2014

Sustainability Report

Terna
TERNA GROUP

Mission

Terna is a leading grid operator for energy transmission. The Company manages electricity transmission in Italy and guarantees its safety, quality and affordability over time. It pursues electricity grid development, ever-increasing operating efficiency and integration with the European grid. It ensures equal access conditions for all grid users. It develops market activities and new business opportunities with the experience and technical expertise it has acquired in managing complex systems. It also creates value for shareholders thanks to continual commitment to professional excellence, and a responsible approach to the community, fully respecting the environment and the areas in which it operates.

2014

Sustainability Report

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Summary

Letter to our stakeholders

The 2014 Sustainability Report, the tenth published by Terna, further consolidates a longstanding trend of positive results. But this is also the first report that we present as the new Top Management, after taking office one year ago. We are therefore particularly proud to present continued growth in the company's results, but also the virtuous change necessary to design a Terna of the future, in a rapidly developing environment at both European and global level.

Over the past months, we have improved our understanding of a strong company, among the top European network operators, that strives to achieve excellence in the sustainable development of infrastructures, in innovation and in services for users, with consequent benefits for the electricity system, without overlooking attractive remuneration for shareholders.

These issues are brought to the attention of our stakeholders both through the Sustainability Report and the Annual Financial Report, which, as of last year, amounts to the Integrated Report. For this reason, the content of this letter is the same as in the Annual Report.

2014 represents a solid starting point, both from an economic and financial point of view, as well as from the equally important perspective of sustainability performance. Regarding the first point, results reflect the positive contribution of both Regulated and Non-Regulated Activities. Compared to 2013, revenues increased by 5.3%, almost reaching 2 billion euro, EBITDA reached almost one and a half billion euro and Net Profit increased by 6%, well above 500 million euro. Capex, in line with the Development Plans, stood at approximately 1.1 billion and during the year new strategic infrastructures have become operational, such as the "Trino-Lacchiarella" and "Foggia-Benevento" lines, significant projects for the Country's safety and energy efficiency. Regarding technological innovation, we carried on with our efforts to develop energy storage systems. Despite high investment levels, the Group generated 260 million in Free Cash Flow and Net Debt has been kept below 7 billion euro, confirming close attention to the management of the financial structure.

Progress has also been considerable in terms of sustainability performance. The per capita training hours have been increased to 43, involving 91% of employees; the number of occupational injuries has decreased, with the injury rate down to 1.27%. On the environmental front, containment programs have enabled us to reduce the impact of SF_6 leakage – the Group's main source of direct greenhouse gas emissions – down to 0.55%, below our target of 0.60%. Grid development has continued to provide an indirect but significant contribution to the growth of electricity production from wind and solar systems, that in 2014 reached 14.3% of total production. Research activities have been focused on the development of new sustainable technologies. The commitment to continuous improvement of processes has focused on relations with the stakeholders: the new map presented in this Report and the in-depth information contained in the relevant chapter mark the launch of a better organisation of involvement methods. The decision to put together this Report in line with the new GRI-G4 Guidelines marks another step forward in the field of sustainability, following our traditionally attentive approach to transparent communication and quality reporting. Application of the new guidelines has also revamped the handling of procurement and the supply chain.

These results represent an important reference to explore and seize new opportunities that may arise, as well as to face the challenges posed by the general market conditions, the evolution of the European electricity sector and the new regulation expected in 2015. For this reason the new 2015-2019 Strategic Plan foresees specific management actions focused on a further strengthening of the electricity system, with a view to an increasingly interconnected European grid; on a more selective approach to investments, with lower impacts on electricity tariffs and debt; on the development of Non-Regulated Activities; and finally, on increased operating efficiency, also thanks to the new organisational structure and the launch of an important voluntary generational turnover programme. Concrete environmental and social initiatives, and those regarding relations with stakeholders will contribute to the sustainability of our actions, also in keeping with our adhesion to the United Nations' Global Compact, in line with our commitments as a founding member of the Global Compact Network Italy Foundation.

To sum up, starting from the results achieved and from a track record of value creation, we believe the Group is well positioned to positively face and overcome future challenges, leveraging the competence, willingness and strong values of all members of the Terna team.

Chairwoman
CATIA BASTIOLI

Chief Executive Officer
MATTEO DEL FANTE

2014

10 years of sustainability

Terna
TERNA GROUP

10 years of sustainability

With the publication of this Report, Terna has reached its tenth year of reporting on its environmental and social performance, in line with the commitments made in its Code of Ethics and which have been translated into concrete, measurable and comparable objectives.
Since the first edition in 2005, the Sustainability Report has been submitted to the Board of Directors for approval. As of the second year, it has adopted the GRI G3 indicators and been submitted to an external auditing firm for review, the same that audits the Financial Statements.
Over the years, the increase in the number of indicators has been connected to a growing capacity to define environmental and social objectives. Achieving these objectives has led to a significant increase in the number of socially responsible investors among Terna's shareholders (for floating shares, going from 1.6% in March 2009 to 6.1% in December 2014)[1], as well as the inclusion of the Terna stock in the main international sustainability indices.

TERNA SUSTAINABILITY REPORTS

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GRI standards adopted	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES
Standards adopted	=	G3	G3	G3	G3	G3	G3.1	G3.1	G3.1	G4
Level of application	=	B+	B+	B+	A+	A+	A+	A+	A+	CORE
Number of indicators	=	35	41	55	56	58	64	65	64	69
External assurance	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES

As of the 2009 Report, the year in which Terna formally adhered to the Global Compact, a table has been included alongside the GRI Content Index that shows the GRI indicators published and the corresponding Global Compact principles side by side. The 2009 Report represented the first Communication on Progress (CoP) to the United Nations network which, after two years, in line with the increase in the number of indicators published, reached the "Advanced" level, the highest possible, for the completeness and transparency of information.
In line with the sustainability information in compulsory corporate reporting published by the Italian National Board of Chartered and Public Accountants (CNDCEC)[2], some of the information contained in the 2010 Report was included in the Report on Operations within the 2010 Annual Financial Report. This began the process of integrating the two reports, which in 2014 led Terna to publish its first Integrated Report.

INCLUSION OF THE TERNA STOCK IN SUSTAINABILITY INDICES

2006	2007	2008	2009	2010	2011	2012	2013-2014
FTSE4Good	FTSE4Good	FTSE4Good	FTSE4Good	FTSE4Good	FTSE4Good	FTSE4Good	FTSE4Good
ECPI	ECPI	ECPI	ECPI	ECPI	ECPI	ECPI	ECPI
	AXIA	AXIA	AXIA	AXIA	AXIA	AXIA	AXIA
		FTSE KLD	FTSE KLD	MSCI	MSCI	MSCI	MSCI
			ASPI	ASPI	ASPI	ASPI	ASPI
			ETHIBEL	ETHIBEL	ETHIBEL	ETHIBEL	ETHIBEL
			DJSI World	DJSI World	DJSI World	DJSI World	DJSI World
				DJSI Europe	DJSI Europe	DJSI Europe	DJSI Europe
				FTSE ECPI	FTSE ECPI	FTSE ECPI	FTSE ECPI
					STOXX® ESG	STOXX® ESG	STOXX® ESG
						Vigeo World and Europe	Vigeo World and Europe

1 Data provided by the sustainability ratings agency Vigeo, on the basis of shareholder identification carried out using restrictive criteria for the definition of socially responsible investors.
2 "The Report on Operations in the Annual Financial Statements, in the light of the changes introduced by Legislative Decree 32/2007", CNDCEC, January 2009.

During the period 2005-2014, Terna has measured and published an increasing quantity of information and data relative to environmental, social, economic and management/operational areas. At this point we will introduce an example, selecting an important indicator for each of the chapters for which the Sustainability Report is known and which are dedicated, respectively, to the electric service and to economic, environmental and social responsibility. The long-term trend of the indicators provides an account of the drive for improvement that has involved and continues to involve all Terna's areas of activities.

Indicators

INTERRUPTION FREQUENCY INDEX
Short Average Interruption Frequency Index + Medium Average Interruption Frequency Index (SAIFI+MAIFI)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Average 2005-2009	Average 2010-2014
SAIFI+MAIFI	0.18	0.21	0.23	0.22	0.19	0.14	0.14	0.14	0.17	0.19	0.21	0.16

SHARE PERFORMANCE

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Average 2005-2009	Average 2010-2014
Share price in Euro	2.08	2.57	2.76	2.33	3.00	3.16	2.60	3.02	3.63	3.76	2.5	3.2

SF_6 LEAKS

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Average 2005-2009	Average 2010-2014
Incidence of leakage	0.59	0.58	0.77	1.07*	0.89	0.73	0.60	0.59	0.49	0.55**	0.83	0.59

* This figure includes the leakage due to an accident that occurred in 2008.
** This figure includes the leakage (784 kg) due to an accident that occurred in 2014.

TRAINING

	2005	2006	2007	2008	2009	2010	2011	2012	2013*	2014	Average 2005-2009	Average 2010-2014
Total hours	124,188	118,123	146,787	186,654	164,416	171,146	178,734	143,418	120,115	148,955	148,034	152,474
Average hours per capita	42	35	43	53	47	49	51	41	35	43	44	44

* The hours of training provided in 2013 reflect the continuation of a transitional period for 2012-2013 which involved Terna going through corporate reorganization.

The complete series of Sustainability Reports is available at http://www.terna.it/Default.aspx?tabid=101 – "Sustainability" Section – Report Archive (http://www.terna.it/default/home_en/sustainability/Sustainability_Report_Archive.aspx).

2014

The Report in brief

Terna
TERNA GROUP

The Report in brief

This report, now in its 10th year, has for the first time adopted the **G4 Guidelines of the Global Reporting Initiative (GRI)**, a year ahead of their definitive entry into force. This new reporting standard is the result of a multi-stakeholder consultation process over two years, involving 120 international experts and making reference to the OECD Guidelines for Multinational Enterprises, the principles of the United Nations Global Compact, the ISO 26000 Guidelines and the United Nations principles on human rights.
The G4 has the goal of making sustainability reporting more strategic through increased focus on governance, ethics and integrity, the supply chain, anti-corruption and greenhouse gas emissions, together with the results of **a materiality analysis** that highlights the most significant issues and information for Company stakeholders.

What's new in the Sustainability Report

The results of the materiality analysis and the stakeholder map review, together with the adoption of the G4 standard, are the main new features of this Sustainability Report, which is increasingly oriented towards issues relevant to the Company and its stakeholders. The "Terna's Profile" chapter is therefore more streamlined, without loss of content, while the chapter on "Relations with Stakeholders" is more substantial, showing the **new mapping** for stakeholders and giving an account of the main initiatives implemented by Terna in this regard. In line with the G4 indications, the **supply chain** is handled in a new and more comprehensive way, including the systems implemented by Terna on environmental issues and human rights.
The central chapters on economic, environmental and social responsibility introduce the respective **thematic materiality matrices**: additional, easy-to-read tools offering a synoptic view on what the relevant issues actually are for the Company and its stakeholders.
For the fifth year running, **comparisons were made with other companies** on four important environmental and social indicators, so as to allow the stakeholders involved to assess Terna's figures and performance with respect to other companies (see the methodological note on page 143).

The main sustainability results

Among the results of 2014, the following are worth noting:
- the preparation of Terna's first Integrated Report. After three years of active participation in the Pilot Programme of the International Integrated Reporting Council (IIRC), the first Integrated Report has been published, coinciding with the Report on Operations within the Annual Financial Report;
- new mapping of Terna stakeholders, with connected relevance analysis;
- updating of ISO 14001 environmental analysis and the BS OHSAS 18001 management system, in both cases to take new energy storage (battery) activities into account;
- the completion of an internal study on the effective level of adhesion to the principles of the Global Compact, with further investigation of the component relative to human rights according to the indications found in the United Nations Ruggie Report;
- a return to high numbers of training hours for employees.

Relations with stakeholders

The new stakeholder map, which has gone from 8 categories divided into 48 sub-categories to 12 categories broken down into 73 sub-categories, is the main development in this chapter, together with a new section on "Grievance mechanisms". The chapter lists the main categories of Terna's stakeholders, showing the instruments provided by the Company to build, maintain and consolidate a relationship of mutual trust.

The figures

Consultation: 181 encounters involving about 100 local authorities
Employees: 604 involved in survey on compliance with the Global Compact's Ten principles

Information boxes

- Terna and Greenpeace talk about the energy context to 2030 on page 51
- Terna promotes new rules for environmental protection on page 51
- Compliance with the Global Compact principles: the employees survey on page 52
- SEA portal and the Environmental Report on page 53
- Grid development and acceptance by local populations: the BESTGRID project on page 54
- Terna meets Pescara on page 55
- Terna and consumer associations work together on an information campaign for local communities on page 56

Responsibility for the electric service

Preceded by an overview of the country's energy needs and production, the chapter discusses Terna's core business in detail, distinguishing the various stages of maintenance, planning, implementation and operation of the electricity transmission grid. In the second part, the focus is on the future of the grid with specific information on applied research and the progress made in developing storage systems and smart transmission solutions.

The figures

Security Plan: 82 million euros invested in 2014
New lines: 330 km of high and very-high-voltage lines (or three-phase power lines) entered into operation
Checks: 91,300 km of three-phase power lines subject to visual inspections of which 22,200 by helicopter
Live-line works: 1,600 checks and 753 maintenance operations

Information boxes

- Terna and ENTSO-E: the Ten-Year European Network Development Plan on pages 73-74
- BEST PATHS project launched on page 77

Economic responsibility

A description of the regulatory framework and revenue structure, the incentive mechanisms introduced by the Regulatory Authority for Electricity, Gas and Water, the transmission cost on the end-user's bill, risk management and Terna's other economic impacts are just some of the topics dealt with in this chapter, which this year also offers a new overview of the supply chain, with a closer look at assessing the ESG criteria when selecting and qualifying Italian and foreign suppliers.

The figures

Employment: 3,437 Group employees as at 31.12.2014
Indirect employment: 2,489 full time equivalent
Total investments: 1,096.1 million Euro
Total Shareholder's Return (TSR): 8.9%
Suppliers active during the year: 2,003

Information boxes

- Assessing ESG for foreign supplies at page 91

Environmental responsibility

This part of the Report deals with the most significant environmental aspects of Terna's work such as the visual impact of lines and substations; the impact of lines on biodiversity, with particular reference to birdlife; the management of special waste; electrical and magnetic fields; and emissions of greenhouses gases.

The figures

Electricity consumption:	186 GWh, down by 8 GWh compared with the previous year
CO_2 emissions:	141,603 tonnes, showing a slight increase compared with the previous year (+3,690 tonnes caused by an accident involving SF_6 leakage)
Waste management:	4,489.88 tonnes of special waste produced, down by 773.68 tonnes compared with the previous year
Environmental offsets:	12.7 million Euro, an increase of 4.3 million Euro compared with the previous year
Water consumption:	173,692 m^3, down by 24,498 m^3 compared with the previous year

Information boxes

- Terna's new pylons on page 102
- Terna's pylons in the repopulation of the white stork on page 104
- Life Cycle Assessment (LCA) on page 113

Comparisons

- CO_2 emissions: comparative data on pages 106-107
- SF_6 leaks: comparative data on page 109

Social responsibility

The last chapter of this report deals with Terna's responsibility towards its people and society. The first part, focusing entirely on human resources, describes the development and management systems to improve performance, the development of individual skills, training, remuneration policies, and safety and injury prevention. The second part describes the role of Terna in society, exercised also through active participation in national and international associations, and the key corporate giving activity.

The figures

Training:	148,955 hours of training provided, amounting to 43 hours per capita
Equal opportunities:	11.5% of total employees women
	17.6% of total management positions held by women[3]

Information boxes

- Management of generational turnover on page 122
- "Here Come Grandma and Grandpa": the initial results from monitoring the impact on the final beneficiaries on page 135
- Roman kiln in Lonato del Garda given a new lease of life with Terna on page 136

3 The percentage refers to the number of female senior and junior executives out of the total number of senior and junior executives in the company.

Comparisons

- Staff turnover: comparative data on page 122
- Training for employees: comparative data on page 124

Reading approaches for stakeholders

- Regulators of licensed activities: pages 48, 73-74, 86-87
- Public decision-makers and authorities: pages 48, 56
- Shareholders: pages 49, 57-58, 84-85, 158, 159
- Financiers: pages 57-58, 160
- Electric service operators: pages 49, 94
- Media and opinion-makers: pages 50, 51, 54, 55
- Customers (non-regulated activities): pages 29, 33, 34
- Suppliers: pages 51, 89-94, 160
- Business partners: pages 50, 74-75
- People in the organization: pages 52-53, 120-130, 164-167
- Community: pages 53, 62, 63, 68, 83, 87, 134
- Local communities: pages 54-55, 68, 135, 136

Reading approaches by Global Compact principle

- Human rights – Principle 1: pages 38, 52, 54-56, 68-69, 89-94, 100-102, 130, 132, 165
- Human rights – Principle 2: pages 52, 89-94, 130
- Labour – Principle 3: pages 35, 52, 53, 91, 130
- Labour – Principle 4: pages 35, 52, 91, 130
- Labour – Principle 5: pages 35, 52, 91, 130
- Labour – Principle 6: pages 52, 121, 126, 127, 128, 130, 155, 164, 165, 166
- Environment – Principle 7: pages 52, 68-69, 88, 103-104, 105, 106, 107, 108, 114-115, 161, 162
- Environment – Principle 8: pages 52, 57, 68, 69, 89-94, 100, 102, 103-104, 106, 107, 108-110, 112, 113-115, 162, 163
- Environment – Principle 9: pages 52, 68-69,103-105, 108-110, 114-115
- Anti-corruption – Principle 10: pages 37-38, 52, 57, 134, 165


Terna

2014

Terna
TERNA GROUP

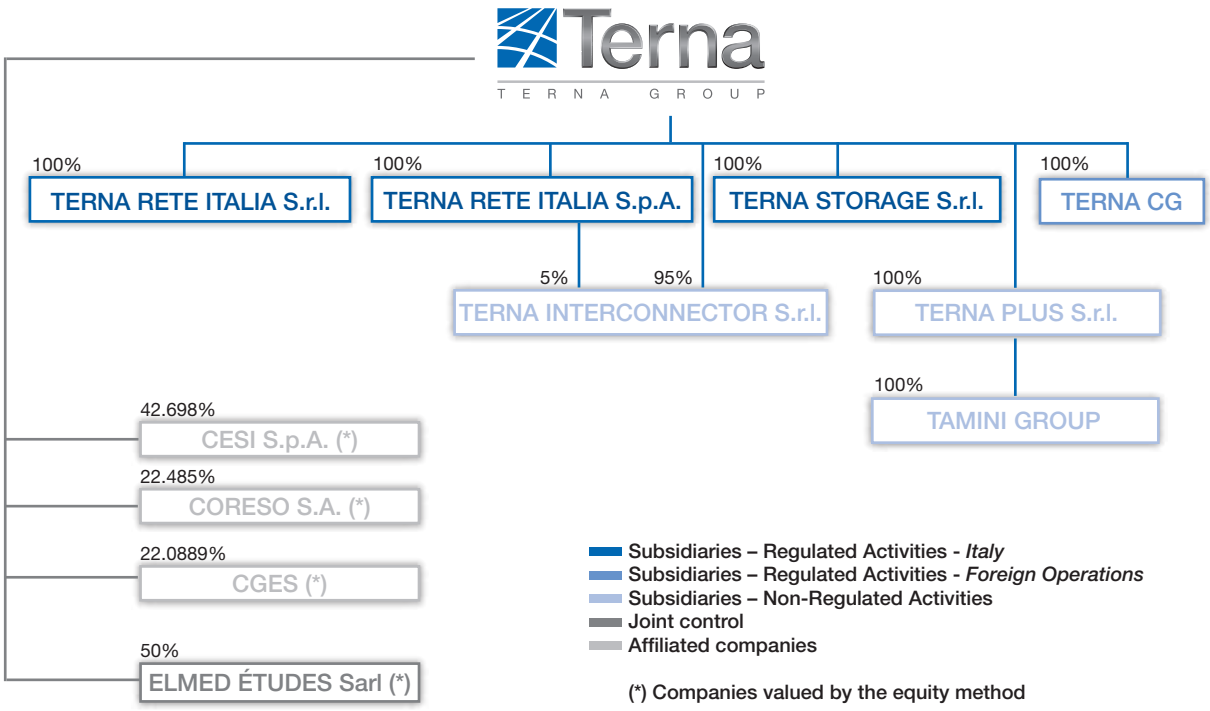
Company Presentation

Terna is the largest independent transmission system operator (TSO) in Europe and the sixth largest in the world in terms of kilometres of lines managed.
The Company has its headquarters in Rome and is the owner of the Italian National Transmission Grid (NTG), with 57,871 km of electricity lines (around 63,900 km of three-phase power lines), 491 transformer substations, and 21 lines interconnecting with foreign grids (data at 31 December 2014).
In Italy, Terna acts as the TSO with a monopoly under a government licence in accordance with the Ministry of Production Decree of 20 April 2005. It is responsible for transmitting and dispatching electricity along the high-voltage and very-high-voltage grid throughout the whole of Italy, as well as for planning, constructing and maintaining the grid.
Terna's mission is to:

- manage electricity transmission in Italy, guaranteeing its security, quality and affordability over time;
- ensure equal conditions of access for all grid users;
- develop market activity and new business opportunities with the experience and technical skills gained in managing complex systems;
- create value for its shareholders with a strong commitment to professional best practices and with a responsible approach to the community, respecting the environment in which it operates.

The Terna Group

The Terna Group's shareholding structure at 31 December 2014 is as follows:



At 31 December 2014, the Terna Group includes:
- Italian subsidiaries controlled directly, with a 100% stake: Terna Rete Italia S.p.A., Terna Rete Italia S.r.l., Terna Storage S.r.l. and Terna Plus S.r.l.;
- Italian subsidiary controlled directly with a 95% stake (the 5% minority is owned by another Group company: Terna Rete Italia S.p.A.): Terna Interconnector S.r.l.;
- the Montenegrin company controlled directly, with a 100% stake: Terna Crna Gora d.o.o.;
- the Italian company Tamini Trasformatori S.r.l., controlled by Terna Plus S.r.l. with a 100% stake;
- the associated companies: CESI S.p.A. (42.698% stake), CORESO S.A. (Belgian company, 22.485% stake); CRNOGORSKI ELEKTROPRENOSNI SISTEM AD – "CGES" (Montenegrin company, 22.0889% stake) and the Tunisian joint-venture ELMED ÉTUDES S.a.r.l. (50% stake).

Organizational structure

The Terna Group has adopted an organizational structure divided into a parent company and operating companies (with employees) wholly controlled by the parent company itself:
- Terna S.p.A., the parent company, as well as being the owner of the licence for the transmission and despatching of electricity, also owns the capital assets and is responsible for defining the NTG Development Plan and the Defence Plan.
- Terna Rete Italia S.p.A. is the Group company responsible for all traditional business activities, for ordinary and extraordinary maintenance of the grid, and managing and implementing developments to the grid, as set out in the Parent Company's Development Plan. To this end, Terna Rete Italia S.p.A. has drawn up a business unit lease agreement, with effect from 1 April 2012, with the parent company and concomitant intra-group agreements for regulating business. More than 80% of the Group's human resources are concentrated within Terna Rete Italia S.p.A.
- Terna Storage S.r.l., founded in 2012, is responsible, pursuant to a contract signed to such end with the parent company, for ensuring the implementation of diffused energy storage system projects, as well as the related coordination, study and research activities.
- Terna Plus S.r.l. is the operating company devoted to non-regulated business projects. It has developed a streamlined and flexible operating structure. The development of such business pursues the objective of further enhancing assets held and the Parent Company's distinctive skills in the creation and management of, in particular, high-voltage infrastructure in Italy and abroad (see also the box "Terna Plus acquires 100% of the Tamini Group" on page 29).
- Terna Crna Gora d.o.o., a Montenegrin limited liability company (S.r.l.) incorporated on 22 June 2011 and wholly controlled by Terna, is engaged in authorising, constructing and managing the Italy-Montenegro electricity interconnection on the Montenegrin side. The investments carried out by the company in 2014 in Montenegro amounted to € 15,195,000 and were connected to design, supplies and labour, in line with that foreseen in the construction contracts for execution of the project. In particular, the main design for the cables was finalised, the necessary authorisations were obtained for preliminary activities related to cables and the substation, the construction site at Lasta (Kotor) was opened, and the preliminary work to construct the substation was started as a result. At the end of 2014, the company recorded revenues of € 700,000 and a loss of € 1,287,000. Therefore, no taxes were paid to the Montenegro government.

Since 31 December 2013, the only changes to the scope of consolidation are in respect of "non-regulated activities". In particular these included the acquisition of 100% of the capital in the Tamini Group by the subsidiary Terna Plus (closing took place on 20 May 2014), and the incorporation of Interconnector S.r.l. (95% owned by the Group parent company, Terna S.p.A., and 5% by the subsidiary Terna Rete Italia S.p.A.) which is the vehicle created to develop and implement the "Italy-France Interconnector" project.

Associates

CESI is a leading company in testing and certifying electro-mechanical equipment, and electrical system consultation. It covers all stages of the electric system life cycle and offers companies operating in the electric system (generation, transmission and distribution), the manufacturers of electric and electronic equipment, large electricity consumers, and local and national public administration a full range of services aimed at resolving problems related to the production processes of the entire electrical energy sector.

CORESO is a Belgian service company with its headquarters in Brussels; Terna became a shareholder in November 2010 with a 22.485% stake. The shareholding structure of the company includes the operators of France (RTE), Belgium (Elia) and Great Britain (National Grid), each with a share equal to that of Terna, and the German operator, 50 Hertz Transmission, with 10%. CORESO prepares daily forecasts and real-time analyses of energy flows in Central and Western Europe, identifying possible critical issues and duly informing the TSOs concerned in a timely manner.

CRNOGORSKI ELEKTROPRENOSNI SISTEM AD ("CGES") is the Montenegrin TSO of which Terna became a shareholder, holding 22.09% of the capital, following approval by the CGES shareholders' meeting of a capital increase restricted to Terna.

The agreement is the fruit of industrial and country-system cooperation and is part of the intergovernmental agreements between Italy and Montenegro, which began on 19 December 2007 and were ratified with the signing of a strategic partnership agreement in November 2010, for the construction of a new undersea electricity interconnection and the implementation of a partnership between the national transmission operators.

Joint ventures

ELMED ÉTUDES is a Tunisian company, equally owned by Terna and the Tunisian electricity operator, STEG, which initially focused on preliminary research work for a tender for the construction and operation of an electricity generation plant in Tunisia and the subsequent execution of the work necessary to connect the Tunisian and Italian electricity grids. The initial programme was not completed due to changes in the political and economic climate. On 31 July 2013, the shareholders' meeting of ELMED ÉTUDES therefore resolved to separate the studies related to creation of the connection from the construction of the generation plant, granting a mandate to the company's directors to take all the action needed for such purpose.

SIZE OF THE TERNA GROUP AS OF 31.12.2014

Number of employees:		3,437
of whom:	Terna S.p.A.	384
	Terna Rete Italia	3,037
	Terna Storage	5
	Terna Plus	11
Tamini[1]		357
Terna Crna Gora[1]		3
Turnover in millions of Euro		1,996
Total capitalisation in millions of Euro		7,624
Km of three-phase power lines		63,891
Km of lines[2]		57,871

(1) Unless explicitly indicated, the 357 Tamini employees and the 3 local employees of Terna Crna Gora d.o.o. are excluded from the data presented in this Report.

(2) For a breakdown of the kilometres of lines and three-phase power lines by voltage, please see the Tables of indicators on page 157.

TERNA Plus acquires 100% of Tamini Group

Terna Group's non-regulated activities consist of adding value to its own assets and leveraging its unique capabilities in the infrastructure development and management sectors, in particular high-voltage infrastructure, in Italy and abroad.
In line with this mission, on 20 May 2014 the subsidiary Terna Plus completed the acquisition of the entire share capital of Tamini Trasformatori S.r.l. and its subsidiaries operating in the production and sale of industrial and power transformers: V.T.D Trasformatori S.r.l., Verbano Trasformatori S.r.l. and Tamini Trasformers USA L.L.C.
Tamini is a pillar of Italy's industrial heritage and one of the leading groups in Europe in the design, production and sale of industrial and power transformers. Tamini is a skilled producer of industrial machinery with approximately 400 specialised employees and customers from over 90 countries all around the world, installing over 200 transformers per year. It marries customers' facility-specific requirements to sophisticated design and calculation techniques thanks to innovative software solutions and leading-edge simulation models.
Tamini's total of over 8,000 transformers built and installed, makes it the global number one in the sector in terms of number of machines installed. In addition it boasts the construction of the world's most powerful transformer, in Turkey. It has four factories, all in Italy, respectively in Legnano (Milan), Melegnano (Milan), Novara and Valdagno (Vicenza).

Ownership structure

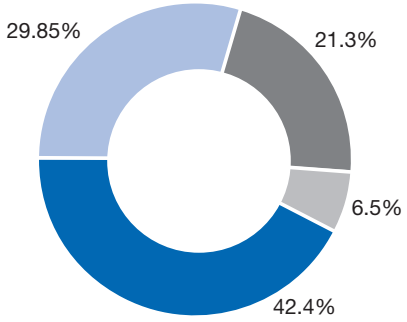
As of reporting date, Terna S.p.A.'s share capital amounted to 442,198,240 Euro, represented by 2,009,992,000 ordinary shares, with a par value of 0.22 Euro each, fully paid-up.
On the basis of the shareholder register and other information gathered when this report was prepared, ownership of Terna S.p.A. is divided as follows:

- CDP RETI S.p.A. 29.85% (subsidiary of Cassa Depositi e Prestiti S.p.A.)[4, 5]
- Institutional Investors 48.9%
  - of which People's Bank of China 2.01%
- Retail 21.3%

TERNA'S SHAREHOLDERS BY TYPE

CDP RETI S.p.A.	29.85%
Italian Institutional Investors	6.5%
Foreign Institutional Investors	42.4%
People's Bank of China	2.01%
Retail	21.3%

Total 100%



On the basis of periodic surveys performed by the Company, it is believed that 57.6% of Terna shares are held by Italian investors (CDP RETI S.p.A., 29.85%; Retail, 21.3%; and Institutional Investors, 6.5%), with the remaining 42.4% held by Foreign Institutional Investors (United Kingdom/Canada 11.0%, Rest of Europe 12.3%, US/Canada 8.3%, Middle East, Asia and Australia 4.7%, Other 6.0%).
At the end of 2014, 14.9% of Terna's share capital was held by socially responsible investors (SRI). There were 81 SRIs – i.e. those choosing to invest in Terna with a sustainable approach in mind, based on the consideration of ESG (Environmental, Social and Governance) aspects – which was essentially in line with the 2013 figure of 85. They represent 6.1% of the floating shares (7.2% at the end of 2013) and 10% of the shares held by institutional investors (in line with the 10% at the end of 2013).
In the "Report on Corporate Governance and Ownership Structures", approved by the Board of Directors for the financial year 2014 – Section II: Information on corporate structures published alongside the Terna and Terna Group Annual Financial Report reported information on ownership structures, restrictions on the transfer of shares, shares which grant special rights, and restrictions on voting rights required under Article 123-*bis* of the Consolidated Law on Finance (Italian Legislative Decree No. 58 "TUF" of 24 February 1998).
In order to safeguard Terna's independence and impartiality, no operator in the electricity industry may exercise voting rights in appointing the Board of Directors for a stake of more than 5% of the share capital.

4 This shareholder has a stake in Terna S.p.A.'s share capital above the thresholds indicated in Consob Resolution No. 11971/99, based on the information available, and communications from Consob.
5 Shareholder Agreements: on 27 November 2014, a shareholder agreement was stipulated between Cassa Depositi e Prestiti S.p.A. (CDP) on the one part, and State Grid Europe Limited (SGEL) and State Grid International Development Limited (SGID), on the other, in relation to CDP RETI S.p.A. (CDP RETI), SNAM S.p.A. and TERNA S.p.A. The basic information relative to this Shareholder Agreement has been published on the CONSOB and Terna websites, pursuant to the regulations in force.

Corporate governance

Terna S.p.A.'s governance structure is based on the traditional administration and management model. It is in line with the principles found in the Corporate Governance Code for listed companies, published by the Committee for Corporate Governance promoted by ABI, ANIA, Assonime, Assogestioni, Borsa Italiana and Confindustria as of December 2011 (as most recently updated in July 2014, accessible on the Borsa Italiana S.p.A. website http://www.borsaitaliana.it/comitato-corporate-governance/codice/2014clean.pdf) to which Terna adhered, through a resolution by the Board of Directors on 24 July 2012.
The current structure of the Board of Directors provides for a single Chief Executive Officer to whom the Board attributed the mandates in a resolution on 27 May 2014 defining their content, limitations and any specific methods.
The activities of the Board of Directors are co-ordinated by the Chairman. In its resolution on 27 May 2014, the Board of Directors assigned the Chairwoman, Catia Bastioli, the official role of representing the Company, guiding and directing the activities of the Board, and promoting and acting as advisor for CSR (corporate social responsibility), as well as supervising the activities relative to the holding in "CESI - Centro Elettrotecnico Sperimentale Italiano Giacinto Motta S.p.A.", jointly with its Chief Executive Officer. The Board of Directors – appointed by the General Shareholders' Meeting – is entrusted with managing the firm. The Board of Directors is responsible for establishing strategic and organizational guidelines for the Company and the Group, as well as ensuring that the necessary audits for monitoring the performance of the Company and its subsidiaries are in place.

BOARD OF DIRECTORS IN OFFICE AT 04/03/2015

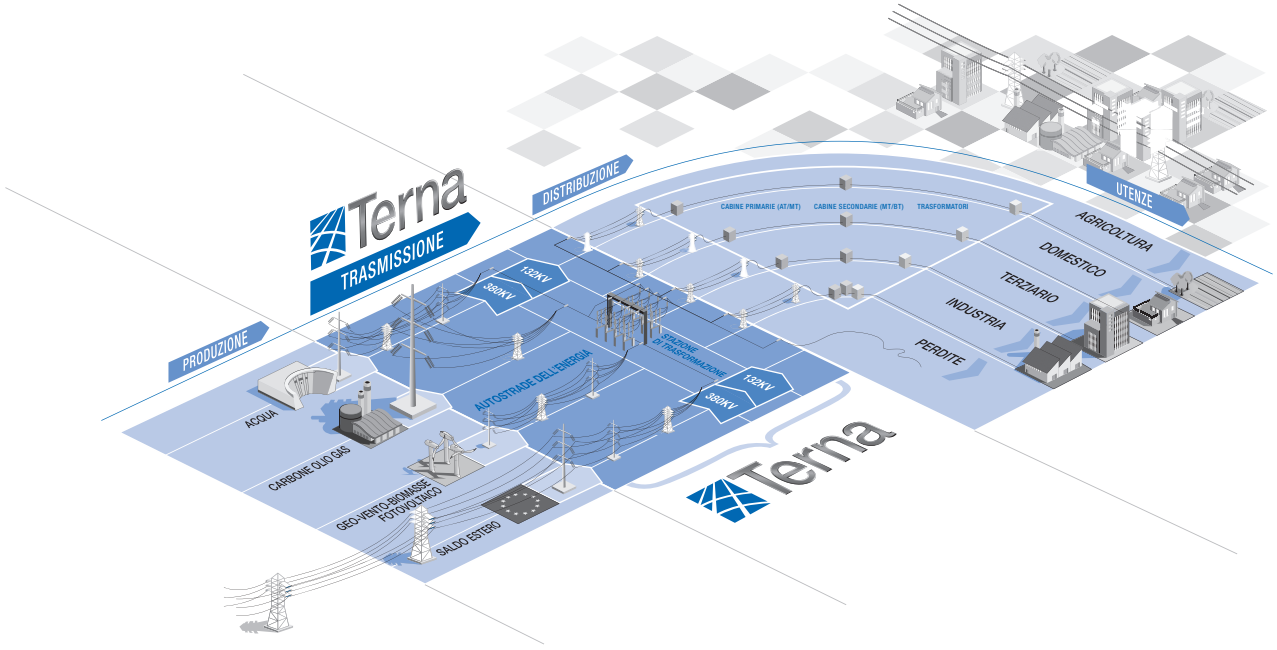
Office	Members	Executive	Non-executive	Independent	Control, Risk and Corporate Governance Committee	Remuneration Committee	Appointments Committee	Committee on Transactions with Related Parties
Chairperson	Catia Bastioli		●					
Chief Executive Officer	Matteo Del Fante	●						
Director	Cesare Calari		●	●	●			
Director	Carlo Gandolfo Cerami		●	●	●	●	●	
Director	Fabio Corsico		●	●		●		●
Director	Luca Dal Fabbro		●	●	●		●	
Director	Yunpeng He		●					
Director	Gabriella Porcelli		●	●		●		●
Director	Stefano Saglia		●	●			●	●

The Board of Directors is comprised of nine members, whose mandate will expire upon approval of the budget for the 2016 financial year. Further information on Terna's corporate governance can be found in the "Report on Corporate Governance and Ownership Structures", which was approved by the Board of Directors on 26/03/2015 and is available on the Company's website www.terna.it in the "Investor Relations" section.

Core business: electricity transmission

Terna's core business is the transmission of electricity in Italy.
The Italian electric system consists of four stages: producing, transmitting, distributing and selling electricity.

Terna is responsible for managing the electric system by:
- **operating the high-voltage grid;**
- **maintaining infrastructure;**
- **planning grid development;**
- **constructing the grid.**



The main stages of transmission are as follows.

Operating the grid

In operating the grid, it is **essential to ensure a balance between input and output at all times**, i.e. between the supply of energy, produced domestically and imported, and consumption by end users. This function is termed dispatching and is managed by Terna Rete Italia.

Preparation for real-time operation includes **planning unavailability** (of the grid and of production plants) with different time horizons, forecasting national electricity demand, comparing demand for consistency with the production plan determined as the result of the free energy market (Electricity Market and contracts outside of the Electricity Market), acquiring resources for dispatching, and checking the power transits for all the transmission grid lines.

During the **real-time control** stage, the National Control Centre, coordinating other centres around the country, monitors the electric system and dispatches electricity, intervening, by communicating commands to producers and Remote-Control Centres, in order to vary grid supply and distribution. To avoid the risk of grid degeneration and prolonged power outages, it may also intervene in an emergency to reduce demand. For further details, please see pages 64-67, “Service quality and continuity”.

Maintenance

Terna Rete Italia **maintains power lines and substations** through three Area Offices, which are divided into eight Operational Transmission Areas and which employ over 80% of the Group’s human resources. For further details, please see page 67, “Plant maintenance”.

Grid development planning

Analysing electricity flows in the grid and producing demand projections allow Terna to **identify the critical points of the grid and work to be carried out** in order to ensure the system’s adequacy in terms of meeting demand, securing operations, reducing congestion, and improving service quality and continuity.

Work to be carried out is detailed in the National Transmission Grid Development Plan, which is presented every year to the Ministry of Economic Development for approval. Terna then follows the authorisation process, from prior consultation with local government through to construction authorisation.

Finally, by analysing the grid, Terna also sees to identifying the **best ways of connecting to the transmission grid** for all operators who wish to connect their plants. For further details, please see page 68, “Grid development”.

Construction

Terna Rete Italia sets the engineering standards for plants connected to the grid, particularly construction standards and the performance required of equipment, machinery, and station and power-line components. As far as plant construction is concerned, **Terna prepares projects for the authorised works**. It sets out the requirements for external resources and project budgets, as well as the working methods and technical specifications for the components and materials that will be used in constructing the new lines or stations, including the adoption of innovative methods. The construction of new plants is normally outsourced. For further details, please see page 69, "Completed work".

Other activities

To complement its core business, **Terna develops non-regulated activities, or those subject to regulation by the Italian Regulatory Authority for Electricity, Gas and Water (AEEGSI) but different from the licensed activities.**
In 2014, these activities concerned:

- progress with investment projects in storage systems (see the box below);
- continuation of initiatives abroad.

The innovative "Energy Intensive" and "Power Intensive" projects

The rise in generation from renewable sources – increased by the priority dispatch obligation – the global economic crisis and the consequent contraction of demand, further complicated secure management of the grid and its power flows. Owing to its long and narrow shape, Italy was one of the first to have to tackle these problems, but it is also among the first to find solutions, positioning it at the leading edge of technological innovation in the field of storage systems. As part of a complex strategy of updating the NTG to cope with these new challenges, Terna has launched two parallel projects in the area of storage systems.
The first project, entitled "Energy Intensive", is aimed at reducing local congestion in the areas of Southern Italy, where wind farms are concentrated (along the Apennines between Campania and Apulia); in certain grid conditions, in fact, it is necessary to "limit" production from renewable sources with an economic loss (the incentive is still paid) and environmental damage (the "green" energy not delivered is replaced by the same amount of "non-green" energy) which involves the entire electrical system. To avoid such problems, Terna is constructing three storage plants using Sodium-Sulphur (NaS) technology for approximately 12 MW of power each and a total capacity of approximately 250 MWh.
The second project, entitled "Power Intensive", involves the creation of 40 MW of storage systems on the major islands with the objective of contributing to the defence of the electrical system, increasing its ability to react rapidly to fluctuations caused by the unforeseeability of renewable sources. Given the great innovation typical of these systems, Terna, in agreement with the MED and the AEEGSI, has decided to proceed in two successive stages: in the first, 16 MW are planned, divided into two installations with power of approximately 8 MW each situated on the major islands. When this stage is complete, a further 24 MW will be installed in the most critical areas of the said islands. The specific feature of the first stage, also known as the "Storage Lab", is that multiple technological solutions will be installed – ZEBRA lithium-ion batteries and, in the near future, lithium super-capacitors and flow batteries – and it thus becomes the largest laboratory in the world on electrochemical storage plants (see also page 75).

Development abroad

Terna has two strategic objectives abroad: developing interconnections with neighbouring countries to increase the security, value and sustainability of supply, and diversification with respect to national investments, also through cooperation with energy operators with a consolidated presence abroad. Italy is the most interconnected state in Europe, with especially good links to Mediterranean countries: France (2013 saw the commencement of work on the new transalpine interconnection), Slovenia, Greece and soon also Malta (2015) and Montenegro (2019). Focusing international development on the Mediterranean basin allows Terna to benefit from Italy's competitive advantage: its geographical positioning – not only a potential outlet market but a hub between continental Europe and the Mediterranean. This also has an impact on the security of the system; following the integration of renewable sources in the grid, and European regulations to create a single market, it is essential to create strong interconnections with foreign countries and, therefore, natural outlet markets such as the Balkans and North Africa. Investment in other countries with positive growth trends and which require electrical infrastructure along with a stable, reliable legislative/regulatory framework, increases the value of Terna's skills.

The Balkans

The Balkan Peninsula is an area of strategic interest for Terna, considering its proximity and the energy potential in the region, particularly with regard to renewable resources.
The new undersea power line between Italy and Montenegro, incorporated into the NTG Development Plan, will link Italy to the Balkans via 415 km of 500 kV cable between the hubs in Villanova (Pescara, Italy) and Kotor (Montenegro), with a transmission capacity of 1,000 MW.
The construction of interconnection cables received the necessary authorisation. The international tenders have been awarded: in Italy, the work is managed by Terna Rete Italia, while in Montenegro by Terna Crna Gora d.o.o. In 2014, the necessary authorisations were received in Montenegro for preliminary activities related to the cables and substation, and the construction site was opened in Lasta (Kotor).

North Africa

Terna is not currently invested in North Africa, but is involved in preliminary development studies on:
- the creation of an electrical corridor between the Maghreb and Europe involving the interconnection of the countries involved. Terna is currently exploring the possibility of a Tunisian interconnection with the TSO in Tunisia, STEG;
- participating in cooperation, institutional and industrial initiatives. To this end, Terna was one of the promoters of Med-TSO.

Cooperation between Mediterranean TSOs: Med-TSO

Med-TSO is the association of 20 transmission system operators from 18 countries around the Mediterranean. Terna was the driving force behind setting it up in 2012 and hosts the organization's head offices.
Together with its 2015-2017 Action Plan, Project Mediterranean was launched by Med-TSO in 2014 to promote infrastructure investments in the region. It comprises five areas of activity and is co-financed by the European Commission following the signing of a cooperation agreement in December 2014.
- Rules: Mediterranean Network Code and Technical Rules for the international exchange of electricity, in cooperation with MedReg;
- Infrastructure: coordinated planning of developments to the Mediterranean grids;
- International exchange of electricity: promotion of international exchange of electricity;
- Med-TSO database: sharing information between electricity businesses in the Mediterranean;
- Knowledge network: development of a network to exchange knowledge and experience in partnership with universities in the Med-TSO countries.

During the Euro-Mediterranean Conference of Energy Ministers in Rome in November 2014 the EC, MedReg (the association of Mediterranean electricity and gas regulators based in Rome in the offices of the AEEGSI) and Med-TSO signed a Partnership Agreement recognising both associations as institutional partners in the Euro-Mediterranean energy sector.

Sustainability aspects related to Terna

Terna's main business is the provision of a service which is indispensable for the operation of the entire Italian electric system and to ensure electricity for everyone. The greatest social and economic impact of the company's business lies in its ability to provide the general public with a reliable, efficient electric service. Commitment to service is therefore also our main reference point when approaching sustainability matters. This has been confirmed by the results of the materiality analysis carried out in 2013, and reviewed in 2014 (see the methodological note on page 140).
In general, Terna's intent, as ratified in its Code of Ethics, is to construct and develop relationships based on trust with stakeholders, which are able to create value for the business and for the stakeholders themselves.
Although the end users of the electric service are not direct customers of Terna, but rather are companies that distribute and sell electricity, the essential role it performs in the electric system makes Terna **ethically responsible for the service with regard to Italian society**. Thus Terna is fully aware of the responsibility entrusted to it by the government licence, and sets itself the following objectives:
- providing a secure, reliable, continuous and cost-effective service;
- developing and ensuring an efficient transmission system;
- respecting impartiality and neutrality in order to ensure equal treatment for all grid users.

In Terna's view, business and sustainability matters are closely linked, so much so that both the company and its stakeholders consider **adopting a responsible approach to planning the NTG** a company priority.
This means being pro-actively concerned about the possible environmental and social impact of any development, adopting all the necessary measures to prevent and minimise such an impact, and pursuing a **constructive dialogue with local communities** who live in the area where the development is planned, or where there are power lines.
For Terna, respect for the environment and for local communities is a rule of conduct which can trigger a virtuous cycle: it allows biodiversity and the richness of the landscape and local culture to be preserved, and facilitates acceptance and creation of new infrastructure, generating financial benefits for shareholders and for society, which can enjoy a more secure, more efficient and less costly service. Focus on the community is also demonstrated by the creation of initiatives of social, humanitarian and cultural value, which serve as a concrete sign of participation in the growth of civil society.
The role of human resources in Terna's work is crucial. **Renewing specific technical skills**, which are often rare or unique in the electricity industry, constitutes an important part of Terna's sustainability approach. Another, which is just as important, is **occupational safety**. This is especially relevant due to the fact that many operational tasks are associated with particular risks such as work high above ground and maintenance work on live lines.
Further details on the key sustainability issues for Terna can be found in the first section of the four chapters on service, economic, environmental and social responsibility in this Report.

Sustainability governance

Code of Ethics

The Code of Ethics, approved by the Board of Directors on 21 December 2006, is the most authoritative reference for identifying sustainability issues important to Terna and for defining internal policies and guidelines. It can be used as a concrete guide in everyday decisions, helping to achieve the objective of establishing and consolidating trust with stakeholders. One of the commitments expressed in the Code is to provide evidence in the Sustainability Report each year of the implementation of the Company's environmental and social policy, as well as the consistency between the objectives and results achieved. In February 2015, considering the changes made over time to the Group's organizational structure, Terna developed a guideline for the adoption of the Code of Ethics by the companies of the Group, which contains interpretation instructions on the connection between the specific contents of the Code and the operational context of the Parent Company and its subsidiaries.
The Code of Ethics is available in the "Investor Relations" section of Terna's website under "Corporate governance".

Global Compact

G4-HR4
G4-HR5
G4-HR6

When it joined the Global Compact – the United Nations' multi-stakeholder network – in 2009, Terna further cemented its commitment to observing the ten principles of the Global Compact on human rights, employment, the environment and preventing corruption. These principles were already set out in Terna's Code of Ethics as a benchmark for the company's corporate responsibility and sustainability initiatives. Terna has been on the Steering Committee for the Italian network since 2011 and contributed to the work done in 2014 by taking part in the working group on integrated reporting. For the fourth year running, Terna also submitted a Communication on Progress (CoP) at the Global Compact advanced level.

Management policies and systems

The conduct principles and criteria in the Code of Ethics have been translated into corporate policies and coherent management systems. Specifically, these include:

Internal organization

With regard to sustainability, the following are of particular significance:

- the presence of a Sustainability Steering Committee, the members of which are the Chairperson of Terna S.p.A. – to whom the Board of Directors on 27 May 2014 gave, in addition to institutional duties, the role of promoting and advising on CSR – the CEOs of Terna Rete Italia S.p.A. and Terna Plus S.r.l.; and a number of Directors who share the responsibility for determining strategic guidelines and sustainability objectives for the Terna Group, and for monitoring their progress and implementation. The Group's CSR Manager is the Secretary of the Steering Committee, which also decides on the Group's annual and long-term sustainability plans, to support and add to the Strategic Plan. It supervises company activities related to sustainability;
- the presence of a Corporate Social Responsibility Unit within the External Relations and Communications Department, which, in collaboration with all company departments and with reference to best practices, helps define the company's sustainability objectives from an ethical, social, environmental and sustainability-governance viewpoint, and communicate the objectives and results of corporate social responsibility. Moreover, the Unit constantly monitors the risks connected with sustainability, which entail potential negative repercussions for the company's reputation and its intangible value, by analysing the ratings of the main agencies (such as RobecoSAM, Vigeo and Eiris), which regularly assess sustainability;
- the Sustainability Team, a permanent working group that guarantees application of the guidelines and achievement of the objectives defined by the Sustainability Steering Committee, and serves as the "drive belt" between the Steering Committee and the various company departments responsible for implementing its decisions;
- the use of SDM (Sustainability Data Manager) software to manage the sustainability IT system which currently collects more than 1,500 indicators corresponding to textual information, data, conversion factors and formulas for monitoring Terna's environmental and social performance;
- the presentation to the Board of Directors of sustainability objectives and results, when it approves the Sustainability Report.

