cyber security strategy is defined according to the identification of the possible risks and a shared iterative process in synergy with the business areas, whereby aspects such as the Group's expected IT scenario, the relative objectives and the resulting initiatives are progressively reinforced. The strategy is approved by the Group Senior Management and subsequently expressed through specific implementation plans. The new Cyber Risk Management method was prepared and reinforced over the course of 2017. It applies both to IT and in the industrial environment (OT), including the IoT.



# Protection of systems and networks

Safety analysis activities were carried out in accordance with the plan defined by the Audit Function, in order to maximize the level of system coverage. In 2017, more than 350 penetration tests ("Ethical Hacking") were carried out to

evaluate the level of protection achieved by IT and industrial systems and applications.

Based on an agreement with a startup, a pilot project was also launched to install probes to monitor safety in the industrial sector. The first probes were installed in Italy and the others will be progressively installed in South America and Spain over the course of 2018.

Finally, the activities to improve the protection of the Enel Group's websites continued, using advanced technologies to make visitor information secure, to protect sites from hacking of applications, to make sites faster and to mitigate attacks. At the end of 2017, 280 Enel websites were protected, and the Strategic Plan includes coverage of all the relevant sites.



## Cyber Emergency Readiness Team (CERT)

Given the continuous growth of cyber risks, in terms of numbers and critical issues, it has become increasingly important to prevent and deal with cyber security incidents in a coordinated manner, by

sharing information and data on threats and vulnerabilities as soon as possible. For this purpose, Enel has equipped itself with a Cyber Emergency Readiness Team (CERT), which allows to:

- prevent, detect and respond to cyber security incidents;
- collect and manage privileged information regarding threats, actors and carriers;
- ensure exchanges of information and collaborations in a secure environment and between identified actors.

The CERT is already active in the interna-

tional cyber security community, in which the actors recognize each other in line with official agreements. In 2017, memoranda of understanding were signed with 6 national CERTs<sup>2</sup> (Romania, Italy, Chile, Argentina, Peru, Colombia). In Italy, Romania and Argentina, the formal accreditation process has already been completed.

2 At the international level this acronym stands for "Computer Emergency Response Team".



## Training and awareness

IT security training and information programs have become one of the Group's permanent initiatives. It is important to

create culture, awareness and skills in order to minimize the risk of attacks that exploit the human factor.

2017 saw the launch of a global awareness campaign, "Hackers Love Data. Save It," aimed at all the people working in the Company. It was provided in three languages (Italian, English and Spanish) and broadcast over multiple channels. At

the same time, another training program was also activated that includes the involvement of specific professional groups involved in OT and industrial control systems (ICS), in order to improve and refine the related skills.



#### Main collaborations

In line with the Open Power approach, Enel promotes collaborations with private organizations, institutions, academies and universities in order to share best practices, operational models, develop potential channels for sharing information, and contribute to the creation of new standards, regulations and directives. In 2017, active participation in the standardization groups continued, specifically, for example, in the context of the International Electrotechnical Commission TC57/WG15, "Data and Communication Security," on the subject of the "secure by design" approach to IT security. The standard was issued in July 2017 after four years of joint work.

The National Observatory for the Cyber Security, Resilience and Business Continuity for Electrical Systems continued to provide its support. This group of experts (of which Enel is a founding member) is also a point of reference for research initiatives in the field of critical electrical infrastructures.

Close cooperation also continued with:

- > academia, through the organization of lectures and meetings to identify talents interested in researching cyber security issues;
- > international initiatives such as the Horizon 2020 Work Programme, and specialized working groups for drafting contributions in support of institutional bodies responsible for issuing standards and regulations.

The commitment to scouting startups and technological partnerships continued in collaboration with Holding Innovation and Sustainability and Global ICT Digital Transformation.

Two pilot projects based on Cisco technologies for industrial safety and IoT have been developed and are underway, as part of the Memorandum of Understanding with Cisco, which was established with the objectives of Co-Education, Co-Innovation and Threat Intelligence.

Finally, Enel's cyber security experts participated in numerous major national and international conferences, in order to maintain an active role in the industry's international community and to share Enel's model of cyber security.

## Customer focus

102-15

## ▶ 2017-2019 Plan: **Customer focus**

**SDGs Activities Categories** 2017 results **Targets** Industrial growth Acquisition of new customers on free electricity • +15.7 mil customers • +1.7 mil customers (2017-19)and gas market Customers Integration of free Customers offers and or discounted services integrated services tailored to for customers activating S Social inclusion electricity and gas offers customer needs Industrial growth Promotion of sustainable electric Customers • 1,100 public charging stations and 25 thousand mobility through the development and adoption Social inclusion private charging of innovative Climate stations business models change Technologies and digitalization



## ▶ 2018-2020 Plan: **Customer focus**

SDGs	Activities	Categories	2020 targets
7	Acquisition of new customers on free electricity and gas market	I Industrial growth Customers	• +14.7 mil customers
9	Incentivization of transactional operations in the web customer area <sup>1</sup>	T Technologies and digitalization S Social inclusion Customers	• 9 mil operations
11	Customer Satisfaction Index for Enel Energia SpA on the Italian free market	Customers	• 93% in 2018
9	Digitalization of customer relations	Customers Technologies and digitalization	• 30% reduction in cost-to-serve <sup>2</sup>
11	Initiatives to promote responsible consumption	I Customers T Technologies and digitalization S Social inclusion E Climate change	
11	Commercial offers and integrated services tailored to customer needs	Customers Social inclusion	



(2) Italy, Iberia and Romania.

Our commitment

























## Customer focus

102-7 EU4

n an energy market characterized by rapid changes, Enel sees digitalization and customer focus as key to accelerating the process of value creation. Reliability, safety and

continuity in distribution, together with quality, effectiveness and transparency in the sale of energy, characterize every phase of the relationship with customers. To respond to the change in the

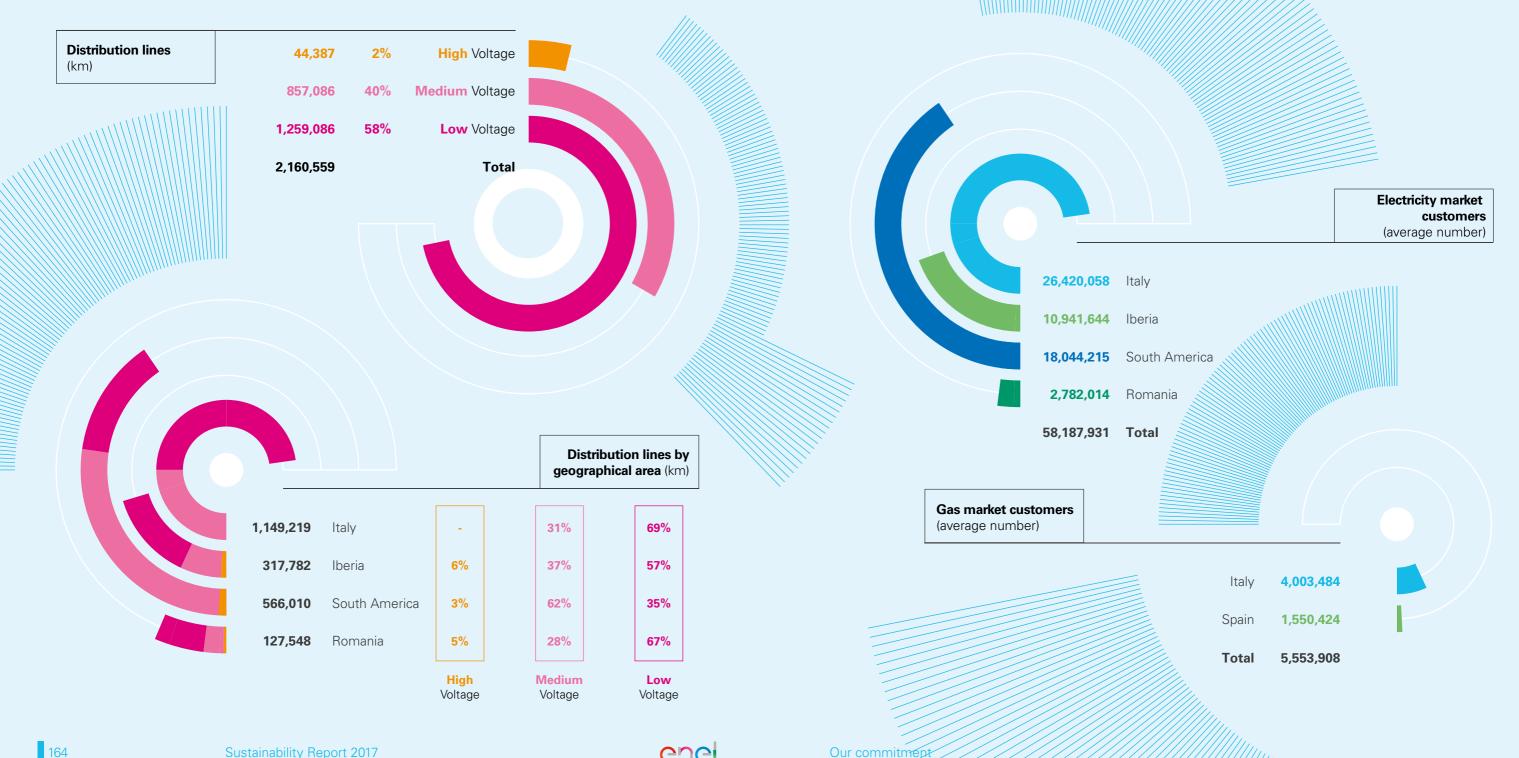
energy scenario, Enel also has a new Global Business Line called e-Solutions, which is dedicated to the development of innovative products and digital solutions in sectors where energy shows the greatest potential for transformation: cities, homes and industry.

The electricity transported on the Group's distribution network amounted to 445.2 TWh, up by 19.2 TWh compared to 2016.

The average number of energy and gas customers in 2017 is around 64 million. In particular, during the year there was an increase of over 2 million customers

in South America. Energy sales amounted to 284.8 TWh in 2017, an increase of 21.7 TWh (+8.2%) compared to 2016. There were greater quantities sold on all non-regulated markets where the Group operates as a seller of electricity, in particular Italy +11.0 TWh, Iberia +4.0 TWh, Romania +3.5 TWh and South America +1.2 TWh which offset the lower sales volume on the regulated market in Italy (-1.9 TWh), in Iberia (-1.0 TWh) and in Romania (-0.8 TWh). Sales in the South America regulated market went against the trend, increasing by 10.4 TWh. Enel also manages a demand response capacity of approximately 5.7 GW. See the "Digital-e" chapter for further infor-





# Operational excellence and quality in distribution

DMA EU (former EU7)

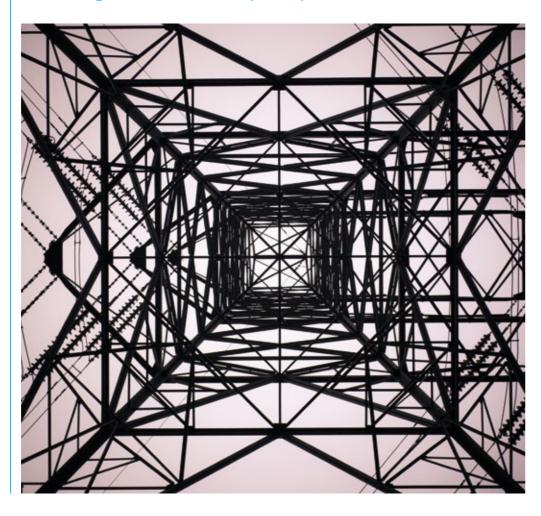
DMA EU (former EU23)

nel plays a fundamental role in the energy transition process, from a centralized to a distributed business model. Smart grids, distributed energy systems and the demand response service allow a high degree of flexibility in the management of network peaks and a better integration of renewable energies, generating virtuous synergies between Enel's various businesses and making the grid a key element. The power grid therefore enables numerous services, not only in the continuous process of digitalization, but also thanks to its quality, efficiency, reach and widespread coverage.

The Enel Distribuição Goiás (formerly CELG-D) distribution company in Brazil was acquired in 2017, further increasing the number of customers. In March 2018, almost a year after the acquisition, the company launched a new logo, reflecting a long process of improving the company's safety, efficiency and quality standards. This ambitious program aims to extend, modernize and digitize Enel Distribuição Goiás' network, in a country with a predominantly rural economy, over a vast area where many people still have no access to energy.

The continuous improvement of the network therefore assumes a core role in the economic and social development of communities, as well as for the daily life of citizens, fully in line with the commitments to the United Nations 2030 Agenda Sustainable Development Goals ("SDGs") and with Enel's Creating Shared Value policy (see the "Communities and value sharing" chapter for further information).

The continuous improvement of the network assumes a core role in the economic and social development of communities, as well as for the daily life of citizens, fully in line with the commitments to the United Nations 2030 Agenda Sustainable Development Goals ("SDGs") and with Enel's Creating Shared Value policy.



#### Colombia: the Nueva Esperanza project

The Nueva Esperanza project, south of Bogotá, Colombia, is part of the plan to expand the power grid in order to meet growing energy demand in the area. The construction of the Nueva Esperanza primary substation (installed capacity of 450 MVA) and its three power line corridors posed a major sustainability challenge in view of the protection of local biodiversity and important archaeological discoveries during the construction phase.

Efforts to protect local flora and fauna led, among other things, to the identification, rescue and transfer of about 3,000 plants in the area directly affected by the project (Bosque Renace). Employees, students and representatives of the local community took part in this process, and specific environmental education initiatives took place. A survey was carried out on the *Choloepus hoffmanni* ("two-toed sloth"), which is present on the site.

A large team undertook the recovery of archaeological remains, consisting of about 200 anthropologists, bio-anthropologists, field assistants, and administrative and logistics staff. Human remains and objects dating back to an ancient settlement of the Herrera and Muisca periods (400 BC) were found, up to the Hispanic domination of the 16th century. Enel provided support for the construction of the Archaeological Exhibition Hall of Nueva Esperanza, located in the Municipality of Soacha and inaugurated on February 20, 2018, to house some of the unearthed materials.

It's Enel's responsibility to ensure a continuous and safe supply of energy to the national electricity systems of the countries in which it operates as distributor. The quality of the supply is closely linked to the reliability and efficiency of the transmission and distribution infrastructure, which must be able to meet the required demand levels. In coordination with the other parties that in various ways operate on network infrastructures, Enel works continuously to develop and improve the efficiency of the distribution network. In all countries. Enel carries out network maintenance and modernization on the existing infrastructure, aimed primarily at reducing the number and duration of service interruptions. The work can involve changing the network structure, replacing technically inadequate line components, increasing the degree of self-control of the network through automation, and carrying out remote work on secondary

substations. Regarding 'commercial' losses, the digitalization of the network and the use of the "Remote Operator" system – combined with the use of smart meters – allow greater effectiveness in checking power usage, while also reducing fraud.

The digitalization of the network and the dissemination and application of processes, technologies and procedures in the different countries where Enel operates are essential elements. A platform model based on 3 pillars:

- 1) "disruptive" efficiency: increasing efficiency levels through the digitalization of all the main processes of both Enel and its supply chain;
- 2) "data-driven" network: through network automation, remote control systems, IoT (Internet of Things), machine learning and cognitive computing systems, a large amount of data can be leveraged and deployed in predictive maintenance systems, to improve net-

work stability and service quality;

3) "end-user experience": this is mainly pursued through the use of new electronic meters (smart meters), but also through the initial application of new work platforms, Blockchain and digital applications to improve service performance for customers.

Thanks to innovative digital technologies, it is possible to monitor the entire network and act quickly to resolve outages and ensure an optimal supply of energy. Remote control systems are essential for the operation of the distribution networks, allowing local operating centers to carry out all the operations necessary to ensure the continuity of the electrical service.

In this constantly evolving system, customers take a central role thanks to electronic tools that make consumption transparent, encouraging active participation in the energy market and promoting an efficient use of energy.

In 2017, the spread of smart meters continued in the Group countries, particularly in Romania, Iberia, Chile and Brazil. The smart meter is now available for more than 43 million users, an increase of about 6% compared to 2016. The 2018-2020 Strategic Plan envisages the installation of approximately 20 million meters in the next three years and 4.3 billion euro in investments for the digitalization of assets.

Skills and innovative technologies also enable the development of smart cities by combining environmental protection, energy efficiency and economic sustainability in a single urban model. In a very similar way, the platform can support the evolution of production process

models of complex groupings (industrial districts, etc.) in the transition to the circular economy.

In Spain, during 2017, the Smart City Málaga Living Lab project obtained certification from the European Network of Living Labs (ENoLL), thus becoming the space in which to manage projects that touch all areas of smart grid technology.

### The Living Lab in Savona, the city of the future

The challenge of the coming years is to satisfy the growing demand for energy through sustainable development, while respecting the environment and through technological innovation. Enel is working on this exact field at the Savona campus of the University of Genoa, creating the "Living Lab Microgrid".

Housed in a former barracks from the 1930s, with an area of 55 thousand square meters and approximately 2 thousand people, mostly students, living there daily, the campus is a small urban district of Savona. With power storage systems and energy production from renewable sources, all the campus buildings are connected and at its center there is the



Smart Energy Building (SEB). This is the first example in Italy of a totally self-sufficient building connected to a smart grid with zero carbon dioxide emissions. The building is insulated from a thermal and acoustic point of view and is equipped with high-efficiency lighting systems connected solely to the university microgrid.

The energy is supplied by a photovoltaic system and a geothermal heat pump heating unit, and, to a lesser extent, by the U-Gym digital gym, which reconverts the movement produced on the exercise bikes and ellipticals.

The Savona Living Lab enables us to test new technologies, combining Enel's global experience and industrial scale with the University of Genoa's research and innovation. The campus has been included in the International Sustainable Campus Network, a network of 84 world universities recognized for their excellence in the sustainability field.

Enel is interested in knowing the opinions of its stakeholders regarding the services it offers and carries out surveys to measure their satisfaction. Specific communication channels are in place in the various countries where it operates, also in line with the provisions of standards and regulations. In Italy, for example, a call center and innovative services

are in place, increasing the ability to respond and provide faster and more detailed information to customers.

In addition to the call center, the e-Notify service got underway in December 2017. e-Notify sends communications and notices e-distribuzione customers who want to know, for example, of any works planned in their area. The new

chatbot also launched in February 2018: Eddie, a virtual assistant designed to inform and communicate with customers. For more information on innovation and digitalization projects, refer to the relevant chapters "Technologies and Innovability" and "Digital-e".







# Quality of service and promotion of responsible and aware consumption

he leadership of a company like Enel must hinge on customer care and attention to providing quality service. This does not refer only to the supply of electricity and/or natural gas, but also and above all to the intangible aspects of the service, relating to customer perception and satisfaction. The many areas being worked on include:

- development of new contact methods and channels:
- > improvement of back-office processes;
- monitoring of complaints and requests for information in order to reduce fulfillment times and ensure their proper management;
- analysis of the reports, in order to understand the customer's perception and any critical issues in progress, so as to immediately implement the appropriate corrective actions and not compromise the overall customer satisfaction.

Customer satisfaction

103-2 103-3 102-43 102-44 418-1

The focus on quality of service remained in place this year, as shown by the results of the customer satisfaction surveys carried out in all the countries in which Enel is present as a seller or distributor of electricity

In Italy, the customer satisfaction index (ICS) for 2017 is 94.41 for the requlated market, with an increase of 3.5% compared to 2016, and 93.1 for the free market, up by 3.1% compared to 2016. Furthermore, surveys are carried out on a monthly basis regarding the satisfaction of customers who received a response to a written or verbal complaint. The survey is conducted through telephone interviews carried out after sending the reply or during the telephone call when the customer is given a response. The guestionnaire is carried out through an automatic responder. The questions put to the customer aim to verify their satisfaction in relation to the following aspects: 1. resolution of the problem, 2. timeliness, 3. courtesy and kindness, 4. service in general. The customer expresses an assessment from 1 (not satisfied at all) to 5 (fully satisfied). The data for 2017 show a level of satisfaction between 4.0 and 4.2.

In **Iberia**, excellence in customer care is the main value in its commercial relationships at the subsidiary Endesa, which pursues maximum efficiency in its customer care channels, tools and platforms through a process of constant innovation and improvement. In 2017, Endesa concentrated, among others, on the following aspects:

- continuous improvement of the quality perceived by customers in digital channels;
- improving the quality of information collected through email, mobile phone and post;
- > focus on the two areas with the greatest impact on customer satisfaction (terms and time limits);
- management of sales complaints, transforming the complaint into an opportunity and reducing resolution times:
- continuous improvement of the management of the first contact with the customer

In order to ensure compliance with the identified improvements, 20 key indicators are monitored every month. The most significant results for 2017 include the improvement of customer satisfaction in the non-residential market for the management of complaints relating to marketing (+30%), service of physical contact points (+2%) and billing services (+8%).



In Iberia, customer satisfaction is constantly monitored, with telephone interviews and emails (for example, through the *Sistema de Calidad Percibida*, and the *Estudio de Satisfacción de Clientes Empresas*), in order to offer its customers the best possible support; the index shows a constantly rising trend over the years, reaching a value of 7<sup>2</sup> in 2017 for the free market, up 1.7% compared to 2016.

In **Romania**, customers can express their opinions through a contact center, email and on the website. The information is collected monthly and the results are used to improve service quality and corporate processes. The overall satisfaction index was 87³, up 2.5% compared to 2016 for the free market, while for the regulated market it was 81, up 2.4% compared to 2016.

In **South America**, customer satisfaction indicators are essential for the definition of strategies and new products. In Brazil, customer satisfaction is measured each

Our commitment

year through two different monitoring actions using different methods: the IASC survey (Customer Satisfaction Index) coordinated by the relevant authority, the Agência Nacional de Energia Elétrica (ANEEL), and the ABRADEE survey (Associação Brasileira de Distribuidores de Energia Elétrica) coordinated by the association of energy distributors, which contains further details to facilitate monitoring work. To get to know customer opinions also in Peru, a series of interviews are carried out with users of the contact point services, applying a direct and personal survey technique through structured and standardized questionnaires. Finally, in Colombia, a customer satisfaction survey model is in place that is designed to measure market perception of the supply of products and services, and which seeks to concentrate efforts and resources to improve customer satisfaction. The quality satisfaction index (ISCAL) - whose key elements include the business rela-

tionship and invoicing – has remained at excellent levels in recent years, thanks to the development of the customer relationship plan.

<sup>3</sup> The score is calculated on a scale from 1 to 100







171

<sup>1</sup> The score is calculated on a scale from 1 to 100

<sup>2</sup> The score is calculated on a scale from 1 to 10.

## Complaint management

 103-2
 103-3
 102-17

 102-43
 102-44
 418-1

In all the countries where Enel operates, customers have several channels available to submit complaints or requests for information (mail, website, toll-free number). Enel constantly monitors the feedback received in order to understand the customer's perception and any critical issues in progress and implement the appropriate corrective actions. In **Italy**, through the company Enel Energia, the Enel Group ensures the commercial quality control of all the contact channels by carrying out

systematic monitoring of sales and management processes. The goal is to ensure compliance with the requirements under current legislation, with privacy regulations and with the regulations protecting workers' freedom and dignity. The checks are performed in various ways: personal coaching, mystery calls, replaying vocal orders and customer complaint analysis. The "new quality control" model follows the same approach, introducing some contractual KPIs with partners, with minimum thresholds for awarding bonuses and penalties. Over the course of 2017, the customer-facing channels (agencies, shops) of the model became more established. The key characteristics of the new model – which is aimed also at continuous improvement - involve the establishment of short- and medium-term contractual quality indicators, the introduction of a bonus and penalty mechanism, and sharing the control model with partners to ensure synergy with their internal monitoring programs. The reports are managed through a portal and evaluated by a team made up of the "Quality and commercial support" and "Regulatory/Anti-trust" units, so that the most suitable actions can be taken.

In **Iberia**, complaints are managed both centrally by the "Atención de Reclamaciones" (Complaint Management) unit and at local level through six territorial units, in order to detect any service disruptions in advance and decide the best way to resolve the issue, improving process efficiency. The office of *Defensor del Cliente – Ombudsman* is still active, providing a unique way to ensure dialogue between the Company and its customers. The office is also active in **Brazil** and **Colombia**.



## Care of vulnerable groups

 102-43
 102-44

 103-2
 103-3

Enel is at citizens' side to improve and maintain access to electricity in the most disadvantaged areas and among the poorest populations. In all the countries where the Group operates there are forms of support, often linked to government initiatives, aiding certain sections of the population in paying for electricity and gas costs, to provide equal access to energy.

In **Italy**, since 2008 for the electricity sector and since 2009 for the gas sec-

tor, there is state aid for domestic customers in economic hardship and - for the electricity sector only - for customers who use electro-medical life-saving equipment (so-called "social bonus"). The bonus is financed with state resources and with specific rates set by the Authority. Bonus applications are managed by the Municipalities and, in case of approval, the customers see a credit in their bill that varies depending on the income and the number of family members. In 2017, around 380 thousand customers of Enel Energia and about 440 thousand of Servizio Elettrico Nazionale received the social bonus. Moreover, as part of the "Viva gli Anziani!" project, Enel Energia donated about 10 thousand LED lamps that cannot be sold to the Community of Sant'Egidio.

In **Romania**, in 2017 Enel continued the pilot project aimed at improving ac-

cess to electricity for vulnerable groups through personalized customer care and community development activities. The project is divided into three phases: a research phase in which the needs of consumers in a disadvantaged area of Bucharest are assessed; a consultation phase involving the collection of information from the community about their problems and potential solutions (debt rescheduling, microcredit, legal assistance, etc.); and an action phase in which specific interventions are planned and implemented based on the results of the first two phases.

In **Spain**, several agreements have been signed since 2014 with local/regional authorities and with third-sector organizations to avoid cuts in supplies to customers certified by social services to be in energy poverty. Since 2014, supply cut-offs have been avoided for

over 240 thousand bills, corresponding to approximately 68 thousand electricity and gas customers in energy poverty, worth over 24 million euro. A new model is currently being developed in line with the social bonus regulation (Royal Decree 897/17) issued in Spain.



## A transparent relationship with customers

## Transparent commercial communications

102-16 103-2 103-3 417-1 DMA EU (former EU24)



- clear and simple, prepared using language that is as close as possible to that normally used by the other party;
- in line with current regulations, without using evasive or otherwise improper practices;
- comprehensive, avoiding missing out any information relevant to the customer's decision;
- > accessible to the customer.

Enel is pursuing a process of digital transformation focused on customer (see also the "Technologies and Innovability" chapter and the "Customer journey" box below).

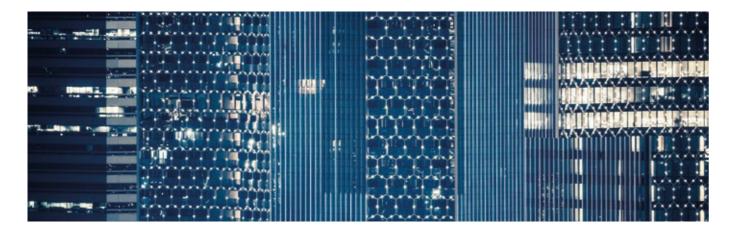
In particular, Enel Energia's digital channels in **Italy** have been complete-



ly overhauled in 2017, with the aim of creating a new commercial and operating relationship with customers. The updated version of the Enel Energia app came out in October 2017. Among other things, it allows users to check the activation status of their supply contract and to integrate the My Energy service so that they can monitor electricity and gas costs by viewing the consumption and expenditure graph for individual bills, with a new and intuitive interface design including color diagrams, helping users to better visualize their consumption. A summary section now shows the main information required: spending, any recalculations or discounts, other charges and total taxes. The new web portal (which is also available in English) has been online since December 2017, helping to increase awareness of the new areas

of Enel Energia's commercial offering The site guides the consumer through the wide range of products and services, assisting with and simplifying the process of evaluating and purchasing a product or service and directing the customer towards self-care features The new features of the website include the possibility of using the "contract configuration" system: this consists of three simple questions to guide the customer towards the solution for their needs. The new online sign-up process improves the web billing and direct debit services, allowing customers to receive their bill directly via email - an important contribution to limiting the use of paper and the impacts of transport and delivering bills.

In 2017, the Antitrust Authority (AGCM) initiated proceedings for alleged abuse of dominant position against Enel



SpA (Enel), Enel Energia SpA (EE) and Servizio Elettrico Nazionale SpA (SEN). These proceedings are in progress. For more information, please refer to the relevant section of Enel's Consolidated Annual Report 2017 (https://www.enel. com/investors/a/2016/09/annual).

In Iberia, the Online Billing project made it possible to reduce the issuance of paper bills, with significant environmental benefits linked to lower paper consumption. In 2017, the number of digital invoices issued was estimated to be in the tens of millions, with corresponding savings in printouts. Both in Italy and in Iberia, the strong commitment to greater use of electronic invoicing led to an increase in the use of this type of invoice respectively of 10% and 30% compared to 2016. A number of disputes concerning market practices are underway involving Endesa. For more information, see the Endesa 2017 Sustainability Report.

### **Accessibility** of information

102-16 103-2 103-3 417-1 DMA EU (former EU24)

In order for customer communication to be truly transparent, fair and effective, it is necessary to ensure that any cultural, linguistic, illiteracy or disability barriers do not jeopardize equal access to information for customers. The various initiatives in this regard include:

- > Italy: simultaneous translation is active at Enel Points in 13 languages (English, French, Spanish, German, Chinese, Arabic, Russian, Romanian, Punjabi, Albanian, Serbian, Croatian and Slovenian). As part of the "Enel Social Services" program created in collaboration with the Prime Minister's Office, Servizio Elettrico Nazionale sends its bills in Braille to blind customers. On the Enel Energia website (www.enel.it) there is a chat function and a dedicated "Manage your supply easily" section (Home/Support);
- > Spain: the website www.endesaclientes.com includes a comprehensive section explaining electricity and gas bills in detail, concept by concept, both for the free market

and the regulated market. The site is available in Spanish, Catalan and English. Endesa is committed to overcoming any barriers - whether physical, social or language-related - through its commitment to digitalization. This is to be achieved through processes and tools that ensure access to customer service for people with disabilities or the elderly (for example, there is a dedicated channel for people with hearing and speech difficulties to receive information on billing and contracts). In addition to being available in several languages, the telephone service has a specific application to facilitate communication with people with speech difficulties. Customer contact points are all on the ground floor to ensure access for people with disabilities;

- > Colombia: customer management processes have been optimized through a service that organizes appointments for customer-facing channels and digital services with the creation of 'virtual offices' and 'smart windows' ("ventana inteligente");
- > Romania: the "Live Agent" option launched in 2017, which uses the website to provide a new communication channel for customer man-



## **Privacy** protection

103-2 103-3 418-1

In all countries where it is present, Enel operates in compliance with current regulations on the protection of customer privacy. The Company also undertakes to monitor all the third-party companies that may be in a position to use customers' personal data. To this end, dedicated clauses are included in contracts with partners who use personal data to perform specific activities, for example sales services or customer satisfaction surveys. Customer data is an expression of the individual's personality and identity, therefore it must be handled with due caution and assurances. Enel sees personal data as both a shared asset and a company asset. For this reason, the Group has established the role of Data Protection Officer to ensure full respect for the privacy of all the natural persons with whom it interacts. For more details, see the chapter "Getting to know Enel - Values and pillars of company ethics".



## Commercial offers, and energy-saving products and services

103-2 103-3 DMA EU (former EU24)

In all the countries where Enel operates, it has launched a wide range of high energy performance products to ensure savings in terms of both consumption and emissions. In Italy, in particular, there are offers based on different time slots, helping to ensure the overall efficiency of the loads on the power grid and customers' access to a lower price in the set slots. In addition, customers gain an awareness and responsibility for their consumption choices and can see in their bill how much they consumed in each time slot. They could then change their habits to achieve maximum savings. Enel procures the energy for residential customers from renewable-energy plants - as proven by the certification of the Energy Services Operator (GSE) in accordance with current legislation - in quantities equal to the equivalent consumption billed to customers. In particular, the Guarantees of Origin provided for by Directive 2009/28/EC

certify that the energy supplied by Enel is from renewable sources.

Enel's commitment to supplying energy-efficient products continued in 2017, with the aim of spreading the use of integrated and innovative home automation systems for better management of household consumption. An App has also been developed to support the marketing of energy efficiency products, from the order stage to contract signature. The contracts are signed directly through mobile devices using a digital signature, thus reducing the use of paper (see the below section "A new way of experiencing energy: Enel X is







## **Customer journey**

At the beginning of 2017, Enel launched the Digital Customer Transformation Program with the aim of placing the customer at the center of the company's strategy even more strongly, taking full advantage of the opportunities offered by new technologies.

The transformation of the energy sector and the development of new technologies have led to new ways of doing business, with a significant impact on the relationship between customer and company. At the beginning of 2017, Enel launched the Digital Customer Transformation Program with the aim of placing the customer at the center of the company's strategy even more strongly, taking full advantage of the opportunities offered by new technologies. The main actions implemented were a careful and detailed redesign of the customer journey, aimed at ensuring a very positive customer experience in terms of simplicity, transparency, reliability and emotional relevance. A number of specific customer journey initiatives were also implemented. From the design to the implementation phase, the project followed a well-defined path that included: analysis of the scenario and the market strategies in order to correctly identify business priorities; listening to customers to get a clear picture of their level of satisfaction, any difficulties in interacting with Enel, their needs and expectations; analysis of global best practices in terms of customer experience management; and careful mapping of internal processes and areas for improvement.

The design phase began in April 2017 and reached its conclusion in December. The phase took place in "innovation rooms" hosting teams made up of people from different areas within Enel, varying in background and expertise, to redesign the customer journey and identify the solutions to be adopted. "Execution rooms" launched in October 2017, which started working on the first initiatives identified in the design phase and that will be developed for the most part in 2018. To fully seize all the opportunities offered by technology and to respond to the complexity of the initiatives, a working model has been put in place that seamlessly integrates two implementation approaches:

- agile a set of incremental and iterative methodologies that focuses on customer satisfaction through the continuous supply of functioning products. On the operational level, once the design phase is over, a team of 9/10 people (squads) with skills in business processes and IT solutions is placed in a room. They then work on the detail of the design and, for successive sprints (fixed periods of time, generally from 2 to 4 weeks, where all the phases of development of a product in agile methodologies are carried out), produce a first output called "Minimum Viable Product", which will be tested by customers and industrialized for subsequent improvements;
- > waterfall the more classic approach, which is organized into successive phases defining and planning all the project's details.

Agile and waterfall integrate harmoniously within the rooms to ensure that business objectives are achieved in their entirety and people can truly bring experiences and skills together in an effective manner.

The first activities launched in 2017 were:

- > **smart sign-up**, launched in October, which aimed to significantly reduce the volume of information requested from customers during the sign-up phase;
- **discovery**: an application that allows the customer to quickly get information on the reasons why there is no electricity at their home;
- advanced analytics, with the aim of creating models and solutions that, firstly, allow better understanding of customer preferences and anticipation of future behavior and trends and, secondly, provide structured data that will improve customer journeys and, more generally, drive company strategies (data-driven company). Of course, all of the above is carried out in the utmost, scrupulous compliance with the provisions of the General Data Protection Regulation (EU Regulation 2016/679).

Other initiatives, currently being devised, will focus on the development of digital channels (social, applications, web), the creation of solutions to raise the level of customer engagement, and the optimization of internal processes.



# A new way of experiencing energy: Fnel X is born

Enel created the new e-Solutions Global Business Line in 2017. Its aim is to anticipate the needs of global customers, developing innovative products and digital solutions and transforming energy into value-added services for people, companies and cities. November saw the launch of the logo of this new identity: Enel X. The X symbolizes a multiplier of value, but also an image of a crossroads that connects the four key points of the e-Solutions division:

- e-City: for public lighting, artistic lighting, energy efficiency, safety and fiber optics;
- 2) e-Home: for the development of smarter homes, cutting energy consumption and guaranteeing greater well-being, as well as for renewable generation with integrated solutions that also include storage;
- 3) e-Industries: to offer an integrated and tailor-made service to our customers, from strategic consulting to energy monitoring systems and efficiency-related technologies, from distributed generation to the smart use of batteries, as well as island-based and grid-connected microgrid solutions and the most advanced demand response systems;
- 4) e-Mobility: promoting e-mobility with increasingly innovative solutions, through recharging infrastructures, new technologies and second-life battery services.

Digitalization and continuous innovation, combined with many years of experience in the energy sector, make Enel a compeAnticipate the needs of global customers, developing innovative products and digital solutions and transforming energy into value-added services for people, companies and cities.



tent and reliable operator, able to give its customers about how to best use energy. The recent acquisitions of dynamic and innovative entities allow Enel to open up to new business and offer an integrated system of energy solutions with high added value.

Acquisitions included:

- Demand Energy Networks American developer of an advanced software platform for the smart and optimized management of energy storage systems of resources distributed at customer sites;
- EnerNOC world leader in smart energy management services and in enabling customers to access energy markets through demand response systems;
- eMotorWerks specialized in the supply of charging systems for electric vehicles and solutions that maximize the value of the vehicles themselves, generating revenues from the supply of services to the network.

Enel X is also able to perform advanced energy monitoring thanks to the EIS (Energy Intelligence Software) platform. This system has now been launched in the United States and allows constant monitoring of energy consumption, but also of consumption of all commodities involved in the production/life cycle. It also checks if there are any anomalies in consumption and then corrects them or optimizes consumption methods, seeking positive solutions.

Enel's objective is also to identify the best practices already present in the Group and to draw up an adoption plan so that they can be disseminated in all other countries where it is present, according to customer needs and requirements. In particular, these are some areas where Enel is an outstanding performer:

> Italy: public lighting, and above all adaptive public lighting, is a new frontier for making cities increasingly resilient (see the "Technologies and

- Innovability" and "Digital-e" chapters for further details);
- home have been developed through a widespread network of partners. In particular, there are services for the periodic maintenance and repair of domestic equipment (maintenance & repair), urgent repair services in the event of device malfunctions (repair), as well as packages that com-
- bine products and services, including through a sophisticated rental model (appliances & services);
- > Colombia: a successful initiative is Crédito Fácil, which allows customers without access to the banking sector to get credit more easily than through traditional financial systems. To date, about 900 thousand credit cards are in circulation, thanks to the collaboration between the Enel

Group and the financial partners which has made these credit cards the most widely used in the country.

Below are two examples of projects developed in 2017 that combine customer focus, innovative services, new technologies and sustainability.



## USA - Marcus Garvey Village

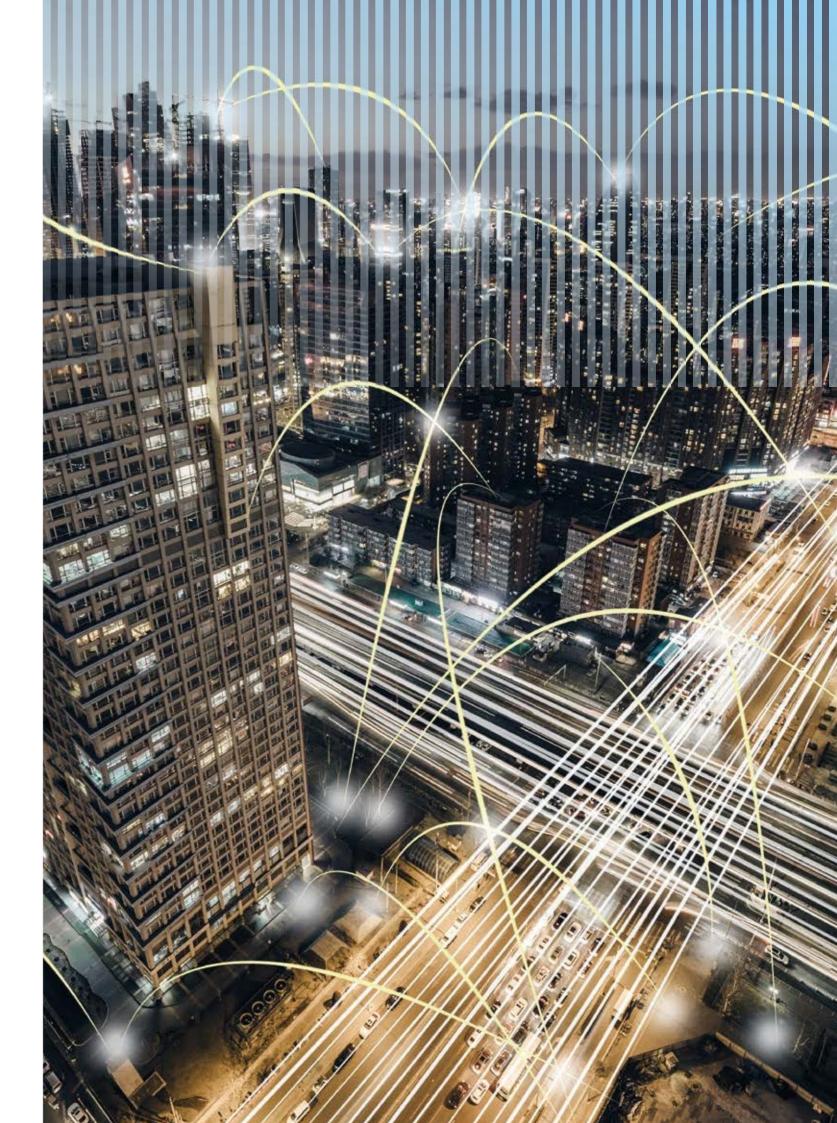


This cutting-edge project is the first self-sufficient energy system in New York, achieved through the creation of a **smart microgrid**. The project demonstrates how even in a metropolis, a controlled network can be built in a smart, digital and distributed way, increasing the system's resilience and transforming the energy supply chain. This is all thanks to the Distributed Energy Network Optimization System (DEN.OS) software developed by Demand Energy, through which the 625 apartments in the Village will be able to use all the energy that the microgrid generates and distributes. This reduces costs, increases the efficiency of the system and reduces greenhouse gas emissions, effectively opening the road to energy self-sufficiency. In particular, the Marcus Garvey Village Apartments Microgrid project includes 400 kW of photovoltaic energy, a fuel cell of 400 kW and 300 kW/1.200 kWh of batteries completely managed by DEN.OS. The Marcus Garvey Village Apartments Microgrid Project has also won the prestigious **ESNA Innovation Award for distributed storage**.

## Costa Rica - Establishment Labs SA Microgrid



Establishment Labs, a Costa Rican manufacturer of state-of-the-art medical aids, has almost neutralized the risk of blackouts, reducing high electricity and diesel costs and making the most of the rooftop photovoltaic solution combined with a Demand Energy storage system. In particular, a microgrid was installed that integrates lithium-ion batteries (500 kW/1 MWh) and photovoltaics (276 kW), with a system controlled by a smart software platform (DEN.OS) that optimizes the way in which these distributed energy resources interact. Under normal conditions, the system guarantees total autonomy for the production plant through the use of solar energy produced by photovoltaic panels. When a network outage occurs, the microgrid goes into "island" mode, allowing the "Establishment Labs" to continue with normal operations and to preserve the entire production process. In fact, the Company was not affected by the July blackout that affected seven Central American countries. Moreover, in addition to being essential for supporting production during an outage, the solution reduces the power absorbed by the site with benefits visible in bills, reducing operating costs and limiting the emissions of greenhouse gases.





## Occupational health and safety

102-15

▶ 2017-2019 Plan: Occupational health and safety

SDGs	Activities	Categories	2017 results	Targets
3	Extra Checking on Site (ECoS)	S Safety management S Supply chain management	• 129 ECoSs carried out	• 120 ECoSs in 2020
3	Global awareness programs about prevention and health promotion	<b>S</b> Training	• 21 programs realized	• 17 programs in 2020
3	Continuous improvement of safety controls and on-site checking, and investigation of all accidents and significant near misses, identifying preventive and corrective measures	S Safety policies S Safety management	• 55 significant events and 401 corrective and improvement actions	
3	Specific initiatives to strengthen employee and contractor awareness and commitment to health and safety and promotion of the safety culture	<b>S</b> Training	Diffusion of the online course on "near misses"	
3	Integration of safety into policies, processes and procedures	S Safety policies	Integration     of HS issues     in suppliers     approval process	
3	Further reduction in combined injuries frequency rate (LTIFR) and severity rate (LDR)	S Safety management	• LTIFR 0.21 (-5%) • LDR 10.47 (+16%)	



## ▶ 2018-2020 Plan: Occupational health and safety

SDGs	Activities	Categories	2020 targets
3	Extra Checking on Site (ECoS)	S Safety management S Supply chain management	• 120 ECoSs planned in 2020
3	Global awareness programs about prevention and health promotion	<b>S</b> Training	• 17 programs in 2020
3	Harmonization and alignment with the Group best practice for on-site checking procedures and investigation of all accidents and significant near misses, identifying preventive and corrective measures	S Safety policies S Safety management	
3	Specific cross-Business Lines initiative to strengthen employee and contractor awareness and commitment to health and safety and promotion of the safety culture	<b>S</b> Training	
3	Integration of safety into policies, processes and procedures	S Safety policies	
3	Further reduction in combined injuries frequency rate (LTIFR) and severity rate (LDR)	S Safety management	

















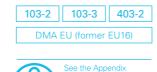








# Occupational health and safety



nel considers people's health, safety and mental/physical integrity to be a precious asset that must be protected at all times - whether at work, home or in their free time. It is committed to developing and promoting a sound safety culture everywhere in order to ensure a healthy work environment. Quality and safety are an essential combination. Each person is responsible for his or her own health and safety, as well as the health and safety of those with whom they interact. As set forth in Enel's Stop Work Policy, any risky situation or unsafe behavior must be promptly reported and stopped. Enel's safety culture is based on each person's constant commitment, the integration of safety into processes and training, the reporting and analysis of any near misses, the stringent selection and management of contractors, quality controls, the sharing of experiences within the Group and the comparison with top international play-

Enel has a Statement of Commitment to Health and Safety, signed by the Group's top management, that serves as a policy of reference. In general, health and safety activities are based on the following principles:

- compliance with the law, the adoption of best standards and sharing experiences:
- the creation, implementation and continuous improvement of the Occupational Health and Safety Management System in compliance with the BS OHSAS 18001 standard;
- > the reduction of accidents, occupa-

protected at all times – whether at work, home or in their free time.

