Comparative analysis of sustainability performance

In the belief that a comparison of environmental, social and governance performance should not only concern the Company but also its stakeholders, as in previous years, this Report also includes comparisons between Terna's results and those of other companies. The comparative sustainability indicators regard the following topics: carbon intensity (new in the 2018 Sustainability Report), the SF_{ϵ} leakage rate, per capita hours of training and the staff turnover rate.

The main criteria adopted in the analysis, as a premise for reading and interpreting the comparisons of each of the indicators in the Report, are set out below:

- three company peer groups were chosen: the first consists of the leading European and non-European Transmission System Operators in terms of the number of kilometres of line operated;
- the second, covering a range of sectors, comprises large Italian companies (the 40 companies listed on the FTSE MIB on 8 September 2018);
- and the third consists of the international best performers in the Electric Utilities ELC sector (identified by the sustainability rating agency, RobecoSAM, and included in the Dow Jones Sustainability World Index in September 2018).

The purpose of the three peer groups - also in connection with the type of indicator examined - is to provide a comparison between companies with the same operating characteristics, including an Italian comparison and one with the top international performers from the same sector. Among the companies in the three peer groups, consideration has been given to the ones that publish useful information for comparison on their websites via their Sustainability Report (even if it has not been drawn up in accordance with the GRI guidelines) or via other documents (integrated reports, HSE reports, financial reports, etc.). This led to a reduction in the sample compared with the number of companies in the peer group at the outset. The comparative analysis necessarily refers to data for 2017, as the comparisons were made whilst the 2018 reports were being prepared, as was also the case for Terna.

It should be noted that, despite the exclusion of explicitly non-homogeneous data, in many cases doubts remain regarding the actual comparability between companies, especially in situations where significant discrepancies were found between the data reported by some companies and the average figure for the peer group.

SUMMARY TABLE

PANEL	TSO	FTSE-MIB	DJSI - ELECTRIC UTILITIES
Companies considered	55	40	8
Companies with relevant data	24	36	8

The reference panel

TSO Panel

The following tables set out the transmission operators which have been analysed. Are listed the operators that are members of ENTSO-E, the European Network of Transmission System Operators for Electricity and the major non-European transmission companies.

NAME

50Hertz Transmission GmbH

Akcionarsko društvo Elektromreža Srbije

American Electric Power - AEP

Amprion GmbH

AS Augstsprieguma tÏkls

Austrian Power Grid

C.N. Transelectrica S.A.

ČEPS, a.s.

China Southern Power Grid

Creos Luxembourg S.A.

Crnogorski elektroprenosni sistem AD

Cyprus Transmission System Operator

EirGrid plc

Electroenergien Sistemen Operator EAD

Elering AS

ELES, d.o.o.

Elia System Operator SA

Energinet.dk

Eskom

Fingrid Ovi

Gujarat Energy Transmission Corporation

HOPS d.o.o.

Hydro-Québec

Independent Power Transmission Operator S.A.

ISA - Interconexión Eléctrica S.A.

ITC Holdings

Landsnet hf

Litgrid AB

Macedonian Transmission System Operator AD Maharashtra State Electricity Transmission Co. Ltd.

MAVIF

National Grid Electricity Transmission plc

Nezavisni operator sustava u Bosni i Hercegovini

OST sh.a - Albanian Transmission System Operator

Polskie Sieci Elektroenergetyczne S.A.

Power Grid Corporation of India Ltd.

Red Eléctrica de España S.A.

Rede Energètica Nacionais, S.A.

Réseau de Transport d'Electricité

ROSSETI/Federal Grid Company of Unified Energy

System

Scottish Hydro Electric Transmission plc

Scottish Power Transmission plc

Slovenská elektrizačná prenosová sústava, a.s.

State Grid Corporation of China

Statnett SF

Svenska kraftnät

Swissgrid ag

System Operator for Northern Ireland Ltd

TEIAS

TenneT TSO B.V.

TenneT TSO GmbH

Terna - Rete Elettrica Nazionale SpA

Transmission Corporation of Andhra Pradesh

TransnetBW GmbH

Vorarlberger Übertragungsnetz GmbH

FTSE-MIB Panel

The following table refers to the companies listed on the FTSE MIB as at 08/09/2018.

NAME

A2A

Atlantia

Azimut

Banca Generali

Banca Mediolanum

Banco BPM

BPER Banca

Brembo

Buzzi Unicem

Campari

Cnh Industrial

Enel

Eni

Exor

Ferrari

Fiat Chrysler Automobiles

Finecobank

Generali Ass

Intesa Sanpaolo

Italgas

Leonardo

Luxottica Group

Mediaset

Mediobanca

Moncler

Pirelli & C

Poste Italiane

Prysmian

Recordati

Saipem

Salvatore Ferragamo

Snam

Stmicroelectronics

Telecom Italia

Tenaris

Terna-Rete Elettrica Nazionale

Ubi Banca Unicredit

Unipol

Unipolsai

Panel Electric Utilities - ELC

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 2018.

NAME

Compagnia Energetica de Minas Gerais S.A.

Electricitè de France S.A.

