



In brief	38
Introduction	39
Terna and the SDGs	40
Structure of the Group	43
Business model and activities	50
Strategic Plan 2020-2024	62
Opportunities and risks connected with climate change	64
Main economic impacts	68

Presentation of Terna: key SDGs, the Group's structure and governance, its activities and business model, the new Strategic Plan and the main economic impacts.

>>

Profile and activities

In brief

This is an introductive section presenting Terna: changes in the Group's structure with respect to 2018, the Parent Company's ownership structure, its governance, business model, core activities, new Strategic Plan 2020-2024 and, above all, the values underpinning its approach to doing business, consisting of the UN Sustainable Development Goals (SDGs), primarily Goals 7, 9 and 13.

The business model, designed to deliver the current energy transition, identifies a number of essential enablers ("People"¹² and "Innovation"¹³), starting from Terna's mission, which corresponds with our two core activities and the related roles in the electricity system: transmission (TSO-Transmission System Operator) and dispatching (SO-System Operator). These activities represent the Company's core business¹⁴ ("Regulated Activities" or "Regulated Activities in Italy"), whilst our other activities are classified as non-regulated ("Non-regulated Activities") and international ("International Activities").

Information on the Strategic Plan 2020-2024 is followed by a paragraph on "Opportunities and risks connected with climate change"¹⁵, focusing on the principal reason for the need to implement a new energy model based on the integration of renewable sources.

The section closes with a brief description of revenue in 2019, broken down by type ("Regulated Activities", "Non-regulated Activities" and "International Activities"), and the main economic impacts during the year, starting with the value added generated.

HIGHLIGHTS:

SRIs (Socially Responsible Investors) 11.8% of the free float (9.5% in 2018)	Capital expenditure €1,264.1m (up 15.6% on 2018)	Procurement €1,484m (up 25.5% on 2018)
--	--	--

¹² See the specific section on page 169.

¹³ See the specific paragraph on page 160.

¹⁴ Transmission and dispatching activities are described in a specific section, "Electricity service and innovation" on page 129.

¹⁵ See page 64.

Introduction

The Terna Group's main activities are electricity transmission and dispatching in Italy, where, under a government concession, it performs the role of TSO (Transmission System Operator).

Terna is thus responsible for the planning, construction and maintenance of the National Transmission Grid ("NTG"), as well as management of the electricity that flows through it, with the aim of ensuring the continuity and quality of the service.

During the current transition to a decarbonised economy, Terna has a key role to play in enabling the growing integration of non-programmable renewable sources.

Based in Rome, the Terna Group owns almost the entire NTG, which is among the most modern and technologically advanced transmission grids in Europe. We are the largest independent electricity transmission network operator in Europe and one of the world's leading operators in terms of the number of kilometres of overhead line managed, with over 74,000 kilometres of high-voltage lines.

The Group is responsible for the long-term security, quality and cost-effectiveness of the national electricity system, pursuing its development and integration with the European system. We ensure that all network users have equal access. Our activities are carried out under a monopoly regime, in accordance with the regulations defined by the Regulatory Authority for Energy, Networks and the Environment ("ARERA") and in implementation of the guidelines established by the Ministry for Economic Development (the "MED").

Alongside these activities ("Regulated Activities in Italy"), the Group also operates in a number of non-regulated sectors in Italy, leveraging the technical expertise acquired in managing its core business and as a result of innovation ("Non-regulated Activities").

Finally, the Group offers its expertise and services to overseas customers ("International Activities"), including in collaboration with energy operators that have an established international presence. These initiatives focus on countries that require investment in their transmission systems, and which also have stable political and regulatory frameworks and a risk-return profile in line with that of the Company.

In managing all its businesses, Terna pays great attention to the possible economic, social and environmental impacts, and adopt a sustainable approach to business in order to establish, maintain and consolidate relationships with its stakeholders that are based on mutual trust, with a view to creating shared value.

The Parent Company, Terna S.p.A., is listed on Borsa Italiana's screen-based trading system (*Mercato Telematico Azionario*) and, at approximately €11.9 billion¹⁶, ranks among Italy's leading companies by market capitalisation.

¹⁶ Market capitalisation at the close of trading on 30 December 2019. The market capitalisation, calculated on the basis of the average share price for the year, is €11.3 billion.

Terna and the SDGs



Terna's activities and mission coincide almost entirely with a number of the United Nations SDGs.