People's health, safety and mental/physical

integrity are a precious asset that must be

tional diseases and other incidents through the implementation of appropriate prevention measures and verification of their adequacy and effectiveness:

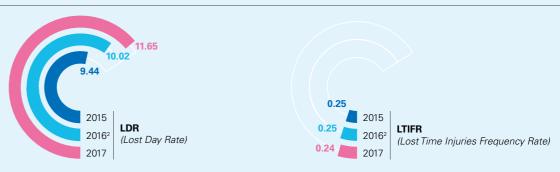
- the assessment of all health and safety risks and the adoption of a systematic approach to eliminate them at the source or, when this is not possible, to minimize them;
- the promotion of information initiatives to disseminate and consolidate a culture of health, safety and organizational well-being;
- the adoption of work methods inspired by quality and their dissemination through decisive and effective training that aims to firmly unite technical and safety aspects;
- managers' direct efforts aimed at strengthening a sound culture of safety leadership;
- the adoption of safe and responsible conduct at all levels of the organization;
- the design of workplaces and the provision of equipment and tools suitable

- for carrying out the work, ensuring the best conditions of health, safety, comfort and well-being;
- stringency in the selection and management of contractors and suppliers, and the promotion of their involvement in programs for the continuous improvement of safety performance;
- constant attention to local communities and to all those who work or come into contact with the Group's activities by sharing a culture of health and safety protection;
- annually defining specific and measurable targets and continuously monitoring them to verify that they have been achieved through the involvement of top management.

In implementation of the policy, each Group Division has its own Health and Safety Management System that complies with the BS OHSAS 18001 standard. The new Global e-Solutions Division was set up in 2017, and it will start the process of preparing and implementing the management system over the course of 2018.

## Safety rates<sup>1</sup>

#### Enel employees



#### Contractor employees



#### Severe and fatal injuries - Enel employees (no.)



#### Severe and fatal injuries - Contractor employees (no.)



- (1) The rates and figures reported in this chapter do not include the companies acquired in 2017 (EnerNOC, eMotorWerks, Demand Energy Networks, Enel Distribuição Goiás and Tynemouth Energy Storage). Given the small amount of time that has lapsed since their acquisition, it was decided to start consolidation from 2018 in order to allow for the alignment of systems and related reporting procedures.
- For the calculation of LTIFR and LDR rates, reference should be made to the notes in the attachment (performance indicators).
- (2) The 2016 figures have been recalculated following a detailed redefinition due to Slovenské elektrárne's removal from the scope.

<sup>(3)</sup> Injury with an initial prognosis, as shown on the first medical evaluation, exceeding 30 days; or with a guarded prognosis, until the prognosis can be determined; or with an unknown prognosis, which, when first assessed by the Division/Company concerned, is assumed to exceed 30 days. Once the prognosis set, the injuries will be considered severe only if the first prognosis exceeds 30 days. If the prognosis is not set or remains unknown for 30 days from the event, the injury shall be considered severe.

In 2017, injury rate (LTIFR - Lost Time Injury Frequency Rate) and absences from work due to accidents (LDR - Lost Day Rate) for the Enel Group's employees amounted to 0.24 and 11.65, respectively. In particular, with a decrease in the number of injuries and consequently in the LTIFR, there is a slight increase in the number of lost days and consequently in the LDR.

As regards contractors' employees, the LTIFR stood at 0.19 (a reduction of about 6% vs. 2016) and the LDR at 9.86 (an increase of 16% vs. 2016). During 2017, there were 2 fatal accidents involving Enel Group employees, 1 in Spain and 1 in Argentina, the first due to crushing and the second due to impact. There were also 11 fatal injuries among contractors, including 3 in Italy, 7 in South America (1 in Argentina, 4 in Brazil, 1 in Colombia and 1 in Peru) and 1 in Romania. Regarding the causes, 5 accidents were electric. 4 were mechanical and 2 were due to traffic accidents during working hours.

With regard to accident management, a specific policy has been set (Policy 106 "Classification, communication, analysis and reporting of incidents"), which defines the roles and procedures to ensure the timely communication of incidents and ensures the cause analysis process, the definition of improvement plans and their monitoring according to the event type. The policy also includes details on the methods of communication and analysis of near misses that have the potential to cause severe damage. According to the aforementioned policy, all severe and fatal injuries to Enel and contractor employees and non-severe events considered significant are investigated by a group of experts. The improvement measures resulting from the analyses are constantly monitored and followed until they are completed; in the event contracting companies commit a breach, the appropriate measures are taken (termination of the contract, suspension of qualification, etc.). In the case of particularly severe and fatal injuries, in order to define further strategic actions for the entire Group, a specific Steering Committee is also set up that involves the competent Company Functions/Divisions. The Steering Committee has the goal of coordinating the improvement measures already identified and defining further strategic actions for the entire Group, to prevent the recurrence of similar events. In addition, the Policy also defines cases of exclusion, i.e. those events that cause damage to

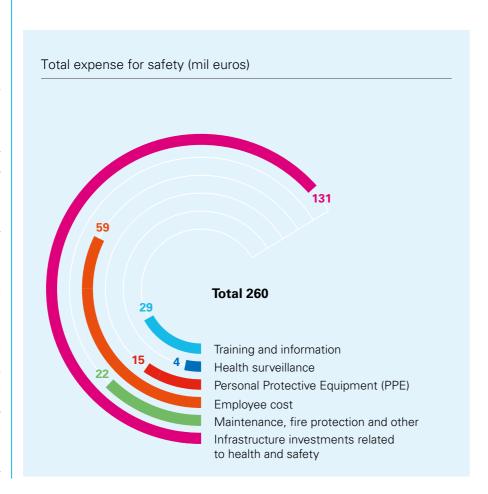
people but are not attributable to the

typical cases of accidents at work (for example, animal attacks, accidents due to extreme weather conditions, etc.)

In confirmation of the strategy and Enel's safety policies, during 2017 several initiatives were launched to strengthen the control system, especially as regards contractors, and the integration between the business areas and health and safety functions, in order to identify potential areas at risk and prevent the occurrence of accidents through the use of innovative technologies.

In 2017, Enel invested 260 million euro in safety, in line with the expenditure for 2016

In Enel's organizational model, the Health, Safety, Environment and Quality (HSEQ) unit of the Holding as-



sumes an important role of oversight, direction and coordination, promoting the dissemination and sharing of best practices within the Group and the external comparison in health and safety with the top international play-

ers in order to identify opportunities for improvement and ensure a constant commitment to risk reduction. Alongside the Holding Function, the HSEQ structures of the Global Business Lines direct and support the

business on health and safety issues, define improvement plans and monitor their execution



# Safety in the procurement processes

Safety is integrated into the procurement processes and the performance of the companies is monitored both in the preventive phase, through the qualification system, and during the execution of the contract, through numerous control processes.

Specific and stringent rules are applied during the supplier qualification and selection process, based on health and safety performance. For high-risk activities, a prequalification audit is also required.

As for the monitoring of activities during the execution of the contract, the Vendor Rating system is a consolidated process. Health and safety performance levels are measured through a specific index and, since 2015, the global model on the Vendor Rating index also takes into consideration the impact of any people accidents in the assessment of companies.

All companies that work with the Enel Group must share its health and safety standards. The General Conditions of Contract (CGC), valid for the entire Enel Group, include clauses dedicated to Safety is integrated into the procurement processes and the performance of the companies is monitored both in the preventive phase, through the qualification system, and during the execution of the contract, through numerous control processes.

health and safety. They provide for penalties in case of safety rule violations, which may also lead to the termination of the contract and suspension of the qualification.

For this reason, contracting companies are involved in many initiatives aimed at promoting a culture of safety. In particular, an information session is carried out on the specific risks present before the contractors' personnel access the worksite. Enel people perform this session, which aims to highlight special risks due to the specific nature of the plants and the activities present that are not normally present in the Company's business.

Furthermore, in 2017, the **Extra Checking on Site (ECoS)** initiative continued, with 129 ECoSs completed. This is in

line with the 120 checkings that were planned. The ECoSs have the aim of evaluating the adequacy of the organization, commitment and processes in a pre-determined operative area.

Expert HSEQ people external to the operating unit subject to the assessment, perform these controls, together with technical experts specific to the business and permit to plan and define corrective actions that are duly monitored.





# Infrastructure safety and technological innovation

Technological innovation can improve all health and safety processes, from people training to the implementation of prevention and protection measures, and the execution and analysis of corrective controls.

In 2017, new safety innovation projects were introduced and a number of projects previously launched in 2016 continued

Intrinsic Safety: a project started in 2016 focused on the design, analysis and possible modification of both new and existing machinery aimed at reducing people exposure to risky situations, worksites or activities. The project is focused on information sharing and alignment between the HSEQ and Engineering units.

**Safety Jacket:** a project involving the creation of a work jacket with a built-in airbag that combines the existing protec-



tion measures against falls with a new, never-before-seen technology in the industrial field. Developed with a startup, this project combines innovation and safety to protect people from all Business Lines working at height.

**Drones:** the Company has adopted the use of drones to inspect chimneys, boilers and waterways in order to prevent risks related to workers directly accessing unsafe places.

Virtual Reality: development continued on the 3D virtual reality simulator, a project launched in 2015. In particular, new virtual reality scenarios have been developed, including those relating to electrical risk, aimed at operational

training on both maintenance and safe-

Virtual Safety Assistant: an electronic device that maps in real time the surrounding environment and the memorized data related to specific activities, thereby supporting workers in implementing the prevention and protection measures necessary to carry out their work safely.



#### Health

The Enel Group has defined a structured health management system, based on prevention measures to develop a corporate culture oriented toward the promotion of physical and mental health, organizational well-being and the balance between personal and work life. With this in mind, the Group carries out

global and local awareness campaigns to promote healthy lifestyles, sponsors screening programs to prevent the onset of diseases and guarantees the provision of medical services. The global initiatives and program are developed in accordance with the World Health Organization calendar and local needs.

The Enel Group implements a systematic and continuous process of identification and assessment of work-related stress risks in accordance with the "Stress at Work Prevention and

Well-being at Work Promotion" policy. This enables the prevention, identification and management of stress in work situations that may affect both individuals and broader sections of the organization, also providing a set of guidelines aimed at promoting a culture of organizational well-being.



## Development of a culture of health and safety: training and information

EU18

The health and safety awareness campaigns carried out over the course of the year focused on areas of specific attention for the Company. This year the campaigns focused mainly on issues relating to personal health and the most common diseases, such as:

hypertension, hepatitis, smoking, risk factors for cardiovascular diseases, skin cancer, etc. The campaigns were based both on the news published on the company intranet and on specific news reports on Enel TV and Enel Radio.

With regard to training, in 2017 Enel people received over 430 thousand hours of training, in addition to safety information and instruction, with the aim of increasing specific knowledge and skills throughout the Group. The various issues covered included online training for safely driving both four- and two-wheel vehicles and the "Safety Leadership" training session for managers.

#### 100%

staff at contracting companies working for Enel who have received training and information on health and safety from their employer

## over 800 thousand

of training and information for contractor employees<sup>1</sup>

The figure also includes training and induction courses provided by Enel people which are required to access the Group's construction and/



# Safety of communities and third parties

416-1

Enel plants are built in compliance with the legal provisions and good practices. Plants, machinery and equipment are subject to systematic inspections and periodic maintenance in order to guarantee normal operation, in compliance with the law and in accordance with the highest standards.

In order to guarantee the health and safety of the community and reduce the impact on the external environment of the production activities, periodic measurement campaigns are



conducted internally. Such efforts include measuring the electromagnetic fields of the distribution systems, as well as the level of noise, vibrations and dust generated by production plants' machinery and distribution substations.

The following aspects of environ-

mental relevance are also monitored: atmospheric emissions, air quality, pollution of surface water, water quality, production, recycling, reuse and disposal of waste, soil quality, and impacts on biodiversity.



## Managing emergencies

DMA EU (former EU21)

Enel has a shared crisis and critical event management system in the various countries where the Group operates. This system provides for the assessment of the impact caused by the critical event through a standard 3-level reference scale. High-impact crises are managed centrally, while those with a medium or low impact level are managed within the specific organization of the individual countries.

For high-impact level crises ("Group Red Code"), it is envisaged to set up a central crisis committee active at the Security Control Room at the Viale Regina Margherita office in Rome to provide 24/7 support for the communication and the coordination of the information flows. In addition, the crisis committee will define the strategies and actions to

deal with the critical event and coordinate all activities to limit the damage to property, profitability and reputation of the Enel Group.

In Enel SpA there is a Security unit within the Human Resources and Organization Holding with the aim of defining strategies and guidelines on the issues of safety, guaranteeing reporting to top management and promoting the sharing of best practice. In addition, a travel security process has been established with the aim of protecting Enel staff travelling abroad by sup-

plying information and notices on the destination countries, indicating the conditions which could represent risks for the health and safety of travelers (for example, political unrest, terrorist attacks, crime, healthcare emergencies, etc.), providing the guidelines and conduct to be followed and activating security measures needed in regard to the risk level identified for the destination country.





## Nuclear policy

Enel adopts a policy for the safe management of its nuclear activities. This policy focuses not only on safe nuclear operations, but also on the integration of nuclear safety into all the corporate processes, stressing the importance and particular nature of being a nuclear operator. The policy confirms the commitment of top management to undertake all the activities in such a way that the opera-

tional nuclear units are managed and developed safely and with the protection of workers, the local populations and environment as the most important priority, as well as encouraging excellence in all stages of the process and going beyond simple respect of the law.

Checks on the safety of nuclear power plants, i.e. the stress tests which were arranged in Europe immediately following the Fukushima incident, seek to measure the size of safety margins at nuclear power plants given extreme external scenarios, such as earthquakes or flooding, and incidental scenarios, for ex-

ample the lack of electricity or the lack of water for cooling, thus investigating the response of the plant should it be subject to unplanned operating conditions. The nuclear power plants have been carefully studied and the improvements identified are being implemented. These measures include, for example, the installation of new safety systems and technologies to guarantee the continuity and availability of electric power in the case of a total blackout.



# Industrial relations for health and safety issues

103-2 103-3 403-1 404-4

In order to facilitate the implementation of the health and safety initiatives and to encourage the sharing of decisions and results, in all the Group countries a number of joint committees have been

set up dedicated to monitoring and controlling health and safety conditions nationally and across Divisions. With the aim of facilitating the integration and standardization of the committees, which operate at different levels, during 2012, in Italy the bilateral occupational health and safety committee was set up, in accordance with the Italian model of industrial relations of July 17, 2012. The committee has the task of promoting prevention and training activities, as well as raising awareness of health and safety issues, and, finally, drawing up and collecting examples of good practice. As from 2013, this aspect was further extended to the whole scope of the Enel Group, through the creation of a bilateral commission for health and safety at Group level, set up under the Enel Global Framework Agreement of June 14, 2013. This committee, which in 2013 defined a "joint recommendation" which can be applied in all Enel countries, focuses on the application and implementation of health and safety standards at Group level.

Further details on the commissions operating at the national and/or local level in the main countries are shown below.



COUNTRY	JOINT HEALTH AND SAFETY COMMITTEES				
Italy	Besides the bilateral committee on policies for safety and protecting the working environment, which was set up in 2012, there are two committees, which operate at the divisional level of Infrastructure and Networks and Generation. In addition, periodic meetings are organized involving the employer, the head of the prevention and protection service, the competent doctor and the workers' safety representative. The meetings are held at least once a year and 100% of employees are represented.				
Russia	In every plant in Russia there are committees which deal with health and safety. Every organizational unit has a worker representative for occupational health matters, for a total of 49 representatives, who communicate with the company managers and unions.				
Romania	In accordance with legal provisions, there are safety and hygiene committees in each comp consisting of: representatives of the company, the specialist doctor and professional representat of the unions/representatives of employees, which meet periodically (quarterly) to discuss speciasues, and propose measures to manage, control and improve safety.				
Spain	At national level the <i>Comisión de participación y control</i> has been set up and, at local level, <i>Comités de seguridad y salud territoriales</i> have been set up.				
Argentina	In the power plants there are bilateral hygiene and safety committees, which meet once every month or two months.				
Chile	At all production sites with more than 25 workers, there are <i>Comités paritarios de hygiene y seguridad</i> , which deliberate on occupational health and safety initiatives through an annual work plan. These committees meet once a month.				
Peru	There are 5 bilateral committees, which also involve contractors' representatives.				
Brazil	All sites have a <i>Comissão interna de prevenção de acidentes</i> , composed of company representatives and workers representatives and focused on creating accident prevention initiatives.				
Colombia	Two joint committees have been established (COPASST), one for distribution and one for generation, which deal with the promotion of occupational health standards.				

## Environmental sustainability (1/2)

102-15

▶ 2017-2019 Plan: **Environmental sustainability** 

SDGs	Activities	Categories	2017 results	Targets
12 13	Reduction of SO <sub>2</sub> specific emissions	E Environmental footprint	• 0.81 g/kWh <sub>eq</sub> <sup>1</sup> (-16% vs 2010)	• -30% by 2020 (vs base year 2010)
12 13	Reduction of NO <sub>x</sub> specific emissions	E Environmental footprint	• 0.77 g/kWh <sub>eq</sub> <sup>1</sup> (-8% vs 2010)	• -30% by 2020 (vs base year 2010)
12 13	Reduction of dust specific emissions	E Environmental footprint	• 0.26 g/kWh <sub>eq</sub> (-50% vs 2010)	• -70% by 2020 (vs base year 2010)
6 12	Reduction of water specific consumption	<b>E</b> Water	• 0.49 l/kWh <sub>eq</sub> (-27% vs 2010)	• -30% by 2020 (vs base year 2010)
12	Reduction of waste produced	E Waste	• 9.4 Mt (-11% vs 2015)	• -20% by 2020 (vs base year 2015)



## ▶ 2018-2020 Plan: **Environmental sustainability**























Our commitment



## Environmental sustainability (2/2)

102-15

▶ 2017-2019 Plan:

**Environmental sustainability** 



#### 2017 results

#### **Targets**





of the Biodiversity



• Framework developed for measuring projects, investments and protected areas





Ongoing protection of species on the IUCN<sup>1</sup> Red List in protected areas near plants



Ongoing collaboration with IUCN1







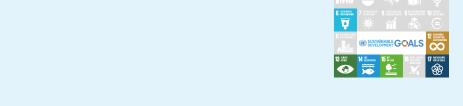
#### Circular economy (CE)

- Adoption of a systematic approach to CE in the Group
- Launch of project to assess CE impacts
  Launch of partnership
- with companies and institutions about CE **Application of CE** principles to Futur-e projects, as a key factor in developing

the projects

- Circular economy

- Operational efficiency
- Partnerships
- Circularity measurement
- model developed Dedicated corporate web
- page created Scientific committee
- established for the web page on CE2
- CE criteria introduced in Futur-e projects assignment



## ▶ 2018-2020 Plan: **Environmental sustainability**

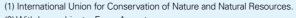
2020 targets Implementation of projects to minimize the impact of Enel sites Increase project E Biodiversity on the habitat and the species included in the IUCN¹ "Red List" portfolio Development of biodiversity E Biodiversity indicators and a reporting system in partnership G Partnerships with IUCN E Circular economy circular economy (CE) strategy in new Countries<sup>3</sup> • 9 new Countries Operational efficiency E Circular economy Launch of CE projects in Company's Divisions 9 projects Operational efficiency E Circular economy Strengthening of partnerships and collaborations about CE G Partnerships



Measurement of the Group's circular EBITDA and target setting

E Circular economy

Industrial growth



<sup>(2)</sup> With Legambiente, Enea, Accenture,

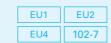


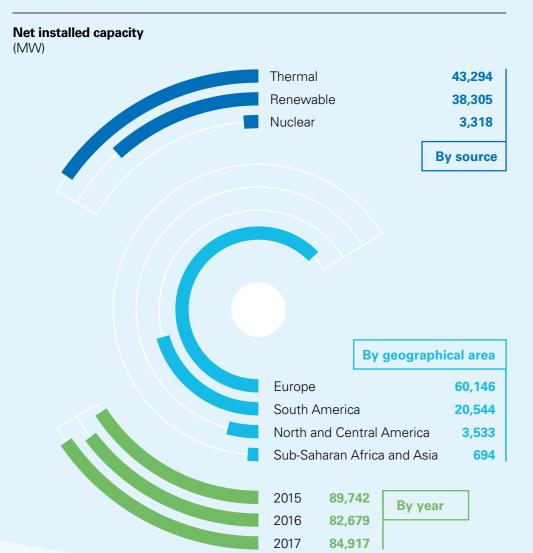


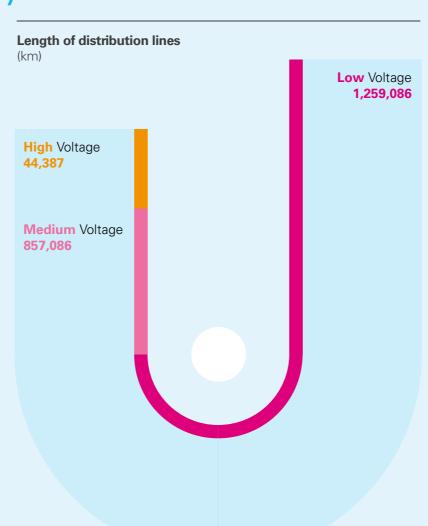
al S Social G Governance T Technological

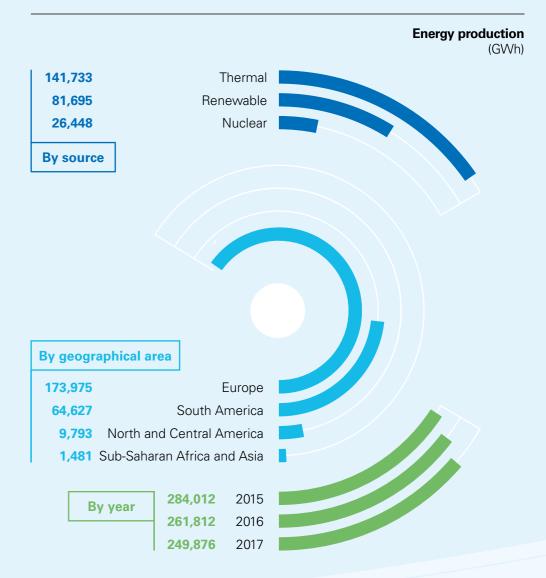
<sup>(3)</sup> CE strategy currently only in place in Italy.

## Environmental sustainability









		entina	Brazil	Bulgaria	Canada	01.11											i.	Russia	Spain	USA	South Africa	Uruguay	Im
Therma	al¹ 3	3	1		madu	Chile	Colombia	Costa Rica	Greece	Guatemala	India	Italy	Mexico	Panama	Peru	Portugal	Romania	Hass					
Renewable	2					8	2					32			3	1		4	30		12	1	2
Nuclear			46	2	1	35	12	3	50	5	3	590	11	4	7		12		227	50			25
Distribution substations	19,924	200																	3				月
		<b>468,</b> 1	161		2	1,898	87,166					582,032			10,220		23,13	3	134,4	49 used (for e	<sub>xample,</sub> organiz	ational or techr	nological).

(1) The number of plants by country can vary according to the aggregation criterion assets.

## Environmental policy

Last updated: February 2018

Protecting the environment and natural resources, combating climate change, and striving to achieve sustainable economic development are all strategic factors in planning, carrying out, and developing Enel's activities, and are decisive in consolidating its leadership in energy markets.

Since 1996, Enel has observed a Group environmental policy which is based on four key pillars:

- 1. Protecting the environment by preventing impacts to it.
- 2. Improving and promoting the environmental sustainability of products and services.
- 3. Creating shared value for the Company and stakeholders.
- Complying with legal obligations and voluntary commitments, promoting ambitious environmental management practices

and pursues ten strategic objectives:

- 1. Organisation-wide application of internationally recognised Environmental Management Systems based on the principle of continuous improvement and the adoption of environmental indicators to measure the environmental performance of the entire organisation.
- **a.** Annual maintenance of ISO 14001 certifications and extension to cover the entire Groupperimeter.
- **b.** Rationalisation and harmonisation of certification in the various organisational areas; search forsynergies and sharing of best practice with regard to environmental management.
- Reducing environmental impact by applying the best available technologies and best practice in the stages of plant construction, operation, and decommissioning, taking into consideration a life cycle analysis approach and the circular economy concept.
  - **a.** Environmental impact assessment for the construction of plants or significant changes.
  - **b.** Study and application of Best AvailableTechnologies (BAT).

- **c.** Protection and monitoring of the quality of surface and groundwater in areas around the plants.
- **d.** Internal development and application of international best practices.
- 3. Siting industrial plants, infrastructure and buildings, while safeguarding the territory and biodiversity.
- **a.** Development and update of an Action Plan for Biodiversity.
- **b.** Development of biodiversity protection projects, taking into account the specific features of local environments (conservation of the habitats of protected species, reintroduction of particular species, replanting of native flora, in collaboration with research centres and nature observatories).
- **c.** Carry out bio-monitoring activities (land, seas, rivers).
- d. Use of technologies to protect biodiversity.
- e. Mitigation of the visual impact and of the impact on the landscape of generation and distribution plants.

## 4. Leadership in renewables and in low-carbon electricity generation and efficient use of energy, water resources, and raw materials.

- a. Growth in renewable energy production.
- b. Improvement of the efficiency of power plants.
- **c.** Reduction in grid losses associated with electricity distribution.
- **d.** Efficient management of water resources for industrial uses, focusing in particular on "water stress" areas.
- **e.** Value the by-products of electricity generation as raw materials for other production processes.
- **f.** Promotion of services and products for energy efficiency in the end-uses.

## 5. Optimal management of waste and wastewater and promotion of circular economy initiatives.

- a. Reduction in waste production.
- **b.** Reduction of polluting effect of wastewater.
- **c.** Increase in the recovery percentage of waste and wastewater produced.
- **d.** Qualified selection of suppliers of waste disposal services and use of IT systems for the traceability of waste.

## 6. Development of innovative technologies for the environment.

- **a.** Implementation of systems for increasing plant efficiency and reducing emissions.
- **b.** Promotion and development of smart grids as well as solutions based on the digital management of assets designed to improve environmental performance.
- c. Development of innovative solutions for renewable energy production (photovoltaic, geothermal, wind, marine energy) including the integration of renewable energy and energy storage
- d. Promotion and development of electric mobility.

## 7. Report transparently on the Company's environmental results to citizens, institutions and other stakeholders.

**a.** Publication of the Sustainability Report and open-data access to the Group's main environmental parameters.

- **b.** Communication with analysts and participation in various sustainability indices.
- **c.** Consultation and engagement with local stakeholders.
- **d.** Dissemination of environmental initiatives through the internet.

## 8. Employee training and awareness-raising on environmental issues.

- a. Training on environmental issues.
- **b.** Employee engagement in campaigns to raise awareness about the environment.

## 9. Promotion of sustainable environmental practices among suppliers, contractors and customers.

- **a.** Use of qualification criteria for the selection of suppliers based on environmental performance.
- **b.** Training initiatives and meetings to inform suppliers about the Enel expectations in terms of management of the environmental impacts due to activities to be undertaken, starting from the work start stage.
- **c.** Assessment of suppliers based on the environmental performance achieved during the activities carried out on behalf of Enel.

## 10. Complying with legal obligations and voluntary commitments.

- **a.** Guarantee that operations are carried out in compliance with the legal obligations and the commitments undertaken voluntarily, in the various countries.
- **b.** Resolving any cases of non-compliance with regard to the obligations and voluntary commitments undertaken.
- **c.** Consider further actions and voluntary commitment to protect the environment, even if not part of our legal obligations.



## Environmental governance

103-2 103-3



he protection of the environment and natural resources, the fight against climate change and the contribution to sustainable economic development are strategic factors in the planning, operation and development of Enel's activities, as well as being essential for consolidating the Company's leadership in the energy markets. Since 1996 Enel has implemented a Group environmental policy, updated at the beginning of 2018, and included in the beginning of this chapter, that applies to the whole value chain, including the due diligence and Merger&Acquisition processes

Environmental activities are carried out within Enel through an organization that reaches across operational units, coordinated by a central Holding unit in terms

of general environmental policy guidelines. In the Business Lines and Global Service Divisions there are structures and figures in charge at various levels (see also the chapter "Business model for a low-carbon growth").

In particular, the Staff Functions coordinate the management of the respective environmental issues, ensuring the necessary specialist support consistent with the Holding's guidelines, while the operating units manage the specific aspects of the various industrial sites. In the Group, the people dedicated to managing environmental issues in 2017 amounted to 425 Full Time Equivalent (FTE). During the year, training activities were carried out for a total amount of about 52 thousand hours, which involved the field of Environmental Man-

agement Systems (such as water and waste management, environmental restoration, prevention). The training mainly involved the thermal and renewable sectors, with particular attention to geothermal and solar energy for the entry into operation of the new plants.

The main environmental risks are also monitored through *ad hoc* analyses on the environmental specificities of the individual Business Lines, such as ECoS (Extra Checking on Site), which are performed to identify the relevant areas and to define and monitor the corrective actions (see also the chapter "Occupational health and safety").



## Environmental Management Systems

A key element of the environmental policy is the gradual application of the internationally recognized Environmental Management Systems (EMS)

to all the activities carried out by the Enel Group. In implementing the environmental policy, each Division of the Group has its own EMS compliant with the ISO 14001 standard. The new Global e-Solutions Division was set up in 2017, and it will start the process of preparing and implementing the management system over the course of 2018. During the second half of 2017, it was decided to suspend integrated certi-

fication at Group level (present in last year's environmental policy). A review of Enel SpA's EMS was launched in light of an organizational change that led to the creation of the Holding HSEQ (Health, Safety, Environment, Quality) unit, which is responsible for direction, coordination and control at Group level.

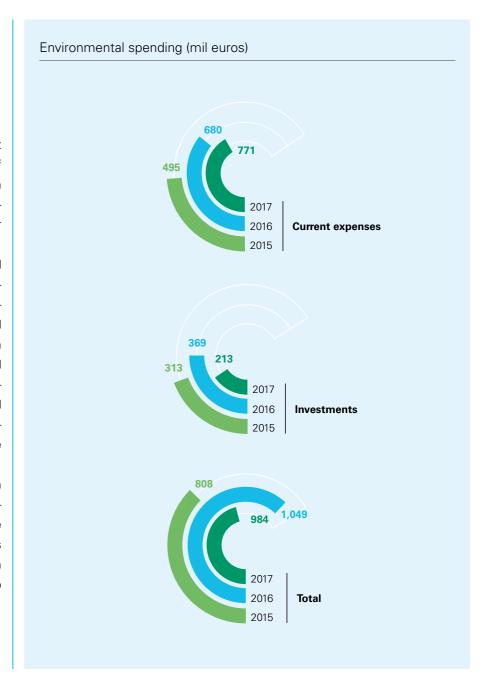


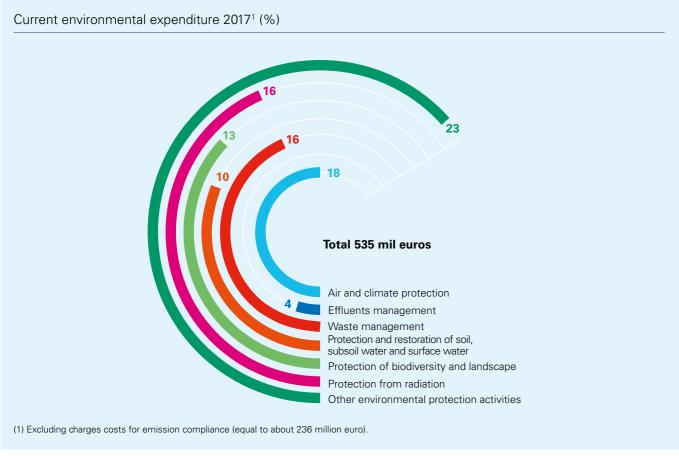
## Environmental spending

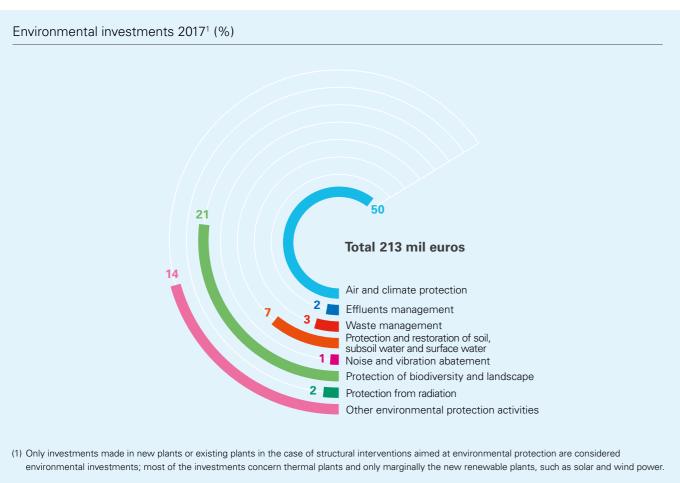
In 2017, the overall financial commitment for the protection and safeguarding of the environment was about 1 billion euro, divided into 771 million euro for operating expenses and 213 million euro for investments.

Operating expenses mainly concerned the thermal, hydroelectric and distribution sectors in Europe and South America. In particular, the largest share related to the costs for air and climate protection (maintenance of treatment plants and reduction of emissions, waste management, storage, transport, disposal and sending to recovery/recycling) and activities related to radiation protection in the Group's nuclear plants.

As part of the greenhouse gas reduction policy, Enel participates in the European Union Emissions Trading Scheme (EU-ETS), whose management costs amounted to approximately 236 million euro for Italy (in 2016 they amounted to 359 million euro).







In 2017, there was a decrease in investments compared to 2016 (213 million euro in 2017 compared to 369 million euro in 2016), mainly due to the progress of the work on the plants. Last year, the share of investments was mainly divided between Italy, Spain and Chile, while in 2017 investments mainly went to Colombia, as well as Europe and Chile. The value of investments in environmental upgrading of thermal plants for 2017 amounted to

around 130 million euro, as reported in the chapter "Business model for a low-carbon growth".



## Greenhouse gas emissions

103-2	103-3	305-1	305-2
	305-3	305-5	305-6

he use of fossil fuels for energy production accounts for a quarter of global greenhouse gas emissions. Enel's industrial activities in the production of electricity contribute to the emission of carbon dioxide (CO<sub>2</sub>) mainly deriving from production from thermal sources, and, more marginally, from sulfur hexafluoride losses (SF<sub>6</sub>) mainly from the distribution network.

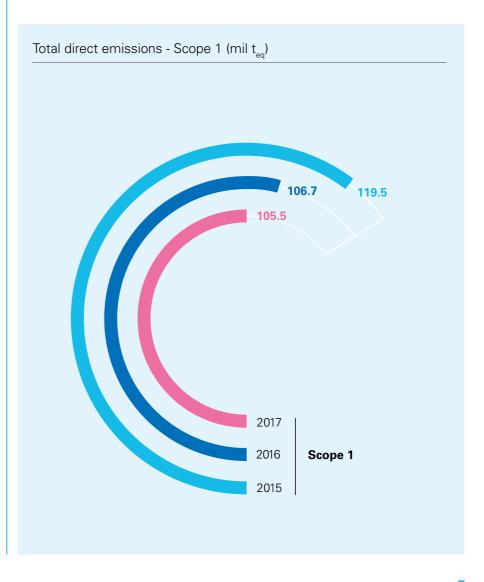
In 2017, direct emissions of **CO**<sub>2</sub> equivalent (**Scope 1**)<sup>1</sup> amounted to 105.5 million tons. The slight decrease compared to 2016 is due to lower thermal production in 2017 compared to the previous year (-0.5%) and, as part of this, to a different production mix compared to the previous year, with an increase in production from combined cycles and a decrease in production from coal and oil & gas plants.

The  $\mathbf{SF_6}$  is used in high- and medium-voltage electrical equipment for its insulating and electric arc extinguishing properties and is, as of yet, irreplaceable in these applications. The quantities released into the atmosphere in 2017 amounted to 6,362 kg, equivalent to 150 thousand tons of  $\mathbf{CO_2}$  equivalent<sup>2</sup>. In percentage terms,  $\mathbf{SF_6}$  contributes 0.14% of the Group Scope 1 emissions, i.e. an extremely small quantity.

Under Scope 1, Enel also considers the

emission of ozone-depleting substances according to the Montreal Protocol, including for example chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs). Emissions of these

substances in 2017 corresponded to 29 thousand tons of CO<sub>2</sub> equivalent<sup>3</sup>.



The **Scope 2** emissions (388 thousand tons of CO<sub>2</sub> equivalent) refer to indirect emissions deriving from the generation of electricity purchased and used by the Company. Scope 2 includes CO<sub>2</sub> emissions associated with the consumption of electricity purchased in the network for civil uses (in offices, for example) and for pumping in hydroelectric plants. Since 2016, all electricity supplies for Italian production sites and offices are from renewable sources.

In 2017, Scope 2 emissions decreased by about 33% compared to the previous year (583 thousand tons of CO<sub>2</sub>

equivalent) in relation to lower hydroelectric activity in Europe due to lower water availability.

**Scope 3** emissions are generated as a result of the Company's activities and are not derived from sources controlled or owned by the Company itself. For Enel, this value is mainly linked to fugitive emissions of methane from coal mines in the extraction phase and to emissions from the transport of fuels used for the operation of its plants. 2017 shows a value of about 7.1 million tons of  $CO_2$  equivalent, down about 2% compared to 2016 (7.2 million tons of  $CO_2$  equivalent) mainly due to the

decrease in coal thermal activity.

- 1 The Scope 1 emissions for 2015 also take into account fugitive emissions of methane (CH<sub>4</sub>) related to the extraction of coal from its own mines, no longer active today. CO<sub>2</sub> emissions from thermal production do not take into account the emissions not related to managed production.
- 2 Global Warming Potential equal to 23,500.
- 3 The value obtained is calculated by converting the tons of each individual gas detected (CFC, HCFC, R22 and freon) by applying the value of the reference average Global Warming Potential of the gas families (source: IPCC, WG1AR5\_ Chapter08).



# Emissions of SO<sub>2</sub>, NO<sub>x</sub> and dust generated

103-2 103-3

he greatest atmospheric pollutants associated with thermal power generation are sulfur oxides (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and dust. Emissions are measured at the chimney in most large plants, using continuous monitoring systems, as required by the national legislation of each Country.

As was the case for  ${\rm CO_2}$ , the values for  ${\rm SO_2}$  (-3%) and  ${\rm NO_x}$  (+1%) in 2017 were essentially stable compared to the previous year. Dust emissions showed an increase (about +14%) due to a shift in the Russian production mix towards coal. Specific emissions all increased in 2017. The increase is not linked to increased pollutant production, but to a decrease in the Group's energy production due to the changes in the scope of operations that took place mainly in 2016 (see the paragraph "Development of renewable capacity and reduction of thermal capac-



ity" in the chapter "Business model for a low-carbon growth"). In particular, the specific emissions of SO<sub>2</sub>, NO<sub>x</sub> and dust show an increase of 2%, 5% and 23% respectively.

Also taking into account the managed capacity<sup>4</sup>, equal to about 2.6 GW, and the managed production of about 7 TWh, the total values were respectively about 88 GW for capacity and about 257 TWh<sub>eq</sub> for production. As a result, specific emissions were equal to 0.81 g/kWh<sub>eq</sub> for SO<sub>2</sub>, 0.77 g/kWh<sub>eq</sub> for NO<sub>x</sub> and

0.26 g/kWh<sub>eq</sub> for dust.

In the coming years, a gradual reduction of all pollutants is expected thanks to a series of interventions on the entire thermal generating fleet, to align the plants with the industry's best practices through the installation or improvement of pollutant abatement systems and the progressive decommissioning of less efficient plants. In the three-year period 2018-2020, around 500 million euro is due to be invested in environmental initiatives in some selected plants.

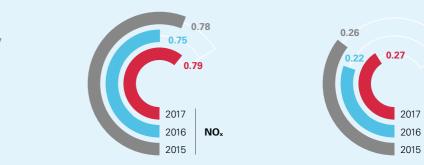
These will include infrastructural work and management improvements, aimed at achieving best possible performance, even exceeding legal requirements.

4 Capacity managed through the joint ventures of the renewables area in Italy, USA and Canada.



Dust





### 2020 targets

Compared to the data recorded in 2010, Enel has committed to achieving certain targets by 2020 for the reduction of specific atmospheric emissions, evaluated based on the results achieved and the timetable laid down by the Business Plan for the next three years. The Plan calls for an evolution of the mix towards renewable energies and a reduction in emissions from fossil fuels through the alignment of existing plants to best practices, together with a change in the perimeter of the production fleet.







# Efficiency in energy consumption

 103-2
 103-3
 302-1

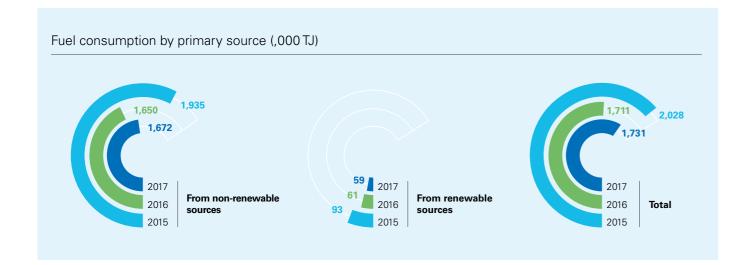
 302-3
 302-4

or Enel, using energy efficiently means, on the one hand, maximizing the efficiency of the mix of sources (thermal, nuclear and renewable) and, on the other, making the distribution network increasingly efficient. Therefore, the strategy to reduce Enel's energy consumption envisages investments to increase efficiency in all the Group's activities, from production to

distribution, and also aims at spreading greater awareness of conduct (see also the chapter "Business model for a low-carbon growth"). In 2017, improvement of process efficiency and the implementation of operational excellence programs continued by optimizing the production load distribution.

Energy consumption mainly includes consumption of fossil fuels for the op-

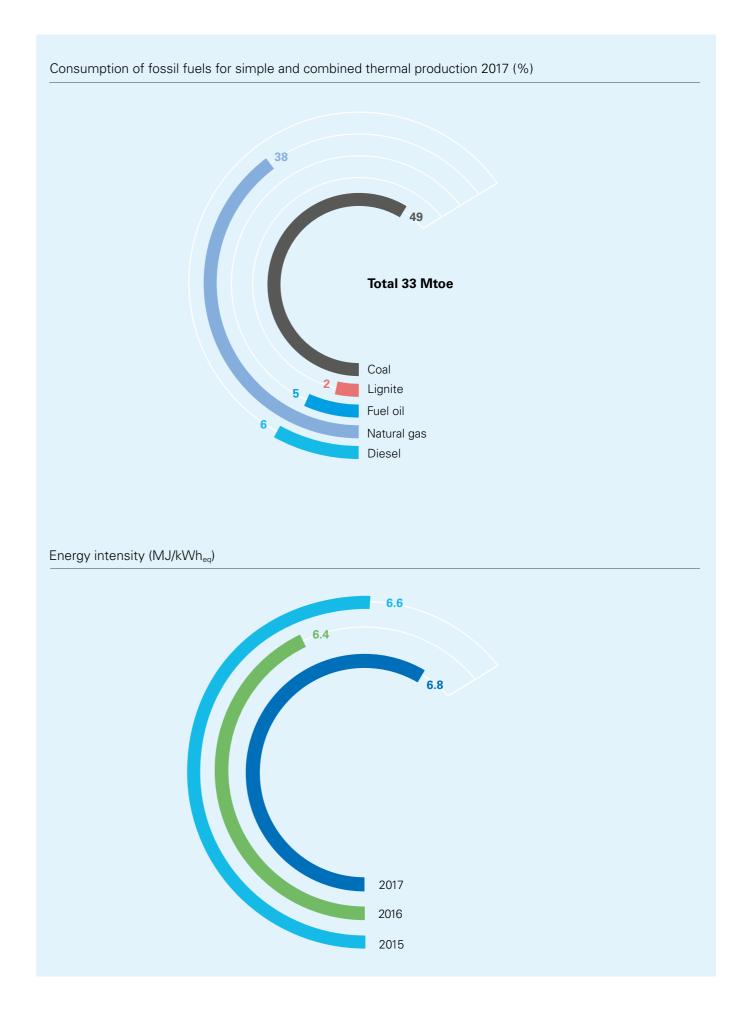
eration of thermal power plants and uranium for nuclear power plants. A small component of energy consumption comes from the consumption of renewable sources, which for Enel are represented by biomass and geothermal fluid



Consumption of fossil fuels for thermal production in 2017 was in line with that recorded in 2016. The energy intensity of the Group, which provides a measure of its operational efficiency, amounted to 6.8 MJ/kWh<sub>eq</sub> in 2017.

In view of almost stable total fuel consumption compared to 2016, energy intensity was up due to the decrease in Group production.







The table below shows the main initiatives carried out both on plants and on the territory, with an indication of the country and the area of intervention in terms of energy efficiency.

COUNTRY	INTERVENTION AREA	INTERVENTION DESCRIPTION
Russia	Thermal production	Nevinnomyskaya: several initiatives were implemented in 2017, which have enabled total savings of around 95 thousand GJ; these included the use of energy-efficient equipment with the resulting reduction in fuel consumption, the use of LED lights and various technical interventions on the equipment.  Reftinskaya: the reorganization of the lighting system, involving the replacement of normal light bulbs with LEDs, saved about 18 thousand GJ.  Konakovskaya: about 33 thousand GJ were saved in total from some interventions on unit 6 (rebuilding the boiler insulation system, maintenance of the heating systems, cleaning the heating surfaces, maintenance of the turbine).
Spain	Thermal production	More than 400 GJ was saved by the replacement of 2 mills in Group I, with a more efficient model at the <b>Teruel</b> plant and by the replacement of some old equipment in the <b>Alcúdia</b> plant.
Romania	Electricity grid distribution	A total of around 11 thousand GJ was saved thanks to the increase in maintenance activities, in particular the phase load balancing of the grid and the replacement of power transformers/voltage control.
	Market	In 2017, <b>Enel Romania</b> offered 148 energy saving bulbs (7.5 W) and 35 extensions with switches to the Ferentari district of Bucharest, as part of a wider initiative to improve access to energy in the area and promote more efficient consumption of electricity.
taly	Electricity grid distribution	Around 222 thousand GJ were saved in total thanks to the installation of new low-loss transformers, the optimization of the MV network layout, the installation of new substations and the reconstruction/upgrading of LV/MV lines. The addition to the distribution network of new substations (both HV/MV and MV/LV) allows a rationalization and optimization of the network at lower voltage, resulting in a reduction of the average length and average load of the network with a resulting reduction of power losses. The renovations of the MV and LV lines are generally carried out by replacing the existing conductors with others of a larger section, with a consequent reduction in energy losses.
olombia	Electricity grid distribution	About 4 thousand GJ were saved thanks to a project for the installation of LED equipment and the replacement of sodium and metal halide (MH) luminaries.