Integrated Management System, Accreditations and Certifications

Work relating to the fields of the environment and occupational safety, which are a crucial part of Terna's sustainability vision, are coordinated and directed in the Integrated Quality, Environment and Occupational Safety Management System, which is certified as **ISO 9001:2008**, **ISO 14001:2004** and **BS OHSAS 18001:2007** compliant. **The integrated system covers 100% of Terna's activities in Italy and abroad**, both the work carried out on existing plants, and the planning, design and construction of new plants.

On 27 January 2014, new certificates were released relative to the "Quality, Environment and Occupational Health and Safety Management Systems" for the companies in the Terna Group, extended also to the subsidiaries Terna Cma Gora and Terna Storage. In June, the usual inspections were carried out to maintain the certification for "**Quality, Environment and Occupational Health and Safety**" for the companies in the Terna Group. Finally, during the year, certification for the "**Information Security Management System**" (ISMS) was renewed, in accordance with the ISO/IEC 27001:2005 international standard (initially obtained in 2011), for the TIMM applications (Amended Text on the Monitoring of the Wholesale Electricity Market).

In 2014, in line with that established in Italian Legislative Decree 344/99 (the "Seveso Directive"), a "**Management System for the Prevention of Serious Accidents**" was implemented for the subsidiary Terna Storage, which operates on its own sites, where electricity storage systems which fall under the auspices of the directive have been and will be installed.

In regard to accreditation certificates, in February the multi-site testing laboratory was accredited; this is located in Viverone (Biella), Civitavecchia (Rome) and Frattamaggiore (Naples) for tests on the equipment used in live-line work, in accordance with the ISO/IEC 17025 standard. In September 2014, further inspections were carried out by Accredia, which confirmed the positive results. This has allowed the Terna Group to become, both nationally and at the European level, the reference point in the high-voltage energy sector, as it is the only organization accredited to issue certification in regard to tests carried out on LLW equipment.

During 2014, the procedure for accreditation of the Calibration Centre activities in Florence, Turin and Cagliari began, in accordance with the ISO/IEC 17025 standard, which is necessary in order to carry out metrological tests on active electrical energy meters and on electricity measurement systems used to determine energy flows for tax purposes, as foreseen by the Customs Agency.

With the aim of receiving UNI CEI EN ISO 50001:2011 certification, in 2014 the development of the "**Energy Consumed for Own Use Management System**" for the Terna Group continued. Energy analyses were completed for the relevant Group locations and the first sensors were placed on the three sample electrical substations in Rondissone (Turin), Dugale (Verona) and Rome North for remote measurement of energy consumption.

Balanced Scorecard

Company activities are monitored and controlled with a Balanced Scorecard (BSC) system, a control panel of indicators used to evaluate, at quarterly intervals, the progress made in achieving the objectives, including those related to sustainability, linked to the Strategic Plan.

Respecting the law and preventing corruption

G4-S03

For Terna, the prevention of corruption is a strategic activity which is intrinsically linked to internal audit systems. Legality and honesty are two of the general principles on which the Code of Ethics and the conduct of the Company's business are based.
Terna's strategy in this regard focuses on three major areas: Organizational Model 231, fraud management and staff training.
In the period 2012-2014, the Audit Unit examined all company departments (100%) and subsidiaries several times in relation to various types of risk, including those relating to corruption, within the scope of audit and risk assessment activities for company procedures and departments.
During 2014, the Audit Unit carried out an internal survey on respect for the Ten Principles of the Global Compact by Group companies, which involved a total of 604 people (for more details, please see the box on page 52).
Since 2013, the safeguards and systems in place at the Company have enabled attribution to the Parent Company of the legality rating with the maximum score.
This rating, attributed to Terna by the Italian Antitrust Authority (AGCM), is taken into consideration when granting loans to businesses by public administrations, and on accessing bank loans.

Organizational Model 231

In 2002, Terna's Board of Directors resolved to adopt an Organizational and Management Model which met the requirements of Legislative Decree No. 231 of 8 June 2001.
Terna's adoption of the Organizational and Management Model 231 aims to ensure correctness and transparency in carrying out company business and activities in order to protect its position and image and the expectations of its stakeholders.
The current model is divided into 11 parts, 1 general and 10 special, plus the compliance regulation. The task of keeping the model up to date is assigned to the Project Coordination and Model 231 Monitoring Unit, within the Corporate Affairs Division. During 2014, following the acquisition of the Tamini Group, the Unit took action to update the Group's Organizational Model, in order to ensure alignment with that of Terna.
To guarantee adequate awareness, understanding and application of the Model by all workers, a training campaign was prepared for Terna employees who had not been able to participate in previous training initiatives.
Further information on Terna's Organizational Model and those of the Group's other companies is available in the "Investor Relations" section under "Corporate Governance" on Terna's homepage http://www.terna.it/Default.aspx?tabid=101.
(http://www.terna.it/default/home_en/investor_relations_en/corporate_governance_en/organizational_model.aspx).

Fraud Management

This unit, within the Corporate Protection Department, carries out the following tasks:

- preventing and managing crimes by systematically analysing the pre-conditions for fraudulent acts; outlining specific monitoring and control procedures in order to mitigate risks; and continuously monitoring the efficacy of the preventative measures adopted;
- checking and assessing new entities and counterparties with the aim of containing risks deriving from transactions with third parties;
- validating, ex ante, requests for awarding consultancy services, professional appointments and IT services, and procedures for awarding contracts to predetermined suppliers;
- sending, in accordance with the Memorandum of Understanding signed with them, data, information and news on contractors and subcontractors to the institutions responsible, in order to prevent criminal attempts to infiltrate construction work on the infrastructure of the National Transmission Grid.

G4-SO4
G4-HR2

Personnel training

All new employees attend training courses which aim in part to ensure awareness and dissemination of the rules on conduct and procedures established to prevent crime at all levels of the company within their objectives. These courses also train and inform personnel about the areas at risk of criminal activity and about potential crime in relation to the work carried out. Training courses on the Code of Ethics and Organizational Model 231 are also provided (see the Tables of indicators on page 165).

G4-SO5

In 2014, there was no pending litigation, nor were any penal cases concluded in regards to corruption. Since 2005 (the year in which ownership and management of the transmission grid was combined and Terna - Rete Elettrica Nazionale S.p.A. was established) and through the entirety of 2014, no significant monetary fines, or definitive administrative or judicial penalties have imposed a "do/not do" obligation on Terna, or criminally convicted its employees (see page 57 in this chapter).

The Strategic Plan

On the 26 March 2015, Terna approved its Strategic Plan for 2015-2019. The Terna group intends to implement strategies aimed at generating cash flow which is able to ensure a sound and balanced financial structure, as well as supporting the distribution of dividends. The strategic initiatives identified will be concerned with:

- the establishment of efficiency programmes concerning investments and operating costs;
- the consolidation of transmission investments;
- the creation of new cross-border interconnections;
- the development of non-regulated activities.

Regulated Activities

In the next five years, the Terna Group plans for electricity grid development totalling around 3.9 billion Euro; 3.2 billion Euro of which will be for investments in the national electricity grid.

The European and Italian regulatory framework is increasingly aimed towards progressive growth and greater investment selectivity, which favour energy infrastructure that is more technological, smart and which has a low environmental impact, with a particular focus on new electrical interconnections with neighbouring countries. The works on the interconnections between foreign countries – "Piossasco-Grand'Ile" between Italy and France, and "Villanova-Tivat" between Italy and Montenegro – will continue in this direction. Other grid development opportunities that are not included in the Strategic Plan can be added to these projects. In fact, the potential acquisition of a high-voltage grid owned by the FS is currently being evaluated.

Non-Regulated Activities

The Group's non-regulated activities are predominantly divided into the following areas:

- Services for third parties
- Tamini Group
- Interconnector

The revenue from non-regulated activities are expected to grow by 16% on average on an annual basis, surpassing 300 million Euro in 2019 and totalling around 1.4 billion Euro during the course of the Plan, while maintaining a limited use of capital and an acceptable risk profile.

Operating efficiency

The efficiency programme will produce steady benefits of around 30 million Euro in lower operating costs and will lead to a generational turnover plan that is able to place up to 200 new young professionals within the Terna Group over the next two years.

Free cash flow improvement

The evolution of Terna's revenue composition deriving from regulated and non-regulated activities, combined with measures implemented in the field in order to additionally increase operating efficiency, will allow for significant benefits to be produced on the Group's EBITDA, which will contribute robustly to the generation of a further 2 billion Euro of Free Cash Flow during the Plan period. These measures, together with careful supervision of investments, will contribute to a gradual reduction in net debt, starting from 2018, and will guarantee the flexibility required to support an attractive dividends policy.

Dividends policy

For 2015, a dividend of 20 Euro cents per share is provided for (payout ratio of around 70%), which also represents a solid base for the future.

Sustainability objectives and results

The improvement in Terna's environmental and social performance is based on a constant commitment to making progress in all areas of sustainability, which translates into sustainability objectives and plans. Among the **results for 2014**, the following are worth noting:

- the preparation of Terna's first Integrated Report. After three years of active participation in the Pilot Programme of the International Integrated Reporting Council (IIRC) and experimentation with the interactive version on the website, in 2014 the first Integrated Report was published, coinciding with the Report on Operations in the Annual Financial Report, fully reviewed in line with the guidelines of the "International <IR> Framework" issued by the IIRC in December 2013;
- new mapping of Terna's stakeholders, with connected relevance analysis, which is further explored in the Chapter on "Relations with Stakeholders" in this Report;
- updating of ISO 14001 environmental analysis and the BS OHSAS 18001 management system, in both cases to take new energy storage (battery) activities into account;
- the completion of an internal study on the effective level of adhesion to the principles of the Global Compact, with further investigation of the component relative to human rights according to the indications found in the United Nations Ruggie Report;
- in terms of community initiatives, the completion of the first cycle of the "Here Come Grandma and Grandpa" initiative, for which a questionnaire was prepared in cooperation with SDA Bocconi to measure the effects on its beneficiaries. The Kimbondo project has suffered delays and is currently being rescheduled.

The new mapping of stakeholders constitutes a further step, after the materiality analysis carried out in 2013, in the direction of a stakeholder management model, the design of which will be completed in 2015. The goal is to reinforce and systematize company tools that can help to manage relationships with stakeholders, learn about their expectations and opinions and plan appropriate actions.

The following table shows some of the **objectives for 2015**, which focus primarily on the improvement of internal processes. These include the definition of targets to be used to develop subsequent action plans. The following are particularly noteworthy:

- the definition of guidelines for stakeholder management;
- the organization of information meetings aimed at the population of areas affected by grid development projects, in line with those held in Pescara (see the box on page 55);
- the continuation of active participation in the International Integrated Reporting Council programmes, to consolidate and refine the experience gained in preparing the Integrated Report;
- the continuation of cooperation with RSE to study the consequences of climate change and the related extreme weather phenomena on transmission grid infrastructure and grid management conditions;
- the review of the action plans related to solidarity, some of which were suspended during the course of 2014, to determine new goals and priorities.

AREA OF RESPONSIBILITY	2014 OBJECTIVES	2014 RESULTS	2015 OBJECTIVES
Governance and general considerations	Revision of stakeholder mapping, with a focus on local stakeholders.	●●●	Definition of a stakeholder management and engagement model.
	Integrated Reporting: participation in the Pilot Programme of the International Integrated Reporting Council.	●●●	Participation in IIRC programmes and refinement of the Integrated Report.
	Supply chain: revision of contractual documents with ethical, environmental and social content.	●●●	Review of the matrix used to identify significant areas for ESG purposes.
	Supply chain: introduction of ISO14001 and BS OHSAS 18001 standards as selection requisites in selected sectors.	●○○	Establishment of information events for citizens affected by grid development projects (meetings open to the public).
Environmental responsibility	Revision of action plans on SF_6 leakage	●●○	Definition of targets for key environmental impact KPIs.
	Update of environmental analysis ISO14001 for new activities (storage).	●●●	Start of cooperation with RSE to research the impacts of climate change on infrastructure and transmission management.
	Life cycle assessment: - conclusion of cable study start of 380 kV overhead lines study	●●●	Obtainment of certification according to the UNI CEI EN ISO/IEC 50001:2011 standard.
Social responsibility	Realisation of Social Action Plan projects - 100 Schools project - Kimbondo project - "Here Come Grandma and Grandpa" project	 ●○○ ●○○ ●●●	Revision of social-action projects.
	Recognition of human rights in line with the UN Ruggie Report	●●●	Education/awareness campaign on workplace health and safety (near miss).
	Update of management system BS OHSAS 18001 with new activities (e.g. storage)	●●●	Energy efficiency awareness initiative for employees.

Key
●●● Objective achieved
●●○ Partly achieved
●○○ Postponed or suspended

Sustainability indices

Terna's commitment to improving its ESG (Environmental, Social and Governance) performance shows in its sustainability ratings, its inclusion in the main international quoted sustainability indices and the appreciation of socially responsible investors.
During the course of 2014, Terna's membership of all the main international, quoted sustainability indices was confirmed. In January 2015, for the third year running, Terna was included in the Gold Class in the "RobecoSAM Sustainability Yearbook 2015". There are only three companies in the Electric Utilities sector globally which achieved this accolade to be part of the Gold Class, companies must achieve a rating which is within 1% of that of the sector leader.

TERNA'S PRESENCE IN SUSTAINABILITY INDICES (AS OF 31.12.2014)

INDEX	YEAR INCLUDED	INDEX FEATURES
FTSE4Good - Global - Europe	2005	The FTSE4Good indices include the best companies in terms of sustainability performance on the basis of the analyses of the EIRIS agency. The index is reviewed twice a year, in March and September, in order to include any new firms and to exclude those which have not maintained the required sustainability standards. Terna has been continually present on the index since 2005.
AXIA - Global - ASI	2006	Axia Financial research produces sustainability indices which select the best practices in the area of sustainability from the most highly capitalised companies in Italy and in Europe. Terna is present on the Axia Global Sustainable Index and, since its creation in March 2012, on the Axia Sustainable Index (ASI) which includes the 40 top stocks by market capitalisation listed on the Italian market.
ECPI - Ethical Global - Ethical Euro - Ethical EMU	2007	These indices were designed to be used by customers for investment analysis, benchmarking, and performance measurement, based on the analyses of the ECPI agency.
MSCI - WORLD ESG - EAFE ESG - EMU ESG - EUROPE ESG	2007	These are a continuation of the KLD indices, which were among the first to trace the non-financial performance of companies and still constitute one of the most highly regarded references in the United States. Terna's shares are permanently included in the numerous indices belonging to the families indicated.
ETHIBEL - PIONEER - EXCELLENCE	2009	The indices are calculated on the basis of ratings provided by the agency Vigeo. Inclusion is subject to approval by the Ethibel Forum, a panel of independent experts on the different aspects of sustainability.
ESI - Excellence Europe	2009	The indices are calculated on the basis of ratings provided by the agency Vigeo. Inclusion is subject to approval by the Ethibel Forum, a panel of independent experts on the different aspects of sustainability.
DOW JONES SUSTAINABILITY INDICES - World - Europe	2009 2010	The DJSI indices select the companies with the best sustainability performance among those most highly capitalised (the top 319 out of 2,500 in the world for the World Index and the top 154 out of 600 European companies for the European index) according to the rankings calculated by the agency RobecoSAM.
FTSE ECPI - Italy SRI Benchmark - Italy SRI Leaders	2010	Introduced in 2010, and based on the analyses of ECPI, these are the only sustainability indices that include solely companies listed on the Italian Stock Exchange.
STOXX® ESG - Global ESG Leaders Index - Global Environmental Leaders - Global Social Leaders - Global ESG Governance Leaders	2011	Launched in 2011, these indices are calculated on the basis of the assessments of the rating agency Sustainalytics and select the 313 best stocks for ESG performance from among the 1,800 present in the general STOXX® Global index. To be included in the Global ESG Leaders Index, it is necessary to be included in at least one of the three specialised indices (Global Environmental Leaders, Global Social Leaders and Global ESG Governance Leaders). Terna is the only Italian utility company included in all three.
VIGEO - Euronext Vigeo Word 120 - Euronext Vigeo Europe 120 - Euronext Vigeo Eurozone 120	2012	Presented in 2012 by the social, environmental and governance rating agency Vigeo, these indices are made up of companies listed in the North American, Asian and European markets and included in the STOXX® 1800 benchmark. Vigeo's new ESG indices are prepared on the basis of a methodology using more than 330 key indicators and 38 sustainability criteria.

2014

Terna
TERNA GROUP

Relations with stakeholders

Building a relationship based on mutual trust with our stakeholders begins with taking their interests into account and analysing their compatibility with those of the Company, in order to be able to adopt a consistent and transparent approach.
The stakeholder map of the Terna Group was reviewed in 2014, updating the 2006 version used as a premise to the drafting of the Code of Ethics. The review process, which ended at the start of 2015, involved numerous unit managers, directors and executives of the Group companies, with the aim of defining a model for managing relationships with stakeholders. The method used to support the definition of the model is the one defined by the AA1000 Stakeholder Engagement Standard (SES) developed by AccountAbility, last updated in the 2011 issue. The eight categories of the previous map, divided into 48 subcategories, were rearranged to provide more evidence to stakeholders previously merged with others. The current map is divided into 12 categories and 73 subcategories. For every category of stakeholder, the following table shows the most important commitments expressed in the Code of Ethics and the specific engagement tools, such as monitoring and checking expectations and opinions. The various monitoring tools are used to different extents.

Stakeholder	Commitments	Relation and monitoring methods
REGULATORS OF LICENSED ACTIVITIES *AEEGSI, Ministry of Economic Development, European Regulatory Institutions.*	• Transparent, complete, reliable information. • Compliance with deadlines. • Fair and collaborative approach to facilitate regulation.	Regular meetings. Ongoing relations with the AEEGSI offices and Committee. Formal communications and reports within regulated processes. Transmission of information and evaluations in response to specific requests or on the initiative of Terna.
PUBLIC DECISION-MAKERS AND AUTHORITIES *Ministries with responsibilities relevant to the electricity supply chain; Other Government Bodies; Regions and their Bodies; Parliament and Commissions; EU Institutions; Other regulation and audit institutions; the Judiciary; Strikes Information Commission; National institutions of other countries of interest; International institutions.*	• Transparent, complete, reliable information. • Compliance with deadlines. • Representing the Company's interests and positions in a transparent, scrupulous and consistent fashion, avoiding discrimination or collusion.	Regular meetings. Formal communications and reports within regulated processes.
SHAREHOLDERS *Controlling shareholders; Institutional equity investors; Retail investors; Financial analysts; Proxy advisors; SRI Investors; ESG rating analysts and agencies.*	• Balanced management of financial, security and service-quality objectives. • Creating value for shareholders in the short and long term. • Corporate governance aligned with best practices. • Adopting systems to forestall and control risks. • Listening to shareholders and informing them in a timely and equal manner. • Commitment to avoiding insider trading.	Road shows, conference calls, dedicated meetings, dedicated email and websites. Sustainability rating
LENDERS *Banks; Ratings agencies; Debt investors; International financial institutions; National and international public lenders.*	• Adopting systems to forestall and control risks.	Regular meetings. Dedicated informative documentation. Ratings.
ELECTRIC SYSTEM OPERATORS *Distributors; Producers; Potential users requesting connection to the NTG; Wholesalers; Associations representing industry operators; Other electricity supply chain organizations; Interruptible customers; Other transmission system operators (TSO); Industry bodies; Other NTG owners.*	• Efficient, quality service aiming at constant improvement. • No arbitrary discrimination among operators. • Confidentiality of information regarding grid users. • Representing the Company's interests and positions in a transparent, scrupulous and consistent fashion, avoiding discrimination or collusion. • Ensuring utmost clarity in relations.	Grid Code Consultation Committee. Dedicated meetings. Participation in structured working panels. "Operator Consulting" section on Terna's website. Reports provided and regulated by the Grid Code. "My Terna" platform for dispatching users, with dedicated call centre. Gaudì Portal for integrated management of plant and production units.

Stakeholder	Commitments	Relation and monitoring methods
MEDIA AND OPINION-MAKERS *National and international media; National and international opinion groups; Web users; Universities; Other scientific and research organizations; National and international study and steering groups.*	• Public and uniform dissemination of information. • Excluding exploitation and manipulation of information to the advantage of the Company. • Pursuing areas of cooperation in the interests of both parties, with associations representing stakeholders.	Presenting and distributing the Sustainability Report and the Development Plan. Organizing seminars, workshops and targeted surveys. Collaboration and partnership initiatives. Participation in structured working panels. Mailbox and profiles on social networks.
CUSTOMERS (Non-regulated activities) *Non-regulated business customers; Potential customers.*	• Efficient, quality service aiming at constant improvement.	Dedicated meetings.
SUPPLIERS *Core suppliers; Non-core suppliers; Trade associations representing suppliers; Potential suppliers.*	• Opportunity to compete on the basis of quality and price. • Transparency and fulfilment of agreements and contractual commitments. • Transparent procurement processes. • Supplier qualification, including through quality, environmental, and social certification. • Anti-mafia and anti-money-laundering efforts with suppliers.	Procurement portal. Direct meetings. Post-tender feedback. Discussion panels with associations.
BUSINESS PARTNERS *Business partners; Investee companies; Purchasers of interconnection lines; Public safety organizations; Applied research institutions; Business developers.*	• Transparency and fulfilment of agreements and contractual commitments.	Partnership agreements. Protocols. Meetings for specific projects. Structured collaboration.
PEOPLE IN THE ORGANIZATION *Employees; Governance bodies; External staff; Trade unions; Educational system; Workers' representatives.*	• Safeguarding the physical integrity of employees and their personal dignity. • Non-discrimination and equal opportunities. • Investment in professional development. • Recognition of individual capabilities and merit.	Direct sample-based surveys. Internal communication initiatives. Focus groups on specific subjects. Consultations, discussions and negotiation with the Trade Unions.
THE WIDER COMMUNITY *Current and future end-users of the electrical service.*	• Ensuring the security, continuity, quality, and cost-effectiveness of the service over time. • Assessing the long-term effects of the Company's choices. • Reducing the environmental impact of company activities.	Open channels for alerts (post, e-mail). Public consultation. Periodic sample population surveys.
LOCAL COMMUNITIES *Landowners affected by grid development; Associations representing local interests; Local media; Local administrators; Local suppliers and subcontractors; Owners of property and land close to existing lines; Territorial committees; Local politicians; Local opinion-makers; Infrastructural sector operators; Other citizens affected by grid development; Other local authorities; Other citizens affected by existing lines.*	• Assessing the long-term effects of the Company's choices. • Reducing the environmental impact of company activities. • Advance dialogue with local institutions to invest in a way that is respectful of the environment, landscape and local interests. • Supporting social, humanitarian and cultural initiatives. • Providing evidence of the implementation of environmental and social policy.	Consultation process in planning the electricity grid. Formal communications and reports within regulated processes. Meetings with the general public.

Regulators of licensed activities

Terna works mainly in a regulated context and the AEEGSI is the main stakeholder: through tariffs it determines almost all Terna's revenues and, with its measures, it defines the methods and conditions for carrying out the business for which Terna is the licensee.
With regard to the carrying on of licensed business, Terna is subject to regulation also by the Ministry of Economic Development, which is responsible for developing electricity transmission grids and must therefore provide Terna with guidance.
During 2014, Terna promoted bilateral meetings with the Ministry of Economic Development, as part of the drafting process for the European reference standard for the industry (see also "Terna and ENTSO-E: Ten-Year European Network Development Plan" on pages 73-74).

Public consultation on the Development Plan promoted by the AEEGSI

Since 2012, in accordance with Legislative Decree 93/11, the AEEGSI has, through public consultation, intervened explicitly in the evaluation process of the Development Plan produced by Terna.
In July 2014, the Authority launched the public consultation process for the 2013 and 2014 Development Plans. The process continued until September and included a public seminar held at Terna headquarters.
On this occasion, Terna presented the main contents of the Plans to stakeholders and responded to specific questions.
The main electricity industry associations made numerous remarks and comments on about 35 topics related to the planning and development of the NTG. All observations and related comments prepared by Terna at the request of the Authority have been published on the Authority website (http://www.autorita.energia.it/it/inglese/index.htm).

Public decision-makers and authorities

Terna's work requires constant dialogue with governmental institutions (Prime Minister's Office, Ministry of Economic Development, Ministry of the Environment, Ministry for Cultural Assets and Heritage), Parliament (Chamber and Senate of the Republic), political contacts and national associations. This also requires attendance at hearings, meetings, conferences and forums to promote shared interests. In addition, Terna Rete Italia engages in continuous discussions with regional authorities for activities related to legislation governing the industry, authorisation procedures, and consultations with local communities. During 2014, the Company was invited, on several occasions, to take part in Parliamentary hearings on important issues relating to Terna's operations.
By way of example we indicate the following:

- the Chamber Production Commission hearing (February 2014) on the inquiry into the National Energy Strategy;
- the Senate Industry Commission hearing on the results of State-owned companies (March 2014);
- the informal hearing at the united Senate Commissions for Industry and Territory on the electric system outages in Veneto in the winter of 2013 (June 2014);
- the hearing at the Senate Industry Commission on the new leadership's strategies regarding the main directly or indirectly State-owned companies (October 2014);
- the informal Production Commission hearing of the Chamber of Commerce on the Company's general strategies (October 2014).

A constant and collaborative dialogue was maintained with representatives of the political parties, Government and Members of Parliament, aimed at representing Terna's point of view, as the transmission operator, on issues relating to the Italian electricity sector.
Efforts were intensified also in bilateral meetings with the Prime Minister's Office and the institutions on issues of particular relevance for the Company and for the development of the national electric system.

Shareholders

The relationship between Terna and its institutional and individual investors is built around transparency and a timely exchange of information. Specifically, the Investor Relations Unit interacts with market operators and the Corporate Secretariat with retail shareholders.
Contact details for retail investors are available on the Company's website. The e-mail addresses are: azionisti.retail@terna.it.
For institutional investors, the contact numbers are: (+39) 0683138106 and (+39) 0683139041 and the e-mail address is investor.relations@terna.it.
To further encourage dialogue with investors, Terna has developed a dedicated "Investor Relations" section on its website www.terna.it, which offers any interested parties **timely updates on the Company's economic results and strategic objectives**. The section contains economic and financial information, and up-to-date data and documents of general interest to shareholders. Through the site, web streaming enables visitors to follow conference calls organized when the Company's results are published. Live participation in these events exceeds fifty connections on average, including analysts who follow Terna's shares and publish studies.
In 2014, retail investors sent 11 requests for information to the dedicated e-mail address (compared with 20 in 2013, and 21 in 2012). The requests concerned dividends (policy, advances and rights to receive), company documentation for shareholders' meetings and the impact of tax legislation on Terna.
The Corporate Social Responsibility Unit maintains ongoing relationships with sustainability ratings agencies and, in collaboration with the Investor Relations Unit, with analysts and fund managers, to which it provides the necessary information to assess the company's ESG performance. In 2014, the following organizations requested and obtained information: Carbon Disclosure Project, Evalueserve, Generali Investment, Oekom, RobecoSAM, Vigeo.

Electric service operators

Terna maintains relations with grid users and electricity industry operators through various communication channels. These relations are largely defined by the regulations that govern the processes of development and management of the electricity grid. Terna has also developed additional channels, including the portals My Terna (the platform through which Terna manages contracted dispatching users, with associated dedicated call centre) and GAUDÌ (see "The Gaudì Portal" page 50).

Consultation Committee

The Committee is the technical consultation body for users established in accordance with the Prime Minister's Decree of 11 May 2004, setting out rules for the unification of ownership and management of the National Transmission Grid. **The Committee is a permanent base for consultation with companies involved in the electricity industry** and includes representatives from the various user categories, namely: distributors, producers (from both conventional and renewable sources), large industrial customers, wholesalers, and consumers. The Regulatory Authority for Electricity, Gas and Water and the Ministry of Economic Development participate as observers.
The Committee has a predominantly advisory role regarding the general criteria for the development of the grid and interconnections, maintenance of grid security, general criteria for the classification of sensitive information and access to the same. The Committee may also advocate changes to current rules and propose conciliatory regulations since, at the request of the parties, it may facilitate the resolution of any disputes between grid users resulting from the application of the rules of the Terna Grid Code.
In 2014, Terna's activity in promoting the involvement of electricity operators continued also through this body.
In particular, the Committee has been involved in the consultation process and has expressed its opinion on the revision of Annex A.72 of the Grid Code concerning the "Procedure for the Reduction of Distributed Generation in a state of emergency for the National Electric System" (abbreviated to "RIGEDI procedure"), intended to implement the directions set out in Annex M of standard CEI 0-16 regarding the remote disconnection of generation plants above 100kW and connected to the medium-voltage grids.
In addition to this issue, on which the Committee was formally called to express its opinion, in 2014 Terna kept Committee participants continuously up to date on the 2014 National Transmission Grid Development Plan, the state of implementation of the Plan, new requirements and developments, and regulatory changes that have taken place regarding simple production and consumption systems. Finally, information was given on the methodology developed within ENTSO-E – Cost-benefit analysis methodology – for a harmonised European-level analysis of the costs and benefits of the works included in the European Development Plan.

The Gaudì Portal

The Gaudì Portal is the system that supports the integrated management of relevant and non-relevant plant and production units. It entered into service in its first version in January 2011.
The system, which was established by specific provisions by the AEEGSI, allows registration and technical data for all plants and electricity production units, completed or under construction across the country, to be received and stored. It facilitates management throughout the life-cycle of the plant by recording upgrades, structural modifications, commercial and technical variations and decommissioning (total or partial) of plants.
There are over 660,000 plants registered in the system in total.
During 2014, two new modules were developed on the Gaudì platform:

- the GEDI Module to accommodate adjustments to distributed generation plants in line with the requirements of annexes A70 and A72 of the Grid Code. This information is essential for Terna's adoption of measures for reducing distributed generation in a state of emergency for the national electric system;
- the SSPC Module, for management and monitoring of the process of qualification of simple production and consumption systems, has been in force since January 2015. The Simple Production and Consumption Services (SSPC) are auto-procurement systems, where one or more plants of the same company group fuel one or more consumption units of the same company group, not necessarily the same one as the manufacturer. SSPC classification will allow distributors to correctly charge fees for general system expenses.

Media and opinion-makers

In 2014, Terna's external communication was again assessed using the Demoskopea survey "City Giornalisti", a reference tool for finding out how effective journalists think companies' communication strategies are and how they judge their relations with press offices.
"City Giornalisti" saw Terna's press office finish in fifth place in the overall classification. It involved 80 economic and financial journalists from national newspapers and was conducted on a sample of 45 firms.
In 2014, the Terna Press Office issued 52 press releases and, in line with previous years, had about 8,000 meetings, 200 one-to one meetings with journalists, and attended approximately 50 conferences of interest in support of senior management and the main company departments. The overall media coverage, within the 12-month period, recorded about 28,600 releases – an increase of 57% compared to 2013; specifically, +22% in the press, +20% in TV and +73% on the web. Online communication also grew, with 4.7 million pages visited and more than 500 posts of new content (videos, articles etc.), published not only on the institutional website www.terna.it but also posted on the company's Facebook and Twitter accounts, through which Terna interacts with two large communities – the former consisting above all of employees, the latter of journalists, experts, politicians and citizens – that now count more than 6,000 people (+70% in 2014 from 2013).
The easy access from all devices on the move (smartphones and tablets) make the web a fundamental contact tool: the website, in fact, is the main channel for finding out about a company. Terna has long had a system for reading and interpretation of these channels with open field web monitoring that covers sites, blogs and social networks. The system accurately counts and detects Terna's web presence through related content.
Daily alerts detect references to the company on the web and, additionally, weekly and monthly reports track trends in content and how these influence the company's brand reputation with detailed analysis and evaluation of the results. The evaluation of opinions is, in fact, a key element to consider in the planning of activities aimed at building relationships with online journalists, citizens who talk about the Company online, and finally with employees.
For Terna's relations with academics and other opinion groups, please refer to pages 51, 54, and 55.

Business partners

Terna's relations with current or potential business partners are oriented towards mutual respect and identifying development opportunities for all those involved, with a view to reaching partnership agreements.
To ensure a safe, uninterrupted electrical service for the community, Terna has signed partnership agreements with institutions creating forms of collaboration to support the Group's activities. This is the case, for example, in the agreements with the Ministry of the Interior (2009) for the physical protection of NTG critical infrastructure, with the Guardia di Finanza [Finance Police] (2009) for transparency in the management of contracts, and with the Fire Brigade Corps (2011) for grid safety.

Terna and Greenpeace talk about the energy context to 2030

Three years on from the "Battle of the Grids" technical seminar on the development of the electricity grid, growth of renewable sources and European 20-20-20 energy objectives, Terna again welcomed Greenpeace, the environmental association dedicated to these issues, for a panel discussion of possible energy scenarios in 2030. The starting point for the debate was the Report "PowE[R] 2030. A European Grid for ¾ Renewable Energy by 2030", the third produced by Greenpeace on this subject, focused on the feasibility of a European energy system with about 70% of energy production covered by renewable sources by 2030. The panel discussion, which was attended by representatives of institutions, industrial and consumer associations, was opened by Terna Chair Catia Bastioli and Greenpeace Italia Executive Director Giuseppe Onufrio. Sven Teske of Greenpeace International presented the contents of the Report, which was then discussed with contributions from Guido Bortoni, AEEGSI Chairman, Giulio Volpi, of the European Commission Directorate-General for Energy, and Owen Wilson, Chair of Eurelectric's Environment and Sustainable Development Policy Committee. The Italian Electricity Grid Development Plan was presented by Gianni Armani, Chief Executive Officer of Terna Rete Italia while the final observations were made by Terna's Chief Executive Officer, Matteo Del Fante. The speakers found a point of agreement on the fact that, in a production model still based on traditional energy sources, the growth of renewables is now unstoppable and that they must be considered an opportunity to improve the grid and its management, and thus reduce system costs.

Suppliers

The usual point of contact for Terna and its suppliers is the "**Procurement Portal**", the section of the institutional website where it is possible to learn about tenders, participate in online tenders, and go through the qualification process for inclusion on the Supplier Register.
In 2014, Terna adopted the electronic platform for managing contract tenders, thus making way for the dematerialization of the procedure. The Procurement and Contracts Department also maintains direct contact with suppliers to manage contractual relations and improve the Company's knowledge of specific issues with groups of suppliers. To that end, meetings are periodically organized with specialist companies or industrial associations to inform them about any updates to the requirements, or points of attention related to the ethical conduct to be followed in relations with Terna.
Terna presents and discusses its main investment projects and relative procurement plans with the **electromechanical companies in the energy industry** (mostly members of Confindustria ANIE) and organizes meetings on specific issues with particular reference to safety. The important action programme requires an even greater effort on the part of suppliers, who are required to act not merely as simple contractors but as real technological partners. Terna plays an active role in key meetings with suppliers such as industry meetings, expositions and conferences. In order to expand its portfolio of suppliers, Terna continuously engages in "**procurement marketing**" by market scouting, benchmarking and monitoring the performance of suppliers. This involves constant meetings with both Italian and overseas supplier firms.

Terna promotes new rules for environmental protection

Institutions, members of Government, suppliers, environmental associations and employees took part in Terna's conference on "The new rules for environmental protection", held in Rome in March 2015. Considering **the environment as a corporate asset**, together with the **ability to look to the long term**, is Terna's premise for reversing the approach that holds competitiveness and the environment to be diametrically opposed. The company has indicated that the following internal tools are necessary for creating a model of integrated protection: **environmental governance, staff training** and the adoption of adequate **environmental risk management**. To foster the conscious sharing of environmental responsibility concerning the supply chain, Terna has highlighted the importance of **environmental certification of qualified suppliers** and has presented its **integrated construction-site safety project**, aimed at monitoring potential environmental risks via a preventative approach. The results of a survey on the Italian population, conducted by the Piepoli Institute, were also announced at the conference. It emerged that 61% of the companies interviewed considered an increase in environmental standards to be positive for their own development.

People in the organization

The Group's personnel is periodically involved in initiatives to survey opinion on subjects of general interest, such as the overall quality of life at the Company ("People Satisfaction") or of training. The tools used range from anonymous questionnaires, to encourage free participation, to dedicated focus groups that enable in-depth studies and proposals for new solutions.
In 2014, Terna's people were surveyed on observance of the Ten Principles of the Global Compact which inspire the Group's Code of Ethics (see the box below).

G4-HR9

Compliance with the Global Compact Principles: the employees survey

Between October and December 2014, Terna's Audit Unit carried out an internal survey on observance of the Ten Principles of the Global Compact by the Group companies. The survey, provided for in the 2014 Sustainability Plan, involved a total of 604 people, of which 10 managers, 79 people reporting directly to managers, 503 employees (124 from the headquarters and 379 from the area offices) and 12 specialists on processes particularly relevant to the subject of the survey. The survey was conducted on the basis of questionnaires, prepared in collaboration with the CSR Unit, which were themselves based on three documents:

- **Global Compact Self-Assessment Tool**, to test the adequacy of behaviour with respect to the Ten Principles, and which was used to identify the detailed check points in applying the principles;
- **Ruggie Report**, specifically the section on corporate responsibility in respecting human rights, including the indications for due diligence;
- **Check list for self-audits**, a self-diagnosis tool prepared by Transparency International for the purpose of preventing corruption, used to supplement the anti-corruption part of the questionnaires.

The questions asked related to human rights (health and safety in the workplace, working hours and pay, fair treatment, impact on the community), work (freedom of association, forced labour, child labour, discrimination), the environment (precautionary approach, responsibility and performance, technology) and anti-corruption (corporate culture and procedures, collective action, anti-corruption in managing human resources, in the accounting system, in sales activities and in contracts and supplies). As regards human rights and work, the survey was also used to gauge employee satisfaction, with specific questions on management methods as perceived by individuals (transparent management, equal opportunities, privacy, training, working environment). The questionnaires were differentiated on the basis of the target audience, with a different weighting assigned to the four sections and question formulation adjusted to suit the participants. The Managers, the people reporting to them and the process specialists were interviewed directly; questionnaires were sent to employees, selected according to a random sampling procedure. The 503 replies obtained correspond to a reply rate of more than 75%. From the analysis, a generally positive perception emerged of the participants as to the Group's focus on the Global Compact Principles. The detailed answers are still being analysed and assessed internally.

Industrial relations

All Terna employees[6] are covered by the **collective labour agreement** adopted by companies in **the electricity industry**. Terna, as part of the delegation of employers that negotiates new contracts with the unions, contributes to the definition of industry regulations.
The National Collective Employment Contract (CCNL) provides for the establishment of a bilateral body – at the electricity industry level – on "Health, safety and the environment", to make proposals, verify, monitor and coordinate training on environmental and safety matters.

G4-LA5

G4-LA8

Employee involvement in matters of health and safety is currently regulated by law, which provides for the election of Employee Safety Representatives (ESRs) by all the employees, thus representing 100% of the workforce. During the aforementioned renewal of the CCNL, the role of the ESRs was expanded to also include environmental issues, so they are now known as ESERs.

6 Employees of the subsidiary Terna Crna Gora d.o.o., operating in Montenegro, are covered by an individual secondment contract. For any matters not expressly covered, reference should be made to the CCNL [national collective bargaining agreement] for the electricity sector.

The relations between Terna and the trade unions **at the company level** are governed by the "Protocol on the industrial relations system", which defines a system of relations divided into contract negotiation, discussions, consultation and advance and/or periodic information exchange. The **rate of unionisation of Terna employees in 2014 was equal to 55.3%**, down compared to previous years; union membership is concentrated in the biggest groups. Management of the "Protocol on the industrial relations system" has enabled the parties to develop and consolidate an effective network of relations at all levels, thus allowing the processes of change of significant corporate interest to be governed.
During the three-year period 2012-2014, negotiations with industry trade unions resulted in the **signing of 47 written agreements**.
In 2014, the company's industrial relations work saw the signing of the agreement defining the new regulatory and economic framework on 22 October, valid for three years from 2014 to 2016, and the launch of the performance bonus system, the major issue referred to in second-level bargaining.
Trade union involvement in organizational changes is one of the central aspects of industrial relations: it is regulated both by legal provisions, industry-wide contracts and company agreements. In accordance with the union agreements in effect at Terna, in the event of significant organizational changes, preliminary discussions with the unions must take place, to be concluded within three months. In these discussions, the Company should make available the documentation necessary to ensure a complete overview of the organizational project, enabling observations and proposals to be formulated. At this stage, advance information remains at the collective level. Individual employees are informed in advance only if the organizational change entails their transfer to a different office. In this case, workers must be informed in writing at least thirty days in advance.

G4-LA4

The wider community

Terna's role in the electric system gives it a responsibility to society as a whole both for everyday and medium-to-long-term operation.
Terna conducts its relations with the "stakeholder society" using a variety of information tools: the website, social media (Facebook, Twitter, LinkedIn, Slideshare and Flickr) and dedicated e-mail addresses (info@terna.it).
Detailed information on Terna's grid development operations are available through the SEA portal, described below.

SEA portal and the Environmental Report

In the interests of transparent communication with its stakeholders, Terna uses an interactive portal to facilitate sharing within the framework of the **Strategic Environmental Assessment (SEA)** procedure of the NTG Development Plan (www.portalevas.terna.it). Through the "SEA Portal", users can consult not only the Environmental Report, with particular reference to the related maps, but also the data on SEA monitoring of the implementation of the Plan. The "**Environmental Report**" area shows Plan operation areas being studied on national territory, allowing verification of possible interactions with territorial, environmental, natural and landscape elements, represented by their respective geographic information layers. The "**SEA Monitoring**" area gives map representations of the progressive implementation of the Plan, showing the development and progress of operations. A **new feature** is being implemented, focusing on consultation with communities. It will allow all the local administrations involved in the consultation process to exchange real-time map data relating to the search for the most sustainable locations for NTG development operations. The development of this additional collaborative tool, facilitating communication and the exchange and updating of information, will help to promote the administrations' participation and involvement in the process of continued dialogue with Terna, for the sustainable development of the NTG.

G4-SO1

Local communities

Terna's approach to local areas, which is especially important when new lines must be constructed, consists in a voluntary process of prior engagement with local institutions (regional and local administrations, park authorities, etc.). This process involves the sharing of NTG development needs with local institutions, a willingness to listen to stakeholder opinions and the search for a shared solution regarding the positioning of new infrastructure and the reorganization of existing structures.
To facilitate acceptance of electricity infrastructure by local communities, Terna considers it fundamental to hold discussions with local administrations as early as possible, right from the moment when the need for a new NTG development project is recognised. In this way, the conditions are created in which to develop and "build" the grid together, thus making it more sustainable and acceptable.
Terna's approach to local areas envisages a voluntary pre-authorisation procedure illustrated in detail in the section on consultation, on pages 68-69.
In regard to possible developments in this approach – above all in terms of direct contact with local communities – please also see the box below.

Development of grids and acceptance by local communities: the BESTGRID project

BESTGRID is a project co-financed by the European Commission and coordinated by the Renewables Grid Initiative (RGI) to develop European grids. This is needed in order to integrate renewable sources, speed up authorisation procedures and increase acceptance by local communities.
In addition to Terna, four European TSOs participate – the National Grid (Great Britain), Elia (Belgium), TenneT (Holland), 50Hertz (Germany) – as well as some Non-Governmental Organizations (NGOs), including BirdLife Europe (for environmental aspects), Germanwatch and the International Institute for Applied Systems Analysis (IIASA), which monitors and assesses the approaches tested.
Acceptance by local communities and obtaining the necessary authorisation are at the centre of four pilot projects (two in Germany, one in the United Kingdom and one in Belgium), aimed at identifying new approaches to developing electricity grids. In the context of these four pilot projects, Terna has selected certain initiatives and examined their efficacy, applicability and transferability to the Italian and international contexts, through three workshops in February 2015 with Ministries, local organizations, environmental groups and citizen representatives, with the support of WWF Research and Projects.
The initiatives explored in the workshop were:

- "Info-market" (carried out by Tennet): a new approach to the local community that foresees meetings with citizens in public places with explanations of the specific project with the help of maps, round table discussions divided into topics, and the gathering of observations and comments;
- Electromagnetic field measurement (carried out by 50Hertz): mobile office with technicians, communication experts and representatives of the academic world who can explain electromagnetism to citizens, while also measuring electromagnetic fields near electrical lines;
- 50Hertz and NABU (German partner of BirdLife International) collaboration, with the goal of conserving natural environments and animal species affected by the power line chosen for the pilot.

These initiatives, which for Terna represent potential areas for innovation in the consulting process for works in the Development Plan, were well received by those participating in the seminars, which welcomed Terna's opening up to dialogue with citizens. The first step was taken through the implementation of an "info-market" in Pescara (see the box "Terna meets Pescara" on the next page).

In February 2014, Terna signed an agreement with ANCI, the National Association of Italian Municipalities, of which 7,318 municipalities representing 90% of the population are members, to share the decision as to the location of electricity works throughout Italy through increased harmonization between Terna's development work and the municipalities' town and local planning instruments.
During 2014, a total of 181 meetings were held with local administrations, involving around a hundred bodies.
In February 2015, Terna organized an informative meeting with the people of Pescara – the municipality where the landing site of the Italy-Montenegro cable is situated (please also see the box below).

Terna meets Pescara

Public information meeting in the municipality where the landing site of the Italy-Montenegro undersea cable is situated.

On 6 February 2015, in the Teatro D'Annunzio in Pescara, Terna organized an information day on the Italy-Montenegro undersea connection project. The event, directed at local citizens, was open to all interested stakeholders. It sought to give direct access to information for the citizens of Pescara, the area where Vallelunga, the landing site of the undersea cable, on the Italian coast is located. This was a voluntary Terna initiative, consistent with the transparent and participatory approach that characterises development investment in the electricity grid. The event was announced at a press conference then advertised by local media.
Those who came to the event were welcomed and then accompanied in groups into a hall where ten information panels and four in-depth topic tables had seen set up, dealing with:

- the reasons behind the work
- the consultation and authorisation process
- the project itself
- integration of the work and the local area

At each table, at least two Terna technicians were present and answered questions from citizens. They belonged to the departments responsible for Engineering (design and management of the worksite), Grid Development (planning the authorisation process) and Terna Rete Italia Centre-South Division. The issues of greatest concern were the reasons behind the work, the effective need for the same, the anticipated benefits – especially for the local area – and the exact plan in relation to inhabited areas and electromagnetic fields.
In addition to the direct dialogue made possible by the meeting, citizens were able to fill in a card to submit personalised information requests, which Terna undertook to answer by e-mail.
Terna's technicians were available to the public all day, from 10 am to 7 pm. About 300 people took part throughout the day. Ten cards with specific questions for Terna were collected.

Opposition to the building of new lines

Terna considers respect for the environment and for the territory an integral part of grid planning and makes every effort to act in agreement with the local institutions. However, new infrastructure-creation projects often provoke adverse reactions attributable to the NIMBY (Not In My Backyard) syndrome. In these cases, Terna is willing to examine the situation and find alternative solutions, including ones which are technically more complex than those originally identified, provided that they are compatible with the general interest of the electric service in terms of security, efficiency and cost-effectiveness. Searching for agreed solutions requires difficult discussions and can be a drawn-out process. The results are normally positive, but local opposition may persist throughout. Please note the following cases from 2014:

- **Sorgente – Rizziconi**. In 2011, when the construction sites opened, protests broke out in the Messina area against the new power line under construction, despite the fact that the route was the result of more than two years of technical and environmental studies, and despite consultation with local communities having begun in 2004 with over 100 meetings. In February 2015, the Prosecutor's Office of Messina sequestered pylon no. 40 in the Municipality of Saponara, for presumed violation of the regional Landscape Protection Plan, which was approved after landscape authorisation for the pylon. The work continues without issue along the rest of the route.
- **Rationalisation in the Middle Piave Valley**. The project was authorised in February 2011 and is now in the environmental-impact assessment phase. Some municipalities including Belluno and Soverzene are opposed to the route proposed. Terna has informally put forward an alternative to the local authorities, which is currently under consideration.
- **Villanova-Gissi**. The project was authorised in 2014. The opening of the worksites was marked by protests, which intensified when the land designated for the power line was taken over.
- **Rationalisation of Lucca**. The operation was authorised in March 2014. When the land parcels affected by the easement were published in the press, a local protest immediately grew. Some municipalities, including Lucca, had originally participated in the consultation but, when faced with the protests, decided to withdraw their support for the project.

Terna and consumer associations work together on an information campaign for local communities

In 2014, Terna continued its efforts to build and manage local consensus through the project, begun in January 2013, under the banner "Terna Information Campaign – Consumer Associations" with Adiconsum, Codici, Lega Consumatori, UNC, MDC, Assoutenti, Adoc and Movimento Consumatori. The campaign aims to achieve maximum information-sharing with the localities affected by the implementation of planned infrastructure and to increase awareness of the usefulness and benefits of the new infrastructure.
It seemed appropriate to accompany local actions with efforts to inform, participate in and share as regards local needs, to highlight the benefits and costs of the operations.
Consumer Associations have a strong regional presence and are well represented at institutions. They may therefore facilitate dialogue with the local administration and with the community. The project is divided into two phases:

1. Training of executives of all CNCU Consumer Associations (National and Regional Secretariats). This phase began in April 2014 and involved 12 associations, specifically 12 senior executives and 6 regional delegates from Sicily, Calabria and Veneto.
2. Local information activities, harmonising information on the benefits of works at the local level. This phase began in February 2015 and involved eight associations, of which five focused on the Foggia-Gissi work. In March, the regional delegates became involved, after the national senior executives.

Inquiries, litigation and penalties

Preliminary inquiries of the Regulatory Authority for Electricity, Gas and Water

In 2014, the Regulatory Authority for Electricity, Gas and Water (hereinafter referred to as "Authority") did not begin any formal preliminary enquiries of potential interest for Terna.
Note, however, that resolution 256/2014/E/COM enabled the launch of a survey on regulated-business investment, intended to verify the correctness of the information disclosed to the Authority and to provide useful elements for the evaluation of the appropriateness and consistency of investments in relation to the industry context. Within the framework of this survey, the Authority intends to prioritise further investigation into the information submitted to determine electricity distribution reference tariffs.
With reference to previous fact-finding enquiries, the following proceedings are still pending.