Empresa Nacional de Electricidad S.A.

Enel SpA

Energias de Portugal

Iberdrola S.A.

Red Electrica de Espana S.A.

Terna-Rete Elettrica Nazionale SpA

Focus

STAFF TURNOVER: COMPARATIVE DATA

By staff turnover, Terna means the ratio of employees leaving the Company during the year to the number of employees at 31 December of the previous year.

As the staff turnover rate is an indirect indicator of the corporate climate that affects all sectors, data for transmission companies (the TSO group) and large Italian listed companies (FTSE-MIB) were examined, as well as data for electric utilities included in the World Index of the Dow Jones Sustainability Index.

In 2018, Terna registered a turnover rate of 2.4%. In 2017, the last year for which comparative data are available, Terna's turnover rate stood at 5.9%, reflecting the generational turnover plan. Examination of the average rates recorded by the peer groups reveals that Terna's turnover rate, in 2017, was broadly in line with the average for the TSO group and below the average for companies in the FTSE-MIB and the Dow Jones Sustainability Index.

TURNOVER RATE (%) - 2017	TSOS	FTSE-MIB	DJSI- ELECTRIC UTILITIES
Available data	19	34	8
Min.	1.3	2.4	3.7
Average	5.4	11.5	7.1
Max.	18.6	38.8	10.1
Terna		5.9	





Focus

STAFF TRAINING: COMPARATIVE DATA

Comparison of the staff training performance is based on the per capita hours of training provided by companies. As per capita training is not necessarily linked to the size of a company or the sector in which companies operate, data from all the three peer groups (TSOs, electric utilities in the Dow Jones Sustainability Index and FTSE-MIB companies) were examined.

In 2018, Terna provided 55 hours of training for each employee, marking an increase with respect to 2017, when an average of 50 hours of training per employee was provided. This ranks Terna above the average figure for all three peer groups. As further evidence of Terna's commitment to skills development, its above-average performance is confirmed by the average for the five-year period 2013-2017 (49 hours of training per capita each year at Terna, compared with the less than 30 hours provided by the FTSE-MIB group).

It should be noted that the Terna figure does not include on-the-job training.

HOURS OF TRAINING PER CAPITA - 2017	TSO	FTSE-MIB	DJSI-ELECTRIC UTILITIES
Available data	14	34	8
Min.	17.0	7.0	34.4
Average	48.2	28.6	49.9
Max.	108.0	67.9	108.0
Terna		50	





Focus

Carbon intensity: comparative data

In the Sustainability Report for 2018, Terna has decided to extend its benchmarking to include carbon intensity for the first time, in order to compare its CO_2 emissions normalised by revenue with peer groups. The analysis was carried out by comparing Terna's emissions figure with three peer groups: FTSE-MIB listed companies, electric utilities included in the Dow Jones Sustainability World Index, and TSOs. In the absence of normalisation factors applicable to all sectors, it was deemed worthwhile to present the emissions data normalised by revenue which, despite differences in the value chains in the various sectors, is an important initial step in standardising the comparison.

57,8

TONNES OF CO₂
EQUIVALENT
NORMALISED
BY REVENUE
PER €M

In 2018, carbon intensity attributable to Terna's activities amounted to 57.8 tonnes of CO_2 equivalent normalised by revenue per \in m.

In 2017, however, the year for which comparison with the other companies is available, carbon intensity amounted to 66 tonnes of CO₂ equivalent normalised by revenue per €m.

As can be seen from the comparison with all three peer groups, in 2017 Terna was significantly below the average.

CARBON INTENSITY (TONNES OF ${\rm CO_2}$ EQUIVALENT NORMALISED BY REVENUE PER ${\rm EM}$) IN 2017	TSO	FTSE-MIB	DJSI- ELECTRIC UTILITIES
Available data	13	36	8
Min	13.4	0.5	16.3
Average	774.7	373.8	809.5
Max	6,719.3	7,280.7	1,760.7
Terna		66	



Further details on how the benchmarking of carbon intensity is conducted may be found in the "Sustainability" section of the Company's website at www.terna.it.

Terna focuses its attention on a number of voluntary action programmes aimed at reducing its main sources of greenhouse gas emissions, which primarily regard curbing the SF_6 leakage rate, the energy efficiency of buildings and energy saving at electricity substations.

Focus

SF₆ leakage: comparative data

 ${\rm SF_6}$ gas is used by electricity transmission companies because of its excellent electrical insulation properties. The specific nature of the use of ${\rm SF_6}$ gas limits comparison to the peer group of other TSOs only. The indicator compared is the leakage rate with respect to the total amount of gas installed in substation equipment. In 2018, Terna registered a leakage rate of 0.38%. This is a marked improvement on the figure for 2017, the year to which the comparison refers, when ${\rm SF_6}$ leakage stood at 0.47%. In comparison with the other transmission operators, in 2017 Terna reported a percentage of ${\rm SF_6}$ leakage below the peer group weighted average, calculated as the ratio between the sum of the leaks and the sum of the quantities installed by the TSOs as a whole, and slightly below the arithmetic mean.



SF₆ LEAKAGE RATE (%) - 2017



