

2011



The Concise Report

# The Concise Report

## Terna

With a high-voltage electricity grid of more than 63,500 kilometers across Italy, Terna is the leading independent transmission operator in Europe and the sixth largest in the world in terms of the number of kilometers of lines managed. The Company is the main owner of the National Transmission Grid and is responsible for the transmission and dispatching of electricity throughout Italy, namely, safely managing – 365 days a year, 24 hours a day – the balance between electricity demand and supply in Italy as well as the planning, development and maintenance of the grid.

In addition to providing the transmission service in Italy, Terna has development projects in the Mediterranean basin, particularly in North Africa and in the Balkan countries, for building new interconnections and increasing Italy's import capacity to the benefit of the Italian electricity system's safety.

The Company is also involved in developing non-traditional activities: in 2011, the second phase of the project for building and selling photovoltaic plants was completed and the Strategic Plan presented in March 2012, also included significantly increasing investments for implementing battery storage systems for the transmission grid as well as other new projects. Terna, headed by CEO Flavio Cattaneo, and by Chairman Luigi Roth has been listed on the Italian Stock Market since June 2004. Its major shareholder is Cassa Depositi e Prestiti with 29.85% (March 2012). 11% of the share capital is held by Socially Responsible Investors (SRI).

## The most significant events

During 2011, Terna successfully focused on its core business and on new opportunities for developing non-traditional activities, always based on sustainability objectives.

With regard to grid development, the company maintained its commitment for accelerating the growth of the country's electricity infrastructure completing the new Chignolo Po-Maleo power line (see box page 86), opening the building site for the Sorgente-Rizziconi electricity line (see box page 119), continuing upgrading the metropolitan areas of Milan, Turin and Naples and strengthening the 150kW main electricity lines for wind power production in Campania, Basilicata and Puglia. As part of its non-regulated activities, with the closing in October 2011 of the second phase of the photovoltaic project, Terna built and then sold in a little over one year a production facility that when fully operating will allow saving CO<sub>2</sub> emissions equal to 209,000 tons a year (page 36).

In particular, the following events are pointed out:

- on March 17, 2011, during the day dedicated to the celebration of the 150<sup>th</sup> anniversary of the Unification of Italy, the official inauguration took place of the SA.PE.I., the submarine cable that connects Sardinia with the mainland; this occurred at the landing power station in Borgo Sabotino (LT), attended by the Minister for Economic Development;
- on May 13, 2011, Terna's Board of Directors appointed the Company's new Board of Directors that confirmed Flavio Cattaneo as CEO and Luigi Roth as Terna S.p.A.'s Chairman;
- on July 25, 2011 the EHV Chignolo Po-Maleo electricity line was inaugurated that is 24 km long and was built in only 18 months with single pole pylons that involved removing 31 km of obsolete electricity lines and consequently "freeing" 310,000 square meters of the territory (see box page 86);
- on October 14, 2011 Terna was included in the new STOXX® indexes that select the 300 best companies for sustainability performance among the 1,800 present in the STOXX® Global index;
- on October 24, 2011 the second phase of Terna's photovoltaic project was completed with the sale of Nuova Rete Solare S.r.l., Terna's entirely owned company through SunTergrid, to the private equity fund Terra Firma, (see box page 36);
- on December 30, 2011 the Electricity and Gas Authority concluded the process for reviewing the tariff regulations and set new tariff rules for Terna's activities for the 2012-2015 period (see box page 93);
- on April 2, 2012 the Terna Group's new organizational structure was approved, aimed at supporting the business development established in the 2012-2016 Strategic Plan (see box page 33);
- on April 19, 2012, at Terna's headoffice, Med-TSO, the association of Mediterranean transmission system operators, was officially launched, with the purpose of creating a connection between the regulatory duties that apply to sector Authorities and those referring to the operational management of electricity systems (see box page 38).

## The numbers of 2011

Despite the negative economic situation, Terna confirmed its industrial strength and financial solidity, increasing investments for safety and efficiency of the electricity system and generating work and employment.