# Responsible management of water resources

 103-2
 103-3
 303-1

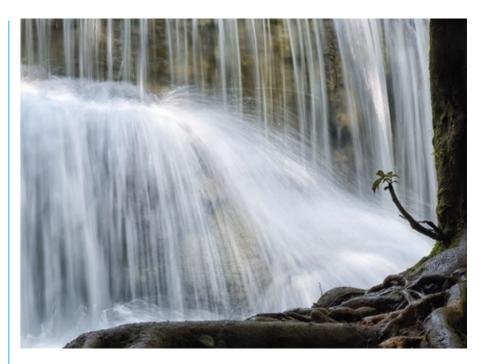
 303-2
 303-3
 306-1

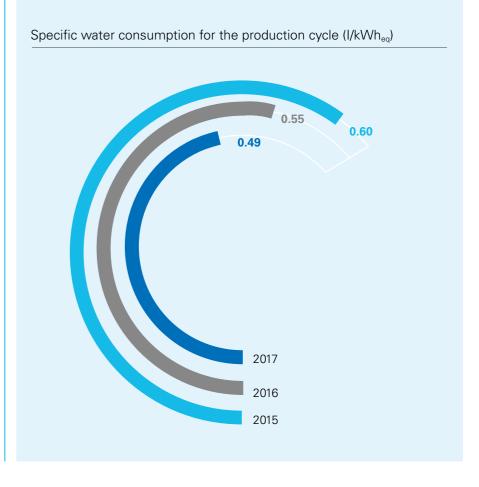
he integrated management of water resources is based on the following main lines of action:

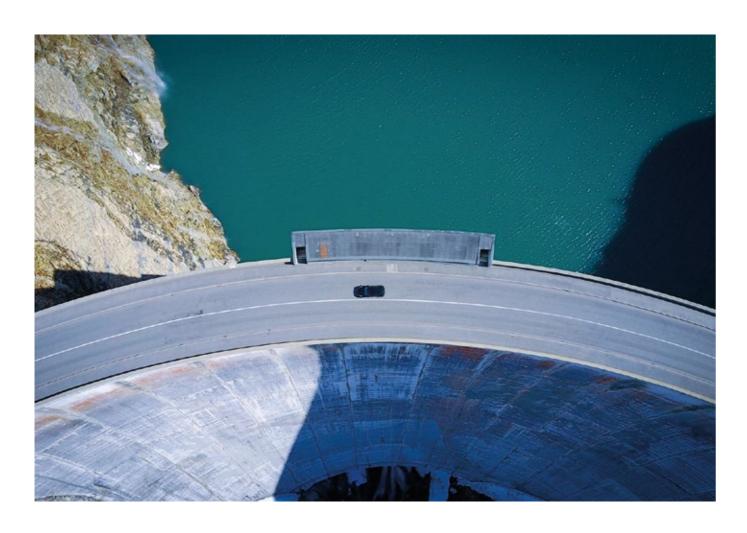
- > efficient use of water resources also through losses control;
- optimization of wastewater treatment and protection of the water quality of the destination environment;
- management of releases from hydroelectric plants through specific programs to guarantee the volumes needed to preserve the ecological status of rivers (minimum vital outflows);
- integrated management of hydrogeological basins in order to preserve multiple land use and water quality.

The Enel Group takes water and uses it for the most part for thermal and nuclear production mainly for industrial purposes, such as cooling and atmospheric emissions abatement systems (desulphurization, abatement of nitrogen oxides).

In 2017 the total water requirement amounted to about 126 Mm³, with a reduction of around 15% compared to 2016 (149 Mm³). The decrease in water consumption is mainly due to the exit from the perimeter of two Slovakian nuclear power plants, which has led to a 61% reduction in the specific water needs for nuclear production in the last three years, from 2015 to 2017. The specific water needs of the Group, including thermal, nuclear, geothermal, and other activities for industrial uses, in 2017 amounted to 0.49 l/kWh<sub>ea</sub>, about 11% lower than the previous year, in line with the target to reduce the Group's water consumption by 30% in 2020 compared to 2010.







In 2017 about 8% of the total production of the Group used and/or consumed fresh water in water stressed areas (defined as areas in which the annual water *per capita* availability rate is less than 1,700 m<sup>3</sup>).

The total water requirements for the Group's production activities are covered by usage from sources that are not scarce (sea water), scarce (surface soft water, groundwater and from industrial aqueducts), or through the use of wastewater from production processes.

In 2017, usage from scarce sources amounted to approximately 111 Mm³, a decrease of about 17% compared to 2016, also due to the exit from the perimeter of the Slovakian asset – in particular the nuclear power plants, which mainly use river water. Consumption figures do not take into consideration

the water used in open cycle because it is returned to the original body of water in the same quantity, with unchanged chemical characteristics and minimal temperature variations (always within the limits set by the regulations in the countries where Enel operates). In total, 99% of the water used for open cycle cooling in Enel plants is returned to the original bodies of water.

consumption in production processes, in particular by encouraging the application of multiple water usage systems as much as possible. In some coal-fired plants, for example, the use of crystallizers downstream of the desulfurizers allows the total recovery of the wastewater.

Enel is committed to reducing water

Enel constantly monitors all production sites in areas at risk of water scarcity

in order to manage the water resource in the most efficient way. In particular, site monitoring takes place through the following levels of analysis:

- mapping production sites in areas with potential "water scarcity" situations, in which the average value of renewable water resources per person is lower than the reference set by FAO (the mapping is carried out with the Global Water Tool of the World Business Council for Sustainable Development);
- identification of "critical" production sites, i.e. those in "Water Scarcity Areas" with withdrawals;
- more efficient management of water, also aimed at maximizing the supply from wastewater and sea water;
- > monitoring of sites' climate and vegetation data.

As regards hydroelectric plants, in addition to complying with the requirements of the different territorial Protection Plans that impose the obligation to release the minimum vital outflows. Enel has simultaneously

launched experiments in Italy, Spain and Latin America concerning the real impact on the ecosystem of these outflows. In some specific cases, it has also launched studies aimed at examining the effect of the daily flow

variations caused by the intermittent releases of turbinated waters downstream of the plants.



## Research and innovation in the conservation of water resources

Enel's Global Thermal Generation, in collaboration with Global Renewables, coordinates the **European MATCHING project** (Materials & Technologies for Performance Improvement of Cooling Systems in Power Plants), funded under the Horizon 2020 program. The consortium, which brings together 16 partners between utilities, research bodies and vendors, aims to develop new technologies to reduce the use of water for cooling in thermal production and to optimize its use in geothermal power plants. Launched in 2016, the first phase of the project focused on the development of pilot projects in the laboratory. The first phase, which has had positive results, was followed by the experimentation phase in seven major European plants, including the thermal plant of As Pontes, in Spain, the thermal plant in Brindisi and the geothermal plant in Nuova San Martino, in the district of Lago, both in Italy.

In terms of water recovery, in the Italian geothermal sites Enel Green Power has been using "Closed Loop" treatment for several years, which allows the separation of bentonite (the fluid used for drilling operations, also known as sludge) from the water itself. This process makes it possible both to reduce water consumption, reducing the transfer of solid waste to landfills, and recovering reusable water to prepare new sludge, to dilute the circulating water and to wash the equipment. With regard to thermal plants, moreover, the innovative "Zero Liquid Discharge" process was implemented in some Italian plants, with the aim of making the use of water perfectly efficient. Through this process, all wastewater is reused in the production cycle, eliminating effluent and reducing consumption.

#### 2020 targets



Enel has committed to achieving a 30% reduction of specific water consumption by 2020 (compared to the data recorded in 2010). The target was set in view of the results achieved and the timetable laid down by the Business Plan for the next three years, which will see improvements in the efficiency of water usage in the existing thermal plants, an evolution of the mix towards renewable energies and a reduction in generation from fossil fuels through a change in the perimeter of the production fleet.

#### Water effluent

Wastewater includes water for industrial use and rainwater collected from the internal areas of production sites, potentially polluted by oils, which after a treatment process are returned to surface water bodies, or reused.

Enel pays close attention to the quality of its discharges to surface waters and invests to improve its effluent treatment plants. Potentially polluted waters produced at the sites are sent to specific treatment plants depending on the type of substances that may be present. The treated wastewater – amounting to about 108 Mm³ in 2017 (about 112 Mm³ in 2016) – are partly returned to surface water bodies and partly reused within the plants themselves, helping to meet total water needs. The percentage of reuse varies depending on the technical characteristics of the plants and the use of crystallizers in some coal plants.

In 2017, the amount of wastewater recovered after treatment across the Group amounted to around 7 Mm³, meeting 5.4% of total needs. This increase compared to 2016 (+30%) is mainly due to the removal of the Slovakian power plants from the consolidation.

Ш

particular coal generation.

Specifically, there was a slight increase in the production of ash and a greater increase in that of gypsum, derived from the desulfurization treatment of combustion gases; the latter had an increase of 7% compared to the previous year, rising from 1.3 Mt in 2016 to 1.4 Mt in 2017, in line with the environmental measures currently under way (particularly in Spain).

The waste sent for recovery across

Enel accounted for 22.5% of the total waste produced.

As part of its activities in the nuclear field, Enel is committed to minimizing the production of waste deriving from daily activities, as well as future waste deriving from the decommissioning of plants. Changes in the quantities of radioactive waste produced depends on maintenance and fuel handling operations and, therefore, is subject to considerable fluctuations over the

years. This has a particular impact on the specific production of high-activity solid radioactive waste in nuclear power plants.

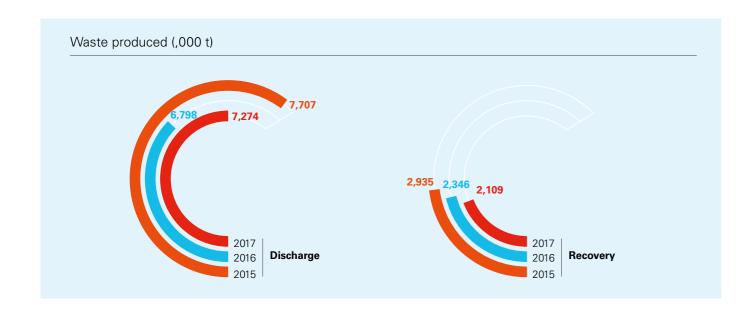
## Waste management

103-3 103-2 306-2 306-3

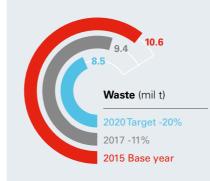
he waste produced by the Group's activities is transferred to sites authorized according to the type of material, and increasingly sent for recovery. Recovery mainly applies to materials that can be reused in construction (such as gypsum and

combustion ash), regenerated (like oils and batteries), or recycled (like some types of metals). The Group's policies are aimed at continuously increasing the percentage of waste sent for recovery, whether hazardous or non-hazardous.

In 2017, the Enel Group produced a total of 9 million and 383 thousand tons of waste, of which 99% classified as non-hazardous. The quantity produced increased compared to 2016 by 3%. The increase in waste production is mainly due to thermal generation, in



#### 2020 targets



Compared to the data recorded in 2015, Enel has committed to achieving a waste production target of 20% by 2020. The target was set in light of the results achieved and the timetable laid down by the Business Plan for the next three years, which will see an evolution of the mix towards renewable energies and a reduction in generation from fossil fuels through a change in the perimeter of the production fleet.

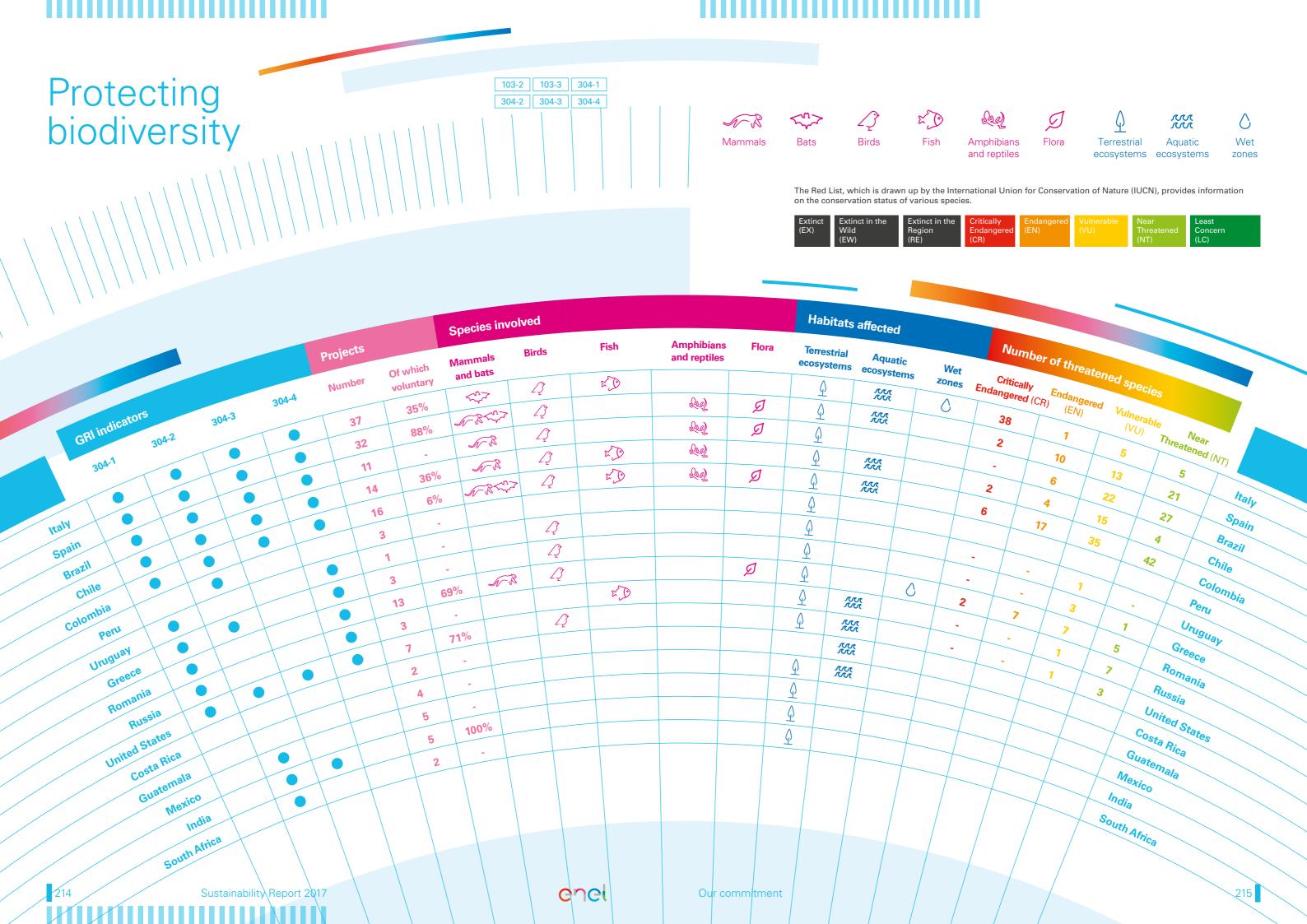


The total quantity of the most significant spills in 2017 was about 90  $\mathrm{m}^3$ . The greatest contribution came from the area of energy distribution.

Except for rare spill events from large-

scale transformers, environmental accidents are mostly small spills where rapid containment and subsequent environmental restoration activities are carried out by a specialized company, according to the procedures imposed by local regulations. To further mitigate the risk related to possession of substances with environmental impacts, several experiments are underway that envisage the use of vegetable oil

 which is biodegradable – instead of the traditional insulating mineral oil.



rotection of biodiversity is one of the most important ways to measure a Company's sustainability. Preserving ecosystems and species equates to respect for life, the natural world, and community spaces and symbols.

Enel is mindful of the value of ecosystems and biodiversity and is traditionally involved in the responsible management of natural resources during its operations.

The protection of biodiversity is a strategic objective of Enel's environmental policy and is an integral part of the Group's EMS. In 2017, initiatives to protect species and natural habitats numbered 158 projects, with a total investment of 10 million euro and a total of 1.94 million hectares of protected areas.

Mainly affecting the renewable-energy plants (especially hydroelectric and wind power) and distribution networks, the projects included studies, surveys and monitoring plans for vulnerable species, programs to reintroduce native species, reforestation, and infrastructural interventions such as isolating and replacing electrical conductors dangerous for bird life. They also included the installation on power lines of supports for the birds of prey and migratory species to stand and nest, and the construction of access ramps for fish fauna near hydroelectric plants.

The initiatives are planned by assigning priorities for ecosystems based on protected areas and for species based on which of these are on the "Red List" of the International Union for Conser-

vation of Nature and Natural Resources (IUCN). Specific local issues that may be particularly important for the local communities are also treated with the utmost care.

In 2015, Enel drew up a specific policy to be used as a benchmark and guide for all of the Group's biodiversity protection initiatives in the generation, transmission and distribution of electricity, adding to the principles of the Group's environmental policy (https://www.enel.com/investors/biodiversity).

The aim of the policy was to contribute to meeting the objectives of the United Nations Convention on Biological Diversity (CBD), the 2011-2020 Biodiversity Plan and the associated Aichi<sup>5</sup> targets. In particular, Enel undertakes to:

> plan activities that may interfere with

species and natural habitats, while respecting the "mitigation hierarchy" principle, which involves a commitment to:

- avoid and prevent the occurrence of negative impacts on biodiversity, and if they cannot be avoided;
- reduce the damage and remedy its effects; and lastly
- compensate for residual negative impacts; for minor impacts, by carrying out compensatory works in line with the principle of "no net loss" of biodiversity and, where applicable, achieving a positive net outcome;
- conduct Environmental Impact Studies for each new plant that include an evaluation of the effects on biotopes, on animal and plant species, in order

to avoid operating in areas of high natural value, also planning the adoption of the best solutions to limit the effects on biodiversity;

- collaborate with local communities, research centers and environmental and local associations to identify biodiversity values and develop studies and projects for protection and enhancement;
- monitor the effectiveness of the measures taken to protect and conserve biodiversity;
- regularly report its biodiversity performance.

The projects currently underway are distributed in almost all the countries where Enel operates, but mainly in Italy, Brazil and Spain. Hydroelectric technology has the greatest number of associ-

ated projects, followed by wind power and networks.

5 See the reference website https://www.cbd. int/sp/targets/.



#### **Enel and IUCN**

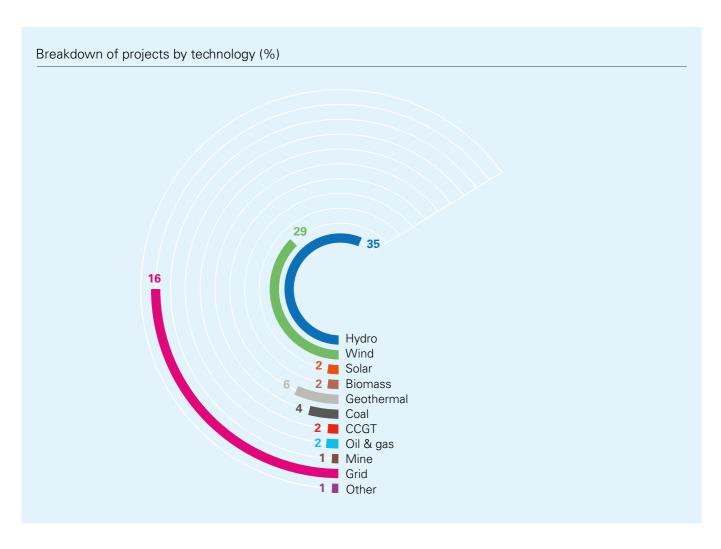
In September 2017, IUCN and Enel signed an annual validity agreement to support the Company in identifying opportunities to enhance the biodiversity around its sites and raise awareness on the best management practices in the energy production sector.

The work is organized around three areas of activity:

- 1. assessment of the risks and opportunities associated with biodiversity around infrastructural sites, through the use of the integrated biodiversity assessment tool (IBAT);
- 2. identification of biodiversity best practices for the implementation of the mitigation hierarchy for energy infrastructures:
- 3. definition of new indicators for biodiversity reporting at the company level.

Four Enel sites were visited as part of the agreement, selected based on the technologies involved and characteristics of the biodiversity in the surrounding areas: in Italy (Porto Corsini, thermal generation - CCGT), Chile (Tarapacá, thermal generation - coal), Mexico (Villanueva, solar generation) and Brazil (Apiacás, hydroelectric generation). The aim of the visits was to get to know current practices for avoiding and reducing the impacts on biodiversity related to energy infrastructures, as well as mitigation actions and any compensation mechanisms used.

The project involves IUCN developing a series of recommendations to further strengthen the Company's biodiversity contribution



Sustainability Report 2017 CITY Our commitment

#### The "Teodora" power plant at Porto Corsini

The "Teodora" power plant is a modern combined gas cycle and has an EMAS certified environmental management system since 2006.

In the nearby wetland the "Pialassa della Baiona" there are 1,800 hectares protected by the Ramsar Convention, Special Protection Zone for Birds and Site of Community Importance.

In order to minimize the impact due to the thermal discharge and to protect the high biodiversity value of the area, Enel has started collaborations with all the stakeholders present on the territory for several years and forums with the local associations for the protection of the wider system of wetlands of Porto Corsini, an extensive fluvial-marine transition environment relevant for biodiversity (e.g. Greater noctule bat - Nyctalus lasiopterus, European pond turtle - Emys orbicularis, Black tern - Chlidonias niger).



Sustainability Report 2017

#### Other activities

#### Distribution

In order to protect the landscape and the local area, Global Infrastructure and Networks uses specific strategies to mitigate the environmental impacts of the construction of new networks and the modernization of existing ones.

The cabling ratio is the ratio (in percentage) between the length of the cable lines and the total length of the lines.

It gives an immediate indication of the mitigation of the environmental impact of power lines. The increase in this index over time is due to an increase in the length of the overhead and underground cable line to the detriment of bare conductors, with benefits in terms of network resilience, restriction of vegetation cutting and drastic reduction in the risk of electrocution for birdlife.

On a like-for-like basis compared to 2016, the cabling index in 2017 was stable compared to the previous year, equal to around 72%. The inclusion of the Brazilian distribution company Enel Distribuição Goiás in the reporting boundary (which took place in February 2017) brings the cabling index to approximately 60%. Enel Distribuição Goiás has a network of over 215 thousand kilometers, which is not uniform with the existing Enel network in the area.

The 2020 target for this index is 62%.



#### Storage and movement of fuel

Storage tanks for liquid fuels (oil and gas oil with associated pipelines) and solid tanks (coal and lignite depots located in dedicated ports) are monitored with regard to the use of resources, the consumption of electricity and the production of emissions (air quality), wastewater and waste.

#### Sustainable construction sites

Starting in 2013, in compliance with the new standards applicable from 2015 defined by the GRI, the Enel Group began reporting the main environmental performance indicators connected to construction site activities. This category includes activities of various types and scales: from the distribution area's yards to sites pertaining to thermal plants or the construction of new renewable hydroelectric, wind, solar, geothermal or biomass plants.

Activities have changed considerably over the years in view of the environmental aspects directly managed by the Group. Starting in 2016, reporting was carried out according to a new sustainable construction site model and the principles of the "circular economy" as it applied to all existing sites. The next Sustainability Report will include the initial results obtained from the model, to that a three-year sample can be presented and analyzed.

In 2017, the Ministry of the Environment in Santiago de Chile awarded the "Seal of Excellence" certificate to the project for the prefabricated premises of the Cerro Pabellón construction site, located about 25 kilometers from the plant. This result was made possible by a series of initiatives to improve the ecological footprint of the area of the premises, by quantifying, reducing and neutralizing greenhouse gases, using mechanisms to reduce CO<sub>2</sub> emissions, water use and waste production.







#### Cerro Pabellón

**Cerro Pabellón** is located in **Chile** in the Atacama desert, in the district of Ollagüe, Antofagasta region, at 4,500 meters above sea level. It is the first high-enthalpy<sup>1</sup> industrial-grade geothermal plant to have been built at such an altitude. The plant consists of two units, with a total net capacity of 41 MW.

Cerro Pabellón is a high-enthalpy binary cycle plant and features the most advanced geothermal technologies, ensuring optimal results despite the extreme local conditions where it is located, including a wide temperature range and high altitude. Furthermore, once the generation cycle is completed in the plant, the geothermal fluid extracted from the production wells is re-introduced into the subsoil, ensuring the long-term availability and sustainability of the geothermal resource. One of the unique features of geothermal energy is the ability to produce energy in a continuous cycle, 24 hours a day.

The two units started to introduce energy into the *Sistema Interconectado del Norte Grande* (SING) that powers the north of Chile in March and August. The inauguration, which took place in September 2017, was opened by the President of Chile Michelle Bachelet.



(1) High-enthalpy geothermal tanks are characterized by very high temperatures, above 150 °C.

# Environmental disputes

103-2 103-3 307-1

s of 31 December 2017, the Group is involved in 569 legal proceedings regarding Generation, Distribution, Renewables and the Market (environment-related civil and criminal passive proceedings in which the Group is respondent and originating from actions brought by third parties for the annulment of favorable administrative measures).

The amount of the fines imposed on Group companies in 2017 amounted to around 2 million euro, mainly in South America. This sum also includes fines being appealed where provisional enforcement has not been granted. In South America, 17 new proceedings were opened in 2017, of which 59% related to the environmental biodiversity and the landscape, 23% referred to various matters, and 18% to air and climate.

There are several proceedings in progress in relation to nuclear activities in Spain, details of which can be found in the Endesa 2017 Sustainability Report (see the website www.endesa.com). Enel Green Power SpA has also been

served with a summons to appear before the Court of Ancona for alleged violation of Italian Legislative Decree 231/01. For details, please refer to Enel 2017 Annual Report, available on www.enel.com.



#### Colombia -Embalse del Muña dispute

The Embalse del Muña is a water reservoir serving a pumping system that draws water from the Bogotá river downstream of the city in the department of Cundinamarca. It is owned by the Emgesa SA Group and used for the production of energy.

In 2001, the inhabitants of Sibaté (a town near the lake) filed a "class action" against other national, provincial and municipal public bodies, as well

as private entities operating near the banks of the Bogotá river, for damages of 1,130 million euro resulting from the contamination of the El Muña reservoir. The claims were merged into a single action due to their homogenous interests. In response to these claims, Emgesa SA has declared that it is not liable for the alleged events, since the basin receives already contaminated waters. Emgesa SA also requested the involvement in the proceedings of numerous public and private bodies that discharge into the Bogotá river or which, for various reasons, are responsible for environmental management of the riverbed. On appeal, the Council of State fully confirmed the decision of the Administrative Court of Cundinamarca, which among other things had denied Emgesa's request to extend the suit

to various third parties involved. An administrative complaint was filed against this decision, followed by an appeal. In November 2017, the Administrative Court of Cundinamarca revoked the decision of the lower court with a ruling in favor of Emgesa SA. Several companies have filed a new appeal and proceedings are pending.

Ш

### Environmental criticalities

n addition to environmental litigation, Enel also monitors so-called "environmental criticalities": disputes and complaints that individuals, committees, environmental organizations and local administrators may bring against the operation, management or construction of the Group's facilities (plants, networks, substations, buildings, etc.). These includes - in order of severity - administrative notices, warnings, written protests (direct or in the media), media campaigns. Environmental criticalities may occur even after the adoption of the most stringent and advanced preventive measures. The

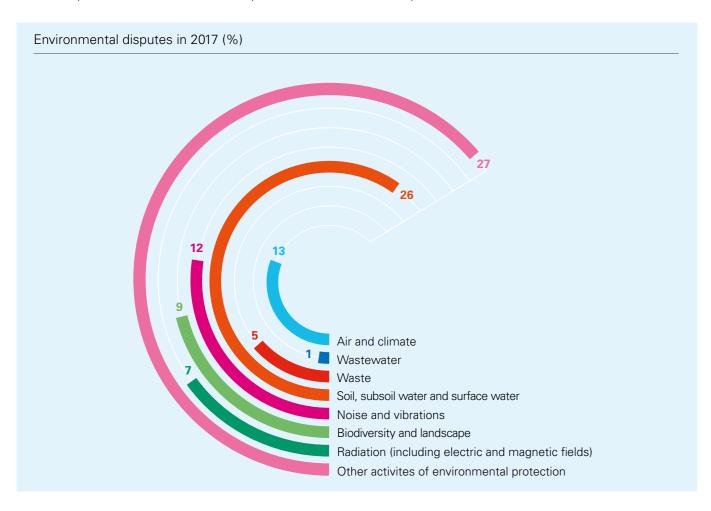
Group pays special attention to these criticalities and its people are ready to take emergency action and to engage at management level. In the event of an environmental criticality, Enel engages openly and transparently, making the requested information available to the parties involved. There were 421 environmental criticalities detected in 2017. This number does not include complaints made by individuals as regards distribution in Brazil (1,233) due to maintenance activities on the networks.

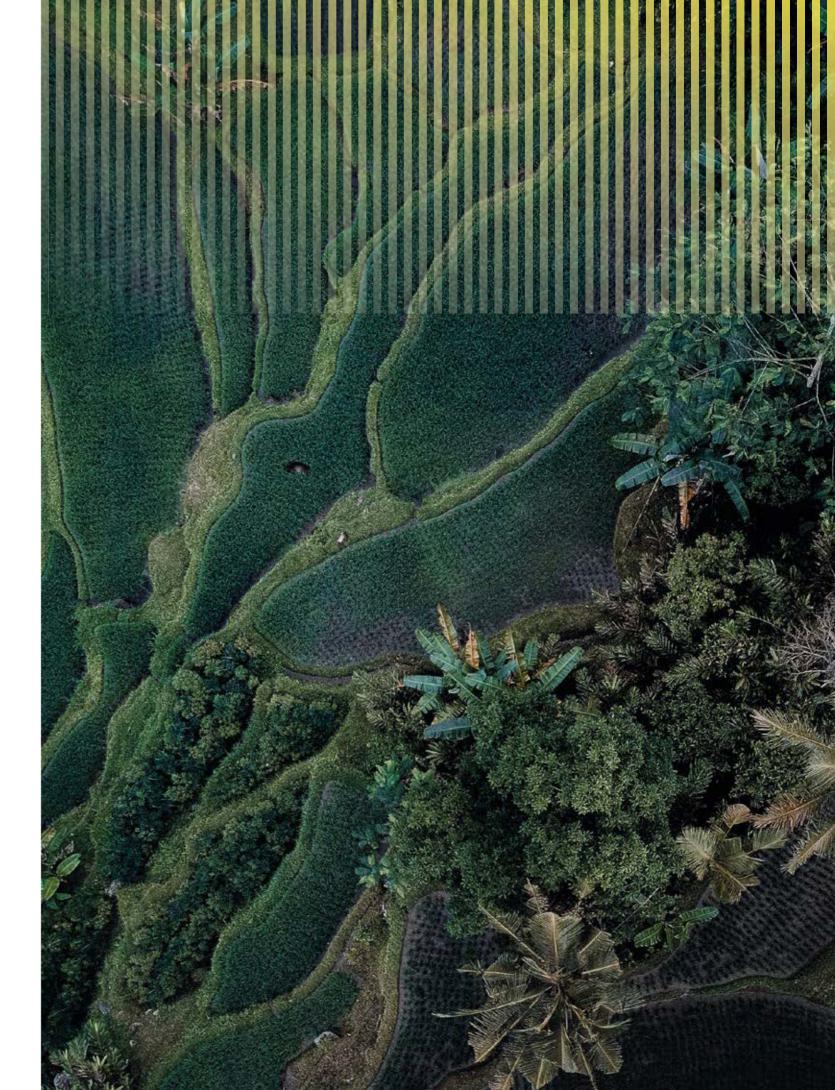
Among the issues for 2017, there is one relating to the Brindisi-Cerano thermal plant; for further information, please re-

fer to the Annual Report under the section "Significant events in 2017".

The issues relate mainly to high-voltage plants, since the physical, natural and landscape effects and the economic impact relating to high-voltage plants are more pronounced than that found around medium/low voltage systems.









# Sustainable supply chain

102-15

#### ▶ 2017-2019 Plan: Sustainable supply chain

SDGs	Activities	Categories	2017 results	Targets
12	Qualified suppliers assessed for health and safety aspects for the main product groups	<ul><li>S Supply chain management</li><li>S Safety policies</li></ul>	• 64%	• 100% by 2019
12	Qualified suppliers assessed for environmental aspects for the main product groups	S Supply chain management Environmental management	• 27%	• 100% by 2019
12	Qualified suppliers assessed for human right or business ethics aspects for the main product groups <sup>1</sup>	<ul><li>S Supply chain management</li><li>S Human rights</li><li>G Business ethics</li></ul>	• 21%	• 100% by 2019



#### ▶ 2018-2020 Plan: Sustainable supply chain

SDGs	Activities	Categories	2020 targets
12	Qualified suppliers assessed for health and safety aspects for all product groups	<ul><li>S Supply chain management</li><li>S Safety policies</li></ul>	• 100% by 2020
12	Qualified suppliers assessed for environmental aspects for all product groups	S Supply chain management E Environmental management	• 100% by 2020
12	Qualified suppliers assessed for human right or business ethics aspects for the main product groups <sup>1</sup>	S Supply chain management S Human rights G Business ethics	• 100% by 2020

(1) According to the new assessment model of Sustainability Requirements.

















# Sustainable supply chain

102-9	102-10	103-2	103-3
308-1	407-1	408-1	409-1
		414-1	414-2



nel bases its purchasing processes on pre-contractual and contractual conduct which is focused on reciprocal loyalty, transparency and collaboration in order to have a resilient and responsible supply chain, which can understand and adapt to the context and which is committed to adopting best practice in order to take opportunities and mitigate any economic, environmental and social risks.

The procurement process increasingly assumes a central role in value creation, thanks to greater interaction and integration with the outside world and with the different parts of the Company's organization. Constant analysis of the economic and international scenario allows for the best suppliers to be chosen, without sector or geographical constraints. Suppliers are involved from the moment the internal need arises; their proposals are heard and innovative approaches are developed together.

Another key aspect is the adoption of new digital technologies that foster the rapid circulation of information and the identification of decisions and actions. The cornerstones of the transformation for a new management of the procurement process therefore consider the following as pillars:

- maximizing the value of procurement activities in its various forms: security, saving, quality, performance, revenues, flexibility, cash flow generation and risk reduction;
- > the improvement of the experience in stakeholder relations, in an end-

to-end framework that better integrates internal customers and suppliers;

> the central role of the people who work in the Global Procurement Func-

The procurement process increasingly

parts of the Company's organization.

assumes a central role in value creation,

thanks to greater interaction and integration

with the outside world and with the different

tion, who are the drivers of change.

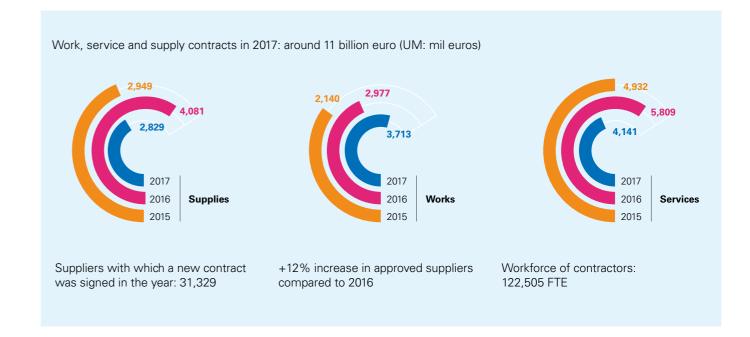
Openness to innovation and enhancement of experiences and skills form the foundations for the process.

Furthermore, suppliers are fundamental allies in the process of developing a new circular economy-oriented approach in which the use of virgin raw materials is extremely small or almost completely eliminated. A fully sustainable model focuses on innovation and environmental protection, in which all the parties involved can reinvent the parameters that regulate production and economic flows. Enel is set on beginning down this path of knowledge and analyzing its impacts, and has launched the "Environmental Product Declaration (EPD)" project, initially considering 6 product categories<sup>1</sup>, involving all suppliers (or potential suppliers) in the merchandise category. The EPD is an effective tool to highlight a company's commitment to reducing the environmental impacts resulting from an asset's production cycle or the provision of a service. This voluntary declaration must be prepared on the basis of the product life cycle analysis² and drafted according to the guidelines of the UNI EN ISO 14040 standards and the specific Product Category Rules (PCRs). In order to encourage this change, in early 2018 Enel presented the first seminar on the "Circular Economy Initiative for Enel Suppliers Engagement" project, which saw the involvement of 30 major suppliers worldwide.

<sup>2</sup> LCA - Life Cycle Assessment. The product life cycle analysis is a method created to help quantify, interpret and evaluate the environmental impacts of a specific product or service throughout its entire lifespan.



# Purchases and tenders for goods and services



he procurement process has matrix-style organization structure that allows experiences and specific skills to be shared, so as to be able to respond adequately and quickly to business needs. This model provides five different global units and eight local units, according to well-defined responsibilities and governance processes which, by identifying local needs, allow for common strategies and synergies aiming to optimize total costs to be created. This organization structure is completed by two staff units that oversee procurement processes and dealings with suppliers.

It is a fluid and flexible model that helps to make the most of the companies with which the Group interacts, by enriching the portfolio of solutions made available by Enel, respecting local characteristics and considering diversity and innovation as added values.

Procurement procedures are aimed at guaranteeing the quality of services with the utmost respect for the principles of cost-effectiveness, efficiency, timeliness and correctness. The Code of Ethics, Zero Tolerance of Corruption Plan, the Human Rights Policy, Model under Italian Legislative Decree 231/01 and the Enel Global Compliance Program form the framework of purchasing activities and form a de facto guide and code of conduct for suppliers. Each award procedure is designed to guarantee the principles of free competition, equal treatment, non-discrimination, transparency, proportionality, and publicity. Furthermore, the principle of cost-effectiveness may come second to the criteria laid down in invitations for tenders, inspired by social needs, or the protection of health, the environment and the promotion of sustainable development.

From the Open Power perspective, a continuous channel of communication with companies is maintained, sharing their performance evaluations (see the "Vendor Rating" section below) and collaborating to improve them during the entire contract cycle. In addition, Enel's suppliers have available a single registration point, the "Open Supplier Portal" (www.globalprocurement.enel.com), which enables them to interact with all the companies of the Enel Group through one global dashboard and to use all the services available: respond to invitations for tenders, manage their own approval process, view their own Vendor Rating results, and so on.





<sup>1</sup> Wind turbines, insulators, storage, smart meters, switches, photovoltaic systems.

# The processes underpinning Enel's procurement system

nel carries out structured analysis and monitoring of the procurement process. In particular, it carries out a risk assessment on 100% of the procurement merchandise categories. The main identified risks concern economic, environmental, social and reputa-

tional aspects. 84% of first-level suppliers³, equal to approximately 8,600⁴, was considered a critical supplier due to its strategic nature linked to the company business, purchasing volumes, and the potential economic, social and environmental impacts.

- Known as tigr 1
- 4 Suppliers with outstanding contracts worth > 25,000 euro.



# Supplier qualification system



In order to select the best suppliers, Enel has created the Supplier Qualification System in compliance

with the laws and regulations on local and European Union procurement and in line with the Enel management model. The qualification system represents:

- a guarantee for Enel, since it is an updated list of subjects of certified reliability (legal, economic and financial, technical/organizational, ethical and safety) on which to draw;
- the possibility, in compliance with the laws in force, for suppliers to be called on for procurement tenders organized by Group companies.

The approval process requires, also in compliance with the law in force, the presentation of a series of documents (self-certification regarding the possession of the general prerequisites, finan-

cial statements, certification, etc.) and, among other things, the adhesion to the principles expressed in the Code of Ethics, the Zero Tolerance of Corruption Plan and the 231 Compliance Program, the Human Rights Policy, and the ten principles of the Global Compact with specific reference to the absence of any conflict of interests (including any potential conflict). All approved suppliers are requested, during the formalization of the contract, to provide specific documentation certifying they are up to date with the payment of social security contributions.

In 2017, the sustainability requirements (on human rights, environment and health and safety) that all companies requesting to be qualified have to meet have been updated, in line with the most advanced relative standards. As part of the human rights assessment questionnaire, which was formulated according to the guidelines of the internationally recognized UN Guiding Principles on Business and Human Rights and the UNICEF Children's Rights and Business Principles, specific information is requested from suppliers about their impact on: a) the local communities in which they operate; b) inclusion and diversity; c) freedom of association; d) protection and privacy; e) forced labor

and child labor; f) suppliers; and g) communication. Once it is completed, information is requested about any current proceedings and ethical certifications and policies that the supplier has. The merchandise categories considered to have a significant environmental impact, equal to 27% of all product categories under qualification, provide for the supplier's environmental management methods (for example, ISO 14001 certification) to be analyzed, while for the product categories presenting a high health and safety risk to be contracted, equal to 47% of all product categories under qualification, the suppliers are evaluated by examining their company performance and the organizational and management quality in terms of their safety (for example, OHSAS 18001 certi-

It is important to highlight that the qualification system is supported by a reward-based evaluation mechanism: the companies that undergo the qualification process are encouraged to use virtuous tools and practices by awarding them higher ratings if their standards are in line with the Group's expectations and international best practices.



#### Tenders

During 2017, 3,664 invitations for tenders were launched, 2,178 of which were online. In particular, online negotiations have prevented the printing of about 560,000 pages, reducing the environmental impact of these activities. Enel's commitment to introducing considerations for sustainability into tender processes has continued, through the introduction of a "K of sustainability"

factor. A library was also developed in which the "Ks of sustainability" are cataloged in order to facilitate their dissemination.

Below are some examples of tenders in which considerations for sustainability have been introduced:

- Infrastructures and Networks: supply of cables an environmental sustainability criterion has been included in the technical requirements which requires suppliers to obtain ISO/TS 14067<sup>5</sup> certification and reduce CO<sub>2</sub> emissions;
- Italian Market: call center a "so-

cial clause" was introduced, aimed at promoting the professional and territorial stability of the workers employed in call centers. The social clause makes it possible to reward any proposals for the relocation of a portion of workers through sustainable projects.

5 ISO/TS 14067 is the ISO standard issued in 2013 that aims to improve the clarity and consistency of the quantification, reporting and communication of the carbon footprint of products (CFP).



#### Integrity requirements

Since 2016, new checks have been defined and adopted at the Group level on integrity requirements for suppliers, with the aim of consolidating the existing control system through more incisive action to contrast corruption. Specific documentary criteria have been established to certify the legal requirements and good standing, which are standard and applicable to all phases of the procurement process, and the operating verification procedures have been defined, aimed at enhancing the prevention instruments available and aimed at impacting any aspects related to corruption issues and the factors that favor its spread. A culture of respect for rules and ethics has also been promoted.

The strengthening of the checks on the possession of the aforementioned requirements, both in the stage of admission to the Approval System and maintaining the approval and in the stage of assigning a contract, is focused on particular activities, goods and contracts which are considered more sensitive ("at risk"), identified for each country/geographic area: Italy, Argentina, Chile, Colombia, Peru, Romania, Russia, South Africa, North America, Mexico and Central America, India, Iberia and Brazil.

# Contractual clauses



Enel has defined specific contractual clauses, included in all contracts for works, services and supplies

that are updated periodically to take into account regulatory changes and to fol-

low best international practices. In 2016, the sixth edition of the General Conditions of Contract was published. It consists of a General Part, containing the clauses applicable in all countries, plus the Country Annexes, containing the specific clauses applicable in each single country in question. Currently there are 15 Annexes in use (Italy, Spain, Portugal, Chile, Peru, Colombia, Brazil, Romania, Slovakia, Russia, Argentina, Guatemala, Panama, Mexico and Costa Rica). In 2016, specific general conditions were defined to be applied to contracts for

the purchase, maintenance and support of software and cloud services and 9 Country Annexes: Argentina, Brazil, Chile, Colombia, Italy, Peru, Romania, Russia and Spain.

It is important to underline that Enel constantly monitors current and potential risks related to the activity throughout its supply chain. For example, since 2016 internal analyses have been underway to verify that suppliers of products containing/using cobalt respect human rights: in-depth research and interviews with the main suppliers have been con-

Sustainability Report 2017 Our commitment

ducted and specific contractual clauses have been introduced.

During the execution of the contract, Enel carries out several performance monitoring processes related to the safety of its contractors or people employed in various capacities (for example, subcontractors). If these analyses reveal a critical event, in addition to the provisions of the General Conditions of Contract (GCC) of the Enel Group and/or the existing contract, Enel may consider taking corrective action against the contractor involved.



#### Vendor Rating



Vendor Rating (VR) is a tool aimed at monitoring supplier performance both before and during

Ш

the contract. The VR is based on an objective and systematic survey of information relating to certain indicators such as punctuality, quality, correctness and safety, as well as the behavior of contractors during the procurement and contract execution phases. In 2017, 429 merchandise groups and approximately 2,915 contractors were monitored through this process.

During 2017, an innovative VR tool was developed that will become operational over the next few months: Track&Rate, an app that allows plant and construction people who are in daily contact with suppliers to perform a real-time evaluation of their performance. This tool revolutionizes the entire VR process: the individual will contribute to a wealth of knowledge that will be used, together with data from the Business Lines' management systems to calculate qualitative/ quantitative ratings that can be shared and used at various decision-making levels, with significant advantages for the Group. This is in line with Enel's goal of being a data-driven company in which, thanks to the multi-channel nature of the tools and the active participation of the people who work for the Company, decisions are based on a global vision in line with the idea of Open Power.