- *Resolution 450/2013/E/EEL of 11 October 2013 – Determination of electricity price trends in Sicily during the maintenance period on the Sicily-Mainland interconnection in October 2013*
  With this provision, the Authority extended the fact-finding investigation launched in 2012 (resolution 401/2012/R/EEL) on critical issues in managing the electric system to include Sardinia as well as Sicily. This has been done in order to acquire further information on management of the Sicilian electrical system and the conduct of operators. The deadline for conclusion of both investigations has been extended to 31 March 2014. The closure measure of this fact-finding enquiry has not been implemented.
- *Resolution 475/2013/E/EEL of 31 October 2013 – Launch of a fact-finding inquiry into the provision of metering services*
  After certain critical issues were brought to light relating to the provision of metering services, with particular reference to distributed generation facilities connected to the distribution grid, the Authority launched a fact-finding inquiry in order to obtain data on the following:
  - the measurement of energy produced and energy fed into the grid by distributed generation plants;
  - the measurement of energy withdrawn from the transmission and distribution grid by end users and distributing companies.

The closure measure of this fact-finding enquiry has also not been implemented.

Environmental litigation

Environmental litigation originates from the installation and operation of electricity plants, and primarily involves damages which could derive from exposure to electrical and magnetic fields generated by power lines. The Parent Company and the subsidiary Terna Rete Italia S.r.l. are involved in various civil and administrative lawsuits requesting the transfer or change of the method of operation of allegedly harmful power lines, despite their being installed in full compliance with the applicable legislation (Italian Law No. 36 of 22 February 2001 and the Prime Minister's Decree of 8 July 2003). Only a very small number of cases include claims for damages for harm to health caused by electromagnetic fields.
Only in a few sporadic cases have adverse judgements been issued against the Company. These have been appealed and the appeals are still pending, although adverse rulings are considered unlikely.

Litigation concerning licensed activities

Given that it has been the licensee for transmission and dispatching activities since 1 November 2005, the Parent Company is involved in a number of cases appealing AEEGSI, MED and/or Terna measures relating to activities operated under the license. Only in those cases in which the plaintiffs not only claim defects in the contested measures, but also allege that Terna violated the rules established by such authorities, has the Company appeared in court. Within the scope of this litigation, although a number of cases have seen the AEEGSI Resolutions struck down in the first and/or second-level court, together with the consequent measures adopted by Terna, it is felt that there is little risk of adverse outcomes for Terna, since the matters generally regard pass-through items. This position is supported by the information provided by the external legal counsel representing the Company in the cases involved. As the licensee for transmission and dispatching activities, the measures taken by the Parent Company Terna when applying the Resolutions adopted by the Authority are sometimes the subject of challenges. In appropriate circumstances, the economic costs of such challenges may be borne by the Authority.

Other litigation

Also pending against Terna S.p.A. are a number of disputes over town planning and environmental issues connected to the construction and operation of some transmission plants. An unfavourable outcome may have effects on Terna Rete Italia S.p.A. (although currently unforeseeable and therefore not included in the determination of the "Provisions for disputes and other contingencies") both as the Terna S.p.A. assignee for construction and as the assignee for the financial year. Particular reference is made to the possibility that charges may accrue to Terna Rete Italia S.p.A. for the modification of plants and their subsequent temporary unavailability. An examination of the above disputes, carried out by Terna S.p.A and its appointed external legal counsel, suggests that the chances of negative outcomes are remote.

Penalties

EU25

During the period 2012-2014:

- there were no definitive criminal convictions or plea bargaining for injuries to third parties caused by Terna's assets;
- as of 31 December 2014, there was no pending litigation nor had any legal proceedings been conclusive regarding corruption, unfair competition, anti-trust, or monopolistic practices. Regarding these same matters, no definitive administrative or judicial, monetary or non-monetary penalties were imposed for non-observance of laws or regulations, including environmental ones, that imposed an obligation on Terna to "do/not do" (e.g. prohibitions) or criminally convicted its employees.

G4-SO5
G4-SO7
G4-SO8

In the three-year period 2012-2014, no significant penalties were imposed regarding the provision of the service, the environment or, more generally, compliance with the law.

G4-EN29

Since 2005 (the year in which ownership and management of the transmission grid was combined and Terna – Rete Elettrica Nazionale S.p.A. was established) and through the entirety of 2014, no significant monetary fines, or definitive administrative or judicial penalties have imposed a "do/not do" obligation on Terna, or criminally convicted its employees.

G4-PR9

G4-HR12
G4-SO11
G4-EN34
G4-LA16

Reporting tools

For Terna, management of relations with the main stakeholders also involves the preparation of dedicated communication channels to gather information requests, suggestions, notifications and complaints of various types. The easiest and most accessible tool is e-mail, with a number of issue-specific addresses (e.g. info@terna.it, csr@terna.it, etc). Promotion of this tool is done through the institutional site http://www.terna.it/Default.aspx?tabid=101 and, in the case of employees, also through the intranet.
On the homepage menu, through the "Contacts" section, a number of questions guide users who want to contact Terna. This page also gives the certified e-mail accounts for all communication that requires this feature.
For electricity operators and suppliers, Terna has three separate portals (Gaudì, MyTerna and the Procurement Portal), as well as a dedicated call centre, which can be reached through a toll-free number (800-999333).
From the website homepage it is also possible to access Terna's social media profiles on Facebook and Twitter particularly, which represent for the company a growing opportunity for interaction.
These tools are also supported by dedicated reporting tools and mechanisms for ethical and environmental issues (see the sections below).
In addition, among the 2015 sustainability objectives (see page 40), is the "Definition of a stakeholder management and engagement model", which will include a review of the current reporting mechanisms.

Code of Ethics clarifications and reporting violations

Terna employees who require clarifications or want to report an issue can contact the Ethics Committee or the Audit Unit. These structures are also responsible for handling any reports of violations of the Code by external stakeholders. Contact information (addresses, e-mail, and telephone numbers) can be found and are kept up to date on the intranet and website. Specifically: comitato.etico@terna.it and audit.codiceetico@terna.it.
The Ethics Committee was created to offer a specific channel for both external and internal stakeholders to be used for communications on the Code of Ethics. This body consists of three members, appointed by the Chief Executive Officer, who have the task of:

- responding to requests for clarifications regarding the Code of Ethics;
- receiving and examining reports of violations;
- deciding whether to open an investigation regarding the report and providing a response.

On the other hand, the Audit Unit is Terna's internal audit unit, and is responsible for investigating any reports of violations of the Code of Ethics. Reports collected by the Ethics Committee and the Audit Unit are published on page 156.

Environmental reports and complaints

In line with the ISO 14000 Environmental Management System, Terna monitors and classifies complaints received regarding significant environmental issues.
Any written communication from stakeholders can be presented to a Group office or organizational unit with the aim of reporting that an activity carried out by Terna is causing or has caused damage. It is filed by the office and managed by the relevant operating unit.
Complaints received are classified on the basis of the relevant environmental aspects – defined by the Environmental Analysis – using the following categories: waste, noise, biodiversity, landscape, electrical and magnetic fields, lighting, vegetation control, and other.
Most reports are related to electrical lines with a request to check electromagnetic emissions, noise produced during plant operation, and cutting of vegetation located along the power line corridors.
Terna responds as soon as possible and, in any case, within 30 days of receiving the request, or within 60 days if the size and complexity of the request make it impossible to resolve within the first 30 days.
In this case, Terna informs the requesting party of the extension in a timely manner, indicating the reasons behind it. Details of reports received and managed during the last three-year period are published on page 156.

2014

Responsibility for the electric service

Terna
TERNA GROUP

Our approach

Terna's core business is the provision of electricity transmission and dispatching services in Italy. These services are in the general interest of society and performed on the basis of a government concession which assigns Terna the role of National Electricity Transmission System Operator (TSO). The service performed by Terna is indispensable for the operation of the entire electric system and for ensuring electricity for everyone.
The role that Terna plays within the electric system renders it ethically responsible for the service provided to the whole of Italy. This responsibility regards both everyday operation of the transmission grid and medium- and long-term considerations.
The grid is Terna's asset, however it is also essential infrastructure for the Italian nation. Its present management, maintenance and development must ensure efficiency and security in the immediate future, as well as for future generations.
Our managerial objectives are therefore connected first and foremost **to compliance with regulations and meeting the specific targets set by the industry regulatory authority** (the AEEGSI – the Regulatory Authority for Electricity, Gas and Water). Targets of particular relevance include:

- continuity of performance measurements. Terna's performance in this area in recent years has been in line with the targets set;
- security and grid-development goals, set out in the:
  1. **Security Plan for the Electric System** in order to plan the investments needed to improve elements which have an impact on the safety of the electric system;
  2. **Development Plan**, approved every year by the Ministry for Economic Development, which sets forth the construction of new electricity lines and stations necessary to ensure an efficient and cost-effective system. Terna also selects development projects on the condition that the overall financial benefits to the electric system outweigh the costs.

Terna, as the operator of the electric system, is also responsible for compiling Italian national statistics for the electricity industry. This entails knowledge of confidential sector-operator data, and especially those pertaining to electricity producers. Terna protects this confidential data using the best practices possible to avoid information in its possession being accessed or communicated to unauthorised third parties. Given the nature of the service, Terna is not affected by problems of product responsibility typical of producers of goods or services for end customers.

Energy context

Demand for electrical energy in Italy

For the third consecutive year, the demand for electrical energy in Italy fell. In 2014, the demand for electrical energy in Italy was 309,006 million kWh (provisional data), reporting a drop of 3.0% in comparison with 2013, which, in turn, ended with a decline equal to that of 2012. The electricity demand recorded this year displays the same level as that recorded at the beginning of 2000. When comparing 2014 results with same day and temperature results from the previous year, the aforementioned decline is 2.1%. Calendar and temperature effects in this instance are cumulative: in conjunction with an average temperature that was approximately half a degree lower in the summer months and more than two degrees higher in the winter months, 2014, while having the same number of days as 2013, had two fewer working days.

ELECTRICITY BALANCE SHEET FOR ITALY

GWh	2014*	2013**	2012
Net production	267,557	278,832	287,805
From foreign suppliers	46,724	44,338	45,408
Sold to foreign clients	3,021	2,200	2,304
For pumping	2,254	2,495	2,689
Total demand in Italy	**309,006**	**318,475**	**328,220**

(*) Provisional data.

(**) Definitive data; in the 2013 Sustainability Report, the data published was still provisional.

Electricity generation

In 2014, national net production was 267,557 million kWh (provisional data), showing a fall of 4.0% from the previous year. The same production, divided according to source, shows that, in comparison with 2013, there was a fall in the production of thermal energy and an increase in production by renewable sources[7] including wind, solar and geothermal. There was a sharp increase in hydroelectric production (please see the following table).

PRODUCTION OF ELECTRICAL ENERGY IN ITALY

GWh	2014*	2013**	2012
Net hydro production	58,067	54,068	43,256
Net thermal production[8]	165,684	183,404	207,327
Net wind, photovoltaic and geothermal production	43,806	41,360	37,222
Total net production	**267,557**	**278,832**	**287,805**

(*) Provisional data.

(**) Definitive data; in the 2013 Sustainability Report, the data published was still provisional.

The security of the electric system

Ensuring the security of the Italian Electric System, which is interconnected with the European grid, is a difficult task that Terna performs through a series of actions based on a scrupulous assessment of operational risks.
The objective is to maintain the risk of service outage within pre-established limits and, should this occur, mitigate the negative consequences as much as possible.
For Terna, preventing and containing operational risk means monitoring and protecting the physical integrity of its plants, preparing defence plans to limit the impact of outages, preventative planning of operations, improving the capacity for real-time control, training its operators, developing new methods in support of the process of planning and control, increasing the reliability of the supporting resources, and coordinating the management of the system interconnected with the TSOs of neighbouring countries.
The projects are set out in the **Security Plan for the Electric System**, prepared by Terna and approved by the Ministry of Economic Development. The Plan, which in 2014 reached its eleventh edition, is compiled every year and undergoes a four-year planning period. In the various editions of the Plan, the approach to the security of the electric system has become increasingly detailed: the current structure of the Security Plan provides for eight subject areas relating to the activities of planning, control, regulation and protection, restarting and monitoring of the electric system, as well as an area devoted to the safe and optimal management of renewable resources.
In the context of the areas of intervention, the 2014 Security Plan confirms the short-to-medium term initiatives already identified in the previous edition, which also include innovative projects (in particular, power-intensive electrochemical storage systems for ultra-rapid frequency regulation and equipment to compensate for reactive power), aimed at securely managing the system, in particular on the larger islands, in the expected operating scenarios characterised by increasing production from non-programmable renewable sources.
In this context and also in consideration of the limited growth of the load and the progressive disposal of obsolete conventional thermal plants, with the consequent decrease of the system regulating capacity, the 2014 Plan includes studies to provide the main interconnection lines on the north Italian border with appropriate phase shifter transformers (PSTs). In fact, these devices are particularly useful for the regulation and balancing of systems in critical situations, in particular under low load conditions or with excess production from non-programmable renewable sources.
In 2014, the investments made relative to projects provided for in the Security Plan totalled 82 million Euro.
The eleventh edition of the Security Plan for 2014-2017 provides for investments of around 303 million Euro.

7 Renewable production can be defined as total production from wind, solar, geothermoelectric, biomass (included in the table under thermal production) and hydro power, net of pumping plant production.

8 A proportion of thermoelectric production, amounting to approximately 16,400 GWh, was attributable to biomass, a renewable source.

Information security

To support its business activities, Terna uses the best available technology, which starts with a structured approach to containing the growing threats to the Group's information assets (intangible and tangible assets, that is electricity operator corporate data and/or information, IT infrastructure, networks, IT systems, automation and control systems, etc.). For this reason, some time ago it adopted a security governance model, inspired by the main international standards and best practices.
This model is now well established, based on a detailed regulatory framework of policies and procedures, combined with an operating programme coordinated by Information Risk Management, with a focus on all the various risk factors (organizational, technical and technological, physical/environmental, cyber, etc.), including compliance with laws related to data processing and the fight against digital crime.
In 2014, this programme continued to favour a preventive approach, with the adoption of preventive controls aimed at guaranteeing the necessary characteristics in terms of the security and resilience of ICT assets "by design", prioritising the most critical or even vital ones for the proper functioning of Critical Infrastructure, such as the grids, the electricity grid control systems and the national electric system.
In the same programme, the logical security of the numerous databases which store business-sensitive corporate information were an area of particular focus, as well as the data related to users of the transmission and dispatching services, electricity producers and traders (for example, production capacity and injection programmes), and the data gathered for sector statistics or made available by the sector authority for monitoring the electricity market.
Following the publication of the Italian plan for digital security in 2014 (http://www.sicurezzanazionale.gov.it/sisr.nsf/wp-content/uploads/2014/02/italian-national-strategic-framework-for-cyberspace-security.pdf), Terna has promoted various initiatives to address the growing context of cyber threats that come from new technology more promptly and in partnership with other institutions.
New bilateral agreements have been signed with institutional bodies (e.g. MED-CERT) which have assumed responsibility under the plan (for cyber-intelligence activities and national Computer Emergency Response Team (CERT) activities in particular) and relaunched, at the operational level, agreements that have already been signed such as CNAIPIC, the police authority against computer crimes. The aim is to create a privileged public-private rapport, with effective relationships and secure data exchange, which will allow for emerging cyber risks to be identified in time, with special attention given to protecting critical infrastructure, such as the electricity grid. This will allow Terna to gradually extend and strengthen its ability to act in the medium term, in terms of prevention but also in the case of reacting to cyber incidents, within a framework of mutual assistance at the national level.
In regard to protection of personal data, Terna guarantees the necessary monitoring of compliance with the legislative framework and, again in 2014, as in previous years, there were no complaints received from users for violation of privacy,
G4-PR8 or of inappropriate or unauthorised use of personal data entrusted to the Group's companies, either through the email address (privacy@terna.it) created expressly for such notifications, or through the other channels used for notification or identification.

EU28

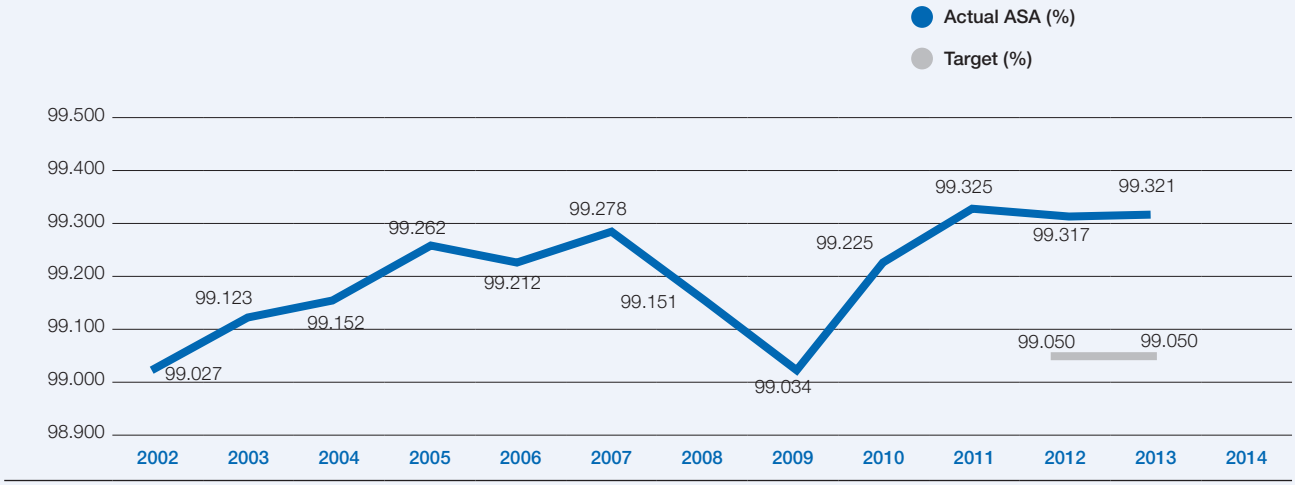
Service continuity and quality

EU29

Continuity is the most important measure of the performance of the electric service.
Each stage of the electric system – generation, transmission, and distribution – contributes to the final result: ensuring the availability of electricity for society, with outages that remain below pre-set thresholds and with appropriate standards of technical quality.
Terna monitors the quality of the service provided using different indexes and identifies targets for improvement. The indexes shown below, where not otherwise specified, are defined by the AEEGSI (Resolution 250/04) and by the Terna Grid Code.
The change in the indexes does not reveal significant trends. Each index moves within a very small range in ratio to the overall service measured. In addition, among the causes of change are both external factors, such as weather conditions, and events (for example faults) attributable to management of the NTG. Analysis of the latter does not show systematic trends.

AVAILABILITY INDICATOR

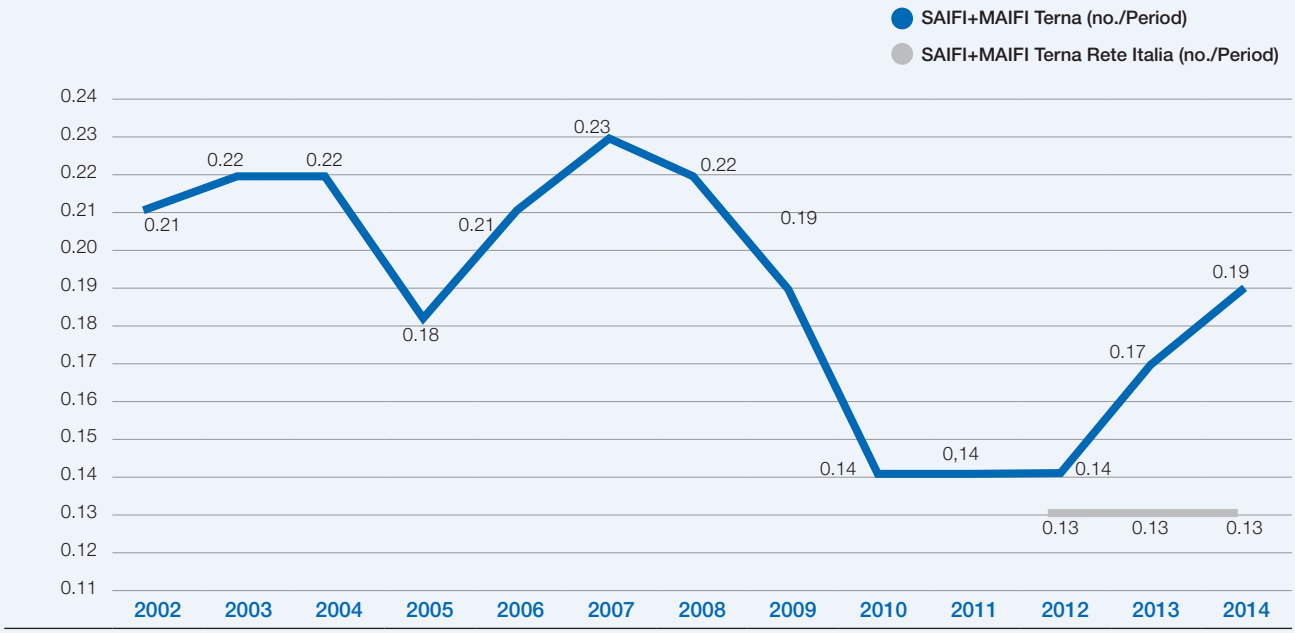
Average System Availability (ASA)
Average availability of the electricity grid components for use in a given period.
This index can be expressed in terms of specific categories (for example, by voltage level), grid areas, or – as in this case – the entire National Transmission Grid.
The higher the level of the indicator, the better the service performance.
Below is a graph showing the trend of the ASA index from 2002 to 2013[9].



CONTINUITY INDICATOR

Short Average Interruption Frequency Index + Medium Average Interruption Frequency Index (SAIFI+MAIFI)
This interruption frequency index is calculated as the ratio between the number of customers involved in short (less than 3 minutes) and long (more than 3 minutes) interruptions, and the number of users of the National Transmission Grid.
The lower the level of the indicator, the better the service performance.
The performance achieved during the year, with reference to the Terna NTG[10], is shown in the graph below that displays the trend of the index from 2002-2014:

No. Customers interrupted/No. NTG Users



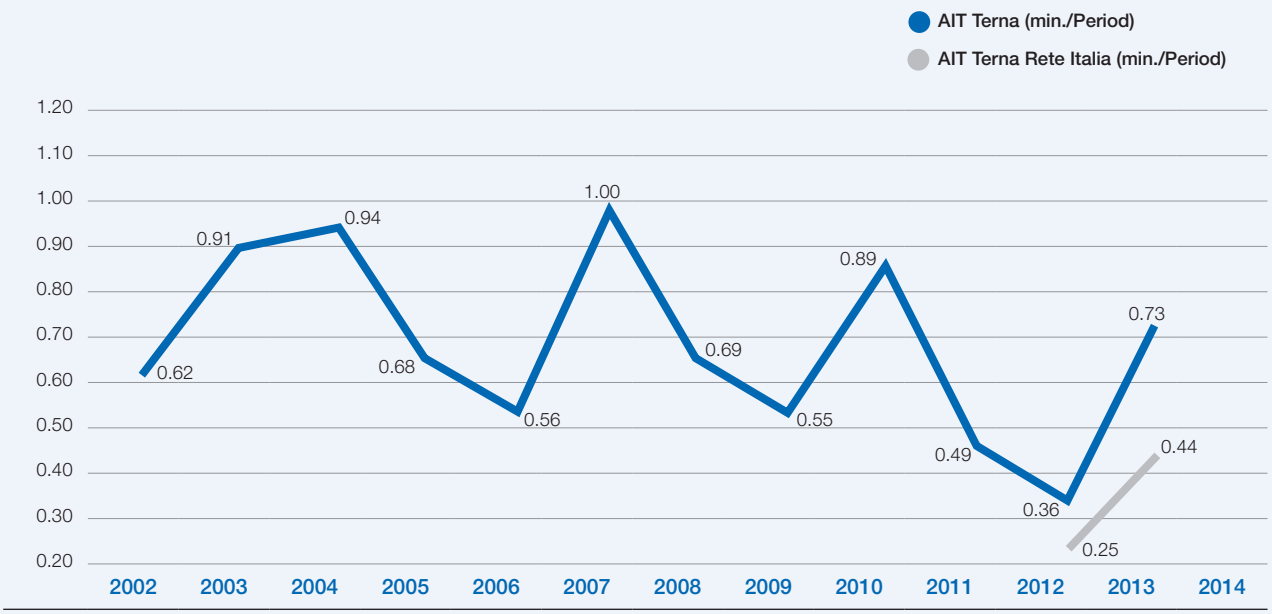
9 As at the reporting date, the 2013 data for the ASA index are provisional, while those for 2014 are not yet available.
10 Since 2012, the interruption frequency index (SAIFI+MAIFI) has also been monitored with reference to the portion of the NTG owned by the subsidiary Terna Rete Italia S.r.l.

SYSTEM CONTINUITY INDICATOR

Average Interruption Time (AIT)

This is an internal indicator which measures the average interruption time of the electric system (NTG) in a year, calculated as the ratio between the energy not supplied in a certain period (ENS value) and the average power consumed by the NTG in the period considered. The figure is rounded to two decimal places.
The lower the level of the indicator, the better the service performance.
The performance achieved during the year, with reference to the Terna NTG[11], is shown in the graph below that displays the trend of the index from 2002 to 2013[12], net of the amount attributable to relevant incidents:

average interruption time (min)



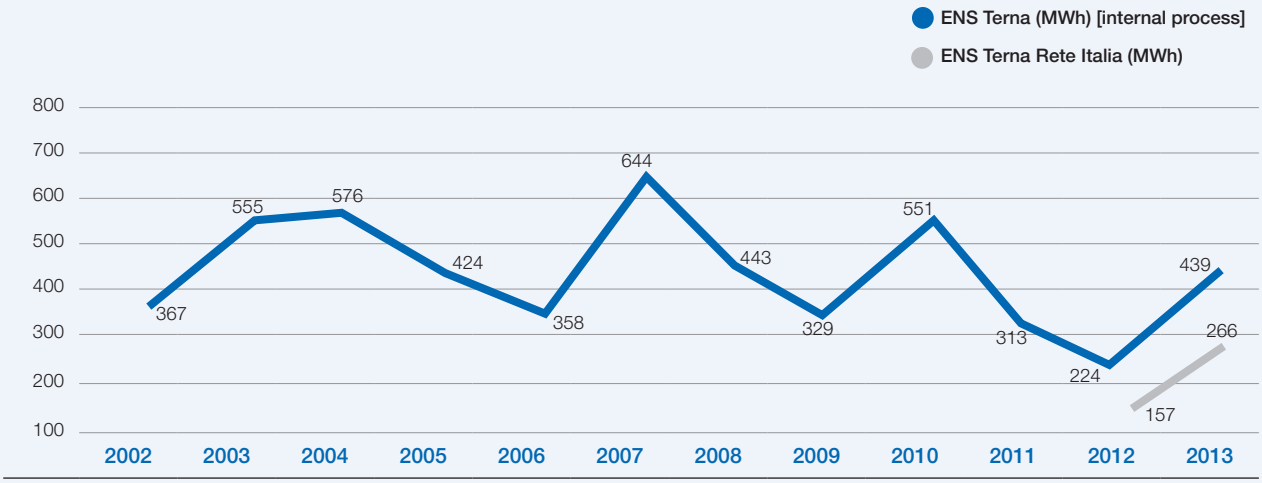
SERVICE CONTINUITY INDICATORS

Service continuity indicators measure the energy not supplied to users of the grid following certain events, according to criteria defined and calculated by the AEEGSI. The lower the indicator, the better the service performance.
The final evaluation of the following continuity indicators for 2014 by the AEEGSI was not available at the time this report was published. However, the provisional data illustrate a better performance with respect to targets and the final figures from the previous year. Therefore the following shows the changes in these indicators since they were introduced up until 2013.

Energy Not Supplied (ENS)

The Energy Not Supplied (ENS) indicator shows the energy not supplied to users connected to the NTG[13] following events which affect the NTG, net of the amount attributable to relevant incidents.

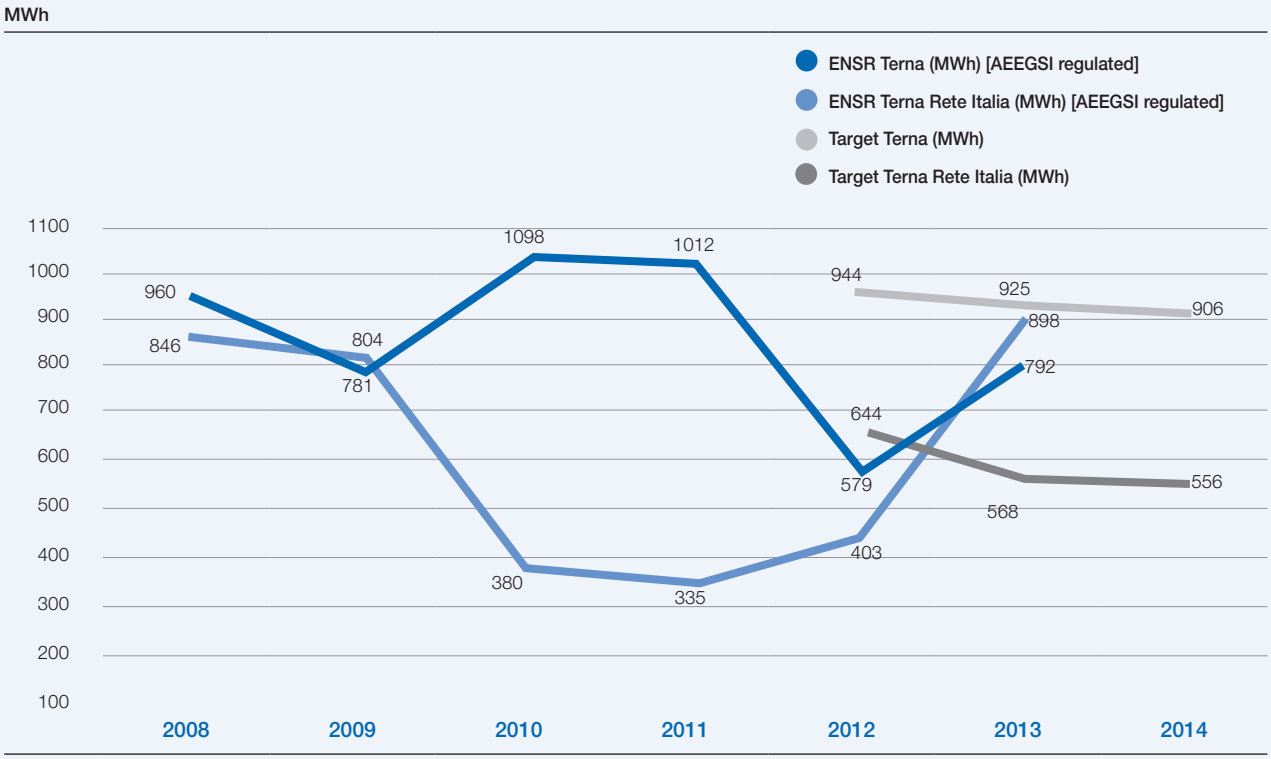
MWh



11 Since 2012, the AIT indicator has also been monitored with reference to the portion of the NTG owned by the subsidiary Terna Rete Italia S.r.l.
12 The AIT index for 2014 was not available at the time this report was published, as it is linked to the RENS index (Regulated Energy Not Supplied) which has not yet been calculated by the AEEGSI.
13 Since 2012, the ENS indicator has also been monitored with reference to the portion of the NTG owned by the subsidiary Terna Rete Italia S.r.l.

Regulated Energy Not Supplied (RENS)[14]

The AEEGSI regulated the quality of the service provided by Terna using an incentive/penalty mechanism set out in AEEGSI Resolution 197/11. It is applicable to the regulatory period 2012-2015 and relates to the Regulated Energy Not Supplied (RENS) index referring to the Terna S.p.A. and subsidiary Terna Rete Italia S.r.l. grid.



Plant maintenance

Plant maintenance is essential for ensuring service quality and continuity. To ensure that plants can be identified immediately and reached as quickly as possible, especially in the event of malfunctions, all workers use a hand-held device that incorporates a navigation system showing all plants.

This was the main action taken in 2014 with regard to electrical substations and lines:

Plant monitoring and inspection: in addition to the checks prescribed by law, the following checks were carried out:

- **22,700 periodical technical and surveillance checks on substations** at different voltage levels;
- **inspections with visual checks** on around 91,300 km of three-phase lines, approximately 22,200 km of which were carried out by helicopter (visual + infra-red), with a total average frequency of around 1.5 inspections per year for each power line;
- **13,800 instrumental checks**, using thermal imaging cameras to identify hot spots, and DayCor UV cameras to pinpoint the corona effect on insulators and conductors, also climbing pylons with LLW (Live-Line Working) techniques;
- **power line inspections by helicopter**. After concluding the LIDAR (Laser Imaging Detection and Ranging) project, achieving the aim of creating a geo-referential platform of the National Transmission Grid, Terna started large-scale experimentation of helicopter inspections with its own personnel to monitor the appearance and functioning of the high-voltage overhead lines. This improves diagnostics and makes checks objective, given that the results of the instrument surveys are recorded, in line with the best practices of the leading European Transmission System Operators.

Ordinary maintenance: Terna identifies the action to be taken on the basis of indications of deterioration coming from the integrated remote-management system, the online sensors and the results obtained from the plant monitoring process, using Maintenance and Business Intelligence (MBI), the expert system which optimises maintenance activities, active since 2005.

14 For the RENS indicator, the targets for 2012-2015 have been set as an average of the RENS 2008-2011 indicator, referred to in AEEGSI Resolution 197/11, with a 2% improvement in performance year on year.

G4-EN12

Controlling vegetation: for correct operation of the lines, continual monitoring of vegetation growth is necessary to prevent it getting too close to the energy conductors and causing possible short circuits and line interruption. In 2014, vegetation was cut along 14,500 km of power lines.
Live-line working (LLW): approximately 1,600 monitoring inspections and 753 maintenance jobs were performed on live wires.
This work is performed with the line in operation and increases the availability of facilities, contributing to improving service quality and continuity.
Special maintenance: in 2014, Terna reconstructed 22 km of overhead lines and 18 km of underground cables, and replaced approximately 2,500 km of energy and guard wires.

Grid development

The transmission grid must gradually evolve and expand in accordance with developments in the generation and consumption of electricity. Both the supply and demand of electricity grow at uneven rates in different areas of Italy. The combination of these elements changes the flows of electricity in the system, causing congestion in the existing grid. To tackle these issues, Terna prepares annual **grid development investment programmes**, so as to stay up to date with the evolution of production capacity and consumption, and to increase its efficiency and security. The development work that Terna plans and carries out also has positive repercussions on society; in fact, the assumption underlying its implementation is that the collective financial benefit generated outweighs its cost.
Every year, Terna prepares a **Transmission Grid Development Plan (DP)** with the **national transmission grid development projects** envisaged for the next ten years and the progress made on development works planned in previous years. The "2015 Development Plan" is concerned with the transmission grid development investments for 2015-2024.
The document, accompanied by a closer examination of the economic sustainability analyses for the main development plans, describes the reference framework, the objectives and criteria for transmission grid planning, the new development needs identified in 2014, priorities for action and the expected results of the Development Plan.
Every Development Plan follows a detailed path: it is assessed and approved by the Ministry of Economic Development and subject to public consultation (pursuant to Article 36.13 of Italian Legislative Decree 93/11) by the Authority for Electricity, Gas and Water, and also subject to evaluation by the Grid User Consultation Committee.
In addition, pursuant to Italian Legislative Decree 152/06, as amended, the DP is also subject to the Strategic Environmental Assessment (SEA)[15] process carried out by the Ministry for Environment and Protection of Land and Sea in collaboration with the Ministry for Cultural Heritage.

G4-SO1
G4-EC7
G4-EN27

A responsible approach to grid development: the consultation

Since 2002, Terna has used a new framework for creating infrastructure in Italy, by choosing to **voluntarily bring discussions with local communities forward to the project planning stage** (for power lines and electrical substations) within its Development Plan. This improves the quality of relations with public authorities at various levels compared with previous interaction, when the company merely complied with legal requirements which stipulated that discussions with local communities need only begin when the planning of the infrastructure was already well-defined, often leading to strong opposition from local institutions and residents. On the contrary, Terna's approach involves regional authorities, sharing grid development needs and working alongside Terna to find sustainable solutions which accommodate those needs.
The aim of this method is the **optimal localisation of new installations**: Terna and the public authorities find shared solutions, in terms of local **corridors**, based on area criteria (known as "ERPA criteria") and ratified in specific agreements. Thus Terna has initiated a voluntary approach which integrates environmental and local considerations into the planning process, through constant discussion with local stakeholders, preceding integration which would subsequently be outlined by the Strategic Environmental Assessment (SEA).

15 It is also potentially subject to screening to check whether it should undergo SEA pursuant to Italian Legislative Decree No. 1 of 24 January 2012.

The SEA, at the time the subject of an EC Directive (2001/42/EC), was to be transposed into Italian law only many years later (in 2007 with Italian Legislative Decree 152/2006) and with much less detailed implications at the level of relations with local institutions. From 2002, Terna has signed Protocols of Understanding and Planning Agreements in 18 Regions and in the Autonomous Province of Trento in order to formalise reciprocal commitments as part of a transparent, inclusive planning process.
Further information on SEA is available in the "Electric System" section of the website:
http://www.terna.it/default/home_en/electric_system/sea.aspx which can also be accessed from the dedicated map portal ("SEA Portal").

Area criteria

During consultation with local institutions, agreeing on **location criteria** is one of the most effective instruments for selecting solutions with the least impact, in terms of local corridors. These criteria are used to identify the greater or lesser degree of suitability of an area to host electrical infrastructure.
As part of the National SEA Committee, Terna and regional administrations agreed on a system of criteria **(ERPA)** based on four classes:

- **Exclusion:** areas in which all construction is excluded. Currently, the exclusion criterion includes areas recognised by law as areas of absolute exclusion (such as airports and military zones) and areas which are not directly excluded by law but which are constrained by a priori agreements between Terna and the entities involved.
- **Repulsion:** areas that can be considered only in the absence of more environmentally compatible alternatives.
- **Problematic:** areas in which passing is problematic for an objective reason associated with specific features of the area and documented by the authorities involved, which therefore require further analysis.
- **Attraction:** areas with good landscape compatibility and areas that already host line infrastructure such as energy corridors, in which it would be more sustainable to position a new line with respect to new areas that do not have any line infrastructure.

The support of GIS (Geographic Information System) technology is fundamental when searching for sustainable locations (corridors) for NTG development projects. This technology allows comprehensive consideration of all information relating to the different types of land use and protection obligations (territorial, naturalistic, cultural, landscape, etc.), in order to identify possible locations which are the most compatible with the area concerned. Further reinforcing this approach, in February 2014 Terna signed an agreement with ANCI, the National Association of Italian Municipalities (see page 54).

Main development work in progress

Each year, grid development work takes the shape of numerous projects at different stages of the implementation cycle.

Completed work

In 2014, **Terna increased its transformation capacity by about 2,165 MVA of power and put approximately 330 km of new high and very-high-voltage lines into operation**. Among the works completed, the projects of primary interest include the new 380 kV double three-phase "Trino-Lacchiarella" power line, the upgrade of the 380 kV "Foggia-Benevento" connection, the new 380 kV "Scilla-Rizziconi" power line, the 220 kV underground power lines "Martinetto-Levanna", "Pellerina electrical substation-Politecnico electrical substation", "Politecnico electrical substation-TU Centre", "Politecnico electrical substation-TU South" and "Pianezza-Pellerina" to improve service safety in the metropolitan area of Turin. With regard to power pants which feed in and use production from renewable sources in the south of Italy, upgrades to extensive 150 kV portions of the grid have been completed. Lastly, reactors were installed at the electrical substations of Udine West, Planais, Vignole, Piossasco, Teramo, Ospiate and Cattolica Eraclea.

Progress on construction sites

The major works that began in 2014, and which are still in progress, aim to reduce grid congestion, connect new power plants (particularly those based on renewable sources) and make the national transmission grid more reliable, with a greater emphasis on the environment and safety. Among these are the 380 kV "Gissi-Villlanova" power line (the first of the sections needed to double the Adriatic backbone to 380 kV) and the 380 kV "Sorgente-Rizziconi" power line. Furthermore, as part of the wider "Udine West-Redipuglia" planned project, work at the Udine South electrical substation continue. Lastly, important interconnection initiatives with foreign countries are under way, in particular the Italy-Montenegro HVDC interconnection.

Authorised work and authorisation procedures in progress

In 2014, authorisation procedures were initiated for the 380/220/132 kV Mese transformer station and the 132/110 kV Brennero transformer station, for the reorganization of the line inputs at the Pellerina electrical substation and for the 150 kV connection cables between 380/150 kV stations in Castellaneta in order to feed in production from renewable sources. Following an approach based on the utmost transparency towards its stakeholders, Terna has created a web platform, which, since March 2011, has been publishing information online on the progress made on the projects included in the Development Plan[16]. The figure below summarises the main projects included in the Development Plan which are currently authorised or awaiting authorisation:

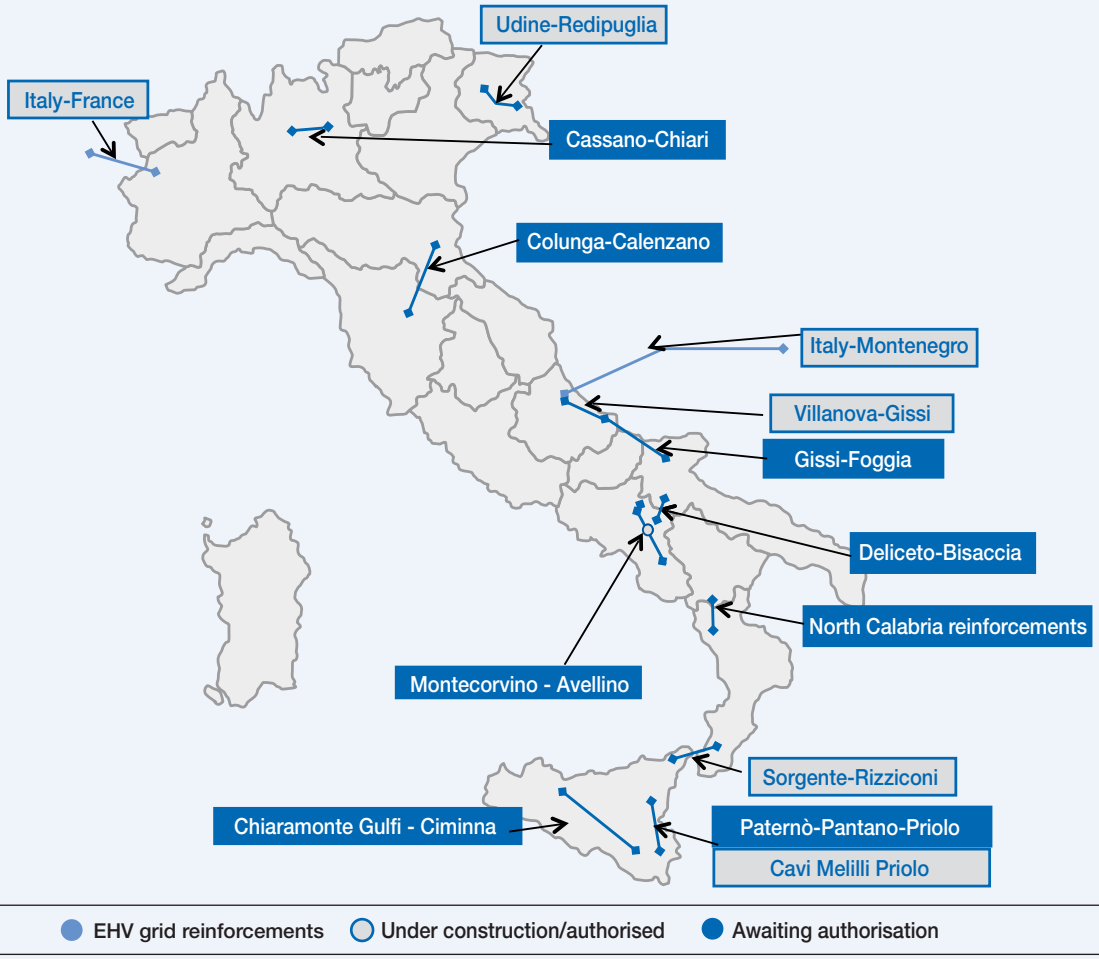


Figure 1 - Main Development Plan projects which have been/are being authorised

Projects set out for use of energy produced from renewable sources

Implementing Directive 2009/28/EC and the National Action Plan (NAP) prepared by the Ministry of Economic Development, Terna included a specific section in the National Development Plan which defines the action needed for full use of the energy deriving from the production of renewable source systems.

The grid analyses carried out in order to facilitate the use and development of production from renewable sources have enabled us to identify action to be taken both on the primary 380-220 kV transmission grid, and on the 150-132 kV high-voltage grid.

The figure below shows an overview of the main development work carried out on the 380 kV very-high-voltage grid, aimed at fully using the energy produced by renewable sources.

16 See the corporate website at: www.terna.it/default/Home/SISTEMA_ELETTRICO/CantieriTernaPerItalia.aspx.

Figure 2 - Main action on the 380 kV grid needed to make full use of energy produced by renewable source systems

Connecting new plants

Terna, pursuant to Italian Legislative Decree No. 79 of 16 March 1999[17], must connect to the grid all those who request the same. Specifically, Terna is responsible for connection to the National Transmission Grid (NTG) at high/very-high voltage for plants with a power of 10 MW or more, while the assigned regional distribution companies are responsible for connections to plants with power of less than 10 MW. The methods and technical/economic conditions used by Terna to issue estimates to those who request a connection to the NTG are established in the Grid Code and the provisions issued on the subject by the Italian Regulatory Authority for Electricity, Gas and Water (AEEGSI). The NTG connection procedure begins with the presentation of a connection request to Terna and concludes when the power plant enters into service. There are four key stages: a preliminary stage concerned with developing the connection plans; a planning stage during which a project of works on the NTG is drafted and submitted to Terna for approval; an authorisation stage in which the project is submitted to the relevant authority; and an execution stage preceded by contractual arrangements between Terna and the proponent regarding the construction of NTG facilities. Although, in recent years, there has been a steady decline in the number of connection requests, owing mainly to changes in the incentive scheme which favours the connection of small renewable energy plants and, therefore, typically to the distribution grid, as well as the expiration of some initiatives due to the non-compliance of proponents with regulatory requirements, it should be noted that:

- the trend in connection requests has been almost constant over the last few years;
- in the context of the connection process, there has been a significant upward trend in initiatives in the execution phase (particularly for contractor plants in incentives tenders). This latter trend is due to certain proponents having obtained authorisation for infrastructure aimed at collecting renewable energy through works connected to generation plants, including the plants in Basilicata, such as the 380/150 kV substation in Melfi and the 380-150 kV Genzano – Oppido – Vaglio - Avigliano backbone;

17 Specifically, the Legislative Decree states: "*the operator must connect to the national transmission grid all those who request the same, without compromising service continuity and provided that the technical rules pursuant to paragraph 6 of this article are respected, as well as the technical and economic conditions for access and interconnection established by the Italian Regulatory Authority for Electricity and Gas [now the Italian Regulatory Authority for Electricity, Gas and Water]. A refusal of access to the grid must be appropriately justified by the operator.*"

- six generation plants began operating on the NTG during the course of 2014, for total power of around 113 MW, contained with respect to previous years, as a reaction to new mechanisms used to distribute incentives.

In terms of solar plants, as already noted, an increase was seen in requests made to the local distributor grid for MV and LV. Nonetheless, as the distribution grids are interconnected with the transmission system, the presence of these plants also has an effect on extensive portions of the high and very-high voltage transmission grid. In these situations, energy returns from the distribution grid to the transmission system. In fact, the plants referenced above are often concentrated in areas with low demand, which leads to the energy produced returning to the HV grids in certain periods.

Also note that in 2014, five new plants owned by distribution companies, which are connected to the NTG, began operating. These plants are examples of infrastructure works included in an action programme involving several bodies, which aims to bring forward connection requests from power plants run on renewable energy sources and, more generally, to ensure well-managed, sustainable development of renewable energy across the country.

It has been confirmed that, in 2014, there were more requests for the connection of renewable energy plants in Southern Italy and the Islands, which are more favourable in terms of the availability of primary sources. Throughout the whole of Italy, a significant reduction in requests for connection of solar sources has continued to be seen.

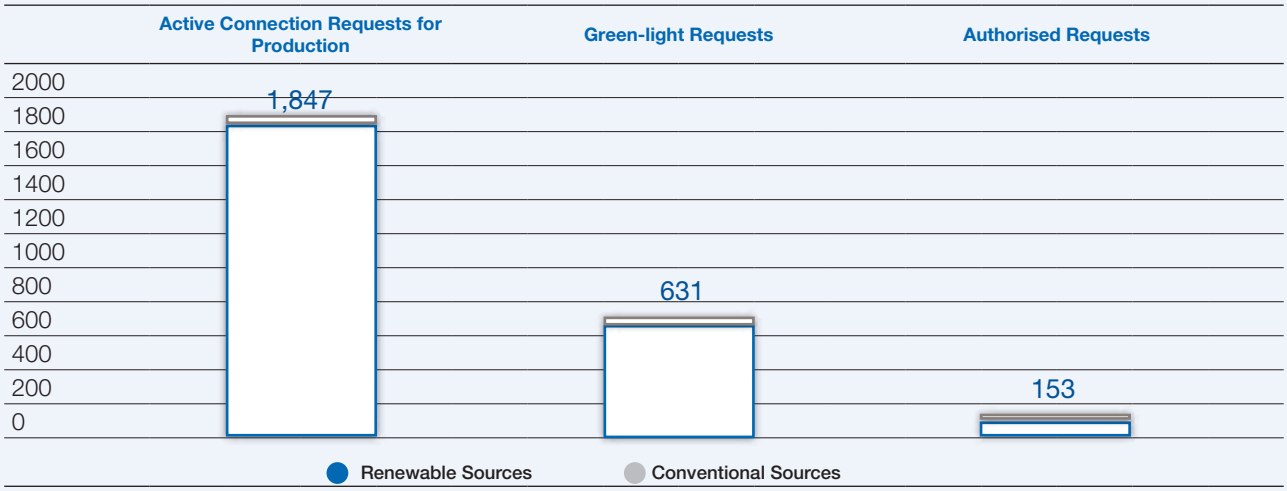
In addition, note that the regulatory changes in regard to the regulation and management of Simple Production and Consumption Services (SSPC) has led to Terna managing connect requests relative to these types of plants.

