

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 2014. The country in which the company has its headquarters 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.

Name	Country	Data acquired
Acciona SA	Spain	x
Cia Energetica de Minas Gerais - CEMIG	Brazil	x
EDP - Energias de Portugal SA	Portugal	x
Endesa SA	Spain	x
Enel	Italy	x
Entergy Corp	USA	x
Iberdrola SA	Spain	x
Terna	Italy	x

METHODOLOGY OF COMPARISON

Comparative Analysis of Sustainability Performance

Methodological Remarks

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. The sustainability indicators that were compared relate to the following issues: CO2 emissions, SF6 leakage incidence rate, water consumption, waste production, staff turnover rate on termination, hours of training per capita provided to employees 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.

Some of the indicators considered (water consumption, waste produced, CO2 emissions) show data 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 that participate in the Global Reporting Initiative (GRI)	19	28	8
Companies with relevant data	27	31	8

FTSE-MIB Panel

The following table refers to the companies listed on the FTSE-MIB as at 21 January 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.

Name	Sectors	Data acquired
A2A	Energy	x
Atlantia	Transport	x
Autogrill	Food	x
Azimut	Financial services	
Banca Monte Paschi Siena	Banking	x
Banca Popolare Emilia Romagna	Banking	x
Banca Popolare 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	Vehicles & Publishing	x
Finmeccanica	Aeronautics & Defence	x
Generali	Insurance	x
Gtech	Lotteries & Betting	x
Intesa Sanpaolo	Banking	x
Luxottica	Banking	
Mediaset	Media & Communications	x
Mediobanca	Banking	x
Mediolanum	Insurance & Banking	x
Moncler	Clothing	
Pirelli & C	Tyres & Property	x
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
Unipolsai	Insurance	x
World Duty Free	Travel retail	
Yoox	Fashion and design	x

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 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	Germany		
Amprion	Germany		
Augstsprieguma tīkls	Latvia		
Austrian Power Grid AG - Verbund	Austria		x
C.N. Transelectrica S.A.	Romania		x
ČEPS	Czech Rep.		
Creos Luxembourg	Luxembourg	Gas	x
Crnogorski elektroenergetski sistem AD	Montenegro		
Cyprus Transmission System Operator	Cyprus		
EirGrid	Ireland		
Electroenergien Sistemem Operator	Bulgaria		
Elering	Estonia		
ELES d.o.o.	Slovenia		x
Elia System Operator SA	Belgium		x
Energinet.dk	Denmark	Gas	x
Fingrid	Finland		x
HOPS d.o.o. (Croatian TSO) - Croatian Transmission System Operator	Croatia		
Independent Power Transmission Operator	Greece		
JP Elektromreža Srbije	Serbia		
Landsnet	Iceland		x
Litgrid	Lithuania		
MAVIR	Hungary		
MEPSO	Macedonia		
National Grid Electricity Transmission plc UK	United Kingdom/ USA	Gas; Generation, Distribution	x
Nezavisni operator sustava u Bosni i Hercegovini - ISO BiH	Bosnia and Herzegovina		
Polskie Sieci Elektroenergetyczne	Poland		
Red Eléctrica de España	Spain		x
Redes Energéticas Nacionais	Portugal	Gas	x
Réseau de Transport d'Électricité	France		x
Scottish and Southern Energy	United Kingdom	Gas; Generation, Distribution	x
Scottish Power Transmission plc	United Kingdom	Gas; Generation, Distribution	x
Slovenska elektrizacna prenosova sustava - SEPS	Slovakia		
Statnett	Norway		x
Svenska Kraftnät	Sweden		x
Swissgrid ag	Switzerland		
System Operator for Northern Ireland	United Kingdom		
TenneT D	Germany		x
TenneT NL	Netherlands		x
Terna	Italy		x
Transnet	Germany		x
Vorarlberger Übertragungsnetz GmbH	Austria		