If during the execution of the contract Enel detects critical issues concerning a contractor's behavior, an improvement plan can be defined jointly with the supplier.

Sustainability Report 2017

Number of tier 1 suppliers evaluated during 20176: 5,601

Percentage of tier 1 suppliers evaluated to whom corrective actions were assigned: 10%

Percentage of suppliers evaluated with improvement corrective action plan whose ESG performance improved following the action plan: 98%

<sup>6</sup> The value includes the assessments made during the tender phase and the awarding of the contract



# Monitoring systems

Within each phase of the procurement process, specific commissions are identified, made up of representatives from both the procurement area and the Business Lines, with the task of assessing and monitoring supplier per-

formance. In particular, the following commissions were established:

- qualification and Vendor Rating commission;
- > integrity committee.

The integrity committee, in which the Security Function also takes part, usually meets on a monthly basis or whenever a critical issue emerges regarding a supplier. Its aim is to share and analyze situations for which actions/sanctions are to be taken against the supplying companies.

In addition, specific units have been set up at the individual country level, the Contract Controls Areas, which have the task of carrying out checks to ensure the responsible management of the supply chain and assessing and managing the risks in relation to joint and several liability (contractors and any subcontractors are contractually bound).





# Training and information

103-2 103-3



In the last two years
Enel has organized
numerous meetings
with contractors on
sustainability issues

aimed at the exchange of ideas and approaches. For example, in September 2017, a meeting was held in Peru enti-

tled "Sustainable Supply Chain", during which good practices were shared and actions identified to improve performance from an environmental, social and governance perspective. The meeting was attended, among others, by the national delegates of the United Nations Global Compact Network and the Global Reporting Initiative. At the end of the event, a cooperation agreement was signed with the GRI to provide training and IT tools to small and medium-sized enterprises so that they can quantify and manage their actions and publish their first Sustainability Reports.

In December 2017, an event was organized in Brazil that saw the participation of about 50 of the main local suppliers to discuss with Enel issues related to innovation and sustainability.

Furthermore, various training and information activities on occupational health and safety are carried out (see the "Occupational health and safety" chapter).

Lastly, on the dedicated Internet portal (www.globalprocurement.enel.com),
Enel has reserved a specific section for the publication of articles and information on the main business and sustainability issues.

ш



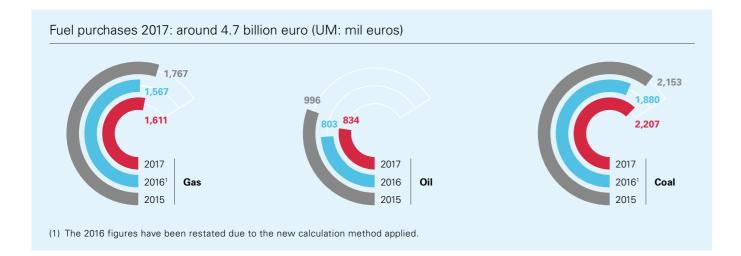
## Fuel procurement

102-9 103-2

urchasing fuel is a strategic activity for the Group, since it plays a leading role in guaranteeing the security and continuity of thermal energy production. The selection of fuel suppliers is done by assessing

economic and financial aspects of the counterparties and the possession of the technical and commercial prerequisites. Suitable counterparties are subsequently included in specific Vendor Lists. Purchase contracts signed with

such suppliers are subject to the rules adopted by the Group regarding the Code of Ethics and the Zero Tolerance of Corruption Plan, to which suppliers must adhere.



In relation to purchases by sea from the international market, a check is made that suppliers are not on specific Black Lists of the UN, European Union and the US Office of Foreign Assets Control (OFAC), lists which respectively identify individuals or organizations connected with terrorist organizations, organizations subject to financial sanctions by the EU and so-called SDN (Specially Designated Nationals) organizations which are subject to sanctions by the United States for accusations, among other things, of terrorism or drug-trafficking. Finally, in order to mitigate the risks from fuel transport by sea, Enel has adopted a tool to assess and select the transporters used, known as



vetting. Vetting is a recognized industry standard for oil transport, but for some years Enel and a small number of operators have started to apply the same methodology also in the sector

of dry bulk transport (minerals, coal, cereals).



# Bettercoal (bettercoal.org)

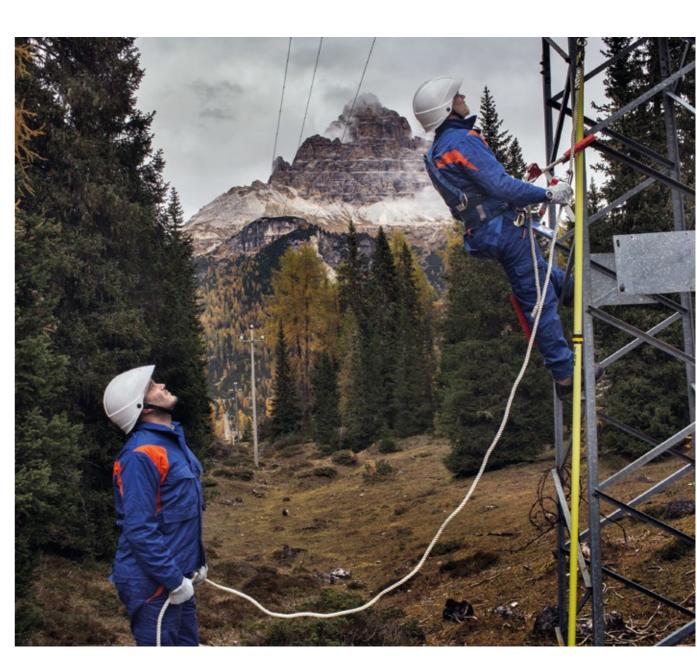
103-2 | 103-3 |

Enel, together with major European power utilities, is actively engaged in Bettercoal, a global initiative to promote continuous improvement of corporate responsibility in the international coal supply chain. Bettercoal has published a code of conduct based on existing and agreed social responsibility standards in the mining sector. It establishes in detail the guidelines that mining companies can refer to in defining their social, environmental and ethical policies. In addition to the growing presence of Bettercoal in several forums related to the sustainability of coal and the supply chain, the initiative has become an

example of cooperation aimed at improving socially responsible practices in the supply chain.

The Bettercoal Code conveys to the suppliers members' expectations regarding their practices with reference to four macro categories (management, ethical commitment and transparency, human and labor rights and environmental performance), promoting continuous improvement. For more information, visit www.bettercoal.org.





Sustainability Report 2017 Our commitment 233

# Appendix



## Methodological note

101	102-1	102-3	102-5	102-45
102-46	102-47	102-50	102-51	102-52
102-53	102-54	102-55	102-56	103-1

Goals (SDGs), in line with the guidelines of the SDG Compass, the guide published in November 2015 and developed by GRI, UN Global Compact and the World Business Council for Sustainable Development (WBCSD) with the aim of supporting companies in aligning their strategy with the SDGs and measur-

ing and managing their contribution to these objectives.



102-46 103-1

ince 2003, every year Enel has published the Sustainability

Report along with the Group's Annual Report.

The 2017 Sustainability Report is aimed at the Enel Group's stakeholders for the purpose of highlighting the actions taken towards the Group's sustainability targets and to respond to the legitimate expectations of all stakeholders.

Compared to previous years, in the 2017 Sustainability Report the materiality assessment has been expanded and given additional structure to offer a more focused presentation of the key topics for the Group's stakeholders.

In compliance with Italian Legislative Decree no. 254 of December 30, 2016, entitled "Implementation of Directive 2014/95/EU of the European Parliament Information and in-depth analyses on the issues and indicators presented in this Report can be requested to:

#### **Enel SpA - Innovability Function** (Innovation and Sustainability) Sustainability

Viale Regina Margherita, 137

00198 Rome - Italia

Tel +39 06 8305 1

Email sustainability@enel.com

https://www.enel.com/investors

and of the Council of October 22, 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups" (Italian Legislative Decree 254/16), Enel has been publishing the Consolidated Non-financial Statement, available on www.enel. com, since the 2017 fiscal year



#### How this Report was produced

The 2017 Sustainability Report was prepared according to the GRI Sustainability Reporting Standards (2016) of the Global Reporting Initiative (GRI) - Core option, and the supplement dedicated to the Electric Utilities sector issued in 2013 by the GRI "Electric Utilities Sector Disclosures". Starting from the current fiscal year, Enel has made the transition from the GRI G4 Guidelines to the GRI

Standards, reporting the results of its sustainability performance from the last three years.

In particular, the content creation process was based on principles of relevance (or "materiality"), stakeholder inclusiveness, sustainability context, and completeness of data and information; with reference to the quality of the reported information, the principles of balance, comparability, accuracy, timeliness, clarity and reliability were fol-

This Report also follows the principles of inclusivity, materiality and responsiveness indicated in the AA1000APS (AccountAbility Principles Standard) issued in 2008 by AccountAbility, an international institute of applied research on sustainability issues.

With reference to the materiality principle in particular, the degree of detail with which the various issues are covered in reporting was determined according to their weight in the Enel Group's objectives and strategies and their relevance to the stakeholders, as determined through a structured materiality assessment.

Lastly, the dashboards reported in each chapter include reference to the United Nations' main Sustainable Development

#### 2017 materiality analysis

In the process followed for the 2017 materiality analysis, the issues and categories of stakeholders subject to the assessment were reviewed following guidelines and suggestions received from internal and external stakeholders; new initiatives to involve and listen to stakeholders were also implemented. This path is consistent with the methodology adopted, which provides for an annual update of the results obtained the previous year, and the implementation every two years of new initiatives for listening to and involving stakeholders, in parallel with a possible revision of the issues and the categories of stakeholders involved in the assessment, with the aim of accounting for changes to the sustainability scenario the Company operates in.

The materiality analysis is based on the AA1000SES guidelines for the phases of mapping, stakeholder prioritization and analysis of the results of engagement; it is based on the AccountAbility and GRI Standards criteria with respect to the definition of the relevant issues and the application of the principle of materiality. The definition of the issues being analyzed is based on various sources, including company policies and principles of corporate conduct, initiatives of stakeholder consultation, the issues of interest to sustainability rating agencies and industry benchmarking studies. The aspects being assessed for the issues at hand include:

- > on the stakeholders' side, the relative importance of each issue according to their perceptions and the 'direction' of their expectations (expectations of Enel's engagement as opposed to disengagement). For a better understanding of stakeholders' expectations, in 2016 Enel integrated into the process the assessment of the stakeholders' degree of satisfaction with how the Company manages issues;
- on the Company's side, the issues' level of impact on business strategies, determined based on the current and future commitment made on each issue.

In 2017, the Company analyzed the results of many consultation, engagement and dialogue initiatives carried out by Enel with the Group's relevant stakeholders; this included the financial community, national and international institutions, authorities, representative and trade associations, suppliers, customers, civil society and our people.

Some examples of the sources considered for the analysis were customer satisfaction and customer complaints, relationships with analysts and investors, sustainability rating agency questionnaires, relations with representative bodies and trade associations, institutional relations at the national and local level, trade union relations, media monitoring and opinion polls.

Enel's strategies was assessed by involving the company's Functions and submitted to the Chairman and Chief Executive Officer. This analysis reflects the strategic guidelines defined by the 2018-2020 Strategic Plan, the objectives of the Functions/Divisions and the commitments undertaken by the Group through its policies and its own criteria of conduct

Through its representation in the materiality matrix from the "Setting priorities" chapter, the joint analysis of the two dimensions expresses how "aligned" or "misaligned" the intervention priorities as indicated by the stakeholders in relation to the various issues are compared to the Group's relative degree of com-

Below is the transcoding table for the topics included in the materiality analysis into the relevant GRI Standards or Aspects of the GRI supplement dedicated to the electric utilities sector ("Electric Utilities Sector Disclosures"); an indication is provided about the internal or external scope of the issue, as well as limitations on the scope.

The materiality of the various issues in



Sustainability Report 2017 ene **Appendix** 237

2017 materiality analysis topic	GRI Standards or Electric Utilities Sector Disclosures Aspects	Internal scope	External scope	Reporting limitations on internal scope	Reporting limitations on external scope
Economic and financial value creation	GRI 201: Economic Performance	Group			
Sound governance and fair corporate conduct	GRI 205: Anti-corruption				
and ian corporate conduct	GRI 206: Anti-competitive Behavior				
	GRI 406: Non-discrimination	Group			
	GRI 415: Public Policy	-			
	GRI 419: Socioeconomic Compliance				
Decarbonization of the energy mix	GRI 201: Economic Performance				
0,	GRI 305: Emissions				
	Plant Decommissioning	Group			
	System Efficiency				
	Availability and Reliability				
perational fficiency	Research and Development				
	Availability and Reliability	Group			
	System Efficiency	- C. Gup			
	Demand-side management				
New technologies, services and digitalization	Research and Development	Group			
Customer focus	GRI 417: Marketing and Labeling				
	GRI 418: Customer Privacy	Group			
	Provision of Information				
Environmental compliance and	GRI 301: Materials	-			
management	GRI 302: Energy				
	GRI 303: Water	Group			
	GRI 304: Biodiversity				
	GRI 305: Emissions				

2017 materiality analysis topic			External scope	Reporting limitations on internal scope	Reporting limitations on external scope
1	GRI 306: Effluents and Waste				
	GRI 307: Environmental Compliance	Group			
People management, development	GRI 401: Employment				
and motivation	GRI 402: Labor/Management Relations				
	GRI 404: Training and Education				
	GRI 405: Diversity and Equal Opportunity				
	GRI 407: Freedom of Association and Collective Bargaining	Group			
	GRI 408: Child Labor				
	GRI 409: Forced or Compulsory Labor				
	GRI 410: Security Practices				
	GRI 412: Human Rights Assessment				
Occupational health and safety	GRI 403: Occupational Health and Safety	Group	Suppliers		Reporting partially extended to suppliers
Engaging local communities	GRI 411: Rights of Indigenous Peoples				
	GRI 413: Local Communities				
	GRI 414: Supplier Social Assessment	Group			
	GRI 416: Customer Health and Safety	. С.очр			
	Disaster/Emergency Planning and Response				
	Access				
Sustainable supply chain	GRI 204: Procurement Practices				
Sapply Stram	GRI 308: Supplier Environmental Assessment	Group	Suppliers		Reporting not extended to suppliers
	GRI 414: Supplier Social Assessment				

Sustainability Report 2017 ene Appendix 239

#### The reporting process

The results of the materiality analysis made it possible to define the structure of the 2017 Sustainability Report by focusing it more on the relevant topics, to which specific in-depth analysis chapters were dedicated. Similarly, the level of relevance for the issues, in turn divided into detailed sub-issues, influenced the degree of detail used to discuss the individual topics and report the relevant

GRI indicators (GRI Standards and Electric Utilities Sector Disclosures Aspects) in order to be "in accordance" - Core option, as well as the choice of the most appropriate instrument to represent them (2017 Annual Report and annexed Reports). These were referenced for the discussion or analysis of more specific issues of economic performance or environmental management or governance. The materiality analysis also formed the basis for defining Enel's sustainability objectives for the 2018-2020 period, as illustrated by the Sustainability Plan (see page 76).

The GRI Content Index, shown in the

Appendix, contains the precise references to the 2017 Sustainability Report and to the Group's other reporting instruments. Please visit www.enel.com for more information on topics such as innovation projects or Enel's foundations, and the 2017 Informe de Sostenibilidad by Endesa and Enel Américas for further details on initiatives dedicated to customers and local communities in Spain and South America, respectively.



#### **Drafting and assurance**

102-56

The sustainability Key Performance Indicators (KPIs) reporting and monitoring process involves the Holding in terms of cross-functional issues, and all of the Group's Business Lines, Global Functions and Companies for the specific issues and indicators of their various sectors of activity.

The managers in charge of collecting, checking and processing the KPIs under their responsibility are identified within the structures involved. The Sustainability unit, which is part of the Innovation and Sustainability Function, is responsible for consolidating information and coordinating the entire Sustainability Report drafting process

In this process, the Administration, Finance and Control Function ensures consistency of the quantitative data present in the Group consolidation system used in the Sustainability Report and the other reporting documents.

The Sustainability Report is submitted to the analysis and assessment of the Control and Risk Committee and the Corporate Governance and Sustainability Committee, who verify that it is complete and reliable; the document is then approved by the Board of Directors and is finally presented at the General Shareholders' Meeting along with the Group's Annual Report and the Consolidated Non-financial Statement.

The Sustainability Report is subject to limited assurance by an independent company, Ernst & Young SpA (EY), also in charge of the assurance of the Enel Group's Annual Report and the Consolidated Non-financial Statement. The work carried out during the assurance activities involves the application of the criteria indicated in the ISAE 3000 (Revised)1 principle and, consequently, the Code of Ethics for Professional Accountants, which includes professional independence and verification that there are no conflicts of interest that may affect the ethical principles of integrity, objectivity, professional competence and diligence, confidentiality and professional behavior. The audit report describing the details of the principles adopted, the activities carried out and the related conclusions is included in the Appendix. Starting this year, the green bond report is also included in the Appendix. It is also audited by EY according to the ISAE 3000 (Revised)1 principle; the as-

sociated audit report is also included in

the Appendix.

<sup>1</sup> International Standard on Assurance Engage ments ISAE 3000 (Revised), "Assurance Engagements Other than Audits or Reviews of Historical Financial Information"



#### **Report boundaries**

102-10 | 102-48 | 102-49 | 102-56

The data and information included in the 2017 Sustainability Report refer to Enel SpA and the consolidated companies as per the fiscal year ending December 31, 2017. Both in the text and in the Appendix, "Corporate", "Holding" or "Parent" means Enel SpA, while "Group" or "Enel" refers to Enel SpA and the subsidiaries as a whole. The data in the Sustainability Report refer to the companies included as per

the full consolidation method used for the scope of consolidation in the Annual Report as of December 31, 2017. The associated companies (which in the Annual Report are valued using the equity method) and the other entities over which Enel exercises significant influence (including joint ventures) are included in the calculation of the data, where available, in proportion to Enel's stake, and are cited in the text if they produce significant impacts.

The only exception to the full consolidation scope is seen in the companies acquired in 20172. For these companies, it was decided that, for some of the areas covered in this document, the related consolidation should start from the 2018 fiscal year in light of the short time span since their acquisition. The areas excluded have been indicated directly in the specific chapters.

For details on the companies included in the consolidation scope, please refer to the 2017 Consolidated Financial

There were discrepancies with reference to the KPIs and the information reported in the 2016 Sustainability Report due to changes in the Group's consolidation scope. For more detailed information on the changes that occurred, please refer to the 2017 Annual Report in the "Main changes to consolidation scope" and "Significant events of 2017" sections.

The effect of these changes, as well as any significant changes or limitations to the scope or the method used to calculate individual indicators as compared to 2016, are expressly indicated in the text and/or in the Appendix, together with the effects produced on the related data. Please refer to the notes in the Appendix tables for any further details on adjustments to published data, calculation methods, assumptions or significant limitations to the indicators.

The data are precisely calculated based on Enel's accounting, non-accounting and other information systems, and are validated by the relevant managers. Estimate-based data and the relative calculation method are explicitly indicated. For a time comparison of the data, please note that the differences between 2017 and 2016, in absolute values and in percentage values, are calculated using decimals that are not always displayed in the printed version. In the Appendix tables showing quantitative data, any percentage variations exceeding |100%| are indicated by "-".

<sup>2</sup> Demand Energy Networks, EnerNOC, eMotor-Werks, Enel Distribuição Goiás and Tynemouth Energy Storage.



Sustainability Report 2017 enel **Appendix** 241

# Performance indicators

The sustainability KPIs are presented from pages 259-303 and form an integral part of this Sustainability Report. In order to facilitate the joint reading of the performance indicators and the qualitative information contained in the Sustainability Report, in the print-

ed copy the quantitative indicators will be reported in a separate booklet. The booklet will be in the pocket of the third cover page.



#### **Unit of measure**

,000	thousands	kg CFC-11eq	equivalent kilograms	min	minutes
,000 d	thousands of days		of CFC-11	$Mm^3$	millions of cubic meters
,000 h	thousands of hours	kWh	kilowatt hours	Mtoe	millions of tons
,000 t	thousands of tons	kWh eq	equivalent kilowatt		of oil equivalent
%	percentage		hours <sup>3</sup>	MW	Megawatts
cent euros	euro cents	kWh/t	kilowatt hours per ton	MWh	Megawatt hours
dd	days	l/kWh	liter per kilowatt hour	no.	number
g/kWh	grams per kilowatt hour	l/kWh eq	liter per equivalent	r	rate
g/kWh eq	grams per equivalent		kilowatt hour	sec	seconds
	kilowatt hour	MBq per unit	megabecquerel per unit	t	tons
GBq per unit	gigabecquerel per unit	mil A4 eq	millions of equivalent	TBq per Unit	terabecquerel per unit
Gm³	billions of cubic meters		A4 sheets	toe	ton of oil equivalent
GWh	gigawatt hours	mil euros	millions of euros	TJ	Terajoule
h	hours	mil h	millions of hours	TWh	Terawatt hours
h/per cap	hours per capita	mil t	millions of tons		
kg	kilograms	mil t eq	millions of equivalent tons		

#### **Acronyms**

	5				
BoD	Board of Directors	EGP	Enel Green Power	RL	Remote learning
BOD	Biochemical Oxygen	EIB	European Investment	R&D	Research &
	Demand		Bank		Development
CCGT	Combined Cycle Gas	EPS	Earnings per Share	S&P	Standard & Poor's
	Turbine	HV	High Voltage	SRI	Socially Responsible
COD	Chemical Oxygen	IPO	Initial Public Offering		Investor
	Demand	IRAP	Italian Regional	TSR	Total Shareholder
CSR	Corporate Social		Production Tax		Return
	Responsibility	IRES	Italian Corporate		
EBT	Earnings Before Tax		Income Tax		
EBIT	Earnings Before Interest	LBG	London Benchmarking		
	and Tax		Group		
EBITDA	Earnings Before	LV	Low Voltage		
	Interest, Tax,	MV	Medium Voltage		
	Depreciation and	PCBs	Polychlorinated	0.0	
	Amortization		biphenyls	3 Correspo productio	ending to the sum of energy and hear on.



EY S.p.A. Via Po, 32 00198 Roma Tel: +39 06 324751 Fax: +39 06 32475504 ev.com

Independent auditors' report on the document "2017 Sustainability Report"

(Translation from the original Italian text)

To the Board of Directors of Enel S.p.A.

We have carried out a limited assurance engagement of the document "2017 Sustainability Report" (hereinafter "Sustainability Report") of Enel S.p.A. and its subsidiaries (hereinafter the "Group") as of December 31, 2017.

#### Directors' responsibility on the Sustainability Report

The Directors are responsible for the preparation of the Sustainability Report in accordance with the "GRI Sustainability Reporting Standards" issued in 2016 by GRI – Global Reporting Initiative and with the "Inclusivity", "Materiality" and "Responsiveness" principles included in the "AA1000 AccountAbility Principles Standard (2008)" issued by AccountAbility (Institute of Social and Ethical Accountability) that are detailed in the paragraph "Methodological note" of the Sustainability Report, as well as for that part of internal control that they consider necessary in order to allow the preparation of a Sustainability Report that is free from material misstatements, even caused by frauds or unintentional behaviours or events. The Directors are also responsible for defining commitments of the Group regarding the sustainability performance and for the reporting of the results achieved, as well as for the identification of the stakeholders and of the significant matters to report.

#### Auditors' responsibility

It is our responsibility the preparation of this report on the basis of the procedures carried out. Our work has been conducted in accordance with the criteria established by the principle "International Standard on Assurance Engagements 3000 (Revised) – Assurance Engagements Other than Audits or Reviews of Historical Financial Information" (hereinafter "ISAE 3000 Revised"), issued by the International Auditing and Assurance Standards Board (IAASB) for the engagements that consist in a limited assurance.

This principle requires the respect with the independence and other ethical requirements in compliance with professional standards and applicable legal and regulatory requirements and the maintenance of a comprehensive system of quality control ISQC (Italy) n. 1 as well as the planning and the execution of our work in order to obtain a limited assurance that the Sustainability Report is free from material misstatements.

These procedures included inquiries, primarily with company's personnel responsible for the preparation of the information included in the Sustainability Report, document analysis, recalculations and other procedures in order to obtain evidences considered appropriate.

EY S.p.A.
Sede Legale: Via Po, 32 - 00198 Roma
Capitale Sociale deliberato Euro 3.250.000,00, sottoscritto e versato Euro 3.100.000,00 i.v.
Iscritta alla S.O. del Registro delle Imprese presso la C.C.I.A.A. di Roma
Codice fiscale e numero di iscrizione 00434000584 - numero R.E.A. 250904
P.IVA 00891231003
Iscritta al Registro Revisori Legali al n. 70945 Pubblicato sulla G.U. Suppl. 13 - IV Serie Speciale del 17/2/1998
Iscritta all'Albo Speciale delle società di revisione
Consob al progressivo n. 2 delibera n.10831 del 16/7/1997

A member firm of Ernst & Young Global Limited

Sustainability Report 2017 CYCL Appendix 243



The procedures were related to the compliance with the Standard "GRI 101: Foundation 2016" and with the "AA1000 AccountAbility Principles Standard (2008)" for defining report content and quality of the Sustainability Report, and are summarized below:

- comparison of economic and financial data and information included in the Sustainability Report with those included in the Group's consolidated financial statements as of 31<sup>st</sup> December 2017 on which we issued our audit report on April 17, 2018;
- b. analysis, through interviews, of the governance system and management process of the issues related to the sustainable development regarding the Group's strategy and operations;
- analysis of the process relating to the definition of material aspects included in the Sustainability Report, with reference to the criteria applied to identify priorities for the different stakeholders categories and to the internal validation of the process outcomes;
- d. analysis of the operation of the processes that support the generation, recording and management of the quantitative data reported in the Sustainability Report. In particular, we have carried out the following procedures:
  - interviews and discussions with personnel of the management of the Enel S.p.A. and with the
    personnel of Enel Russia PJSC, e-distribuzione S.p.A., Enel Produzione S.p.A. and Enel Green
    Power S.p.A., to obtain an understanding about the information, accounting and reporting
    systems in use for the preparation of the Sustainability Report, as well as about the internal
    control processes and procedures supporting the collection, aggregation, data processing and
    transmission of data and information to the department responsible for preparation of the
    Sustainability Report;
  - on-site verifications at the Konakovskaya GRES thermal power plant of Enel Russia PJSC, at the Fusina thermal power plant and at the Nove hydro power plant both of Enel Produzione S n  $\Delta$ :
  - analysis on a sample basis of the documentation supporting the compilation of the Sustainability Report, in order to confirm the processes in use, their adequacy and the operation of the internal control for the correct processing of data and information in relation to the objectives described in the Sustainability Report;
- e. analysis of the compliance and internal consistency of the qualitative information included in the Sustainability Report to the standards and principles identified in paragraph "Directors' responsibility on the Sustainability Report" of the present report;
- f. analysis of the process relating to stakeholders engagement, with reference to procedures applied, through review of minutes or any other existing documentation relating to the main topics arisen from discussions with them;
- g. obtaining of the representation letter, signed by the legal representative of Enel S.p.A., relating to the compliance of the Sustainability Report with the standards and principles indicated in paragraph "Directors' responsibility on the Sustainability Report", as well as to the reliability and completeness of the information and data presented in the Sustainability Report.



Our engagement is less in scope than a reasonable assurance engagement in accordance with ISAE 3000 Revised and, as consequence, we may not have become aware of all the significant events and circumstances which we could have identified had we performed a reasonable assurance engagement.

#### Conclusion

Based on our work, nothing has come to our attention that causes us to believe that the "2017 Sustainability Report" of the Group as of December 31, 2017 is not in compliance, in all material aspects, with the "GRI Sustainability Reporting Standards" issued in 2016 by the GRI - Global Reporting Initiative and with the principles included in the "AA1000 AccountAbility Principles Standard (2008)", as stated in the paragraph "Methodological note" of the Sustainability Report.

Rome, May 10, 2018

EY S.p.A. Signed by: Massimo Antonelli, Partner

This report has been translated into the English language solely for the convenience of international readers

Sustainability Report 2017 CM Appendix 245

## Green bond report

#### Introduction

On January 9, 2017, Enel Finance International successfully placed its first green bond on the European market, for a total of 1,250 million euro, which was aimed at institutional investors and backed by a guarantee issued by Enel SpA

Part of the net issuance proceeds – carried out under the medium-term bond issue program of Enel and Enel Finance International (Euro Medium-Term Notes Programme - EMTN) – was used to finance eligible projects according to the "Green Bond Principles 2016" categories, published by the ICMA (International Capital Market Association). Proceeds not allocated during 2017 will be used to finance additional projects included in the update of the plan disclosed to the market in November 2017. Specifically, proceeds of the first bond issued financed solely new development, con-

struction and repowering renewable generation projects.

In order to ensure the transparency and quality of the green bonds issued, the Enel Group has prepared and released a "Green Bond Framework", whose compliance with the reference principles was confirmed by Vigeo Eiris, an external advisor, which issued the so-called "second party opinion". The advisor also qualified as "reasonable" the assurance level on the ESG indicators (Environmental, Social and Governance) selected for reporting. In particular, Enel's performance linked to these indicators was considered as "advanced"2, the framework used to issue the green bond as "robust" and the related reporting methods, as defined in the framework, also "robust".

The reference documents are available on Enel's website (https://www.enel.com/investors/fixed-income/main-programs/green-bond).

Worth highlighting is that the Enel Group is among the first companies in the world having set up a "Green Bond Committee" with the aim of selecting projects and monitoring the progress of their development.

The reporting document hereof, being published for the first time, meets Enel's commitment undertaken at the time of the bond issuance to report annually on the use of proceeds, on the environmental benefits deriving from the projects financed and on further ESG metrics linked to these projects, as illustrated in the "second party opinion".

<sup>2</sup> Vigeo Eiris evaluation scale - Performance: Advanced. Robust. Moderate. Weak.



#### Reporting criteria

Indicators shown in the following tables were determined in accordance with the "Green Bond Framework" principles. Table A "Financial indicators" shows:

- the project's capacity and "Investment in currency" as approved by the Board of Directors and/or the Investment Committee, and disclosed to the financial market through specific press releases;
- > the value of the "Investment in euros" as determined by converting the amount of the investment in
- currency at the average 2017-2019 exchange rate for the years of Enel's related Industrial Plan;
- the share of the green bond proceeds allocated to the project as the difference between the total costs capitalized as of December 31, 2017 and the amount of third party financing associated to the specific pro-

ject<sup>3</sup>. The entire amount of proceeds allocated to projects in 2017 was spent during the year;

> the commercial operation date defined as the time when the plant produced it first kWh.

Table B "ESG Indicators" shows the environmental benefit in terms of  ${\rm CO}_2$  avoided (actual or expected) related to the financed projects, specifically:

- the quantity of CO<sub>2</sub> avoided (both actual and expected) is determined by multiplying (actual or expected) production by the thermal production emission factor specific to the country where the plant is located (emission factors source: Enerdata February 2, 2018 release);
- the share of production (both actual and expected) and the related amount of CO<sub>2</sub> avoided attributable to the green bond is calculated as the share of green bond proceeds allocated to the project in 2017 on the total investment (ref. Table A).

As for the further ESG metrics, Table C "Further ESG indicators" shows, when possible and relevant<sup>4</sup>, the data relating

to the projects financed with the proceeds of the bond, as envisaged in the "second party opinion"<sup>5</sup>:

- water consumption refers to water withdrawal occurred in the period following the commercial operation date, as well as including also any withdrawal associated to residual building activities still in progress after that date;
- actions to protect/restore biodiversity refer to the number of projects promoted by Enel in connection to the operation of the plant;
- plant shutdown or site stop due to environmental issues is equal to the number of times operations were interrupted forcedly due to environmental management issues and its impact;
- concerning occupational safety, the number of fatal and severe injuries<sup>6</sup> is reported;
- > social actions means any activity and/or project carried out to support local communities in the areas surrounding the plant. Beneficiaries means the number of people involved by such activity and/or project.

Table D "Overall information" refers to the criteria, indicators, overall information and approach chosen by Enel to develop the projects financed through the proceeds of the bond.

<sup>6</sup> Injury with an initial prognosis, as shown on the first medical evaluation, exceeding 30 days; or with a guarded prognosis, until the prognosis can be determined; or with an unknown prognosis, which, when first assessed by the Division/Company concerned, is assumed to exceed 30 days. Once the prognosis set, the injuries will be considered severe only if the first prognosis exceeds 30 days. If the prognosis is not set or remains unknown for 30 days from the event, the injury shall be considered severe.



Sustainability Report 2017 Characteristics Appendix 247

Vigeo Eiris evaluation scale - Level of Assurance Reasonable. Moderate. Weak.

<sup>3</sup> If the same company is involved with the implementation of several projects, proceeds are allocated to the specific project based on the capacity.

<sup>4</sup> Projects with a capacity exceeding 20 MW and entered into operation before September 30,

<sup>5 &</sup>quot;Material reused/recycled after revamping" is not applicable, as the proceeds of green bonds in 2017 were not used to finance such kind of projects

#### **Table A - Financial indicators**

Country	Project name	Technology	Status	Capacity (MW)	Commercial operation date (year)	Currency of investment	Investment in currency (mil)	Investment in euros (mil) <sup>1</sup>	Green bond proceeds allocated to the project in 2017 (mil euros)
USA	Red Dirt	Wind	In Operation	300	2017	USD	420	378	58
USA	Thunder Ranch	Wind	In Operation	298	2017	USD	435	392	120
USA	Hilltopper	Wind	Ready to build (BD²)	185	2018	USD	325	293	52
USA	Stillwater Solar II	Solar	Under Construction	27	2018	USD	40	36	30
USA	Woods Hill	Solar	In Operation	25	2017	USD	45	41	33
USA	Rattlesnake Creek	Wind	Under Construction	320	2018	USD	430	387	27
USA	Rock Creek	Wind	In Operation	300	2017	USD	500	450	58
BRAZIL	Nova Olinda	Solar	In Operation	292	2017	USD	300	270	161
BRAZIL	Lapa	Solar	In Operation	158	2017	USD	175	158	49
BRAZIL	Horizonte MP	Solar	Under Construction	103	2018	USD	110	99	43
BRAZIL	Cristalândia	Wind	In Operation	90	2017	USD	190	171	30
BRAZIL	Delfina	Wind	In Operation	180	2017	USD	400	360	33
CHILE	Cerro Pabellón	Geothermal	In Operation	41	2017	USD	325	293	57
CHILE	Sierra Gorda	Wind	In Operation	112	2016	USD	215	194	17
PERU	Wayra	Wind	Under Construction	132	2018	USD	165	149	78
PERU	Rubi	Solar	In Operation	180	2017	USD	170	153	68
ITALY	Various projects³	Biomass / Geothermal / Hydroelectric	-	35	2017-2019	EUR	130	130	32

<sup>(1)</sup> Indicative value in euros (EUR), although the investment in US dollars (USD) applies where present. The exchange rate used is 1.11 USD/EUR.

#### **Table B - ESG Indicators**

Expected  CO <sub>2</sub> avoided attributable to GB  (t)	Expected annual production attributable to GB (GWh)	Expected CO <sub>2</sub> avoided (t)	Expected annual production (GWh) <sup>2</sup>	avoided attributable to GB	2017 production attributable to GB (GWh)	CO <sub>2</sub> avoided (t)	2017 production (GWh) <sup>1</sup>	Project name	Country
125,009	183	820,236	1,200	n.a.	n.a.	n.a.	n.a.	Red Dirt	USA
229,756	336	751,883	1,100	n.a.	n.a.	n.a.	n.a.	Thunder Ranch	USA
73,325	107	410,118	600	n.a.	n.a.	n.a.	n.a.	Hilltopper	USA
25,294	37	30,007	44	n.a.	n.a.	n.a.	n.a.	Stillwater Solar II	USA
19,658	29	23,924	35	n.a.	n.a.	n.a.	n.a.	Woods Hill	USA
61,998	91	888,589	1,300	n.a.	n.a.	n.a.	n.a.	Rattlesnake Creek	USA
110,129	161	854,413	1,250	n.a.	n.a.	n.a.	n.a.	Rock Creek	USA
n.a.	n.a.	n.a.	n.a.	41,286	82	69,110	137	Nova Olinda	BRAZIL
n.a.	n.a.	n.a.	n.a.	30,792	61	98,657	195	Lapa	BRAZIL
48,234	95	111,209	220	n.a.	n.a.	n.a.	n.a.	Horizonte MP	BRAZIL
n.a.	n.a.	n.a.	n.a.	16,208	32	93,213	184	Cristalândia	BRAZIL
n.a.	n.a.	n.a.	n.a.	13,195	26	144,457	286	Delfina	BRAZIL
n.a.	n.a.	n.a.	n.a.	9,221	12	47,107	61	Cerro Pabellón	CHILE
n.a.	n.a.	n.a.	n.a.	21,103	28	236,137	308	Sierra Gorda	CHILE
149,943	315	285,432	600	n.a.	n.a.	n.a.	n.a.	Wayra	PERU
92,838	195	209,317	440	n.a.	n.a.	n.a.	n.a.	Rubi	PERU
32,634	61	133,781	250	550	1	2,257	4	Various projects	ITALY

n a not applicab

Sustainability Report 2017 CMC Appendix 249

<sup>(2)</sup> Business Development.

<sup>(3)</sup> Aggregated data for 26 small-scale Italian projects. The technologies involved are biomass, geothermal and hydroelectric.

<sup>(1)</sup> For projects entered into operation by September 30, 2017, the actual production data are reported and consequently the amount of CO<sub>2</sub> avoided.

<sup>(2)</sup> For projects that entered into operation after September 30, 2017 or which have not yet entered into operation, the expected annual production data and the expected amount of CO<sub>2</sub> avoided are reported.

#### **Table C - Further ESG indicators**

Project name	Water consumption (m³)	Actions to protect/restore biodiversity (no.)	Plant shutdown or site stop due to environmental issues (no.)	Injuries (fatal and severe) (no.)	Social actions (no.)	Beneficiaries (no.)
Nova Olinda	40,765	-	-	-	25	9,641
Lapa	21,665	1	-	-	24	6,554
Cristalândia	10,049	3	-	-	9	1,883
Delfina	6,382	4	-	-	13	4,397
Cerro Pabellón	27,317	-	-	-	11	18,299
Sierra Gorda	53,883	-	-	-	-	-

#### **Table D - Overall information**

	CRITERION	INDICATOR	DATA/APPROACH
Respect for human rights standards and prevention of breaches		Number and descrip- tion of the reports identified through the Enel monitoring system	No reporting on projects financed with GB revenue.
		Results of risk analysis on human rights at country level	The analysis conducted in the Group's countries of presence highlighted an average risk perceived as "acceptable" and "high priority". The Group human right practices and policies were subsequently assessed as "robust". However, specific action plans have been developed for each country of presence as well as centrally managed improvement plan to harmonize and integrate processes at policies defined at the global level and applied at local level.
	Respect for labor rights	Number and description of the reports identified through the Enel monitoring system	No reporting on projects financed with GB revenue.
		Results of risk analysis at country level on human rights	The analysis conducted in the Group's countries of presence highlighted an a erage risk perceived as "acceptable" and "to be monitored". The Group huma rights practices and policies were subsequently assessed as "robust". However specific action plans have been developed for each country of presence as well as a centrally managed improvement plan to harmonize and integrate processes are policies defined at the global level and applied at local level.
(e tr	forking conditions employment relationships, aining, health and safety onditions, respect for working hours)	Number of accidents (fatal and serious)	No incidents reported on projects financed with GB revenue.
er fa c	ntegration of nvironmental and social actors into the supply hain - Responsible purchasing	Ethical clauses in contracts with suppliers	Through the General Contract Conditions, Enel requires its contractors and sulcontractors, among other things, to comply with the ten principles of the Unite Nations Global Compact, respect for and protection of internationally recognize human rights, as well as respect for ethical and social obligations regarding the fight against child labor and protection of women, equal treatment, prohibition of discrimination, freedom of association, association and representation, forced I bor, safety and environmental protection, sanitary conditions and also regulator conditions, retribution, contributions, insurance and tax.
	Business ethics (prevention of corruption and money laundering, fraud, anticompetitive practices)	Number and description of the reports identified through the Enel monitoring system	No reporting on projects financed with GB revenue.
	Audit and internal control	% of area/country processes covered by internal audit activities	The average annual coverage level of the processes through internal audit activities is equal to one third.

<sup>(1)</sup> Average perceived risk: average of perceived risk levels identified in the countries being analyzed. Reference scale of risks: 1. High risk; 2. High priority risk; 3. Risk to be monitored; 4. Acceptable risk.

Sustainability Report 2017 CYCL Appendix 251

 $<sup>(2) \ \</sup> Reference\ scale\ of\ performance\ values:\ Robust\ (75\%-100\%);\ Good\ (50\%-75\%);\ Sufficient\ (25\%-50\%);\ Needs\ improvement\ (0\%-25\%).$ 



Enel S.p.A.

Report on the examination of the Green Bond Report prepared by Enel S.p.A., relating to the development, construction and repowering of renewable generation plants financed through the issuance of the Green Bond ISIN XS1550149204, occurred on January 9, 2017, attached to the Sustainability Report 2017



EY S.p.A. Via Po, 32 00198 Roma

Tel: +39 06 324751 Fax: +39 06 32475504 ev.com

To the Board of Directors of Enel S.p.A.

- 1. We have examined the "Green Bond Report prepared by Enel S.p.A., relating to the development, construction and repowering of renewable generation plants financed through the issuance of the Green Bond ISIN XS1550149204, occurred on January 9, 2017 (hereinafter the "Report"), attached to the Sustainability Report 2017". The Report has been prepared in accordance with the criteria described in the "Reporting criteria" note. The directors of Enel S.p.A. are responsible for the preparation of the Report in accordance with the criteria described in the "Reporting criteria" note and for the implementation of an internal control system necessary to enable the preparation of the Report that is free from material misstatement, whether due to fraud or error. Our responsibility is to express an opinion on the Report on the basis of our examination.
- 2. We conducted our examination in accordance with the "International Standard on Assurance Engagement 3000 Assurance Engagements other than Audit or Reviews of Historical Financial Information" ("ISAE 3000"), issued by International Auditing and Assurance Standards Board. ISAE 3000 requires compliance with ethical principles, including independence, and the planning and conduct of our work in order to obtain reasonable assurance that the Report does not contain material misstatements. In accordance with such criteria we have performed the procedures necessary to achieve the engagement objectives indicated in the first paragraph. Such examination mainly consisted in the performance of the following procedures:
  - (i) meeting with Enel's personnel involved in the preparation of the Green Bond Report;
  - (ii) assessment, through inquiries with the Enel's personnel, of the procedures followed to collect, aggregate and report the ESG and financial data included in the Green Bond Report;
  - (iii) performing limited test of details to verify that the data used in the preparation of the Green Bond Report are consistent with the information and documentation held by the companies of the Enel Group.

We believe that our work is sufficient and appropriate to provide a basis for our opinion.

- In our opinion, the "Green Bond Report" has been prepared, in all material respects, in accordance with the criteria detailed in the "Reporting criteria" note.
- This report is solely for use and information purposes of Enel S.p.A. and should not be used for other purposes, or distributed to third parties without our previous consent.

Rome, May 10, 2018

EY S.p.A.