Bearing in mind that the national electricity sector has been affected by the crisis and uncertainties in the Italian economy, with significant effects not only related to the decrease in the demand for electricity, but also the reduction in available production capacity as a consequence of plans to decommission or preserve production units implemented by the main operators, we note the following relative to generation from conventional sources:

- there are a number of plants for which, despite having obtained building permits over recent years and commissioning already having been scheduled, the construction sites have not yet been opened on account of the current economic situation which has led to the sustainability of the planned works being reviewed;
- the definitive suspension of the planned conversion of three thermoelectric plants;
- the opening of the worksites for two new thermoelectric plants, planned for 2015 (unless further extensions are granted by the relevant public authorities).

The graph below summarises the connection requests for production plants currently managed by Terna, specifically:

- active connection requests for which the requesting party works to fulfil the obligations foreseen in the Grid Code;
- green-light connection requests for which the requesting party has obtained the technical go-ahead from Terna in regard to compliance with the Grid Code;
- authorised connection requests or those requests for which the requesting party has presented the authorisation to the relevant authorities and for which Terna has made/must make economic commitments in regard to carrying out the connection work.



Terna and ENTSO-E: the ten-year development plan for the European Network

Terna is a member of ENTSO-E, the European Network of Transmission System Operators for Electricity, which represents 41 TSOs belonging to 34 countries, including those of South-East Europe (excluding Albania and Kosovo).
Since 3 March 2011, ENTSO-E, with head office in Brussels, under the terms of the EU's "Third Energy Package" has been the **official body for cooperation among grid operators at the EU level**. ENTSO-E works in close coordination with the European Commission and the Agency for the Cooperation of Energy Regulators (ACER).

European Network Codes

ENTSO-E has the task of preparing European Network Codes for grid connection (generators, distributors and end users), the market, and the operation of the electric system. Once they have been finalised (including the consultation process with the reference stakeholders), they will be adopted by the European Commission, becoming supra-national and binding legislative acts which, in cross-border issues, shall take precedence over national codes.
In 2011, the European Commission, ENTSO-E and ACER established a three-year work programme for the composition of twelve European Network Codes for the electricity industry, which takes into account the political conclusions of the European Council of 4 February 2011 and which had fixed 2014 as the term for completing the integration of the national and regional electricity markets.
For this reason, between 2013 and 2014 ENTSO-E presented nine Network Codes to ACER for recommendation for European Commission approval. On the 5 December 2014 the European Commission formally adopted the CACM Network Code (Capacity Allocation and Congestion Management) which, subject to approval by the Parliament and the Council expected in 2015, will become a binding legislative act for all EU Member States. Of the remaining eight codes, seven were approved by ACER in 2014 and will be submitted in 2015 to be considered by the EU Member States for final approval, while only one is still waiting to be assessed by ACER.

Market transparency and integrity

ENTSO-E contributes to energy market transparency by establishing a centralised platform for the publication of data and information. In June 2013, the European Commission adopted Regulation 543/2013 on transparency and ENTSO-E has correspondingly implemented a new European central platform which, as of 5 January 2015, publishes (as set out in the Regulation) the data of the 41 European grid operators.
Lastly, in accordance with EU Regulation 1227/2009 on integrity and transparency in the electricity market, ENTSO-E is collaborating with ACER in order to construct a European monitoring platform, ARIS (ACER REMIT Information System), which will be used to identify any potential manipulation of the electricity markets.

Ten-Year European Network Development Plan

ENTSO-E prepares the Ten-Year European Network Development Plan (TYNDP), starting from the national investment plans, and taking into account EU guidelines on the trans-European energy networks. In addition, the TYNDP identifies the development needs for cross-border capacity and any possible obstacles such as those deriving from authorisation procedures.
The latest edition of the Plan, which is published every two years, was released in December 2014 and is being considered by ACER. The new plan is made up of six regional investment plans, the Development Plan for the European Grid, and the report on the forecast scenarios and adequacy of the European electric system. In addition, for the first time it features forecasts on the state of the grid in 2030. This looking ahead to 2030 represents an intermediate step in the development of the "Electricity Highways" for 2050, one of the objectives of the European Commission's "Energy Roadmap 2050", in order to complete decarbonisation of the European electric system by that year.
Compared to the national development plans drawn up by the TSOs, the 2014 Development Plan for the European Grid includes only projects with a significant cross-border impact, around 130 in total, amounting to an expected investment of around 150 billion Euro between now and 2030. Ten Terna projects are included in this plan, for a total estimated investment of approximately 5.9 billion Euro.

Technology and Innovation

When introducing new technological and plant solutions, and new instruments and methods aimed at improving the reliability of power plants and, in turn, service quality, Terna mainly uses in-house technicians who base their work on carefully monitoring and analysing the performance of plants and equipment. The Group also uses the specialised support of manufacturers, collaboration with universities, RSE S.p.A. (Ricerca Sistema Energetico) and CESI S.p.A., a specialised service company in which it has a 42.698% shareholding.
In particular, in 2014 the Terna Group incurred costs of 18.2 million Euro in respect of the associate CESI S.p.A., of which 16.3 million Euro were capitalised.
Research into innovations and new developments in engineering mainly relate to three areas.

Optimisation of infrastructure and materials

Work continues on designing pylons with reduced visual impact and which are more easily integrated into the surrounding environment, as well as on researching conductors able to boost the transmission capacity of existing overhead lines, and on developing new technology for high-voltage cables. The activities carried out in 2014 were as follows:

- engineering new single-stem supports with a lattice pylon structure in 380 kV double three-phase circuit, construction and factory testing of five supports intended for the "Villanova-Gissi" line;
- research on high-temperature low-sag (HTLS) conductors, capable of withstanding higher temperatures without suffering mechanical degradation during operating life;
- start of collaboration with other utilities (ACEA and ENEL Distribuzione) for a study which assesses the use of vegetable insulation fluids – highly biodegradable and with a high flash point – in transformers, as an alternative to mineral insulating oils.

New equipment and plant configurations

Research is focused on developing and implementing Compact Rapid-Installation Stations (SCRI). After a positive trial run with the 150 kV Compact Rapid-Installation Station, a similar project has been planned for a 380 kV station, which manufacturers confirm is viable. Furthermore, it was decided that constituent models developed for the 380 kV Compact Rapid-Installation Station would be used in innovative systems solutions for the construction of parallel bar bays. Implementation is planned for 2015.
For the HV cable lines, in the light of the trials conducted in the laboratory and in the field, the Pry-Cam™ portable tool, developed by Prysmian Electronics S.r.l., was validated for partial discharge measurement in tests performed after installation, without any contact being made with the component being tested, thus ensuring the utmost safety.

Plant safety and the environment

The main aim of research is to guarantee greater levels of safety at plants and in the surrounding area in the event of external, potentially dangerous events such as fires, earthquakes and extreme environmental conditions. In 2014, we note the following:

- **Substations** - the completion, in collaboration with Roma Tre University, of a study on the seismic vulnerability of the plants, an area in which Terna has obtained a patent for the Wipe - Rope TRI system. The effectiveness tests performed in the laboratory demonstrated a 50% reduction in structural stresses. In the current year, the plan to install this technology in stations located in sites with a high seismic risk was launched and 90% completed, and the assessment of implementation in sites with medium risk is in progress. Testing also began, in the laboratory and in the field, on innovative instrument transformers, which are intrinsically safe, both from an environmental perspective (no oil or SF_6) and in terms of the physical safety of people and objects.
- **Overhead lines** - the launch of an installation campaign in northern Italy of the anti-rotation device for overhead conductors, able to counteract the formation and growth of "sleeves" of wet snow and the implementation of a software model that predicts the formation of "sleeves" of ice.

Finally, worthy of note is the beginning of a collaboration with RSE S.p.A. to increase awareness of the consequences of extreme climate scenarios – in line with the studies done by the Intergovernmental Panel on Climate Change (IPCC) – regarding grid infrastructure and transmission operations.

Planning and development of storage systems

Terna also affirms its commitment to guaranteeing secure and economical grid management, including by launching an innovative storage system agenda. The plan is divided into two macro-projects ("**Energy Intensive**" and "**Power Intensive**") which envisage the installation of various types of systems.

The two macro-projects, as well as being highly innovative, are also unique in kind and purpose. The development of the projects is managed by Terna Storage S.r.l..

The "**Energy Intensive**" project was first introduced in the 2011 Development Plan and envisages the construction of three electrochemical NaS-technology storage systems in Southern Italy with a total capacity of 34.8 MW:

- Ginestra (Benevento), 12 MW
- Flumeri (Avellino), 12 MW
- Scampitella (Avellino), 10.8 MW

These plants will allow the 150 kV backbones of the National Electricity Grid, which are present in areas with a high concentration of non-programmable renewable energy sources, to be managed with greater security and flexibility.

In the first part of 2014, the construction of the Ginestra and Flumeri plants commenced and by December the first plant had been commissioned, as well as the first 6 MW of the second.

The Scampitella plant was authorised by the Ministry of Economic Development in March 2014 and construction work subsequently began. The commissioning of the remaining 6 MW of the Flumeri plant is planned for 2015, as well as the entire Scampitella plant.

Pursuant to AEEGSI Resolution 66/2013, which acknowledges the "**Energy Intensive**" projects as forming part of the remuneration category for investments testing the storage pilot projects on the National Transmission Grid, these plants will be subject, in the next 12 years, to monitoring of the main parameters and indicators, in order to verify the use and actual compliance with grid requirements.

In regard to the "**Power Intensive**" project, proposed in the 2012 Security Plan, which foresees the creation of 40 MW, the two sites designated for the Storage Systems – Ciminna in Sicily and Codrongianos in Sardinia were confirmed, authorised and implemented in 2014.

Having procured lithium- and ZEBRA-based storage technologies, an activity which began in 2013, a total of 12 storage system were constructed: 5 in Sicily and 7 in Sardinia. With the installation of these systems, accelerated testing in the laboratories was also undertaken and the results are expected in the first quarter of 2015. In regard to the 12 systems installed on the two sites, eight began operations in 2014, for a total of 8.6 MW: 3.2 MW in Sicily and 5.4 MW in Sardinia (see the box, "The innovative "Energy Intensive" and "Power Intensive" projects" on page 33).

Smart transmission solutions

One of Terna's main needs is to make the transmission grid dynamic, i.e. capable of evolving rapidly and effectively in response to unpredictable and rapidly changing circumstances.
Therefore Terna has set out projects in the Development Plan which will guarantee security, reliability and efficiency in the electric system under various operating conditions, while maximising the timely and flexible use of existing infrastructure and thus facilitating integration of growing production from renewable sources, including those not directly connected to the NTG.
Among these projects we note:

- installing electrical equipment (Phase Shifting Transformers – PSTs) for controlling energy flows on the high and very-high-voltage grid;
- installing synchronous condensers to improve the stability and operating security of the system;
- installing reactors and condensers for proper management of reactive power flows on the grid, with consequent cost reduction for the Dispatching Market;
- using systems that allow real-time monitoring of transport capacity on existing lines, also as a function of actual environmental conditions (Dynamic Rating). In this regard, the testing, which is drawing to a close, will make it possible to define types and standards of application of the method, in order for it to be progressively implemented and diffused, in particular on the critical "Central North-North" and "Central South-South" sections and on renewable collection lines;
- testing of diffused storage systems to maximise the exploitation of power from renewable sources and to improve the regulation of the high and very-high-voltage systems;
- initiatives based on "smart" logic aimed at improving the forecasting and control of distributed generation.

These solutions generally have **reduced environmental impact**, allowing the use of existing assets to be maximised, and offer implementation times and costs which are typically lower than those necessary for the creation of new network infrastructures (high-voltage lines and stations).
The following innovative solutions are also planned:

- **participation in the GREEN-ME project** (Grid integration of REnewable Energy sources in the North-MEditerranean). As part of the Connecting Europe Facility (CEF) programme relating to the development of systems to integrate distributed generation from the south of France to the regions of northern Italy, a funding request for this project was presented to the European Commission in July 2014 by Italian and French TSOs and DSOs (Distribution System Operators). The project has been added to the list of Projects of Common Interest (PCI) published by the European Commission in October 2013, as one of the "Smart Grid" projects. The project is conditional on receiving funding from the European Commission; it was also re-nominated in the updated list of PCI projects presented in 2014;
- **improving grid identification and control with digital systems.** By exploiting the potential offered by digital equipment, the aim is to provide measurements directly for the analysis and monitoring of service quality;
- **monitoring grids.** The growing impact of renewable sources on the distribution grids requires data collection and modelling which will enable a more detailed overview of the load/generation on distribution systems that operate with the transmission grid.

BEST PATHS project launched

(BEyond State-of-the-art Technologies for re-Powering AC corridors & multi-Terminal HVDC Systems)

After over two years working alongside the European Commission, the BEST PATHS project is underway. This ambitious, four-year research and development project is focused on developing high-capacity, flexible, pan-European transport grids, needed to satisfy Europe's long-term energy objectives and to fully incorporate renewable energy.

With a 63 million Euro investment, 50% co-financed by the EU, this is the largest energy research and development project of the European Union's Seventh Framework Programme.

In Rome on 30 October 2014, Terna, as the Chair of the Consortium of 39 research and industry leaders, utilities and transmission system managers, hosted the kick-off meeting for the entire project, which saw the participation of over 70 experts from all over Europe, representing the various aspects of work foreseen, as well as the Commission Officer responsible for funding.

The general coordinator of BEST PATHS is the Spanish TSO, Red Eléctrica Corporaciòn. The project is divided into five research areas in terms of work in the field, each of which has its own "Demo Leader". These areas are: interoperability between wind farms and conversion stations (Iberdrola, Spain); interoperability between multi-vendor converters in direct current grids (RTE, France); innovative components and systems in direct current (Terna); re-powering of overhead lines in alternating current (50 Hertz, Germany) and use of superconductor cables (Nexans, France).

In addition to being one of the founders of the initiative, Terna is also the leader of the largest demo worth 23 million Euro, related to the development of technology, components and systems in HVDC, inspired by the needs related to the future renewal of the SACOI connection between Sardinia, Corsica and mainland Italy. The developments in research related to the SACOI framework will also be useful for more general issues related to HVDC systems. Terna's task, with the assistance of the research organization RSE, is project management and coordination with the other demos. In addition, Terna will create the system architecture and coordinate the development and subsequent tests in the field by the involved industries: Toshiba for multi-level HVDC VSC converters, Nexans for extruded dielectric submarine and underground cables for DC applications, and De Angeli for high-performance overhead DC conductors. In addition, Terna and RSE will also coordinate laboratory testing to assess the reliability of innovative insulators for DC overhead lines and to improve the techniques used to locate faults in the very long cables typical of HVDC connections.

The overall objective of the project is to identify technological best paths to develop more robust and flexible grids, able to support greater quantities of renewable energy and bridge the gap between production, often located in remote areas, and large consumption areas, creating benefits for the integrated electricity market and an ever more sustainable energy system.

The partners represent all the links in the chain of European innovation, from universities and research centres that create new knowledge, to the energy industry that develops new products, through to the end users – the transmission grid operators and utilities that use these products to offer a better service to all of society.

For once, through Terna's project proposal, Italy will be able to play a primary role in the use of European funds allocated to maintain or acquire technological leadership in the context of energy systems. However, the overall benefits greatly exceed the purely economic advantages (grants for 50% of research costs and 100% of management costs), given that they offer the possibility to focus sizeable research resources, including private ones, on the most relevant aspects for concrete applications. This is combined with direct access to the results of the other demos, the technological consequences, sharing of best skills and practices, opportunities for professional development and, not least, greater synergy with the manufacturers, who continue to serve as the main source of technological innovation.

2014

Terna
TERNA GROUP

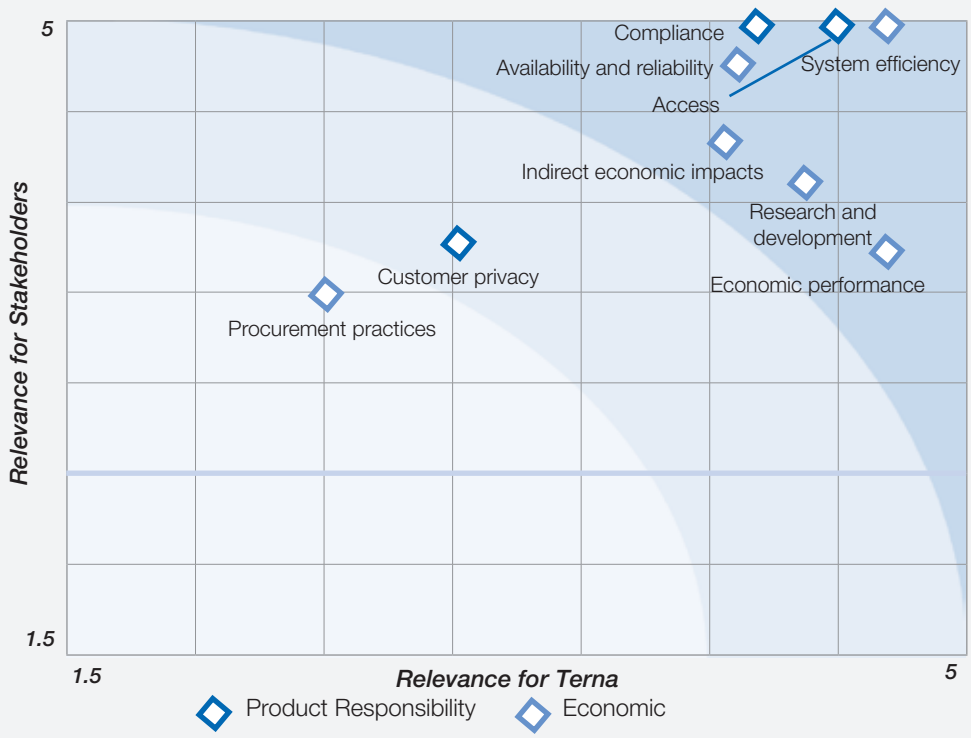
Our approach

At Terna, we believe that service objectives are to be integrated with financial performance objectives. The synthesis of these two areas results from the search for operating efficiency and growth opportunities, whilst fulfilling service obligations and, in particular, ensuring the security of the electric system.
In Italy, Terna holds the monopoly on electricity transmission. It cannot therefore increase business or revenue by enlarging its market share; hence it pursues these objectives mainly by:

- promptly delivering the investments set out in the Grid Development Plan, which both improve the electric service for society and constitute a source of corporate income;
- seeking operational efficiency and optimal capital structure;
- developing non-regulated activities connected to transmission;
- seeking business opportunities in industries other than transmission;
- expanding business abroad.

For a detailed presentation of the economic and financial results achieved by the Group, see the Annual Reports available online in the "Investor Relations" section and, in particular, the 2014 Integrated Report. The main results of the last three years are, however, discussed in this chapter.
Below is a visual representation of the materiality assessment of the economic and electric service aspects of G4 with indication of the materiality threshold (for more details, please see the methodological note on pages 140-141).

2014 MATERIALITY MATRICES – G4 ASPECTS



Access (to the service)	pages 33-34; 64-66; 73
Availability and reliability	pages 33-34; 63; 67-68; 75
Compliance	pages 35-38; 57
Customer privacy	pages 62; 64
Economic performance	pages 83; 84; 88; 126; 134; 158; Integrated Report on pages 216-217
Indirect economic impacts	pages 89-94; 162
Procurement practices	pages 89-94; 160
Research and development	pages 74-75; 76
System efficiency	pages 62; 107

Terna's economic impact

G4-EC1

Value added[18]

Value-added is a measurement of the income of a company, and that of a whole economy, during a given period (usually one year). In corporate accounting terms, value added is calculated by subtracting costs incurred for procuring intermediary goods and services necessary for production from the value of production itself (revenue associated with goods and services produced during the year). These costs do not include labour costs, which are instead part of the value the company adds, through its activities, to intermediary goods and services. The difference between sales revenue from the final product and the cost of raw materials (and support services) is value added. Other than the cost of labour, value added also includes profits and the share of income allocated to paying interest on debts or taxes.

TERNA GROUP – VALUE ADDED STATEMENT(1)

€	Financial year 2014	Financial year 2013	Financial year 2012
A. Staff Remuneration	340,455,415	282,591,663	275,766,675
B. Remuneration of public authorities	355,659,934	433,790,713	437,398,256
C. Return on borrowed capital	189,666,491	190,767,423	211,447,315
D. Return on risk capital(2)	401,998,400	401,998,400	401,998,400
E. Remuneration of the Company	142,535,590	111,606,710	61,541,976
Total net value added	1,430,315,830	1,420,754,909	1,388,152,622

(1) The amounts relative to the creation and distribution of the value added are taken from the Consolidated Financial Statements, which were prepared according to the international accounting standards IFRS/IAS. Specifically, the Terna Group has adopted the IFRS/IAS international accounting standards since 2005.

(2) Return on capital for 2014 refers to the advance distributed in November 2014 (140.7 million Euro) and to the balance proposed to the Meeting of the BoD in the session on 26 March 2015 (261.3 million Euro).

The 2012-2014 period shows an increase equal to 3.0% of the value added generated by the Group, in the context of which the impact of borrowed capital remained essentially stable (averaging 14%). In regard to staff remuneration, the impact on total net value added (equal to 20% in 2012 and 2013) shows an increase of 3.9%, attributable both to the provision for early retirement incentives connected to the corporate reorganization programme begun by the Parent Company in 2014, as well as the impact of the Tamini Group, acquired in May 2014.
With reference to direct and indirect taxes, the tax incidence with respect to total net value added, averaging 29% in previous years, fell by 6.6% with respect to the 2012 figure, mainly due to effects connected to the Robin Hood Tax pursuant to Res. No. 138/2011. Specifically, the Group's 2014 tax figures reflect the impact of the reduction applied to the IRES [Italian corporate income tax] mark-up from 10.5% to 6.5% (bringing the IRES rate to 34%, in contrast to 38% in 2013), as well as the adjustment of net deferred taxes at 31 December 2014, following the judgement which declared its unconstitutionality[19].
With regard to the taxes paid by the foreign subsidiaries of the Group in 2014, we note the following:

- the Montenegrin Terna Crna Gora, registered a loss, which therefore did not generate any type of taxation to be paid to the Montenegrin government (for details, please see page 25);
- the United States based subsidiary of Tamini Group "Tamini Trasformers USA L.L.C." paid 54,812 dollars in federal taxes and 13,032 dollars in state taxes.

Return on risk capital, in relation to total net added value, is substantially in line with 2012 (-0.9%), while the effect of provisions increased from around 4% to around 10%.

18 This section, including the table, includes the values associated with the subsidiaries Terna Crna Gora and Tamini Group.
19 On 11 February 2015, the Constitutional Court published Judgement 10/2015, with which it declared unconstitutional the Robin Hood Tax. Given that, in the judgement of the Court, applying this declaration of illegitimacy retroactively would constitute a grave violation to the equilibrium of the government's accounts, sanctioned under Article 81 of the Constitution; the unconstitutionality is effective as of the day following the publication of the sentence in question. Therefore, Terna Group determined current taxes for financial year 2014 by applying the IRES rate with a mark-up of 6.5%, and adjusted net deferred taxes to the rate foreseen at the time of the payment (27.5%, without application of the additional Robin Hood Tax). This adjustment had a positive impact on the income statement of around € 30 million.

G4-EC8

Other economic effects

Terna's economic impact does not end with the production and distribution of value added. First and foremost, **the economic repercussions of the electric service** must be considered: Terna ensures that a service of general interest, which contributes to the country's economic growth, is provided over time.
The Company's grid development work is of particular importance. Developing interconnections with bordering countries makes it possible to import electricity at more competitive prices compared to domestic production, as well as to have an additional power reserve and guarantee greater competition within the energy markets. Reducing grid congestion improves the use of generation resources in order to meet demand and makes it possible to use the most competitive plants, with positive effects on competition within the generation sector and on end prices.
In accordance with the legal and regulatory framework, all of Terna's investments in grid development are examined from a technical and economic perspective, by comparing the estimated cost of the work with the related benefits in terms of the reduction of the overall system expense, in order to maximise the cost/benefit ratio. Consequently, every Euro invested by Terna on average generates multiple savings for the users of the grid which are ultimately passed on to the end consumer. It is therefore significant that Terna's investment (most of which is to develop the grid) has increased greatly over the last few years.

OVERALL INVESTMENTS – TERNA GROUP[1]

	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Millions of Euro	1,096.1	1,212.3	1,235.2	1,229.2	1,162.7	900.4	764.9	606	345.5	263.5

(1) This table includes the values associated with the subsidiaries Terna Crna Gora and Tamini Group.

The above table shows Terna Group's total investments in 2014, equal to 1,096.1 million euro, of which 1,048.1 million euro are related to investments remunerated by the AEEGSI.

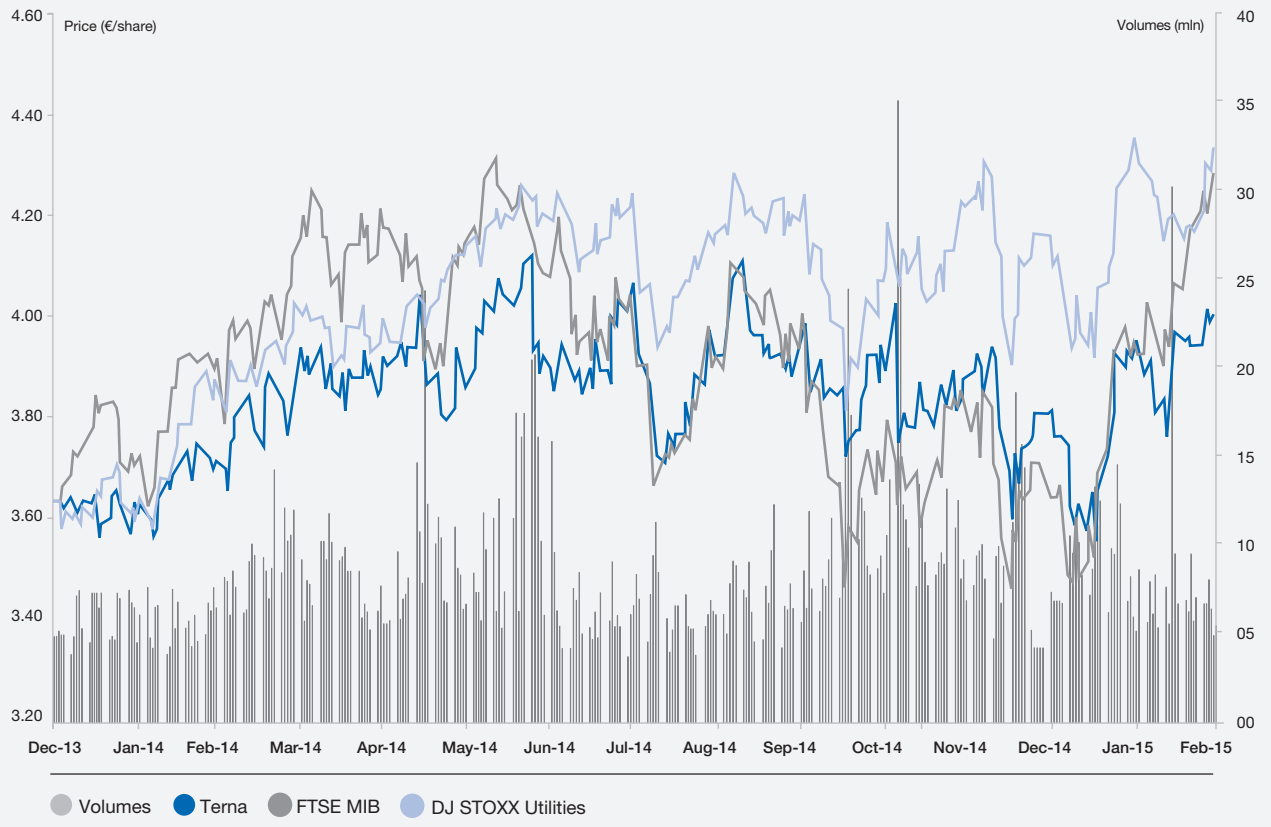
G4-EC4

In 2014, public contributions to the plant account – a direct reduction in the value of the plants – amounted to 39,399.32 euro (1,972,121.42 euro in 2013, and 1,561,023.47 euro in 2012). We also note that during the year contributions were received in relation to projects financed by the Ministry of Economic Development (MED) for 60,535,918.26 euro.
The second aspect to consider is the **creation of jobs and procurement expenses**. Terna employees **3,437 employees** (data as at 31 December 2014), of which 900 are located in Rome, with the rest distributed evenly throughout the whole of Italy.
In 2014, Terna indirectly employed labourers from **contractors and subcontractors totalling the equivalent of 2,489 full-time employees** to perform building works – above all the construction and maintenance of power lines.
In 2014, the **economic value of Terna's procurement** of services, supplies and works came to 631 million euro. For more details, please see the paragraph on page 89.

Share performance

In a fragile macroeconomic context, the main European stock exchanges ended 2014 with contrasting performances: IBEX Madrid +3.7%, FTSE MIB Milan +0.2%, DAX Frankfurt -0.1%, CAC Paris -0.5%, FTSE 100 London -2.7%.
The indices reflected a slower-than-expected economic recovery, a deflation scenario and high unemployment levels. These macro factors were combined with fears associated with the crisis in the Ukraine, political instability in Greece and the falling price of oil.
As regards government securities, the announcements of further expansionary monetary policy measures by the European Central Bank, in a context of official interest rates close to zero, permitted a significant reduction of government security yields. In particular, the yield of Italian ten-year BTPs fell by more than 50%, going down from 4.1% to 1.9% at the end of the year.
In the USA, the continuing economic stimulation policies facilitated growth and the reduction of unemployment levels. In this context, Wall Street gained approximately 8% (INDU New York +7.5%) closing at a record high. In 2014, Terna recorded a 3.5% rise and guaranteed a Total Shareholder's Return (TSR) of 8.9%. On 20 June 2014, the stock reached a record high of € 4.11 per share. The average volume traded in 2014 stood at approximately 8.4 million shares daily.
From its initial listing on the stock exchange on 23 June 2004 to 31 December 2014, the stock has increased in value by 121.2% with a TSR of 317.7%. This performance is in sharp contrast with the market (TSR FTSE MIB +1.0%) and is more than twice that of the sector (TSR DJ STOXX Utilities +132.1%). Finally, we note that in the first two months of 2015, the stock has gained 7.2%, exceeding the average figure for the sector (DJ STOXX Utilities +5.11%).

Trend of Terna stock and the FTSE MIB and DJ STOXX 600 Utilities indices



Source: Bloomberg. Data as at 27 February 2015

Terna has adopted a policy which provides for the payment of dividends twice a year. The 2014 dividend advance payment was 0.070 Euro (coupon detachment date 24/11/2014, payment on 26/11/2014), while the balance proposed to the Meeting of the Board of Directors (session 26 March 2015) was 0.130 Euro. Further information on share performance and dividend trends can be found on the site (http://www.terna.it/default/home_en/investor_relations_en.aspx).

Revenue and risk management

Revenue structure and the regulatory framework

In 2014, the Terna Group's revenue amounted to € 1,996.4[20] million. The majority of this revenue (about 93%) derives from traditional activities regulated by the Authority for Electricity, Gas and Water (hereinafter, the Authority) and around 7% refers to non-regulated activities. The latter consist mainly of revenue from the Tamini Group and for specialised services provided by other companies in Terna Group to third-party entities, such as maintenance activities on HV facilities, plant engineering, maintenance of the fibre optic network, housing of telecoms equipment, as well as other consulting activities in the transmission sector.

Regulated revenue

The Company's regulated revenue is generated by tariffs – the most important of which is the transmission tariff (CTR) – paid to Terna by different categories of operators in the electricity industry (distributors, producers and dispatching users) in proportion to specific physical quantities set as a reference by the AEEGSI (quantity of energy transported in the National Transmission Grid, energy dispatched, number of input points).
The AEEGSI determines the unit sum of tariff components for the transmission and dispatching services annually, on the basis of rules defined at the beginning of every four-year regulatory period. Terna's recognised costs and the amounts set as a reference (forecasts) for the aforementioned physical quantities are contributing factors. The cost components considered when determining the above tariffs can be related to three main categories:

- **RAB Remuneration.** The RAB (Regulatory Asset Base) is revalued annually on the basis of ISTAT data regarding the change in the gross-fixed-investment deflator and is updated to account for net investments made by Terna and decommissioning carried out during the year. On the basis of Resolution No. 199/11, the RAB is remunerated by the Authority at a base return rate (WACC) correlated with market rates. For the 2012 and 2013 tariffs, the WACC was 7.4%. For those of 2014 and 2015, it was updated by the Authority to 6.3%. All investments made after 31/12/2011 benefit from an additional 1%, paid by the Authority in order to compensate for the "regulatory lag" i.e. the delay with which tariffs remunerate investments. Therefore, the base RAB remuneration for these investments (as of the 2014 tariffs) is 7.3% (6.3%+1%).
- For some specific types of investments, this return is increased for 12 years from the initial start-up date, while for some strategic investments the increase occurs during the construction phase, on the condition that Terna achieves certain efficacy benchmarks. In 2014, RAB remuneration (base + incentive) constituted approximately 51% of Terna's recognised costs.
- **Depreciation and amortisation.** Recognised depreciation and amortisation are adjusted in accordance with the useful life of assets and of new investments which have come into operation. They are also re-evaluated annually according to changes in the gross-fixed-investment deflator. The share of amortisation/depreciation remuneration represented approximately 31% of the total recognised costs in 2014.
- **Operating costs.** These are typically the costs of labour and the procurement of goods and services, which do not constitute investments. The component covering these costs, which in 2014 came to about 18%, is based on annual operating costs, valid for the entire regulatory period (i.e. 2010 for the regulatory period 2012-2015) and on the residual portions – temporarily left to Terna – of the extra-efficiency achieved in the two preceding regulatory periods. All of this is annually revised on the basis of inflation and adjusted by an efficiency factor aimed at fully transferring extra efficiency over time to end users.

Once the unit amounts of the transmission and dispatch tariffs have been established (recognised costs divided by the reference quantity), the returns gained by Terna depend on the actual trend of the physical quantities concerned, and particularly on the energy transported by the NTG and the energy dispatched. The sharp decline in consumption that began in the second half of 2008, together with the increase in energy input into the distribution networks due to incentives for the production of renewable energy, have rendered the trend in energy transported by the NTG less predictable and led the Authority to confirm, for the IV regulatory period (four-year period 2012-2015), the mechanism to partially neutralise the volume effect introduced by Resolution ARG/elt 188/08. This mechanism foresees that:

- if the final energy total is less than that used to calculate the tariffs, Terna's remuneration is increased for the portion of volumes which exceed the -0.5% exemption;
- if the final energy total is greater than that used to calculate the tariffs, Terna is required to return the excess earnings for the portion of volumes which exceed the +0.5% exemption.

20 This amount includes the values associated with Terna Crna Gora and Tamini Group.

Pass-through items

In addition to regulatory revenues and those generated by non-regulated activities, Terna manages cost and revenue items connected to transactions completed with electricity market operators to buy and sell the energy needed for dispatching activities: these are known as "pass-through" items, meaning they do not have an influence on the net income in the Terna Group's income statement (revenues equal costs).
These items include payments such as the capacity payment which Terna collects from withdrawal dispatching users and grants to the producers who make the capacity available on the market. It also includes the payment that Terna collects from the withdrawal dispatching users and grants to the operators which supply the load interruption service.
A significant proportion of pass-through items consist of uplift, a tariff component which includes various system costs, including covering the net expenses incurred to procure resources on the Dispatching Service Market (DSM). In 2014, pass-through revenues and costs for the Terna Group totalled € 5,882.2 million (€ 5,807.3 in 2013).

2014 Incentive schemes

The Authority has introduced specific bonus and penalty schemes aimed at encouraging service improvement, both in terms of technical reliability and cost. As is implicit with incentive mechanisms, upon reaching objectives, the benefit to service users will be a multiple of the incentive paid to Terna. In particular, in 2014 incentive mechanisms were provided for:

- the quality of the transmission service (non-tariff incentive mechanism, Resolution 197/11, valid 2012-2015);
- the promotion of investments of particular importance (tariff incentive mechanisms: additional WACC and investment acceleration, Resolution 197/11, valid 2012-2015).

The bonuses/penalties connected to whether or not the objectives are achieved as established in the incentive schemes are included in Terna's total regulated revenue.

The cost of transmission on the end user's bill

In accordance with current regulations, the majority of Terna's recognised costs are billed to end customers of the electric service by the distribution companies. Even without an official breakdown of the costs for the domestic end user which directly shows the impact of the costs resulting from Terna's activity, based on the figures published by AEEGSI it can be estimated that the transmission costs have a weight of about 3.5% on the electricity bill of an average domestic user[21].

Risk management

Since over 90% of Terna Group's revenues are derived from activities recognised and remunerated by the Authority for Electricity, Gas and Water, the risks arising from changes to the regulatory framework could have a significant impact on achieving objectives. This particular context which transforms some market risks into regulatory risks, influences our approach to risk management.
Terna, which is part of the country's "critical infrastructure", assesses and analyses possible risk scenarios, paying particular attention to operational risks in order to reduce service disruption and damage to the health of staff in the workplace, and to optimise business processes.
For these reasons, the corporate governance model which Terna has adopted is committed to giving adequate consideration to all interests involved. In particular, the Remuneration Committee and the Audit and Risk Committee are present in the context of the Board of Directors. The Audit and Risk Committee has a consultative and advisory function, supporting the Board in decisions which relate both to internal audit systems and risk management, with regard to periodic checks to ensure the adequacy and efficacy of this system in accordance with the company's characteristics and risk profile. The Audit and Risk Committee is comprised entirely of non-executive directors and has an independent majority; at least one member has adequate experience in accounting and finance. For more details on governance structure and hierarchy, please refer to the "Report on Corporate Governance and Ownership Structures", published alongside the Terna and Terna Group Financial Report. Corporate policy on the internal audit system also establishes a direct relationship between the Audit and Risk Committee and the Chief Risk Officer (CRO).
The Chief Risk Officer (CRO) – appointed in May 2013 by the Director in charge of the Internal Audit and Risk Management System, after consultation with the Audit and Risk Committee – is responsible for supporting senior management in their handling of the Risk Management process at the Group level effectively, with respect to all financial, operational, business and other risks. Terna carries out this process by using the Enterprise Risk Management (ERM) methodology, in accordance with sector best practices.

21 This is the relation between the unit cost of transmission (which the distributing companies pay to Terna) and the cost of electricity for an average domestic consumer (family with 3 kW of committed power and 2,700 kWh of annual consumption). Terna calculations using AEEGSI data.

As part of the integrated and systematic risk management which distinguishes it, Terna adopts structural management tools and prevention measures in line with its own Risk Management rationale.
With regard to reputational risk, across all of the Group's activities, protection is guaranteed and strengthened by a sustainable approach to business. Starting from the assumption that legal compliance is a must, this considers the potential environmental and social consequences so as to prevent and mitigate the effects of such risks.
Finally, Terna constantly monitors risks associated with aspects of sustainability which may have a negative impact on its reputation and its intangible value, including through ratings analyses by the main agencies which periodically conduct sustainability assessments (such as RobecoSAM, Vigeo and Eiris).
For a full description of the procedures for preventing and managing such risk, see the 2014 Annual Financial Report.

G4-EC2

Climate change risks and opportunities

Terna, as a utility company, transmits electricity as its main task; it is not involved in any way in the generation of electricity and thus is not subject to any obligation to reduce emissions or to any emission-trading schemes.
At present, there are no fiscal (e.g. a carbon tax) or regulatory measures (e.g. emission-reduction targets, inclusion in emission-trading schemes) which have direct consequences on Terna's business and financial performance.
Terna's management has identified potential, albeit remote, risks connected with global warming and the reactions that it may provoke within governments and in terms of customer attitudes.
Ares of overlap with Terna's work are as follows:

- the task of maintaining a balance between the input and withdrawal of electricity to/from the transmission grid becomes more difficult when weather conditions are extreme. Examples of this include during water shortages and in extreme heat or freezing conditions. There is an increased probability of critical situations, which can result in the temporary disconnection of users in certain areas of the country. This consequently draws the attention of the public authorities and the mass media to Terna. In this regard Terna is carrying out research initiatives in two directions. The first is oriented to increasing knowledge of the potential consequences of extreme weather scenarios – in line with the IPCC (Intergovernmental Panel on Climate Change) data – on grid infrastructure and on transmission operations; the second is aimed at developing technological solutions for securing the service in specific adverse weather conditions (see the section "Technology and Innovation");
- concern over climate change could lead to a reduction in the elasticity of energy demand to GDP growth. Research into greater energy efficiency has already altered the traditional relationship between economic growth and demand for electricity. This trend could also result in lower growth in the demand for electricity than currently seen, under equal conditions. The rules adopted so far by the AEEGSI regarding the remuneration of the transmission service currently make it unlikely that the possible reduction in volume could translate into a decrease in revenue for Terna;
- the increase in the production of energy from renewable sources poses various challenges for Terna in relation to the need to plan and implement investments to resolve grid congestion problems and for efficient and safe management of non-programmable production. Furthermore, intermittent production (in particular wind production) makes dispatching more difficult, increasing the need for power reserves and regulation.

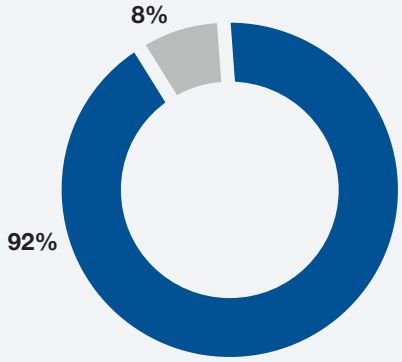
On the contrary, climate change has provoked changes in legislation to encourage renewable energy sources. This has already provided Terna with opportunities to explore new business avenues.
Investments in the transmission grid, made necessary by connecting renewable energy plants, are a source of revenue for Terna. Furthermore, grid development investment has significant consequences in terms of reducing emissions throughout the electric system (reduction of losses, improvement in the production mix, connection to new renewable energy plants). This is positive for Terna's image. The long-term prospect of developing interconnections in areas which are not connected today (e.g the Balkans and North Africa) enables Terna to cultivate business opportunities. In the short term, Terna is experimenting with storage devices (batteries), which, if successful, may actually encourage the use of renewable sources, while resolving grid regulation problems. These investments may open up a new business avenue for Terna which is indirectly linked to climate change.

Procurement

G4-EC9
G4-EN32
G4-EN33
G4-LA14
G4-HR10
G4-HR11
G4-SO9
G4-SO10
G4-LA15

As well as ensuring a service of general interest, Terna's business activities contribute to generating upstream activities of significant economic value and social impact.
In 2014, total spending to procure services, supplies and labour amounted to over € 631 million, distributed among 2,003 suppliers with whom contracts applied during the year.

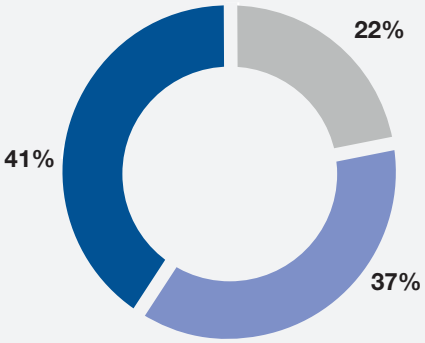
Composition of procurement by origin



Foreign Operations	8%
Italy	92%

Total 100%

Composition of procurement by type



Services	22%
Supplies	41%
Works	37%

Total 100%

The predominance of national and local suppliers is a consequence of the specific nature of the business, and in particular of the need to perform fast maintenance work on plants to ensure the utmost security of the electrical system. Suppliers located in geographical proximity to the plants also guarantee more competitive transport costs for heavy and bulky supplies, contributing in this way also to reducing the related environmental impact.
With a view to expanding the supplier portfolio, the market is continuously scouted; this implies rigorous meetings with both Italian and overseas potential suppliers.
In the different stages of the procurement cycle, Terna pays attention to the suppliers' characteristics as regards legality, technical and organizational capacity, and environmental sustainability and social responsibility issues. As far as the latter are concerned, monitoring to guarantee correctness is based on various tools, which create more stringent conditions when the product categories are more significant for Terna or owing to the potential social and environmental impact of the suppliers' businesses.
All suppliers are required to commit contractually to behave in compliance with the provisions of Terna's Code of Ethics and Model 231; sanctions are impose for any misconduct. Although a preponderant proportion of suppliers are Italian, in the other cases the supplier is always subject to screening in relation to country of origin. In cases of countries at risk as regards respect for human rights or corruption, specific further investigations are carried out (see the box on page 91).
For procurement that regards the performance of activities linked to Terna's core business (**instrumental contracts**), and which mainly comprise supplies of electrical materials and equipment, work contracts, and services in the sectors of electricity transmission, telecommunications and Information Technology, the legal regulations provided for in the Contracts Code apply. Numerous requirements for contractualisation involve environmental and social aspects (human rights, working conditions): among these, for example, checks on regular payment of contributions, no breaches of workplace safety laws and no environmental crimes. The Integrity Pact, validated in its most recent form in 2014 by Transparency International, entails commitments in relation to integrity and combating corruption. In 2014, social and environmental requisite criteria were used in the phase of awarding tenders according to the best-bid principle.
Finally, for certain sectors, specific social and environmental requirements are introduced at the **qualification** stage.

SUPPLIERS ACTIVE IN 2014 AND APPLICATION OF ENVIRONMENTAL AND SOCIAL REQUIREMENTS

	Suppliers active in 2014				Amount procured from suppliers subject to specific requirements (% of respective total amount procured)			
	Number	% of total	Amount procured (€ millions)	% of total	Basic requirements[1]	Additional social and environmental requirements[2]	Social[3] and environmental[4] qualification requirements	Country risk assessment[5]
Total active suppliers	2,003	100	631.1	100	100	96.2	34.5	100
Core suppliers (instrumental contracts)	1,722	86.0	607.1	96.2	100	100	35.9	100
Suppliers of significant sectors for ESG purposes	289	14.4	341.2	54.1	100	99.8	53.2	100

(1) Observance of principles and conduct provided for in Terna's Code of Ethics and Model 231.
(2) Integrity Pact (validated by Transparency Italy), anti-Mafia certification, check on: national collective bargaining agreement used, regular contributions and tax payments, absence of environmental crimes, absence of serious breaches of workplace safety laws, compliance in the area of employment of protected categories, medical suitability certificate for the task issued by the assigned doctor (for work contracts), and the absence of impediment to public contracts.
(3) Work safety management system certified OHSAS 18001 or similar (required only of suppliers of specific qualification product categories).
(4) Environmental management system certified ISO 14001 or similar (required only of suppliers of specific qualification product categories).
(5) Assessment of risks of corruption and respect for human rights associated with the supplier's headquarters.

The table shows the coverage ensured by the different instruments, in terms of percentage of procurement, for significant groups of suppliers active in 2014. The coverage is 100% or just a little less for most of the social and environmental requirements. Where there are social and environmental requirements for qualification, the coverage is higher for suppliers belonging to significant sectors for ESG purposes. These latter are periodically identified on the basis of the product categories, of which we assess the significance for the business (amount procured, critical nature for the core business) and the significance of the social aspects (health and safety, and safety and working conditions) and the environmental aspects (significant environmental impacts in the supply chain, in use by Terna, and at the end of the useful life stage). Identification of the significant sectors for ESG purposes entails particular attention not only at the qualification stage, but also in finalising the technical specifications, and the commitment to adopt particular precautions in the case of sectors not subject to qualification. Finally, additional specific health and safety measures have been added to work contracts. For more information, please refer to the section "Monitoring of safety, environment and human rights at contractor sites" on page 91.
The table below is focused on new suppliers in 2014.

NEW CONTRACTED SUPPLIERS

	2014
% of new suppliers – checked for basic requirements[1]	100
% of new suppliers – checked for additional social and environmental requirements[2]	87

(1) Observance of principles and conduct provided for in Terna's Code of Ethics and Model 231.
(2) Integrity Pact (validated by Transparency Italy), anti-mafia certification, check on: applicable collective bargaining agreement, regular contributions and tax payments, no environmental crimes, no serious breaches of workplace safety laws, compliance in the area of employment of protected categories, no impediment to public contracts.

Assessment of ESG criteria in qualifying suppliers

Most of the product categories that are most significant for the core business from a technical and economic point of view are subject to qualification. This qualification is managed with a system on the basis of which only companies capable of demonstrating requisites of legislative compliance in line with that of the Contracts Code, and of technical and organizational quality and financial solidity, are selected and added to the relevant register. Besides these, in areas at greater risk from the point of view of sustainability, an adequate level of environmental management and the ability to protect worker health and safety are also required. For example, through possession of management systems certified in accordance with the international ISO 14001 and OHSAS 18001 standards.
Of all the qualified suppliers, 63% have acquired or are acquiring BS OHSAS 18001:2007 safety certification, and 64% have acquired or are acquiring ISO 14001:2004 environmental certification.
Terna is committed to ensuring a response in good time to all companies that intend to qualify: in 2014, 49 new suppliers were found to be suitable and a total of 360 companies are present on the register.

QUALIFIED COMPANIES 2014

	2014
Number of suitable companies	360
- of which new suitable companies in the year	49
Companies required to have the Environment and Safety Management System	200

G4-HR4

G4-HR5

G4-HR6

Assessing ESG risks in foreign supplies

Country risk, in relation to Terna's procurement activities, is understood as the possibility of suffering damage on the occurrence of circumstances or events which can be linked to the economic, social and political context of the country in which the supplier normally operates. This risk is much less than that associated with environmental and health and safety matters, but could assume greater significance as the procurement markets expand and, more generally, owing to Terna's foreign expansion strategy. To analyse and assess the most significant risk factors, which relate to the macro-areas of economic and political governance of the various countries, and to observance of the human rights established at the international level, objective elements are used, including ratification of the UN and ILO conventions, combined with the assessments expressed by the main international non-governmental organizations and by the most important ratings agencies working in the fields in question. These assessments are updated in general every year and therefore constitute a source of constant monitoring of the effective evolution of the situation. These assessments are combined with reporting of the restrictive measures issued by the Italian and European authorities, which entail both limitations on the free circulation of goods (trade embargoes) and rules of conduct in the case of transactions with countries offering tax advantages (tax havens).

Monitoring of safety, environment and human rights at contractors' sites

The increase in workers employed by contractors and subcontractors in 2014 is linked to the increase in the number of construction sites.