Specifically, the relevant SDGs are 7 ("Affordable and clean energy"), 9 ("Industry, innovation and infrastructure") and 13 ("Climate action"), whose implementation depends primarily on delivery of the energy transition towards a decarbonised economic model and of the NTG Development Plan.

For this reason, the section on the "Electricity service and innovation" is structured in such a way as to highlight Terna's activities that contribute to implementation of the relevant SDGs, starting with preparation of the 2020 Development Plan and the description of the progress made with respect to the previous Plans.

The SDGs are at the same time a benchmark for the approach Terna adopts in managing its activities. This is founded on objectives such as the efficient use of natural resources, respect for the environment, cuts in emissions, waste reduction and recycling, respect for human rights, efforts to foster innovation, partnerships to combat corruption, and transparent reporting.

In this sense, Terna makes reference to Goals 8 ("Decent work and economic growth"), 12 ("Responsible consumption and production"), 15 ("Life on land"), 16 ("Peace, justice and strong institutions") and 17 ("Partnership for the Goals").

TERNA'S BENCHMARK SDGs

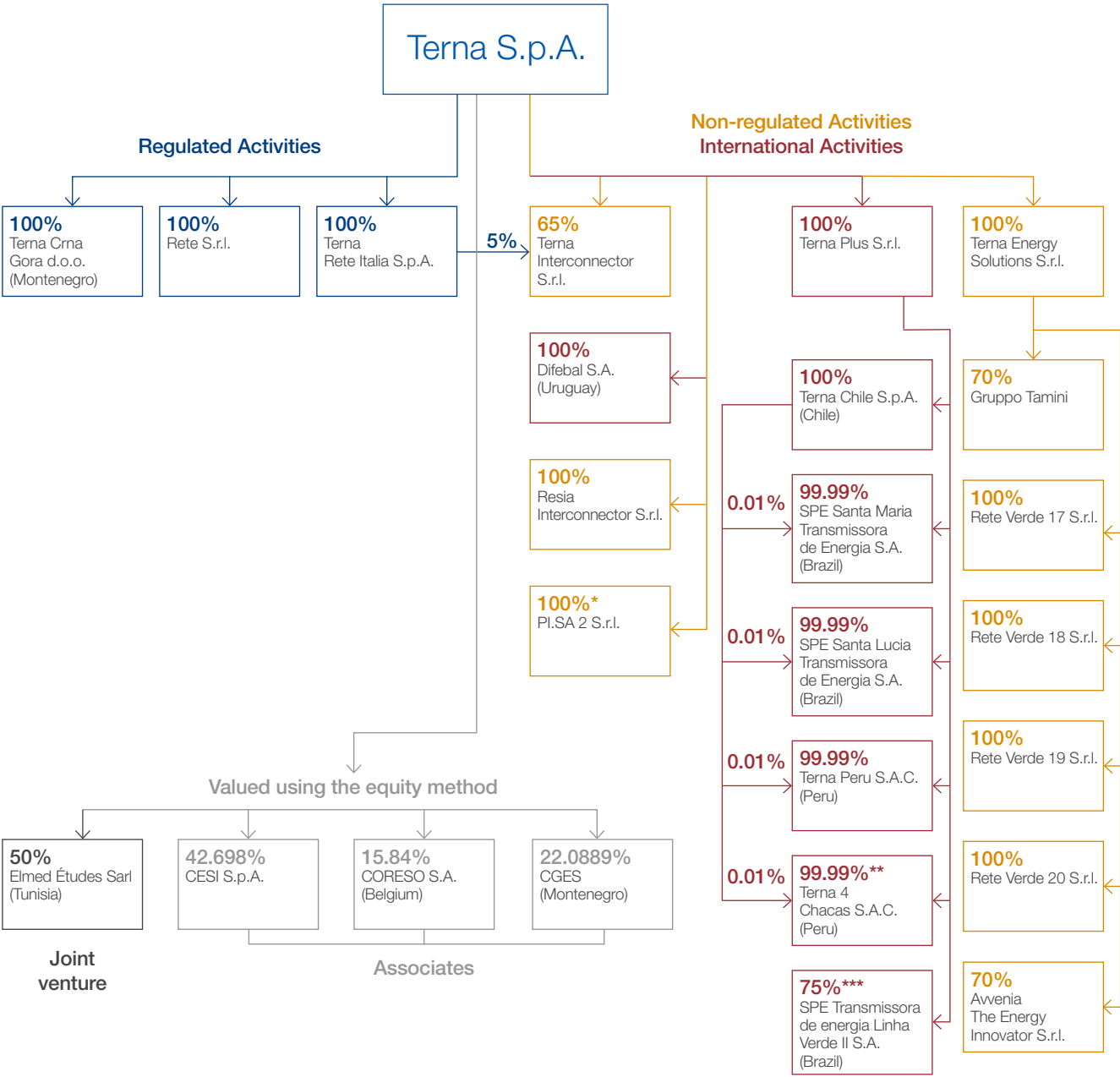
7 AFFORDABLE AND CLEAN ENERGY	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	13 CLIMATE ACTION	SDGs
Ensure access to affordable, reliable, sustainable and modern energy for all.	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.	Take urgent action to combat climate change and its impacts.	Target

