

COMPARISON METHODOLOGY

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 2015 Sustainability Report, as was the case in previous years. The comparative sustainability indicators regard the following themes: CO₂ emissions, SF₆ leakage incidence rate, hours of training per capita provided to employees and the turnover rate on termination of personnel. 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 31/12/2015); 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 2015). 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 2014 data, since the comparisons were drafted when the 2015 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 CO₂ 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.

SUMMARY TABLE

Panel	TSO	FTSE-MIB	DJSI – Electric Utilities
Companies considered	53	40	8
Companies with relevant data	22	30	8

TSO Panel

The following tables set out the transmission operators which have been analysed. The first table lists the operators that are members of ENTSO-E, the European Network of Transmission System Operators for Electricity; the second table, instead, lists the major non-European transmission companies. The following is specified for each TSO: the country in which it operates primarily and additional sectors or activities that it carries out; lastly, an “x” in the final column indicates the companies for which it has been possible to acquire the relevant data for comparison.

EUROPEAN TSOs (members of ENTSO-E)			
Name	Country	Additional sectors/activities	Data acquired
50Hertz Transmission GmbH	Germany		
Amprion GmbH	Germany		
AS Augstsprieguma tīkls	Latvia		
Austrian Power Grid AG	Austria		x
C.N. Transelectrica S.A	Romania		
ČEPS a.s.	Czech Republic		
Creos Luxembourg S.A.	Luxembourg	Gas	
Crnogorski elektroprenosni sistem AD	Montenegro		
Cyprus Transmission System Operator	Cyprus		
EirGrid plc	Ireland		
Electroenergien Sistemen Operator EAD	Bulgaria		
Elering AS	Estonia		x
ELES d.o.o.	Slovenia		x
Elia System Operator SA	Belgium		x
Energinet.dk	Denmark	Gas	x
Fingrid Oyj	Finland		x
HOPS d.o.o.	Croatia		
Independent Power Transmission Operator S.A.	Greece		
JP Elektromreža Srbije	Serbia		
Landsnet hf	Iceland		x
Litgrid	Lithuania		
Macedonian Transmission System Operator AD - MEPSO	Macedonia		
MAVIR	United Kingdom/USA		
National Grid Electricity Transmission plc	Bosnia and Herzegovina	Gas; Generation, Distribution	x
Nezavisni operator sustava u Bosni i Hercegovini	Macedonia		
Polskie Sieci Elektroenergetyczne S.A.	Poland		
Red Eléctrica de España S.A.	Spain		x
Rede Eléctrica Nacional, S.A	Portugal	Gas	x

Réseau de Transport d'Electricité	France		x
Scottish Hydro Electric Transmission plc - SSE Plc	United Kingdom	Gas; Generation, Distribution	x
Scottish Power Transmission plc	United Kingdom	Gas; Generation, Distribution	
Slovenská elektrizačná prenosová sústava, a.s.	Slovakia		x
Statnett SF	Norway		x
Svenska Kraftnät	Sweden		x
Swissgrid AG	Switzerland		
System Operator for Northern Ireland Ltd	United Kingdom		
TenneT TSO B.V. - NL	Germany		x
TenneT TSO GmbH D	Netherlands		x
Terna - Rete Elettrica Nazionale	Italy		x
TransnetBW GmbH	Germany		
Vorarlberger Übertragungsnetz GmbH	Austria		

EUROPEAN TSOs (members of ENTSO-E)

Name	Country	Additional sectors/ activities	Data acquired
American Electric Power - AEP	USA	Generation, Distribution	x
AP TRANSCO	India		
China Southern Power Grid	China	Distribution	
Eskom	South Africa	Generation, Distribution	
Federal Grid Company	Russia	Generation, Distribution	x
GETCO	India		
Hydro-Québec	Canada	Generation, Distribution	x
Interconexión Eléctrica SA - ISA	Latin America	Roads, Telecommunications	x
ITC Holdings	USA	Roads, Telecommunications	
Maharashtra State Electricity Transmission Co. Ltd.	India		
Power Grid Corporation of India	India		
SGCC - State Grid Corporation of China	China		

FTSE MIB Panel

The following table refers to the companies listed on the FTSE MIB as at 31/12/2015. The relevant sector is specified, and an “x” in the final column indicates the companies for which it has been possible to acquire the relevant data for comparison.