CONTRACTORS AND SUBCONTRACTORS' EMPLOYEES[1]

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	2014	2013	2012
Days worked	547,660	500,884	419,543
Full-time equivalent	2,489	2,277	1,907

(1) The data take into account the term of construction contracts and the variations in the workforce required, and relate to various types of Terna work contracts, from large construction sites to cutting vegetation under power lines. The days worked and the FTE units are estimated on the basis of the average daily presences at the largest construction sites and the amounts paid for contracted work on smaller sites. No further information is available on the types of contracts used by contractors.

Considering the significant use of external labour on Terna's construction sites, **work contracts** are subject to stricter rules regarding not only qualification, but also management, particularly with reference to occupational safety.
During the supplier qualification process, Terna requires that documented procedures for protecting the health and safety of workers be presented. For companies in categories considered most significant with regard to safety and the environment, an in-depth investigation of the management practices adopted is envisaged by means of a detailed questionnaire. With the objective of reducing the safety risks regarding contract work, Terna requires additional specific certifications concerning contractor employees such as:

- certification that they understand Italian, so as to ensure their access to information on construction-site safety;
- at sites for the construction of overhead power lines, certification that all workers (mainly blue-collar) have examined and have been appropriately instructed on the use of personal protective equipment, the risks established in the Construction-site Safety Plan (CSP) and the Operating Safety Plan (OSP) prepared by Terna, and the environmental-protection measures as established in the relevant operating procedure "Management of the environmental aspects

EU18

during plant construction", which is attached to each contract;
- for several specific roles (e.g. workers installing and maintaining overhead lines, workers cutting vegetation, site foremen, team leaders and safety managers), an attendance certificate for specific training courses lasting between 24 and 32 hours;
- appointment of a Safety, Prevention and Protection Managers (RSPP), a construction-site safety representative, a crisis manager and substitute, and an assigned doctor;
- a request in contracts drawn up with contractors to provide injury rates for the year.

The actual training of personnel is verified through a web platform – the Qualified Company Personnel project.
The costs of eliminating or limiting the risks of interference are excluded from the downward price competition for awarding the contract.
To reduce to a minimum the risk of violations of human and labour rights to the detriment of contractor employees, in addition to the specific instrumental-contract documentation, Terna also requires:
- a copy of an insurance policy covering damages to third parties, personal injuries and damage to property, including the contractor's, for the entire duration of the work and in an amount appropriate to the type of work performed;
- a periodical copy of the payment of social-security and other contributions.

Activities in 2014

In line with previous years, in 2014, 40 construction sites for building lines and substations entrusted to contractors were checked across the country. The construction sites were chosen on the basis of the duration of the work, considering that work that lasts longer is probably more complex.
During the inspections not only aspects closely associated with workplace safety were analysed, but also those associated with environmental protection, such as pollution, waste management and interference with the surrounding environment.
In June, a workshop was organized on applying workplace safety regulations at Terna construction sites, which was attended by the Execution Safety Coordinators (ESCs) currently included in the qualified segment. Terna outlined the characteristics of its construction sites and the experience it has gained during the execution of its work to the over 60 professionals who attended the workshop, focusing on electrical risk and, in particular, the Rules for the Prevention of Electrical Risk (DPRET).
In the context of the **Terna-ANIE** [National Federation of Electro-technical Companies] **technical forums** to harmonise and standardise safety rules at electricity construction sites, guidelines were drawn up in relation to managing the safety aspects for activities on HV overhead power lines. The guidelines contain the following technical documents:
- organization of safety at construction sites for building, maintenance and demolition work on overhead power lines under the terms of Italian Legislative Decree 81/08 and subsequent amendments and additions;
- methods of climbing and rescue at heights;
- methods of work on tubular supports and pylons.

Also in 2014, the "Inter-Company Environmental, Health and Safety Forum" was set up and the leading Italian operators of network plants and infrastructure take part. The aim is to facilitate discussions among companies, identify the best safety practices, discuss interpretations of laws and create a virtuous path of continuous improvement on the subjects of health, safety and the environment.

EU18 Equal opportunities and transparency in contractual relationships

Access to tender procedures, which normally regulate the awarding of orders, is guaranteed for all suitable companies according to the principle of equal opportunities, and is governed by the "Regulation on Procurement". The regulation represents the corporate reference document for Terna's procurement activity and was prepared on the basis of the Contracts Code (Italian Legislative Decree 163/2006) which, in turn, transposes the EU legislation on the subject.
Another essential tool for guaranteeing transparency in procurement is the "Procurement Portal", the section of the institutional website based on criteria of simplicity, effectiveness and efficiency, through which it is possible to find out about competitive tenders and take part in online tenders, as well as to complete the qualification procedure for access to the register, moving towards paperless management. In 2014, approximately 1,500 requests for online assistance were received from suppliers, 100% of which were resolved in the times provided for in the corporate procedures.

CONTRACTED SUPPLIERS

	2014	2013	2012
Number of contracted suppliers	2,003	2,026	1,951
Tender awarding procedures adopted (% of amounts awarded)			
European tenders	62	46	71
Non-European tenders	17	41	23
Fixed	21	14	6

Continuous improvement and auditing tools

Dialogue with suppliers remains the most important tool to guide their growth, from the point of view of ethics, environmental sustainability and social responsibility.
From an operational point of view, the existence of the supplier's ESG requisites after the first qualification stage is verified over the three years for which the qualification is valid through constant work on checking the supplies, which during 2014 translated into 703 audits. If conduct is found to no longer be in line with the qualification requirements, the supplier may be warned or suspended temporarily from the register and, in the most serious cases, removed altogether.

QUALIFICATION MONITORING

	2014	2013	2012
Suppliers removed from the register	-	-	-
Suspensions	6	3	5
Warnings	14	4	4

The auditing system within the company also provides for other checks, according to the activities performed by the suppliers and the type of risks assessed as predominant in a certain segment:
- constant checks, ex ante, of requests for awarding consultancy services, professional appointments and IT services, and of procedures for awarding contracts to predetermined suppliers;
- on-site checks at suppliers who are qualified/or seeking qualification during the year. In particular in 2014, 80% of these inspections were concentrated on companies that belong to the relevant segments from an ESG point of view;
- inspections at construction sites of lines and substations managed by contractors, to check safety and environmental aspects.

AUDITS IN 2014

Qualification monitoring	703
On-site qualification checks	30
Ex-ante checks (assignments, IT, predetermined)	654
of which in relevant segments for ESG	24
Environmental and safety inspections at contractors' sites	40

Terna, finally, promotes the settlement of any disputes that arise with suppliers.

DISPUTES WITH SUPPLIERS

	2014	2013	2012
Pending litigation	23	13	22
Existing litigation	2	1	0
Settled litigation	2	0	2

Economic relations with service operators

Terna mainly deals with companies which operate within the electricity industry and which belong to one or more of the following categories:

- **distribution companies**, with which Terna regulates the energy transmission service on its own grid;
- **dispatching users**, i.e. producers, end customers, or wholesalers with which Terna regulates the dispatching service;
- **interruptible customers**, i.e. end customers of withdrawals that grant Terna the right to interrupt their service;
- **owners of production plants and owners of grid segments**, to which Terna must guarantee the right to connection in compliance with regulatory and technical provisions.

Relations between operators within the industry and Terna are regulated mainly by the industry authorities and are defined technically and commercially in the Grid Code. In particular, with regard to the dispatching service, Terna regulates the financial items regarding the **procurement of the resources necessary to safeguard the security of the national electric system** with the users of the input dispatching service. Thus it maintains the balance between input and withdrawals, as well as ensuring that grid parameters such as voltage and frequency are at appropriate levels.

The financial items regarding procurement on the Dispatching Service Market (DSM) and other input-side system expenses are liabilities and, in 2014, amounted to about 2.0 billion Euro.

The system expenses relative to withdrawal dispatching, mainly composed of the uplift payment for DSM resource procurement, are assets and, in 2014, amounted to about 3.6 billion Euro.

Moreover, with both input and withdrawal dispatching users, Terna regulates the financial items relating to imbalances, understood as the difference between the plans the users presented on the electricity markets and the actual value of the electricity input or withdrawn. With regard to input, the amount came to about 0.2 billion euro (expenses for the operator) while the amount relating to withdrawal came to about 0.2 billion euro (income for the operator). Most of the interactions with electricity operators are managed through the **MyTerna portal**, a platform created to optimise the commercial relationship with counterparts.

The portal represents the main access channel for services dedicated to operators, including management of the database for requests for connection to the NTG; stipulation of withdrawal contracts; management of contacts; and viewing of the main data for each operator. In 2014, Terna procured resources for interruptibility and instant-load-reduction services, which aim to secure the functioning of the national electric system in the event that resources procured on the market were found to be insufficient. In 2014, there were 290 assignees of the interruptibility and instant-load-reduction service for about 3,960 MW of power and the related economic liability amounted to about 0.5 billion Euro on an annual basis.

EU3

ELECTRICITY INDUSTRY OPERATORS COLLABORATING WITH TERNA – NUMBER OF USERS

USERS	2014	2013	2012
Interruptible users	290	322	234
Distributors directly connected to the NTG	25	24	24
Input dispatching users (Producers and Traders)	107	102	88
Withdrawal dispatching users (Traders and end customers, including the Single Buyer)	164	140	130

2014

Terna
TERNA GROUP

Our approach

Terna recognises the importance of the right balance between energy requirements and protecting the environment and local communities. In carrying out its business, it therefore seeks appropriate solutions to ensure Italy has the electricity it needs in the most reliable, economical and environmentally sustainable way.
From an environmental point of view, the most significant impact of Terna's work is not so much in using natural resources or in emitting pollutants, but rather the **physical presence of power lines and electrical substations**, and their interaction with the surrounding natural and urban environment.
The **most significant environmental aspects** of Terna's work are thus:

- the visual impact of substations and lines on the landscape;
- the impact of lines on biodiversity, with particular regard to birdlife;
- special waste and its management;
- electric and magnetic fields;
- greenhouse gas emissions.

Terna has established an Environmental Policy which expresses its commitment to practices which limit and reduce its environmental impact, even beyond the limits imposed by law, whenever this does not compromise the other general interests that it is obliged to protect.
Among Terna's main environmental commitments, the following should be noted:

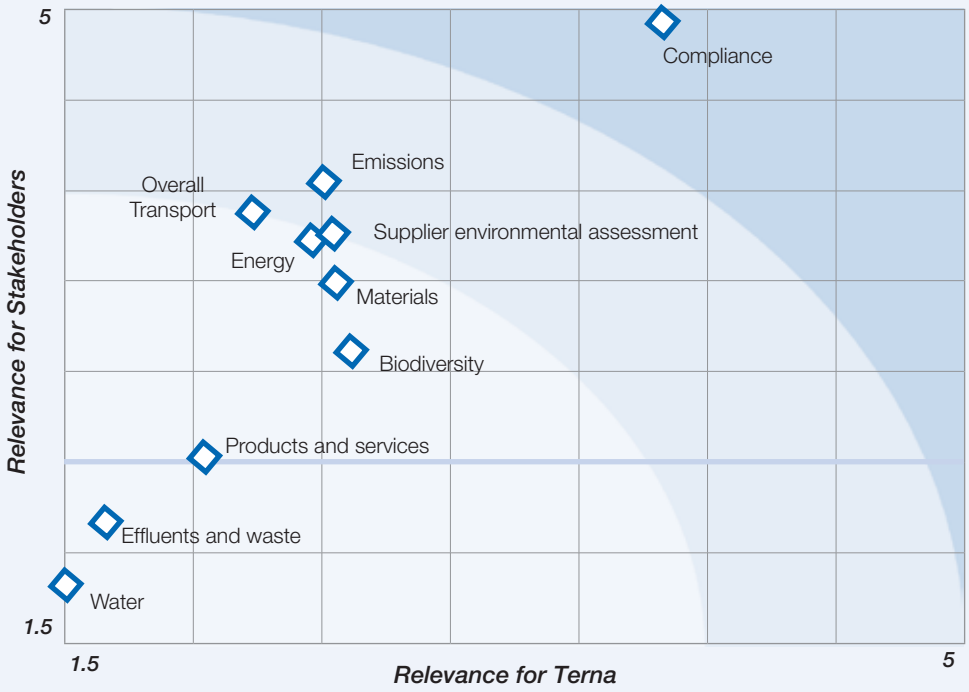
- in the planning of grid development investments, listening to the needs expressed by stakeholders (in particular, local institutions and environmentalist associations) and seeking agreement on solutions, through a process of **voluntary prior consultation with local institutions** (see the dedicated section: "Responsible development of the electricity grid" in the chapter "Responsibility for the electric service");
- in the construction, management and maintenance of the grid, adopting procedures in accordance with the provisions of the law and, where possible, reducing environmental impact. Terna has adopted an **ISO 14001:2004 certified Environmental Management System** which **covers 100% of the national transmission grid (substations and lines) and offices**; since 2013, the Environmental Management System of Terna Crna Gora has also been ISO 14001:2004 certified;
- in relations with suppliers, the requirement to gradually adapt to the environmental standards adopted by Terna;
- with regard to magnetic fields, strict compliance with regulations and attentiveness to the development of scientific studies, as well as contributing to the correct presentation and understanding of the phenomenon;
- with regard to biodiversity, the commitment to limit the impact of the grid, particularly on birdlife, with mitigation activities to be identified and finalised, including programmes agreed upon with environmental associations;
- with regard to climate change, a recognition of the importance of the problem and commitment to take action, as far as is operationally possible, to reduce the emission of greenhouse gases.

In organizational terms, environmental matters are overseen by several departments, responsible for specific aspects, which are coordinated by the Sustainability and Environment Steering Committee.
The "Environmental Responsibility" chapter is therefore organized as follows:

- description of the environmental aspects of grid development;
- thematic focus on handling specific areas of impact; electric and magnetic fields, biodiversity, consumption, emissions, use of materials, waste.

Below is a visual representation of the materiality assessment of the environmental aspects of G4 with indication of the materiality threshold. For completeness of information, this Report also indicates the aspects below such threshold (for more details, please see the methodological note on pages 140-141).

2014 MATERIALITY MATRICES – G4 ASPECTS



Biodiversity	pages 68; 101; 102; 103-104; 163
Compliance	pages 35-38; 57; 100
Effluents and waste	pages 100; 112; 113-114; 163
Emissions	pages 105; 106; 107; 108-110; 161
Energy	pages 62; 105; 110; 162
Materials	pages 112; 113; 162
Overall (costs for the environment)	pages 114-115
Products and services	pages 68-69; 100; 103-104
Supplier environmental assessment	pages 89-94
Transport	pages 110; 161
Water	page 162

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G4-EN29

Compliance with the law

In the three years 2012-2014, no definitive administrative or judicial, monetary or non-monetary penalties were imposed for non-compliance with environmental laws or regulations. The "Tables of indicators" section and the paragraph "Disputes and litigation" contain further data on environmental litigation and complaints. In 2014, as in the previous two-year period, there were no significant leaks of pollutant liquids. Two equipment fires occurred in the electrical substations of two different operational areas, following actions to put them out (carried out by local fire fighters), the surrounding areas were restored (see the sections "Limiting SF_6 leakage" and "Waste"). Below are the main activities completed in 2014, both to adjust to regulations and to improve Terna's Environmental Management System.

- Since March, all of Terna's operating structures have been authorised to transfer special hazardous waste produced, following the SISTRI (waste tracking) system. In line with this change, the guidelines defining waste management criteria within the Group were updated.
- Over 4,500 hours of training were provided on environmental issues, among which we note those dedicated to the specialised course "Waste Management with SISTRI", attended by 200 technicians.
- During 2014, an Environmental Analysis was published on the impact of the Terna Group's activities, which updates the Initial Environmental Analysis published in 2007. In this analysis, which is the foundation of the environmental management system, all the environmental impacts deriving from the activities carried out by the Group companies were identified and described, by site type. For each activity, the specific impacts were defined. Additionally, the relevant (national and local) standards were identified, as well as the indicators and the associated monitoring methods. In total, 36 environmental aspects were identified and analysed.
- Activities dedicated to containing the noise produced by electrical-substation equipment continued. Specifically, in 2014 a technical guide was published for the definition of general solutions to reduce the noise produced by transformation equipment in electrical substations. In addition, investments were completed aimed at reducing noise in two electrical substations.
- For the period 2011-2018, tree camouflaging is foreseen for 14 electrical substations under construction. As of 2014, three of these camouflaging projects have been completed.

Managing the environmental impact of grid development

G4-EN27

Lines and local communities

G4-SO2

The **construction of new lines** responds to the technical needs of the electric system – such as removing congestion and eliminating risks of overload – and to increasing energy production and consumption, which accompanies the economic growth of specific areas or of the entire country. Terna includes the necessary new constructions in the Grid Development Plan, which every year follows a complex authorisation procedure (for the authorisation procedure of each specific project, see also the monitoring platform "Terna Building Sites in Italy" available on the website http://www.terna.it/Default.aspx?tabid=101). While grid development caters to society's general interest, the environmental impact of the construction of new power lines is instead concentrated on the area affected by the line route. In addition, the population density of many parts of Italy and the artistic-cultural value and landscape of many other parts make planning more complex and construction more difficult. In response to these problems, Terna has voluntarily adopted an approach involving dialogue and consultation with institutions, so as to find solutions for preserving the richness and potential of the country's environmental and cultural assets (see the paragraph on consultation on pages 68-69).
As regards **existing lines**, the need to intervene is usually due to the fact that many lines were built some decades ago. The gradual urbanisation of rural areas and the adoption of new legal regulations, modifying parameters already in force regarding the interaction between power lines and the land, mean that changes to portions of the existing grid become necessary. The environmental action preceding the coming into operation of grid development investments are described below, divided into the following phases: planning, consultation, design and construction.

Planning

During the grid planning phase, Terna can reduce the impact of power lines on the environment through operations which can be divided into two categories.

- **Rationalisation**: complex work which involves several grid components at the same time, consisting mainly of replacing plants with better systems, eliminating the parts of the grid of negligible use following new constructions, or adding new grid elements to avoid having to upgrade saturated lines. Of all the rationalisation work envisaged by the Development Plan, there are many more demolitions than new constructions, resulting in a positive net effect in terms of the presence of power lines around the country. **Dismantling of stretches of line**: made possible by the construction of new power lines, this is the most significant benefit for the environment resulting from grid development work.

- **Reclassification**: converting existing power lines to a higher voltage by constructing new conductors and pylons in place of the existing ones. This can involve replacing old pylons with larger ones, which therefore take up more space. However, reclassification, compared with constructing a new line, has the advantage of **generally using pre-existing infrastructural corridors, avoiding taking over new land.**

Consultation

From 2002 onwards, Terna has chosen to voluntarily bring forward discussions with local communities to the project planning stage of its Development Plan. The dialogue with local institutions at the **consultation** stage and the **Strategic Environmental Assessment (SEA)** procedure of the Development Plan offer indications for handling the environmental impact at the design stage (for details of the consultation procedure adopted by Terna and the SEA, see pages 68-69).

Design

Through a design process focused on environmental and landscape aspects, Terna aims to limit the impact on the land, reconciling the public utility need for the plants with protecting the environment and town planning. The search for the route for the construction of a power line is, in fact, the most delicate design stage because it is the route itself that determines and conditions interferences with the surrounding landscape and community. We work, therefore, trying to:

- limit the length of the route as much as possible in order to occupy the smallest possible portion of land;
- minimise interference with areas of environmental, naturalistic, landscape and archaeological value;
- cause the least harm possible to the properties involved, taking care to assess the existing situations on the land to be crossed compared also to the conditions of the surrounding area;
- avoid, as far as possible, involving built-up or urban development areas;
- identify a route that enables the future regular operation and maintenance of the power line.

Great attention is paid to minimising visual impact, in particular through the following actions:

- **Burying cables** which eliminates or **reduces the visual impact** typical of overhead stretches of line, negatively perceived above all in built-up areas. However, burying cables, although appreciated and requested by local institutions, is problematic from a technical and economic point of view: underground lines are less reliable over time than overhead lines and take much longer to repair in the event of a malfunction. For this reason, they often do not ensure adequate security for the electrical system and service continuity. In addition, buried cables have a greater impact in the construction stage – for example, in terms of road traffic – and much higher construction costs (from five to ten times the cost of an overhead line).
- Choosing **pylons with a reduced visual impact**. Over the last few years, Terna has expanded the available alternatives and has also turned to internationally renowned architects to design new pylons (see the box on the following page).

For the construction of new electrical substations, similar considerations apply.

Construction

EU13

To manage the environmental impact of its construction sites, Terna has adopted operating guidelines – “Management of the environmental aspects during plant construction” – to ensure observance of the environmental policy adopted by the Company. One aspect to which particular attention has been paid is identifying **construction site areas and access routes**, which are located, where compatible with the technical and planning needs, **in areas of less naturalistic value**. When the project is complete, Terna provides for the restoration of the sites involved back to their original state. If these areas involve natural or semi-natural habitats, further “green” work is also carried out.

Terna’s **environmental policies**, which are applied also at construction sites, were formulated according to the provisions of the applicable environmental laws and the prescriptions of the ISO 14001 standard. This includes aspects such as preventive measures against contaminating aquifers, limiting damage to vegetation, managing accidents, minimising air and noise emissions and vehicle use, and correctly managing waste and excavated land (see page 100 on this subject).

Mitigation and compensation

G4-EN13

In compliance with the requirements expressed during the authorisation procedure, Terna adopts **mitigation measures to reduce the impact, and/or improve integration into the environment, of the electrical structures.**

In particular Terna creates systems to hide electrical substations from places frequented by tourists or those of landscape-environmental interest; redevelops buildings; prefers to locate lines where they take advantage of natural morphology; makes use of naturalistic engineering techniques for managing water and forestry systems and stabilising slopes.

If the mitigation measures are not sufficient to reduce the interference to insignificant levels, **environmental offsetting measures** are adopted, that is environmental regeneration or habitat reconstruction work on areas close to the power line such as balancing out the trees cut along the lines in the projects by planting individual trees of the same species over equivalent areas.

Terna's new pylons

Terna increasingly considers pylons not just as necessary technical grid infrastructure but also as objects to blend in harmoniously with the landscape, limiting their visual impact and giving them new functions safeguarding the environment and biodiversity.
For most of the overall route of the main works completed ("Trino - Lacchiarella") or under construction ("Foggia - Benevento", "Sorgente - Rizziconi", "Italy - France" and "Italy - Montenegro"), Terna is already using low-environmental-impact pylons such as the single-stem poles or "Germoglio" pylons. Alongside these two types, the "Foster" pylon is used; this is the first pylon with which Terna has experimented in supplementing the basic technical function with an artistic component.

The "single-stem" pylon – this is the low-environmental-impact pylon which offers a reduction of up to 15 times the area occupied by the lines and the ground surface occupied by pylons (from 150 square metres for a truncated pyramidal pylon down to 10 square metres).
This pylon is already in use along some of the latest lines constructed by Terna, in particular the "Chignolo Po - Maleo" 380 kV power line, for which 70% of the total route has single-stem pylons for a total of 88; the "Trino - Lacchiarella" line which has a total of 201; and the first stretch of the "Foggia - Benevento" line with 40 pylons. Other single-stem pylons are in use on the "Laino - Rizziconi" line (5) and the "S. Fiorano - Robbia" line (2).
As regards instead lines under construction, for "Udine - Redipuglia" 114 single-stem pylons are planned while for the "Benevento 2 - Benevento 3" stretch of the "Foggia - Benevento" there are another 28.
This solution offers advantages also as regards assembly (requiring just a few hours compared to an average of five days for a traditional pylon) and safety, given the reduction in work at height by blue-collar workers.

The "Foster" pylon – this is the "design" pylon which won Norman Foster, one of the major exponents of high-tech architecture, the international award "Pylons for the Environment", held by Terna in 1999 and which marked the transition from technical design to one blending in with the landscape. Some units have been operating for some time along the "Santa Barbara - Tavarnuzze - Casellina" line.

The "Germoglio" pylon – winner of the "Pylons of the future" competition, launched by Terna in 2007 and concluded in 2009, to find new design solutions for pylons, able to change the visual perception. Designed by architect Hugh Dutton (head of the Giorgio Rosental architecture group), this pylon has been in use since 2013. It is located between Piedmont and Lombardy, along a section of the 380 kV "Trino - Lacchiarella" power line.

Monitoring and supervision of electromagnetic fields

Protection from exposure to electromagnetic fields is precisely defined by law: the relative legislation (Prime Minister's Decree of 8 July 2003) establishes:

- **exposure limits:** in case of exposure to electric and magnetic fields at a frequency of 50 Hz generated by power lines, the limit is 100 microteslas for magnetic induction and 5 kV/m for the electric field, understood as effective values;
- **caution values:** as a precautionary measure protecting against the possible long-term effects of exposure to magnetic fields generated at the grid frequency (50 Hz), in children's play areas, residential areas, school sites, and places where people stay for at least four hours a day, the "caution value" for magnetic induction is 10 microteslas, understood as the median value over 24 hours under normal operating conditions;
- **quality objectives:** in planning new power lines near "sensitive" areas as above, and in planning new settlements and areas in the vicinity of lines and installations already present, the quality objective is set at 3 microteslas for the value of magnetic induction, understood as the median value over 24 hours under normal operating conditions. This is in order to gradually minimise exposure to electric and magnetic fields generated by power lines operating at a frequency of 50 Hz. To ensure that quality objectives are met, in agreement with the Regional Environmental Protection Agencies, electric and magnetic field measurements for new power lines are provided for in the Monitoring Plans, both in the pre- and post-construction stages.

The values of the three parameters, and in particular the "caution value" (10 microteslas) and the quality objective (3 microteslas) show that the Italian legislator has adopted the precautionary approach expressed by Article 15 of the Rio Principles. These parameters are the lowest at the European level[22]. Observance of the law in its work implicitly entails Terna's adoption of the same principle.

Terna carries out line inspections to ensure compliance with the limits set out by current legislation. In the event of any reports and requests by responsible bodies and administrations, Terna provides the data needed to assess the effective exposure to electric and magnetic fields generated by its plants.

Finally, with the objective of providing accurate but easily comprehensible information on the subject, Terna has provided a further explanation of electromagnetic fields (EMFs) in the "Sustainability" section of its website.

Safeguarding biodiversity

EU13

G4-EN27

The relationship between the Terna grid and the surrounding natural environment and, consequently, its impact on biodiversity assume different features in the new-line construction phase and in the existing-line operation phase.

In the construction stage, the impact on biodiversity is associated with site work: opening up routes so as to be able to erect pylons, excavate and remove residual materials. The construction of new lines and substations requires particular attention to be paid when near or in protected areas.

G4-EN11

G4-EN12

In the operating stage of existing lines, the potential impact on biodiversity is twofold. On the one hand, **the line route may be a factor increasing biodiversity** and protecting certain species because the pylons and their bases constitute "islands" of concentrated biodiversity, sparing areas of land from intensive farming. On the other hand, the lines potentially have negative effects on biodiversity, in particular on birds and in protected areas or areas of natural interest.

The interaction between the lines and these areas is constantly monitored to limit the risk of negative impact on birdlife. The main tool used to identify critical line sections is a comprehensive regional database, populated with data from the Regions and Ministries: the Geographic Information System (GIS). This system allows for integrated analysis of all layers of information for various types of land use and protection constraints (regional, naturalistic, cultural, landscape, etc.). Using the GIS, Terna has put together an **inventory of all possible interference between its lines and areas with protected or high levels of biodiversity 10% of Terna's electricity grid (amounting to 5,625 km) crosses protected areas** for stretches ranging from a few hundred metres to tens of kilometres, against an extension of protected land areas, as a total and net of overlaps, for a surface area of over 20% of Italian national territory.

With a view to environmental sustainability, biodiversity and protected areas therefore constitute an important element in grid development planning: the biodiversity characteristics of areas potentially destined to host a new infrastructure are carefully studied; the information gathered is included in the criteria for determining the final route and is available in the Environmental Report, in the volumes detailing regional aspects which accompany the Grid Development Plan.

This approach was confirmed in the Memorandum of Understanding signed by Terna and the WWF in 2009 and renewed in 2013, which provides for the incorporation of environmental criteria consistent with the WWF's conservation strategy in the planning of new lines.

22 Source: "Comparison of international policies on electromagnetic fields", National Institute for Public Health - Netherlands, May 2011.

Despite the precautions taken in the planning stage, it is possible that interference may occur between the single works and certain species or habitats: to reduce this interference to a minimum, environmental mitigation measures, where necessary supplemented by environmental offsetting measures, are adopted (see also page 102).
To reduce the risk of collision for birdlife to a minimum, **for stretches of line where birds frequently cross, special devices known as "dissuaders" have been installed**. Due to their size and the noise they make when struck by the wind, they **make electricity lines more easily perceivable to birds in flight. In 2014, there were 13,397 dissuaders compared to 12,005 in the previous year**.
Terna deals with biodiversity in partnership with leading national bodies which work to protect the environment and animal species.
In 2014, Terna continued to support the "**nests on pylons**" initiative, in cooperation with the ornithological association *Ornis Italica* which, every year, makes it possible to collect various biological and ethological data, revealing a positive effect in terms of biodiversity; alongside this, the **"birdcam" project**, provides for the installation of television cameras on artificial nests to follow the birds' reproduction period online on Terna's website and on www.birdcam.it.
Further information, and indicators of Terna's commitment to preserving biodiversity, on the projects pursued with its partners and the main results are available in the "Sustainability" section of the website www.terna.it.

Terna's pylons in the repopulation of the white stork

The white stork (*Ciconia ciconia*) is a migratory species found in the Central-Euro-Asian Mediterranean area: in fact, it nests in Europe (Italy, France, Austria and Switzerland), in Asia Minor (Turkey) and in North Africa, and spends the winter to the south of the Sahara desert.
There has been evidence of the stork's presence in Italy since the times of the Roman Empire. Numbers started to decline in the 16th century and the stork disappeared completely a century later.
The spontaneous return of the stork to Italy – first simply passing through in the spring and autumn, and then staying during the breeding season – began in the 1950s and, since then, a slow, yet steady, increase in numbers has been recorded with 160 breeding pairs counted in 2005. In that year, nesting took place in Piedmont, Lombardy, Veneto, Friuli-Venezia Giulia, Emilia-Romagna, Tuscany, Calabria, Puglia, Sicily and Sardinia, with 14% of the total population being concentrated in Piano di Gela in Sicily.

When migrating, the stork is a gregarious species and forms great flocks, but during the breeding season it becomes strongly territorial. Solitary breeding pairs or local groups nest on trees, buildings, pylons or artificial structures such as the aforementioned pylons. This behaviour has allowed Terna to become involved in some initiatives concerning the repopulation of this species.
The first began in 2013 in Prato, Tuscany, when volunteers from the *Centro di Scienze Naturali* [Natural Sciences Centre] made Terna aware of the presence of a nest of storks on one of its pylons. A collaboration was formed from this, which resulted in the installation of a webcam near the nest so that all the stages of the reproductive cycle could be followed, from the laying and incubation of the eggs, to the hatching and fledging of the newborn storks. The same year, an environmental education programme was established for school pupils in Prato. They chose the names "Nuvola" [Cloud] and "Tuono" [Thunder] for the two storks and drew them for the "My Storks" competition, in part sponsored by Terna. In 2014, the "Pylons, Artificial Trees and Biodiversity" photo contest was launched by Terna, together with other information initiatives, in collaboration with UniCoop and the Province of Prato.
A similar initiative has been established in the municipality of Crevalcore (Bologna), where Terna, working with the town council, has installed a series of platforms ("perches") on some of its pylons to encourage the white stork to nest. Again, all the reproductive stages were observed in the name of education and science by a webcam installed by Terna. As well as the organization of public events aimed at enhancing local protected areas, the results of these web monitoring activities (food spectrum, feeding frequency and other behavioural aspects) were presented at the end of 2014 during a scientific workshop organized by the municipalities of the Emilia region that belong to the GIAPP [Integrated Management of the Protected Areas of the Po Valley] network.

Energy efficiency and climate change

Terna's business is electricity transmission and not production, which, in the electricity industry – and among all business activities in general – are those most responsible for greenhouse gas emissions. For this reason, Terna is not subject to emission-reduction obligations according to the Kyoto targets, nor to emission-trading schemes of any kind, **but it has still chosen to commit itself voluntarily to containing emissions**. In this light, in 2014 Terna decided to respond to the urging of the international CDP (originally "Carbon Disclosure Project") and adhere to the "CDP Road to Paris" initiative, subscribing to three commitments (emission data transparency, elimination from the supply chain of procurement leading to deforestation, and public support for the objective of reducing greenhouse gases). In view of the United Nations Conference on Climate Change, planned for 2015 in Paris, the objective of the CDP is to mobilise the corporate world to reduce its impact on the environment.
As well as monitoring and programmes to contain its emissions, some of **Terna's activities lead to significant reductions in CO_2 emissions in the overall electric system**. The following are of note:

- the investments provided for in the Development Plan (pages 110-112);
- the reduction of resources procured on the Dispatching Service Market, which also entails a lower demand for production with the same level of service (page 94).

Energy consumption

G4-EN3

G4-EN5

The transmission of electricity requires **direct consumption** of energy only for a few activities that support the service, in particular:

- fuel for the company vehicles in use (for line inspections, repairs, and other activities mainly connected with the maintenance of lines and substations). In 2014, there was a slight increase in fuel consumption (+5%), mainly attributable to changes in the perimeter of the plants and an increase in the construction sites managed (for details on company operating vehicles, see page 110);
- diesel for emergency generators, which are used only in cases where electricity – the normal energy source for equipment – is lacking, precisely to ensure that the electric system is controlled and normal service restored. It is estimated that across Italy generators were used for a total of 1,342 hours (consumption of 0.8 GJ per hour);
- heating oil and natural gas for heating, particularly in offices.

The **indirect consumption** of energy consists of the electricity used to run substations and operating plants (85% of the total) and in offices and workshops. The figure for office consumption is 101,614 GJ, which, as a ratio to Terna's total employees (net of blue-collar workers), corresponds to per capita consumption of 40.8 GJ per year. Implementation of the energy efficiency management system (see the paragraph "Objectives and results" on page 40) will enable an improvement in this efficiency indicator in the medium term.

DIRECT AND INDIRECT ENERGY CONSUMPTION BROKEN DOWN BY PRIMARY SOURCE – GIGAJOULES[1]

	2014	2013	2012
Direct consumption			
Petrol for vehicles[2]	91	318	408
Diesel for vehicles[2]	85,238	80,718	77,570
Natural gas for heating	8,659	9,426	9,241
Oil for generators and heating	9,850	12,884	11,058
Total direct consumption	103,837	103,345	98,277
Indirect consumption			
Electricity for powering substations and offices[3]	668,808	698,709	638,050

(1) The direct consumption data in tonnes and thousands of m3 are shown in detail in the Tables of indicators. To convert the volumes of primary resources into gigajoules, the parameters indicated in the Global Reporting Initiative (GRI) protocols were used.
(2) Only the consumption of operating vehicles, and not of managerial vehicles, is considered.
(3) The reference for the division of the production mix is the "Monthly Report on the Electric System" with the results for December 2014, available on the website http://www.terna.it/Default.aspx?tabid=101.

G4-EN15

G4-EN16

Direct and indirect CO_2 emissions

As well as direct and indirect energy consumption, direct greenhouse-gas emissions connected with Terna's work are caused by SF_6 (sulphur hexafluoride) leaks, a greenhouse gas used in substation equipment for its highly insulating properties.
SF_6 leaks are the main source of direct greenhouse-gas emissions by Terna; in particular, in 2014 they account for 90% of total direct emissions. In the last five-year period, the quantity of SF_6 present in the Terna Group's plants increased by 174 tonnes (+48%). This is a trend – common to many transmission operators – destined to continue in the next few years for technical reasons associated with the higher insulating properties of the gas and to the smaller size of substations built with equipment containing SF_6, compared with more traditional solutions. For this reason, the absolute figure for SF_6 leaks also tends to increase. Programmes to limit the proportion of SF_6 leaks are illustrated in the specific paragraph on page 108.

TOTAL DIRECT AND INDIRECT EMISSIONS OF GREENHOUSE GASES – CO_2 EQUIVALENT TONNES[1]

	2014	2013	2012
Direct emissions			
SF_6 leaks	67,751	57,175	62,791
R22 leaks	-	90	110
Petrol for vehicles	6	22	28
Diesel for vehicles	6,308	5,974	5,741
Natural gas for heating	485	528	518
Oil for heating and generators	729	954	818
Total direct emissions	**75,280**	**64,743**	**70,007**
Indirect emissions			
Electricity	**66,323**	**73,170**	**70,008**

(1) Conversion of direct energy consumption and SF_6 (sulphur hexafluoride) leaks to equivalent CO_2 emissions is done using the parameters indicated in the Greenhouse Gas Protocol (GHG) Initiative and, in particular, the emission factors indicated in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). Indirect consumption of electricity is converted taking into account the proportion of thermoelectric production in the total Italian electricity production for 2014. The reference for the division of the production mix is the "Monthly Report on the Electric System" with the results for December 2014, available on the website www.terna.it.

The increase in direct emissions in 2014 was due mainly to the figure for SF_6 leaks, up by 19% compared with 2013; the figure was affected by the accident that occurred in an operational transmission area during which 17,877 tonnes of CO_2 equivalent were dispersed into the atmosphere. Net of this accident, Terna's direct emissions were equal to 57,403 tonnes, confirming the downward trend compared with the previous year.

CO_2 emissions: comparative data

The figures used for comparison as regards the emission of CO_2 are composed of the relative figures on direct and indirect emissions (aims 1 and 2).
The unit of measure used for the comparison is the CO_2 equivalent, expressed in thousands of tonnes, where equivalent CO_2 means the total gases contribution to the greenhouse effect.
The analysis was done by comparing Terna's emission values with those of all three corporate panels: companies listed on the FTSE-MIB, the Electric Utilities on the Dow Jones Sustainability World Index, and the TSOs.
In the absence of normalisation factors valid for all sectors, it was deemed of interest to present the company data on CO_2 emissions in absolute terms – despite the poor comparability. Such figures, which vary greatly in magnitude from one case to another, at least provide an indication of the extent of greenhouse gas emissions – and therefore of the practical need to contain and mitigate them from the point of view of sustainability – in the various sectors and companies. For 2014, CO_2 emissions attributed to Terna's activities amounted to 142 thousand tonnes (124 thousand net of the accident, previous paragraph). On the other hand, for 2013 (the year with which a comparison can be made) emissions were measured at 138 thousand tonnes of CO_2.
In the comparison with all three panels, for 2013 Terna was significantly below the average. In the group of Electric Utilities, it is the company releasing the least emissions.

CO_2 emissions (thousands of tonnes) 2013			
	TSO	FTSE-MIB	DJSI – Electric Utilities
Available data[1]	14	26	8
Average	27,597	7,985	31,216
Max	233,300	116,368	116,368
Min	4.6	1.29	138.0
Terna		138	

(1) In the absence of figures published directly by the company, it was decided that the figures declared in the Reports published in 2014 by CDP (formerly "Carbon Disclosure Project") could be used for the analysis. CDP figures were used for six companies.

Details of the calculation of the "CO_2 emissions" benchmark are available in the "Sustainability" section of the website.

Other indirect CO_2 emissions

G4-EN17

In addition to the emissions corresponding to electricity consumption, Terna's most significant indirect emissions are related to grid losses. For the indicators related to emissions produced by staff air miles, see page 161.

Grid losses

EU12

Grid losses are defined as the difference between energy input by producers (including imported energy) and final consumption; the losses relevant for Terna are those associated with the transmission grid. The figure presented in the table below is based on the direct measurement of energy inputted and withdrawn from the transmission grid (approximately 7,500 metres), to which corrective technical coefficients are then applied in cases in which the measuring point does not coincide with the boundaries of the transmission grid. It must be noted that Terna is responsible for measuring the energy input into the NTG, while for the energy withdrawn Terna may, on the basis of specific agreements, read the measurements remotely, which however remain the responsibility of the distributor companies. This entails a margin of error on the correctness of the measurements of electricity withdrawn which has reduced over the years, thanks to cross-checks and the gradual resolution of discrepancies with the distributors' data. For these reasons, starting from 2012, it was decided to use the simple moving average of losses with a three-year window (2010-2012 for the year 2012; 2011-2013 for the year 2013; 2012-2014 for the year 2014) as the annual figure. In this way, the margin of error and the risk of interpreting the effect of measurement errors and related corrections as real trends is reduced.

GRID LOSSES

	2014		2013		2012	
	% proportion with respect to energy demand	GWh	% proportion with respect to energy demand	GWh	% proportion with respect to energy demand	GWh
VHV and HV grid	1.5	4,611	1.4	4,411	1.4	4,485

Terna can only contribute to determining the amount of losses, which are not completely under its control. Dispatching – needed to ensure the constant balance between injections and withdrawals, and to avoid grid-security and service-disruption problems – takes place according to regulated criteria within the framework of production set-up determined by the energy market, and cannot therefore be conditioned by Terna so as to minimise losses.
Grid development, however, with equal production set-ups, would lead to greater efficiency and thus a reduction in losses; however, the real impact of grid development on losses cannot be predetermined, nor is it under the control of the grid operator, since it depends on the evolution of production capacity and the demand and supply of electricity on a local basis.
Considering the production mix of the Italian generation system, the CO_2 emissions associated with grid losses amounted to 1,646,235 tonnes for the year 2014 (they were 1,662,890 in 2013 and 1,771,477 in 2012).

G4-EN20

Other atmospheric emissions

G4-EN21

Besides the emissions already described above, Terna monitors and controls other emissions into the atmosphere, relating mainly to:

- refrigerant gases
- nitrogen oxides

For details of the figures, see the Tables of indicators (page 161).

G4-EN19

Initiatives to reduce emissions

Terna focuses its attention on a number of voluntary action programmes aimed at reducing its main sources of greenhouse-gas emissions, in particular on:

- **a programme to limit the proportion of SF_6 leaks:** Terna has launched several initiatives such as identifying leaks promptly by means of online monitoring systems and seeking technological solutions which improve the sealing of equipment and components;
- **a programme for energy-efficient** buildings (offices);
- **feasibility studies for energy conservation initiatives** in electrical substations.

Limiting SF_6 leakage

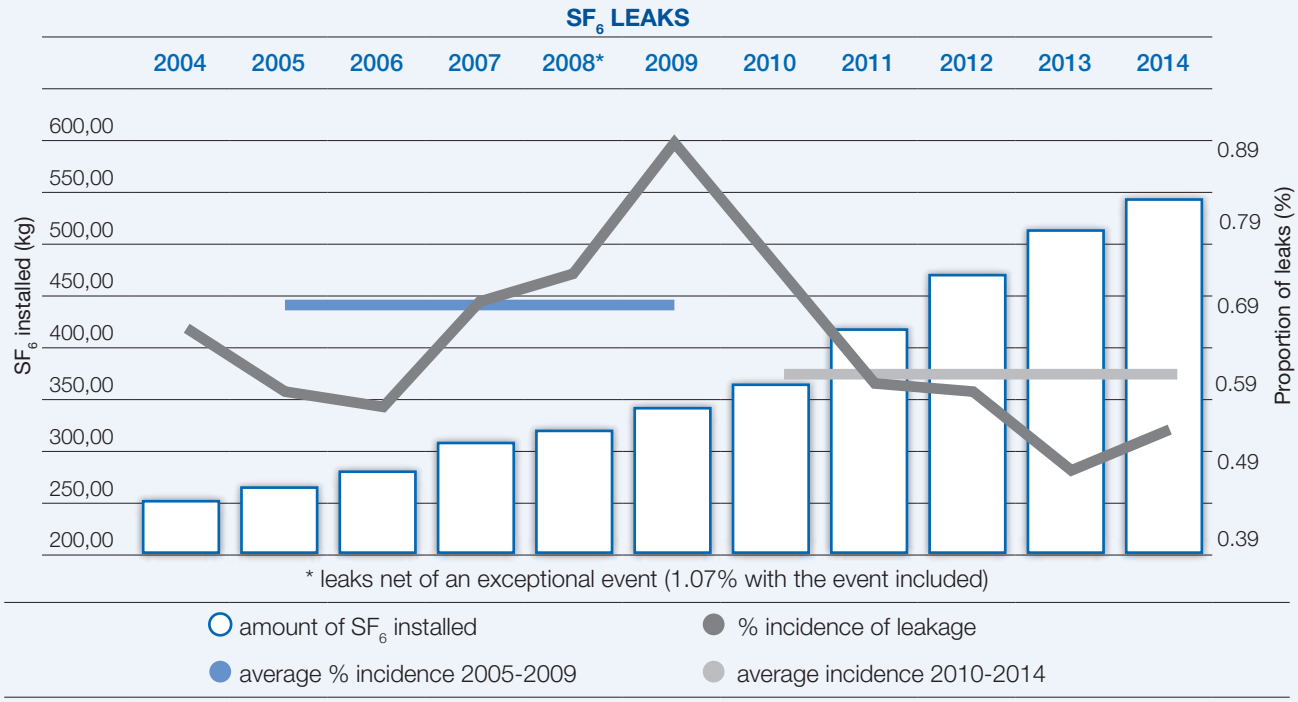
Thanks to its chemical and physical properties that make it an excellent insulator, the gas SF_6 (sulphur hexafluoride) is used as insulation in certain electrical devices such as switches, current transformers and armoured systems. These enable the construction of electrical substations in smaller spaces and with fewer maintenance needs. Thanks to these properties, devices with SF_6 gas insulation are expected to be used increasingly, as is happening also abroad with other transmission operators.

Part of the gas present in the devices is dispersed into the atmosphere owing to defective seals, faults and sometimes also during operations to restore pressure. SF_6 gas is classified as a greenhouse gas: Terna works to **keep SF_6 leaks under control**, limit and, if possible, reduce their percentage as a ratio to the total gas used. If in fact leaks in absolute terms may increase owing to the greater use of gas, a reduction in the proportion of leaks would, precisely for this reason, have a significant impact in terms of emissions avoided.

Although the proportion of SF_6 leaks has been identified as a significant indicator of Terna's performance in relation to climate change, studies are still being done to identify a target. There are in fact several elements of uncertainty:

- the growth of awareness of and attention to the issue has been reflected in an improvement in measuring leaks, entailing – precisely in the years when limiting activity began (2009-2010) – worsening performance, in all probability only apparent;
- the occurrence of faults with significant gas leaks – the probability of which is growing given the increasing use of SF_6 gas in equipment at large substations – can alter the trend considerably;
- while on the one hand installing equipment with better sealing performance tends to reduce the proportion of leaks, on the other the ageing of equipment already installed could entail an increase in leaks;
- Terna already records low figures for the proportion of SF_6 leaks compared with other TSOs (see the specific box in this paragraph), so further reductions, which have growing marginal costs, can only be moderate and most likely counterbalanced by the aforementioned adverse factors, with a potentially greater impact.

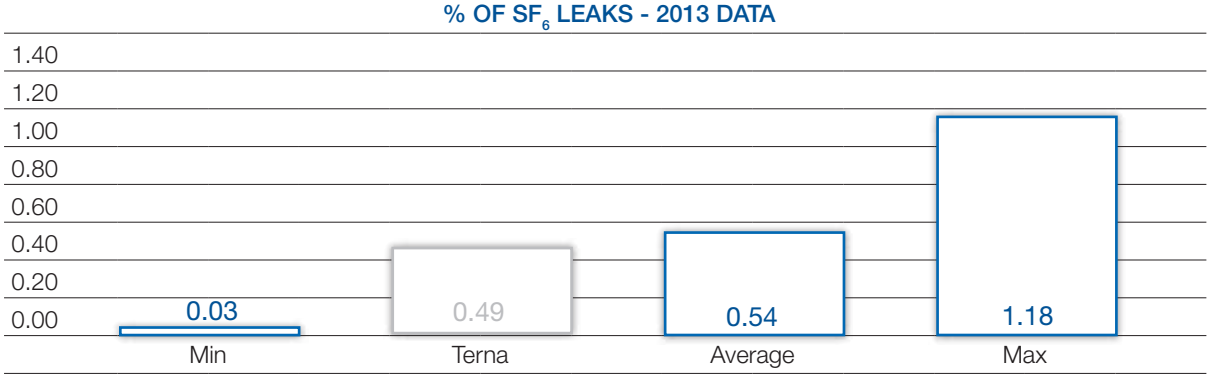
Net of exceptional faults and any effect deriving from ageing of the equipment in operation, it is estimated that installing new devices with better seals (such as more highly reliable transformers), which began in 2009 and continued in the years 2010-2012, may determine a reduction in the proportion of leaks estimated at 0.1% over a period of five years from the start of the installation campaign, provided that the new equipment is effectively available. On the basis of this estimate, and again net of the factors mentioned, we expect the proportion of leaks to converge towards figures oscillating around 0.6%, considering that the average proportion in the period 2005-2009 was 0.7%.



In 2014, the proportion of leaks was 0.55%. This figure was however affected by an accident that occurred in a substation during which 784.1 kg of SF_6 were dispersed (equal to 26% of leaks recorded in the year). Net of this event, the proportion was 0.41%, down from the two previous years (2013: 0.49%; 2012: 0.59%).

SF_6 leaks: comparative data

SF_6 gas has an extremely powerful greenhouse effect (22,800 times more than CO_2[(1)]) and is used by electricity transmission operators as a result of its excellent electrical insulation properties. On account of the specific nature of the use of this gas, only the TSO panel was considered for the comparison.
The SF_6 figure is given as the proportion of leaks to the total quantity of gas in substation equipment. In 2014, Terna recorded a proportion of leaks of 0.55% (0.41% net of the accident). For 2013, the year to which the comparison refers, SF_6 leaks were equal to 0.49%.
In the comparison with other transmission operators, for the year 2013 Terna showed a below-average proportion of SF_6 leaks, confirming the trend seen in previous years. A graph of the data available for 2013 is shown below:



(1) See "IPCC Fourth Assessment Report: Climate Change 2007".

Details of the calculation of the "SF_6 leaks" benchmark are available in the "Sustainability" section of the website.

G4-EN30

Company fleet

The company's **vehicle fleet** is not concentrated in a few places, but rather used over a vast area: company vehicles are in fact used daily for line inspections and to reach operating plants scattered throughout the country.
The fleet of vehicles used by Terna is 88% cars fitted with Euro 5 engines (see the table in the Tables of indicators on page 161), a higher percentage than the national average which in 2013 recorded only 14% of vehicles with Euro 5 engines[23].