BENCHMARK SDGs FOR THE MANAGEMENT OF TERNA'S ACTIVITIES

8 DECENT WORK AND ECONOMIC GROWTH	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS	SDGs
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	Ensure sustainable consumption and production patterns.	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.	Promote peaceful and more inclusive societies for sustainable development; provide access to justice for all and build effective, accountable and inclusive institutions at all levels.	Strengthen the means of implementation and revitalize the global partnership for sustainable development.	Target



Structure of the Group





Compared with 31 December 2018:



* PI.SA.2 S.r.l., a wholly owned subsidiary of Terna S.p.A., was established on **15 February 2019**, following a restructuring of the regulated activities relating to the Italy-France interconnector.

** Terna 4 Chacas S.A.C. was established on **6 August 2019**, following the agreement signed in 2016 to start work on the construction of a new 16-km power line. The company is 99.99999% owned by Terna Plus S.r.l., with the remaining interest held by Terna Chile S.p.A..

*** On **11 November 2019**, Terna S.p.A., acting through its subsidiary, Terna Plus S.r.l., closed the transaction with Construtora Quebec resulting in the acquisition of a 75% interest in the Brazilian-registered joint-stock company, SPE Transmissora de energia Linha Verde II S.A..

The sale of Monita Interconnector S.r.l. to Interconnector Energy Italia s.c.p.a. was completed on **17 December 2019**.

SUBSIDIARIES WITH REGULATED ACTIVITIES			
Company	Business		Revenue
Terna Rete Italia S.p.A.	All regulated activities related to operation, routine and extraordinary maintenance, management and development of the NTG.	3.170	465.9 €m
Rete S.r.l.	Acquired in 2015 from Ferrovie dello Stato Italiane (Italian State Railways) group, the company owns 8.3% of the NTG infrastructure.	0	143.7 €m
Terna Crna Gora d.o.o. <i>Company incorporated under Montenegrin law</i>	Management of construction of the Italy-Montenegro interconnector, on the Montenegrin side.	10	0 €m
SUBSIDIARIES WITH NON-REGULATED ACTIVITIES IN ITALY			
Company	Business		Revenue
Terna Energy Solutions S.r.l.	Development of new activities and business opportunities in the Italian Non-regulated market.	52	12.9 €m
Tamini Trasformatori S.r.l.	Production and marketing of industrial and power transformers via six production plants located in Italy in Legnano (MI), Melegnano (MI), Novara, Valdagno (VI), Ospitaletto (BS) and Rodengo (BZ).	351	140.5 €m
Rete Verde 17 S.r.l.	Development of renewable energy initiatives.	0	0 €m
Rete Verde 18 S.r.l.	Development of renewable energy initiatives.	0	0 €m
Rete Verde 19 S.r.l.	Development of renewable energy initiatives.	0	0 €m
Rete Verde 20 S.r.l.	Development of renewable energy initiatives.	0	0 €m
Avvenia The Energy Innovator S.r.l.	Implementation of energy efficiency projects, including via EPC (Energy Performance Contract) solutions.	17	4.7 €m
Terna Interconnector S.r.l.	Development and construction of private infrastructure for interconnections with other countries.	0	86.2 €m
Resia Interconnector S.r.l.	Construction and operation of the Italy-Austria interconnector as part of the Interconnector project.	0	0 €m
PI.SA 2 S.r.l.	Construction of the Italy-France interconnector following a restructuring of the related activities.	0	0.2 €m
Acquisition of Brugg Kabel AG, a leading manufacturer of terrestrial cables	As part of the growth strategy for Non-regulated Activities, on 29 February 2020, Terna, acting through its subsidiary, Terna Energy Solutions S.r.l., completed the acquisition of a 90% interest in Brugg Kabel AG (a Brugg group company), one of Europe's leading manufacturers of terrestrial cables. The acquired company designs, develops, produces, installs and maintains electric cables for all voltages and accessories for high-voltage cables.		