IV S.p.A.
liede Legale: via Po, 32 - 00198 Roma
lagitale: Sociale deliberato Euro 3.250.000,00, sottoscribto e versato Euro 3.100.000,00 i.x.
sonitia alla S.O. del Registro delle Imprese presso la C.C.I.A. di Broma
Ordice Inscale: e ruamero di liscrizione 00434000584 - numero R.E.A. 250904
PNA 00891231003
scritta all'Registro Revisori Legali ali n. 70945 Fuoblicato sutla 6.33. Suppl. 13 - IV Sene Speciale del 17/2/1998
critta all'Albo Speciale delle società di revisione
Orisco ali progressivo n. 2 delibera n.10831 del 16/7/1997

A member firm of Ernst & Young Global Limited

Sustainability Report 2017 CM Appendix 253

## Appendix to the Sustainability Report 2017

## Performance indicators

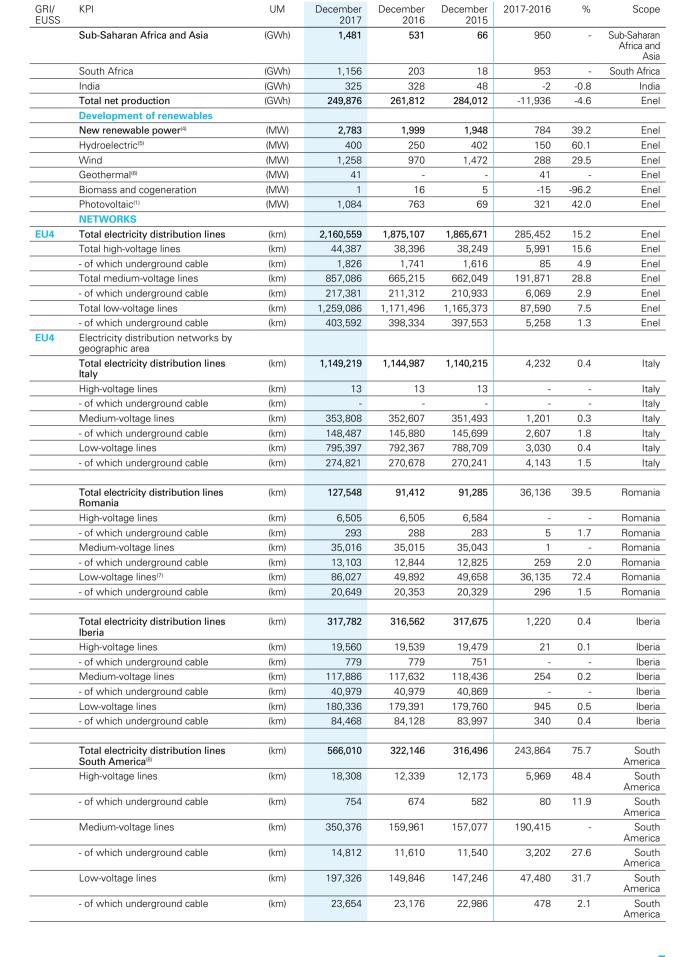


#### Getting to know Enel - ID

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
EU1	GENERATION							
	Installed capacity							
	Net efficient generation capacity by primary energy source							
	Thermal net capacity	(MW)	43,294	43,454	47,577	-160	-0.4	Enel
	Coal	(MW)	15,965	16,103	16,841	-138	-0.9	Enel
	CCGT	(MW)	15,028	15,100	16,099	-72	-0.5	Enel
	Oil/gas	(MW)	12,301	12,251	14,637	50	0.4	Enel
	Nuclear net capacity	(MW)	3,318	3,318	5,132	-	-	Enel
	Renewable net capacity	(MW)	38,305	35,907	37,033	2,398	6.7	Enel
	Hydroelectric	(MW)	27,799	27,425	29,046	374	1.4	Enel
	Wind	(MW)	7,431	6,532	6,653	899	13.8	Enel
	Geothermal	(MW)	802	761	833	41	5.4	Enel
	Biomass and cogeneration	(MW)	57	57	99	-	-	Enel
	Photovoltaic <sup>(1)</sup>	(MW)	2,216	1,132	402	1,084	95.7	Enel
	Total net electrical capacity	(MW)	84,917	82,679	89,742	2,238	2.7	Enel
	Net efficient generation capacity by geographic area			-				
	Italy	(MW)	27,652	27,760	30,715	-108	-0.4	Italy
	Iberia	(MW)	22,732	22,744	22,912	-12	-0.1	Iberia
	South America	(MVV)	20,544	18,915	18,173	1,629	8.6	South America
	Chile	(MW)	7,475	7,434	6,892	41	0.6	Chile
	Argentina	(MW)	4,419	4,419	4,384	-	-	Argentina
	Colombia	(MW)	3,467	3,457	3,407	10	0.3	Colombia
	Peru	(MW)	2,158	1,934	1,959	224	11.6	Peru
	Brazil	(MW)	2,975	1,621	1,481	1,354	83.5	Brazil
	Uruguay	(MW)	50	50	50	-	-	Uruguay
	North and Central America	(MVV)	3,533	2,792	3,512	741	26.6	North and Central America
	North America	(MVV)	2,092	1,495	2,506	597	39.9	North America
	Panama	(MW)	354	325	312	29	9.0	Panama
	Guatemala	(MW)	164	164	164	-	-	Guatemala
	Costa Rica	(MW)	81	81	31	-	-	Costa Rica
	Mexico	(MW)	843	728	499	115	15.8	Mexico
	Europe and North Africa	(MVV)	9,761	9,810	14,248	-48	-0.5	Europe and North Africa
	Russia	(MW)	8,878	8,944	8,944	-65	-0.7	Russia
	Slovakia <sup>(2)</sup>	(MW)	-	-	4,032	-	-	Slovakia
	Romania	(MW)	534	534	534	-	-	Romania
	Belgium <sup>(2)</sup>	(MW)	-	-	406	-	-	Belgium
	Greece	(MW)	307	290	290	17	5.9	Greece
	Bulgaria	(MW)	42	42	42	-	-	Bulgaria
	Sub-Saharan Africa and Asia	(MW)	694	659	182	36	5.5	Sub- Saharan Africa and Asia
	South Africa	(MW)	522	486	10	36	7.4	South Africa
	India	(MW)	172	172	172	-	-	India
		,						



GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Total net electrical capacity	(MW)	84,917	82,679	89,742	2,238	2.7	Enel
	Power generation plants							
	Total thermal units	(no.)	361	366	404	-5	-1.4	Enel
	Steam units (condensation and back pressure)	(no.)	106	112	139	-6	-5.4	Enel
	CCGT units	(no.)	46	45	48	1	2.2	Enel
	GT units	(no.)	70	70	70	-	-	Enel
	Units with alternative engines	(no.)	139	139	147	-	-	Enel
	No. of renewable energy plants	(no.)	1,073	1,032	1,148	41	3.8	Enel
	Hydroelectric plant	(no.)	744	722	803	22	3.0	Enel
	- of which mini-hydro plants (< 10 MW)	(no.)	436	452	466	-16	-3.5	Enel
	Wind plants	(no.)	195	185	207	10	5.4	Enel
	Photovoltaic plants	(no.)	88	83	96	5	6.0	Enel
	Geothermal plants	(no.)	36	34	37	2	5.9	Enel
	Biomass plants	(no.)	10	8	5	2	25.0	Enel
	OPERATING RESULTS							
EU2	GENERATION							
	Net production by primary energy source							
	Thermal net production	(GWh)	141,733	142,394	154,901	-661	-0.5	Enel
	Coal	(GWh)	70,497	72,342	85,677	-1,845	-2.6	Enel
	CCGT	(GWh)	44,381	40,303	40,542	4,078	10.1	Enel
	Oil/gas	(GWh)	26,855	29,749	28,682	-2,894	-9.7	Enel
	Nuclear net production	(GWh)	26,448	33,444	39,837	-6,997	-20.9	Enel
	Renewable net production	(GWh)	81,695	85,974	89,274	-4,279	-5.0	Enel
	Hydroelectric	(GWh)	55,363	60,031	65,939	-4,668	-7.8	Enel
	Wind	(GWh)	17,827	18,294	16,204	-467	-2.6	Enel
	Geothermal	(GWh)	5,820	6,194	6,205	-374	-6.0	Enel
	Biomass and cogeneration(3)	(GWh)	108	226	241	-118	-52.2	Enel
	Photovoltaic	(GWh)	2,577	1,229	685	1,348	_	Enel
	Total net production	(GWh)	249,876	261,812	284,012	-11,936	-4.6	Enel
	Net production by geographic area	,- ,	-,-		. , .	,		
	Italy	(GWh)	53,518	60,912	68,519	-7,394	-12.1	Italy
	Iberia	(GWh)	78,618	72,323	77,444	6,294	8.7	Iberia
	South America	(GWh)	64,627	62,165	63,272	2,462	4.0	South America
	Chile	(GWh)	20,231	19,728	19,823	503	2.6	Chile
	Argentina	(GWh)	14,825	13,124	15,204	1,701	13.0	Argentina
	Colombia	(GWh)	14,766	14,952	13,705	-186	-1.2	Colombia
	Peru	(GWh)	7,493	8,699	8,801	-1,206	-13.9	Peru
	Brazil	(GWh)	7,161	5,474	5,690	1,687	30.8	Brazil
	Uruguay	(GWh)	151	189	49	-38	-20.1	Uruguay
	North and Central America	(GWh)	9,793	12,268	11,210	-2,475	-20.2	North and Central America
	North America	(GWh)	5,313	8,628	7,368	-3,315	-38.4	North America
	Panama	(GWh)	1,528	1,367	1,661	161	11.8	Panama
	Guatemala	(GWh)	608	369	579	239	64.8	Guatemala
	Costa Rica	(GWh)	319	122	230	197	-	Costa Rica
	Mexico	(GWh)	2,025	1,781	1,372	244	13.7	Mexico
	Europe and North Africa	(GWh)	41,839	53,613	63,501	-11,774	-22.0	Europe and North Africa
	Russia	(GWh)	39,830	41,062	42,090	-1,232	-3.0	Russia
	Slovakia <sup>(2)</sup>	(GWh)	-	9,684	18,292	-9,684	-100.0	Slovakia
	Romania	(GWh)	1,358	1,235	1,330	123	9.9	Romania
	Belgium <sup>(2)</sup>	(GWh)	-	977	1,150	-977	-100.0	Belgium
	Greece	(GWh)	548	559	549	-11	-2.0	Greece
	Bulgaria	(GWh)	103	96	90	7	7.6	Bulgaria
	= =:300	(3 * *11)	100		55		,.0	



GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Energy transported and local coverage							
	Energy transported	(TWh)	445	426	427	19	4.5	Enel
	Municipalities served by electric grid	(no.)	13,558	13,368	12,785	190	1.4	Enel
	SALES							
	Electricity volumes sold by market <sup>(9)</sup>							
	Volumes sold free market	(GWh)	155,955	140,905	132,279	15,050	10.7	Enel
	Italy	(GWh)	59,262	48,302	38,656	10,960	22.7	Italy
	Iberia	(GWh)	83,036	79,008	77,154	4,028	5.1	Iberia
	Romania	(GWh)	6,318	2,855	2,338	3,463	-	Romania
	France <sup>(2)</sup>	(GWh)	-	2,218	3,966	-2,218	-100.0	France
	Slovakia <sup>(2)</sup>	(GWh)	-	2,398	4,103	-2,398	-100.0	Slovakia
	South America	(GWh)	7,339	6,124	6,062	1,215	19.8	South America
	Volumes sold regulated market	(GWh)	128,798	122,149	127,837	6,649	5.4	Enel
	Italy	(GWh)	43,958	45,837	49,369	-1,879	-4.1	Italy
	Iberia	(GWh)	13,478	14,482	15,745	-1,004	-6.9	Iberia
	Romania	(GWh)	4,029	4,864	5,353	-835	-17.2	Romania
	South America	(GWh)	67,333	56,966	57,370	10,367	18.2	South America
	Total volumes sold	(GWh)	284,753	263,054	260,116	21,699	8.2	Enel
	Electricity volumes sold by geographic area							
	Italy	(GWh)	103,220	94,139	88,025	9,081	9.6	Italy
	Iberia	(GWh)	96,514	93,490	92,899	3,024	3.2	Iberia
	Romania	(GWh)	10,347	7,719	7,691	2,628	34.0	Romania
	France <sup>(2)</sup>	(GWh)	-	2,218	3,966	-2,218	-100.0	France
	Slovakia <sup>(2)</sup>	(GWh)	-	2,398	4,103	-2,398	-100.0	Slovakia
	South America	(GWh)	74,672	63,090	63,432	11,582	18.4	South America
	Volumes sold gas	(Gm <sup>3</sup> )	11.7	10.6	9.4	1.1	10.9	Enel
	Italy	(Gm³)	4.8	4.6	4.1	0.2	4.3	Italy
102-7;	ECONOMIC RESULTS	(Gm³)	6.9	6.0	5.3	0.9	15.9	Iberia
201-1	D	(1)	74.000	70 500	75.050	4.047		Feet
	Revenues	(mil euros)	74,639	70,592	75,658	4,047	5.7	Enel
	Italy	(mil euros)	38,781	37,045	40,727	1,736	4.7	Italy
	Iberia Conthe Annaria	(mil euros)	19,994	18,953	20,484	1,041	5.5	Iberia
	South America	(mil euros)	13,154	10,768	10,828	2,386	22.2	South America
	Europe and North Africa	(mil euros)	2,411	3,798	4,990	-1,387	-36.5	Europe and North Africa
	North and Central America	(mil euros)	1,187	1,125	882	62	5.5	North and Central America
	Sub-Saharan Africa and Asia	(mil euros)	96	29	18	67	-	Sub-Saharan Africa and Asia
	Other, eliminations and adjustments	(mil euros)	-984	-1,126	-2,271	142	12.6	Other, eliminations and
	EDITO	/1- ·	45.050	45.070	45.00-	077		adjustments
	EBITDA	(mil euros)	15,653	15,276	15,297	377	2.5	Enel
	Italy	(mil euros)	6,863	6,618	6,916	245	3.7	Italy
	South America	(mil euros)	3,573 4,204	3,562 3,556	3,353 3,306	11 648	18.2	Iberia South
	Europe and North Africa	(mil euros)	543	762	1,451	-219	-28.7	America Europe and North Africa
	North and Central America	(mil euros)	759	833	575	-74	-8.9	North and Central America

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Sub-Saharan Africa and Asia	(mil euros)	57	14	7	43	-	Sub-Sahara Africa and Asi
	Other, eliminations and adjustments	(mil euros)	-346	-69	-311	-277	-	Othe elimination an adjustment
	Italy	(%)	43.8	43.3	45.2	0.5		Ital
	Iberia	(%)	22.8	23.3	21.9	-0.5	_	Iberi
	South America	(%)	26.9	23.3	21.6	3.6	_	South Americ
	Europe and North Africa	(%)	3.5	5.0	9.5	-1.5	-	Europe and North Africa
	North and Central America	(%)	4.8	5.5	3.8	-0.6	-	North an Central Americ
	Sub-Saharan Africa and Asia	(%)	0.4	0.1	-	0.3	-	Sub-Sahara Africa and Asi
	Other, eliminations and adjustments	(%)	-2.2	-0.5	-2.0	-1.8	-	Othe elimination an adjustment
	EBIT	(mil euros)	9,792	8,921	7,685	871	9.8	Ene
	EBT	(mil euros)	7,211	5,780	5,281	1,431	24.8	Ene
	Group net income	(mil euros)	3,779	2,570	2,196	1,209	47.0	Ene
	Creating value for stakeholders							
	Revenues	(mil euros)	74,639	70,592	75,658	4,047	5.7	Ene
	External costs	(mil euros)	53,680	49,257	53,323	4,423	9.0	Ene
	Net income/(expenses) from commodity risk	(mil euros)	578	-133	168	711	-	Ene
	Gross global added value continuing operations	(mil euros)	21,537	21,202	22,503	335	1.6	Ene
	Gross global added value	(mil euros)	21,537	21,202	22,503	335	1.6	Ene
	Shareholders	(mil euros)	1,068	2,542	1,316	-1,474	-58.0	Ene
	Lenders	(mil euros)	2,495	2,698	2,848	-203	-7.5	Ene
	Employees	(mil euros)	4,504	4,637	5,314	-133	-2.9	Ene
	State	(mil euros)	3,273	3,244	3,369	29	0.9	Ene
	Business system	(mil euros)	10,197	8,081	9,656	2,116	26.2	Ene
	Economic value generated							
	Economic value generated directly	/:l	74.000	70 502	75.050	4.047	F 7	Г
	Revenues	(mil euros)	74,639	70,592	75,658	4,047	5.7	Ene
	Economic value distributed	(mil euros)	63,375	59,969	<b>64,686</b> 53.155	3,406	5.7 7.5	Ene
	Operating costs  Personnel and benefit cost	(mil euros)	53,103	49,390	5,314	3,713	-2.9	Ene
	Payment to lenders of capital	(mil euros)	2,495	2,698	2,848	-133 -203	-7.5	Ene Ene
	Payments to governments	(mil euros)	3,273	3,244	3,369	29	0.9	Ene
	Gross added value continuing operations	(mil euros)	-	-	-	-	-	Ene
	Economic value generated	(mil euros)	11,264	10,623	10,972	641	6.0	Ene
	Investments	/ 11 \	0.400.0	0.550.0	7.440.5	100.1	4.0	
	Investments <sup>(10)</sup>	(mil euros)	8,129.9	8,552.3	7,113.5	-422.4	-4.9	Ene
	Piedmont	(mil euros)	104.3	103.0	101.0	1.3	1.3	lta
	Lombardy	(mil euros)	147.8	165.2	174.2	-17.3	-10.5	Ital
	Trentino Alto Adige	(mil euros)	0.1	1041	0.2	0.1	0.1	Ital
	Veneto Friuli Venezia Giulia	(mil euros) (mil euros)	14.1	124.1 14.6	121.5 14.1	-10.0 -0.3	-8.1 -2.2	lta.
	Liguria Liguria	(mil euros)	29.6	38.0	49.6	-0.3	-2.2	ltal
	Emilia Romagna	(mil euros)	116.6	98.1	100.3	18.4	18.8	Ita
	Tuscany	(mil euros)	190.3	187.0	213.5	3.3	1.8	Ital
	Marche	(mil euros)	30.6	33.5	29.2	-2.8	-8.5	Ital
		(mil euros)	18.7	25.9	16.3	-7.2	-27.9	Ita
	Umbria						8.4	Ita
	Umbria Lazio		436.1	402.1	355.3	34.0	0.4	
	Lazio	(mil euros)	436.1 65.5	402.1 56.5	355.3 44.4	9.0		,
	Lazio Abruzzo	(mil euros)	65.5	56.5	44.4	9.0	16.0	Ita
	Lazio	(mil euros)		-				Ital Ital

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Basilicata	(mil euros)	22.8	25.0	24.1	-2.2	-8.7	Italy
	Calabria	(mil euros)	74.9	81.0	70.0	-6.1	-7.5	Italy
	Sicily	(mil euros)	157.9	169.8	186.4	-11.9	-7.0	Italy
	Sardinia	(mil euros)	63.9	67.9	57.8	-4.0	-5.9	Italy
	Total Italy	(mil euros)	1,883.8	1,907.7	1,859.2	-23.9	-1.3	Italy
	Iberia	(mil euros)	1,105.3	1,163.8	1,018.2	-58.5	-5.0	Iberia
	South America	(mil euros)	3,002.2	3,069.4	2,936.7	-67.2	-2.2	South America
	Europe and North Africa	(mil euros)	306.9	265.2	248.2	41.7	15.7	Europe e Nord Africa
	North and Central America	(mil euros)	1,801.7	1,832.3	719.9	-30.6	-1.7	North and Central America
	Sub-Saharan Africa and Asia(11)	(mil euros)	30.0	303.9	311.7	-273.9	-90.1	Sub- Saharan Africa and Asia
	Algeria	(mil euros)	-	10.0	19.5	-10.0	-100.0	Algeria
	Total Abroad	(mil euros)	6,246.1	6,644.6	5,254.2	-398.5	-6.0	Total Abroad
	Adjustments	(mil euros)	-	-	-0.2	-	-	Enel
	Weight of foreign investments	(%)	76.8	77.7	73.9	-0.9	-	Enel
	CASH COST <sup>(12)</sup>							
	net of non-recurring items	(mil euros)	11,457	11,428	12,397	29	0.3	Enel
	of which fixed costs	(mil euros)	8,643	8,494	9,081	149	1.8	Enel
	Investments in maintenance	(mil euros)	2,814	2,934	3,316	-120	-4.1	Enel
	CORPORATE IMAGE							
	Customer relationship(13.1)	(%)	41.4	40.3	n.a.	1.1	-	Italy
	Price transparency <sup>(13.2)</sup>	(%)	41.7	38.5	n.a.	3.2	-	Italy
	Insitutional Dimension <sup>(13.3)</sup>	(%)	59.9	62.5	n.a.	-2.6	-	Italy
	Ethics(13.4)	(%)	43.4	41.3	n.a.	2.1	-	Italy
	Brand Equity Index <sup>(13)</sup>	(r)	69.4	70.5	n.a.	-1.1	-1.6	Italy
	Presence index <sup>(14)</sup>	(no.)	9,734	8,102	8,223	1,632	20.1	Iberia
	Global visibility index(14)	(,000)	2.0	2.8	3.4	-0.8	-28.7	Iberia
	Qualitative visibility index (from -1 to +1) <sup>(14)</sup>	(r)	0.40	0.52	0.62	-0.12	-23.1	Iberia

- (1) The increase in capacity in 2017 compared to 2016 is due to the entry into operation of new plants in Latin America.
- (2) In 2016 Belgium, France and Slovakia were removed from the scope of Enel Group.
- (3) The decrease in biomass production is due to the exit from the scope of the Enemansa and La Loma plants, both in Spain.
- (4) New renewable power, excluding disposals and changes in the scope.
- (5) The new hydroelectric capacity is mainly due to the acquisition, following a tender, of a thirty-year concession for the 380 MW Volta Grande hydroelectric plant in Brazil.
- (6) The new geothermal capacity is due to the entry into operation of Cerro Pabellón in Chile.
- (7) The figures for 2016 and 2015 were restated due to the change in methodology. The figures are equal to: 2016 86,043 network km; 2015 85,537 network km. Total distribution lines equal to 1,911,258 for 2016 and 1,901,550 for 2015.
- (8) In 2017, the company Enel Distribuição Goiás (ex CELG-D) was acquired in Brazil.
- (9) The 2016 and 2015 figures have been recalculated in line with the methodological approach that provides for the distinction in the free market and regulated also for Iberia.
- (10) The data refer only to continuing operations, and so do not include the values of assets classified as "held for sale".

Sustainability Report 2017

- (11) The reduction of capex in South Africa is due to the completion of the plant park, completed at the end of 2016.
- (12) The cash cost consists of the sum total of investments in maintenance (so-called "Maintenance Capex") and operating costs (so-called "Opex"), net of non-recurring items.
- (13) Data source: Advertising tracking. This analysis, conducted with CAWI methodology, analyzes the health of the brand, the effectiveness of communication and the effects it generates on the brand. Throughout the year, weekly for 44 weeks, interviews are conducted with representative samples of the Italian population aged 18-64 with 200 interviews in the off-air weeks and 500 interviews in the on-air weeks. The index includes: reputational asset, value of the image and propensity to the brand.
- (13.1)% of attribution to Enel+Enel Energia of the "commercial relationship" and "empathy" areas of the image profile tracking 2017.



(13.2)% of attribution to Enel+Enel Energia items: "proposes clear and transparent offers" and "communicates clearly and transparently" of the image profile tracking 2017.

- (13.3) % of attribution to Enel+Enel Energia "institutional factor area" of the image profile tracking 2017.
- (13.4) % of attribution to Enel+Enel Energia "sustainability" of the image profile tracking 2017.
- (14) **Presence Index**: number of news on Endesa/Enel published during the year, both on national and regional newspapers. This information is obtained from the press review.

**Global Visibility Index**: every news on Endesa/Enel has associated a numerical value (-10 to +10) and is calculated with a formula that takes into account the objective, thematic and impact characteristics of the news:

- media: daily, weekly, magazine, etc.
- periodic: economic, sports, etc.
- editorial treatment
- Item sub-item: item relevance indicated for Endesa, such as tariffs, sector reform, patronage, economic results, etc.
- length of news in number of pages
- information source: drafting, agency, company, etc.
- qualitative impact: negative or neutral positive: tone of the written news.

At each variable listed is assigned a score and a numerical value is obtained through a formula (-10 to 10). This value evaluates the impact that the common reader would have in reading a piece of news about Endesa.

The global visibility index is the average value of the total news on Endesa published by the press during the year on national and regional

**Qualitative visibility index** (-1 to +1): it is the qualitative impact (last point of the previous list), it measures if the general tone of the news is positive, negative or neutral. If this indicator is positive it means that the majority of the published news have had a positive or neutral tone. If it is negative it means that the majority of the news has been published in a negative tone. To calculate the indicator, the sum of the positive and neutral news is added, multiplying them by (+1), and the negative ones, muliplying them by (-1), divided by the total number of news items.

Performance indicators 26

#### Getting to know Enel - Governance

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
102-5	SHAREHOLDERS							
	Composition of shareholdings							
	Investors <sup>(1)</sup>							
	Ministry of Economy and Finance	(%)	23.6	23.6	25.5	-	-	Enel SpA
	Institutional investors	(%)	57.5	54.0	51.5	3.5	-	Enel SpA
	Retail shareholders	(%)	18.9	22.4	23.0	-3.5	-	Enel SpA
	Location of institutional investors							
	Italy	(%)	7.4	10.2	10.0	-2.8	-	Enel SpA
	UK	(%)	18.3	17.9	15.3	0.4	-	Enel SpA
	Rest of Europe	(%)	27.3	26.9	28.4	0.4	-	Enel SpA
	North America	(%)	38.9	36.3	37.3	2.6	-	Enel SpA
	Rest of the World	(%)	8.1	8.7	9.0	-0.6	-	Enel SpA
	Concentration index (Top 50)	(%)	37.0	34.2	32.3	2.8	-	Enel SpA
	Investment style of institutional investors							
	Long Only	(%)	71.4	67.9	67.3	3.5	-	Enel SpA
	Index	(%)	13.1	13.2	14.0	-0.1	-	Enel SpA
	Hedge	(%)	0.8	1.3	1.2	-0.5	-	Enel SpA
	Other	(%)	14.7	17.6	17.5	-2.9	-	Enel SpA
	Socially Responsible Investors (SRI)							
	Presence of SRI funds	(no.)	160	150	132	10.0	6.7	Enel SpA
	Enel shares held by SRI funds	(mil)	878.0	813.6	720.0	64.4	7.9	Enel SpA
	Weight of SRI funds in institutional shareholdings <sup>(2)</sup>	(%)	16.9	17.0	17.0	-0.1	-	Enel SpA
	Location of SRI investors(3)							
	Italy	(%)	2.4	1.6	4.6	0.8	-	Enel SpA
	UK	(%)	12.4	11.9	11.8	0.5	-	Enel SpA
	Rest of Europe	(%)	51.4	50.3	51.2	1.1	-	Enel SpA
	North America	(%)	32.9	34.3	31.5	-1.4	-	Enel SpA
	Rest of the World	(%)	0.9	1.9	0.9	-1.0	-	Enel SpA
	Share price performance							
	Financial performance of the share (4)							
	Enel	(%)	22.5	7.6	5.3	14.9	-	Enel SpA
	FTSEMib	(%)	13.6	-10.2	12.7	23.8	-	Enel SpA
	Acea	(%)	33.3	-18.7	58.8	52.0	-	Acea
	A2A	(%)	25.4	-1.9	49.7	27.3	-	A2A
	Centrica	(%)	-41.4	7.3	-21.8	-48.7	-	Centrica
	Endesa	(%)	-11.3	8.6	11.9	-19.9	-	Endesa
	Iberdrola	(%)	3.6	-4.8	17.0	8.5	-	Iberdrola
	RWE	(%)	43.9	0.9	-54.3	43.0	-	RWE
	E.ON	(%)	35.2	-14.8	-37.1	50.1	-	E.ON
	Cez	(%)	15.5	-3.2	-24.8	18.7	-	Cez
	GDF-Suez	(%)	18.3	-25.8	-16.0	44.0	-	GDF-Suez
	EdF	(%)	16.1	-28.7	-40.5	44.8	-	EdF
	EdP	(%)	-0.3	-12.9	3.2	12.6	_	EdP
	Lai	( / 0 /	-0.5	12.0	0.2	12.0		Lai

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Innogy	(%)	-1.0	=	-	-	_	Innogy
	Enel Américas	(%)	27.2	11.5	-13.0	15.7	-	Enel Américas
	Enel Chile	(%)	19.5	-	_	-	_	Enel Chile
	Enel Russia	(%)	46.7	39.2	-3.4	7.5	_	Enel Russia
	lbex 35	(%)	7.5	-2.2	-6.1	9.6	-	Enel SpA
	MICEX	(%)	-5.5	26.8	26.1	-32.3	_	Enel SpA
	IPSA	(%)	34.0	12.8	-4.4	21.2	_	Enel SpA
	Dividend Yield <sup>(5)</sup>							
	Enel	(%)	4.5	4.3	4.1	0.2	_	Enel SpA
	A2A	(%)	2.9	3.3	3.3	-0.4	_	A2A
	Centrica	(%)	9.6	5.1	5.5	4.5	_	Centrica
	Iberdrola	(%)	4.6	4.6	4.2	-	_	Iberdrola
	RWE	(%)	0.9	1.1	_	-0.2	_	RWE
	E.ON	(%)	2.4	3.1	5.6	-0.7	_	E.ON
	ENGIE (ex GDF-Suez)	(%)	7.0	8.3	6.1	-1.3		ENGIE
	EdF	(%)	7.5	5.6	8.1	1.9	_	EdF
	EdP	(%)	6.6	6.6	5.6	-		EdP
	Enel on the main stock markets	(70)	0.0	0.0	0.0			Lui
	worldwide							
	FTSE Italy All-Share	(%)	10.0	10.0	7.8	0.1	_	Enel SpA
	BEELECT	(%)	13.5	13.4	12.0	0.1	-	Enel SpA
	Enel in the FTSE4GOOD sustainability index	(r)	Yes	Yes	Yes	-	-	Enel SpA
	Presence of Enel in the DJSI	(r)	Yes	Yes	Yes	-	-	Enel SpA
	Return for the shareholder							
	EPS (Earnings Per Share)	(cent euros)	36	26	23	10.0	38.5	Enel SpA
	TSR (Total Shareholder Return) from IPO (accumulated)	(%)	106.1	61.6	44.4	44.5	-	Enel SpA
	TSR from IPO (annualized)	(%)	4.1	2.8	2.3	1.2		Enel SpA
	TSR last 2 years (accumulated)	(%)	42.8	21.8	30.5	21.0	-	Enel SpA
	TSR last 2 years (annualized)	(%)	19.5	10.3	14.3	9.1	-	Enel SpA
	Communication to shareholders							
	Meetings with investors <sup>(6)</sup>	(no.)	948	615	479	333	54.1	Enel SpA
	Meetings with ESG investors	(no.)	48	30	-	18	60.0	Enel SpA
102-43	Information requests from retail shareholders <sup>(7)</sup>	(no.)	85	148	153	-63	-42.6	Enel SpA
	LENDERS							
	Debt							
	Total debt	(mil euros)	37,410	37,553	37,545	-143	-0.4	Enel
	Debt to Equity	(r)	0.7	0.7	0.7	-	-	Enel
	Rating							
	S&P	(r)	BBB+	BBB	BBB	-	-	Enel
	Outlook	(r)	Stable Outlook	Stable Outlook	Positive Outlook	-	-	Enel
	Moody's	(r)	Baa2	Baa2	Baa2	-	-	Enel
	Outlook	(r)	Stable Outlook	Stable Outlook	Stable Outlook	-		Enel
	Fitch	(r)	BBB+	BBB+	BBB+	-	-	Enel
	Outlook	(r)	Stable Outlook	Stable Outlook	Stable Outlook	-	-	Enel
102-22; 405-1	CORPORATE GOVERNANCE							
	Board of Directors (BoDs)							
	Members of BoDs by type	(no.)	9	9	9	-	-	Enel SpA
	Executive members	(no.)	1	1	1	-	-	Enel SpA
	Non-executive members	(no.)	8	8	8	-		Enel SpA
	- of whom independent <sup>(8)</sup>	(no.)	7	7	7	-		Enel SpA
				3	3			Enel SpA

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Women on BoDs of the Group							
	Women on the BoDs of Enel SpA	(no.)	3	3	3	-	-	Enel SpA
	Women on the BoDs of Group companies	(no.)	200	157	176	43	27.4	Enel
	Members of the BoDs by age group Under 30 years old	(%)	-		_	_	-	Enel SpA
	30 - 50 years old	(%)	11	11	11	_	_	Enel SpA
	Over 50 years old	(%)	89	89	89	-	_	Enel SpA
	BoDs meetings	(no.)	15	13	15	2	15.4	Enel SpA
	ETHICAL AUDITING							
	Implementation of the Code of Ethics							
	Reports received by type of stakeholder	(no.)	123	85	124	38	44.7	Enel
	Internal stakeholders	(no.)	21	15	36	6	40.0	Enel
-	External stakeholders	(no.)	34	19	33	15	78.9	Enel
	Anonymous	(no.)	68	51	55	17	33.3	Enel
	Reports received for harmed or potentially harmed stakeholder	(no.)	123	85	124	38	44.7	Enel
	Shareholder	(no.)	51	44	43	7	15.9	Enel
	Customer	(no.)	27	11	16	16	-	Enel
	Employee	(no.)	26	18	34	8	44.4	Enel
	General public	(no.)	3	3	6	-	-	Enel
	Suppliers	(no.)	16	9	25	7	77.8	Enel
	Reports received by status	(no.)	123	85	124	38	44.7	Enel
	Reports being assessed	(no.)	10	-	-	10	-	Enel
	Reports for which a violation has not been confirmed	(no.)	86	64	90	22	34.4	Enel
	Reports for which a violation has been confirmed	(no.)	27	21	34	6	28.6	Enel
	Reports related to	(no.)	123	85	124	38	44.7	Enel
	Conflict of interests/Bribery/ Corruption	(no.)	27	19	28	8	42.1	Enel
	Misappropriation	(no.)	53	25	29	28	-	Enel
	Work practices	(no.)	22	22	37	-	-	Enel
	Community and society	(no.)	1	2	2	-1	-50.0	Enel
	Other reasons	(no.)	20	17	28	3	17.6	Enel
	Violations confirmed by type of harmed stakeholder <sup>(9)</sup>	(no.)	27	21	34	6	28.6	Enel
	Shareholder	(no.)	11	12	16	-1	-8.3	Enel
	Customer	(no.)	5	1	3	4	-	Enel
	Employee	(no.)	7	6	8	1	16.7	Enel
	General public	(no.)	2	1	-	1	100.0	Enel
	Suppliers	(no.)	2	1	7	1	100.0	Enel
406-1	Violations related to incidents of <sup>(9)</sup>	(no.)	27	21	34	6	28.6	Enel
205-3	Conflict of interests/Bribery/ Corruption <sup>(10)</sup>	(no.)	5	6	10	-1	-16.7	Enel
	Misappropriation	(no.)	13	7	10	6	85.7	Enel
	Work practices	(no.)	6	6	7	-	-	Enel
	Community and society	(no.)	1	-	-	1	-	Enel
	Other reasons	(no.)	2	2	7	-	-	Enel
	Violations regarding incidents of conflict of interest/corruption, by country	(no.)	5	6	10	-1	-16.7	Enel
	Argentina	(no.)	-	_	1	_	_	Argentina
	Brazil	(no.)	-	1	2	-1	-100.0	Brazil
	Chile	(no.)	1	2	1	-1	-50.0	Chile
	Colombia	(no.)	1	-	2	1	-	Colombia
	Italy	(no.)	2	2	-	-	-	Italy
	Romania	(no.)	-	-	3	-	-	Romania
	Slovakia <sup>(11)</sup>	(no.)	_	_	1	_	_	Slovakia
	Olovakia						_	Siuvania

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Actions taken in response to incidents of conflict of interest/ corruption	(no.)	6	7	10	-1	-14.3	Enel
	of which: actions taken against employees in response to cases of conflict of interest/corruption	(no.)	4	6	n.a.	-2	-33.3	Enel
	of which: actions taken against contractors in response to cases of conflict of interest/corruption	(no.)	2	1	n.a.	1	100.0	Enel
412-3	Significant investment agreements that include human rights clauses	(no.)	6	10	6	-4	-40.0	Enel
412-3	Percentage of significant investment agreements that include human rights clauses	(%)	100	100	100	-	-	Enel
	INSTITUTIONAL RELATIONS							
201-4	Grants							
	Grants supplied in the period by geographic area	(mil euros)	66.7	41.0	8.7	25.7	62.7	Enel
	Italy	(mil euros)	64.6	38.3	4.6	26.3	68.8	Italy
	Slovakia <sup>(11)</sup>	(mil euros)	-	-	0.1	-	-	Slovakia
	Spain	(mil euros)	0.6	1.5	4.0	-0.9	-57.1	Spain
	Brazil	(mil euros)		0.4	_	-0.4	-100.0	Brazil
	Colombia	(mil euros)	1.5	-	-	1.5	-	Colombia
	Chile	(mil euros)	-	8.0	-	-0.8	-100.0	Chile
	Grants received by destination							
	Energy networks	(%)	90.9	73.6	15.5	17.3	-	Enel
	R&D	(%)	4.3	12.0	28.1	-7.7	-	Enel
	Renewable	(%)	3.8	11.2	39.8	-7.4	-	Enel
	Training	(%)	-	-	11.80	-	-	Enel
	Other	(%)	1.0	3.2	4.8	-2.2	-	Enel
	Number of projects which received grants	(no.)	42	41	34	1	2.4	Enel
	Loans granted by the EIB and others							
	Remaining debt on loans from EIB and others by geographic area	(mil euros)	5,253	5,130	5,505	123	2.4	Enel
	- Italy	(mil euros)	3,608	3,755	3,910	-147	-3.9	Italy
	- Abroad (Latin America, Spain, Slovakia, Russia, Romania)	(mil euros)	1,645	1,375	1,595	270	19.6	Enel
	Remaining debt on loans from EIB and others by destination							
	Energy networks	(%)	66.7	64.7	62.8	2.0	-	Enel
	R&D	(%)	0.1	-	0.01	0.1	-	Enel
	Renewable	(%)	24.7	25.8	26.9	-1.1	-	Enel
	Training	(%)	-	-	-	-	-	Enel
	Other	(%)	8.5	9.5	10.3	-1.0	-	Enel
	Number of projects in progress approved with loans from EIB and others	(no.)	123	99	91	24	24.2	Enel
	Taxes	(mil euros)	3,273	3,244	3,369	29	0.9	Enel
	IRES, IRAP and other taxes	(mil euros)	1,264	1,052	1,157	212	20.2	Enel
	Taxes abroad	(mil euros)	618	941	751	-323	-34.3	Enel
	Other taxes and duties	(mil euros)	1,222	1,085	1,292	137	12.6	Enel

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Fees net of contributions received	(mil euros)	169	166	169	3	1.8	Enel

- (1) The institutional investor is a subject who, under a specific mandate or on their own account, undertakes equity and/or property investment on a continuous and professional basis. The category includes: mutual funds, pension funds, hedge funds, investment and merchant banks,
- (2) Calculated as the ratio between the number of shares held by identified Socially Responsible Investors and the number of shares held by identified institutional investors.
- SRIs are investors who state that they include environmental, social and governance (ESG) factors in traditional financial analysis in order to direct their investment decisions (the inclusion of at least one ESG criterion and adhesion to the main international principles approved by organizations such as UNPRI, UKSIF, EUROSIF are among the key factors in order to be able to classify an investor as an SRI).
- Calculated as the difference between the valuation on the last open market day of the year and the valuation of the previous year.
- Source: Bloomberg and Company filings.
- Only certified meetings are considered (meetings held during the different road shows).
- (7) Only requests received have been considered and not the responses provided also.
- The number of independent directors pursuant to the Consolidated Law on Finance (TUF) is 8 (including the Chairman). The number of independent directors pursuant to the Code of Self Discipline is 7 because the Code does not allow the Chairman to be considered independent since she is a "senior representative" of the company.
- (9) During 2017 the analysis was completed of the notifications received in 2016, for this reason the number of confirmed violations for 2016 was restated from 18 to 21. The violations for 2017 concern the notifications received in 2017. The data provided are updated to February 8, 2018 and consistently with the data reported by the CCR.
- (10) Corruption consists of the abuse of power conferred with the goal of private gain and can be instigated by individuals in the public or private sector. It is interpreted here as including corrupt practices such as bribes, fraud, extortion, collusion, conflict of interest and money
- (11) Slovakia was removed from the scope on 2016.



#### Communities and value sharing

CCC Come Ch Inv Co imp So init To En Su by Su Ex ass		UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
So En Su by	ITIATIVES IN FAVOR OF THE OMMUNITY							
Inv Coo im Soo init To En So En Su by Su Ex ass	ontributions to communities - LBG ethod							
So init To En So En Su by Su Ex ass	naritable donations <sup>(1)</sup>	(mil euros)	10.3	9.4	8.6	0.9	10.0	Enel
so init To En So En Su by Su Ex ass	vestments in communities	(mil euros)	52.0	23.2	23.4	28.8	-	Enel
sinit To En So En Su by Su Ex ass	ommercial initiatives with a social apact	(mil euros)	28.3	26.1	35.8	2.2	8.6	Enel
So En Su by Su Ex:	ocially sustainable business itiatives	(mil euros)	-	-	-	-	=	Enel
So En Su by Su Ex:	otal (expense + investments)(2)(3)	(mil euros)	90.6	58.7	67.8	31.9	54.4	Enel
Su by Su Ex	nel Cuore Onlus							
Su Ex	olidarity projects supported by nel Cuore	(no.)	30	32	50	-2	-6.3	Italy
Ex	ums provided to Enel Cuore Onlus Enel Group companies	(mil euros)	5.8	5.7	5.3	0.2	2.7	Italy
ass	ubscription fees	(mil euros)	0.3	0.3	0.3	-	-	Italy
Tie	ctraordinary contribution from sociates <sup>(4)</sup>	(mil euros)	5.5	5.0	5.0	0.5	10.0	Italy
110	ed donations	(mil euros)	-	0.3	-	-0.3	-100.0	Italy
EU25 SA	AFETY FOR COMMUNITIES							
Th	nird-party injuries							
Se	evere and fatal third-party injuries	(no.)	80	109	107	-29	-26.6	Enel
- f	fatal	(no.)	40	58	60	-18	-31.0	Enel
- S	severe	(no.)	40	51	47	-11	-21.6	Enel
Th	nird-party injuries by type							
Ele	ectricity injuries	(%)	81.3	89.0	71.1	-7.7	_	Enel
	pad accidents against Group frastructure	(%)	12.5	8.0	19.6	4.5	-	Enel
	ccidents for other reasons (slipping, lling from height, crash-crush-cut)	(%)	6.2	3.0	9.3	3.2	-	Enel
Ca	auses of electricity accident							
Co	onstruction activities near power es	(%)	24.6	26.0	20.0	-1.4	-	Enel
Att	tempted theft	(%)	27.7	17.0	20.0	10.7	-	Enel
Otl	ther <sup>(5)</sup>	(%)	47.7	57.0	60.0	-9.3	-	Enel

<sup>(1)</sup> The item includes grants made to Enel Cuore over the years.

<sup>(2)</sup> The 2016-2017 delta refers to Holding (sponsorship of the Formula E for over 5 million euro, considered as promotion of the Enel brand within an activity related to its core business) and Chile (many projects have been reclassified with respect to the last year, agreements have been added, such as Ralco, Bocamina and Los Cóndores, which add about 15 million euro, intended as investments in local communities).

<sup>(3)</sup> The 2016 figure was restated due to an adjustment of the exchange rate applied in Peru.

<sup>(4)</sup> As happened for the previous years, the amount indicated in 2017 refers for 5,500,000 euro to the total amount allocated to Enel Cuore Onlus, by way of "Extraordinary Contribution 2017", by some of the associated companies of the latter (e-distribuzione SpA, Enel Energia SpA, Enel Green Power SpA and Enel Italia SrI). As at December 31, 2017 the amount committed was not yet paid.

<sup>(5)</sup> Mainly accidental contact with metal wires, agricultural work, plant-cutting, etc.