NON-EUROPEAN TSOs

Name	Country	Additional sectors/activities	Data acquired
American Electric Power - AEP	USA	Generation, Distribution	x
Transmission Corporation of Andhra Pradesh - AP TRANSCO	India		
China Southern Power Grid	China		x
Eskom	South Africa	Generation, Distribution	x
Rossetti/Federal Grid Company - FGC	Russia		x
Gujarat Energy Transmission Corp. - GETCO	India		
Hydro-Québec	Canada	Generation, Distribution	x
Interconexión Eléctrica SA - ISA	Colombia	Roads, Telecommunications	x
International Transmission Company/Entergy	USA		
Maharashtra State Electricity Transmission	India		
Power Grid Corporation of India Ltd	India		
State Grid Corp. China	China		x

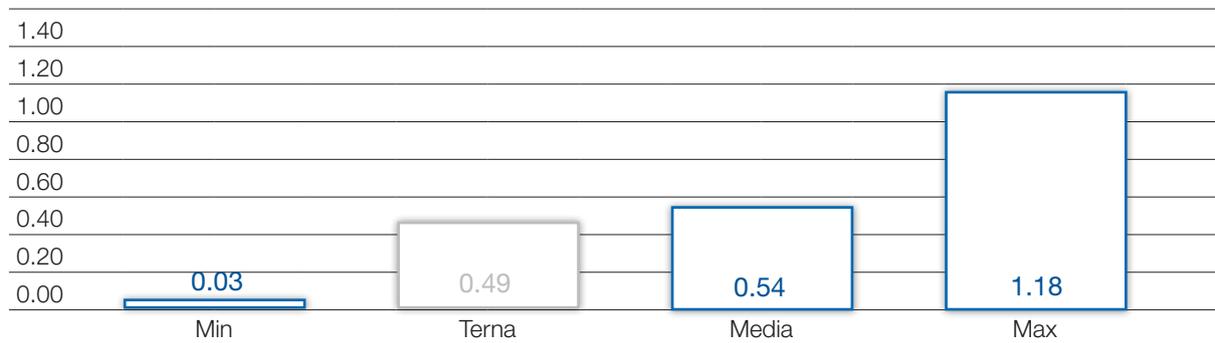
SF₆ leaks: comparative data

SF₆ gas has an extremely powerful greenhouse effect (22,800 times more than CO₂⁽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 SF₆ 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, SF₆ leaks were equal to 0.49%. In the comparison with other transmission operators, for the year 2013 Terna showed a below-average proportion of SF₆ leaks, confirming the trend seen in previous years. A graph of the data available for 2013 is shown below.

% OF SF₆ LEAKS - 2013



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

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 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 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 2014, CO₂ emissions attributed to Terna's activities amounted to 142 thousand tonnes (124 net of the accident). On the other hand, for 2013 (the year with which a comparison can be made) emissions were measured at 138 thousand tonnes of CO₂.

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.

CO₂ emissions (thousands of tonnes) - 2013

	TSO	FTSE-MIB	DJSI - Electric Utilities
Figures available ⁽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		138.0	

⁽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.

Production of waste: comparative data

The comparison between Terna and other companies in regard to the issue of waste was conducted using both total (hazardous and non-hazardous) waste production, which was expressed in absolute terms, as well as relative waste production, taking the per capita figure per employee into consideration.

Data from all three panels were used: transmission system operators (TSO panel), the listed companies of the FTSE-MIB and the Electric Utilities companies included in the Dow Jones Sustainability World Index (ELC).

A substantial lack of comparability emerged from the comparison between the companies, as the amount of waste produced was particularly influenced by the sector in which they operate.

Despite the intrinsic limitations of the comparison, in the absence of more effective normalisation factors than the number of employees, it was nevertheless deemed of interest to present the comparative data so as to provide at least an indication of the issue's materiality in terms of sustainability.