SUBSIDIARIES WITH NON-REGULATED INTERNATIONAL ACTIVITIES			
Business		Revenue	Company
Development of new activities and business opportunities in the non-regulated international market, in particular in South America.	43	0.7 €m	Terna Plus S.r.l.
Management of activities involved in the design, construction and maintenance of electricity infrastructure.	0	0 €m	Terna Chile S.p.A. <i>Company incorporated under Chilean law</i>
Management of activities involved in the design, construction and maintenance of electricity infrastructure.	2	5.1 €m	SPE Santa Maria Trasmisora de Energia S.A. <i>Company incorporated under Brazilian law</i>
Management of activities involved in the design, construction and maintenance of electricity infrastructure.	16	24.1 €m	SPE Santa Lucia Trasmisora de Energia S.A. <i>Company incorporated under Brazilian law</i>
Management of activities involved in the design, construction and maintenance of electricity infrastructure.	8	4.4 €m	Terna Perú S.A.C. <i>Company incorporated under Peruvian law</i>
Management of activities involved in the design, construction and maintenance of electricity infrastructure.	7	39.3 €m	Difebal S.A. <i>Company incorporated under Uruguayan law</i>
Construction, for the Parish of San Martàn Papa de Chacas in Peru, of a power line in the city of San Luis and the supply of a number of components to be used in the construction of a substation.	0	0€m	Terna 4 Chacas S.A.C. <i>Company incorporated under Peruvian law</i>
Management of activities involved in the design, construction and maintenance of electricity infrastructure.	7	4.7 €m	Linha Verde II S.A. <i>Company incorporated under Brazilian law</i>
ASSOCIATES OR JOINT VENTURES			
Business		Revenue	Company
Pure and applied scientific research aimed at making advances in the electro technical, energy, electronic and IT sectors.	693	124.2 €m	CESI S.p.A. ¹⁷
Management of daily forecasting and real-time analysis of energy flows in central and western Europe, identifying possible critical issues and promptly informing the TSOs concerned.	45	10.5 €m	CORESIO S.A. ^{18 19} <i>Company incorporated under Belgian law</i>
TSO for Montenegro's electricity market. Investment acquired as part of the Italy-Balkans interconnector project.	312	33.7 €m	CGES ^{20 21}
Jointly controlled by Terna and the Tunisian company, STEG, the company is engaged in carrying out preparatory studies for construction of the infrastructure required to connect the Tunisian and Italian electricity systems.	2	0 €m	Elmed Études Sarl

¹⁷ Data refer to 2018.¹⁸ Although the stake is less than 20%, the investment remains relevant based on the assumption that the Parent Company exerts significant influence. The shareholders include Terna and the operators in France (RTE), Belgium (Elia) and the UK (National Grid), each with 15.84% interests, in addition to the German operator, 50 Hertz Transmission, with 7.90%.¹⁹ Data refer to 2018.²⁰ In full, "Crnogorsk Elektroprenosmi Sistem Ad".²¹ Data refer to 2018.