# Our people and their value

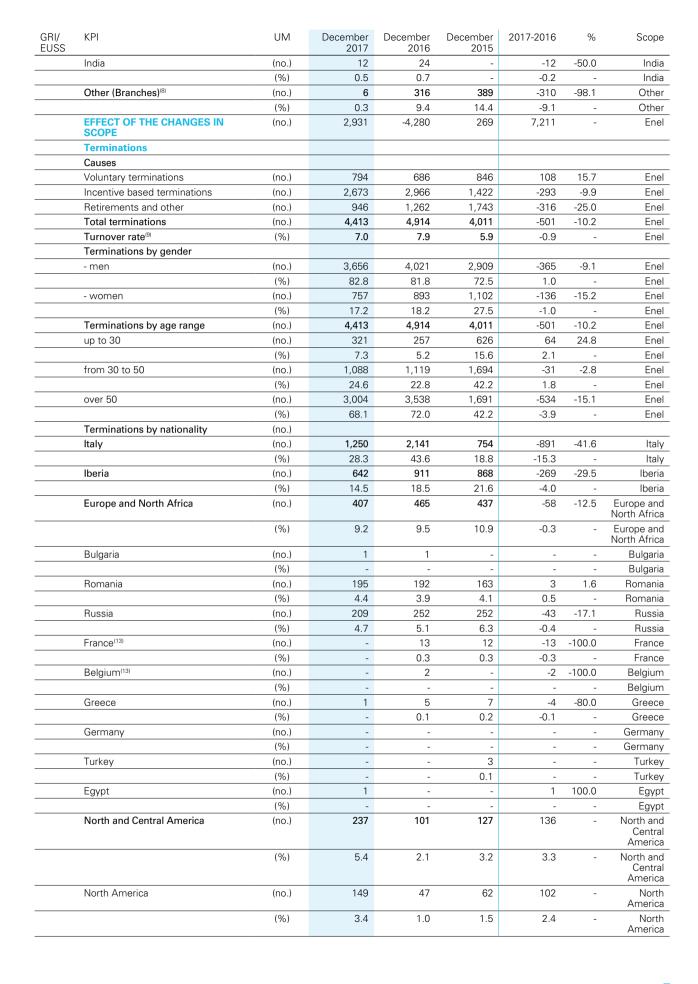
Scope	%	2017-2016	December 2015	December 2016	December 2017	UM	KPI	GRI/ EUSS
							SIZE AND COMPOSITION OF WORKFORCE (1)	
							Size of workforce	
Enel	1.3	820	67,914	62,080	62,900	(no.)	Total workforce	102-7
Enel	-5.8	-6.7	122.5	117.6	110.9	(mil h)	Hours worked	
						(,	CHANGE TO SIZE <sup>(2)</sup>	401-1
Enel	-31.5	-1,059	2,695	3,360	2,301	(no.)	New recruits	
Enel	_	7,211	269	-4,280	2,931	(no.)	Changes in scope	
Enel	-10.2	-501	4,011	4,914	4,413	(no.)	Terminations	
Enel	_	6,654	-1,047	-5,834	820	(no.)	Balance	
			·	,			Workforce by geographic area and gender	102-8
Italy	-2.6	-842	33,040	31,956	31,114	(no.)	Italy	
Italy	-3.2	-839	27,202	26,252	25,413	(no.)	- of whom men	
Italy	-0.1	-3	5,838	5,704	5,701	(no.)	- of whom women	
Abroad	5.5	1,662	34,874	30,124	31,786	(no.)	Abroad	
Abroad	5.4	1,262	27,330	23,295	24,557	(no.)	- of whom men	
Abroad	5.8	400	7,544	6,829	7,229	(no.)	- of whom women	
Iberia	-3.0	-301	10,715	10,185	9,884	(no.)	Iberia <sup>(3)</sup>	
Iberia	-3.5	-278	8,353	7,869	7,591	(no.)	- of whom men	
Iberia	-1.0	-23	2,362	2,316	2,293	(no.)	- of whom women	
Europe and North Africa	-0.5	-28	6,076	5,752	5,724	(no.)	Europe and North Africa <sup>(4)</sup>	
Europe and North Africa	-3.0	-127	4,416	4,236	4,109	(no.)	- of whom men	
Europe and North Africa	-0.3	-5	1,660	1,620	1,615	(no.)	- of whom women	
Romania	-1.6	-50	3,133	3,113	3,063	(no.)	Romania	
Romania	-2.8	-62	2,294	2,237	2,175	(no.)	- of whom men	
Romania	1.4	12	839	876	888	(no.)	- of whom women	
Russia	-3.2	-84	2,781	2,639	2,555	(no.)	Russia	
Russia	-3.3	-64	2,005	1,924	1,860	(no.)	- of whom men	
Russia	-2.8	-20	776	715	695	(no.)	- of whom women	
Other (Europe e North Africa)	1.9	2	162	104	106	(no.)	Other (Europe and North Africa)	
Other (Europe e North Africa)	-1.3	-1	117	75	74	(no.)	- of whom men	
Other (Europe e North Africa)	10.3	3	45	29	32	(no.)	- of whom women	
North and central America	-	1,159	810	891	2,050	(no.)	North and Central America <sup>(5)</sup>	
North and central America	-	886	642	700	1,586	(no.)	- of whom men	
North and central America	-	273	168	191	464	(no.)	- of whom women	
South America	7.1	924	12,802	12,979	13,903	(no.)	South America <sup>(6)</sup>	
South America	7.6	788	10,236	10,357	11,145	(no.)	- of whom men	

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scop
	- of whom women	(no.)	2,758	2,622	2,566	136	5.2	Sout Americ
	Sub-Saharian Africa and Asia <sup>(7)</sup>	(no.)	195	185	120	10	5.4	Sub-Sahara Africa ar As
	- of whom men	(no.)	112	119	67	-7	-5.9	Sub-Sahara Africa ar As
	- of whom women	(no.)	83	66	53	17	25.8	Sub-Sahara Africa an As
	Other (Branches)(8)	(no.)	30	28	4,351	2	7.1	Oth
	- of whom men	(no.)	14	14	3,616	-	-	Oth
	- of whom women	(no.)	16	14	735	2	14.3	Oth
	Total workforce	(no.)	62,900	62,080	67,914	820	1.3	En
	- of whom men	(no.)	49,970	49,547	54,532	423	0.9	Er
	- of whom women	(no.)	12,930	12,533	13,382	397	3.2	Er
405-1	WORKFORCE BY LEVEL AND GENDER							
	Managers	(no.)	1,281	1,284	1,271	-3	-0.2	Er
	- of whom men	(no.)	1,048	1,064	1,058	-16	-1.5	Er
		(%)	81.8	82.9	83.2	-1.1	-	Er
	- of whom women	(no.)	233	220	213	13	5.9	Er
		(%)	18.2	17.1	16.8	1.1	-	Er
	Middle Managers	(no.)	10,416	9,796	10,581	620	6.3	Er
	- of whom men	(no.)	7,493	7,176	7,875	317	4.4	Er
		(%)	71.9	73.3	74.4	-1.3	-	Er
	- of whom women	(no.)	2,923	2,620	2,706	303	11.6	Er
	NA(1:-	(%)	28.1	26.7	25.6	1.3	-	Er
	White-collar workers	(no.)	32,654	32,654	35,975	-	-	Er
	- of whom men	(no.)	23,387	23,454	26,139	-67	-0.3	Er
		(%)	71.6	71.8	72.7	-0.2	- 0.7	Er
	- of whom women	(no.)	9,267	9,200	9,836	67	0.7	Er
	Blue-collar workers	(%)	28.4	28.2 18,346	27.3	0.2 203	1.1	Er Er
	- of whom men	(no.)	18,549		20,087	189	1.1	Er
	- or whom men	(no.) (%)	18,042 97.3	17,853 97.3	19,460 96.9	-	- 1.1	Er
	- of whom women	(no.)	507	493	627	14	2.8	Er
	- or whom women	(%)	2.7	2.7	3.1	-	2.0	Er
	Total	(no.)	62,900	62,080	67,914	820	1.3	Er
	Index of professional qualification	(110.)	02,300	02,000	07,514	020	1.0	
	Managers	(%)	2.0	2.1	1.9	-0.1	_	Er
	Middle Managers	(%)	16.6	15.8	15.6	0.8	_	Er
	White-collar workers	(%)	51.9	52.6	53.0	-0.7	-	Er
	Blue-collar workers	(%)	29.5	29.5	29.5	-	_	Er
	Workforce by level of education							
	Total	(no.)	62,900	62,080	67,914	820	1.3	Er
	Degree	(%)	37.4	35.3	35.1	2.1	-	Er
	High-school diploma	(%)	46.3	47.4	47.5	-1.1	-	Er
	Other	(%)	16.3	17.3	17.4	-1.0	-	Er
105-1	WORKFORCE BY AGE RANGE AND LEVEL							
	< 30	(%)	10.2	10.6	9.8	-0.4	-	Er
	- of whom Managers	(%)	-	-	-	-	-	Er
	- of whom Middle Managers	(%)	0.2	0.2	0.2	-	-	Er
	- of whom White-collar workers	(%)	4.1	3.7	3.5	0.4	-	Er
	- of whom Blue-collar workers	(%)	5.9	6.7	6.1	-0.8	-	Er
	30 - 50	(%)	52.2	51.9	52.0	0.3	-	Er
	- of whom Managers	(%)	1.0	1.0	0.9	-	-	Er
	- of whom Middle Managers	(%)	10.3	9.9	9.8	0.4	-	Er
	- of whom White-collar workers	(%)	26.1	26.9	27.4	-0.8	-	Er
	- of whom Blue-collar workers	(%)	14.8	14.1	13.9	0.7	_	Er

Solution   Solution	Enel Enel Enel Enel Enel Enel Enel Enel
- of whom Middle Managers (%) 6.0 5.7 5.6 0.3 of whom White-collar workers (%) 21.8 21.9 22.1 -0.1 of whom Blue-collar workers (%) 8.8 8.8 9.6 Average age (years) 44.1 44.4 44.7 -0.3 -0.7  Workforce by age range and gender  < 30 (%) 10.2 10.6 9.8 -0.4 of whom men (%) 8.8 9.4 8.5 -0.6 of whom women (%) 1.4 1.2 1.3 0.2 - 30 -50 (%) 52.2 51.9 52.0 0.3 of whom men (%) 39.2 38.8 39.2 0.4 of whom women (%) 13.0 13.1 12.8 -0.1 of whom women (%) 37.6 37.5 38.2 0.1 of whom men (%) 31.5 31.6 32.6 -0.1 of whom women (%) 6.1 5.9 5.6 0.2 -  Workforce by years of service  Average (years) 17.0 17.5 17.9 -0.5 -3.0  < 10 (no.) 22,370 22,040 22,798 330 1.5  10 - 19 (no.) 14,211 12,656 13,711 1,555 12.3  20 - 29 (no.) 14,807 15,767 18,377 -960 -6.1	Enel Enel Enel Enel Enel Enel Enel Enel
- of whom White-collar workers (%) 21.8 21.9 22.1 -0.1 of whom Blue-collar workers (%) 8.8 8.8 9.6 Average age (years) 44.1 44.4 44.7 -0.3 -0.7  Workforce by age range and gender  < 30 (%) 10.2 10.6 9.8 -0.4 of whom men (%) 8.8 9.4 8.5 -0.6 of whom women (%) 1.4 1.2 1.3 0.2 - 30 - 50 (%) 52.2 51.9 52.0 0.3 of whom men (%) 39.2 38.8 39.2 0.4 of whom women (%) 13.0 13.1 12.8 -0.1 of whom women (%) 37.6 37.5 38.2 0.1 of whom men (%) 31.5 31.6 32.6 -0.1 of whom women (%) 6.1 5.9 5.6 0.2 -  Workforce by years of service  Average (years) 17.0 17.5 17.9 -0.5 -3.0  < 10 (no.) 22,370 22,040 22,798 330 1.5  10 - 19 (no.) 14,211 12,656 13,711 1,555 12.3  20 - 29 (no.) 14,807 15,767 18,377 -960 -6.1	Enel Enel Enel Enel Enel Enel Enel Enel
- of whom Blue-collar workers (%) 8.8 8.8 9.6 Average age (years) 44.1 44.4 44.7 -0.3 -0.7   Workforce by age range and gender	Enel Enel Enel Enel Enel Enel Enel Enel
Average age         (years)         44.1         44.4         44.7         -0.3         -0.7           Workforce by age range and gender           < 30	Enel Enel Enel Enel Enel Enel Enel Enel
Workforce by age range and gender           < 30	Enel Enel Enel Enel Enel Enel Enel Enel
gender         <30         (%)         10.2         10.6         9.8         -0.4         -           - of whom men         (%)         8.8         9.4         8.5         -0.6         -           - of whom women         (%)         1.4         1.2         1.3         0.2         -           30 - 50         (%)         52.2         51.9         52.0         0.3         -           - of whom men         (%)         39.2         38.8         39.2         0.4         -           - of whom women         (%)         13.0         13.1         12.8         -0.1         -           - of whom men         (%)         37.6         37.5         38.2         0.1         -           - of whom men         (%)         31.5         31.6         32.6         -0.1         -           - of whom women         (%)         6.1         5.9         5.6         0.2         -           Workforce by years of service         (years)         17.0         17.5         17.9         -0.5         -3.0           < 10	Enel Enel Enel Enel Enel Enel Enel
- of whom men         (%)         8.8         9.4         8.5         -0.6         -           - of whom women         (%)         1.4         1.2         1.3         0.2         -           30 - 50         (%)         52.2         51.9         52.0         0.3         -           - of whom men         (%)         39.2         38.8         39.2         0.4         -           - of whom women         (%)         13.0         13.1         12.8         -0.1         -           > 50         (%)         37.6         37.5         38.2         0.1         -           - of whom men         (%)         31.5         31.6         32.6         -0.1         -           - of whom women         (%)         6.1         5.9         5.6         0.2         -           Workforce by years of service         Workforce by years of service         (years)         17.0         17.5         17.9         -0.5         -3.0           < 10	Enel Enel Enel Enel Enel Enel Enel
- of whom women         (%)         1.4         1.2         1.3         0.2         -           30 - 50         (%)         52.2         51.9         52.0         0.3         -           - of whom men         (%)         39.2         38.8         39.2         0.4         -           - of whom women         (%)         13.0         13.1         12.8         -0.1         -           - of whom women         (%)         37.6         37.5         38.2         0.1         -           - of whom men         (%)         31.5         31.6         32.6         -0.1         -           - of whom women         (%)         6.1         5.9         5.6         0.2         -           Workforce by years of service         (years)         17.0         17.5         17.9         -0.5         -3.0           < 10	Enel Enel Enel Enel Enel
30 - 50	Enel Enel Enel Enel
- of whom men         (%)         39.2         38.8         39.2         0.4         -           - of whom women         (%)         13.0         13.1         12.8         -0.1         -           > 50         (%)         37.6         37.5         38.2         0.1         -           - of whom men         (%)         31.5         31.6         32.6         -0.1         -           - of whom women         (%)         6.1         5.9         5.6         0.2         -           Workforce by years of service           Average         (years)         17.0         17.5         17.9         -0.5         -3.0           < 10	Enel Enel Enel
- of whom women         (%)         13.0         13.1         12.8         -0.1         -           > 50         (%)         37.6         37.5         38.2         0.1         -           - of whom men         (%)         31.5         31.6         32.6         -0.1         -           - of whom women         (%)         6.1         5.9         5.6         0.2         -           Workforce by years of service         (years)         17.0         17.5         17.9         -0.5         -3.0           < 10	Enel Enel Enel
>50         (%)         37.6         37.5         38.2         0.1         -           - of whom men         (%)         31.5         31.6         32.6         -0.1         -           - of whom women         (%)         6.1         5.9         5.6         0.2         -           Workforce by years of service           Average         (years)         17.0         17.5         17.9         -0.5         -3.0           < 10	Enel Enel
- of whom men     (%)     31.5     31.6     32.6     -0.1     -       - of whom women     (%)     6.1     5.9     5.6     0.2     -       Workforce by years of service       Average     (years)     17.0     17.5     17.9     -0.5     -3.0       < 10	Enel
- of whom women         (%)         6.1         5.9         5.6         0.2         -           Workforce by years of service           Average         (years)         17.0         17.5         17.9         -0.5         -3.0           < 10         (no.)         22,370         22,040         22,798         330         1.5           10 - 19         (no.)         14,211         12,656         13,711         1,555         12.3           20 - 29         (no.)         14,807         15,767         18,377         -960         -6.1	
Workforce by years of service           Average         (years)         17.0         17.5         17.9         -0.5         -3.0           < 10	Enel
Average         (years)         17.0         17.5         17.9         -0.5         -3.0           < 10	
< 10         (no.)         22,370         22,040         22,798         330         1.5           10 - 19         (no.)         14,211         12,656         13,711         1,555         12.3           20 - 29         (no.)         14,807         15,767         18,377         -960         -6.1	
10 - 19     (no.)     14,211     12,656     13,711     1,555     12.3       20 - 29     (no.)     14,807     15,767     18,377     -960     -6.1	Enel
20 - 29 (no.) 14,807 15,767 18,377 -960 -6.1	Enel
	Enel
30 - 34 (no.) 7,127 6,795 7,583 332 4.9	Enel
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Enel
> 35 (no.) 4,385 4,822 5,445 -437 -9.1	Enel
Total (no.) 62,900 62,080 67,914 820 1.3	Enel
< 10 (%) 35.6 35.5 33.6 0.1 -	Enel
10 to 19 (%) 22.6 20.4 20.2 2.2 -	Enel
20 to 29 (%) 23.5 25.4 27.0 -1.9 -	Enel
30 to 34 (%) 11.3 10.9 11.2 0.4 -	Enel
Over 35 (%) 7.0 7.8 8.0 -0.8 -	Enel
102-8 Workforce by type of contract and gender	
Permanent contract         (no.)         62,053         60,921         66,981         1,131         1.9	Enel
- of whom men (no.) 49,320 48,656 53,845 664 1.4	Enel
- of whom women (no.) 12,733 12,265 13,135 468 3.8	Enel
Fixed-term contracts (no.) 843 1,081 845 -238 -22.0	Enel
- of whom men (no.) 646 836 618 -190 -22.7	Enel
- of whom women (no.) 197 245 227 -48 -19.8	Enel
Insertion/work experience contracts (no.) 4 78 88 -74 -94.9	Enel
- of whom men (no.) 4 55 68 -51 -92.7	Enel
- of whom women (no.) - 23 20 -23 -100.0	Enel
Total contracts         (no.)         62,900         62,080         67,914         820         1.3	Enel
- of whom men (no.) 49,970 49,547 54,532 423 0.9	Enel
- of whom women (no.) 12,930 12,533 13,382 397 3.2	Enel
Fixed-term and insertion/work (%) 1.35 1.87 1.37 -0.6 - contracts as percentage of total	Enel
Internship and traineeships         (no.)         1,595         3,347         946         -1,752         -52.3	Enel
102-8 Workforce by type of contract and gender	
Full-time contracts         (no.)         61,930         61,156         66,939         774         1.3	Enel
- of whom men (no.) 49,678 49,303 54,284 375 0.8	Enel
- of whom women (no.) 12,252 11,853 12,655 399 3.4	Enel
Part-time contracts         (no.)         970         924         975         46         5.0	Enel
- of whom men (no.) 292 244 248 48 19.7	Enel
- of whom women (no.) 678 680 727 -2 -0.3	Enel
Part-time + Full-time contracts         (no.)         62,900         62,080         67,914         820         1.3	Enel
- of whom men (no.) 49,970 49,547 54,532 423 0.9	Enel
- of whom women (no.) 12,930 12,533 13,382 397 3.2	Enel
Percentage of part-time (%) 1.5 1.5 1.4	Enel

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
102-8	Workforce by type of contract and geographic area							
	Italy	(no.)	31,114	31,956	33,040	-842	-2.6	Italy
	Permanent contracts	(no.)	31,053	31,915	33,036	-862	-2.7	Italy
	Fixed-term contracts	(no.)	61	41	4	20	48.8	Italy
	Iberia <sup>(3)</sup>	(no.)	9,884	10,185	10,715	-301	-3.0	Iberia
	Permanent contracts	(no.)	9,637	9,943	10,484	-306	-3.1	Iberia
	Fixed-term contracts	(no.)	247	242	231	5	2.1	Iberia
	South America <sup>(6)</sup>	(no.)	13,903	12,979	12,802	924	7.1	South Africa
	Permanent contracts	(no.)	13,489	12,205	12,464	1,284	10.5	South Africa
	Fixed-term contracts <sup>(14)</sup>	(no.)	414	774	338	-360	-46.5	South Africa
	Europe and North Africa <sup>(4)</sup>	(no.)	5,724	5,856	6,076	-132	-2.3	Europe and North Africa
	Permanent contracts	(no.)	5,709	5,780	6,033	-71	-1.2	Europe and North Africa
	Fixed-term contracts <sup>(15)</sup>	(no.)	15	76	43	-61	-80.3	Europe and North Africa
	North and Central America <sup>(5)</sup>	(no.)	2,050	891	810	1,159	-	North and Central America
	Permanent contracts	(no.)	1,949	876	810	1,073	-	North and Central America
	Fixed-term contracts	(no.)	101	15	-	86	-	North and Central America
	Sub-Saharan Africa and Asia <sup>(7)</sup>	(no.)	195	185	120	10	5.4	Sub-Saharan Africa and Asia
	Permanent contracts	(no.)	189	175	120	14	8.0	Sub-Saharan Africa and Asia
	Fixed-term contracts <sup>(16)</sup>	(no.)	6	10	-	-4	-40.0	Sub-Saharan Africa and Asia
	Other (Branches) <sup>(8)</sup>	(no.)	30	28	4,351	2	7.1	Other (Branches)
	Permanent contracts	(no.)	27	27	4,034	-	-	Other (Branches)
	Fixed-term contracts	(no.)	3	1	317	2	-	Other (Branches)
401-1	CHANGES TO SIZE							
	New hires							
	New hires by gender	(no.)	2,301	3,360	2,695	-1,059	-31.5	Enel
		(%)	3.7	5.4	4.0	1.7	-	Enel
	- of whom men	(no.)	1,619	2,618	2,075	-999	-38.2	Enel
		(%)	70.4	77.9	77.0	-7.6	-	Enel
	- of whom women	(no.)	682	742	620	-60	-8.0	Enel
		(%)	29.6	22.1	23.0	7.6	-	Enel
	New hires by age range	(no.)	2,301	3,360	2,695	-1,059	-31.5	Enel
	up to 30	(no.)	927	1,709	845	-782	-45.7	Enel
		(%)	40.3	50.8	31.3	-10.5		Enel
	from 30 to 50	(no.)	1,127	1,406	1,622	-279	-19.8	Enel
		(%)	49.0	41.9	60.2	7.1	-	Enel
	over 50	(no.)	247	245	228	2	0.8	Enel
		(%)	10.7	7.3	8.5	3.4	-	Enel
	New hires by geographic area							
	ltaly	(no.)	403	1,136	125	-733	-64.5	Italy
		(%)	17.5	33.8	4.6	-16.3		Italy
	Iberia	(no.)	315	362	370	-47	-12.9	Iberia
		(%)	13.7	10.8	13.7	2.9		Iberia
	Europe and North Africa	(no.)	275	295	263	-20	-6.8	Europe and North Africa

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
		(%)	11.9	8.8	9.8	3.1	36.1	Europe and North Africa
	Romania	(no.)	145	173	152	-28	-16.2	Romania
		(%)	6.3	5.1	5.6	1.2	-	Romania
	Russia	(no.)	125	109	100	16	14.7	Russia
		(%)	5.4	3.2	3.7	2.2	-	Russia
	France <sup>(13)</sup>	(no.)	-	-	-	-	_	France
		(%)	-	-	-	-	-	France
	Belgium <sup>(13)</sup>	(no.)	-	2	-	-2	-100.0	Belgium
		(%)	-	0.1	-	-0.1	_	Belgium
	Tukey	(no.)	-	-	4	-	-	Turkey
		(%)	-	-	0.1	-	_	Turkey
	Egypt	(no.)	-	2	-	-2	-100.0	Egypt
		(%)	-	0.1	-	-0.1	-	Egypt
	Greece	(no.)	3	9	7	-6	-66.7	Greece
		(%)	0.1	0.3	0.3	-0.2	-	Greece
	Bulgaria	(no.)	1	-	-	1	100.0	Bulgaria
		(%)	-	-	-	-	-	Bulgaria
	Germany	(no.)	1	-	-	1	100.0	Germany
		(%)	-	-	-	-	-	Germany
	North and Central America	(no.)	405	182	182	223	-	North and Central America
		(%)	17.6	5.4	6.8	12.2	-	North and Central America
	North America	(no.)	285	102	85	183	-	North America
		(%)	12.4	3.0	3.2	9.4	-	North America
	Costa Rica	(no.)	6	9	19	-3	-33.3	Costa Rica
		(%)	0.3	0.3	0.7	-	_	Costa Rica
	Guatemala	(no.)	7	6	11	1	16.7	Guatemala
		(%)	0.3	0.2	0.4	0.1	_	Guatemala
	Mexico	(no.)	97	44	56	53		Mexico
		(%)	4.2	1.3	2.1	2.9	_	Mexico
	Panama	(no.)	10	21	11	-11	-52.4	Panama
		(%)	0.4	0.6	0.4	-0.2	-	Panama
	South America	(no.)	861	992	1,307	-131	-13.2	South Africa
		(%)	37.4	29.5	48.5	7.9	_	South Africa
	Argentina	(no.)	178	338	593	-160	-47.3	Argentina
		(%)	7.7	10.1	22.0	2.4		Argentina
	Brazil	(no.)	282	233	316	49	21.0	Brazil
		(%)	12.3	6.9	11.7	5.4		Brazil
	Chile	(no.)	115	116	168	-1	-0.9	Chile
		(%)	5.0	3.5	6.2	1.5		Chile
	Colombia	(no.)	205	251	195	-46	-18.3	Colombia
		(%)	8.9	7.5	7.2	1.4	-	Colombia
	Peru	(no.)	81	53	29	28	52.8	Peru
		(%)	3.5	1.6	1.1	1.9	-	Peru
	Uruguay	(no.)	-	1	6	-1	-100.0	Uruguay
	0.1.0.1	(%)	-	-	0.2	-	-	Uruguay
	Sub-Saharan Africa and Asia	(no.)	36	77	59	-41	-53.2	Sub-Saharian Africa and Asia
		(%)	1.6	2.3	2.2	-0.7	-	Sub-Saharian Africa and Asia
	South Africa	(no.)	23	51	59	-28	-54.9	South Africa
		(%)	1.0	1.5	2.2	-0.5	_	South Africa
	Kenya	(no.)	1	2	-	-1	-50.0	Kenya
		(%)	-	0.1	-	-0.1	_	Kenya



GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Costa Rica	(no.)	22	23	22	-1	-4.3	Costa Rica
		(%)	0.5	0.5	0.5	-	-	Costa Rica
	Guatemala	(no.)	8	9	8	-1	-11.1	Guatemala
		(%)	0.2	0.2	0.2	-	-	Guatemala
	Mexico	(no.)	46	13	21	33	-	Mexico
		(%)	1.0	0.3	0.5	0.7	-	Mexico
	Panama	(no.)	12	9	13	3	33.3	Panama
		(%)	0.3	0.2	0.3	0.1	_	Panama
	El Salvador	(no.)	-		1	_	_	El Salvador
	Zi baivado.	(%)	_	_	-	-	_	El Salvador
	South America	(no.)	1,847	1,073	1,253	774	72.1	South Africa
		(%)	41.9	21.8	31.2	20.1	-	South Africa
	Argentina	(no.)	263	210	225	53	25.2	Argentina
	Aigontina	(%)	6.0	4.3	5.6	1.7	- 20.2	Argentina
	Brazil	(no.)	1,125	328	306	797		Brazil
	DIAZII	(%)	25.5	6.7	7.6	18.8		Brazil
	Colombia		116	163	280	-47	-28.8	Colombia
	COIOITIDIA	(no.)			7.0	-47	-20.0	
	Ch. T.	(%)	2.6	3.3				Colombia
	Chile	(no.)	244	323	394	-79	-24.5	Chile
		(%)	5.5	6.6	9.8	-1.1		Chile
	Peru	(no.)	97	47	47	50	-	Peru
		(%)	2.2	1.0	1.2	1.2	-	Peru
	Uruguay	(no.)	2	2	1	-	-	Uruguay
		(%)	-		-	-	-	Uruguay
	Sub-Saharan Africa and Asia	(no.)	26	12	4	14	-	Sub-Saharian Africa and Asia
		(%)	0.6	0.2	0.1	0.4	-	Sub-Saharian Africa and Asia
	South Africa	(no.)	18	3	4	15	_	South Africa
		(%)	0.4	0.1	0.1	0.3	_	South Africa
	Kenya	(no.)	1		-	1	100.0	Kenya
		(%)	-		-	-	-	Kenya
	India	(no.)	7	9	-	-2	-22.2	India
	maid	(%)	0.2	0.2	_	-		India
	Other (Branches)(8)	(no.)	4	211	568	-207	-98.1	Other
	Other (Branches)	(%)	0.1	4.3	14.2	-4.2	-30.1	Other
		( 70 )	0.1	4.5	14.2	-4.2		Other
	Average number of years of service of employees whose employment ended in the year	(no.)	26	29	24	-3	-8.5	Enel
	by gender							
	- men	(no.)	27	30	25	-3	-8.7	Enel
	- women	(no.)	24	26	21	-2	-7.0	Enel
	by age							
	- under 30	(no.)	3	3	2	-	-	Enel
	- 30 to 50	(no.)	9	12	10	-3	-30.8	Enel
	- over 50	(no.)	28	31	30	-3	-8.7	Enel
	VALORIZATION			-				
404-3	Assessment							
	Dissemination of assessment(10)	(%)	94.8	95.0	28.2	-0.2	-	Enel
	- men	(%)	77.9	78.9	80.3	-1.0	-	Enel
	- women	(%)	22.1	21.1	19.7	1.0	_	Enel
1	People assessed by level	(no.)	59,613	58,196	19,157	1,417	2.4	Enel
	Managers	(no.)	1,246	1,253	1,271	-7	-0.6	Enel
	Middle Managers	(no.)	9,614	9,286	4,065	328	3.5	Enel
	White collar	(no.)	31,837	30,849	13,821	988	3.2	Enel
	Blue collar	(no.)	16,916	16,808	10,021	108	0.6	Enel
	Rewarding	(110.)	70,010	10,000		100	0.0	LIIOI
	Dissemination of incentives	(%)	23.5	22.3	20.4	1.2	_	Enel
	555	(70)	20.0	22.0	20.4	1.2		

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Employees with individual incentives	(no.)	14,799	13,874	13,836	925	6.7	Ene
	- of whom managers	(no.)	1,209	1,259	1,287	-50	-4.0	Ene
	- of whom middle managers	(no.)	5,753	5,705	5,662	48	0.8	Ene
	- of whom White collar workers and Blue collar workers	(no.)	7,837	6,910	6,887	927	13.4	Ene
	Incidence of variable rewarding	(%)	8.8	10.5	9.5	-1.7	-	Ene
	- of whom managers	(%)	38.4	41.6	37.4	-3.2	-	Ene
	- of whom middle managers	(%)	9.4	12.1	11.7	-2.7	-	Ene
	- of whom White collar workers	(%)	6.3	7.7	6.5	-1.4	-	Ene
	- of whom Blue collar workers	(%)	4.6	5.3	5.7	-0.7	-	Ene
	ltaly	(%)	10.2	10.4	10.5	-0.2	-	Italy
	Iberia	(%)	5.6	6.5	6.6	-0.9	-	Iberia
	South America	(%)	9.8	9.2	7.8	0.6	-	South Africa
	Argentina	(%)	2.8	2.0	1.6	0.8	-	Argentina
	Brazil	(%)	12.8	9.8	13.1	3.0	-	Brazi
	Chile	(%)	19.1	18.7	10.0	0.4	-	Chile
	Colombia	(%)	6.3	9.3	18.0	-3.0	-	Colombia
	Peru	(%)	2.2	2.0	2.0	0.2	-	Peru
	Uruguay	(%)	14.7	10.4	16.8	4.3	-	Uruguay
	North and Central America	(%)	3.8	81.0	17.7	-77.2	-	North and Centra America
	North America	(%)	3.0	118.9	20.0	-115.9	-	North America
	Costa Rica	(%)	10.0	9.8	12.5	0.2	-	Costa Rica
	Guatemala	(%)	6.5	6.5	11.2	-	-	Guatemala
	Mexico	(%)	10.0	10.1	14.4	-0.1	-	Mexico
	Panama	(%)	7.7	8.0	17.7	-0.3	-	Panama
	Europe and North Africa	(%)	14.2	12.4	13.1	1.8	-	Europe and North Africa
	Romania	(%)	3.9	4.1	3.3	-0.2	-	Romania
	Belgium <sup>(13)</sup>	(%)	-	-	2.4	-	-	Belgium
	Russia	(%)	24.3	21.9	22.3	2.4	-	Russia
	France <sup>(13)</sup>	(%)	-	-	29.3	-	-	France
	Bulgaria	(%)	19.1	18.2	19.6	0.9	-	Bulgaria
	Greece	(%)	17.8	13.1	24.4	4.7	-	Greece
	Turkey	(%)	7.7	-	14.4	7.7	-	Turkey
	Egypt	(%)	11.1	-	-	11.1	_	Egyp
	Sub-Saharan Africa and Asia	(%)	8.8	9.1	22.9	-0.3	-	Sub-Sahariar Africa and Asia
	South Africa	(%)	8.5	5.0	16.1	3.5	-	South Africa
	India	(%)	11.1	124.2	66.7	-113.1	-	India
	Other (Branches)	(%)	13.0	10.1	119.7	2.9	-	Othe (Branches
404-1	TRAINING							
	Training hours per employee	(h/pro- cap)	34.4	29.6	37.3	4.8	16.1	Ene
	by gender							
	- men	(h/pro- cap)	36.4	32.1	36.4	4.3	13.5	Ene
	- women	(h/pro- cap)	25.0	27.1	40.7	-2.1	-7.9	Ene
	by level							
	Managers	(h/pro- cap)	38.9	35.3	59.5	3.6	10.2	Ene
	Middle Managers	(h/pro- cap)	36.8	38.4	47.0	-1.6	-4.0	Ene
	White collar workers	(h/pro- cap)	27.1	24.8	27.0	2.3	9.2	Ene

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Blue collar workers	(h/pro- cap)	45.3	33.2	49.4	12.1	36.5	Enel
	Total training hours (distance learning + classroom)	(,000 h)	2,163	1,934	2,548	229	11.8	Enel
	Training hours distance learning	(,000 h)	164	254	487	-90	-35.5	Enel
	- for managerial training	(,000 h)	44	63	79	-19	-30.4	Enel
	- for specialist training	(,000 h)	120	191	408	-71	-37.3	Enel
	Training hours in the classroom	(,000 h)	1,999	1,680	2,060	319	19.0	Enel
	- for managerial training	(,000 h)	484	439	555	45	10.3	Enel
	- for specialist training	(,000 h)	1,515	1,241	1,505	274	22.1	Enel
	Incidence of distance learning training	(%)	7.6	13.1	19.1	-5.5	-	Enel
	Total training hours by level	(,000 h)	2,163	1,934	2,548	229	11.8	Enel
	Managers	(,000 h)	51	47	69	4	7.4	Enel
	Middle Managers	(,000 h)	371	390	507	-19	-4.9	Enel
	White collar workers	(,000 h)	884	856	984	28	3.3	Enel
	Blue collar workers	(,000 h)	857	641	988	216	33.7	Enel
	Dissemination of sustainability							
	Training per capita on sustainability	( h)	8.2	9.9	9.5	-1.7	-16.7	Enel
	Total training hours on sustainability	(,000 h)	517	647	647	-130	-20.0	Enel
201-3	CORPORATE WELFARE							
	Employees covered by pension plan (Benefit Plan)	(no.)	43,074	41,749	47,832	1,325	3.2	Enel
	Employees covered by pension plan (Benefit Plan)	(%)	68.5	67.2	70.4	1.3	-	Enel
EU15	Employees entitled to retire in next 5 to 10 years, by geographic area (main countries in which Enel operates are listed)							
	Pension within 5 years - Enel							
	Managers	(%)	6.9	4.9	8.3	2.0	-	Enel
	Middle Managers	(%)	5.7	4.0	5.7	1.7	-	Enel
	White collar workers	(%)	6.9	5.3	6.6	1.6	-	Enel
	Blue collar workers	(%)	5.5	3.3	5.5	2.2	-	Enel
	Average	(%)	6.5	5.1	6.9	1.4	-	Enel
	Pension within 10 years - Enel							
	Managers	(%)	17.3	16.4	18.5	0.9	-	Enel
	Middle Managers	(%)	15.1	16.7	17.9	-1.6	-	Enel
	White collar workers	(%)	17.5	21.3	22.9	-3.8	-	Enel
	Blue collar workers	(%)	13.5	15.0	17.9	-1.5	-	Enel
	Average	(%)	16.7	20.1	21.7	-3.4	= .	Enel
	Pension within 5 years - Italy							
	Managers	(%)	3.3	3.4	5.2	-0.1	-	Italy
	Middle Managers	(%)	4.7	4.5	5.9	0.2	-	Italy
	White collar workers	(%)	6.7	5.8	7.3	0.9	-	Italy
	Blue collar workers	(%)	3.2	2.8	4.8	0.4	-	Italy
	Average	(%)	5.3	4.7	6.4	0.6	-	Italy
	Pension within 10 years - Italy							
	Managers	(%)	9.4	13.8	16.1	-4.4	-	Italy
	Middle Managers	(%)	13.8	20.2	21.2	-6.4	-	Italy
	White collar workers	(%)	17.3	25.0	26.6	-7.7	-	Italy
	Blue collar workers	(%)	8.7	13.3	17.2	-4.6	-	Italy
	Average	(%)	14.2	20.8	23.1	-6.6	-	Italy
	Pension within 5 years - Iberia <sup>(3)</sup>							
	Managers	(%)	4.5	5.1	4.4	-0.6		Iberia
	Middle Managers	(%)	2.5	2.6	1.0	-0.1	-	Iberia
	White collar workers	(%)	5.0	3.5	1.1	1.5	-	Iberia
	Blue collar workers	(%)	6.2	3.9	0.9	2.3	-	Iberia
	Average	(%)	4.5	3.4	1.0	1.1	-	Iberia
	Pension within 10 years - Iberia <sup>(3)</sup>							
	Managers	(%)	26.1	25.6	21.4	0.5	-	Iberia

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Middle Managers	(%)	13.7	14.4	23.7	-0.7	-	Iberia
	White collar workers	(%)	23.3	24.1	14.2	-0.8	-	Iberia
	Blue collar workers	(%)	28.3	25.9	26.5	2.4	-	Iberia
-	Average	(%)	21.6	21.8	24.5	-0.2	-	Iberia
	Europe and North Africa							
	Pension within 5 years - Russia							
	Managers	(%)	10.5	11.1	17.4	-0.6	_	Russia
	Middle Managers	(%)	10.2	9.2	10.0	1.0	_	Russia
	White collar workers	(%)	11.1	10.4	11.1	0.7		Russia
	Blue collar workers	(%)	7.7	6.2	8.5	1.5		Russia
	Average	(%)	9.4	8.3	9.8	1.1		Russia
	Pension within 10 years - Russia	(70)	0.4	0.0	0.0	1.1		1103310
	Managers	(%)	15.8	11.1	26.1	4.7	_	Russia
	Middle Managers	(%)	22.4	21.5	24.8	0.9		Russia
	White collar workers	(%)	24.9	24.7	26.5	0.9		Russia
		(%)						
	Blue collar workers	(%)	19.2	19.5	23.1 24.7	-0.3	_	Russia
	Average	(%)	21.9	21.8	24.7	0.1		Russia
	Pension within 5 years - Romania	(0()	0.4		47.0			Б .
	Managers	(%)	0.1	0.1	17.6	-	-	Romania
-	Middle Managers	(%)	0.4	0.3	4.0	0.1	-	Romania
	White collar workers	(%)	1.7	2.0	3.8	-0.3	-	Romania
	Blue collar workers	(%)	0.5	0.6	1.4	-0.1	-	Romania
	Average	(%)	2.6	3.0	2.8	-0.4	-	Romania
	Pension within 10 years - Romania							
	Managers	(%)	0.1	0.1	21.1	-	-	Romania
	Middle Managers	(%)	1.4	1.4	14.4	-	-	Romania
	White collar workers	(%)	7.7	7.7	15.1	-	-	Romania
	Blue collar workers	(%)	6.1	5.6	11.6	0.5	-	Romania
	Average	(%)	15.4	14.5	13.5	0.9	-	Romania
	South America <sup>(6)</sup>							
	Pension within 5 years - South America							
	Managers	(%)	18.3	5.0	9.9	13.3	- S	outh America
	Middle Managers	(%)	11.5	4.4	6.2	7.1	- S	outh America
	White collar workers	(%)	10.1	5.5	9.0	4.6	- S	outh America
	Blue collar workers	(%)	11.6	5.5	9.2	6.1	- S	outh America
	Average	(%)	11.7	7.2	12.0	4.5	- S	outh America
	Pension within 10 years - South America							
	Managers	(%)	34.4	14.6	16.3	19.8	- S	outh America
	Middle Managers	(%)	22.6	15.1	12.1	7.5		outh America
	White collar workers	(%)	16.8	14.5	15.8	2.3		outh America
	Blue collar workers	(%)	16.6	16.5	13.1	0.1		outh America
	Average	(%)	19.5	19.1	21.3	0.4		outh America
-	North and Central America <sup>(5)</sup>	(1.27						
	Pension within 5 years - North America							
	Managers	(%)	3.5	51.8	50.0	-48.3	-	North America
	Middle Managers	(%)	0.4	6.8	6.6	-6.4	-	North America
	White collar workers	(%)	1.2	6.3	6.1	-5.1	-	North America
	Blue collar workers	(%)	-	10.5	10.2	-10.5	-	North America
	Average	(%)	5.1	8.8	8.5	-3.7	-	North America

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Pension within 10 years - North America							
	Managers	(%)	9.9	51.8	50.0	-41.9	-	North America
	Middle Managers	(%)	3.0	17.1	16.5	14.1	-	North America
-	White collar workers	(%)	3.4	12.6	12.2	-9.2	-	North America
	Blue collar workers	(%)	-	28.1	27.1	-28.1	=	North America
	Average	(%)	16.3	19.6	18.9	-3.3	-	North America
	Pension within 5 years - Central America							
	Managers	(%)	-	-	-	-	-	Central America
	Middle Managers	(%)	-	2.2	5.5	-2.2	-	Central America
	White collar workers	(%)	-	0.4	-	-0.4	-	Central America
	Blue collar workers	(%)	0.1	3.4	2.4	-3.3	-	Central America
	Average	(%)	0.1	6.0	1.5	-5.9	-	Central America
	Pension within 10 years - Central America							
	Managers	(%)	-	0.6	33.3	-0.6	-	Central America
	Middle Managers	(%)	0.1	8.1	16.4	-8.0	-	Central America
	White collar workers	(%)	-	2.3	0.9	-2.3	-	Central America
	Blue collar workers	(%)	0.1	15.5	15.1	-15.4	-	Central America
	Average	(%)	0.2	26.6	8.1	-26.3	-	Central America
-	MATERNITY - Parental leave							
	Parental leave by gender	(no.)	2,429	2,171	2,090	258	11.9	Enel
	- men	(no.)	1,297	1,048	968	249	23.8	Enel
	- women	(no.)	1,132	1,123	1,122	9	0.8	Enel
	EQUAL OPPORTUNITIES							
405-1	Gender							
	Incidence of employees by gender							
	Women	(%)	20.6	20.2	19.7	0.4	_	Enel
	Managers	(%)	0.4	0.4	0.3	_		Enel
	Middle Managers	(%)	4.6	4.2	4.0	0.4		Enel
	White collar workers	(%)	14.7	14.8	14.5	-0.1	_	Enel
	Blue collar workers	(%)	0.8	0.8	0.9	-0.1		Enel
	Men	(%)	79.4	79.8	80.3	-0.4		Enel
-	Managers	(%)	1.7	1.7		-0.4	-	
					1.6	- 0.4		Enel
	Middle Managers	(%)	11.9	11.6	11.6	0.4	-	Enel
	White collar workers	(%)	37.2	37.8	38.5	-0.6	-	Enel
	Blue collar workers	(%)	28.7	28.8	28.7	-0.1		Enel
	Level of female staff <sup>(11)</sup>	(%)	27.0	25.6	24.6	1.3	-	Enel
	Rewarding of female staff <sup>(12)</sup>	(%)	91.5	94.0	91.5	-2.4	-	Enel
405-2	Ratio of gross salary Women/Men							
	Ratio of gross salary Women/Men	(%)	101.9	101.7	103.3	0.2	-	Enel
	Managers	(%)	82.3	89.0	90.5	-6.7		Enel
	Middle Managers	(%)	95.4	96.3	93.4	-0.9	-	Enel
	White collar workers	(%)	92.2	93.9	97.9	-1.7	-	Enel
40E 4	Blue collar workers	(%)	85.1	82.2	85.4	2.9	-	Enel
405-1	Disability  Disabled or belonging to protected categories by gender	(no.)	1,982	2,014	2,114	-32	-1.6	Enel

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	- of whom men	(no.)	1,378	1,396	1,484	-18	-1.3	Enel
	- of whom women	(no.)	604	618	630	-14	-2.3	Enel
	Incidence of disabled or belonging to protected categories by gender	(%)	3.2	3.2	3.1	-	-	Enel
	- of whom men	(%)	2.2	2.2	2.2	-	-	Enel
	- of whom women	(%)	1.0	1.0	0.9	-	-	Enel
	Disabled or belonging to protected categories by level							
	Managers	(no.)	1	1	1	-	-	Enel
	Middle Managers	(no.)	88	84	86	4	4.8	Enel
	White collar workers	(no.)	1,761	1,815	1,832	-54	-3.0	Enel
	Blue collar workers	(no.)	132	114	195	18	15.8	Enel
	Incidence of disabled or belonging to protected categories by level							
	Managers	(%)	-	-	-	-	-	Enel
	Middle Managers	(%)	0.2	0.1	0.1	0.1	-	Enel
	White collar workers	(%)	2.8	2.9	2.7	-0.1	-	Enel
	Blue collar workers	(%)	0.2	0.2	0.3	-	-	Enel
	WORKING FROM HOME							
	Telecommuting license							
	Employees with Telecommuting license by gender	(no.)	2,671	1,038	956	1,633	-	Enel
	- of whom men	(no.)	1,274	427	387	847	-	Enel
	- of whom women	(no.)	1,397	611	569	786	_	Enel
	Employees with Telecommuting license by gender	(%)	4.2	1.7	1.4	2.5	-	Enel
	- of whom men	(%)	2.0	0.7	0.6	1.3	-	Enel
	- of whom women	(%)	2.2	1.0	0.8	1.2	-	Enel
102-41	RELATIONS WITH UNIONS							
	Union membership in the electricity sector	(%)	47.4	49.4	50.7	-2.0	-	Enel
	Employees covered by collective agreements, by geographic area							
	Total Enel(17)	(no.)	57,828	57,755	63,227	73	0.1	Enel
		(%)	91.9	93.0	93.1	-1.1	-	Enel
	Italy	(no.)	31,114	31,956	33,040	-842	-2.6	Italy
		(%)	100.0	100.0	100.0	-	-	Italy
	Iberia <sup>(3)</sup>	(no.)	8,995	9,658	9,881	-663	-6.9	Iberia
		(%)	91.0	94.9	92.4	-3.9	-	Iberia
	Romania	(no.)	3,063	3,111	3,131	-48	-1.5	Romania
		(%)	100.0	100.0	100.0	-	-	Romania
	Russia	(no.)	2,350	2,447	2,586	-97	-4.0	Russia
		(%)	92.1	92.7	93.6	-0.6	-	Russia
	South America <sup>(6)</sup>	(no.)	12,035	10,508	10,394	1,527	14.5	South America
		(%)	86.7	81.0	81.2	5.7	-	South America
	North and Central America <sup>(5)</sup>	(no.)	215	24	24	191	-	North and Central America
		(%)	10.5	2.7	3.0	7.8	-	North and Central
	Sub-Saharan Africa and Asia <sup>(7)</sup>	(no.)	55	50	-	5	10.0	America Sub-Saharian Africa and Asia
		(%)	28.2	27.0	-	1.2	-	Sub-Saharian Africa and Asia
	Other (Branches)(8)	(no.)	1	1	4,115	-	-	Other (Branches)
		(%)	3.3	3.6	94.6	-0.3	-	Other (Branches)

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Dispute with employees							
	Total proceedings	(no.)	3,496	3,205	3,300	291	9.1	Enel
	Incidence of proceedings as defendant	(%)	80.7	96.2	96.3	-15.5	-	Enel

- (1) 2015 and 2016 data have been restated because of organizational changes/changes in scope.
- (2) During 2017 the companies EnerNOC, Demand Energy Networks, Tynemouth Energy Storage, eMotorWerks have been acquired in North America, and the company Enel Distribuição Goiás in South America. In 2016 Slovakia has been removed from the consolidation scope.
- (3) Depending on organizational changes Morocco is counted within Iberia scope.
- (4) Within the scope are considered Russia, Romania and other countries (Belgium, Bulgaria, Greece, Egypt, France, Germany and Turkey).
- (5) Starting from 2017, Uruguay is considered within the scope of South America. 2016 and 2015 data have been reviewed according to the
- Uruguay has been considered within the scope. 2016 and 2015 data have been reviewed according to the change in scope.
- Within the scope are considered the following Countries: India, Kenya, South Africa.
- (8) Within the scope are considered the following Countries: Algeria, Saudi Arabia, Australia, Croatia, Indonesia, Israele, Holland, Slovakia.
- (9) Turnover rate = total terminations/total workforce.
- (10) In 2016 the new performance assessment process was launched, a global campaign. The data was calculated for all employees at December 31. If only eligible and reachable people are considered (i.e. those who, in September 2016, were part of the workforce and had been working for at least three months in 2016. In addition, people were not considered who, for personal or professional reasons, could not access the print or online questionnaire) the % of performance assessment in 2016 was 99%.
- (11) Female managers and middle managers out of total Managers and Middle Managers.
- (12) Calculated as the ratio between the average salary of Female Managers and Middle Managers and the average salary (men + women) of Managers and Middle Managers.
- (13) In 2016 Belgium and France were removed from the consolidation scope.
- (14) Among the fixed-term contracts, 4 insertion/work experiece contracts are counted in 2017, 5 in 2016 and 88 in 2015.
- (15) Data also includes 63 insertion/work experience contracts for 2016 in Romania.
- (16) Data also includes 10 insertion/work experience contracts for 2016 in South Africa.
- (17) Data for 2015 also includes Belgium and France, removed from the consolidation scope in 2016.