G4-EN6

Energy saving in substations and offices

In 2011, the "Energy Consumed for Own Use Management System" project was launched. This is coordinated by the Terna Group's technician responsible for conservation and rational use of energy (Energy Manager). Following the activities performed over the last three years, the objective in 2015 is to have the system certified to the UNI CEI EN ISO 50001 standard, which establishes the requisites for creating, launching, maintaining and improving an energy management system oriented towards energy efficiency. It should be borne in mind, however, that the development of energy efficiency programmes relative to the **use of electricity** in substations and offices is experimental at this stage. This is due to the fact that Terna's electricity consumption falls within the "own transmission use" category which, from an accounting point of view, constitutes a pass-through item for Terna. As regards **electrical substations**, electricity is used to ensure the functioning of the equipment and its remote control. We are studying initiatives to assess savings opportunities in relation to the main sources of consumption:

- cooling power transformers;
- external lighting;
- air-conditioning and heating systems in technical rooms;
- auxiliary command, control and protection circuits of all equipment and machinery.

In offices, the main sources of energy consumption are related to lighting, air-conditioning, heating and the use of computers and printers. Two initiatives in the year related to reducing such sources of consumption are described below:

- continued replacement of computers and printers. The new models enable savings in average energy consumption of 14.5% and a consequent reduction of carbon dioxide emissions. The reduction achieved in 2014 adds to the one already recorded in the two years 2012-2013 (related to replacing monitors and desktop computers with PCs with lower consumption), for a total of 160 tonnes less of CO_2 for the three years;
- a project was completed for replacing the heating oil boilers with two heat pumps and a series of geothermal probes, in order to reduce the costs and consumption of heating oil for heating the offices of the Friuli-Venezia Giulia Plants Unit. This investment will have a payback period of five years and will permit a reduction in costs for the company. The new plant will permit a reduction in the CO_2 emitted into the atmosphere of approximately 60 tonnes per year. The plant active since September 2014 has already enabled a reduction of approximately 30 tonnes of CO_2.

The Development Plan and reduction of CO_2 emissions from the electric system

The construction of the new lines and substations provided for by the Development Plan will have positive effects not only in terms of service security and the final cost of electricity, but also in terms of reduced emissions from the electric system. This has three effects:

- reduction of grid losses;
- improvement of the production mix and interconnection with other countries;
- connection of plants using renewable energy.

Overall, the reduction in CO_2 emissions could reach approximately 15.5 million tonnes a year.

Reduction of grid losses

Grid losses depend, among other things, on the distance the electricity travels on the transmission grid. In very simple terms, the further the point of consumption (of withdrawal from the NTG) from the point of production (of delivery into the NTG), the greater the losses for the same consumption. In addition, for the same distance, the losses are greater on a lower-voltage line. Development work that improves the grid mesh structure brings withdrawal and consumption points closer: all other conditions being equal, the result is a reduction in grid losses. The same result is produced by upgrading a stretch of the grid, for example when a 380 kV line replaces one at 150 kV over the same route. With the completion of the work set out in the 2015 Development Plan, the decrease in losses at the peak could reach a power value of approximately 180 MW, corresponding to a reduction in grid energy losses estimated of around 1,100 GWh/year. Assuming that the reduction of these losses is equivalent to a reduction in production from combustible sources, it can be considered that the work may also have the added positive effect of a decrease in CO_2 emissions, somewhere between 400,000 and 500,000 tonnes every year.

23 Source: *Fondazione per lo sviluppo sostenibile* [Foundation for Sustainable Development] **Research *"Green Economy e veicoli stradali: una via italiana"* [Green Economy and road vehicles: the Italian way].**

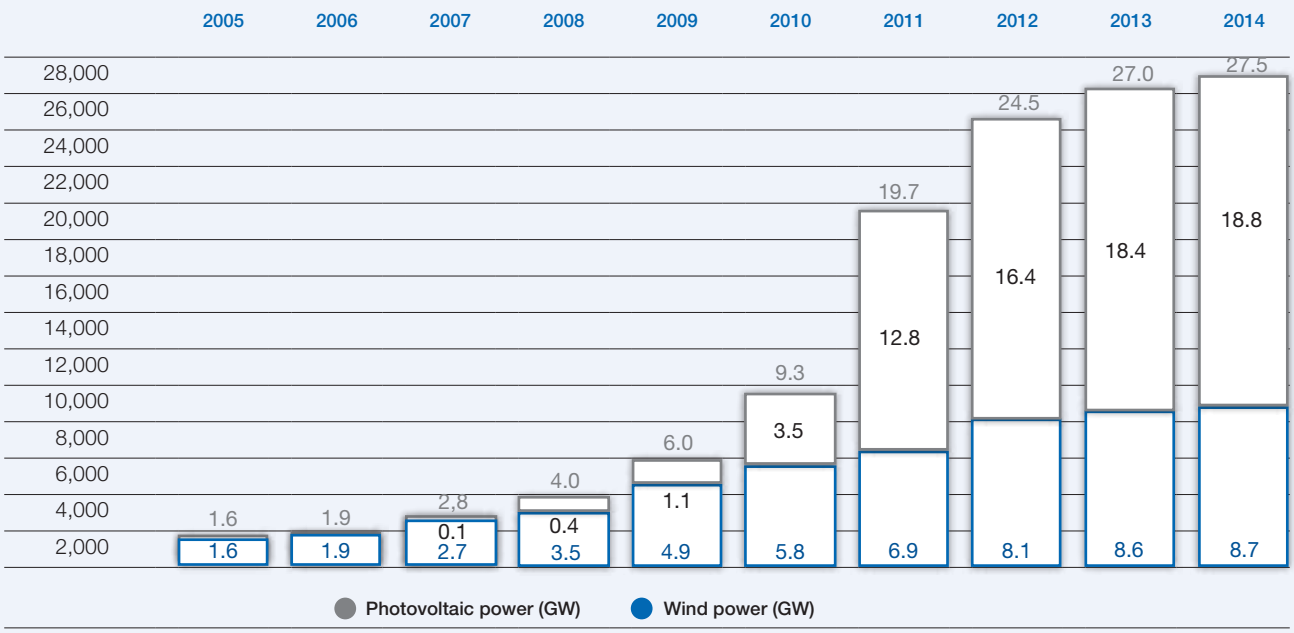
Improvement of the production mix and interconnection with other countries

One of the main purposes of developing the electricity transmission grid is to overcome the transport limits between "electricity zones". The existence of these limits imposes a number of restrictions on the possibility of production by more efficient generation units, that is to say units which pollute less in terms of CO_2 emissions, and at the same time makes production by obsolete substations necessary for grid security.
The work envisaged in the Development Plan, together with the expansion of interconnection with other countries, would enable a more efficient production mix, with a larger proportion of production by plants with higher yields. The same quantity of final consumption would thus be covered with a smaller quantity of fuel: the benefits are quantifiable as a reduction in CO_2 emissions of up to 8,000,000 tonnes a year.

Connection of plants using renewable energy

The main contribution to the reduction of CO_2 emissions comes from connecting production plants using renewable sources considered among the projects in the 2015 Development Plan. One of Terna's main tasks is to plan grid upgrading in order to encourage production of electricity from renewable energy sources; the aim is to try to overcome any grid and operating limitations that could impact renewable-energy input into the grid, which is entitled to dispatching priority.
The development solutions planned include both actions to strengthen sections of the primary grid, which make it possible to indirectly reduce the influence of non-programmable renewable-source (hereinafter referred to as NPRS) production on operation, and actions to locally expand the sub-transmission grids to which the NPRS generation is directly connected (see the relevant paragraph on page 76).
Besides this work, NPRS collection substations on the very-high-voltage grid are planned, which will make it possible to limit the construction of new power lines which would otherwise be needed.
From 2005 to 2014, works on the transmission grid and connections have facilitated an increase in the production of energy from renewable sources (see graph below).

Photovoltaic and wind power installed 2005 - December 2014 (GW)



The works included by Terna in the 2015 Development Plan will release about 5,500 MW of power from renewable sources, thus obtaining a reduction of CO_2 emissions amounting to about 7,000,000 tonnes of CO_2/year.

Reduction of CO_2 emissions in 2014

In 2014, the benefits in terms of reduction of system CO_2 emissions were mainly due to the installation of new "zero-emission" production units.
The provisional figure for power installed from renewable sources in 2014 is presented below.

Energy source	power installed – MW
Wind	~8,700
Photovoltaic	~18,800
Total	**27,500**

From the 2014 provisional figures, it can be seen that the gross production using wind and photovoltaic energy increased by approximately 2,200 GWh; this figure corresponds to a reduction of approximately 1,300,000 tonnes of CO_2[24].

Resource use and waste management

The provision of the transmission service requires the construction and maintenance of a large endowment of capital assets: power lines (pylons, conductors, insulators), transformer substations (transformers, switches, other substation equipment), and control systems are the main components.
The use of materials is related, in particular, to constructing electricity and ICT infrastructure. Terna's direct waste management primarily concerns maintenance of electricity infrastructure.

G4-EN1

Resources

Terna does not use raw materials but purchases finished products such as electrical equipment, conductors, devices and other elements which are used to develop and maintain the National Transmission Grid. An estimate of the materials contained in the primary products purchased by Terna is shown in the following table, where the quantities have been estimated considering the average material contents of the various products purchased by Terna in the years referred to. Information is not currently available on the use of recycled material by the suppliers of the materials and equipment used.

MAIN MATERIALS IN SUPPLIES - TONNES

	2014	2013	2012
Porcelain	327	699	229
Polymeric	114	225	131
Copper	1,019	5,234	3,861
Aluminium	2,946	12,909	4,069
Steel	29,675	6,204	6,163
Glass	3,525	2,014	863
Dielectric oil	408	924	61
SF_6	28	42	50

The quantities shown in the table reveal an overall increase in materials purchased for pylons and insulators. The increase is related to the increased construction of new lines in 2014.
Water and paper consumption is shown in the Tables of indicators on page 162.

24 Considering a conversion coefficient of 0.568 tCO_2/MWh and assuming that the new installed renewable capacity replaces an equivalent thermoelectric capacity.

LCA – Life Cycle Assessment

In 2013, in cooperation with CESI, Terna began a Life Cycle Assessment (LCA) for the standard cable line projects operating at 380 kV, in compliance with the ISO 14040 standards (see 2013 Sustainability Report, pages 103-104). For the purposes of the study the following functional unit was taken into consideration: 1 km of double three-phase power lines, in buried 380 kV cable, inclusive of joints and terminals, considering the laying method as an integral part of the functional unit (in the case in point, direct underground laying, on a level, on city and suburban roads). Numerous environmental impact categories were considered, and measured for the life-cycle stages: cable production, operation, decommissioning and end of life.
The results of the study showed that the operation phase is the most important for the following environmental impacts:

- reduction of the ozone layer;
- land occupation;
- global warming;
- consumption of non-renewable energy.

In fact, operation is characterised by grid losses, the impact of which requires the production of the corresponding electricity lost. Other environmental impacts – such as the consumption of natural resources (copper in particular), land and water ecotoxicity, and emission of carcinogenic substances – are, on the other hand, associated above all with the production phase, particularly due to production processes and the extraction of minerals.
The end-of-life stage contributes negatively to all impact categories, that is, it has an effect that compensates for the environmental impacts of the other stages of the cycle. In other words, the process of recycling metals tends to reduce the impacts associated with the metal extraction, processing and production processes.
Specifically, recycling of copper parts can reduce the impacts connected with the production of the cable by up to 47%.
The study also considered construction site activities, relative to the commissioning of the cable, extraordinary maintenance and end of life. Energy consumption for construction site vehicles amounts to 895.3 GJ per kilometre.
The details of the information obtained thus far will be researched further, in order to identify methods to reduce the environmental impact of the product in question, for example through revision of the procurement specifications.

Waste

G4-EN23

Most of Terna's waste is recovered to be sent for production recycling. Only some residues are sent to the waste-disposal sites and therefore have an environmental impact.
The percentage of waste recovered is around 81% (87% in 2013; 81% in 2012).
Such waste derives mainly from maintenance and modernisation works to the electricity infrastructure, activities which depend on technical considerations regarding the security and efficiency of the system. The quantity of waste may therefore change significantly from year to year.
As regards waste management operations, Terna's environmental policy prefers waste recycling over final waste disposal operations.
Actual recycling depends, however, on the materials which make up the waste. Some materials can easily be separated and consequently reused (for example the iron parts of pylons); however, in some cases, it is impossible or too costly to separate the parts, especially for equipment purchased some years ago.
For these reasons, the annual changes in the percentage of waste recycled must not be interpreted as representing a trend.

WASTE BY CATEGORY[1] (TONNES)

	2014	2013	2012
Waste produced[1]	**4,489.9**	**5,263.6**	**6,208.1**
of which hazardous	2,651.0	3,467.6	3,297.4
of which non-hazardous	1,838.9	1,795.9	2,910.7
Recycled waste	**3,652.7**	**4,554.9**	**5,015.5**
of which hazardous	2,136.2	2,874.8	3,064.9
of which non-hazardous	1,516.6	1,680.1	1,950.6
Waste sent for disposal[2]	**780.3**	**578.9**	**1,080.4**
of which hazardous	458.2	439.6	215.6
of which non-hazardous	322.2	139.2	864.8

(1) This includes only the special waste from the production process, not that produced by service activities (urban waste). Sewage and waste from septic tanks from substations not connected to the sewerage system are not included; the figure for sewage and septic tanks was 383 tonnes in 2014; 842 tonnes in 2013; 610 tonnes in 2012. In 2014, waste identified as "Other emulsions" produced during an accident that occurred in an operating area was also excluded. The quantity of these emulsions was 857 tonnes.
(2) Waste sent for disposal may differ from the simple difference between waste produced and recovered, owing to the temporary storage of waste.

The main **special non-hazardous waste** types **produced** by Terna's activities consist of uncontaminated **metal waste**, deriving from the decommissioning of **transformers, electrical equipment and machines** (for example, generators) no longer in use, with a recovery percentage that averages 100%.
The main **hazardous special waste produced** by Terna's operating activities consists of:

- **metal waste** which derives from the decommissioning of **transformers, electrical equipment and machinery** no longer used and contaminated by hazardous substances, more than 90% of which is recycled on average, after treatment by third parties;
- **batteries** (lead and nickel), which, in the event of a blackout, enable emergency generators to be turned on to keep the energy transportation and transformation service operating during emergencies, 100% of which are recycled;
- **dielectric oils** for the insulation of transformers replaced following the regular checks carried out for transformer maintenance, and which constitute hazardous waste.

Waste sent for disposal consists mainly of materials used in the maintenance and cleaning of plants (mud, oil emulsions and rags containing oils and solvents) and insulating materials containing asbestos for which no kind of recycling is available.

G4-EN31 Costs for the environment

Terna's commitment to the environment is reflected in the costs incurred for environmental reasons, both as investment and as operating expenses. Environmental costs were shown separately on the basis of the definitions presented below, by aggregating information deducible from the company's general and management accounting. Such definitions and the methodology described below have been taken from the operating guidelines of the Terna Group.

Recording methods

Environmental costs are identified firstly on the basis of the definitions available, in particular those of ISTAT (the Italian National Institute of Statistics), Eurostat and the GRI, as well as on the European Commission's recommendation on the recognition, measurement and disclosure of environmental issues in annual accounts and reports on operations (Recommendation 2001/453/EC). On the basis of this recommendation the term "environmental expenditure" includes the cost of steps taken by an organization or on its behalf by others, to prevent, reduce or repair damage to the environment which results from its operating activities.
Secondly, the aforesaid definitions were applied to the environmental aspects considered significant (for example, the noise of substations, electromagnetic fields, etc.) in the Company's ISO 14001-certified Environmental Management System to identify, in the main corporate processes, Terna's operating and investment activities of environmental significance.

Many of Terna's activities described in this Report entail environmental expenses. However, several limitations were introduced in determining the reporting boundary:

- exclusion of integrated costs, i.e. regarding activities whose purpose is not exclusively environmental (for example, the use of pylons with innovative features also from the point of view of environmental integration) because of the subjectivity of accounting for the solely environmental components;
- exclusion of the additional costs connected with the consideration of restrictions or requests for safeguarding the environment during planning and designing new lines (detours and burials).

Other conditions were that the costs had to be:

- significant;
- consistent with the annual reporting of accounts (operating costs and investment clearly distinguished);
- directly booked on the basis of the existing corporate accounting system.

This last condition fulfils the need to minimise recourse to estimates based on non-accounting analyses.

Investment and operating costs

The table below best shows the costs incurred by Terna for the environment (see below for more details on the accounting method used).
These costs exclude expenses regarding internal resources and consider only expenses for external purchases. An exception is the "Environmental activities – existing plants" item, which includes the costs of internal personnel.
In accordance with the method adopted and the footnotes to the table, it should be noted that the environmental costs shown are a subset of the total environmental costs actually incurred, as defined above.

COSTS FOR THE ENVIRONMENT – INVESTMENT AND OPERATING COSTS (MILLIONS OF EURO)

	2014	2013	2012
Investments			
Environmental offsets	12.7	8.4	4.1
Environmental-impact studies	2.1	3.9	1.3
Environmental activities – new plants	4.4	5.0	6
Environmental activities – existing plants	9.8	7.8	9.6
Demolitions	4.7	1.0	2.4
Total investments	**33.7**	**26.1**	**23.4**
Costs			
Costs for environmental activities	19.2	17.9	15.1
Total operating costs	**19.2**	**17.9**	**15.1**

Environmental offsets: these are amounts for offsetting the works set out in the Grid Development Plan, as determined by special agreements entered into with local institutions. The increase of the amount entered in the table reflects the progress of the work scheduled in the Development Plan.
Environmental impact studies: these relate to plants provided for in the Grid Development Plan that are at the construction stage or in the process of being authorised by the relevant administrations.
Environmental activities – new plants: the amount shown is the result of an estimate. On the basis of an analysis of several large investment projects, at least 1% of the total project expense related to environmental items, usually determined by obligations (for example, camouflaging with trees, barriers against noise, installation of dissuaders for birdlife, environmental monitoring, and analysis of excavated earth and rock). Therefore, a value of 1% of investment costs for projects with similar features was considered.
Environmental activities – existing plants: the expenses for upgrading existing plants in accordance with environmental provisions and new regulations (for example noise and visual/landscape aspects).
Demolitions: the costs for the definitive dismantling of lines as part of rationalisation projects.
Costs for environmental activities: cutting back vegetation, cutting grass, waste management and demolitions/dismantling for small amounts not included in investments. These cost items, which can be determined directly from the industrial accounting, do not exhaust the year's total environmental costs, but represent the majority of them.

2014

Terna
TERNA GROUP

OUR PEOPLE

Our approach

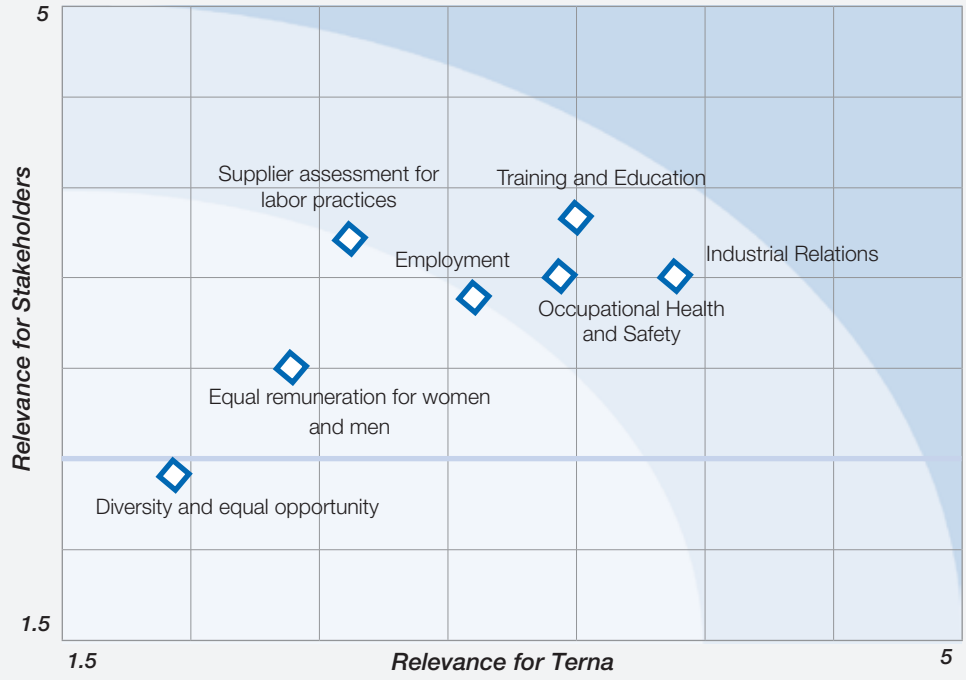
Human resources are an essential part of corporate business but they are also individuals who should be valued and whose rights should be respected. Terna's approach to relations with its collaborators is characterised by:

- **concern for safety** and the prevention of injuries to ensure the physical integrity of employees;
- the design of management and development systems to **improve performance and develop individual skills**;
- **investment in training**, ensuring the growth of the Company and its employees;
- **remuneration and welfare policies** aimed at aligning individual performance with the Company's goals and providing economic security for employees and their families;
- a well-organized system of **industrial relations based on trade-union involvement** in numerous aspects of company life;
- listening to employees by using staff surveys.

Staff policies are established by the Human Resource and Organization Department, while staff management is entrusted to the relevant department Heads as well as the HR Department. Safety issues are the responsibility of the Corporate Protection Department. Both departments are part of the Parent Company's Corporate Affairs Division. For information on relations with employees and unions, please also see the "Relations with Stakeholders" chapter.

Below is a visual representation of the materiality assessment of the aspects of G4 related to labour issues with indication of the materiality threshold. For completeness of information, this Report also indicates the aspects below such threshold (for more details, please see the methodological note on pages 140-142).

2014 MATERIALITY MATRICES – G4 ASPECTS



Diversity and equal opportunities	pages 121; 127-128; 154; 164; 166
Employment	pages 89-94; 121; 122; 123; 125; 126; 164; 165
Equal remuneration for women and men	pages 127-128; 166
Industrial relations	pages 52-53
Occupational health and safety	pages 52; 125; 128-130; 167
Supplier assessment for labour practices	pages 89-94
Training and Education	pages 123-125; 165

Overview of employees

G4-LA1

G4-LA12

The following tables show data for the Group, with the same perimeter as 2013. Therefore, not included are the data for the 357 Tamini Group employees (see methodological note on page 142). For the sake of visual uniformity, we have also excluded the three employees on local contracts with the Montenegrin subsidiary Terna Crna Gora d.o.o. Including Tamini and Terna Crna Gora, employees at 31/12/2014 totalled 3,797.

PERSONNEL COMPOSITION BY CATEGORY

	2014	2013	2012
Total	**3,437**	**3,442**	**3,433**
Senior executives	61	62	59
Junior executives	541	501	502
White-collar workers	1,887	1,922	1,925
Blue-collar workers	948	957	947

In 2014, the Group's personnel decreased slightly compared to 2013. At the end of the year, the number of employees of the Group's Italian companies totalled 3,437 (-5 from 2013). Retirement is by far the most common reason for employees leaving, and is concentrated in the highest age brackets. The turnover rate for spontaneous resignations is always very low (0.32% in 2014; 0.26% in 2013; 0.34% in 2012). The turnover rate of employees aged under 30 was 0 in 2014, and less than 0.1% for the three-year period. The total turnover rate, therefore, essentially reflects terminations owing to retirement. The average length of service of employees who left the Company in 2014 was 32.8 years.
In 2014, Terna made use of 54 temporary workers (compared with 39 in 2013 and 31 in 2012), employees of agencies that provide a temporary employment service to Terna. The increase in fixed-term employees reflects the use of the apprenticeship contract.

PERSONNEL CHANGES

	2014	2013	2012
Total employees	**3,437**	**3,442**	**3,433**
Employees recruited during the year	68	70	45
Employees who left during the year	73	61	105
Turnover rate on termination (%)[1]	2.1	1.8	3.0

(1) The turnover rates report the termination flows with respect to the number of employees as at 31 December of the previous year.

PERSONNEL COMPOSITION

	2014	2013	2012
Total employees	**3,437**	**3,442**	**3,433**
By contract type			
- permanent	3,382	3,412	3,383
- fixed-term	55	30	50
By gender			
- men	3,042	3,048	3,041
- women	395	394	392
Average age of personnel (years)			
Average age	46.6	46.2	45.7

Over time, the generational turnover the Company is experiencing, and its hiring policies, have led to an increase in the educational qualifications of the corporate population. Today, 71% of the corporate population has a degree or high school diploma (70% in 2013).

EU15

Management of generational turnover

The new Italian legislation regarding retirement (Art. 24 of Italian Law No. 214/2011), which raised the age and years of contribution requirements for entitlement to a pension, reduced the catchment area of potential leavers for Terna. A summary table of potential personnel leaving for retirement in the period 2015-2019 is shown below. The total of 637 people can be broken down as follows:

Employees eligible as at 31.12.2014 for a pension under the old legislation:		**68**
of whom:	senior executives, junior executives, white-collar workers	51
	blue-collar workers	17
Employees as at 31.12.2014 potentially retiring in the 2015-2019 period, under the new legislation:		**569**
of whom:	senior executives, junior executives, white-collar workers	361
	blue-collar workers	208

In both the first and the second group, it is expected that there will be greater use of the option of continuing work and developing a better pension. In the last quarter of 2014, the Company launched an ongoing initiative aimed at bringing forward generational change through incentives for voluntary early retirement.
Some time ago, Terna began a series of initiatives to manage generational turnover. Among the most significant are:

- the transmission of knowledge and experience, often specific exclusively to Terna by increasing use of training courses taught by in-house teaching staff;
- professional development projects aimed at creating and transmitting technical and managerial skills, enabling adequate performance of critical roles.

Staff turnover: comparative data

Terna's staff turnover rate is defined as the ratio of employees leaving during the year to the number of employees as at 31 December of the previous year.
As the staff turnover rate is an indirect indicator of the internal company climate affecting all divisions, the figures for the transmission companies (TSO panel) and those of the large companies listed on the Italian stock exchange (FTSE-MIB) were taken into account, as well as those for companies in the Electric Utilities sector included in the Dow Jones World Sustainability Index.
In **2014**, Terna's turnover rate was **2.1%**. In **2013**, the year for which comparative data is available, the turnover rate was **1.8%**, below the average of all the reference panels.

	Turnover rate (%) – 2013		
	TSO	FTSE-MIB	DJSI – Electric Utilities
Figures available	17	24	6
Average	4.9	7.9	6.3
Max	11.5	15.9	11.3
Min	1.0	1.5	1.8
Terna		1.8	

Details on the "staff turnover" benchmark figures are available in the "Sustainability" section of the website.

The human resources process

Research and selection

The personnel recruited from the external labour market are above all graduates – in particular engineers – and qualified people with diplomas from professional institutes, most with an electrical specialisation. Once employed, the new recruits expand their knowledge and the necessary specific skills through dedicated introductory training courses.
The process of searching for and selecting personnel is managed by the Human Resources and Organization Department, which also handles relations with schools, universities and employment agencies. The preferred recruitment channel for candidates is the "Working at Terna" section of the company website.
At the end of the **selection process**, Terna always informs all candidates of the outcome of their application, whether positive or negative. In the 2008-2014 period, Terna consolidated and expanded its relations with universities and the world of postgraduate training and institutional training in general, to support the process of finding new staff and create a virtuous circle of exchange between the Company and the outside world. The Company has entered into agreements with the leading Italian universities and business schools to fund the creation of specialised Master's courses. In 2014, in view of the substantial achievement of the goals of enhancing the visibility, reputation and awareness of the Terna Group in the educational sphere and the labour market, activities were scaled down quantitatively but were more focused in terms of quality.

Key figures 2014

- 28 agreements with universities and business schools (35 in 2013)
- 3 Sponsored Master's courses (6 in 2013)
- 119 hours of teaching Terna employees at universities and business schools (116 in 2013)
- 679 students from university or Master's courses visiting the plants (677 in 2013)
- 32 internships, traineeships, project work programmes (52 in 2013)
- 7 career days in which Terna took part (14 in 2013)

Training

Training at Terna continuously embraces all aspects of professional life. It is aimed at creating value for our people through increasing and diversifying skills and employability, and creating value for the Company through developing human capital in line with the Company mission and the business strategy. Campus *Esperienze in Rete* is the umbrella scheme for all the training provided. The training model is based on knowledge sharing in that the transfer of specialist know-how is entrusted to the most experienced staff of the internal Faculty. These experiences are supported by external collaborations (with universities and business schools) in order to ensure multiple teaching inputs. A dedicated office at an operating site of the Company in Rome has been active since 2012 and can accommodate up to 200 employees involved in training activities at the same time. Training initiatives are categorised by subject area:

- **Context and business model**, for knowledge of the internal and external business context in which Terna works and to promote development of the corporate identity;
- **Education** for managerial and staff development;
- **Training** for the development of technical and professional skills and the acquisition of transversal skills (for example foreign languages, office automation);
- **Pathways** consisting of short, medium or long term training processes involving a mix of initiatives from the three previous subject areas, designed for new recruits and staff in service belonging to uniform professional groups (e.g. shift workers in the control room).

2014 can be considered "The Training Year"; 92% of teaching hours involved initiatives grouped under Training or courses aimed at developing technical, professional and transferable skills. The increase in hours spent on this section (usually around 70%) is mainly due to the extraordinary training plan for new multi-skill qualifications (blue-collar and white-collar workers) resulting from the reorganization of Terna Rete Italia, the main company of the Group. The multi-skill training consists of two multi-modular courses for white-collar workers and two training pathways for blue-collar workers.
These courses include a challenging and structured "on the job" module at operating sites, the duration of which –more than 123,000 hours – was not counted in the total number of hours of training provided in the year, since it was part of work activity.

Key figures 2014

- 91% of employees have attended at least one training course (89% in 2013)
- 148,955 hours of training provided (120,115 in 2013)
- 99.8% of hours provided in the classroom (99.5% in 2013)
- 43 hours of training per capita (35 in 2013): 45 for men, 19 for women

The increased hours of training owed to the following:

- a major commitment in the field of safety (see pages 128-129);
- training in support of the introduction of non-conventional storage systems (batteries);
- training in support of new technology for Synchronous Compensator Plants;
- specialised ICT training;
- strengthening of initiatives on environmental issues (sustainability).

The initiatives relating to the education section, which saw less investment in 2014, will pick up again in 2015. For more details see page 166.

Training for employees: comparative data

The comparison of staff-training performance uses the per capita hours of training provided by companies as a reference. Since per capita training does not depend on the size of the company or on the sector in which companies operate, figures for the companies on all three panels were examined.
In 2014, Terna provided 43 hours of training per employee, up on the 35 hours in 2013, the year for which comparative data is available. Compared to the other companies, Terna is above the average value for the FTSE-MIB panel and below average for the TSO panel and the Dow Jones Sustainability Index – Electric Utilities.

	Hours of training per capita – 2013		
	TSO	FTSE-MIB	DJSI – Electric Utilities
Figures available	13	29	7
Average	44	31	39
Max	77	58	70
Min	12	2	13
Terna		35	

Details on the “staff training” benchmark figures are available in the “Sustainability” section of the website.

Developing human capital

Terna's system for staff development, and therefore for their professional growth, is based largely on performance as the key indicator.
At the core is the **Global Performance System (GPS)**, based on a definition of performance comprising two aspects:
- **the concrete achievement of pre-set targets;**
- **the organizational procedures implemented to achieve them.**

Targets, conduct, assessments and feedback are collected using IT software accessible to all personnel involved, which guarantees traceability over time and constant monitoring of growth. Application of the GPS currently involves **all senior executives, all junior executives** (excluding the shift managers of the real-time network) **and some white-collar workers**. For blue-collar workers and other employees not included in the GPS, other forms of assessment are used such as periodic meetings between line managers and HR representatives.
Measurement of performance is also related to **payment of the variable parts of remuneration**. Various tools are used for this purpose, according to the type of company figures involved and the results time horizon to which they refer:
- **Long-Term Incentive Plan,** linked to multi-year corporate objectives, for senior executives who hold the most important positions in terms of achieving strategic objectives;
- **MBO** (Management By Objectives) for company management, which links the amount of individual bonuses to the degree of achievement of both company and individual targets, some of which coincide with the Sustainability Plan or are related to Terna's environmental and social commitments (e.g. work safety index).

Recognising the importance of the extensive involvement of employees in implementing programmes and plans regarding quality and productivity, Terna signed an agreement with the trade unions governing a **corporate-result bonus assigned to blue- and white-collar workers**, taking into account both general company trends and specific work-related employee targets to encourage productivity.

Corporate welfare

As in other large electricity companies, the treatment of employees at Terna (pay, working hours, holiday, and other aspects of employment) is substantially better than the Italian average.
Benefits are available for all employees including part-time workers and those with trial contracts, specifically:
- supplementary health care;
- supplementary pensions (voluntary participation);
- insurance for non-occupational injuries;
- recreational associations;
- more favourable maternity-leave conditions than those provided for by law;
- subsidised loans for purchasing a home, as well as for serious family needs;
- cafeteria service or meal coupons.

G4-LA2

Terna's employees (excluding senior executives who have access to a different fund) are automatically signed up to the **supplementary health-care fund FISDE** for employees of the Enel Group.
The FISDE pays part of the cost of medical treatment of illnesses not only for its employee members, but also for their dependants.

Beneficiaries	Information on and prevention of risks	Treatment
Workers	Yes	Yes
Families of workers	No	Yes

Terna offers its employees a defined-contribution supplementary pension scheme on a voluntary basis. Senior executives may participate in the Fondenel pension fund (http://fondenel.previnet.it), which envisages contributions both from the senior executive and the Company. Other employees (blue-collar workers, white-collar workers, and junior executives) may sign up for the Fopen pension fund (www.fondopensionefopen.it). In addition to the pension plans, the employees of the Italian companies receive other defined-benefit payments.

Specifically, during their working life, all employees receive a contractual "loyalty bonus" when they reach their 25th and 35th year of employment at the Company. While, upon terminating their employment, they receive the benefits due to all employees (severance pay), senior executives hired or appointed up to 28 February 1999 (allowance in lieu of notice), and blue- and white-collar workers and junior executives hired up to 24 July 2001 (additional months' pay).

G4-EC3

Further information on the composition/coverage of and changes to severance pay and other staff funds is available in the Annual Financial Report.

G4-LA3 Caring for children and family members

Italian law regulates maternity and parental leave, providing for a general coverage, with respect to which Terna offers more favourable conditions, in application both of the National Collective Labour Agreement (CCNL) for the electricity industry and of company agreements. The most important measures are:

- five months of paid maternity leave, awarded to the mother and distributed before and after the birth. Terna guarantees 100% of normal pay compared with the 80% provided for by law;
- six further months of maternity leave paid at 30%. Terna increases this to 45% and 40% respectively in the first and second month of use. The leave may be taken also by the father, within a maximum limit of ten months for the sum of both parents' leave. If not used in the first years of the child's life, the leave can also be used later, up to the age of eight years, but will be unpaid;
- unpaid leave (paid only in the case of serious disability), without limits on use, in the case of illness of children within their third year;
- three days a month, or two hours a day, of leave to care for children or other family members (paid in the case of serious disability);
- extraordinary leave of two years in the case of serious disability of children or other close relations.

The table below shows the number of employees who made use of parental leave for at least 29 days.

	2014	2013	2012
Total	**21**	**20**	**25**
- of whom women	19	18	21
- of whom men	2	2	4

All employees who made use of parental leave over the three-year period returned to work and were still at the company 12 months after their return.

Internal communication

Internal communication has a fundamental role in facilitating the exchange of information, creating integration, promoting teamwork and improving processes; Terna uses instruments to this end such as the company intranet and the in-house publication "Terna News", as well as special events and projects, including the annual "We:Me" convention, meetings with senior management and executives and the "CreativInTerna" competition. Among the initiatives in 2014, we note:

New senior company management

The arrival of Terna's new senior management and the goals and priorities set by new Company challenges have been communicated to staff through various channels. These include the meeting with senior executives, organized to mark the tenth anniversary of Terna's listing on the stock market; interviews in the in-house publication "Terna News"; and notices spread via e-mail.

Seventh edition of the "CreativInTerna" competition

Terna's commitment to the promotion of sustainable behaviour has been the guiding principle of the seventh edition of "CreativInTerna". The "Ri-Creati" project saw participants taking a common object and giving it a new purpose, thus demonstrating that everything can have a second life and a lower environmental impact. Younger participants instead designed a doodle-logo that will be used on the company intranet in 2015.

Policy on use of social media

Always eager to promote the use of new communication channels for better and more transparent flows of information about the Company, Terna has developed the "Guidelines on the proper use of social media" for employees, to encourage correct management of news regarding Terna.

Tamini internal communication

The formalisation of the acquisition of Tamini Group was supported by an internal communications plan to update new colleagues on communications already planned within the Company. The various initiatives included support for the implementation of communications by Tamini senior management to staff, the distribution of "Terna News" at Tamini with articles on company business and a brand kit for each employee, following the Tamini logo makeover in line with Terna's visual identity.

Diversity and equal opportunities

G4-LA12

G4-LA13

Terna adopts merit-based systems for selecting, developing and paying personnel that recognise and reward performance. All forms of discrimination, beginning with the selection and hiring process, are explicitly forbidden by the Group's Code of Ethics.

A large majority of employees are men because of the traditional scarcity of female labour supply in more technical occupations. However, the presence of women is increasing, partly as a result of the general trend in the labour market which has seen a greater participation of women.

The percentage of female employees at Terna in Italy was 9.0% at the end of 2005 (the year in which Terna gained operating autonomy) and **has grown continually to reach 11.5% at the end of 2014**.

Key figures 2014

- 11.5% of all employees are women (11.5% in 2013)
- 17.6% of all managerial positions are occupied by women (17.9% in 2013)[25]
- 27.1% of all new employees, net of blue-collar workers, are women (16.7% in 2013)

The main indicators chosen by Terna to monitor the equal treatment of men and women show that the management and development systems adopted do not disadvantage women. Remuneration figures also show limited gaps between white-collar workers and junior executives, with wider gaps for senior executives where, however, fewer individuals are considered and the differences in salary are therefore more influenced by individual figures.

EQUAL OPPORTUNITIES

Percentage values	2014	2013	2012
Gender pay gap %[(1)]			
Senior executives	72.5	81.3	79.2
Junior executives	97.1	96.3	94.5
White-collar workers	95.3	95.1	94.0
Gender remuneration gap %[(2)]			
Senior executives	71.2	78.5	76.6
Junior executives	100.9	98.2	97.5
White-collar workers	91.9	91.3	89.9

(1) The figure is the result of the ratio between the annual basic pay for women for the different grades and the annual basic pay for men for the same grades. The figure was not calculated for blue-collar workers because there are no women in that category.

(2) The figure is the result of the percentage ratio between the total annual remuneration for women for the different grades and the total annual remuneration for men for the same grades. The total remuneration includes, besides basic pay, production bonuses, the different types of incentives and the value of the benefits received over the year.

25 The percentage refers to the number of female senior and junior executives out of the total number of senior and junior executives in the company.

G4-EC6

Almost all employees are Italian citizens (only 14 employees have foreign citizenship). As of 31 December 2014, **140 people belonging to protected categories** (140 in 2013 and 131 in 2012) were employed, in line with the regulations applying to Terna. Further indicators of equal opportunities are available in the Tables of indicators (page 166).

Health & safety and correct working practices

Working in safety, without putting health at risk is a fundamental worker's right and Terna invests greatly in ensuring this is respected with regard to its staff.
Safety is **part of the global corporate culture**, and those who play a key role in operations are encouraged to be involved in paying close attention to these issues and how to improve on them.
This applies more generally to **respect for human and workers' rights**: the Company undertakes to ensure that such rights are also guaranteed for those working for contractors.

Ensuring employee safety

Terna's commitment to safety should be seen in the context of existing legislative provisions. The Italian legislation on safety, (Legislative Decree 81/2008 "Consolidated Law on Occupational Health and Safety") is among the most stringent in Europe and obliges companies to carry out a detailed assessment of the risks relating to workers' health and safety. Terna specifically focuses on analysing the risks deriving from the interference of the work of contractors and subcontractors, for all operations that make up the working process at construction sites. Terna's approach to safety at work hinges on a **system of instruments that apply to all company processes:**

- *Clear safety-policy guidelines*
  The importance of protecting people from physical harm is affirmed in Terna's Code of Ethics. The Company's Occupational Safety Policy specifies the guidelines in the Code of Ethics, for example with an explicit commitment to promoting accident prevention for all employees, including contractors.
- *Certified Management System BS OHSAS 18001:2007*
  The system covers 100% of company activities and is integrated with the quality and environment system. It is based on scrupulous risk assessment, with a particular focus on electrical risk (Rules for the Prevention of Electrical Risk – DPRET).
- *Organizational unit responsible for safety*
  The unit is composed of a central coordination office and local heads in the area offices and on construction sites. It performs direct inspections of workplaces and construction sites, and continual analysis and monitoring of the risks deriving from corporate activities.
- *Thorough supervision*
  The correct and full application of the procedures is subject to thorough inspections by the Safety, Prevention and Protection Managers (twice a year for each, in the respective areas of responsibility), **internal compliance audits** of all the Terna Group Companies and **external audits** for confirmation of certification. An elected employee representative, responsible for verifying the application of regulations, is also present (Employee Safety Representatives, see indicator LA6).
- *Company Intranet "Environmental Safety & Security" section*
  Within the corporate intranet there is a **database of legislation** on occupational safety (national and regional regulations, technical standards issued by competent bodies).
- *Thorough and ongoing awareness and training activities*
  All personnel have access to the key concepts and changes on the subject of safety through various channels including the corporate intranet and organized informative meetings. The equipment present in the **Viverone (Biella) training centre** makes it possible, in particular, to **carry out training** on safety for climbing pylons (through use of life-size pylons in the gym) and for live-line work in a controlled environment. In 2014, more than 65,000 hours of training were devoted to health and safety, of which over half were aimed at the Company's blue-collar workers (further training indicators are available on page 165).
- *Occupational safety performance targets*
  The **"occupational safety index"** in the indicators system is made up of the injury rate and the lost-day rate linked to the variable remuneration of the departments involved.
- *Applied Research*
  A specific organizational unit of the Engineering Department tests safety materials and devices, measuring their reliability through resistance trials in extreme conditions.

Occupational injuries

G4-LA6

In 2014, as in the two previous years, there were no fatal occupational injuries among Group employees, nor were there cases of fatal or serious accidents, including those occurring in previous years, for which, in the three years considered, corporate liability was definitively ascertained. The total number of injuries fell by 12% compared to 2013, from 41 to 36. In addition, in 2014, for the first time in the three-year period considered, no serious injuries befell any Terna employees. Both the injury rate and the lost-day rate therefore declined with respect to the previous year. In addition, the absentee rate confirmed the downward trend (for more details on safety information and injury rates divided by type, please see the Tables of indicators on page 167).

OCCUPATIONAL INJURIES – TERNA EMPLOYEES, GRI-ILO DEFINITIONS[1]	2014	2013	2012
Injury Rate	1.27	1.42	1.77
Lost-Day Rate[2]	44.16	52.94	60.85
Absentee Rate[3]	7,092.31	7,432.2	7,632.1
Occupational Disease Rate[4]	0	0	0
Number of injuries	36	41	51
- of which serious	0	2	3
- of which fatal	0	0	0

(1) As required by the GRI protocols, the definitions adopted are those provided for by the International Labour Organization (ILO). To facilitate comparison with other sources, the following notes show the figures of the same indicators calculated with alternative formulae. It was not considered necessary to further break down the data by region, because Terna operates only in Italy.
Injury Rate. This is the number of injuries with at least one day's abstention from work divided by the number of hours worked during the year and multiplied by 200,000 (corresponding to 50 working weeks x 40 hours x 100 employees). To facilitate comparison with other sources, this indicator was also calculated using a multiplication factor of 1,000,000 instead of 200,000 (consequently obtaining an injury rate five times that of the ILO). With this calculation method, the injury rate came out at **6.3 in 2014, 7.1 in 2013 and 8.8 in 2012.**
Lost-Day Rate. This is the ratio between the days not worked owing to injury and hours worked in the year, multiplied by 200,000. Days not worked are calendar days, counted from when the injury occurred. To facilitate comparison with other sources, this indicator was also calculated using a multiplication factor of 1,000. With this calculation method, the Lost-Day Rate came out **0.2 in 2014, 0.3 in 2013 and 0.3 in 2012.**
Absentee Rate. This is the number of days of absence owing to illness, strikes and injuries out of the number of days worked in the same period, multiplied by 200,000. To facilitate comparison with other sources, this indicator was also calculated as a percentage of days worked. With this calculation method, the absentee rate came out at **3.6 in 2014, 3.7 in 2013 and 3.8 in 2012.**
Occupational Disease Rate. This is the total number of cases of occupational disease divided by the hours worked in the year, multiplied by 200,000.
(2) To calculate the Lost-Day Rate, the days not worked related to injuries occurring in 2014 were considered together with any continued absence related to injuries occurring during the previous years, following the criterion of annual accrual of days of absence. This method was also adopted to recalculate the 2013 and 2012 rates. For this reason, the data shown in the table differ from those published previously.
(3) The reasons for absence considered do not include maternity leave, marriage leave, study leave, leave for trade union activities, other cases of paid leave, and suspensions.
(4) No hours of absence were ascribable to occupational disease because the type of activities carried out by Terna does not entail any work associated – on the basis of the official legal tables – with the possible onset of occupational diseases. Terna's occupational disease rate must therefore be considered to be always zero.

As shown in the table below, in 2014 two fatal accidents occurred among employees of contractors and subcontractors; one owing to a fall from a height and the other for reasons still being ascertained.

OCCUPATIONAL INJURIES – CONTRACTORS AND SUBCONTRACTORS

GRI-ILO DEFINITIONS	2014	2013	2012
Occupational injuries – contractors' employees	16	11	10
- of which serious	3	4	3
- of which fatal	2	2	2
Injury rate[1]	0.77	0.58	0.63

(1) This is the number of injuries with at least one day's abstention from work divided by the number of hours worked during the year and multiplied by 200,000 (corresponding to 50 working weeks x 40 hours x 100 employees). To facilitate comparison with other sources, this indicator was also calculated using a multiplication factor of 1,000,000 instead of 200,000 (consequently obtaining an injury rate five times that of the ILO). With this calculation method, the injury rate came out at **3.8 in 2014, 2.9 in 2013 and 3.1 in 2012.**

The health and safety systems in contractors' firms are described in the "Procurement" section on pages 91-92.

G4-HR1
G4-HR2
G4-HR3
G4-HR4
G4-HR5
G4-HR6
G4-HR8
G4-HR9
G4-HR12

Respect for human rights

The Terna Group operates in Italy, where the legal framework and the level of civil development largely guarantee respect for human rights, freedom of association and collective bargaining, thus making it non-critical for a company to take particular action on these issues with the implementation of specific management policies.
As regards the Group's work abroad, it is to be noted that, in the whole of 2014, Terna's projects abroad (in the Balkans and North Africa) did not involve operating activities (for example, infrastructure construction). The Company Terna Crna Gora founded under Montenegrin law in June 2011 (three employees with local contracts as at 31 December 2014), adopted the Group's Code of Ethics in February 2012.
Since December 2009, Terna has been part of the Global Compact, adopting its principles as a formal point of reference, after already having cited them since 2006 in its Code of Ethics.
Without affecting the above, and the fact that there are currently no critical issues, in principle, the managerial responsibility for human rights rests, above all, with the Human Resource and Organization, Procurement and Contracts, and Corporate Protection Departments for guaranteeing respect for human rights, and workers' protection in contracted and subcontracted activities (see the paragraph "Procurement" on page 89), and the Audit Unit for ensuring that Terna's Code of Ethics is correctly applied. In virtue of this role, in 2014 the Audit Unit carried out a survey to gauge the employees' perception on the application of human rights within the company and towards suppliers. The survey investigated observance of the principles of the Global Compact by the Group companies, following the indications of the United Nations Ruggie Report in regard to human rights (see also the specific box on the page 52).
The Corporate Social Responsibility Unit, finally, tracks changes in external references (e.g. international conventions).

G4-HR4

Regulation of strikes within the electric service

Relations with trade unions in the industry also give rise to the **regulation of indispensable services** that must be performed, **in the event of a strike**, to ensure service continuity. At Terna, the National Trade Union Agreement signed in February 2013 is applied. As workers responsible for NTG transmission and operating activities, the following shift workers are exempt from strikes:

- operators responsible for real-time control of the national electric system, remote control of transmission plants, verifying production plans and procuring the production resources necessary for dispatching;
- workers with the task of checking, coordinating and operating the computer systems, auxiliary services and infrastructure governing the dispatching of electricity nationwide;
- Security Operations Centre workers.

As for personnel on call, the agreement establishes that, although they have the right to suspend normal performance during the strike, they are obliged to be on call throughout the duration of said strike.

SOCIETY

Our approach

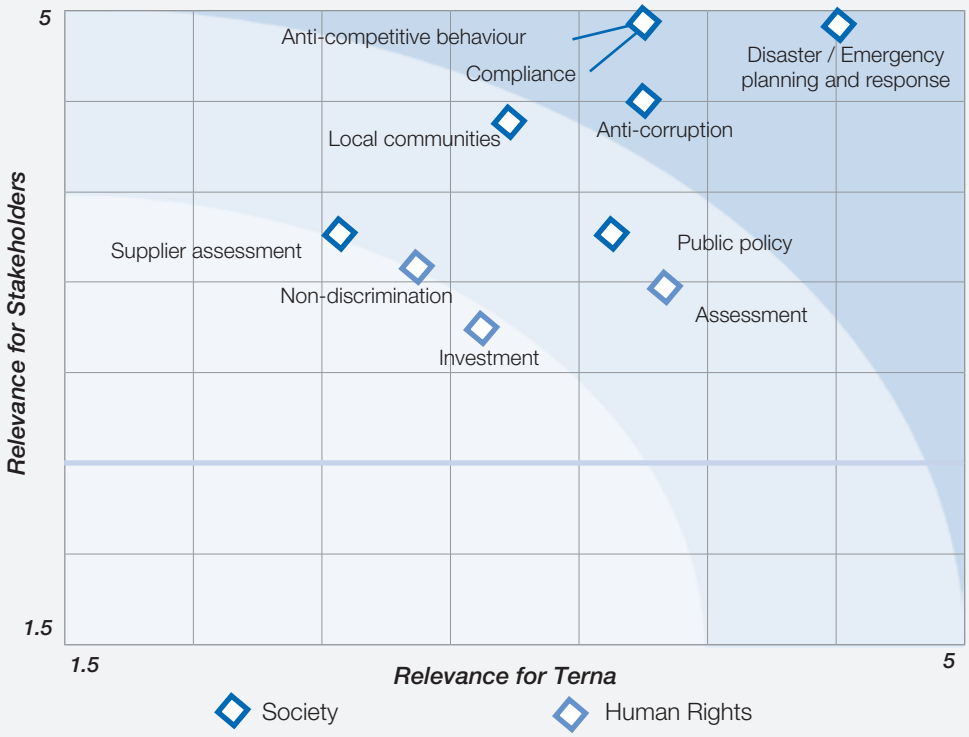
G4-SO2

Terna provides a service in the general interest. Society understood in a general sense as the user of Terna's service, and the local communities more directly affected by grid investment projects, are key stakeholders. The most significant impact of Terna's work on local communities is that on the visual landscape. Terna's approach to this is addressed in the chapter "Environmental Responsibility". The following section discusses other possible effects on individuals and society.