Company	Country	Data acquired
A2A	Energy	x
Anima Holding	Financial services	
Atlantia	Transport	x
Azimut Holding	Financial services	
Banca Mediolanum	Insurance & Banking	x
Banca Monte Paschi Siena	Banking	x
Banca Pop Emilia Romagna	Banking	x
Banca Pop Milano	Banking	x
Banco Popolare	Banking	x
Buzzi Unicem	Cement	x
Campari	Drinks	x
Cnh Industrial	Capital goods	x
Enel	Energy	x
Enel Green Power	Energy	
Eni	Oil & Gas	x
Exor	Holding	
Fiat Chrysler Automobiles	Motor vehicles	x
Finmeccanica	Aeronautics & Defence	x
Generali	Insurance	x
Intesa Sanpaolo	Banking	x
Italcementi	Building and Materials	x
Luxottica	Production and distribution of spectacle frames	
Mediaset	Media & Communications	x
Mediobanca	Banking	x
Moncler	Clothing	
Poste Italiane	logistic-postal, financial, insurance, digital communication services	
Prysmian	Cables	x
Saipem	Oil Industry	x
Salvatore Ferragamo	Luxury Goods	
Snam	Natural Gas	x
Stmicroelectronics	Electronics	x
Telecom Italia	Telecommunications	x
Tenaris	Iron & Steel	
Terna	Electricity transmission	x
Tod's	Footwear	

Ubi Banca	Banking	x
UniCredit	Banking	x
Unipol	Financial services	x
Unipolsai	Insurance	x
Yoox Net-A-Porter Group	Fashion and design	x

Electric Utilities – ELC Panel

The following table lists the companies that have been selected for the “Electric Utilities – ELC” Panel. This group includes the best international performers in the Electric Utilities sector identified by the sustainability rating agency RobecoSAM that were included in the Dow Jones Sustainability World index in September 2015. The country in which the company has its registered office is specified and an “x” in the final column indicates the companies for which it has been possible to acquire the relevant data for comparison.

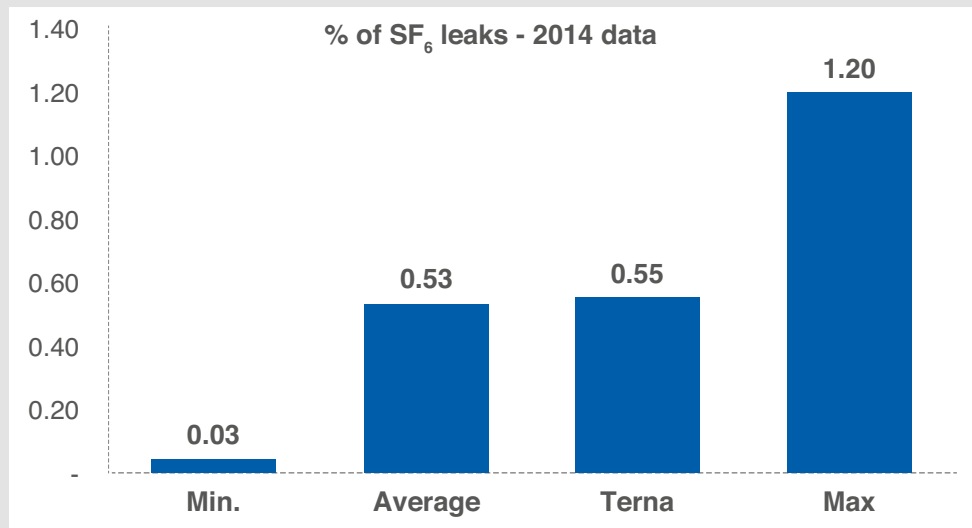
Company	Country	Data acquired
Acciona SA	Spain	x
Cia Energetica de Minas Gerais	Brazil	x
EDP - Energias de Portugal SA	Portugal	x
Endesa SA	Spain	x
Enel SpA	Italy	x
Iberdrola SA	Spain	x
Red Electrica Corp SA	Spain	x
Terna Rete Elettrica Nazionale SpA	Italy	x

SF₆ leaks: comparative data

SF₆ gas is used by electricity transmission operators because of its excellent electrical insulation properties. It has an extremely powerful greenhouse effect, 23,500 times higher than that of CO₂⁽¹⁾.

On account of its specific nature of use, only other TSOs were compared.

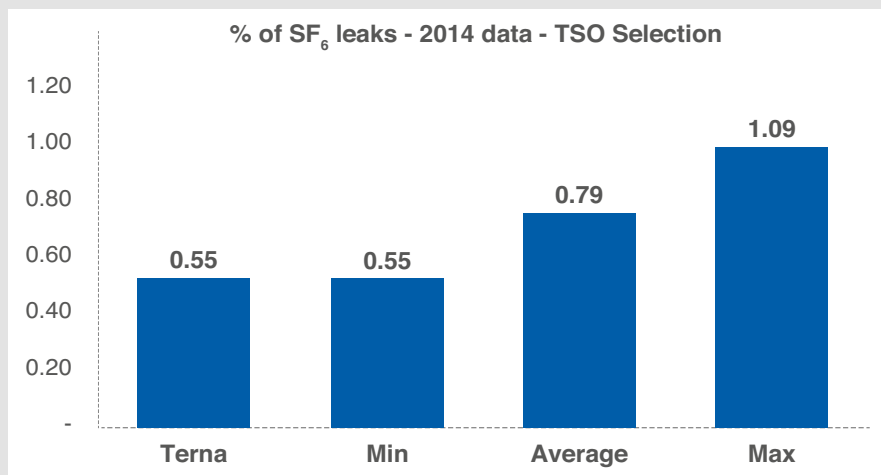
The SF₆ figure is given as the proportion of leaks to the total quantity of gas in substation equipment. In 2015, Terna recorded a proportion of leaks of 0.44%. For 2014, the year to which the comparison refers, SF₆ leaks were equal to 0.55% (0.41% net of the accident that occurred in an operational transmission area).