#### Technologies and Innovability

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	RESEARCH AND INNOVATION							
	Technological innovation(1)	(mil euros)	94	59	76	35	59.9	Enel
	Research personnel	(no.)	361	317	236	44	13.9	Enel
302-5	PROMOTION OF ENERGY EFFICIENCY							
	Energy efficiency certificates	(mil)	3.13	3.03	3.00	0.10	3.3	Italy
	Customers with smart meters(2)	(mil)	43.8	41.4	38.5	2.4	5.8	Enel
	Smart meters installed(3)	(mil)	48.30	45.82	42.97	2.49	5.4	Enel
	Smart meters installed Italy	(mil)	35.95	35.61	35.37	0.33	0.9	Italy
	Smart meters installed abroad	(mil)	12.36	10.20	7.59	2.16	21.1	Abroad
	Dissemination of smart meters abroad <sup>(4)</sup>	(mil)	13.75	11.17	8.29	2.58	23.1	Abroad

<sup>(1)</sup> In 2017 investments in Research and Development were about 58% in the Renewables Division and for around 32% the Infrastructure and

<sup>(2)</sup> Customers with active first- and second-generation meters and active M2 production meters.

<sup>(3)</sup> First- and second-generation active meters, M2 active meters and non-active meters (stopped and preposated).

<sup>(4)</sup> The data refer to the number of meters sold abroad. Following a new methodological approach the 2015-2017 data are cumulative.

## Customer focus

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	CUSTOMERS							
EU3; 102-6	Electricity market (average number of customers)					-		
	Customers Italy	(no.)	26,420,058	26,776,635	27,072,083	-356,577	-1.3	Italy
	Free market	(no.)	7,552,217	6,732,570	6,105,541	819,647	12.2	Italy
	- mass market customers <sup>(1)</sup>	(no.)	5,938,899	5,266,409	4,743,441	672,490	12.8	Italy
	- business customers <sup>(1)</sup>	(no.)	1,580,305	1,420,466	1,321,366	159,839	11.3	Italy
	- customers in protected categories	(no.)	33,013	45,695	40,733	-12,682	-27.8	Italy
	Regulated market	(no.)	18,867,841	20,044,065	20,966,542	-1,176,224	-5.9	Italy
	Customers Iberia	(no.)	10,941,644	11,047,937	11,111,105	-106,293	-1.0	Iberia
	Free market <sup>(1)</sup>	(no.)	5,475,822	5,185,041	4,756,880	290,781	5.6	Iberia
	Regulated market <sup>(1)</sup>	(no.)	5,465,822	5,862,896	6,354,225	-397,074	-6.8	Iberia
	Customers South America	(no.)	18,044,215	15,478,255	15,074,266	2,565,960	16.6	South America
	Free market	(no.)	-	-	-		-	South America
	Regulated market	(no.)	18,044,215	15,478,255	15,074,266	2,565,960	16.6	South America
	Customers South America - Argentina	(no.)	2,518,795	2,490,810	2,479,069	27,985	1.1	Argentina
	Free market	(no.)	-		-	-	_	
	Regulated market	(no.)	2,518,795	2,490,810	2,479,069	27,985	1.1	Argentina
	Customers South America - Brazil	(no.)	8,986,533	6,843,998	6,634,293	2,142,535	31.3	Brazil
	Free market	(no.)	-	-	-	-	-	Brazil
	Regulated market	(no.)	8,986,533	6,843,998	6,634,293	2,142,535	31.3	
	Customers South America - Chile	(no.)	1,855,668	1,803,598	1,760,047	52,070	2.9	Chile
	Free market	(no.)	-	1,000,000	1,700,047	- 52,070	- 2.0	
	Regulated market	(no.)	1,855,668	1,803,598	1,760,047	52,070	2.9	Chile
	Customers South America - Colombia	(no.)	3,296,738	2,986,719	2,865,135	310,019	10.4	
	Free market	(no.)	-	_	-		_	Colombia
	Regulated market	(no.)	3,296,738	2,986,719	2,865,135	310,019	10.4	Colombia
	Customers South America - Peru	(no.)	1,386,481	1,353,130	1,335,723	33,351	2.5	Peru
	Free market	(no.)	-		-	-		Peru
	Regulated market	(no.)	1,386,481	1,353,130	1,335,723	33,351	2.5	Peru
	Customers Romania	(no.)	2,782,014	2,736,908	2,691,849	45,106	1.6	Romania
	Free market	(no.)	656,241	285,969	61,233	370,272	-	
	Regulated market	(no.)	2,125,773	2,450,939	2,630,616	-325,166	-13.3	Romania
	Customers France <sup>(7)</sup>	(no.)	-	2,100,000	1,162	-	- 10.0	France
	Free market	(no.)	_	_	1,162		_	France
	Customers Slovakia <sup>(7)</sup>	(no.)	_	_	6,113	_	_	
	Free market	(no.)			6,113			
	Total customers Enel	(no.)	58,187,931	56,039,735	55,956,577	2,148,956	3.8	Enel
	Total free market <sup>(1)</sup>	(no.)	13,684,280	12,203,580	10,930,928	1,480,700	12.1	Enel
	Total regulated market <sup>(1)</sup>	(no.)	44,503,651	43,836,155	45,025,649	667,496	1.5	
	Gas market (average number of customers)	(110.)	44,303,031	43,000,100	43,023,043	007,430	1.5	Lifei
	Customers Italy	(no.)	4,003,484	3,876,191	3,711,422	127,293	3.3	Italy
	Customers Spain	(no.)	1,550,424	1,513,379	1,286,443	37,045	2.4	
	· · · · · · · · · · · · · · · · · · ·							· · · · · · · · · · · · · · · · · · ·
	Total customers gas market	(no.)	5,553,908	5,389,570	4,997,865	164,338	3.0	
	Total customers Enel electricity and gas	(no.)	63,741,839	61,429,305	60,954,443	2,312,534	3.8	Enel
	PUBLIC LIGHTING Customers public lighting	/n c \	0.405	0.400	2 502	0.5	0.4	المعا
	Customers public lighting	(no.)	3,405	3,490	3,592	-85	-2.4	Italy
	Light sources public lighting	(,000)	1,855	1,921	2,079	-66	-3.5	Italy

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	VOLUMES SOLD							
	Electricity							
	Free market <sup>(1)</sup>	(GWh)	155,955	140,905	132,279	15,050	%  10.7 5.4 8.239.7  4.3 3.6 5.6 15.9 10.9	Enel
	Regulated market <sup>(1)</sup>	(GWh)	128,798	122,149	127,837	6,649	5.4	Enel
	Total volumes sold	(GWh)	284,753	263,054	260,116	21,699	8.2	Enel
	Sales "Green Energy"(2)	(GWh)	-	-	13,350	-	_	Italy
	Revenues "Green Energy" invoiced to end users <sup>(3)</sup>	(mil euros)	976	1,619	1,647	-643	-39.7	Italy
	Gas							
	Italy	(Gm³)	4.8	4.6	4.1	0.2	4.3	Italy
	- mass market customers	(Gm³)	2.9	2.8	3.4	0.1	3.6	Italy
	- business customers	(Gm³)	1.9	1.8	0.7	0.1	5.6	Italy
	Spain	(Gm³)	6.9	6.0	5.3	0.9	15.9	Spain
	Total volumes sold Enel	(Gm³)	11.7	10.6	9.4	1.1	10.9	Enel
	ENERGY AVAILABILITY AND REALIABILITY							
EU11	Efficency thermal generation(4)							
	Incidence of CCGT generation out of total thermal power	(%)	34.7	34.7	33.8	-	-	Enel
	Average thermal generation yield without heat component	(%)	40.7	40.2	40.1	0.5	-	Enel
	Average thermal generation yield with heat	(%)	41.6	42.0	41.8	-0.4	-	Ene
	Average yield by technology without heat component							
	Yield coal plants	(%)	36.0	36.1	36.2	-0.1	-	Ene
	Yield oil/gas plants	(%)	36.8	36.7	37.1	0.1		Ene
	Yield CCGT plants	(%)	55.7	55.4	55.3	0.3	-	Ene
	Average yield by geographic area without heat component							
	Average thermal generation yield Italy	(%)	39.5	40.2	39.1	-0.7	-	Italy
	Average thermal generation yield Russia	(%)	38.4	38.3	38.9	0.1		Russia
	Average thermal generation yield lberia	(%)	41.4	40.2	40.7	1.2		Iberia
	Average thermal generation yield Chile	(%)	44.5	45.6	42.8	-1.1		Chile
	Average thermal generation yield Argentina  Average thermal generation yield	(%)	46.8	43.3	44.3	-0.7		Argentina Brazi
	Brazil  Average thermal generation yield	(%)	49.1	45.1	46.5	-3.3		Peru
	Peru	(%)				1.1		Colombia
	Average thermal generation yield Colombia  Average yield with heat component	(70)	26.9	25.8	26.5	1.1		COIOITIDIA
	by technology	10/. \	20	n.o.	2.0	2.2		Ene
	Yield lignite plants  Yield coal plants	(%)	n.a. 36.2	n.a. 36.2	n.a.	n.a.		
	<u> </u>				36.4	-		Ene
	Yield oil/gas plants	(%)	40.6	40.6	42.0	-	-	Ene
	Yield natural gas plants		n.a.	n.a.	n.a.	n.a.		Ene
	Yield CCGT plants  Average yield with heat component by geographic area	(%)	55.7	55.6	55.5	0.1		Ene
	Average thermal generation yield Russia	(%)	41.5	41.5	42.8	-	-	Russia
EU30	Availability of thermal generation by geographic area							
	Average availability thermal generation Italy	(%)	89.0	86.3	90.8	2.7	-	Italy
	Average availability thermal generation Russia	(%)	82.7	81.5	81.7	1.2	-	Russia
	Average availability thermal generation Iberia	(%)	92.6	94.7	94.1	-2.1	-	Iberia

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Average availability thermal generation Chile	(%)	90.6	88.7	86.0	1.9	7.7 10.1 -12.2 26.8 -4.2 27.4 -1.6 -17.5 6.7	Chile
	Average availability thermal generation Argentina	(%)	82.2	66.0	65.1	16.2	-	Argentina
	Average availability thermal generation Brazil	(%)	99.6	85.6	91.9	14.0	=	Brazil
	Average availability thermal generation Peru	(%)	89.3	94.2	94.4	-4.9	=	Peru
	Average availability thermal generation Colombia	(%)	94.1	72.2	82.1	21.9	=	Colombia
EU28	Service interruptions - frequency (SAIFI)							
	Frequency of interruptions by customer (excluding external causes)	(no.)	1.5	1.4	1.7	0.1	7.7	Italy
	Frequency of interruptions by customer (including external causes)	(no.)	1.6	1.5	1.7	0.1	10.1	Italy
	Frequency of interruptions by customer Romania	(no.)	4.1	4.7	5.1	-0.6	-12.2	Romania
	Frequency of interruptions by customer Iberia	(no.)	1.8	1.4	1.6	0.4	26.8	Iberia
	Frequency of interruptions by customer Peru	(no.)	2.5	2.6	2.9	-0.1	-4.2	Peru
	Frequency of interruptions by customer Chile	(no.)	1.7	1.4	1.5	0.3	27.4	Chile
	Frequency of interruptions by customer Argentina	(no.)	6.8	6.9	6.6	-0.1	-1.6	Argentina
	Frequency of interruptions by customer Brazil (Ampla)	(no.)	9.9	12.0	12.2	-2.1	-17.5	Brazil
	Frequency of interruptions by customer Brazil (Coelce)	(no.)	4.9	4.6	4.5	0.3	6.7	Brazil
	Frequency of interruptions by customer Colombia	(no.)	10.0	8.8	10.9	1.2	12.8	Colombia
EU29	Service interruptions - duration (SAIDI)							
	Service continuity index Italy (excluding external causes)	(min)	42	35	42	7	19.5	Italy
	Service continuity index Italy (including external causes)	(min)	43	37	44	6	18.3	Italy
	Service continuity index Romania	(min)	191	210	238	-19	-9.1	Romania
	Service continuity index Iberia	(min)	84	62	75	22	36.7	Iberia
	Service continuity index Peru	(min)	469	485	539	-16	-3.3	Peru
	Service continuity index Chile	(min)	230	207	225	23	11.4	Chile
	Service continuity index Argentina	(min)	1,770	2,046	1,928	-276	-13.5	Argentina
	Service continuity index Brazil (Ampla)	(min)	1,085	1,321	1,629	-236		Brazil
	Service continuity index Brazil (Coelce)	(min)	515	499	596	16	3.1	Brazil
	Service continuity index Colombia	(min)	820	688	841	132	19.3	Colombia
EU12	Grid losses							
	Grid losses Italy	(%)	4.8	4.8	5.0	-	-	Italy
	Grid losses Romania	(%)	11.0	11.4	11.3	-0.4	_	Romania
	Grid losses Iberia	(%)	8.1	8.4	9.3	-0.3	_	Iberia
	Grid losses Peru	(%)	8.2	7.8	8.1	0.4	-	Peru
	Grid losses Chile	(%)	5.1	5.3	5.0	-0.2	-	Chile
	Grid losses Argentina	(%)	12.0	12.0	12.3	-	-	Argentina
	Grid losses Brazil (Ampla)	(%)	20.4	19.4	19.6	1.0	_	Brazil
	Grid losses Brazil (Coelce)	(%)	13.6	12.6	12.5	1.0		Brazil
	Grid losses Colmbia	(%)	7.8	7.1	7.2	0.7	_	Colombia
	SERVICE QUALITY	(70)	7.0	7.1	1.2	0.7		COIOITIDIA
	ELECTRICITY MARKET ITALY							
	Commercial structure							
	Enel retail outlets (electricity + gas)	(no.)	123	130	130	-7	-5.4	Italy
				700	600		14.3	
	Indirect physical network	(no.)	800	700	000	100	14.3	Italy

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Call Center							
	Regulated market - 800 900 800							
	Call Center service level	(%)	97.1	96.2	98.0	0.9	-	Italy
	Average waiting time	(sec)	104	140	76	-36.0	-25.7	Italy
	Training for Call Center operator (IN Enel)	(h/pro- cap)	16	31	13	-15.0	-48.4	Italy
	Free market (electricity and gas) - 800 900 860							
	Call Center service level	(%)	97.6	97.1	98.0	0.5	-	Italy
	Average waiting time	(sec)	94	92	70	2.0	2.2	Italy
	Training for Call Center operator (IN Enel)	(h/pro- cap)	23	46	35	-23.0	-50.0	Italy
	Service speed							
	Execution of simple work	(dd)	5.5	6.2	6.9	-0.7		Italy
	Supply activation	(dd)	0.7	0.8	0.8	-0.1	-12.5	Italy
102-43; 102-44	Customer Satisfaction							
	Regulated market							
	Customer Satisfaction Index <sup>(5)</sup>	(r)	94.4	91.2	92.6	3.2	3.5	Italy
	Frequency of surveys	(no.)	2	2	2	-	-	Italy
	Written complaints and information requests	(,000)	119.8	130.0	99.1	-10.2		Italy
	Response time to written complaints	(dd)	17.0	25.6	16.5	-8.6	-33.6	Italy
	Free market							
	Customer Satisfaction Index <sup>(5)</sup>	(r)	93.1	90.3	92.4	2.8	3.1	Italy
	Frequency of surveys	(no.)	2	2	2	-	-	Italy
	Written complaints and information requests	(,000)	69.7	77.3	74.1	-7.6	-9.8	Italy
	Response time to written complaints	(dd)	11.2	13.2	12.6	-2.0	-15.2	Italy
	ELECTRICITY MARKET ROMANIA							
	Commercial structure							
	Agencies	(no.)	16	15	15	1.0	6.7	Romania
	Indirect channel	(no.)	70	44	39	26.0	59.1	Romania
	Call Center							
	Call Center service level Regulated market <sup>(6)</sup>	(%)	78.8	83.7	93.7	-4.9	-	Romania
	Customer Satisfaction							
	Regulated market							
	Customer Satisfaction Index	(r)	81.0	79.1	77.4	1.9	2.4	Romania
	Written complaints and information requests	(,000)	29.6	23.6	21.1	6.0	25.5	Romania
	Response time to written complaints	(dd)	11.4	6.0	7.0	5.4	89.5	Romania
	Free market							
	Customer Satisfaction Index	(r)	87.0	84.9	84.8	2.1	2.5	Romania
	Written complaints and information requests	(,000)	23.2	7.1	2.0	16.1	-	Romania
	Response time to written complaints	(dd)	12.4	8.0	8.0	4.4	55.1	Romania
	Free and regulated market							
	Written complaints and information requests commercial area	(,000)	52.8	30.6	23.1	22.1	72.2	Romania
	Response time to written complaints commercial area <sup>(8)</sup>	(dd)	12.0	6.5	7.0	5.5	85.7	Romania
	ELECTRICITY MARKET SPAIN							
	Commercial structure							
	Agencies	(no.)	11	11	11	-	-	Spain
	Indirect channel	(no.)	288	288	299	-	-	Spain
	Call Center							
	Call Center service level	(%)	96.4	96.5	96.1	-0.1	-	Spain
	Service speed Supply activation	(dd)	6.8	6.8	6.9	-		Spain
	Customer Satisfaction free market (former TUR market)							

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Customer Satisfaction Index	(r)	7.2	6.9	6.3	0.3	3.3	Spain
	Written complaints and information requests	(,000)	8.1	10.0	12.3	-1.9	-18.9	Spain
	Response time to written complaints	(dd)	7.8	12.2	6.8	-4.4	-36.1	Spain
	Customer Satisfaction free market (former no TUR market)							
	Customer Satisfaction Index	(r)	7.0	6.9	6.4	0.1	1.7	Spain
	Written complaints and information requests	(,000)	14.1	18.7	17.5	-4.6	-24.5	Spain
	Response time to written complaints	(dd)	8.1	13.3	8.5	-5.2	-39.1	Spain
	GAS MARKET ITALY							
	Customer Satisfaction Gas							
	Written complaints and information requests	(,000)	37.5	35.3	38.7	2.2	6.2	Italy
	Response time to written complaints	(dd)	9.5	14.7	14.0	-5.2	-35.4	Italy
	GAS MARKET SPAIN							
	Customer Satisfaction Gas							
	Written complaints and information requests	(,000)	3.2	6.5	5.1	-3.3	-51.5	Spain
	Response time to written complaints	(dd)	9.4	20.7	8.5	-11.3	-54.6	Spain
	ACCESSIBLITY OF ENERGY							
EU27	Customers disconnected for non- payment Italian market							
	by time from disconnection to payment - Italy (Regulated market)	(no.)	529,964	496,008	656,710	33,956	6.8	Italy
	< 48 h	(no.)	284,851	259,847	343,029	25,004	9.6	Italy
	48 h - 1 week	(no.)	137,999	137,365	178,776	634	0.5	Italy
	1 week - 1 month	(no.)	106,538	98,307	134,132	8,231	8.4	Italy
	1 month - 1 year	(no.)	576	489	773	87	17.8	Italy
	> 1 year	(no.)	-	-	-		-	Italy
	by time from payment to reconnection - Italy (Regulated market)	(no.)	529,964	496,008	656,710	33,956	6.8	Italy
	< 24 h	(no.)	447,331	438,312	591,562	9,019	2.1	Italy
	24 h - 1 week	(no.)	81,539	56,611	64,453	24,928	44.0	Italy
	> 1 week	(no.)	1,094	1,085	695	9	0.8	Italy
	by time from disconnection to payment - Italy (Free market)	(no.)	501,675	475,247	363,687	26,428	5.6	Italy
	< 48 h	(no.)	245,244	237,665	287,312	7,579	3.2	Italy
	48 h - 1 week	(no.)	122,447	106,029	47,279	16,418	15.5	Italy
	1 week - 1 month	(no.)	122,273	120,996	21,823	1,277	1.1	Italy
	1 month - 1 year	(no.)	11,710	10,557	7,273	1,153	10.9	Italy
	> 1 year	(no.)	1	-	-	1	-	Italy
	by time from payment to reconnection - Italy (Free market)	(no.)	491,179	442,078	338,228	49,101	11.1	Italy
	< 24 h	(no.)	480,485	428,072	284,112	52,413	12.2	Italy
	24 h - 1 week	(no.)	10,619	13,629	50,734	-3,010	-22.1	Italy
	> 1 week	(no.)	75	377	3,382	-302	-80.1	Italy
	by time from disconnection to payment - Italy (Gas market)	(no.)	105,092	87,510	87,240	17,582	20.1	Italy
	< 48 h	(no.)	14,476	14,723	58,453	-247	-1.7	Italy
	48 h - 1 week	(no.)	34,140	29,780	14,830	4,360	14.6	Italy
	1 week - 1 month	(no.)	48,938	37,670	12,213	11,268	29.9	Italy
	1 month - 1 year	(no.)	7,536	5,337	1,744	2,199	41.2	Italy
	> 1 year	(no.)	2	-	-	2	-	Italy
	by time from payment to reconnection - Italy (Gas market)	(no.)	89,400	81,384	81,133	8,016	10	Italy
	< 24 h	(no.)	86,387	67,716	13,794	18,671	28	Italy
	24 h - 1 week	(no.)	2,688	13,417	52,736	-10,729	-80	Italy
	> 1 week	(no.)	325	251	14,603	74	29	Italy
	Market Romania							
	by time from disconnection to payment - Romania	(no.)	17,426	21,500	21,107	-4,074	-18.9	Romania
	< 48 h	(no.)	11,825	13,508	13,906	-1,683	-12.5	Romania

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	48 h - 1 week	(no.)	2,074	3,540	2,076	-1,466	-41.4	Romania
	1 week - 1 month	(no.)	2,487	2,712	3,764	-225	-8.3	Romania
	1 month - 1 year	(no.)	1,040	1,740	1,361	-700	-40.2	Romania
	by time from payment to reconnection - Romania	(no.)	12,525	16,152	14,802	-3,627	-22.5	Romania
	< 24 h	(no.)	9,696	3,293	11,944	6,403	-	Romania
	24 h - 1 week	(no.)	2,532	12,544	2,438	-10,012	-79.8	Romania
	> 1 week	(no.)	297	315	420	-18	-5.7	Romania
	Market Spain							
	by time from disconnection to payment -Spain	(no.)	58,977	152,701	234,263	-93,724	-61.4	Spain
	< 48 h	(no.)	46,353	115,455	135,722	-69,102	-59.9	Spain
	48 h - 1 week	(no.)	5,883	17,136	19,246	-11,253	-65.7	Spain
	1 week - 1 month	(no.)	4,424	13,045	31,634	-8,621	-66.1	Spain
	1 month - > 1 year	(no.)	2,317	7,065	47,661	-4,748	-67.2	Spain
	by time from payment to reconnection - Spain	(no.)	58,827	152,509	207,145	-93,682	-61.4	Spain
	< 24 h	(no.)	51,992	141,947	193,097	-89,955	-63.4	Spain
	24 h - 1 week	(no.)	5,735	9,831	12,816	-4,096	-41.7	Spain
	> 1 week	(no.)	1,100	731	1,232	369	50.5	Spain
	Market South America							
	by time from disconnection to payment - South America	(no.)	2,019,769	2,281,638	1,924,830	-261,869	-11.5	South America
	< 48 h	(no.)	1,220,988	1,372,215	1,158,458	-151,227	-11.0	South America
	48 h - 1 week	(no.)	270,581	362,244	292,724	-91,663	-25.3	South America
	1 week - 1 month	(no.)	245,149	315,329	281,338	-70,180	-22.3	South America
	1 month - > 1 year	(no.)	282,976	231,794	192,269	51,182	22.1	South America
	> 1 year	(no.)	75	56	41	19	33.9	South America
	by time from payment to reconnection - South America	(no.)	2,249,345	2,511,632	2,110,181	-262,287	-10.4	South America
	< 24 h	(no.)	2,128,458	2,400,998	1,997,340	-272,540	-11.4	South America
	24 h - 1 week	(no.)	84,902	107,872	109,360	-22,970	-21.3	South America
	> 1 week	(no.)	35,985	2,762	3,481	33,223	-	South America
	Disputes with customers							
	Electricity market							
	Total proceedings	(no.)	98,317	97,166	120,337	1,151	1.2	Enel
	Incidence of proceedings as defendant	(%)	76.6	74.1	79.6	2.5	-	Enel
	Gas market							
	Total proceedings	(no.)	970	2,456	2,380	-1,486	-60.5	Enel
	Incidence of proceedings as defendant	(%)	45.5	87.3	79.3	-41.8	-	Enel
	Regulatory disputes							
	Total proceedings	(no.)	1,314	1,264	1,376	50	4.0	Enel
	Incidence of proceedings as defendant	(%)	74.8	73.4	63.0	1.4	-	Enel

<sup>(1)</sup> The 2016 and 2015 figures have been recalculated in line with the methodological approach that provides for the distinction in the free market and regulated also for Iberia.

<sup>(2)</sup> As from January 1, 2016, as envisaged by the Ministerial Decree of July 6, 2012, the mechanism of Green Certificates (GC) is replaced by a new form of incentive. The subjects who have accrued the right to the GCs keep the benefit for the remaining subsidized period, but in a different form. The new incentive is obtained by accessing GRIN, GSE's IT system which manages the recognition of tariffs.

<sup>(3)</sup> The 2016 and 2015 figures were restated due to difference payments and adjustments of the previous years.

<sup>(4)</sup> Efficiency of the power plants was calculated on the basis of the operation of the plants at the load level where there is the maximum efficiency for those plants for which the load curve is available. This approach was not applied to the heat component since it already has a high yield; availability was calculated by removing the internal causes of non-availability. Some 2016 and 2015 figures have been recalculated due to an update of the load curves.

<sup>(5)</sup> The index reported is the ICS (Customer Satisfaction Index), calculated on the surveys from the mass market segment (residential and microbusiness). The ICS index reported refers to the first Semester 2017.

<sup>(6)</sup> Due to the unavailability of the 2016 final figures, the value of 75.2 for the month of December was reported in the 2016 Sustainability Report.

<sup>(7)</sup> In 2016 Slovakia and France were removed from the consolidation scope.

<sup>(8)</sup> The 2016 figures have been restated due to the new calculation method applied.

### Occupational health and safety

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	SAFETY <sup>(1)</sup>							
	Safety expense						-2.6 -1.3 -19.2 -38.0 9.8 21.1 -5.8 -3.2 -7.820.0 33.3 -100.0 20.0 -100.0 -10.6 -15.0 55.6	
	Safety expense by employee	(euro)	4,127	4,239	3,564	-112	-2.6	Enel
	Total safety expense	(mil euros)	259.6	263.1	242.0	-3.5	-1.3	Enel
	Training and information	(mil euros)	28.5	35.3	22.7	-6.8	-19.2	Enel
	Health Surveillance	(mil euros)	4.4	7.1	6.9	-2.7	-38.0	Enel
	Personal Protection Devices (PPDs)	(mil euros)	15.1	13.8	16.1	1.3	9.8	Enel
	Personnel cost	(mil euros)	58.9	48.6	51.3	10.3	21.1	Enel
	Maintenance, fire protection and other <sup>(2)</sup>	(mil euros)	21.8	23.1	29.4	-1.3	-5.8	Enel
	Infrastructure investments on safety	(mil euros)	130.8	135.2	115.6	-4.4	-3.2	Enel
	Medical checks	(no.)	125,736	136,352	120,315	-10,616	-7.8	Enel
403-2	Number and frequency of injuries to employee							
	Injuries to employees							
	- fatal	(no.)	2	-	4	2	-	Enel
	- men	(no.)	2	-	3	2	-	Enel
	- women	(no.)	-	-	1	-	-	Enel
	- severe <sup>(3)</sup>	(no.)	4	5	3	-1	-20.0	Enel
	- men	(no.)	4	3	2	1		Enel
	- women	(no.)	-	2	1	-2		Enel
·	Injuries to employees, severe and fatal	(no.)	6	5	7	1	20.0	Enel
	- men	(no.)	6	3	5	3	100.0	Enel
	- women	(no.)	-	2	2	-2	-100.0	Enel
	Other non-severe injuries	(no.)	127	142	149	-15	-10.6	Enel
	- men	(no.)	113	133	135	-20	-15.0	Enel
	- women	(no.)	14	9	14	5		Enel
	Total injuries	(no.)	133	147	156	-14	-9.5	Enel
	- men	(no.)	119	136	140	-17	-12.5	Enel
	- women	(no.)	14	11	16	3	27.3	Enel
	Injuries by type and geographical area							
	Italy <sup>(4)</sup>	(no.)	68	73	76	-5	-6.8	Italy
	fatal	(no.)	-	-	1	-	-	Italy
	severe	(no.)	2	2	-	-	-	Italy
	other non-severe	(no.)	66	71	75	-5	-7.0	Italy
	Iberia <sup>(5)</sup>	(no.)	5	5	12	-	-	Iberia
	fatal	(no.)	1	-	2	1	-	Iberia
	severe	(no.)	-	-	1	-	-	Iberia
	other non-severe	(no.)	4	5	9	-1	-20.0	Iberia
	South America <sup>(6)</sup>	(no.)	57	62	61	-5	-8.1	South America
	fatal	(no.)	1	-	1	1	-	South America
	severe	(no.)	1	2	-	-1	-50.0	South America
	other non-severe	(no.)	55	60	60	-5	-8.3	South America
	North and Central America <sup>(7)</sup>	(no.)	1	1	3	-	-	North and Central America

EUSS			2017	2016	2015			
	fatal	(no.)	-	-	-	-	-	North and Central America
	severe	(no.)	-	-	-	-	-	North and Central America
	other non-severe	(no.)	1	1	3	-	-	North and Central America
	Europe and North Africa <sup>(8)</sup>	(no.)	2	6	4	-4	-66.7	Europe and North Africa
	fatal	(no.)	-	=	-	-	-	Europe and North Africa
	severe	(no.)	1	1	2	-	-	Europe and North Africa
	other non-severe	(no.)	1	5	2	-4	-80.0	Europe and North Africa
	Sub-Saharan Africa and Asia	(no.)	-	-	-	-	-	Sub-Saharan Africa and Asia
	Rate of injuries (Lost-Time Injuries Frequency Rate, LTIFR) <sup>(9)</sup>	(r)	0.24	0.25	0.25	-0.01	-4.19	Enel
	- men	(r)	0.26	0.28	0.28	-0.02	-7.77	Enel
	- women	(r)	0.14	0.10	0.15	0.04	37.73	Enel
	Italy <sup>(4)</sup>	(r)	0.25	0.26	0.27	-0.01	-4.32	Italy
	Iberia <sup>(5)</sup>	(r)	0.06	0.06	0.13	-	-	Iberia
	South America	(r)	0.43	0.47	0.46	-0.04	-8.47	South America
	North and Central America	(r)	0.09	0.12	0.36	-0.03	-20.55	North and Central America
	Europe and North Africa	(r)	0.04	0.08	0.04	-0.04	-50.81	Europe and North Africa
	Sub-Saharan Africa and Asia	(r)	-	-	-	-	-	Sub-Saharan Africa and Asia
	Frequency rate <sup>(10)</sup>	(r)	1.20	1.25	1.27	-0.05	-4.19	Enel
	- men	(r)	1.30	1.41	n.a.	-0.11	-7.77	Enel
	- women	(r)	0.72	0.52	n.a.	0.20	37.73	Enel
	Severity of injuries							
	Lost Day Rate (LDR)(11)	(r)	11.65	10.02	9.44	1.63	16.27	Enel
	- men	(r)	12.96	11.18	10.81	1.78	15.95	Enel
	- women	(r)	5.47	4.71	3.16	0.77	16.31	Enel
	Italy <sup>(4)</sup>	(r)	13.92	10.48	10.27	3.44	32.80	Italy
	Iberia <sup>(5)</sup>	(r)	1.97	4.62	6.78	-2.65	-57.38	Iberia
	South America	(r)	17.84	16.35	14.75	1.49		South America
	North and Central America	(r)	0.37	1.18	2.98	-0.81	-68.22	North and Central America
	Europe and North Africa	(r)	2.14	4.78	2.61	-2.64	-55.24	Europe and North Africa
	Sub-Saharan Africa and Asia	(r)	-	-	-	-	-	Sub-Saharan Africa and Asia
	Injury severity index <sup>(12)</sup>	(r)	0.06	0.05	0.05	0.01	16.27	Enel
	- men	(r)	0.06	0.06	0.05	-		Enel
	- women	(r)	0.03	0.02	0.02	0.01	16.31	Enel
	Absence due to injuries	(dd)	6,460	5,884	5,783	576	9.79	Enel
	- men	(dd)	5,928	5,389	5,438	539	10.00	Enel
	- women	(dd)	532	495	345	37	7.47	Enel
	WORK-RELATED ILLNESSES							
								Engl
	Occupational disease rate (ODR) <sup>(13)</sup> by gender and geographical area	(r) (r)	0.01	0.01	0.07	-		Enel Enel

 December
 December
 December
 2017-2016

 2017
 2016
 2015

Scope

Sustainability Report 2017 CYCL Performance indicators

GRI/ EUSS

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	- women	(r)	-	_	n.a.	-	-	Enel
	Italy <sup>(4)</sup>	(r)	-	-	n.a.	-	-	Italy
	Iberia <sup>(5)</sup>	(r)	-	-	n.a.	-	-	Iberia
	South America <sup>(14)</sup>	(r)	0.03	0.01	n.a.	0.02	_	South America
	North and Central America	(r)	-	0.35	n.a.	-0.35	-100.00	North and
		.,				0.22		Central America
	Europe and North Africa	(r)	-	-	n.a.	-	-	Europe and North Africa
	Sub-Saharan Africa and Asia	(r)	-	-	n.a.	-	-	Sub-Saharan Africa and Asia
	Absenteeism							
	Absentee Rate (AR) <sup>(15)</sup> by geographical area	(r)	5,680	5,510	5,827	170	3.09	Enel
	Number of absentee days	(dd)	406,526	419,686	470,180	-13,160	-3.14	Enel
	Italy <sup>(4)</sup>	(r)	5,987	6,311	6,714	-324	-5.14	Italy
	Iberia <sup>(5)</sup>	(r)	5,209	5,596	5,282	-387	-6.92	Iberia
	South America	(r)	5,302	4,425	4,686	877	19.82	South America
	North and Central America	(r)	n.a.	n.a.	n.a.	-	-	North and Central America
	Europe and North Africa	(r)	5,815	4,395	n.a.	1,420	32.31	Europe and North Africa
	Sub-Saharan Africa and Asia	(r)	4,491	1,833	n.a.	2,658	-	Sub-Saharan Africa and Asia
	CONTRACTORS							
403-2	Injuries for contractors							
	- fatal	(no.)	11	5	9	6	-	Enel
	- men	(no.)	11	5	9	6	-	Enel
	- women	(no.)	-	-	-	-	-	Enel
	- severe <sup>(3)</sup>	(no.)	9	7	24	2	28.6	Enel
	- men	(no.)	9	7	22	2	28.6	Enel
	- women	(no.)	-	-	2	-	-	Enel
	Injuries to contractors, severe and fatal:	(no.)	20	12	33	8	66.7	Enel
	- men	(no.)	20	12	31	8	66.7	Enel
	- women	(no.)	-	-	2	-	-	Enel
	Other non-severe injuries	(no.)	189	216	318	-27	-12.5	Enel
	- men	(no.)	172	200	298	-28	-14.0	Enel
	- women	(no.)	17	16	20	1	6.3	Enel
	Total injuries to contractors	(no.)	209	228	351	-19	-8.3	Enel
	- men	(no.)	192	212	329	-20	-9.4	Enel
	- women	(no.)	17	16	22	1	6.3	Enel
	Injuries by type and geographical area							
	Italy <sup>(4)</sup>	(no.)	60	52	79	8	15.4	Italy
	fatal	(no.)	3	1	2	2	-	Italy
	severe	(no.)	-	1	6	-1	-100.0	Italy
-	other non-severe	(no.)	57	50	71	7	14.0	Italy
	Iberia <sup>(5)</sup>	(no.)	34	50	55	-16	-32.0	Iberia
	fatal	(no.)	-	1	2	-1	-100.0	Iberia
	severe	(no.)	3	3	4	-	-	Iberia
	other non-severe	(no.)	31	46	49	-15	-32.6	Iberia
	South America <sup>(16)</sup>	(no.)	100	118	195	-18	-15.3	South America
	fatal	(no.)	7	3	3	4	-	South America
	severe	(no.)	3	3	8	-		South America
	other non-severe	(no.)	90	112	184	-22	-19.6	South America

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	North and Central America <sup>(17)</sup>	(no.)	10	4	3	6	-	North and Central America
	fatal	(no.)	-	-	-	-	-	North and Central America
	severe	(no.)	3	-	1	3	-	North and Central America
	other non-severe	(no.)	7	4	2	3	75.0	North and Central America
	Europe and North Africa <sup>(18)</sup>	(no.)	5	4	17	1	25.0	Europe and North Africa
	fatal	(no.)	1	-	2	1	-	Europe and North Africa
	severe	(no.)	-	-	5	-	-	Europe and North Africa
	other non-severe	(no.)	4	4	10	-	-	Europe and North Africa
	Sub-Saharan Africa and Asia <sup>(19)</sup>	(no.)	-	-	2	-	-	Sub-Saharan Africa and Asia
	fatal	(no.)	-	-	-	-	-	Sub-Saharan Africa and Asia
	severe	(no.)	-	-	=	-	-	Sub-Saharan Africa and Asia
	other non-severe	(no.)	-	-	2	-	-	Sub-Saharan Africa and Asia
	Frequency rate <sup>(10)</sup>	(r)	0.97	1.03	1.51	-0.06	-5.62	Enel
	Rate of injuries (Lost-Time Injuries Frequency Rate, LTIFR)® to contractors	(r)	0.19	0.21	0.30	-0.02	-5.62	Enel
	Italy <sup>(4)</sup>	(r)	0.31	0.30	0.47	0.01	3.69	Italy
	Iberia <sup>(5)</sup>	(r)	0.20	0.29	0.31	-0.09	-31.61	Iberia
	South America	(r)	0.17	0.20	0.31	-0.03	-15.86	South America
	North and Central America	(r)	0.25	0.09	80.0	0.16	-	North and Central America
	Europe and North Africa	(r)	0.07	0.04	0.13	0.03	84.83	Europe and North Africa
	Sub-Saharan Africa and Asia	(r)	-	-	0.17	-	-	Sub-Saharan Africa and Asia
	Lost Day Rate (LDR)(11) to contractors	(r)	9.86	8.53	10.89	1.34	15.66	Enel
	Italy <sup>(4)</sup>	(r)	19.77	15.04	25.01	4.73	31.49	Italy
	Iberia <sup>(5)</sup>	(r)	22.48	20.21	18.11	2.27	11.24	Iberia
	South America	(r)	4.26	4.97	7.32	-0.71	-14.46	South America
	North and Central America	(r)	5.06	1.23	1.09	3.83	-	North and Central America
	Europe and North Africa	(r)	3.31	3.11	3.66	0.20	6.55	Europe and North Africa
	Sub-Saharan Africa and Asia	(r)	-	-	3.14	-	-	Sub-Saharan Africa and Asia
EU18	Health and safety training							
	Contractors and subcontractors employees that have undergone health and safety training and information	(%)	100	100	100	-		Enel
	Construction activities	(%)	100	100	100	_	_	Enel

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Operation and maintenance activities	(%)	100	100	100	-	-	Enel
	- of which operation activities	(%)	100	100	100	-	-	Enel
	- of which maintenance activities	(%)	100	100	100	-	-	Enel

- (1) The 2016 figures have been restated following a detailed redefinition due to Slovenské elektrárne's removal from the scope.
- (2) It includes studies, research and hygiene, medical controls, communication expenses and other costs.
- (3) Injury with an initial prognosis, as shown on the first medical evaluation, exceeding 30 days; or with a guarded prognosis, until the prognosis can be determined; or with an unknown prognosis, which, when first assessed by the Division/Company concerned, is assumed to exceed 30 days. Once the prognosis set, the injuries will be considered severe only if the first prognosis exceeds 30 days. If the prognosis is not set or remains unknown for 30 days from the event, the injury shall be considered severe.
- (4) The 2017 figure does not include the Italian asset of Up Stream gas, removed from the scope in 2016.
- (5) Iberia includes Spain, Morocco and Portugal.
- (6) Injuries Argentina: 1 fatal in 2017 and 1 in 2015; 2 severe in 2016; 51 not severe in 2017, 54 in 2016, 56 in 2015. Peru: 1 severe in 2017; 1 not severe in 2017, 3 in 2016, 1 in 2015. Brazil (includes Uruguay): 1 not severe in 2017, 2 in 2016, 2 in 2015. Chile: 1 not severe in 2017, 1 in 2016, 1 in 2015. Colombia: 1 not severe in 2017.
- (7) Injuries Costa Rica: 1 not severe in 2016 and 2 in 2015. North America: 1 not severe in 2017 and 1 in 2015.
- (8) Injuries Romania: 1 severe in 2015. Russia: 1 severe in 2017, 1 in 2016 and 1 in 2015; 1 not severe in 2017, 2 in 2016, 1 in 2015. Slovakia: 3 not severe in 2016 and 1 in 2015.
- (9) The LTIFR (Lost Time Injury Frequency Rate) is calculated by comparing the number of injuries with the hours worked/200,000. The rate calculation by country considers the total number of injuries involving men and women compared to the sum of hours worked by men and women; the rate calculation by gender considers the number of injuries compared to the hours worked by the gender in question (either only men or only women). Cases requiring first aid are not included in the rate calculation.
- (10) This index is calculated as the ratio between the total number of injuries and the hours worked expressed in millions.

Sustainability Report 2017

- (11) The LDR (Lost Day Rate) is calculated by comparing the number of days of absence due to injuries with the hours worked/200,000. It is based on the number of calendar days being considered starting from the day following the accident.
- (12) This index is calculated as the ratio between the number of days absent due to injury and the hours worked in thousands.
- (13) The Occupational Disease Rate (ODR) is calculated by comparing the number of occupational disease cases that occurred during the year with the total hours worked/200,000.
- (14) In 2017, 4 new confirmed cases of occupational disease occurred in South America.
- (15) The AR (Absentee Rate) is calculated as the ratio between the number of days lost (due to occupational and non-occupational disease, injury, etc.) and days worked\*200,000. The following are excluded: vacation days, family issues, maternity leave, study leave, time off, strikes, military service and paid leave. This figure does not include information relating to North and Central America due to local regulations.
- (16) Injuries Argentina: 1 fatal in 2017 and 1 in 2015; 2 severe in 2015; 6 not severe in 2017, 10 in 2016, 22 in 2015. Brazil (includes Uruguay): 4 fatal in 2017, 1 in 2016, 1 in 2015; 2 severe in 2016; 31 not severe in 2017, 25 in 2016, 39 in 2015. Colombia: 1 fatal in 2017, 1 in 2016, 1 in 2015; 1 severe in 2016; 16 not severe in 2017, 22 in 2016, 58 in 2015. Peru: 1 fatal in 2017, 1 in 2016; 1 severe in 2017, 2 in 2015; 7 not severe in 2017, 14 in 2016, 7 in 2015. Chile: 2 severe in 2017, 4 in 2015; 30 not severe in 2017, 41 in 2016, 58 in 2015.
- (17) Injuries Mexico: 3 severe in 2017; 6 not severe in 2017. Guatemala: 1 severe in 2015. Costa Rica: 2 not severe in 2016, 1 in 2015. Panama: 1 not severe in 2016. North America: 1 not severe in 2017, 1 in 2016, 1 in 2015.
- (18) Injuries Romania: 1 fatal in 2017, 1 in 2015. Russia: 1 fatal in 2015; 1 severe in 2015; 4 not severe in 2017, 2 in 2016, 3 in 2015. Slovakia: 4 severe in 2015; 2 not severe in 2016, 7 in 2015.
- (19) Injuries South Africa: 2 not severe in 2015.



#### Sustainable supply chain

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	NATURE OF SUPPLIERS							
	Number of suppliers with which a new contract was signed in the year	(no.)	31,329	35,860	37,347	-4,531	-12.6	Enel
102-8	Workforce of contracting and subcontracting companies (1)(2)	(no.)	122,505	126,130	132,272	-3,625	-2.9	Enel
	Training hours and information of employees of the contractors <sup>(3)</sup>	(no.)	822,173	677,000	320,000	145,173	21.4	Enel
	Days worked by employees of contractors and subcontractors (1)(2)	(,000 d)	26,951	27,749	29,100	-798	-2.9	Enel
	Costruction activity	(,000 d)	8,368	10,050	10,970	-1,682	-16.7	Enel
	Operating and maintenance activity	(,000 d)	18,583	17,699	18,130	885	5.0	Enel
	- of which operating activity	(,000 d)	5,575	5,310	5,439	265	5.0	Enel
	- of which maintencance activity	(,000 d)	13,008	12,389	12,691	619	5.0	Enel
	Concentration of material and service suppliers (top 15)	(%)	47.6	45.1	37.8	2.5	-	Enel
204-1	Local suppliers of materials and services <sup>(4)</sup>							
	Local suppliers with contracts > 1 million euro	(no.)	1,143	1,041	1,036	102	9.8	Enel
	Foreign suppliers with contracts > 1 million euro	(no.)	158	188	143	-30	-16.0	Enel
	Spending on local suppliers with contracts > 1 million euro	(mil euros)	8,288	9,271	6,821	-983	-10.6	Enel
	Spending on foreign suppliers with contracts > 1 million euro	(mil euros)	707	1,938	1,166	-1,231	-63.5	Enel
	Concentration of spending on local suppliers	(%)	92.1	82.7	85.0	9.4	-	Enel
	Concentration of spending on foreign suppliers	(%)	7.9	17.3	15.0	-9.4	-	Enel
	Purchases and fuel							
	Purchases of materials and services	(mil euros)	10,683	12,867	10,021	-2,184	-17.0	Enel
	Supplies	(mil euros)	2,829	4,081	2,949	-1,252	-30.7	Enel
	Works	(mil euros)	3,713	2,977	2,140	736	24.7	Enel
	Services	(mil euros)	4,141	5,809	4,932	-1,668	-28.7	Enel
	Fuel purchases <sup>(5)</sup>	(mil euros)	4,652	4,251	4,916	401	9.4	Enel
	Gas	(mil euros)	1,611	1,567	1,767	44	2.8	Enel
	Oil	(mil euros)	834	803	996	31	3.8	Enel
	Coal/lignite/biomass	(mil euros)	2,207	1,880	2,153	327	17.4	Enel
	Management instruments							
	Active qualified companies	(no.)	6,755	7,248	6,780	-493	-6.8	Enel
	Online tenders as percentage of all tenders	(%)	61.1	63.2	65.0	2.1	-	Enel
	Online purchases as percentage of all purchases	(%)	57.0	56.4	36.0	0.6	-	Enel
	Use of prescription	(%)	21.3	18.3	26.0	3.0	-	Enel
103-2	Disputes involving suppliers							
	Total proceedings	(no.)	469	496	592	-27	-5.4	Enel
	Incidence of proceedings as defendant	(%)	85.1	82.9	70.4	2.2		Enel

<sup>(1)</sup> Calculated in FTE (Full Time Equivalent).