EU22

The construction of new power lines involves the use of between approximately 30 and 250 square meters of land – usually agricultural – for each pylon. Although Terna is authorised by law (Italian Law No. 1775 of 1933 and Presidential Decree 327/2001, the "Consolidated Law on Expropriations") to use an expropriation procedure to obtain land, Terna prefers solutions based on mutual consent, paying one-off compensation for the right of way of the line through private property. The pursuit of a consensual solution only fails in a minority of cases, making coercive measures necessary. In the three-year period 2011-2014, Terna constructed power lines that entailed obtaining easements from 38,806 land owners (12,072 in 2014; 10,179 in 2013; 7,463 in 2012; 7,092 in 2011); only in 6% of cases was it necessary to use a coercive easement procedure. When Terna constructs a station which occupies much more land, Terna normally purchases the necessary land. Below is a visual representation of the materiality assessment of the aspects of G4 related to human rights and society with indication of the materiality threshold. (for more details, please see the methodological note on pages 140-142).

2014 MATERIALITY MATRICES – G4 ASPECTS



Anti-competitive behaviour	pages 27; 57; 94
Anti-corruption	pages 37-38; 57; 134; 165
Compliance	pages 35-38; 57
Disaster / Emergency planning and response	pages 63-64
(Human rights) assessment	pages 52; 120; 130
Investment	pages 38; 87-88; 91; 120; 130; 165
Local communities	pages 54-56; 68-69; 100-102
Non-discrimination	pages 127-128; 130
Public policy	pages 48; 134
Supplier assessment	pages 89-94

Participation in associations

In accordance with the commitments assumed in the Code of Ethics, Terna cooperates with the associations to which it belongs, discussing and supporting their work in order to contribute to the general improvement of the electricity industry and its regulations and technical standards.
Terna takes an active part in the **CEI (Italian Electro-technical Committee)**, a body entrusted with setting the industry's technical standards. Technical staff at Terna often belong to professional associations such as the **CIGRE (*Conseil International des Grands Réseaux Électriques*)** and the **AEIT (Italian Federation of Electrotechnics, Electronics, Automation, Information Technology, and Telecommunications)**. These associations aim to keep members up to date and bring together electrical engineers and other industrial specialists.
Since November 2011, Terna has been a member of the **Renewables Grid Initiative (RGI)**, an association of European grid operators and non-governmental organizations that promotes 100% integration of electricity generated by renewable sources.
RGI, in turn, coordinates BESTGRID (see www.bestgrid.eu), a project supported by the European Commission aimed at improving the acceptance of electricity grid development activities by citizens, by increasing transparency and opportunities for public participation in authorisation procedures (see the section "Consultation" and the specific box on the pages 54 and 68-69).
Terna is also a member of international and national corporate social responsibility associations, collaborating actively to spread a sustainability culture, and to promote its experience with a view to sharing best practices. In particular, Terna actively supports the following organizations:

- **IIRC – The International Integrated Reporting Council**: an international organization which published the first framework for the integration of financial, environmental, social and governance information in a single report in December 2013, after two years of work (also see pages 39 and 140). Terna participates in the activities of its Business Network Pilot Programme, which works with various companies and organizations at the global level to exchange experiences and best practices.
- **LBG - The London Benchmarking Group, Corporate Citizenship**: the international benchmark organization for measuring the contribution and impact of Corporate Community Investments. Terna employs the LBG model for monitoring and assessing expenses for the community (see also page 134).
- **Global Compact Network Italy Foundation**: Terna has been a member of the Steering Committee of the Italian Network since 2011, and contributed to the Committee's work in 2013 mainly as the promoter and founder of the Global Compact Network Italy Foundation. The Foundation, set up in June 2013, works to increase awareness of the Global Compact, promoting the commitment to corporate sustainability and helping to create a more inclusive, sustainable global economy. For the third year running, Terna produced an "advanced" Communication on Progress (CoP), the most complete version provided for by the Global Compact.
- ***Fondazione Sodalitas***: an organization committed to promoting the spread of corporate sustainability and dialogue between businesses and the not-for-profit sector. Terna is one of the founders.
- ***Anima per il sociale nei valori dell'impresa*** [the spirit of social responsibility within corporate values]: since 2010, Terna has a been a member of this not-for-profit association which brings together managers and companies united by the desire to spread an entrepreneurial culture which combines profit with the creation of well-being within the community.
- **Foundation for Sustainable Development**: Terna became a member in 2011. The Foundation's principle activities consist in studying sustainable development issues – from a cultural and technical perspective – through research, seminars and meetings.
- **CSR Manager Network**: the reference association for professionals who deal with sustainability and Corporate Social Responsibility in their roles as company managers, consultants and researchers. During 2014, Terna supported the research on "The role of the CSR manager: professional experiences and future prospects," which studied career paths, current jobs and the expected developments for 45 CSR managers in Italian companies.
- **Procurement and Sustainability**, an association which carries out studies and makes it easier for companies to compare experiences to improve awareness of sustainability tools for responsible management of the supply chain.
- **Transparency International Italia**, the Italian arm of the international organization which works to fight corruption.

G4-EC1

Community initiatives

In keeping with the desire to contribute to Italy's civil growth beyond its infrastructural role, Terna again in 2014 confirmed its support for social, cultural and environmental initiatives.

Terna's corporate giving work consists mainly in providing financial support to charitable initiatives. In addition, resources are allocated to organizing Terna's own initiatives for the benefit of the community; corporate assets which are no longer useful in the production cycle are donated and support is provided in the form of working time devoted to various

G4-SO6

initiatives by Terna's employees. In particular, paid hours are assigned to volunteering. Each single corporate giving request is managed in keeping with the Group's "Corporate Giving Policy" and assessed by a specific commission made up of the Corporate Protection, External Relations and Communications, and Human Resource and Organization Directors. In all cases, as established by Terna's Code of Ethics, contributions are never made to political parties or their

G4-EC7

representatives.

As outlined in the "Participation in associations" section above, Terna is a member of the London Benchmarking Group (LBG) and has adopted an LBG model – developing a customised variation of it – for defining, classifying and booking company charitable initiatives. The model is oriented to accounting for what is done by companies through initiatives that generate real external benefits; such initiatives may involve contributions in cash (gifts, portion of sponsorships that translates into a real benefit, membership of associations that promote CSR), in kind (e.g. transfer of corporate property at the end of its useful life) and working time. Accounting for contributions requires, in some cases, recourse to non-accounting criteria and is therefore subject to interpretation. However, it also has the advantage of correlating the costs and benefits of the charitable initiatives in a coherent manner, meaning that corporate giving can be strategically planned and rationally managed. The following table shows the aggregate community initiatives, classified according to the LBG model, carried out by Terna in 2014.

COMMUNITY INITIATIVES

Values in Euro	2014	2013	2012
Total value of contributions (excluding internal overhead costs)	1,315,628	1,171,435	1,223,987
Breakdown by contribution type			
- In cash	1,064,850	1,050,670	1,095,888
- In kind (donation of corporate property)	35,445	36,888	46,120
- Working time	215,333	83,878	81,979
Breakdown by initiative type(*)			
- Donations	452,949	511,015	563,510
- Investment in the community	320,505	445,144	300,205
- Commercial initiatives in the community	542,174	216,277	360,272
Breakdown by purpose			
- Education and young people	400,545	410,790	469,300
- Health	21,500	35,000	21,800
- Economic development	245,355	161,300	38,687
- Environment	98,800	160,100	18,600
- Art and culture	443,084	283,767	492,590
- Social welfare	20,000	2,629	53,820
- Crisis support	27,445	53,100	35,000
- Other	58,900	64,750	94,190

(*) Donations: occasional contributions, typically in response to requests for funds from worthy charities.
Investment in the community: expenses for initiatives coordinated/organized by the Company as part of a medium-to-long term programme, often in partnership with an NGO.
Commercial initiatives in the community: charitable marketing initiatives (only the part of the expenditure which constitutes a charitable contribution is booked).

Support for environmental causes was not included in this table because, as a rule, it is associated with the construction of new lines and was therefore classified under environmental expenses (please see the relevant paragraph under "Environmental Responsibility"). This year, once again, work continued on monitoring the effects of corporate giving initiatives. A Terna-LBG questionnaire was sent out to a sample group for the most important initiatives. In this regard, please note:

Education and young people

"Frequenza 200" by We World Intervita

Terna has supported this project since 2012: first through "CreativInTerna", the drawing and photographic competition for Group employees and their children, and then in conjunction with the 2013 and 2014 activities of its "Campus" training centre. "Frequenza 200" (named for the minimum number of school days per school year) is the first Italian network created to combat school drop-outs, numbering more than 600,000 students of compulsory school age in Italy (17% of the school population). Having originally started off in Milan, Naples and Palermo, in 2014 "Frequenza 200" also spread to Rome, Turin and Bari and has involved a total of 40 comprehensive schools, 850 teachers, 5,000 school children, over 2,650 families, 750 mums, 90 professional educators, 250 informal workers and 350 volunteers. Terna's contribution has funded psychological support for children, the provision of educational and recreational materials and meetings with the cultural mediator. The LBG findings showed that 80% of the young people involved in the project successfully completed the school year and chose to continue their studies.

"Here Come Grandma and Grandpa": the initial results from monitoring the impact on the final beneficiaries

At the end of 2014 – a year into the Terna-ARCI Milan partnership for the social project "Here Come Grandma and Grandpa" – the first results, obtained from monitoring the impact on its final beneficiaries, have been presented by the SDA Bocconi School of Management. "Here Come Grandma and Grandpa" is an initiative that aims to encourage real opportunities for intergenerational exchanges between elderly volunteers (the grandparents) and young children from preschools in Milan, supporting the human and learning needs of both parties. The results from the first year of monitoring – while partial as the comparison with homologous data is still to be completed (possible at the end of the second year) – immediately revealed a **multi-stakeholder dimension** to the project, which consisted of **several networks of relationships** that intersect and interact with one another. Firstly, SDA Bocconi identified the key individuals that were priorities in achieving the project's social objectives, defining roles and responsibilities. It then divided the initiative into distinct phases in order to monitor and measure the **performance, results and impact on the community and target population** more easily. The most suitable tools for analysis and research were used each time, particularly **questionnaires, focus groups** and **in-depth interviews**.

These tools, accompanied by a SWOT analysis (Strengths, Weaknesses, Opportunities and Threats), highlighted the project's established strengths, as well as areas for improvement. Overall, from the **15 grandparents** taking part in various fun activities and workshops with **720 children** at **12 preschools**, SDA Bocconi received responses from 47% of the grandparents and 92% of the schools.

The results illustrated a sincere, unconditional "grandparent-child" relationship, based on affection, beyond the "teacher-pupil" dimension. The results from the point of view of the "grandparent-teacher" relationship were just as positive. This was based on honesty and a shared interest in integrating the grandparent's contribution into school activities. A limited connection between the grandparents' voluntary contribution and the educational programme emerged in the analysis as a point of weakness, with a consequent potential difference in objectives. More generally, there is still no centralised coordination of the non-profit's voluntary contributions within the academic world. However, the City of Milan is already working on this point by launching a single organizational office. The objective for next year, in addition to putting measurements into place to resolve these weaknesses, is to **create guidelines** for the non-profit sector and local institutions intending to start up similar initiatives, the community welfare value of which is likely to increase continuously at a time when public resources are in constant decline.

Art and culture

The Terna Prize for Contemporary Art

The sixth edition of the Terna Prize for Contemporary Art, centred on the theme "Art looks ahead", called for submissions on the need to look to the future with new energy and ideas through photography and video art, painting, sculpture and installations. A total of 1,443 works have been submitted and the website has had 20,000 visits. In November the winning works were exhibited in *Paratissima*, a key national and European contemporary art event from Contemporary Art Torino.

Roman kiln in Lonato sul Garda given a new lease of life with Terna

An ancient Roman kiln from the 2nd century B.C., discovered in a Terna electrical substation in Brescia, in the Fornace dei Gorghi area, was returned to the local community in May 2014 on an open day which saw students and citizens taking part. The story of the kiln began with its fortuitous discovery in a town where such happenings are not unusual, testimony to the "industrial" vocation of this area that goes all the way back to the Roman Empire. With the preservation of the local environment in mind, Terna decided to close off the area where the kiln was found from the rest of the substation and hand it over to the Municipality of Lonato del Garda on a free-loan basis, for it to be made into a museum intended for local school tourism.

The signing of the agreement with the Municipality of Lonato coincided with the internal "Vote your Value" initiative, which was launched in 2010 to support the information campaign surrounding the Code of Ethics in order to encourage a responsible and shared approach to the company's social projects.

The values that received the most votes were, in order, legality/honesty, respect and responsibility/intelligent management. The Roman kiln development project in Lonato was linked to this last value.

The objective was achieved by the Lombardy Municipality which, in collaboration with the Lombardy National Heritage Protection Body and Terna, planned to restore and secure the site. These works were completed with the help of regional and European Union funding.

Terna, in addition to freely providing the site, also created the series of panels that illustrate the history of the kiln, from its discovery through to its current restoration. Today the kiln site has no architectural barriers and features a new roof, new brickwork, a lighting system, a convenient parking area, an educational route with information panels, a bookshop and a teaching room to hold workshops during school visits.

The corporate value of "intelligent management" is further shown through the city council's decision to assign the management of the site to a non-profit association. In doing so, a virtuous triangle between the private, public and third sector has been created.

The non-profit is a history, archaeology and nature association named "La Polada" (www.associazionelapolada.it and Facebook page Fornace Romana di Lonato) which opens the site between June and September offering guided tours, booking required, for citizens and visitors and, from September, for school pupils too.

The Roman kiln museum in Lonato is one of two museum kilns and can be reached by the whole Lombardy region. It has become an example of the intelligent management of a shared heritage site that, from now on, can be enjoyed by students and enthusiasts alike.

Other

Social initiatives at all sites

The guidelines of the Company's "Social Action Plan for 2013-2014" are reflected in a programme of initiatives carried out at all company offices in conjunction with non-profit organizations operating in Italy and abroad.

The Association Apurimac has been active in ten main offices with "PePERUncino", an initiative with the purpose of raising funds to send medical teams to villages in the Peruvian Andes.

"Mobile Phones for charity" involved collecting used phones and resulted in a donation to support children's welfare projects by COOPI and Fondazione Don Orione. The "Christmas Market" initiative, trialled in 2013 in the Rome offices, was replicated in all major Terna sites in December 2014, involving over twenty associations working locally with the support of virtual communication teams in the various offices that worked to implement the project.


Terna

2014

Methodological note

Terna
TERNA GROUP

Methodological note

The Sustainability Report as at 31 December 2014 (hereinafter "2014 Sustainability Report") of the Terna Group was prepared according to the GRI-G4 guidelines and the update G4 "Sector Disclosure-Electric Utilities" issued in 2013 by the Global Reporting Initiative (GRI). As in the last few years, the Report was approved by Terna S.p.A.'s Board of Directors and subjected to specific auditing procedures. The assurance report, prepared by PricewaterhouseCoopers, is provided as an annex.
The GRI-G4 guidelines were applied according to the **"CORE" option**.
The process of preparing the document involved identifying the significant aspects to report (see the "Materiality" paragraph below) and presenting the performance achieved by the Group in relation to such aspects and the sustainability targets.
The period of observation is the year 2014; all data refer to the financial year ending on 31 December 2014. At the descriptive level, the significant changes occurring up to 20 March 2015 have also been indicated.
As part of its progressive adoption of the principles outlined by the International Integrated Reporting Council (IIRC), Terna has published, as was the case last year, the Integrated Report coinciding with the 2014 Report on Operations in the Annual Financial Report. This Report also contains numerous topics dealt with in this Sustainability Report. The discussion of the aforementioned topics is the same in both Reports, except where further detail is required pursuant, for example, to specific requirements in the GRI guidelines. The sustainability issues included in the Integrated Report were chosen based on materiality considerations.

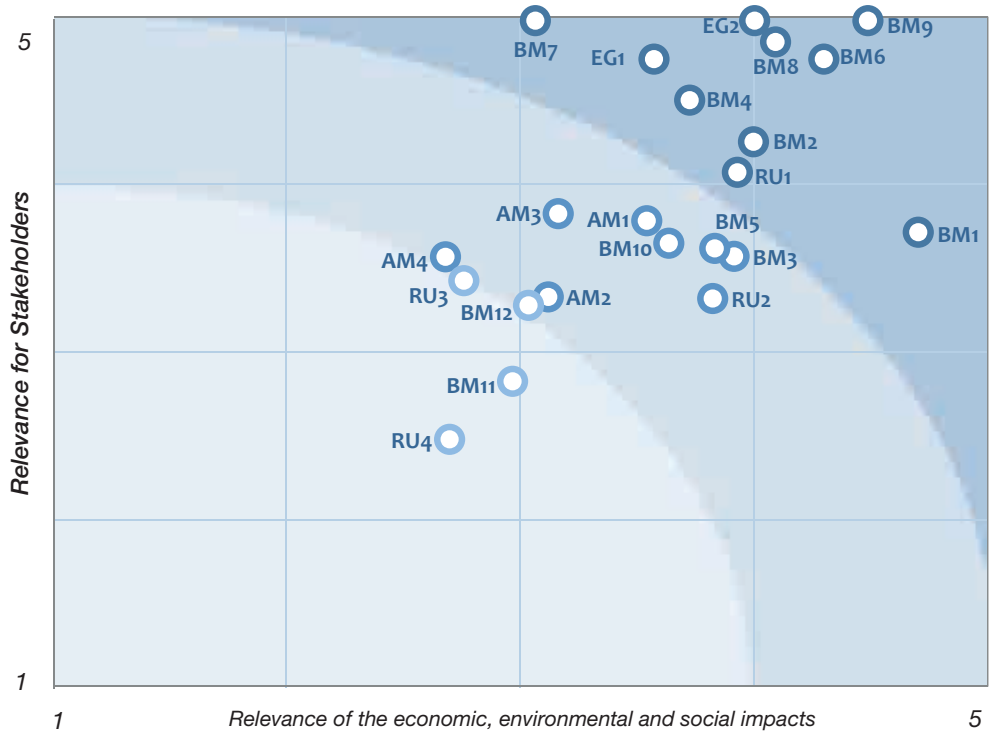
Materiality

The information and GRI indicators to be included in this Report, so as to enable stakeholders to make a balanced assessment of the Group's performance, were chosen on the basis of a careful analysis of the informative objectives of the contents of the Report and its pertinence to Terna's activities and the interests of its stakeholders.
In 2013, Terna launched a process of identification of relevant issues for the company and its stakeholders. The analysis followed the principal of materiality, as described in the GRI-G4 standard and allowed for a materiality matrix to be prepared, as well as a thematic tree (topics grouped together with several levels of detail) on the basis of the parameters of "Relevance for the company" (issues that reflect the significant economic, social and environmental impacts of the organization) and "Relevance for stakeholders" (issues that substantially affect stakeholders' assessments and choices).
In 2014, the matrix was updated, considering new information on relevant issues, as well as their importance to stakeholders and for achieving corporate objectives. In particular, the following activities were undertaken:

- updating the prioritisation of issues in terms of their **"Impact on strategies"**, in other words, the potential for each topic to generate risks and opportunities for corporate objectives in the short, medium and long term. The update was prepared via the analysis of documentation relating to 2014 (e.g. internal policies, the Development Plan and appropriate consultations, the Strategic Plan, press reviews, in-house publication, the Sustainability Plan, BSC and sustainability rating agency questionnaires, etc.). In order to give a more dynamic and forward-looking take on the evaluation, the evidence from the meetings carried out with company departments in 2013 has been included. The **"Relevance for Terna"** was obtained by considering the two results for each topic;
- updating the prioritisation of the issues for the **"Relevance for Stakeholders"** aspect. The update was prepared via the analysis of documentation relating to 2014 (e.g. the AEEGSI Strategic Plan, ANIE Annual Report, AGCM Annual Report, ASSOELETTRICA Report, Greenpeace Report, local and national press reviews, evidence from Terna interviews carried out as part of the new mapping of stakeholders). The "Relevance for Stakeholders" aspect was also supplemented with the evidence from the meetings carried out with company departments in 2013. A qualitative-quantitative model was subsequently developed which allows for the issues to be prioritised via three variables:
  - the relevance of the issue for every category of stakeholder;
  - the priority of each category of stakeholder which considers the new mapping and the relevance of the stakeholders available from 2014;
  - the number of categories of stakeholders interested in the topic.

After having validated the results obtained for the two dimensions, the **Materiality Matrix 2014** was calculated, which highlights the relevant issues and their position in relation to the relevance for corporate strategies (Relevance for Terna) and to the relevance that the company's reference stakeholders attribute to them (Perceived relevance).

THE TERNA GROUP'S MATERIALITY MATRIX 2014



Key

Ethics and governance model

EG1	Efficacy of the governance model
EG2	Integrity and transparency in corporate conduct

Environmental conservation and improvement

AM1	Mitigation of visual impact
AM2	Safeguarding biodiversity
AM3	Management and monitoring of electromagnetic fields
AM4	Emissions management
AM5	Responsible use of resources

Relations with people

RU1	Health and safety of workers and correct working practices
HR2	Developing human resources
HR3	Corporate welfare
RU4	Promoting diversity and equal opportunities

Business Management

BM1	Excellence of economic financial performance
BM2	Containment of service costs
BM3	Developing new business
BM4	Development of interconnections with foreign countries
BM5	Careful risk management
BM6	Responsible planning of the NTG
BM7	Local stakeholder engagement to develop the NTG
BM8	Innovation and integration of renewable sources
BM9	Quality, safety and continuity of the energy supply
BM10	Fairness in relations with electricity operators
BM11	Responsible management of the supply chain
BM12	Social commitment and positive impact on the country

In order to clarify the relationship between the materiality matrix (in which the Terna's key priorities are found) and the handling of the G4 indicators and aspects in the Sustainability Report, one or more Terna key priorities of 2nd or 3rd level has been attributed to each G4 indicator, with the respective values for "Relevance for Terna" and "Relevance for Stakeholders". The rating for each G4 indicator was then calculated and, by grouping the indicators by aspect, a relevance evaluation for each G4 aspect was obtained.
This allowed for the "G4 Materiality Matrices" to be calculated for each GRI-G4 information context (economic, environmental and social), which illustrate the position of the various aspects on the axes of "Relevance for Terna" and "Relevance for Stakeholders" (please see pages 82, 99, 120 and 132). Lastly, we note that the "Aspects" relative to management of the "reporting mechanisms" are not shown in the individual matrices but dealt with together in the relative paragraph on page 58.

Structure of the Report

The chapter divisions in the Report are the same as in previous years. After the Terna's profile and relations with stakeholders comes the standard division of the issues into four main sections, corresponding to the triple bottom line – economic, environmental, and social – typical of sustainability reports, preceded by the section on responsibility for the electric service, which is specific to Terna.
Each chapter begins with an explanation of the managerial approach to the specific area. This is followed by several thematic sections, which are integrated into a single text, giving the precise information required by the GRI Guidelines and the in-depth analysis that Terna considers important to provide. In order to make the Report easier to read, the information regarding the GRI indicators is signalled by the related code in the margin of the text, next to the relevant passages or next to the title if the entire section is considered relevant.
The Tables of Indicators, summarising the GRI indicators and supplementing them with others, complete the Report. For the meaning of technical terms specific to the electricity industry, see the Glossary on the website www.terna.it on the "Tools" page using the following link: www.terna.it/default/Home/sostenibilita2/strumenti_sostenibilita.aspx.

Scope and indicators

The data and information in the 2014 Sustainability Report refer to the Terna Group, that is to say the scope which includes Terna S.p.A. and the companies that were consolidated in the Consolidated Financial Statements for the year ending 31 December 2014, except – unless otherwise stated – the Tamini Group, acquired by the subsidiary Terna Plus on the 20 May 2014. In accordance with the principle of materiality, the data included in the Sustainability Report include all the companies with a significant impact on sustainability (i.e. by size or rather the number of employees; or by potential impact on the environment and society or rather the number of operations/activities which took place during the year), over which Terna S.p.A. exercises control, directly or indirectly, that is to say for which it has the power to determine the financial and operational policies. There are no relations with joint-ventures, subsidiaries or leased businesses that could significantly influence the boundary or the comparability of the environmental and social data. The Group's work abroad – including that of the Montenegrin Terna Crna Gora d.o.o. – did not involve operating activities for the whole of 2014 with significant external impacts (e.g. activities involving construction infrastructure). For this reason, foreign activities have not been included (unless otherwise stated) in the calculation of the indicators published in this Report.
The data were calculated precisely on the basis of the entries in the general accounting and Terna's other information systems. In the case of estimates in determining the indicators, the procedure followed is stated.
All the GRI indicators published are listed below in the GRI-G4 Content Index, which also includes any limitations relative to the requirements.
In comparing this Report to that of 2013, the following should be noted:

- the different definition of days not worked relative to injuries used to calculate the Lost-Day Rate (indicator G4-LA6). The days not worked related to injuries occurring in 2014 were considered, together with any continued absence related to injuries occurring during the previous years, following the criterion of annual accrual of days of absence. This method was also adopted to recalculate the 2013 and 2012 Lost-Day Rates. For this reason, the data shown in the table differ from those published previously.

Comparative analysis of sustainability performance

Convinced that a comparison of environmental, social and governance performance is of interest, not only to the Company itself, but also to its stakeholders, certain comparisons between Terna's results and those of other companies are included in the 2014 Sustainability Report, as was the case in previous years. For 2014, the comparisons were focused on four indicators: CO_2 emissions, SF_6 leakage incidence rate, hours of training per capita provided to employees and the turnover rate on termination. The reduction of the indicators for the comparative analysis, compared with previous years, is mainly derived from the updating of the materiality matrix which gives less relevance to the excluded issues (water consumption, waste production and the gender pay gap).

Listed below are the main criteria adopted in the analysis, as an introduction to the reading and interpretation of the comparisons of individual indicators in the Report:

- three panels of companies were identified: the first was composed of the European transmission system operators and the major non-European operators in terms of kilometres of lines managed; the second, multi-sectoral in nature, is made up of large Italian companies (the 40 listed companies of the FTSE-MIB at 21 January 2015); the third formed by the best international performers in the "Electric Utilities - ELC" sector (identified by the RobecoSAM sustainability rating agency and included in the Dow Jones Sustainability World Index of September 2014). The purpose of the three panels is to guarantee, also relative to the type of indicator reviewed, a comparison between companies with the same operational characteristics, an Italian comparison, and a comparison with top international performers in the same sector.
- the companies considered from among those in the three panels were those which publicise the information necessary for comparisons either on their websites, through the Sustainability Report (even if not prepared following the GRI guidelines) or through other documentation (HSE Report, Financial Report, etc.). This led to a reduction in the sample compared to the number of companies in the starting panel;
- the comparative analysis entails reference to 2013 data, since the comparisons were drafted when the 2014 Reports were still being prepared, as was the case for Terna.

It must be noted that, despite the exclusion of data which were explicitly not consistent, in numerous cases doubts remain as to the actual comparability between companies, especially in instances where significant discrepancies exist between the declared data of some companies and the average value of the reference Group.

In the CO_2 emissions comparison, the data are expressed as physical quantities in absolute terms and therefore show very different levels depending on the type of production activity and the size of the company. In this case, the comparison provides information on the varying significance of the environmental aspects being considered for the individual companies, but does not fulfil the task of making the performance comparable.

For further details, please see the Terna website (where the comparisons regarding water consumption, waste production and the gender pay gap are also published) and the note "Comparing sustainability performance: Terna's experience" in the study "Beyond the financial figures: companies and collective well-being", drafted by the CSR Manager Network and ISTAT, and available on their respective websites.

GRI-G4 content index

The GRI-G4 Content Index is a table showing each indicator and the associated page references where related information can be found in the document. The "External check" column shows where the indicator is part of the sample subject to regular checks as part of a thorough auditing process, known as "Limited Assurance", described on pages 174-176.

		Page	External Assurance (Limited)
1. Strategy and Analysis			
	G4-1	10-11	•
	G4-2	34-35, 39-41	•
2. Organizational Profile			
	G4-3	26	•
	G4-4	26-29, 31-34	•
	G4-5	26-29	•
	G4-6	31-34	•
	G4-7	30	•
	G4-8	31-34	•
	G4-9	28	•
	G4-10	121-122	•
	G4-11	52, 90	•
	G4-12	89-92	•
	G4-13	26-30, 89-92, 160	•
	G4-14	100-103	•
	G4-15	35-36, 133	•
	G4-16	51, 133	•
3. Identified Material Aspects and Boundaries			
	G4-17	140-143	•
	G4-18	140-143	•
	G4-19	82, 99, 120, 132, 142-147	•
	G4-20	82, 99, 120, 132	•
	G4-21	140-143	•
	G4-22	140-143	•
	G4-23	140-143	•
4. Stakeholder engagement			
	G4-24	46-47	•
	G4-25	46-47	•
	G4-26	46-47	•
	G4-27	46-56	•
5. Report Profile			
	G4-28	140-143	•
	G4-29	140-143	•
	G4-30	140-143	•
	G4-31	58, 140-143	•
	G4-32	140-143, 144-149	•
	G4-33	140-143, 174-176	•
6. Governance			
	G4-34	31; 333-335, 345-356, 357-364[2]	•
	G4-35	31, 36; 333, 352-353[2]	•
	G4-36	31, 36; 352-353[2]	•
	G4-37	377-382[2]	
	G4-38	368[2]	
	G4-39	354-356[2]	
	G4-40	341-344[2]	
	G4-41	371-372[2]	
	G4-42	31, 36; 352-353[2]	•
	G4-44	364-371[2]	
	G4-45	87-88; 361-371[2]	•
	G4-46	361-371[2]	
	G4-47	36, 140	•
	G4-48	36, 140	•
	G4-51	Annual Remuneration Report[3]	
	G4-52	Annual Remuneration Report[3]	
	G4- 53	Annual Remuneration Report[3]	
7. Ethics and Integrity			
	G4-56	35-37; 361-369[2]	•
	G4-57	58; 44-45[1]	•
	G4-58	58; 44-45[1]	•

(1) The pages refer to the Code of Ethics, available at www.terna.it
(2) Page numbers refer to the "Report on Corporate Governance and Ownership Structures" in the 2014 Annual Financial Report of the Terna Group, available at www.terna.it
(3) The "Annual Remuneration Report" is available on the website www.terna.it

LIST OF G4 MATERIAL PERFORMANCE INDICATORS PUBLISHED

Economic Aspects

Code	Indicator/Aspect	Page	Limitation and notes	External Assurance (Limited)
	ECONOMIC PERFORMANCE	82-83		•
G4-EC1	Direct economic value generated and distributed	83, 134, 158		•
G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	88		
G4-EC3	Coverage of the organization's defined benefit plan obligations	126, 216-217[1]		
G4-EC4	Financial assistance received from government	84		
	INDIRECT ECONOMIC IMPACTS	82, 84, 134, 135		•
G4-EC7	Impact of infrastructure investments and services supported	68-69, 134		•
G4-EC8	Understanding and describing significant indirect economic impacts, including the extent of impacts	84		•
	PROCUREMENT PRACTICES	82, 89-94		•
G4-EC9	Proportion of spending on local suppliers at significant locations of operation	89, 160		•

Environmental Aspects

Code	Indicator/Aspect	Page	Limitation and notes	External Assurance (Limited)
	MATERIALS	98-99, 112, 113		•
G4-EN1	Materials used by weight or volume	112, 162		•
G4-EN2	Percentage of materials used that are recycled input materials	162		•
	ENERGY	62, 98-99, 105		•
G4-EN3	Energy consumption within the organization by primary energy source	105, 162		•
G4-EN5	Energy intensity	105	Available as of 2014	•
G4-EN6	Reduction of energy consumption	110		
	BIODIVERSITY	98-99, 103-104		•
G4-EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	103, 163		
G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	68, 103-104		•
G4-EN13	Habitats protected or restoredw	102		
	EMISSIONS	98-99, 105		•
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	106, 161		•
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	106, 161		•
G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	107, 161		•
G4-EN19	Initiatives to reduce greenhouse gas (GHG) emissions and reductions achieved	108-110		
G4-EN20	Emissions of ozone-depleting substances (ODS)	108, 161		•
G4-EN21	NOX, SOX, and other significant air emissions	108, 161		•
	EFFLUENTS AND WASTE	98-99, 112, 113		•
G4-EN23	Total weight of waste by type and disposal method	113-114, 163		•
G4-EN24	Total number and volume of significant spills	100		•

[1] Page numbers refer to the "2014 Annual Financial Report" of the Terna Group, available online at www.terna.it

Code	Indicator/Aspect	Page	Limitation and notes	External Assurance (Limited)
	PRODUCTS AND SERVICES	98-99, 100		•
G4-EN27	Mitigation of environmental impacts of products and services	68-69, 103-104		
	COMPLIANCE	35-38, 98-99, 100		•
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	57, 100		•
	TRANSPORT	98-99, 110		•
G4-EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	110, 161		
	OVERALL	98-99, 114-115		•
G4-EN31	Total environmental protection expenditures and investments by type	114-115		•
	SUPPLIER ENVIRONMENTAL ASSESSMENT	89-94		•
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	89-94	Available as of 2014	•
G4-EN33	Percentage of suppliers identified as having significant actual and potential negative environmental impacts and actions taken	89-94	Available as of 2014	•
	ENVIRONMENTAL GRIEVANCE MECHANISMS	58		•
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	156		•

Social Aspects

Labor practices and decent work

Code	Indicator/Aspect	Page	Limitation and notes	External Assurance (Limited)
	EMPLOYMENT	89-94, 120, 121		•
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	121, 164, 165		•
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	125		
G4-LA3	Return to work and retention rates after parental leave, by gender	126		•
	LABOR/MANAGEMENT RELATIONS	52-53, 120		•
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	53		
	OCCUPATIONAL HEALTH AND SAFETY	120, 125, 128-129		•
G4-LA5	Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs	52		
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	129-130, 167		•
G4-LA8	Health and safety topics covered in formal agreements with trade unions	52		
	TRAINING AND EDUCATION	120, 123-125		•
G4-LA9	Average hours of training per year per employee by gender, and by employee category	165		•
	DIVERSITY AND EQUAL OPPORTUNITY	120, 127-128		•
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	121, 127, 155 164, 166		•

Code	Indicator/Aspect	Page	Limitation and notes	External Assurance (Limited)
	EQUAL REMUNERATION FOR WOMEN AND MEN	120, 127-128		•
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	127, 166		•
	SUPPLIER ASSESSMENT FOR LABOR PRACTICES	89-94		•
G4-LA14	Percentage of new suppliers that were screened using labor practices criteria	89-94	Available as of 2014	•
G4-LA15	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	89-94	Available as of 2014	•
	LABOR PRACTICES GRIEVANCE MECHANISMS	58		•
G4-LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	156		

Human rights

Code	Indicator/Aspect	Page	Limitation and notes	External Assurance (Limited)
	INVESTMENT	87-88, 91, 120, 130		•
G4-HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	130		•
G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	38, 130, 165		•
	NON-DISCRIMINATION	120, 127-128, 130		•
G4-HR3	Total number of incidents of discrimination and corrective actions taken	130		•
	ASSESSMENT	52, 120		•
G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	52, 130		•
	SUPPLIER HUMAN RIGHTS ASSESSMENT	89-94		•
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	89-94	Available as of 2014	•
G4-HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken	89-94	Available as of 2014	•
	HUMAN RIGHTS GRIEVANCE MECHANISMS	58		•
G4-HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	156		

Society

Code	Indicator/Aspect	Page	Limitation and notes	External Assurance (Limited)
	LOCAL COMMUNITIES	54-56, 68-69, 132		•
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	54-56, 68-69		
G4-SO2	Operations with significant actual and potential negative impacts on local communities	100-102, 132		
	ANTI-CORRUPTION	37-38, 132, 134		•
G4-SO3	Percentage of operations assessed for risks related to corruption and the significant risks identified	37-38		•
G4-SO4	Communication and training on anti-corruption policies and procedures	38, 165		•

Code	Indicator/Aspect	Page	Limitation and notes	External Assurance (Limited)
G4-SO5	Confirmed incidents of corruption and actions taken	38, 57		•
	POLITICAL CONTRIBUTIONS	48, 132		•
G4-SO6	Total value of political contributions by country and recipient/ beneficiary	134		•
	ANTI-COMPETITIVE BEHAVIOR	27, 94, 132		•
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	57		•
	COMPLIANCE	35-38, 132		•
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	57		•
	SUPPLIER ASSESSMENT FOR IMPACTS ON SOCIETY	89-94		•
G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society	89-94		•
G4-SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken	89-94		•
	GRIEVANCE MECHANISMS FOR IMPACTS ON SOCIETY	58		•
G4-SO11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	156		

Product Responsibility

Code	Indicator/Aspect	Page	Limitation and notes	External Assurance (Limited)
	PRIVACY	62, 64, 82		
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	64		
	COMPLIANCE	35-38, 82		•
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	57		•

LIST OF G4 MATERIAL PERFORMANCE INDICATORS PUBLISHED ELECTRIC UTILITIES SECTOR SUPPLEMENT (EUSS)

Code	Indicator/Aspect	Page	Limitation and notes	External Assurance (Limited)
	ORGANIZATIONAL PROFILE	26-29, 31-34		•
EU3	Number of residential, industrial, institutional and commercial customer accounts	94, 160		
EU4	Length of above and underground transmission and distribution lines by regulatory regime	157		
	AVAILABILITY AND RELIABILITY	33-34, 63 67-68, 75, 82		•
	RESEARCH AND DEVELOPMENT	74-75, 76, 82		•
	SYSTEM EFFICIENCY	62, 82		•
EU12	Transmission and distribution losses as a percentage of total energy	107		•
	BIODIVERSITY	98-99, 103-104		•
EU13	Biodiversity of offset habitats compared to the biodiversity of the affected areas	101, 103-104		

Code	Indicator/Aspect	Page	Limitation and notes	External Assurance (Limited)
	EMPLOYMENT	89-94, 120 121, 123		•
EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region	122		
EU17	Days worked by contractor and subcontractor employees involved in construction, operation & maintenance activities	91		•
EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	92		•
	LOCAL COMMUNITIES	54-56, 68-69, 132		•
EU22	Number of people physically or economically displaced, broken down by type of project, generation plants or transmission line	132		•
	DISASTER/ EMERGENCY PLANNING AND RESPONSE	63-64, 132		•
	CUSTOMER HEALTH AND SAFETY (COMMUNITIES)	98, 103		•
EU25	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases	57		•
	ACCESS TO SERVICE	33-34, 73		
EU28	Power outage frequency (SAIFI)	64-66		
EU29	Average power outage duration (SAIDI)	64-66		

LIST OF OTHER G4 PERFORMANCE INDICATORS PUBLISHED

In line with previous years, it has been decided to publish some indicators despite the aspects they illustrate being assessed as under the materiality threshold (see the section on the materiality analysis on pages 140-142).

Code	Indicator/Aspect	Page	External Assurance (Limited)
G4-EC6	Proportion of senior management hired from the local community at significant locations of operation	128	•
G4-EN8	Total water withdrawal by source	164	•
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	35, 91, 130	
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	35, 91, 130	
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	35, 91, 130	
G4-HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken	130	

Correspondence between the GRI-G4 indicators and the Global Compact principles

This table shows the correlation between the GRI-G4 performance indicators applicable to Terna and each of the ten principles of the Global Compact. This is to facilitate the search for relevant information for stakeholders interested in evaluating Terna's implementation of the principles.

AREA	Global Compact Principle	GRI G4 Aspect and Indicators	Page of the Report
HUMAN RIGHTS	Principle 1 Businesses should **support and respect** the protection of internationally proclaimed **human rights**.	**Human rights** "Investment" Aspect: G4-HR2 "Indigenous Rights" Aspect: G4-HR8 "Assessment" Aspect: G4-HR9 "Grievance Mechanisms" Aspect: G4-HR12	38, 130, 165 130 52, 130 156
		Society "Local Communities" Aspect: G4-SO1, G4-SO2 G4-SO10	54-56, 68-69 100-102, 132 89-94
	Principle 2 Businesses should **make sure they are not complicit in human rights abuses**.	**Human rights** "Investment" Aspect: G4-HR1 "Supplier Human Rights Assessment" Aspect: G4-HR10; G4-HR11	130 89-94
LABOUR	Principle 3 Businesses should **uphold the freedom of association** and the effective recognition of the **right to collective bargaining**.	**Human rights** "Freedom of Association" and "Collective Bargaining" Aspect: G4-HR4	35, 91, 130
		Labour "Labour/Management Relations" Aspect: G4-LA4	53
	Principle 4 Businesses should uphold the **elimination of all forms of forced** and compulsory **labour**.	**Human rights** "Forced or Compulsory Labour" Aspect: G4-HR6	35, 91, 130
	Principle 5 Businesses should uphold the **effective abolition of child labour**.	**Human rights** "Child Labour" Aspect: G4-HR5	35, 91, 130
	Principle 6 Businesses should uphold the **elimination of discrimination** in respect of employment and occupation.	**Economic** "Market Presence" Aspect: G4-EC6	128
		Labour Practices and Decent Work "Employment" Aspect: G4-LA1; G4-LA3 "Training and Education" Aspect: G4-LA9 "Diversity and Equal Opportunity" Aspect: G4-LA12 "Equal Remuneration for Women and Men" Aspect: G4-LA13	121, 164, 165 126; 165 121, 127, 155 164, 166 127, 166
		Human rights "Non-discrimination" Aspect: G4-HR3	130

AREA	Global Compact Principle	GRI G4 Aspect and Indicators	Page of the Report
ENVIRONMENT	Principle 7 Businesses should support a **precautionary approach to environmental challenges**.	**Economic** "Economic Performance" Aspect: G4-EC2	88
		Environment "Materials" Aspect: G4-EN1 "Energy" Aspect: G4-EN3 "Water" Aspect: G4-EN8 "Emissions" Aspect: G4-EN15; G4-EN16 G4-EN17; G4-EN20; G4-EN21 "Products and Services" Aspect: G4-EN27 "Overall" Aspect: G4-EN31	112, 162 105, 162 162 106, 161 107, 108, 161 68-69, 103-104 114-115
	Principle 8 Businesses should undertake initiatives to promote **greater environmental responsibility**.	**Environment** "Materials" Aspect: G4-EN1; G4-EN2 "Energy" Aspect: G4-EN3 "Water" Aspect: G4-EN8 "Biodiversity" Aspect: G4-EN11; G4-EN12; G4-EN13 "Emissions" Aspect: G4-EN15; G4-EN16; G4-EN17 G4-EN19; G4-EN20; G4-EN21 "Effluents and Waste" Aspect: G4-EN23; G4-EN24 "Products and Services" Aspect: G4-EN27 "Compliance" Aspect: G4-EN29 "Transport" Aspect: G4-EN30 "Overall" Aspect: G4-EN31 "Supplier Environmental Assessment" Aspect: G4-EN32; G4-EN33 "Environmental Grievance Mechanisms" Aspect: G4-EN34	112 105, 162 162 103, 162, 163 68, 103-104 102 106, 161; 107 108-110; 163 113-114, 163 100; 68-69 103-104; 57 100; 110, 163 114-115 89-94 156
	Principle 9 Businesses should encourage the **development** and **diffusion of environmentally friendly technologies**.	**Environment** "Energy" Aspect: G4-EN3; G4-EN5; G4-EN6 "Emissions" Aspect: G4-EN19 "Products and Services" Aspect: G4-EN27 "Overall" Aspect: G4-EN31	105, 162; 110 108-110 68-69, 103-104 114-115
ANTI-CORRUPTION	Principle 10 Businesses should work **against corruption in all its forms**, including extortion and bribery.	**Society** "Anti-corruption" Aspect: G4-SO3; G4-SO4; G4-SO5 "Public Policy" Aspect: G4-SO6	37-38; 165 38, 57 134

Source: official site of the Global Compact (www.unglobalcompact.org/resources/306) ***"Making the Connection:** Using the **GRI G4 Guidelines** to Communicate Progress on the **UN Global Compact Principles",*** May 2013.

2014

Terna
TERNA GROUP

TABLES OF INDICATORS

The following tables present the indicators provided for by the G4 “Sustainability Reporting Guidelines”, together with additional indicators which Terna believes it is important to publish in order to show its Corporate Social Responsibility performance. Some data already presented in the body of the Report are also shown for completeness.
For each indicator, the tables show:

- the unit of measure;
- the figures for 2014, 2013 and 2012;
- if significant, the absolute change between 2014 and 2012;
- if significant, the percentage change between 2014 and 2013. It is possible that this change does not correspond to that calculable from the tabulated figures which are generally rounded to one decimal place.

Data are usually calculated as of 31 December and flow indicators regard the entire year.
To facilitate reading the indicators, the following table shows the units of measure in which they are expressed. See also the table of acronyms found after the indicators.

UNITS OF MEASURE KEY

#	Category
%	Percentage
€	Euro
€/000	Thousands of Euro
€/Mln	Millions of Euro
GJ	Gigajoule
GWh/year	Gigawatt hours per year
GWh	Gigawatt hours
H	Hours
Kg	Kilograms
Km	Kilometres
Min	Minutes
MW	Megawatt
no.	Number
Tonnes	Tonnes
Tonnes of CO_2	Tonnes of carbon dioxide
Y	Years

Terna's Profile

Corporate Governance

G4-LA12

	Units	2014	2013	2012	Change 13-14	% Change 2013-14
BOARD OF DIRECTORS						
Total members of BoD	no.	9	9	9	-	-
Presence of independent Directors in the BoD	no.	6	6	6	-	-
Presence of Directors chosen by minority shareholders	no.	3	3	3	0	-
BoD meetings	no.	10	6	7	4	66.7%
Remuneration Committee meetings	no.	4	3	4	1	33.3%
Audit, Risk and Corporate Governance Committee Meetings [1]	no.	3	4	6	-1	-25.0%
Related-Party Transactions Committee Meetings	no.	3	1	1	2	200.0%
Appointments Committee Meetings[2]	no.	1				
COMPOSITION OF THE BOARD OF DIRECTORS						
Men	%	77.8	100.0	100.0	-22.2	-22.2%
Women	%	22.2	0.0	0.0	22.2	-
Under 30 years old	%	0.0	0.0	0.0	0.0	-
Between 30 and 50 years old	%	77.8	33.3	33.3	44.4	133.3%
Over 50 years old	%	22.2	66.7	66.7	-44.4	-66.7%

(1) On the 27 May 2014, the Board of Directors of Terna S.p.A. added responsibilities concerning the system of Corporate Governance to the previous responsibilities of the "Audit and Risk Committee". Therefore, the Committee took on the name of "Audit, Risk and Corporate Governance Committee".

(2) The Appointments Committee was established by Terna S.p.A. with the resolution of 27 May 2014.

Relations with stakeholders

G4-HR12
G4-SO11
G4-EN34
G4-LA16

Reports and complaints

	Units	2014	2013	2012	Change 13-14	% Change 13-14%
IMPLEMENTATION OF THE CODE OF ETHICS						
Total reports received[1]	no.	1	3	3	-2	-66.7%
Areas of reports received[2]						
- Employee management		1	2		-1	-50.0%
- Supplier management			1	1	-1	-100.0%
- Environment and Safety						
- Corruption/Corporate loyalty				1		
- Terna's/Other compliance				1		
Outcome of reports	no.					
- Unfounded			3	2	-3	-100.0%
- Provision[3]				1		
- Under assessment		1		0	1	

(1) The report from 2014 went to the Ethics Committee; of the three reports from 2013, two went to the Ethics Committee and one to the Audit Committee; in 2012, two went to the Audit Committee and one to the Ethics Committee.
(2) Each report or violation may regard more than one management area.
(3) The provision may consist in applying a sanction and/or in other action – such as reviewing procedures, internal monitoring, etc. – aimed at avoiding that the event that caused the report reoccurs.