For the seventh consecutive year, 2011 closed with positive results thanks to a preventive strategy on non-traditional and non-regulated business that will continue to increase in the next three years.

The Terna Group's most significant numbers (as of December 31, 2011) were:

- 1,636 million euros of sales;
- 1,220 million euros of investments;
- 440 million euros of net profit.

## The Sustainability Report: contents and novelties

The 2011 Sustainability Report was prepared according to the “*Sustainability Reporting Guidelines & Electric Utilities Sector Supplement (EUSS)*”, defined by the 2009 GRI - Global Reporting Initiative and the updated G3.1 Guidelines of March 2011.

The application of the GRI guidelines is A+ level, the highest in terms of completeness of the information. A table linking the GRI indicators with the 10 principles of the United Nations Global Compact is also provided.

The Report is divided into 5 principal chapters:

- Terna's Profile
- The responsibility for the electricity service
- Economic responsibility
- Environmental responsibility
- Social responsibility.

The Methodological Note provides useful technical explanations for interpreting the data that is included into the text and into the section “Indicator Tables”.

In compliance with the objective of clearly, completely and transparently providing the greatest possible amount of information, the 2011 Report used various instruments for illustrating the year's results. In addition to the usual dedicated boxes on the year's principal results, this Report expanded the number of comparisons with other companies regarding significant environmental and social indicators.

Comparisons represent a new element in reporting, allowing stakeholders to assess the data and Terna's performance not only with respect to activities carried out in the previous two years, but also in relation to other companies.

For additional information on the reference panels, see the Methodological Note on page 16.

### Comparisons

- CO<sub>2</sub> emissions: pages 130-134
- SF<sub>6</sub> leakage: pages 135-136
- Water consumption: pages 142-143
- Waste production: pages 144-145
- Personnel turnover: pages 152-153
- Employee training: pages 156-159
- Gender pay gap: pages 164-167

## The photographs

Every chapter opens with a photograph of one of Terna's grid elements and with a focus on one of the more recent projects implemented. Single pole pylons, Foster pylons as well as bird dissuaders and artificial nests represent Terna's firm sustainable business approach with important effects for both the environment and biodiversity.

## The main sustainability results

During 2011, important progress was made in all corporate responsibility areas in line with the indications of the Code of Ethics, with the adoption of the Global Compact and with the objectives stated in the 2010 Sustainability Report.

For a timely comparison between objectives and results, please refer to the table on page 44. Below, the main progress and awards are listed.

## General aspects

**The “Sustainability” section of the website [www.terna.it](http://www.terna.it)** was expanded and reorganized to allow easier and more intuitive navigation as well as greater availability of contents, also multi-media ones. This activity awarded Terna fifth place among the first 50 companies included in the Lundquist ranking, the most significant ranking in terms of online sustainability communication (see box page 61).

**Transparency in grid development:** as of March 2011, the website “Terna’s Building Sites in Italy” has been online. It was created to provide communities, institutions, media and other interested stakeholders all the information regarding the progress of the major authorized electricity infrastructures, work in progress or work delayed owing to bureaucratic problems. At the beginning of 2012, the website was further expanded with “Trasversale in Veneto”, a focus dedicated to the electricity criticalities in this region and to the solutions proposed by Terna for overcoming them (see box page 58).

**Culture of Sustainability:** Terna’s support in establishing a culture of sustainability was pursued through the active participation in the most significant initiatives in the sector, (see box on “Terna’s Commitment in the UN Global Compact” page 40) and with progress made in applying the “LBG methodology - The London Benchmarking Group” for monitoring the impacts of Terna’s initiatives in the community (see box page 179).

**Integrated Reporting:** Terna joined the Pilot Programme of the IIRC - International Integrated Reporting Council – and launched an internal project for a greater integration of financial and sustainability aspects in its communication to stakeholders (see page 48).

**Stakeholder engagement:** initiatives were intensified for involving stakeholders both on the short-medium term objectives (see box “A network of relations with stakeholders” page 59) and on issues for possible scenarios (see box “The battle of the grids: joint Terna-Greenpeace initiative”, page 60).