Performance indicators 297

<sup>(2)</sup> The 2016 figures have been restated following a detailed redefinition due to Slovenské elektrárne's removal from the scope.

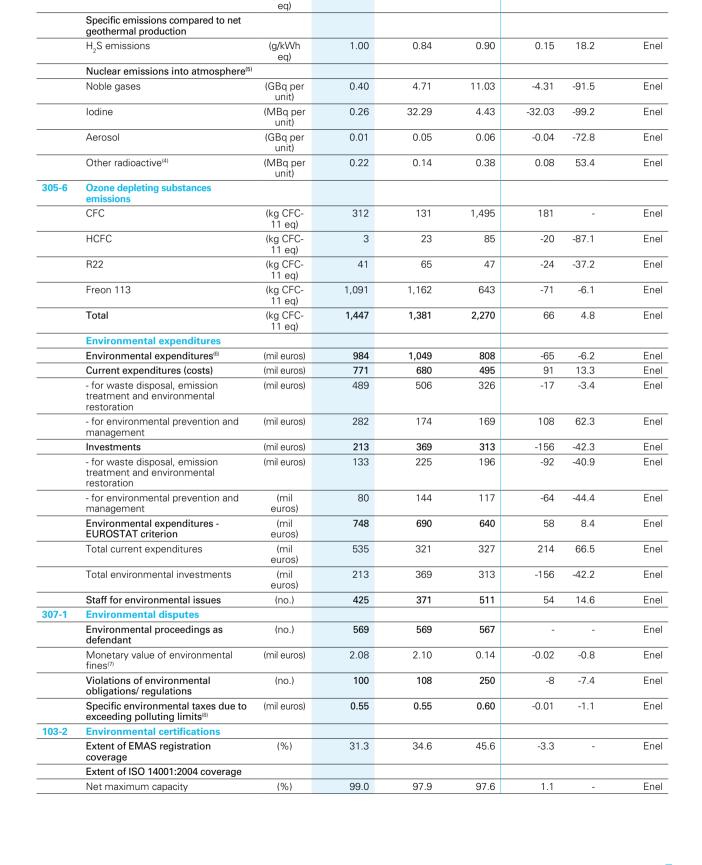
The figure also includes the training and induction courses related to health and safety provided by Enel people required to access the Group's construction and/or operating sites.

<sup>(4) &</sup>quot;Local suppliers" means those suppliers with their registered office in the country in which the supply contract was issued.

<sup>(5)</sup> The 2016 figures have been restated due to the new calculation method applied

### Environmental sustainability

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	EMISSIONS							
305-5	Avoided emissions <sup>(1)</sup>	(mil t)	71.3	83.8	92.5	-12.5	-14.9	Enel
305-1	Direct greenhouse gas emissions (Scope 1)							
	CO <sub>2</sub> emissions from the electricity production and heat	(mil t)	105.20	106.29	119.25	-1.09	-1.0	Enel
	Direct emissions due to other activities	(mil t eq)	0.31	0.44	0.26	-0.13	-29.5	Enel
-	Total direct emissions (Scope 1)	(mil t eq)	105.51	106.73	119.51	-1.22	-1.1	Enel
305-4	Specific emissions							
	Specific CO <sub>2</sub> emissions from total net production <sup>(2)</sup>	(g/kWh eq)	411	395	409	16	4.1	Enel
	Specific CO <sub>2</sub> emissions from total net production - fossil fuels							
	- simple	(g/kWh eq)	723	738	768	-15	-2.0	Enel
	- cogeneration	(g/kWh eq)	684	659	668	25	3.9	Enel
305-2	Indirect greenhouse gas emissions (Scope 2)(3)							
	Fuel deposit and movement	(mil t eq)	0.002	0.002	0.002	-	-	Enel
	Electricity distribution	(mil t eq)	0.169	0.176	0.164	-0.007	-3.9	Enel
	Property management	(mil t eq)	0.082	0.066	0.069	0.016	23.8	Enel
	Mining	(mil t eq)	0.001	0.001	0.001	-	-	Enel
	From electricity acquired from the grid (hydroelectric plant) <sup>(4)</sup>	(mil t eq)	0.135	0.338	0.418	-0.203	-60.2	
	Total indirect emissions (Scope 2)(4)	(mil t eq)	0.388	0.583	0.654	-0.195	-33.4	Enel
305-3	Other indirect greenhouse gas emissions (Scope 3) <sup>(3)</sup>							
	Coal mining	(mil t eq)	5.903	6.004	6.740	-0.101	-1.7	Enel
	Transport of coal by sea	(mil t eq)	0.805	0.835	0.980	-0.030	-3.6	Enel
	Transport of coal by train	(mil t eq)	0.381	0.371	0.377	0.010	2.6	Enel
	Transport of fuel (gas oil, biomass, WDF)	(mil t eq)	0.011	0.011	0.010	-	-	Enel
	Transport raw materials and waste	(mil t eq)	0.028	0.027	0.032	0.001	2.3	Enel
	Total indirect emissions (Scope 3)	(mil t eq)	7.127	7.248	8.139	-0.121	-1.7	Enel
305-7	Other atmospheric emissions							
	SO <sub>2</sub> emissions	(t)	214,057	220,746	312,121	-6,689	-3.0	Enel
	NO <sub>x</sub> emissions	(t)	203,329	200,660	227,520	2,669	1.3	Enel
	H <sub>2</sub> S emissions	(t)	5,809	5,227	5,606	582	11.1	Enel
	Dust emissions	(t)	68,095	59,627	75,443	8,468	14.2	Enel
	Specificc emissions compared to total net production <sup>(2)</sup>							
	SO <sub>2</sub> emissions	(g/kWh eq)	0.84	0.82	1.07	0.02	2.4	Enel
	NO <sub>x</sub> emissions	(g/kWh eq)	0.79	0.75	0.78	0.04	5.3	Enel
	Dust emissions	(g/kWh eq)	0.27	0.22	0.26	0.05	22.7	Enel
	Specific emissions compared to net thermal production							



December

(g/kWh

eq)

(g/kWh

(g/kWh

2017

1.45

1.38

0.46

December

2016

1.48

1.34

0.40

December 2017-2016

-0.03

0.04

0.06

-2.1

2.3

15.3

2015

1.93

1.41

0.47

Scope

Enel

Enel

Enel

Sustainability Report 2017 CYC Performance indicators 299

EUSS

SO<sub>2</sub> emissions

NO<sub>v</sub> emissions

Dust emissions

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	km of grid	(%)	89.9	94.7	95.1	-4.8	-	Enel
	ENERGY CONSUMPTION							
302-1	Fuel consumption by primary source in TJ							
	from non-renewable sources	(TJ)	1,671,664	1,649,723	1,934,930	21,941	1.3	Enel
	Coal	(TJ)	686,761	708,322	813,118	-21,561	-3.0	Enel
	Lignite	(TJ)	25,121	27,674	52,670	-2,553	-9.2	Enel
	Fuel oil	(TJ)	69,668	84,782	80,931	-15,114	-17.8	Enel
	Natural gas	(TJ)	525,904	500,825	495,089	25,079	5.0	Enel
	Diesel	(TJ)	84,071	52,461	56,229	31,610	60.3	Enel
	Uranium	(TJ)	280,139	275,659	436,893	4,480	1.6	Enel
	from renewable sources	(TJ)	59,034	61,672	92,612	-2,638	-4.3	Enel
	Biomass, biogas and waste	(TJ)	5,945	7,829	6,657	-1,884	-24.1	Enel
	Geothermal fluid	(TJ)	53,089	53,842	85,955	-754	-1.4	Enel
	Total direct consumption	(TJ)	1,730,698	1,711,395	2,027,542	19,303	1.1	Enel
	Fuel consumption by primary source in Mtoe							
	from non-renewable sources	(Mtoe)	39.9	39.4	46.2	0.5	1.3	Enel
	Coal	(Mtoe)	16.4	16.9	19.4	-0.5	-3.0	Enel
	Lignite	(Mtoe)	0.6	0.7	1.3	-0.1	-9.2	Enel
	Fuel oil	(Mtoe)	1.7	2.0	1.9	-0.4	-17.8	Enel
	Natural gas	(Mtoe)	12.6	12.0	11.8	0.6	5.0	Enel
	Diesel	(Mtoe)	2.0	1.3	1.4	0.8	60.3	Enel
	Uranium	(Mtoe)	6.7	6.6	10.4	0.1	1.6	Enel
	from renewable sources	(Mtoe)	1.4	1.5	2.3	-0.1	-4.3	Enel
	Biomass, biogas and waste	(Mtoe)	0.1	0.2	0.2	-	-24.1	Enel
	Geothermal fluid	(Mtoe)	1.3	1.3	2.1	-	-1.4	Enel
	Total direct consumption	(Mtoe)	41.3	40.6	48.5	0.7	1.1	Enel
	Incidence of fuel consumption from non-renewable sources <sup>(4)</sup>							
	Coal	(%)	41.1	42.9	42.0	-1.8	-	Enel
	Lignite	(%)	1.5	1.7	2.8	-0.2	-	Enel
	Fuel oil	(%)	4.2	5.1	4.1	-0.9	-	Enel
	Natural gas	(%)	31.5	30.4	25.5	1.1	-	Enel
	Diesel	(%)	5.0	3.2	2.8	1.8	-	Enel
	Uranium	(%)	16.7	16.7	22.5	-	-	Enel
302-1	Indirect energy consumption by destination							
	Fuel deposit and movement	(TJ)	29	27	30	2	8.0	Enel
	Electricity distribution	(TJ)	1,872	1,765	1,876	107	6.0	Enel
	Property management	(TJ)	932	894	780	38	4.2	Enel
	Mining	(TJ)	6	6	16	-	-	Enel
	Total energy consumption	(TJ)	2,839	2,692	2,702	147	5.5	Enel
	Internal consumption	(MWh)	250.074	240 407	216 005	10.467	4.2	Engl
	Electricity consumption for civilian uses	. ,	258,874	248,407	216,895	10,467	4.2	Enel
	Fuel consumption	(toe)	25,768	84,153	25,290	-58,385	-69.4	Enel
	Water requirement for civilian uses	(,000 m³)	6,965	6,901	5,987	64	0.9	Enel
301-1	Paper bought for printers/ photocopiers	(mil A4 eq)	123.7	184.5	144.4	-60.8	-32.9	Enel
	RAW MATERIALS							
	Resources used in the production process							
301-1	Fuel consumption for thermal production							
	from non-renewable sources	1055 :			a=·			
	Coal	(,000 t)	32,775	33,337	37,563	-562	-1.7	Enel
	Lignite	(,000 t)	1,947	2,333	4,305	-386	-16.5	Enel
	Fuel oil	(,000 t)	1,726	2,095	1,996	-369	-17.6	Enel
	Natural gas	(Mm³)	14,318	13,883	13,888	435	3.1	Enel
	Diesel	(,000 t)	1,986	1,276	1,331	711	55.7	Enel

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	from renewable sources							
	Biomass and waste for thermal production	(,000 t)	519	642	411	-123	-19.2	Enel
	Biogas	(Mm³)	1	1	20	-	-	Enel
	Geothermal steam used for electricity production	(,000 t)	47,323	47,668	106,874	-345	-0.7	Enel
	Fuel consumption for nuclear production							
	Uranium	(t)	78	110	106	-32	-29.1	Enel
301-1	Consumables							
	Lime	(,000 t)	743.7	675.1	938.2	68.6	10.2	Enel
	Ammonia	(,000 t)	29.6	38.6	53.7	-9.0	-23.2	Enel
	Caustic soda	(,000 t)	83.7	84.2	86.0	-0.5	-0.6	Enel
	Slaked lime	(,000 t)	15.6	33.4	16.4	-17.8	-53.3	Enel
	Sulfuric/chloride acid	(,000 t)	11.8	12.9	20.2	-1.1	-8.3	Enel
	Other	(,000 t)	43.5	64.6	45.7	-21.1	-32.6	Enel
	Total	(,000 t)	927.9	908.7	1,160.2	19.2	2.1	Enel
	Percentage of materials used that derive from recycled material compared to total consumption of each resource							
	Lime for smoke desulfurization	(%)	-	-	0.1	-	-	Enel
	Lubricant	(%)	5.2	1.8	5.0	3.4	-	Enel
	Dielectric oil	(%)	99.0	68.5	99.6	30.4	-	Enel
	Ferric chloride	(%)	8.3	1.6	-	6.7	-	Enel
	Sulfuric acid	(%)	-		0.08	-	-	Enel
301-2	Paper for printing	(%)	0.1	0.2	0.5	-0.1	-	Enel
	Equipment with PCB	(%)	0.7	1.4	1.2	-0.7	-	Enel
	PCB quantity contained in equipment with PCB > 500 ppm	(t)	0.2	2.4	1.5	-2.1	-90.3	Enel
	PCB quantity contained in equipment with 50 < PCB < 500 ppm	(t)	6,142.0	6,784.5	5,553.0	-642.5	-9.5	Enel
	WATER CONSUMPTION							
	Volumes of water consumed by production process <sup>(9)</sup>							
	Consumption for thermal production	(Mm³)	110.4	110.4	112.6	-0.1	-0.1	Enel
	Consumption for nuclear production	(Mm³)	15.6	38.1	61.2	-22.5	-59.0	Enel
	Consumption for geothermal electric production and fuel storage and transport	(Mm³)	0.043	0.032	0.028	0.011	34.4	Enel
	Total consumption for production processes	(Mm³)	126.0	148.6	173.8	-22.6	-15.2	Enel
	Consumption for other industrial uses	(Mm³)	0.02	0.29	0.9	-0.3	-91.7	Enel
	Total water consumption	(Mm³)	126.0	148.9	174.7	-22.9	-15.4	Enel
	Specific consumption by production process							
	Specific consumption for thermal production	(I/kWh eq)	0.75	0.74	0.70	0.01	0.8	Enel
	Specific consumption for nuclear production	(I/kWh eq)	0.59	1.13	1.52	-0.54	-47.7	Enel
	Total specific consumption for production processes	(I/kWh eq)	0.49	0.55	0.60	-0.06	-10.9	Enel
303-1	Volumes of water used by source <sup>(9)</sup>							
	From scarce sources	(Mm³)	111.4	134.8	158.2	-23.4	-17.4	Enel
	Surface water (wetlands, lakes, rivers)	(Mm³)	93.2	116.6	146.1	-23.5	-20.1	Enel
	Ground water (from wells)	(Mm³)	11.3	11.1	4.5	0.2	2.0	Enel
	Water from aqueducts	(Mm³)	6.8	7.0	7.6	-0.2	-2.5	Enel
	From non-scarce sources	(Mm³)	14.7	14.1	16.5	0.6	4.2	Enel
	Seawater (used as is and desalinated)	(Mm³)	7.8	7.8	9.7	-	-	Enel
	From wastewater (amount used inside plants)	(Mm³)	6.9	6.3	6.8	0.6	9.7	Enel

GRI/ EUSS	KPI	UM	December 2017	December 2016	December 2015	2017-2016	%	Scope
	Total	(Mm³)	126.0	148.9	174.7	-22.8	-15.3	Enel
303-3	Percentage of recycled and reused water	(%)	5.4	4.2	3.9	1.2	-	Enel
	Water used for open-cycle cooling							
	in thermal power plants	(Mm³)	18,277	18,873	19,810	-596	-3.2	Enel
	in nuclear plants	(Mm³)	2,507	2,508	2,407	-1	-	Enel
306-1	WATER EFFLUENT							
	Waste water (quantity discharged)	(Mm³)	108.0	111.5	106.4	-3.5	-3.1	Enel
	from thermal production	(Mm³)	106.1	104.5	96.3	1.6	1.5	Enel
	from nuclear production	(Mm³)	1.9	6.9	10.1	-5.0	-73.0	Enel
	for storage and transport of fuel oil	(Mm³)	0.01	0.06	0.04	-0.05	-86.2	Enel
	Quality of discharged water(10)							
	COD (Chemical Oxygen Demand)	(kg)	268,082	460,555	553,574	-192,473	-41.8	Enel
	BOD (Biochemical Oxygen Demand)	(kg)	81,914	118,649	113,824	-36,736	-31.0	Enel
	Nitrogen	(kg)	42,023	342,251	77,300	-300,228	-87.7	Enel
	Heavy metals	(kg)	28,661	148,761	141,625	-120,100	-80.7	Enel
	Phosphor	(kg)	11,286	11,100	7,615	186	1.7	Enel
	Nuclear emissions into water	11.97	,	,	.,			
	Tritium	(TBq per unit)	66.7	85.8	60.8	-19.1	-22.3	Enel
	Fission and corrosion products	(GBq per unit)	11.5	12.4	11.8	-0.9	-7.1	Enel
306-2	WASTE							
	Waste produced							
	Non-hazardous waste	(t)	9,315,552	9,074,122	10,239,845	241,430	2.7	Enel
	Hazardous waste	(t)	67,453	70,060	402,854	-2,607	-3.7	Enel
	- of which waste containing PCB	(t)	695	706	179	-11	-1.6	Enel
	Total waste produced	(t)	9,383,005	9,144,182	10,642,698	238,823	2.6	Enel
	Total waste sent for recovery	(%)	22.5	25.7	27.6	-3.2	-	Enel
	Hazardous waste by disposal method	(10)						
	Recycled or sent for recovery	(t)	26,406	29,240	20,509	-2,834	-9.7	Enel
	Sent to landfill	(t)	41,047	40,820	382,345	227	0.6	Enel
	Total	(t)	67,453	70,060	402,855	-2,607	-3.7	Enel
	Non-hazardous waste by disposal method							
	Recycled or sent for recovery	(t)	2,082,742	2,317,053	2,915,443	-234,311	-10.1	Enel
	Sent to landfill	(t)	7,232,810	6,757,069	7,324,402	475,741	7.0	Enel
	Total	(t)	9,315,552	9,074,122	10,239,845	241,450	2.7	Enel
	Waste produced in nuclear plants							
	Liquid radioactive waste at low/ medium activity level	(m³)	2	43	50	-41	-	Enel
	Solid radioactive waste at low/ medium activity level <sup>(11)</sup>	(t)	-	31	33	-31	-100.0	Enel
	Solid radioactive waste at low/ medium activity level(11)	(m³)	197	264	276	-67	-25.4	Enel
	Liquid radioactive waste at high activity level	(m³)	-	-	-	-	-	Enel
	Solid radioactive waste at high activity level	(t)	61	65	59	-4	-5.6	Enel
DMA EU	Provision for the decommissioning of nuclear power plants <sup>[12]</sup>	(mil euros)	538	567	528	-29	-5.1	Enel
	Mitigation of the impact on the landscape/territory <sup>(13)</sup>							
	LV/MV cabling ratio	(%)	60.0	72.4	69.4	-12.4	-	Enel
	LV cabling ratio	(%)	81.9	84.0	82.8	-2.1	-	Enel
	MV cabling ratio	(%)	28.1	46.5	45.6	-18.4	-	Enel

- (1) The emissions avoided are calculated as the sum of the emissions avoided in the various areas taking as a reference the specific emission of CO<sub>2</sub> in the average thermal production of the individual country, taken from the Enerdata database (https://www.enerdata.net/). The figure is the product of the electricity production obtained with each renewable or nuclear source by the average CO<sub>2</sub> emission from thermal production in the country where Enel is present.
- (2) Specific emissions are calculated considering the total emissions from the simple and combined thermal production of electricity and heat, in proportion to the total of renewable, nuclear, simple and combined thermal power and heat generation (including the contribution of heat in MWh<sub>w</sub>).
  - For "minor" pollutants (such as metals, including mercury), Enel has undertaken wide-scale measurement campaigns of the concentrations in rivers produced by thermal power plants in a range of situations by type of fuel and abatement system obtaining results which comfortably respect the precise limits established by the laws in the various countries where Enel operates. In particular, for mercury emissions, which are typical of electricity produced from coal, in 2017 a total of 0.387 tons was recorded only for Italy, Spain and Chile which currently represent over 73% of thermal production using coal throughout the Group.
  - In Europe, the mercury emissions are communicated to the competent authorities for registration in the European Pollutant Release and Transfer Register (EPRTR) in application of EU Regulation no. 166/2006 and are subject to associated controls in terms of completeness, coherence and credibility (article 2 of Regulation no. 166/2006).
- "Scope 2" emissions: the estimate of the indirect emissions of CO, relating to 2017 due to the consumption of electricity for electricity distribution, moving fuel, extracting coal, property management and also the electricity purchased from the grid from hydroelectric plant, is the product of the electricity consumption, including grid losses, multiplied by the respective weighted specific emission coefficients of the whole generation mix of the countries where the Enel Group operates (source: Enerdata - https://www.enerdata.net/). "Scope 3": the estimate of indirect emissions of CO<sub>2</sub> relating to 2017 and arising from the transport of coal by sea is calculated starting from the quantity transported (equivalent to 66.6% of the total coal used), taking into consideration Panamax ships with a 67,600 ton capacity, which cover average distances of 700 nautical miles in 22 days, consuming 35 tons of oil a day, and an emission coefficient of 3.2 kg of CO, per liter of oil consumed, considering also three days stopover for unloading, to which consumption of 5 tons of oil is associated. The estimate of the indirect emissions of CO, from rail transport of coal is calculated starting from the quantity transported (equivalent to 33.4% of the coal used) and taking into consideration trains with a capacity of 1,100 tons, which cover average distances of 1,400 km with consumption of 6.9 kWh/t for each 100 km transported and an average emission coefficient of Enel worldwide. The estimate of the indirect emissions of CO, from the transport of consumable materials, oil, gas oil, solid biomass, WDF and waste is calculated, starting from the quantities of raw materials transported, taking into consideration trucks with capacity of 28 tons, which cover average (return) distances of 75 km with consumption of 1 liter of gas oil for each 3 km travelled and an emission coefficient of 3 kg of CO, for each liter of gas oil consumed. The figure is a rough estimate of the fugitive emissions of methane (CH<sub>2</sub>) from the coal which is imported and used by the Enel Group for thermal production. The figure does not take into account the emissions due to the transport of lignite.
- (4) The 2016 figures have been restated due to the new calculation method applied.
- (5) The decreases in 2017 values compared to 2016 are due to changes in the scope in 2016.
- (6) The values relating to "current expenditures for waste disposal, emission treatment and environmental restoration" do not consider either insurance or environmental liability or the amortization for environmental protection investments since the current accounting system does not allow a reliable attribution to specific environmental items of the insurance premiums and the investments are set out as such, since the related amortization has still not been uniquely coded. This value includes the costs of managing CO<sub>2</sub> emission quotas.
- (7) The 2017 and 2016 figures are not comparable with previous years due to the change in methodology in 2016 for the calculation of environmental fines.
- (8) Tax due for exceeding the limits of water discharge at the plants of Reftinskaya and Sredneuralskaya.
- (9) In the calculation for absolute consumption and specific consumption of water, the consumption of water for open-cycle cooling is not included and nor is the plant's consumption of renewable sources.
- (10) The analyses are carried out on different groups of plant from year to year, depending on the specific audit needs, and therefore relate to differing power plant levels.
- (11) The values relating to "solid" nuclear waste (low/medium and high activity) are recorded in tons in Slovakia and in cubic meters in Spain. Both figures are given since they cannot be summed together.
  - The trend in the quantities of radioactive waste produced depends on the maintenance work and fuel movements, and therefore is subject to considerable fluctuations over the years.
- (12) The provision for "nuclear decommissioning" includes the costs incurred at the time of the decommissioning of nuclear facilities by Endesa Generación, a Spanish public company in charge of this activity.
- (13) The cabling ratio is calculated by proportioning the km of cabled lines (both underground and airborne insulated cables) to the total km of lines. The increase in the cabling ratio over the years is due to a general increase, in terms of length, of air-borne and underground cable sections at the expense of bare conductors. The decrease in 2017 compared to 2016 is due to the acquisition of Enel Distribuição Goiás (former CELG-D), an energy distribution company operating in the Brazilian state of Goiás.

# GRI Content Index

CDI Standarda	Dicalcoura	Page number(s)		Omission		
GRI Standards	Disclosure	and/or URL(s)	Part Omitted	Reason	Explanation	
<b>GRI 101: Foundation</b>	2016					
<b>General Disclosures</b>						
	ORGANIZATIONAL PROFILE					
	102-1 Name of the organization	236				
	102-2 Activities, brands, products and services	2-3; 10-13; 14-15				
	102-3 Location and headquarters	236				
	102-4 Location of operations	2-3; 10-13				
	102-5 Ownership and legal form	14-15; 30; 236; 266				
	102-6 Markets served	10-13; 286				
	102-7 Scale of the organization	2-3; 10-13; 106-108; 164-165; 196-197; 262; 272				
	102-8 Information on employees and other workers	274-275; 297				
	102-9 Supply chain	226-227; 232				
	102-10 Significant changes to the organization and its supply chain	10; 226-227; 241				
	102-11 Precautionary Principle or approach	37-41				
	102-12 External initiatives	44-48; 56-57; 131				
	102-13 Membership of associations	56-57; 131				
	STRATEGY					
	102-14 Statement from senior					
	decision-maker	4-7				
GRI 102: General Disclosures 2016	102-15 Key impacts, risks, and opportunities	24-28; 34; 37; 48-49; 70; 76-77; 80-83; 104-105; 124-125; 127; 132; 140-141; 150-151; 162-163; 182-183; 192-195; 224-225				
	ETHICS AND INTEGRITY					
	102-16 Values, principles, standards, and norms of behavior	44-47; 173-174				
	102-17 Mechanisms for advice and concerns about ethics	52; 172				
	GOVERNANCE					
	102-18 Governance structure	14-15; 30; 32-35				
	102-19 Delegating authority	14-15; 32-35				
	102-20 Executive-level responsibility for economic, environmental, and social topics	32-35				
	102-21 Consulting stakeholders on economic, environmental, and social topics	30				
	102-22 Composition of the highest governance body and its committees	2-3; 32-35; 267-268				
	102-23 Chair of the highest gover- nance body	32-35				
	102-24 Nominating and selecting the highest governance body	32-35				
	102-25 Conflicts of interest	37; 52				

GRI Standards	Disclosure	Page number(s)		Omission	
C Ctaridardo		and/or URL(s)	Part Omitted	Reason	Explanation
	102-26 Role of highest governance body in setting purpose, values, and strategy	e 32-35			
	102-27 Collective knowledge of highest governance body	32-35			
	102-28 Evaluating the highest governance body's performance	36-37			
	102-29 Identifying and managing economic, environmental, and social impacts	37-41			
	102-30 Effectiveness of risk management processes	37-41			
	102-32 Highest governance body's role in sustainability reporting	32-35			
	102-33 Communicating critical concerns	34-35; 44-46; 52			
	102-35 Remuneration policies	36-37			
	102-36 Process for determining remuneration	36-37			
	STAKEHOLDER ENGAGEMENT				
	102-40 List of stakeholder groups	62-63			
	102-41 Collective bargaining agreements	283			
	102-42 Identifying and selecting stakeholders	62-63; 84; 93			
	102-43 Approach to stakeholder engagement	19; 30; 62-63; 84-85; 93; 113-114; 170-173; 267; 289-290			
	102-44 Key topics and concerns raised	64-67; 84-85; 93; 170-173; 289			
	REPORTING PRACTICES				
	102-45 Entities included in the consolidated financial statements	241			
GRI 102: General	102-46 Defining report content and topic boundaries	60-61; 237-239			
Disclosures 2016	102-47 List of material topics	64-65; 237-239			
	102-48 Restatements of information	241			
	102-49 Changes in reporting	241			
	102-50 Reporting period	241			
	102-51 Date of most recent report	236-240			
	102-52 Reporting cycle	236			
	102-53 Contact point for questions regarding the report	<sup>S</sup> 236			
	102-54 Claims of reporting in accordance with the GRI Standards	236-240			
	102-55 GRI content index	236-240; 304			
	102-56 External assurance	240; 243-245			
Material Topics					
GRI 200 Economic S	Standard Series				
	ECONOMIC PERFORMANCE				
	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
GRI 103: Management Approach 2016	102 2 The management approach	37-40; 122; 126-127			
πρρισασιί 2010	103-3 Evaluation of the management approach	37-40; 122; 126-127			

Sustainability Report 2017 CPC GRI Content Index

GRI Standards	Diadassa	Page number(s)		Omission	
GRI Standards	Disclosure	and/or URL(s)	Part Omitted	Reason	Explanation
	201-1 Direct economic value generated and distributed	262-263			
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change				
	201-3 Defined benefit plan obligations and other retirement plans	122; 280			
	201-4 Financial assistance received from government	269			
	PROCUREMENT PRACTICES				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
	103-2 The management approach and its components	226; 228-231; 297			
	103-3 Evaluation of the management approach	226; 228-231			
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	297			
	ANTI-CORRUPTION				
GRI 103: Manage-	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
ment Approach 2016	103-2 The management approach and its components	37-41; 45-49			
	103-3 Evaluation of the management approach	37-41; 45-49			
	205-1 Operations assessed for risks related to corruption	37-41; 45-49			
GRI 205: Anti-corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	9 45-49			
	205-3 Confirmed incidents of corruption and actions taken	52; 268-269			
	ANTI-COMPETITIVE BEHAVIOR				
	103-1 Explanation of the material	64-67; 237-239			
GRI 103:	topic and its boundary				
Management Approach 2016	103-2 The management approach and its components	44-47			
Approach 2010	103-3 Evaluation of the management approach	44-47			

GRI Standards	Disclosure	Page number(s)		Omission	
Grii Otanuarus	Disclusure	and/or URL(s)	Part Omitted	Reason	Explanation
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	173-174; Italy: on May 11, 2017, upon request of AIGET and the company Green Network SpA, the Italian Competition Authority (AGCM) started a proceeding against Enel SpA, Enel Energia SpA and Servizio Elettrico Nazionale SpA. The proceeding refers to alleged abuse of dominant position in the retail electricity market for residential and non-residential end-users connected to the LV network. Similar proceedings have also been opened against Acea and A2A. According to AGCM, the Enel Group, which manages the distribution and sale on the regulated market, would have put in place a comprehensive exclusionary strategy through a series of non-replicable commercial conducts, likely to hinder its vertically non-integrated competitors and to favor its own company active on the retail free market. The proceeding should be concluded, unless it is extended, within June 30, 2018. Spain: for information about proceedings please see the 2017 Endesa Sustainability report at "Conociendo Endesa" chapter - paragraph 5.7 "Sanciones recibidas"			
GRI 300 Environmen	ntal Standards Series				
	MATERIALS				
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	<ul><li>103-2 The management approach and its components</li><li>103-3 Evaluation of the manage-</li></ul>	198-199; 200-203			
	ment approach 301-1 Materials used by weight	198-199; 200-203			
GRI 301: Materials 2016	or volume  301-2 Recycled input materials	300-301			
	used  ENERGY	301			
	103-1 Explanation of the material				
GRI 103:	topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	198-199; 200-203; 206			
	103-3 Evaluation of the management approach	198-199; 200-203; 206			
	302-1 Energy consumption withir the organization	206-208; 300			
ODI 200	302-3 Energy intensity	206-207			
GRI 302: Energy 2016	302-4 Reduction of energy consumption	208			
	302-5 Reductions in energy requirements of products and services	285			

Sustainability Report 2017 GRI Content Index

GRI Standards	Disclosure	Page number(s)		Omission	
Grif Standards		and/or URL(s)	Part Omitted	Reason	Explanation
GRI 103:	WATER  103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	198-199; 200-203; 209-212			
	103-3 Evaluation of the management approach	198-199; 200-203; 209-212			
	303-1 Water withdrawal by source	209; 301			
GRI 303: Water 2016	303-2 Water sources significantly affected by withdrawal of water	210-211			
	303-3 Water recycled and reused	212; 302			
	BIODIVERSITY				
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	198-199; 200-203; 214-217			
	103-3 Evaluation of the manage- ment approach	198-199; 200-203; 214-217			
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	214-215			
	304-2 Significant impacts of activities, products, and services on biodiversity	214-215			
	304-3 Habitats protected or restored	214-215			
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	214-215			
	EMISSIONS				
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	138-139; 198-199; 200-203; 203-205			
	103-3 Evaluation of the management approach	138-139; 198-199; 200-203; 203-205			
	305-1 Direct (Scope 1) GHG emissions	203-204; 298			
	305-2 Energy indirect (Scope 2) GHG emissions	204; 298			
	305-3 Other indirect (Scope 3) GHG emissions	204; 298			
GRI 305: Emissions	305-4 GHG emissions intensity	2-3; 138-139; 298			
2016	305-5 Reduction of GHG emissions	138-139; 203-204; 298			
	305-6 Emissions of ozone- depleting substances (ODS)	203-204; 299			
	305-7 Nitrogen oxides (NO $_{\rm x}$ ), sulfur oxides (SO $_{\rm x}$ ), and other significant air emissions	204-205; 298-299			
GRI 103:	EFFLUENTS AND WASTE  103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	198-199; 200-203; 212-213			
	103-3 Evaluation of the management approach	198-199; 200-203; 212-213			

GRI Standards	Disclosure	Page number(s)		Omission	
GRI Standards	Disclosure	and/or URL(s)	Part Omitted	Reason	Explanation
ODI 000 F//	306-1 Water discharge by quality and destination	212; 302			
GRI 306: Effluents and Waste 2016	306-2 Waste by type and disposal method	212-213; 302			
	306-3 Significant spills	213			
	<b>ENVIRONMENTAL COMPLIANCE</b>	E			
001400	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
GRI 103: Management Approach 2016	103-2 The management approach and its components	198-199; 200-203; 221-222; 299-300			
Approudit 2010	103-3 Evaluation of the manage- ment approach	198-199; 200-203; 221-222			
GRI 307: Environmental Compliance 2016	307-1 Non-compliance with environmental laws and regulations	221-222; 299			
	SUPPLIER ENVIRONMENTAL AS	SESSMENT			
	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
GRI 103: Management Approach 2016	103-2 The management approach and its components	198-199; 200-203; 226-230; 231			
	103-3 Evaluation of the manage- ment approach	198-199; 200-203; 226-230; 231			
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	226-230			
GRI 400 Social Stand	lards Series				
	EMPLOYMENT				
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	106-108; 120-122			
	103-3 Evaluation of the management approach	106-108; 120-122			
GRI 401: Employ-	401-1 New employee hires and employee turnover	107; 272; 275-278			
ment 2016	401-2 Benefits provided to full-time employees that are not provided to				
	temporary or part-time employees	2010			
	103 1 Explanation of the material	JINO			
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	123			
	103-3 Evaluation of the management approach	123			
GRI 402: Labor/Ma- nagement Relations 2016	402-1 Minimum notice periods regarding operational changes	123			
	OCCUPATIONAL HEALTH AND S	SAFETY			
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	184; 191			
	103-3 Evaluation of the management approach	184; 191			

308 Sustainability Report 2017 GRI Content Index

GRI Standards	Disclosure	Page number(s)		Omission	
GNI Standards	Disclosure	and/or URL(s)	Part Omitted	Reason	Explanation
	403-1 Workers representation in formal joint management-worker health and safety committees	191			
GRI 403: Occupational Health and Safety 2016	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	2-3; 185-186; 292-294	Contractor H&S rates by gender, employee ab- sentee rate (AR) by gender	Figure unavailable	Figure not available in the actual monitoring system. Data will be reported starting from 2018
	403-4 Health and safety topics covered in formal agreements with trade unions	191			
	TRAINING AND EDUCATION				
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	109-113			
	103-3 Evaluation of the management approach	109-113			
	404-1 Average hours of training per year per employee	106-107; 279-280			
GRI 404: Training and education 2016	404-2 Programs for upgrading employee skills and transition assistance programs	109-113; 122			
	404-3 Percentage of employees receiving regular performance and career development reviews	109-113; 278			
	DIVERSITY AND EQUAL OPPORT	TUNITY			
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	34-35; 46-48; 106-107; 115			
	103-3 Evaluation of the management approach	34-35; 46-48; 106-107; 115			
GRI 405: Diversity and Equal Opportu-	405-1 Diversity of governance bodies and employees	2-3; 34-35; 46-48; 106-107; 115; 267-268; 282-283			
nity 2016	405-2 Ratio of basic salary and remuneration of women to men	106-107; 282			
	NON-DISCRIMINATION				
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	46-48			
	103-3 Evaluation of the management approach	46-48			
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	52; 268			
	FREEDOM OF ASSOCIATION AN	D COLLECTIVE BARGAINING			
	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
GRI 103: Management	103-2 The management approach and its components	46-49; 226-230			
Approach 2016	103-3 Evaluation of the management approach	46-49; 226-230			

		and/or URL(s)	Part Omitted	Reason	Explanation
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of as- sociation and collective bargaining may be at risk	49-50; 226-230; as part of the human rights due diligence process, a Group-wide assessment is carried out on the entire value chain and, to ensure a thorough analysis, detailed information is provided at the country level and not at the level of individual operations			
	CHILD LABOR				
ODI 100	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
GRI 103: Management Approach 2016	103-2 The management approach and its components	46-49; 226-230			
	103-3 Evaluation of the manage- ment approach	46-49; 226-230			
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	49-50; 226-230; as part of the human rights due diligence process, a Group-wide assessment is carried out on the entire value chain and, to ensure a thorough analysis, detailed information is provided at the country level and not at the level of individual operations			
	FORCED OR COMPULSORY LAB	OR			
	103-1 Explanation of the material	64-67; 237-239			
GRI 103:	topic and its boundary	0.107,207.200			
Management Approach 2016	103-2 The management approach and its components	46-49; 226-230			
	103-3 Evaluation of the management approach	46-49; 226-230			
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	49; as part of the human rights due diligence process, a Group-wide assessment is carried out on the entire value chain and, to ensure a thorough analysis, detailed information is provided at the country level and not at the level of individual operations			
	SECURITY PRACTICES	- Pro			
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	46-48			
	103-3 Evaluation of the management approach	46-48			
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	All Enel people is involved in training about sustainability issues, of which human rights are a fundamental element. All suppliers sign specific clauses concerning human rights and commit to complying with the associated policy			
	RIGHTS OF INDIGENOUS PEOPL	' '			
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	46-48; 84-85			
	103-3 Evaluation of the management approach	46-48; 84-85			

Page number(s)

and/or URL(s)

GRI Standards

Disclosure

Omission

Explanation

Reason

Part Omitted

Sustainability Report 2017 CPC GRI Content Index 311

GRI Standards	Disclosure	Page number(s)		Omission	
		and/or URL(s)	Part Omitted	Reason	Explanation
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	No violations of the rights of indigenous peoples have been reported			
	<b>HUMAN RIGHTS ASSESSMENT</b>				
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	46-48			
	103-3 Evaluation of the management approach	46-48			
GRI 412: Human Rights Assessment 2016	412-1 Operations that have been subject to human rights reviews or impact assessments	49; as part of the human rights due diligence process, a Group-wide assessment is carried out on the entire value chain and, to ensure a thorough analysis, detailed information is provided at the country level and not at the level of individual operations			
2010	412-2 Employee training on human rights policies or procedures	50			
	412-3 Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	269			
	LOCAL COMMUNITIES				
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	46-48; 84-87; 93			
	103-3 Evaluation of the management approach	46-48; 84-87; 93			
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	49; 84-85	Percentage of total Group operations	Figure unavailable	Figure not available in the actual monitoring system
	413-2 Operations with significant actual and potential negative impacts on local communities	93			
	SUPPLIER SOCIAL ASSESSMENT	Г			
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	50; 226-230			
	103-3 Evaluation of the management approach	50; 226-230; 231			
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	50; 226-230			
	414-2 Negative social impacts in the supply chain and actions taken PUBLIC POLICY	226-230			
GRI 103: Management	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Approach 2016	103-2 The management approach and its components	44			
	103-3 Evaluation of the management approach	44			

CDI Ctarada da	Disclesion	Page number(s)		Omission	
GRI Standards	Disclosure	and/or URL(s)	Part Omitted	Reason	Explanation
GRI 415: Public Policy 2016	415-1 Political contributions	Enel does not have direct relations with political parties and does not provide financing of any kind, as explicitly established at point 2.2 of the Zero Tolerance of Corruption Plan and at point 3.26 of the Group's Code of Ethics. Some exceptions can be found in some countries following the local law and subject to analysis by the due bodies			
	<b>CUSTOMER HEALTH &amp; SAFETY</b>				
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components 103-3 Evaluation of the manage-	189			
	ment approach	189			
GRI 416: Customer Health & Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	189			
	MARKETING AND LABELING				
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	173-174			
	103-3 Evaluation of the manage- ment approach	173-174			
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	173-174; all the Group sale companies comply with the transparency obligations envisaged by various national and supranational regulations regarding the source of the electricity sold. Energy bills must specify the mix of energy sources used and the source of the energy			
<b>g</b>	417-3 Incidents of non-compliance concerning marketing communications	In 2017 Enel Group companies have not been concerned by proceedings for unfair com-			
	CUSTOMER PRIVACY				
GRI 103:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
Management Approach 2016	103-2 The management approach and its components	51; 170-172; 175			
	103-3 Evaluation of the management approach	51; 170-172; 175			
GRI 418: Customer privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	51; 170-172; 175			
	SOCIOECONOMIC COMPLIANCE				
CDI 102:	103-1 Explanation of the material topic and its boundary	64-67; 237-239			
GRI 103: Management Approach 2016	103-2 The management approach and its components	174-175			
	103-3 Evaluation of the manage- ment approach	174-175			

312 Sustainability Report 2017 GRI Content Index

GRI Standards	Disclosure	Page number(s)	Omission		
GNI Standards	Disclosure	and/or URL(s)	Part Omitted	Reason	Explanation
GRI 419: Socioeconomic Compliance 2016	419-1 Non-compliance with laws and regulations in the social and economic area	Brazil: there were 2 incidents of non-compliance with local laws and/or regulations at Enel Brazil in 2017. Spain: for information about proceedings please see the 2017 Endesa Sustainability re- port at "Conociendo Endesa" chapter - paragraph 5.7 "San- ciones recibidas"			

electricity demand to specific The information over the long term confidentiality requested regards restrictions Strategic Plan data that we do not consider advisable to publish for reasons of strategic expediency. The Enel Group EU10 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 Material aspect: demand-side management DMA 166-168 Material aspect: research and development 142-144 DMA Material aspect: plant decommissioning DMA 302 Material aspect: system efficiency DMA 142-144; 206 EU11 287 EU12 288 **Category: environmental** EU13 214-215 **Category: social** Sub-category: labor practices and decent work Material aspect: employment DMA 184-187; 190 EU15 280-282 EU18 189; 295-296 **Sub-category: society** 

Identified

Omission(s)

Planned capacity The informa-

against projected tion is subject

Reason(s) for Explanation for

Omission(s)

mation.

Proprietary infor-

Omission(s)

GENERAL STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR

Page number(s)

and/or URL(s)

2-3; 12-13; 137-138; 197; 260-261

2-3; 12-13; 164; 196-197; 261-262 SPECIFIC STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR

Page number(s)

and/or URL(s)

12-13; 136; 196; 259-260

286

Material aspect: availability and reliability

166-168

General standard

disclosures for the

EU1 EU2

EU3

EU4

DMA

electric utility sector

**DMA** and Indicators

Sustainability Report 2017 **GRI Content Index** 

Material aspe	ct: local communities
DMA	93
EU22	93-97
Material aspe	ct: disaster/emergency planning and respo
DMA	190
Sub-category	product responsibility
Material aspe	ct: customer health and safety
EU25	271
Material aspe	ct: access
DMA	166-168; 172-175
	Italy: 0%
	Spain: 0% Argentina: 0%
EU26	Brazil: 0%
	Chile: 0% Colombia: 0.39%
	Peru: 3.8%
EU27	290-291
EU28	288
EU29	288
EU30	287-288
Material aspe	ct: provision of information
DMA	174



Concept design and realization

#### You&Web - Gruppo HDRÀ

Copy editing

postScriptum di Paola Urbani

Printing

Varigrafica Alto Lazio

Print run: 300 copies

Published in May 2018

**INSIDE PAGES** 

Paper

Fedrigoni X-PER P.W.

Weight

120 g/m<sup>2</sup>

Number of pages

316

COVER

Paper

Fedrigoni X-PER P.W.

Weight

320 g/m<sup>2</sup>

This publication is printed on FSC® certified 100% paper

Publication not for sale

Ву

**Communications Italy** 

Enel
Società per azioni
Registered office 00198 Rome - Italy
Viale Regina Margherita, 137
Stock Capital Euro 10,166,679,946 fully paid-in
Companies Register of Rome and Tax I.D. 00811720580
R.E.A. of Rome 756032
VAT Code 00934061003

© Enel SpA 00198 Rome, Viale Regina Margherita, 137



We are the energy to express the full potential of each of us.

We are the environment in which we live and the change to which we are devoted, every day.

For this we undertake to safeguard our planet and promote social development.

With passion and innovation. 365 days a year. In more than 30 countries.

We are the communities in which we work and with which we grow.

Because together we have the power to be sustainable.