	Units	2014		2013		2012		Change 2013-14	% Change 2013-14
ENVIRONMENTAL COMPLAINTS		Received	Processed	Received	Processed	Received	Processed	Received	Received
Total complaints received	no.	36	31	34	28	55	44	2	5.9%
Environmental aspect of complaints received									
- Waste	no.	1	1	1	1	2	2		
- Noise	no.	9	6	7	6	6	4	2	28.6%
- Biodiversity	no.	0	0	0	0	0	0		
- Landscape	no.	1	1	1	0	0	0		
- Electrical and magnetic fields	no.	17	17	12	11	25	22	5	41.7%
- Lighting	no.								
- Vegetation control	no.	5	4	7	5	7	7	-2	-28.6%
- Other	no.	3	2	6	5	15	9	-3	-50.0%

Legal disputes

	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
ENVIRONMENTAL LEGAL DISPUTES						
Pending litigation	no.	117	131	132	-14	-10.7%
Existing litigation	no.	8	16	13	-8	-50.0%
Settled litigation	no.	22	17	19	5	29.4%
SUPPLIER LITIGATION						
Pending litigation	no.	23	13	22	10	76.9%
Existing litigation	no.	2	1	0	1	100.0%
Settled litigation	no.	2	0	2	2	-
CUSTOMER LITIGATION						
Pending litigation	no.	14	14	14	0	-
Existing litigation	no.	0	0	0	0	-
Settled litigation	no.	0	0	0	0	-
LITIGATION WITH EMPLOYEES						
Pending litigation with employees	no.	6	10	16	-4	-40.0%
Existing litigation with employees	no.	4	10	1	-6	-60.0%
Settled litigation with employees	no.	8	16	10	-8	-50.0%

Responsibility for the electric service

The Grid

EU4

	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
ELECTRICAL SUBSTATIONS[1]						
380 kV						
substations	no.	157	152	150	5	3.3%
power transformed	MVA	108,098	105,698	103,648	2,400	2.3%
220 kV						
substations	no.	150	150	154	-	-
power transformed	MVA	29,826	30,171	30,227	-345	-1.1%
Lower voltages (≤150 kV)						
substations	no.	184	173	164	11	6.4%
power transformed	MVA	3,152	2,992	3,077	160	5.3%
Total						
substations	no.	491	475	468	16	3.4%
power transformed	MVA	141,076	138,861	136,952	2,215	1.6%
POWER LINES[1]						
380 kV						
length of three-phase power lines	km	12,099	11,824	11,810	275	2.3%
line length	km	11,086	10,908	10,894	178	1.6%
220 kV						
length of three-phase power lines	km	11,700	11,915	11,987	-215	-1.8%
line length	km	9,456	9,569	9,638	-113	-1.2%
Lower voltages (≤150 kV)						
length of three-phase power lines	km	40,094	39,855	39,652	239	0.6%
line length	km	37,330	37,064	36,908	266	0.7%
Total						
length of three-phase power lines	km	63,893	63,595	63,448	298	0.5%
in underground cable	km	1,567	1,514	1,369	53	3.5%
in undersea cable	km	1,348	1,348	1,348	-	-
in 200, 400 and 500 kV direct current	km	2,066	2,066	2,066	-	-
line length	km	57,872	57,541	57,440	331	0.6%
in underground cable	km	1,567	1,514	1,369	53	3.5%
in undersea cable	km	1,348	1,348	1,348	-	-
in 200, 400 and 500 kV direct current	km	1,746	1,746	1,746	-	-
Proportion of direct-current connections						
- three-phase power lines	%	3.2	3.2	3.3	-	-
- lines	%	3.0	3.0	3.0	-	-
GRID EFFICIENCY						
Power supplied	GWh/year	309,006	[2]318,475	328,220	-9,469	-3.0%

(1) The data refer to the entire scope of the Group including, in addition to the plants belonging to Terna S.p.A. and Terna Rete Italia S.r.l., lower voltage installations (≤150 kV) belonging to Terna Plus.

(2) The 2013 figure was recalculated with the final data from the same year, for this reason it is different from the one given.

Economic responsibility

G4-EC1

Value Added

DETERMINATION AND REDISTRIBUTION OF VALUE ADDED[1]	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
Non-subordinate personnel	€	2,108,765	2,314,044	2,222,526	-205,279	-9%
Employees: direct remuneration	€	269,713,726	216,983,787	209,498,296	52,729,939	24%
Employees: indirect remuneration	€	68,632,924	63,293,832	64,045,853	5,339,092	8%
A - Staff Remuneration	**€**	**340,455,415**	**282,591,663**	**275,766,675**	**57,863,752**	**20%**
Direct taxes	€	335,703,743	423,935,663	412,696,487	-88,231,920	-21%
Indirect taxes	€	19,956,191	9,855,050	24,701,769	10,101,141	102%
B - Remuneration of public authorities	**€**	**355,659,934**	**433,790,713**	**437,398,256**	**-78,130,779**	**-18%**
Short-term loan expense	€	58	230	468	-172	-75%
Interest on bank loans	€	80,340,393	78,682,981	82,220,620	1,657,412	2%
Interest on bonds	€	109,326,040	112,084,212	129,226,227	-2,758,172	-2%
C - Return on borrowed capital	**€**	**189,666,491**	**190,767,423**	**211,447,315**	**-1,100,932**	**-1%**
Dividends[2]	€	401,998,400	401,998,400	401,998,400	-	-
D - Return on risk capital	**€**	**401,998,400**	**401,998,400**	**401,998,400**	**-**	**-**
Allocations to reserves	€	142,535,590	111,606,710	61,541,976	30,928,880	28%
E - Remuneration of the Company	**€**	**142,535,590**	**111,606,710**	**61,541,976**	**30,928,880**	**28%**
Total net value added	**€**	**1,430,315,830**	**1,420,754,909**	**1,388,152,622**	**9,560,921**	**1%**

(1) The amounts relative to the creation and distribution of the Value Added are taken from the Consolidated Financial Statements, which were prepared according to the international accounting standards IFRS/IAS. Specifically, the Terna Group has used the IFRS/IAS international accounting standards since 2005.

(2) The 2014 dividends refer to the advance distributed in November 2014 (140.7 million Euro) and to the balance proposed to the Meeting of the BoD in the session on 26 March 2015 (261.3 million Euro).

Shareholders

	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
COMPOSITION OF SHAREHOLDER BASE						
CDP Reti S.p.A.[1]	%	29.85	29.85	29.85	-	-
Other Institutional + Retail Investors	%	70.15	70.15	70.15	-	-
Of which Main Institutional Investors[2]	%	2.01	0	0	2.01	-
SOCIALLY RESPONSIBLE INVESTMENTS[3]						
% of SRI of share capital held by institutional investors	%	10	10	8	-	-
SHARE PERFORMANCE						
Financial share performance	%	3.5	20.1	16.1	-16.6	-82.5%
Dividend yield[4]	%	5.3	5.7	6.7	-0.4	-7.4%
Terna in the stock exchange indices						
FTSE Italia ALL SHARE	%	1.9	1.9	1.8	0.0	-2.1%
FTSE MIB	%	2.1	2.2	2.1	-0.1	-4.1%
SHAREHOLDER'S RETURN						
EPS (Earnings per share)	€	0.271	0.256	0.231	0.02	5.9%
DPS (Dividend per share)	€	0.200	0.200	0.200	-	-
Total Shareholder Return (TSR)						
- from IPO	%	317.7	283.5	200.6	34.2	12.1%
- from the beginning of the year	%	8.92	27.59	24.91	-18.67	-67.7%
COMMUNICATION WITH SHAREHOLDERS						
Meetings/conference calls with investors (buy-side)	no.	100	138	214	-38	-27.5%
Meetings/conference calls with investors (sell-side)	no.	233	235	283	-2	-0.9%
Meetings with dedicated investors and/or with space for CSR issues	no.	20	15	5	5	33.3%
Retail shareholders' requests for information[5]	no.	11	20	21	-9	-45.0%
ECONOMIC PERFORMANCE[6]						
Revenue	€/mln	1,996	1,896	1,806	100	5%
EBITDA	€/mln	1,492	1,488	1,390	3	0%
EBIT	€/mln	1,011	1,038	970	-27	-3%
EBT	€/mln	883	938	876	-55	-6%
Net profit	€/mln	545	514	464	31	6%

(1) Subsidiary of Cassa Depositi e Prestiti S.p.A.
(2) Shareholders who – on the basis of the available information and on the communications received from Consob – have a stake in Terna S.p.A. share capital above the thresholds indicated in Consob Resolution No 11971/99.
(3) Investments made on the basis of ethical/ESG (Environmental, Social and Governance) criteria, as well as on the basis of traditional criteria. Further details on socially responsible investors are given on page 30 in the "Profile" chapter of this Report.
(4) The value was calculated as the ratio between the dividend relative to the financial year and the average reference price in December.
(5) The figure includes the requests received via e-mail.
(6) The data refer to the 2014 Reclassified Income Statement.

Lenders

	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
DEBT						
Financial debt	€/mln	6,968	6,698	5,855	270	4.0%
Equity	€/mln	3,093	2,941	2,794	152	5.0%
Debt to Equity	%	225	225	210	-	-
EUROPEAN INVESTMENT BANK (EIB) LOANS						
Residual debt relative to EIB loans	€/mln	1,707	1,216	1,286	491	40%

G4-EC9

Suppliers

	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
NUMBER AND QUALIFICATION OF SUPPLIERS						
Number of suppliers						
- Number of contracted suppliers	no.	2,003	2,026	1,951	-23	-1%
Procurement of materials and services						
- Supplies	€/mln	260	406	1.257	-146.2	-36%
- Works	€/mln	235	234	261	1.4	1%
- Services	€/mln	136	117	115	19.1	16%
Provenance of suppliers (% of total procurement)						
- Italian suppliers	%	92	77	64	15	20%
- Foreign suppliers	%	8	23	36	-15	-65%
Awarding procedures adopted[1]						
- European tenders	%	62	46	71	16	36%
- Non-European tenders	%	17	41	23	-24	-59%
- Fixed	%	21	14	6	8	56%
Qualification						
- Companies qualified for entry in supplier register	no.	360	369	373	-9	-2%
- Qualified categories	no.	44	44	41	0	-
- Instances of monitoring	no.	703	715	508	-12	-2%

(1) This is the percentage on the amounts awarded; for 2011, the figure did not include non-regulated activities related to the photovoltaic project.

EU3

Regulated-market customers

	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
CUSTOMER PORTFOLIO						
Interruptible users	no.	290	322	234	-32	-9.9%
Distributors directly connected to the NTG	no.	25	24	24	1	4.2%
Input dispatching users (Producers and Traders)	no.	107	102	88	5	4.9%
Withdrawal dispatching users (Traders and end customers, including the Single Buyer)	no.	164	140	130	24	17.1%

Environmental responsibility

G4-EN15
G4-EN16
G4-EN17
G4-EN20
G4-EN21
G4-EN30

Emissions and quantities

	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
SF_6[1] QUANTITY AND EMISSIONS						
Percentage of SF_6 leakage out of total	%	0.55	0.49	0.59	0.06	12.4%
Emissions of SF_6 greenhouse gases	kg	2,971.6	2,507.7	2,754.0	463.9	18.5%
SF_6 quantity	kg	536,094.2	508,463.6	466,652.1	27,630.6	5.4%
- in operating equipment	kg	492,064.1	466,438.3	427,175.9	25,625.8	5.5%
- in cylinders	kg	44,030.1	42,025.3	39,476.3	2,004.8	4.8%
TOTAL DIRECT AND INDIRECT GREENHOUSE GAS EMISSIONS[2]						
Direct emissions		[3]				
SF_6 leaks	tonnes of CO_2	67,751	57,175	62,791	10,576.2	19%
R22 leaks	tonnes of CO_2	0	90	110	-89.6	-100%
Petrol for vehicles	tonnes of CO_2	6	22	28	-15.73	-72%
Diesel for vehicles	tonnes of CO_2	6,308	5,974	5,741	334.53	6%
Natural gas for heating	tonnes of CO_2	485	528	518	-42.99	-8%
Oil for heating and generators	tonnes of CO_2	729	954	818	-224.55	-24%
Total direct emissions	**tonnes of CO_2**	**75,280**	**64,743**	**70,007**	**10,537.90**	**16%**
Indirect emissions						
Electricity	**tonnes of CO_2**	**66,323**	**73,170**	**70,008**	**-6,846.85**	**-9%**
INDIRECT EMISSIONS OF CO_2 RELATED TO STAFF AIR MILES						
Type of flight		[4]				
- Domestic	tonnes of CO_2	899	1,072	1,046	-173	-16.1%
- International	tonnes of CO_2	249	382	329	-133	-34.8%
- Intercontinental	tonnes of CO_2	120	206	99	-86	-41.8%
Total emissions	**tonnes of CO_2**	**1,268**	**1,659**	**1,475**	**-392**	**-23.6%**
NITROGEN OXIDE EMISSIONS[5]						
NO_x	kg	9,100	5,130	4,920	3,970	77.4%
COOLANT GAS – QUANTITIES						
R22	kg	539	1,762	1,965	-1,222.66	-69.4%
R407C	kg	3,133	1,293	1,434	1,841	142.4%
R410A	kg	5,867	4,828	3,449	1,038	21.5%
Other coolant gases	kg	1,206	938	828	269	28.6%
TERNA VEHICLE FLEET[6]						
HYBRIDS	no.	10	9	9	1	11%
EURO 5	no.	1,246	1,226	1,148	20	2%
EURO 4	no.	13	14	15	-1	-7%
EURO 3 or lower	no.	157	146	169	11	8%
Total vehicles	**no.**	**1,426**	**1,395**	**1,341**	**31**	**2%**

(1) In 2014, there was an 18.5% increase in SF_6 leakages compared to 2013; this was caused by the accident that occurred in an operational transmission area during which 784.1 kg of SF_6 was dispersed into the atmosphere. Net of this accident, the SF_6 leakage was equal to 2,187.5 and the percentage of the leakage out of the total was 0.41%, confirming the downward trend compared with the previous year.

(2) Conversion of direct energy consumption and SF_6 (sulphur hexafluoride) leaks to equivalent CO_2 emissions is done using the parameters indicated in the Greenhouse Gas Protocol (GHG) Initiative and, in particular, the emission factors indicated in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). Indirect consumption of electricity is converted taking into account the proportion of thermoelectric production in the total Italian electricity production for 2014. The reference for the division of the production mix is the "Monthly Report on the Electric System" with the results for December 2014, available on the website www.terna.it.

(3) The increase in direct emissions in 2014 was due mainly to the figure for SF_6 leaks, up by 18.5% compared with 2013; the figure was affected by the accident that occurred in an operational transmission area during which 17,877 tonnes of CO_2 equivalent were dispersed into the atmosphere. Net of this accident, Terna's direct emissions were equal to 57,403 tonnes, confirming the downward trend compared with the previous year.

(4) Since 2014, in order to evaluate CO_2 deriving from the air travel of employees, the conversion factors indicated by the Greenhouse Gas Protocol Initiative have been used; unlike in previous years, the parameters indicated in the ICAO (International Civil Aviation Organization) Carbon Emissions methodology have been used.

(5) The figure is calculated on the basis of the values provided by car manufacturers in logbooks and on the mileage estimates of said vehicles. The value expressed in the table represents 66.2% of the company fleet for 2014 (in 2013, it referred to 62.7% of the fleet and, in 2012, 59%).

(6) The table shows the vehicles in the Terna fleet which, in the period in question, filled up at least once as recorded on the fuel card. Only operating vehicles are considered. For information on the consumption of the company fleet, see the following fuel consumption tables.

G4-EN1
G4-EN2
G4-EN3
G4-EN8

Consumption

	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
DIRECT AND INDIRECT ENERGY CONSUMPTION BROKEN DOWN BY PRIMARY SOURCE						
Direct consumption						
Petrol for vehicles[1]	tonnes	2.0	7.1	9.1	-5.1	-71.5%
Diesel for vehicles[1]	tonnes	1,967.2	1,862.9	1,790.2	104.3	5.6%
Natural gas for heating	thousands of cubic metres	222.0	241.7	237.0	-19.7	-8.1%
Oil for generators and heating	tonnes	227.3	297.3	255.2	-70.0	-23.5%
Indirect consumption						
Electricity	GWh	185.8	194.1	177.2	-8.3	-4.3%
DIRECT AND INDIRECT ENERGY CONSUMPTION BROKEN DOWN BY PRIMARY SOURCE – GIGAJOULES						
Direct consumption						
Petrol for vehicles[1]	GJ	91	318	408	-227.2	-72%
Diesel for vehicles[1]	GJ	85,238	80,718	77,570	4,520.1	6%
Natural gas for heating	GJ	8,659	9,426	9,241	-766,8	-8%
Oil for generators and heating	GJ	9,850	12,884	11,058	-3,034.1	-24%
Total direct consumption	**GJ**	**103,837**	**103,345**	**98,277**	**492.0**	**1%**
Indirect consumption						
Electricity for powering substations and offices[2]	GJ	668,808	698,709	638,050	-29,900.5	-4%
WATER CONSUMPTION						
Water consumption per source	cubic metres	173,692.2	198,190.5	219,311.4	-24,498.3	-12,4%
PAPER CONSUMPTION						
FSC paper	tonnes	57.6	46.2	52.5	11.4	25%
MAIN MATERIALS IN SUPPLIES						
Porcelain	tonnes	327	699	229	-372	-53.2%
Polymeric	tonnes	114	225	131	-111	-49.3%
Copper	tonnes	1,019	5,234	3,861	-4,215	-80.5%
Aluminium	tonnes	2,946	12,909	4,069	-9,963	-77.2%
Steel	tonnes	29,675	6,204	6,163	23,471	378.3%
Glass	tonnes	3,525	2,014	863	1,511	75.0%
Dielectric oil	tonnes	408	924	61	-516	-55.8%
SF_6	tonnes	28	42	50	-14	-33.3%
PCB CONCENTRATION						
PCB > 500 ppm[3]	tonnes	0.70	0.22	0.00	0.48	221%
50 ppm < PCB < 500 ppm	tonnes	0.35	3.79	3.81	3.44	-91%

(1) Only the consumption of operating vehicles is considered.
(2) The reference for the division of the production mix is the "Monthly Report on the Electric System" with the results for December 2014, available on the website http://www.terna.it/Default.aspx?tabid=101.
(3) The 2013 and 2014 values are relative to the PCB concentration > 500ppm, which refer to appliances analysed during decommissioning.

Waste

G4-EN23

WASTE MANAGEMENT[1]	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
Waste produced	tonnes	4,489.9	5,263.6	6,208.1	-773.7	-14.7%
Waste recovered	%	81	87	81	-6	-6.4%
Non-hazardous special waste						
Machines, equipment, pylons, conductors, cables						
- quantity produced	tonnes	1,042.2	1,283.3	1,559.5	-241.1	-18.8%
- quantity delivered for recycling	tonnes	1,044.2	1,315.7	1,451.0	-271.5	-20.6%
Packing						
- quantity produced	tonnes	322.8	208.3	252.0	114.5	55.0%
- quantity delivered for recycling	tonnes	318.8	206.7	207.7	112.1	54.2%
Other						
- quantity produced	tonnes	473.9	294.3	1,092.1	179.6	61.0%
- quantity delivered for recycling	tonnes	153.5	147.7	292.0	5.8	3.9%
Total non-hazardous special waste						
- quantity produced	tonnes	1,838.9	1,795.9	2,910.7	43.0	2.4%
- quantity delivered for recycling	tonnes	1,516.6	1,680.1	1,950.6	-163.5	-9.7%
Hazardous special waste						
Machines, equipment, pylons, conductors, cables						
- quantity produced	tonnes	1,427.1	2,386.4	2,404.0	-959.3	-40.2%
- quantity delivered for recycling	tonnes	1,416.1	2,159.5	2,277.1	-743.4	-34.4%
Oils						
- quantity produced	tonnes	936.9	698.4	744.5	238.5	34.1%
- quantity delivered for recycling	tonnes	524.7	611.1	661.2	-86.5	-14.1%
Lead batteries						
- quantity produced	tonnes	110.7	64.4	118.7	46.2	71.8%
- quantity delivered for recycling	tonnes	110.8	64.6	118.7	46.2	71.5%
Waste deriving from materials containing asbestos						
- quantity produced	tonnes	0.0	0.0	0.5	0.0	-
Other						
- quantity produced	tonnes	176.3	318.4	22.2	-142.1	-44.6%
- quantity delivered for recycling	tonnes	84.6	39.6	7.8	45.0	113.8%
Total hazardous special waste						
- quantity produced	tonnes	2,651.0	3,467.6	3,297.4	-816.6	-23.6%
- quantity delivered for recycling	tonnes	2,136.2	2,874.8	3,064.9	-738.6	-25.7%

(1) This includes only the special waste from the production process, not that produced by service activities (urban waste). Sewage and waste from septic tanks from substations not connected to the sewerage system are not included; the figure for sewage and septic tanks was 383 tonnes in 2014; 842 tonnes in 2013; 610 tonnes in 2012. In 2014, waste identified as "Other emulsions" produced during an accident that occurred in an operating area was also excluded. The quantity of these emulsions was 857 tonnes. The quantity of waste sent for disposal may differ from the simple difference between waste produced and waste recovered, owing to the temporary storage of waste.

Biodiversity

G4-EN11

	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
DISSUADERS FOR BIRDLIFE PRESENT ON THE NTG						
Lines affected	km	193	186	172	7	3.6%
Total number of dissuaders	no.	13,397	12,005	11,146	1,392	11.6%
LINES IN PROTECTED AREAS						
Lines interfering with protected areas	km	5,625	5,570	4,950	55	1%
Lines interfering as a total of lines managed by Terna	%	10	10	9		

Costs for the environment

G4-EN31

COSTS FOR THE ENVIRONMENT – INVESTMENT AND OPERATING COSTS[1]	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
Environmental offsets	€/mln	13	8	4	4	51.2%
Environmental-impact studies	€/mln	2	4	1	-2	-46.2%
Environmental activities – new plants	€/mln	4	5	6	-1	-12.0%
Environmental activities – existing plants	€/mln	10	8	10	2	25.6%
Demolitions	€/mln	5	1	2	4	370.0%
Total investments	**€/mln**	**34**	**26**	**23**	**8**	**29.1%**
Costs						
Costs for environmental activities	€/mln	19	18	15	1	7.3%
Total operating costs	**€/mln**	**19**	**18**	**15**	**1**	**7.3%**

(1) For details on the accounting method, see page 114.

G4-LA1
G4-LA12
EU 17

Social responsibility

Number and composition of employees

	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
PERSONNEL CHANGES						
Total employees	**no.**	**3,437**	**3,442**	**3,433**	**-5**	**-0.1%**
Employees recruited during the year	no.	68	70	45	-2	-2.9%
Employees who left during the year	no.	73	61	105	12	19.7%
- men	no.	64	56	99	8	14.3%
- women	no.	9	5	6	4	80.0%
- under 30 years old	no.	0	3	3	-3	-100.0%
- between 30 and 50 years old	no.	9	7	9	2	28.6%
- over 50 years old	no.	64	51	93	13	25.5%
Turnover rate on termination[1]						
Total	**%**	**2.1**	**1.8**	**3.0**	**0**	**19.4%**
- Men	%	1.9	1.6	2.8	0	14.0%
- Women	%	0.3	0.2	0.2	0	79.5%
- Under 30 years old	%	0.0	0.1	0.1	0	-100.0%
- Between 30 and 50 years old	%	0.3	0.2	0.3	0	28.2%
- Over 50 years old	%	1.9	1.5	2.7	0	25.2%
PERSONNEL COMPOSITION						
Total employees	**no.**	**3,437**	**3,442**	**3,433**	**-5**	**-0.1%**
By contract type						
- permanent	no.	3,382	3,412	3,383	-30	-0.9%
- fixed-term	no.	55	30	50	25	83.3%
By employment type						
- full-time	no.	3,404	3,412	3,401	-8	-0.2%
- part-time	no.	33	30	32	-3	-10.0%
By gender						
- men	no.	3,042	3,048	3,041	-6	
- women	no.	395	394	392	1	
By age						
- under 30 years old	no.	375	415	464	-40	-9.6%
- between 30 and 50 years old	no.	1,506	1,412	1,487	94	6.7%
- over 50 years old	no.	1,556	1,615	1,482	-59	-3.7%
Average age and corporate age of personnel (years)						
Average age	Y	46.6	46.2	45.7	0.4	0.9%
Average corporate age[2]	Y	21.2	20.8	20.4	0.4	2.2%
PERSONNEL COMPOSITION BY CATEGORY						
Total	**no.**	**3,437**	**3,442**	**3,433**	**-5**	**-0.1%**
Senior executives	no.	61	62	59	-1	-1.6%
Junior executives	no.	541	501	502	40	8.0%
White-collar workers	no.	1,887	1,922	1,925	-35	-1.8%
Blue-collar workers	no.	948	957	947	-9	-0.9%
PERSONNEL COMPOSITION BY SCHOOLING						
University degree	%	23.1	22.5	22.2	0.6	2.4%
High school diploma	%	47.6	47.2	46.8	0.5	1.0%
Vocational school diploma	%	15.4	15.6	15.9	-0.2	-1.2%
Elementary/Middle school	%	13.9	14.7	15.2	-0.9	-5.8%
FLEXIBLE EMPLOYMENT CONTRACTS AND TERMS						
Diffusion of temporary contracts	no.	55	30	50	25	83.3%
Expiring trial contracts converted to permanent contracts during the financial year	no.	2	46	114	-44	-95.7%
Trainees and interns working at Terna	no.	32	52	37	-20	-38.5%
Diffusion of part-time employment	%	1.0	0.9	0.9	0.1	10.3%
Incidence of overtime	%	8.0	8.3	8.9	-0.3	-3.9%
CONTRACTORS AND SUBCONTRACTORS' EMPLOYEES[3]						
Days worked	no.	547,660	500,884	419,543	46,776	9.3%
Full-time equivalent	no.	2,489	2,277	1,907	212	9.3%

(1) The turnover rates report the termination flows with respect to the number of employees as at 31 December of the previous year.
(2) The average corporate age takes into account previous employment in the case of employees joining Terna following acquisitions of business units.
(3) The data take into account the term of construction contracts and the variations in the workforce required, and relate to various types of Terna work contracts, from large construction sites to cutting trees under power lines. The days worked and the FTE units are estimated on the basis of the average daily presences at the largest construction sites and the amounts paid for contracted work on smaller sites. No further information is available on the types of contracts used by contractors.

Personnel development

G4-HR2
G4-LA9
G4-LA1
G4-SO4

	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
TRAINING						
Hours of training						
- Per employee	h	43	35	41	8	22.9%
By category						
- Senior executives	h	16	38	12	-22	-57.9%
- Junior executives	h	29	34	50	-5	-14.7%
- White-collar workers	h	34	34	39	-	-
- Blue-collar workers	h	70	37	55	33	89.2%
By gender						
- Men	h	45	36	44	9	25.0%
- Women	h	19	25	25	-6	-24.0%
Coverage of employees[1]	%	91	89	86	2	2.2%
Hours provided						
Total	h	148,955	120,115	143,418	28,840	24.0%
- hours of internal teaching	h	98,212	79,876	86,227	18,336	23.0%
Hours of training by type of course						
- Education	h	3,283	12,782	17,707	-9,499	-74.3%
- Context and Business Model	h	8,602	13,851	6,352	-5,249	-37.9%
- Training	h	137,070	93,482	119,359	43,588	46.6%
Participants in Model 231 courses	no.	103	489	6	-386	-78.9%
Participants in sustainability courses	no.	333	76	-	257	338.2%
COMPENSATION						
Average cost per employee[2]	€	79,848	78,124	77,591	1,724	2.2%
Executive employees with Long-Term Incentives (LTI)	no.	46	45	46	1	2.2%
Variable remuneration as % of fixed pay[3]	%	9.5	9.3	10.0	0.2	2.2%
MBO	no.	199	187	184	12	6.4%
CORPORATE CLIMATE						
Total spontaneous resignations	no.	11	9	12	2	22.2%
Absences per employee[4]	h	53.8	56.9	58.7	-3.1	-5.4%
Absentee Rate[5]		7,092.3	7,432.2	7,632.1	-339.9	-4.6%
AVERAGE YEARS OF EMPLOYMENT FOR EMPLOYEES LEAVING THE COMPANY[6]						
Total terminations	Y	32.8	32.4	32.8	0.4	1.4%
- Men	Y	33.1	32.6	33.5	0.5	1.4%
- Women	Y	30.8	29.4	22.0	1.4	4.8%
- Under 30 years old	Y	0.0	3.3	2.3	-3.3	-100.0%
- Between 30 and 50 years old	Y	6.8	6.4	11.9	0.4	5.8%
- Over 50 years old	Y	36.5	37.6	35.6	-1.1	-3.0%

(1) % of employees who took at least one training course during the year.
(2) "Per employee" includes all company employees, including executives.
(3) The figures regard the incentives paid to all employees, including executives. Fringe benefits are excluded.
(4) This figure regards the number of non-contractual absences during the year (illness, accident, leave of absence, strike, unpaid absence).
(5) This is the number of days of absence owing to illness, strikes and injuries out of the number of days worked in the same period, multiplied by 200,000. To facilitate comparison with other sources, this indicator was also calculated as a percentage of days worked. With this calculation method, the absentee rate came out at 3.7 in 2013, 3.8 in 2012, and 3.9 in 2011. The reasons for absence considered do not include maternity leave, marriage leave, study leave, leave for trade union activities, other cases of paid leave, and suspensions.
(6) The duration of employment takes into account previous employment, in the case of employees joining Terna following acquisitions of business units.

G4-LA12

G4-LA13

Equal opportunities

EQUAL OPPORTUNITIES	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
Women out of total employees						
- Women/total	%	11.5	11.5	11.4	-	-
- Women out of total net of production workers	%	15.9	15.9	15.8	-	-
- Female senior executives out of total senior executives	%	16.4	16.1	15.3	0.3	1.6%
- Female senior and junior executives out of total senior and junior executives	%	17.6	17.9	17.3	-0.3	-1.8%
Employment growth						
- Annual change: women	%	0.3	0.5	1.0	-0.3	-50.3%
- Annual change: men	%	-0.2	0.2	-2.1	-0.4	-185.5%
Outflows [1]						
- Outflows: women	%	2.3	1.3	1.6	1.0	79.1%
- Outflows: men	%	2.1	1.8	3.2	0.3	14.0%
Inflows[1]						
- Inflows: women	%	2.5	1.8	2.6	0.8	42.1%
- Inflows: men	%	1.9	2.1	1.1	-0.2	-8.1%
Managerial positions						
- female senior executives out of total women	%	2.5	2.5	2.3	0.0	-0.3%
- male senior executives as % of male employees (excluding production workers)	%	2.4	2.5	2.4	-0.1	-2.1%
Grade promotions[2]						
- Promotions to junior executive as % of previous grade: women	%	2.1	0.3	1.4	1.7	504.1%
- Promotions to junior executive as % of previous grade: men	%	2.7	0.4	3.7	2.3	529.0%
Gender pay gap[3]						
- Senior executives	%	72.5	81.3	79.2	-8.8	-10.8%
- Junior executives	%	97.1	96.3	94.5	0.8	0.8%
- White-collar workers	%	95.3	95.1	94.0	0.2	0.3%
Gender remuneration gap %[4]						
- Senior executives	%	71.2	78.5	76.6	-7.2	-9.2%
- Junior executives	%	100.9	98.2	97.5	2.8	2.8%
- White-collar workers	%	91.9	91.3	89.9	0.7	0.7%

(1) The outflows (inflows) for women and men show the ratio of employees divided by gender who left (joined) in the year to total employees divided by gender at 31 December of the previous year.

(2) The figure is obtained from the ratio between promotions to junior executive that occurred during the year and employees categorised as white-collar workers in the previous year, calculated by gender. Promotions from blue-collar worker to white-collar worker and from junior executive to senior executive were not considered, because the number was not significant on an annual basis.

(3) The figure is the result of the percentage ratio between the annual basic pay for women for the different grades and the annual basic pay for men for the same grades. The figure was not calculated for blue-collar workers because there are no women in that category.

(4) The figure is the result of the percentage ratio between the total annual remuneration for women for the different grades and the total annual remuneration for men for the same grades. The total remuneration includes, besides basic pay, production bonuses, the different types of incentives and the value of the benefits received over the year.

G4-LA7

Health and safety

	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
OCCUPATIONAL INJURIES – TERNA EMPLOYEES, GRI-ILO DEFINITIONS						
Injury rate[1]		1.27	1.42	1.77	-0.15	-10.6%
Lost-Day Rate[2]		44.16	52.94	60.85	-8.78	-16.6%
Occupational Diseases Rate[3]		0	0	0	-	-
Number of injuries	no.	36	41	51	-5	-12.2%
- of which serious	no.	0	2	3	-2	-100.0%
- of which fatal	no.	0	0	0	-	-
OCCUPATIONAL INJURIES, EMPLOYEES – BROKEN DOWN BY GENDER						
Number of injuries	no.	36	41	-	-5	-12.2%
- of whom men	no.	35	39	-	-4	-10.3%
- of whom women	no.	1	2	-	-1	-50.0%
Injury rate – male employees		1.4	1.5	-	-0.1	-8.7%
Injury rate – female employees		0.4	0.1	-	0.3	400.0%
Lost-Day Rate – male employees		49.1	51.9	-	-2.8	-5.4%
Lost-Day Rate – female employees		0.7	1.0	-	-0.3	-28.9%
INSPECTIONS AND INVESTIGATIONS						
Periodic health inspections	no.	2,744	2,624	2,490	120	4.6%
Examinations by assigned doctor	no.	374	301	244	73	24.3%
Inspections and checks[4]	no.	111	130	157	-19	-14.6%
HOURS OF TRAINING ON WORKERS' HEALTH AND SAFETY						
Total	h	66,627	37,940	41,137	28,687	75.6%
Senior executives	h	80	648	0	-568	-87.7%
Junior executives	h	4,889	4,343	1,908	546	12.6%
White-collar workers	h	26,315	14,191	16,292	12,124	85.4%
Blue-collar workers	h	35,343	18,757	22,937	16,586	88.4%
OCCUPATIONAL INJURIES – CONTRACTORS AND SUBCONTRACTORS						
Occupational injuries – contractors' employees	no.	16	11	10	5	45.5%
- of which serious	no.	3	4	3	-1	-25.0%
- of which fatal	no.	2	2	2	-	-
Injury Rate[5]		0.77	0.58	0.63	0.2	32.8%

(1) This is the number of injuries with at least one day's abstention from work divided by the number of hours worked during the year and multiplied by 200,000 (corresponding to 50 working weeks x 40 hours x 100 employees). To facilitate comparison with other sources, this indicator was also calculated using a multiplication factor of 1,000,000 instead of 200,000 (consequently obtaining an injury rate five times that of the ILO). With this calculation method, the injury rate came out at **6.3 in 2014, 7.1 in 2013, and 8.8 in 2012**.

(2) This is the ratio between the days not worked owing to injury and hours worked in the year, multiplied by 200,000. Days not worked are calendar days, counted from when the injury occurred. To facilitate comparison with other sources, this indicator was also calculated using a multiplication factor of 1,000. With this calculation method, the Lost-Day Rate came out at **0.2 in 2014, 0.3 in 2013 and 0.3 in 2012**. To calculate the Lost-Day Rate, the days not worked related to injuries occurring in 2014 were considered together with any continued absence related to injuries occurring during the previous years, following the criterion of annual accrual of days of absence. This method was also adopted to recalculate the 2013 and 2012 rates. For this reason, the data shown in the table differ from those published previously.

(3) This is the total number of cases of occupational disease divided by the hours worked in the year, multiplied by 200,000. No hours of absence were ascribable to occupational disease because the type of activities carried out by Terna does not entail any work associated – on the basis of the official legal tables – with the possible onset of occupational diseases. Terna's occupational disease rate must therefore be considered to be always zero.

(4) Inspections performed by the SPPM (Safety, Prevention and Protection Managers) and the Operational Transmission Area Managers.

(5) This is the number of injuries with at least one day's abstention from work divided by the number of hours worked during the year and multiplied by 200,000 (corresponding to 50 working weeks x 40 hours x 100 employees). To facilitate comparison with other sources, this indicator was also calculated using a multiplication factor of 1,000,000 instead of 200,000 (consequently obtaining an injury rate five times that of the ILO). With this calculation method, the injury rate came out at **3.8 in 2014, 2.9 in 2013, and 3.1 in 2012**.

Relations with trade unions

	Units	2014	2013	2012	Change 2013-14	% Change 2013-14
Employee trade union membership						
Trade union membership rate	%	55.3	62.7	61.73	-7.4	-11.8%
TRADE UNION AGREEMENTS						
Trade union agreements signed during the year	no.	20	14	13	6	43%

Acronyms

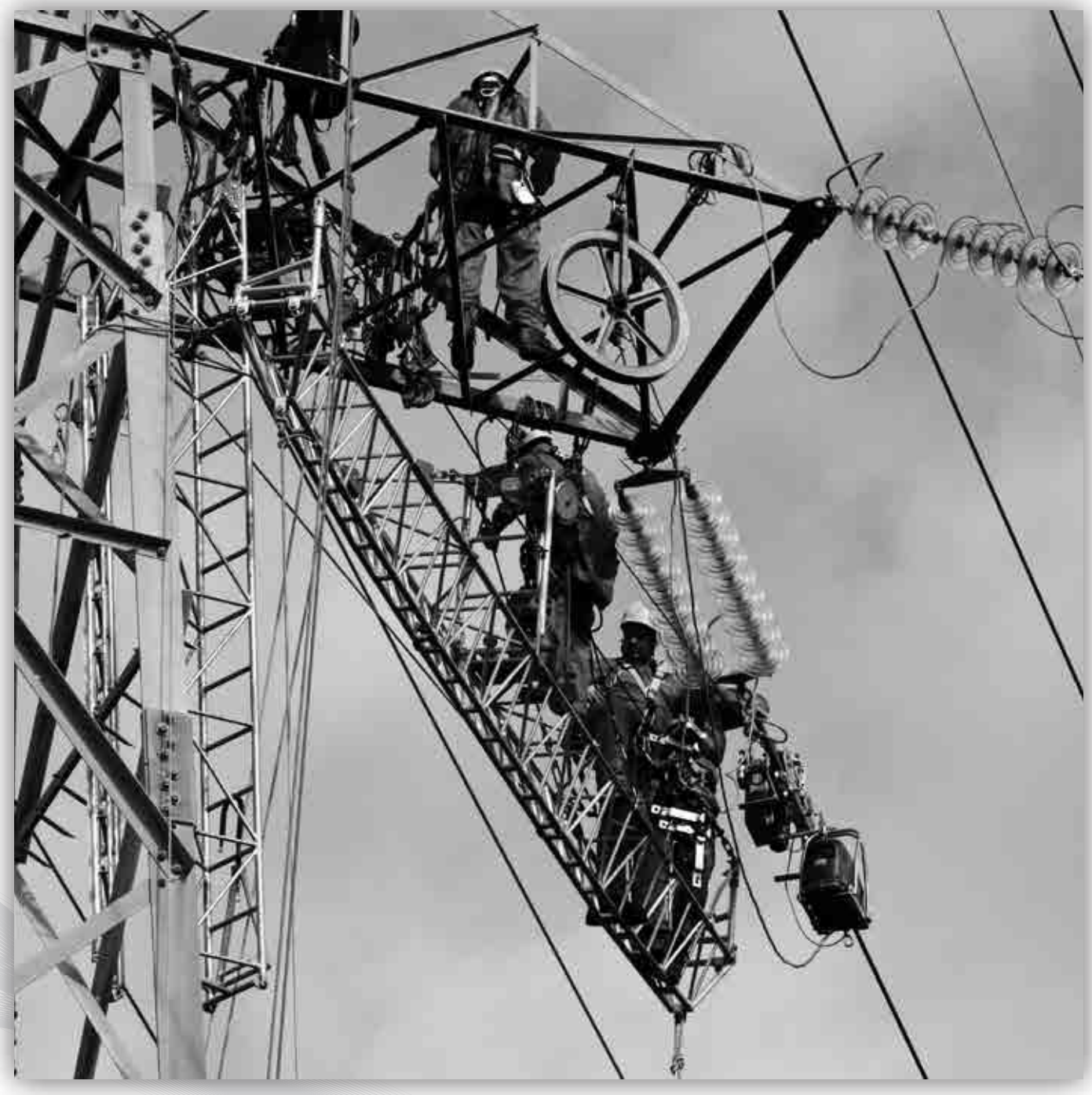
ACEA	Azienda Comunale Energia e Ambiente [Municipal Energy and Environment Company]
AEEGSI	Italian Regulatory Authority for Electricity, Gas and Water
AGCM	Autorità Garante della Concorrenza e del Mercato [Italian Antitrust Authority]
AIT	Average Interruption Time
AOT	Area Operativa Trasmissione [Operational Transmission Area]
ASA	Average System Availability
AU	Acquirente Unico [Italian Single Buyer]
BoD	Board of Directors
CdP	Cassa Depositi e Prestiti
CEI	Comitato Elettrotecnico Italiano [Italian Electro-technical Committee]
CESI	Centro Elettrotecnico Sperimentale Italiano [Italian Electro-technical Testing Centre]
CIGRE	Conseil International des Grands Réseaux Electriques à Haute Tension
CONSOB	Commissione Nazionale per le Società e la Borsa [National Commission for Companies and the Stock Exchange]
CSR	Corporate Social Responsibility
DAM	Day Ahead Market
DP	Development Plan of the National Transmission Electricity Grid
DPS	Dividend Per Share
DSM	Dispatching Services Market
DT	Distance training
EBIT	Earnings Before Interest and Taxes
EHV	Extremely-High Voltage
EIA	Environmental Impact Assessment
EMO	Electricity Market Operator
EMS	Energy Management System
ENS	Energy Not Supplied
ENTSO-E	European Network Transmission System Operators for Electricity
EPS	Earnings Per Share
EPSES	Emergency Plan for the Security of the Electric System
ERPA	Exclusion, Repulsion, Problems, Attraction
GAAP	Generally Accepted Accounting Principles
GIS	Geographic Information System
GRI	Global Reporting Initiative
GRTN	Gestore della Rete di Trasmissione Nazionale [National Transmission Grid Operator]

GSE	Gestore del Sistema Elettrico [Electric System Operator]
HV	High Voltage
IBA	Important Bird Areas
IEA	International Energy Agency
IPO	Initial Public Offering
ISPRA	Istituto Superiore per la Protezione e la Ricerca Ambientale [Italian Institute for Environmental Protection and Research]
ISTAT	Italian National Statistics Institute
MBI	Maintenance and Business Intelligence
MBO	Management By Objectives
MED	Italian Ministry for Economic Development
MEF	Italian Ministry of Economy and Finance
MELS	Italian Ministry for the Environment, Land and Sea
MPA	Italian Ministry for Productive Activities (now the Ministry for Economic Development – MED)
N.A.	Not applicable
NCC	National Control Centre
NTG	National Transmission Grid
OECD	Organization for Economic Cooperation and Development
PCB	Polychlorinated biphenyls
PCT	Polychlorinated terphenyls
PPE	Personal Protective Equipment
ROACE	Returns On Average Capital Employed
SCADA	Supervisory Control and Data Acquisition
SEA	Strategic Environmental Assessment
SETSO	South European Transmission System Operators
SISTAN	Italian National Statistics System
SPZ	Special Protection Zone
SRI	Socially Responsible Investment
S&P	Standard&Poor's
TFR	Trattamento di Fine Rapporto [Staff severance indemnity]
TSO	Transmission System Operator
TSR	Total Shareholder Return
UCTE	Union for the Co-ordination of Transmission of Electricity

The glossary is available on the site www.terna.it on the "Tools" page using the following link: www.terna.it/default/Home/sostenibilita2/strumenti_sostenibilita.aspx

2014

External assurance



Terna
TERNA GROUP

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INDEPENDENT REPORT ON THE LIMITED ASSURANCE ENGAGEMENT OF THE SUSTAINABILITY REPORT 2014

To the Shareholders of
Terna S.p.A.

We have carried out a limited assurance engagement on the Corporate Social Responsibility Report (hereinafter the "Report") of Terna Group (hereinafter the "Group") for the year ended 31 December 2014.

Responsibility of the Directors for the Report

The Directors are responsible for preparing the Report in compliance with the *G4 Sustainability Reporting Guidelines* defined in 2013 by the *GRI - Global Reporting Initiative* and by the *G4 Sector Disclosure - Electric Utilities* defined in 2013, as indicated in the paragraph "Methodological note" of the Report, and for that part of internal control that they consider necessary to prepare a sustainability report that is free from material misstatement, whether due to fraud or unintentional behaviours or events. The Directors are also responsible for defining the sustainability performance targets of Terna Group, for reporting the sustainability results, as well as for identifying the stakeholders and the significant aspects to be reported.

Auditor's responsibility

We are responsible for the preparation of this report on the basis of the work performed. We conducted our engagement in accordance with *International Standard on Assurance Engagements 3000 – Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000)*, issued by the International Auditing and Assurance Standards Board for limited assurance engagements. The standard requires that we comply with applicable ethical requirements, including professional independence, and that we plan and perform our work to obtain limited assurance that the Report is free from material misstatement. The procedures consisted in interviews, primarily of company personnel responsible for the preparation of the information presented in the Report, analysis of documents, recalculations and other verification procedures.

The procedures we performed on the Report consisted in verifying its compliance with the principles for defining the content and the quality of a sustainability report set out in the *G4 Sustainability Reporting Guidelines* and in the *G4 Sector Disclosure - Electric Utilities*, and are summarised as follows:

PricewaterhouseCoopers Advisory SpA

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Società soggetta all'attività di direzione e coordinamento della PricewaterhouseCoopers Italia Srl
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- comparing the financial information reported in chapter "Economic responsibility" and in the attachment "Indicator tables – Economic responsibility" of the Report with the information included in the Group's consolidated financial statements as of 31 December 2014 on which we issued our audit opinion, in accordance with articles 14 and 16 of legislative decree n° 39 of 27 January 2010, on 16 April 2015;
- analysing, through inquiries, the governance system and the process for managing the sustainability issues relating to the Group strategy and operations;
- analysing the process aimed at defining the significant reporting areas to be disclosed in the Report, with regard to the methods for their identification, in terms of priority for the various stakeholders, as well as the internal validation of the process findings;
- analysing the processes underlying the generation, recording and management of quantitative data included in the Report. In detail, we carried out:
  - meetings and interviews with the representatives of Terna S.p.A. to achieve a general understanding of the information, accounting and reporting systems in use to prepare the Report, as well as of the internal control processes and procedures supporting the collection, aggregation, processing and submission of the information to the function responsible for the Report preparation;
  - a sample-based analysis of the documents supporting the preparation of the Report, in order to obtain evidence of the reliability of processes in place and of the internal control system underlying the treatment of the information relating to the objectives disclosed in the Report;
- analysing the internal consistency of the qualitative information described in the Report and its compliance with the guidelines identified in the preceding paragraph "Responsibility of the Directors for the Report";
- analysing the engagement of stakeholders and its results through the existing documentation concerning the significant matters arisen during the Group dialogue initiatives;
- obtaining a representation letter, signed by the legal representative of Terna S.p.A., on the compliance of the Report with the guidelines identified in the paragraph "Responsibility of the Directors for the Report", as well as the reliability and completeness of the disclosed information.

Data and information subject to our limited assurance procedures are included, as required by the *G4 Sustainability Reporting Guidelines*, in the *GRI Content Index* of the Report.

Our limited assurance work was less in scope than a reasonable assurance engagement performed in accordance with ISAE 3000 (*reasonable assurance engagement*) and, consequently, it does not provide us with a sufficient level of assurance necessary to became aware of all significant facts and circumstances that might be identified in a reasonable assurance engagement.

Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe that the Sustainability Report of Terna Group as of 31 December 2014 has not been prepared, in all material respects, in compliance with the *G4 Sustainability Reporting Guidelines* defined in 2013 by the GRI - *Global Reporting Initiative* and by the *G4 Sector Disclosure - Electric Utilities* defined in 2013 as disclosed in the paragraph "Methodological note" of the Report.

Turin, 06 May 2015

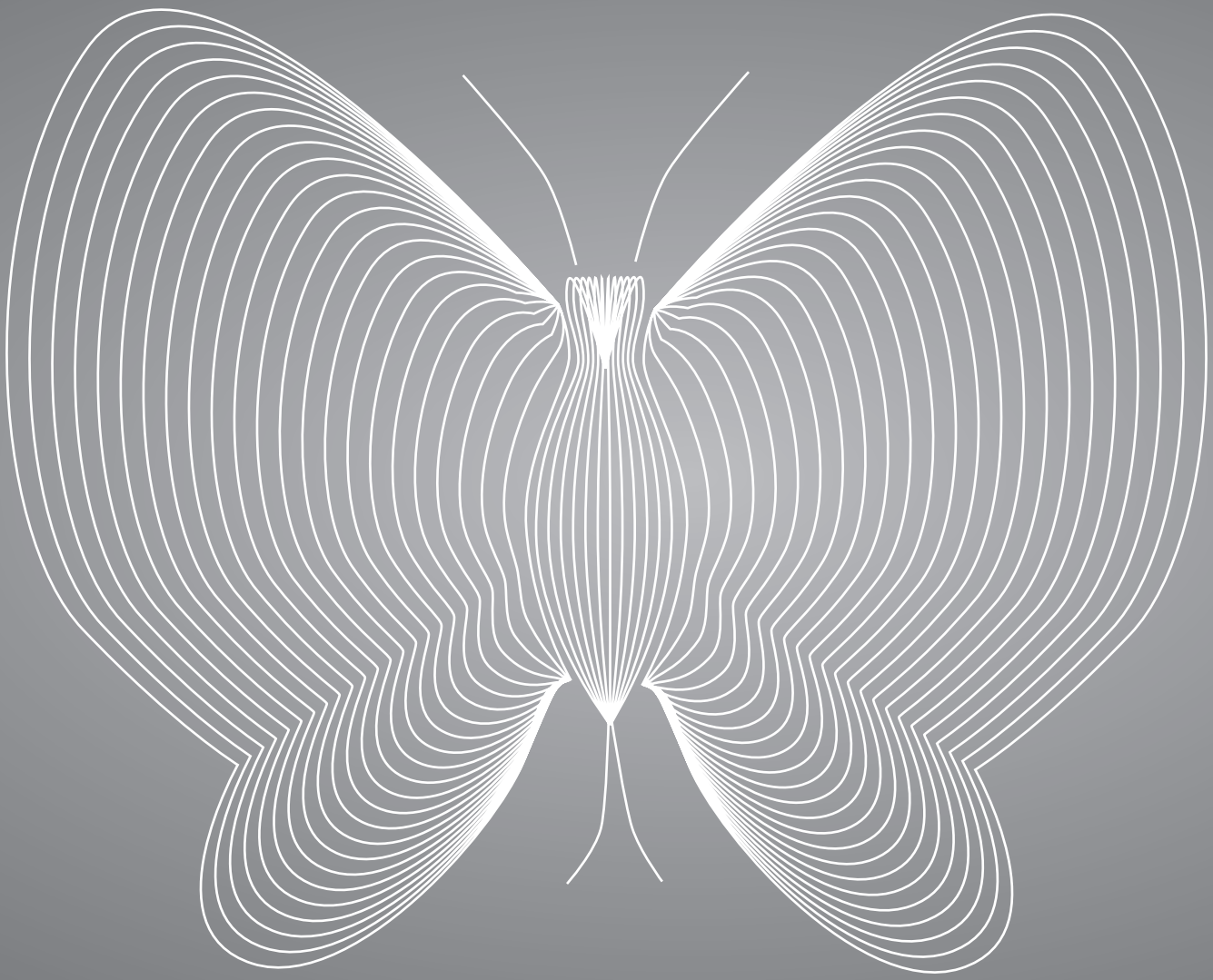
PricewaterhouseCoopers Advisory SpA

Signed by

Paolo Bersani
(Partner)

This report has been translated from the original, which was issued in Italian, solely for the convenience of international readers.

WE WORK FOR A **GRID** THAT'S **LIGHT** FOR THE ENVIRONMENT



WORKING FOR SUSTAINABLE DEVELOPMENT
ALSO MEANS TRANSMITTING ENERGY RESPONSIBLY.
THIS IS TERNA'S JOB.

Terna
TERNA GROUP

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