In the comparison with other transmission operators, for the year 2014 Terna showed a slightly above-average proportion of SF₆ leaks.

In order to better understand the phenomenon, the comparison between the SF₆ leak rates for TSOs with a quantity of gas that is comparable with that of Terna (RTE, REE, Tennet) is given. The average of SF₆ gas in this limited panel, which includes Terna, is equal to 408 tonnes. Despite the fact that Terna has the greatest amount installed (536 tonnes), it reports the lowest leakage incidence rate.

The figure for the compared TSOs confirms the evidence that emerged in 2014 (compared to 2013 data).



(1) See the "IPCC Fifth Assessment Report: Climate Change 2013"

Details of the calculation of the "SF₆ leaks" benchmark are available in the "Sustainability" section of the www.terna.it website.

CO₂ emissions: comparative data

The figures used for comparison as regards the emission of CO₂ are composed of the relative figures on direct and indirect emissions (aims 1 and 2).

The unit of measure used for the comparison is equivalent CO₂, expressed in thousands of tonnes, where equivalent CO₂ means the total contribution of the greenhouse gases to the greenhouse effect.

The analysis was done by comparing Terna's emission values with those of 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 CO₂ 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 2015, CO₂ emissions attributed to Terna's activities amounted to 136.7 thousand tonnes. On the other hand, for 2014 (the year with which a comparison can be made) emissions were measured at 141.6 thousand tonnes of CO₂⁽¹⁾.

When compared with all three panels, Terna is significantly below the average for 2014. The data confirms the trend for the previous three-year period.

CO ₂ emissions (thousands of tonnes) - 2014			
	TSO	FTSE-MIB	DJSI – Electric Utilities
Available data ⁽²⁾	11	26	8
Average	14,372.1	8,918.8	26,072.4
Max	122,700.0	116,116.0	116,116.0
Min	11.8	0.4	87.0
Terna		141.6	

(1) The comparison data for 2014 does not take into account the changes made following the review of the conversion factors indicated by the IPCC AR5 and the Greenhouse Gas Protocol (GHG) Initiative (see the "total direct and indirect emissions of greenhouse gases - CO₂ equivalent tonnes" table).

(2) In the absence of figures published by the company, or directly comparable values, for the FTSE MIB companies and the ELC panel, it was decided that the figures in the "CDP Climate Change Report 2015" could be used for the analysis. In total, CDP figures were used for four companies.

Details of the calculation of the "CO₂ emissions" benchmark are available in the "Sustainability" section of the website, <http://www.terna.it/en-gb/homepage.aspx>.

Staff turnover: comparative data

Terna's staff turnover rate is defined as the ratio of employees leaving during the year against 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 **2015** Terna's turnover rate was **13.8%**, in line with the generational turnover programme implemented during the year. Net of the 438 incentivised redundancies, the turnover rate on termination was 1%.

In **2014**, the year for which comparative data is available, the turnover rate was **2.1%**, below the average of all the reference panels and lower than the panel of the listed companies. The data confirms the trend for the previous three-year period.

Turnover rate (%) – 2014			
	TSO	FTSE-MIB	DJSI – Electric Utilities
Figures available	18	25	8
Average	4.5	7.9	4.6
Max	11.0	14.8	9.0
Min	1.2	2.1	1.5
Terna		2.1	

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

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 2015, Terna provided 56 hours of training per employee, increasing by 30% compared to the 43 hours provided in 2014, the year for which comparative data are available.

Compared to the other companies, Terna is above the average value for all three panels: TSO, Electric Utilities for the Dow Jones Sustainability Index and companies on the FTSE-MIB (data above the average for the previous three-year period).

Hours of training per capita – 2014			
	TSO	FTSE-MIB	DJSI – Electric Utilities
Figures available	11	28	8
Average	41	33	42
Max	74	56	74
Min	12	10	12
Terna		43	

Details on the "staff training" benchmark figures are available in the "Sustainability" section of the website <http://www.terna.it/en-gb/homepage.aspx>.