## Responsibility for the electricity service

**Security of the electricity system:** the Security Plan determined investments for 96 million euros for improving the systems dedicated to protecting the transmission service, also in light of the exponential growth of renewable production plants. The 2012-2016 Strategic Plan established important investments in energy storage systems (see box page 69).

**Monitoring systems:** in July 2011, TIMM’s applications (Integrated Text for Monitoring the electricity market), the database that monitors the electricity market data also for the AEEG, obtained the ISO/IEC 27001:2005 certification (page 70).

**Service quality:** the performance targets were reached and surpassed for the electricity service’s continuity and quality, monitored by Terna and by the AEEG (pages 72-73).

**Pylons and design:** following the entrance into operation of the Foster pylons along the Casellina-S. Barbara-Tavarnuzze electricity line in Tuscany, Terna’s attention devoted to a more harmonious placement of its pylons into the environment has focused on the engineering process of the pylons designed by Arch. Dutton from the Rosental Studio (page 84).

### Other significant aspects

- Terna and smart grids (page 68)
- ENTSO-E: European Network of Transmission System Operators (pages 79-80)
- Providing connection service (page 81)
- Line inspection by helicopter: the LIDAR project (page 82)
- A new method of working on high voltage power line conductors: 3D isolated platform (page 83)
- In Lombardy the first sustainable “super grid”: Chignolo Po-Maleo” (page 86)
- The INTEGRIT project (page 86)

## Economic responsibility

**Economic impact:** in addition to the effects implicit in the service provided to the users of the electricity system, Terna’s economic impact can also be measured by the investment activities (1.2 billion euros in 2011), by the creation of employment (the work performed by the employees of its contractors and subcontractors was equal to over 2,076 full-time employees) and by its procurement costs equal to 1.2 billion euros in 2011 (pages 98-99).

**Dividends for shareholders:** while affected from the negative consequences of increased taxes (Robin Hood Tax), Terna has nonetheless guaranteed its shareholders dividends in line with those of the previous year (see page 101).

**AEEG incentives and Terna’s costs for the electricity system:** all the bonus-penalty initiatives introduced by the Electricity and Gas Authority (AEEG) for improving the service have led to positive results increasing revenues for Terna and implicitly generating multiple positive results for the electricity system’s users (see page 92). Overall, transmission costs affect approximately 3% of the electricity bill of a typical domestic user (see page 92).

### Other significant aspects

- The new regulatory framework (page 93)
- Sustainability in criteria for awarding tenders (page 106)
- Master-data of electricity production plants started (page 109)

## Environmental responsibility

**Consultation:** in 2011, volunteer consultation activities increased with regional authorities and local bodies for authorizing the works included in the Grid Development Plan. For the first time, the Company presented the Development Plan to category and consumer associations (page 59).

**WWF:** during the year, environmental restoration and mitigation measures were carried in the WWF Oases in Padule-Orti Bottagone (LI) and in Stagni di Focognano (FI) as well as in the Sicilian Oasis of Torre Salsa (AG) (see box page 122).

**LIPU:** monitoring activities were completed as established in the agreement with Terna of December 2008, for conducting scientific research on the possible interaction between birdlife and the electricity grid; the analysis of data collected suggested, for two areas out of seven, an additional study phase that is scheduled to begin in 2012 (page 126).

**CO<sub>2</sub> emissions:** even though not subject to the restrictions imposed by the Kyoto Protocol or by emission trading schemes, Terna has implemented numerous initiatives to limit CO<sub>2</sub> emissions. In 2011, direct emissions registered a 4.4% reduction compared to the previous year (page 129).

**Grid Development Plan:** even if indirectly, the greatest contribution to counter climate change is based on implementing the Grid Development Plan. Considering the overall Plan and its grid efficiency effects, change in production mix and connection of renewable plants, the reduction of the system's emissions at the end of the Plan period is estimated to be approximately 11 million tons of CO<sub>2</sub> equivalent (page 138).

**Environmental costs:** Terna's environmental commitment is marked by the costs incurred for environmental reasons, whose separate reporting has been used for three years. Investments in 2011, totaled over 38.3 million euros and operating costs equaled 10.3 million euros (pages 146-147).