Terna produced a total of 4,489.9 tonnes of waste in 2014, which corresponds to 1.31 tonnes per capita, a reduction in regard to the figures from the previous year; for 2013 (the year for which a comparison can be made), the total waste produced was equal to 5,236.6 tonnes and 1.53 tonnes per employee.

As the table below shows, in the waste-production comparison Terna was below the average in all panels.

Waste production - 2013

	TSO		FTSE-MIB		DJSI - Electric Utilities	
Figures available	10		22		7	
Unit of measure	tonnes	tonnes/ employee	tonnes	tonnes/ employee	tonnes	tonnes/ employee
Average	116,225	7.86	702,049	13.00	2,663,686	61.19
Max	1,080,000	45.17	10,056,398	140.86	10,056,398	206.24
Min	269.00	0.03	512.10	0.03	5,263.60	1.53
Terna	5,263.6	1.53	5,263.6	1.53	5,263.6	1.53

Water consumption: comparative data

The comparison between Terna and other companies concerning the use of water resources was conducted using both the total and per capita water consumption per employee as references.

Data from all panels were taken into account in the comparison: the figures for the transmission system operators (TSO), as well as listed Italian companies (FTSE-MIB) and those in the Electric Utilities sector included in the Dow Jones World Sustainability Index (ELC).

A substantial lack of comparability between the companies emerged from the analysis, in that water consumption is closely linked to the activity that the companies carry out (particularly in regard to the different levels of importance of water usage in production processes), the size of the company and, to a lesser extent, the number of employees. For this reason, significant deviations between the consumption values of the different companies are found, even within the panels. Specifically, water consumption will be much lower for companies that provide services (such as banking services) and will be particularly high for companies that carry out activities that require large quantities of water in their production process.

Despite this, it is deemed that a comparison regarding water consumption is useful in highlighting the differences between sectors and in emphasising the importance of the issue with a view to mitigating consumption.

In 2014, water consumption for Terna's activities was equal to 173.7 thousand m³, which corresponds to 50.54 m³ per capita. In 2013, the year to which the comparison refers, Terna's total water consumption figure was 198.2 thousand m³, equivalent to 57.6 m³ per capita, significantly lower than the average of all the reference panels.

Water consumption - 2013

	TSO		FTSE-MIB		DJSI - Electric Utilities	
Figures available	6		25		6	
Unit of measure	Thousands of m ³	m ³ per capita	Thousands of m ³	m ³ per capita	Thousands of m ³	m ³ per capita
Average	155,736	24,805	100,879	1,340	544,374	17,424
Max	531,000	119,347	2,206,360	26,812	3,065,427	101,397
Min	198.2	51.7	10.2	7.5	198.2	36.8
Terna	198.2	57.6	198.2	57.6	198.2	57.6

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 are 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	

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 for the 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 are available, the turnover rate was 1.8%, below the average of all the reference panels.

	Staff turnover (%) - 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	

Gender pay gap: comparative data

The comparison between Terna and other companies in terms of equal opportunities is based on the percentage gender pay gap, the result of the ratio between men's and women's basic annual salary for the same categories of work. On account of the difference between categories from one country to another, the comparison was only performed for the companies in the FTSE-MIB panel, where most of the companies use typical Italian categories to classify employees.

In 2014, the percentage gender pay gap for employees at Terna was 72.5% for senior executives, 97.1% for junior executives and 95.3% for white-collar workers. In 2013, the year for which comparative data are available, the pay gap was 81.3% for senior executives, 96.3% for junior executives and 95.1% for white-collar workers. The difference was not calculated for blue-collar workers, as there are no women working in this category at Terna.

	Gender pay gap (%) FTSE-MIB – 2013		
	Senior executives	Junior executives	White-collar workers
Figures available ⁽¹⁾	20	21	21
Average	88.5	92.7	92.6
Max	104	99	100
Min	76	84.7	79.3
Terna	81.3	96.3	95.1

⁽¹⁾ Where group data were not available, only data concerning Italy were considered for multi-national companies.