An online mini website on electromagnetic fields: information and general definitions, frequently asked questions and a test for one's knowledge are only some of the contents included in the mini website on electromagnetic fields created with the collaboration of the Fondazione Ugo Bordoni and online since July 2011.

### Other significant aspects

- Integrated planning process (pages 115-116)
- Electric and magnetic fields: the legal limit (page 117)
- The "Energy Bridge" between Sicily and Calabria: the Sorgente-Rizziconi power line (page 119)
- A radar for migratory birds (page 120)
- Masking the power stations in Chignolo Po and Maleo (page 124)
- Studies on electricity lines and bats (page 125)
- Recovery and restoration of building site areas in Val d'Ossola Sud (page 125)
- Criteria for location of dissuaders in the planning phase: the Trino-Lacchiarella power line (page 126)
- The 2011 reproductive season in the nests on Terna's pylons (page 127)
- Priority to energy from renewable sources (pages 139-140)
- Terna-Legambiente agreement for a sustainable energy culture (page 140)
- Disposal of equipment containing PCB oil (page 146)

## Social responsibility

**Turnover of personnel leaving:** personnel trends were characterized also in 2011 by a very low spontaneous resignation rate (0.5%): human resources leave the Company mainly for retirement. Turnover of personnel leaving, even considering retirement, is low compared to other companies (see page 150).

**Training:** is reconfirmed as a strong point in enhancing human resources, as indicated by the comparison with other companies (pages 158-159). In 2011, there were 51 training hours per employee, with a coverage of 97% of personnel that underlines Terna's focus on continuous training.

**Occupational safety:** in 2011, as was also recorded in the previous two years, there were no fatal injuries and the absentee rate for injuries confirmed the downward trend (page 172). Many initiatives were implemented for preventing occupational injuries that further improved the already consolidated approach to the issue.

**Corporate giving:** according to the LBG ranking (the London Benchmarking Group), in 2011, Terna allocated 1,714,164 euros to community initiatives of which 1,338.914 were donations and 244.336 investments in the community (page 179).

### Other significant aspects

- Relations with schools, universities, centers of excellence (page 153)
- Transmitting energy also with sports (page 168)
- The Memorandum of Understanding with the Fire Department (page 171)
- With “A better future for everyone”, Terna’s 2011 Christmas created solidarity (page 181)

### Sustainability objectives

2012 objectives (see page 43 for details) are in line with past trends. In particular, the following is underlined:

- reviewing ethical and environmental and social responsibility criteria in the subsidiaries following the company’s new structure;
- continuing the project for a greater integration of financial and sustainability information as part of the IIRC’s Pilot Programme;
- defining an action plan with firm initiatives to be implemented in the principal areas for improvement that emerged from the survey conducted on people satisfaction;
- reviewing environmental and social criteria in the supply chain also in light of the Ruggie Report of the United Nations on human rights.

### Reading approaches for stakeholders

The 2011 Sustainability Report maintained the general lines introduced by several suggestions of stakeholder groups involved in critical readings followed by discussion with Terna’s Corporate Social Responsibility unit.

In Terna’s Profile an entire chapter is dedicated to stakeholder engagement which contains a table with their mapping (page 52), the commitments undertaken by the Company for them and the monitoring instruments used to check their actual implementation and progress.

Again this year, the interest of Terna’s different stakeholders for the parts of the Report that regard them more directly determined several layout choices, the most important of which concerns the boxes, which are more numerous and detailed than in the past and the novelty represented by the benchmarks.

The reading of the sections, or in a few cases, of entire dedicated chapters with their related boxes allows readers to create approaches to the Report other than the standard beginning-to-end one. In particular, the following is pointed out:

- Shareholders, financial analysts and providers of capital: page 54
- Employees: pages 54-55
- Suppliers: pages 58-59
- Grid users, customers and business partners: page 55
- Authorities and regulatory authorities, AEEG: page 53
- Institutions and associations: page 53
- Media, opinion groups and scientific community: pages 59-61
- Society and local communities: pages 56-58