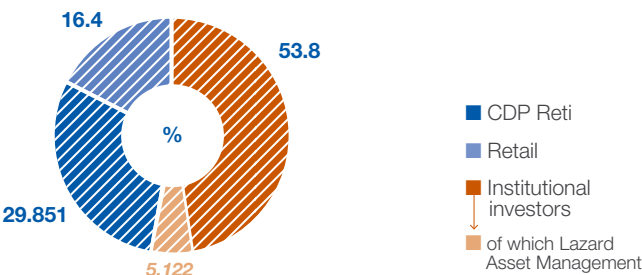


Ownership structure

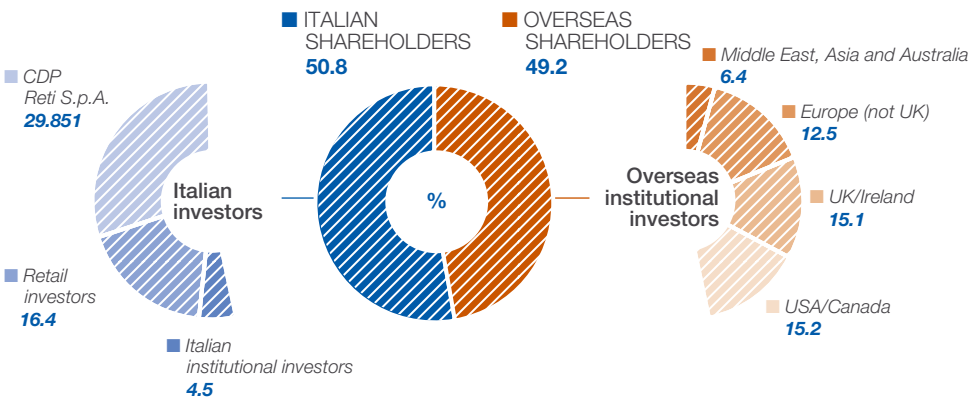
Terna S.p.A.'s share capital amounts to €442,198,240, comprising 2,009,992,000 fully paid-up ordinary shares with a par value of €0.22 each.

Based on information from the shareholders' register and other available data in February 2020, Terna's shareholder structure breaks down as follows:

SHAREHOLDERS BY CATEGORY



SHAREHOLDERS BY GEOGRAPHICAL AREA AND CATEGORY



Socially responsible investors

At the end of 2019, 147 socially responsible investors (SRIs), compared with 109 in 2018 and 103 in 2017, had invested in Terna's shares using an approach that takes into account ESG (Environmental, Social, Governance) aspects. Overall, at the end of 2019, SRIs represented 11.8% of Terna's free float (9.5% in 2018 and 8.3% in 2017) and 15.4% of the capital held by identifiable institutional investors (12.9% at the end of 2018 and approximately 11% in 2017).

Terna has adopted a policy that envisages payment of dividends twice a year.

The interim dividend for 2019 was 8.42 euro cents (paid on 20 November 2019), while the final dividend to be proposed to shareholders by the Board of Directors at the Annual General Meeting on 27 April 2020* is 16.53 euro cents. Further information on the dividend history may be found at www.terna.it.

The Annual General Meeting of 8 May 2019 was attended by 1,804 shareholders (of which 6 in person and 1,798 by proxy), holding a total of 1,321,848,328 shares, equal to 65.763860% of the share capital, all of which bearing voting rights.

Information on the ownership structure, restrictions on the transfer of shares, securities that grant special rights, and restrictions on voting rights, as well as on shareholder agreements, is provided in the "Report on Corporate Governance and Ownership Structures" for 2019, published together with the Annual Report of Terna and the Terna Group. This is available in the "Investor Relations" section of Terna's website.

Eleven requests for information were received by e-mail from non-institutional shareholders (14 in 2018 and 12 in 2017), regarding information on the dividend policy, the share price performance, information on the dates and availability of Terna's corporate documents and/or documents relating to General Meetings and/or other information material on the Company.

* After the date of approval of this Report, and in view of the current health emergency linked to the covid-19 epidemic and the legislation introduced in order to contain the outbreak, the Company has announced a new date for Terna S.p.A.'s Annual General Meeting, which is now scheduled for 18 May 2020.

Corporate governance

The governance system is substantially in line with the principles contained in the Code of Conduct²² for listed companies adopted by Terna, with the related recommendations made by the CONSOB and, more generally, with the international best practices the Company uses as a benchmark.

The current structure of the Board of Directors requires the presence of one Chief Executive Officer, to whom the Board granted the necessary authority via a resolution approved on 27 April 2017, in which the Board defined the scope, limitations and means by which to exercise such authority. The activities of the Board of Directors are coordinated by the Chairman. The Board of Directors consists of nine members, whose terms of office will end with approval of the financial statements for the year ended 31 December 2019.

On 10 August 2018, the Director Stefano Saglia, resigned and, on 15 February 2019, Terna S.p.A.'s Board of Directors co-opted a new non-executive Director, Paolo Calcagnini, on to the Board as his replacement. The Director, Luca Dal Fabbro, tendered his resignation on 22 March 2019. Following the above resignations, the Annual General Meeting of 8 May 2019 elected Paolo Calcagnini, following his earlier co-option, and Prof. Marco Giorgino as Directors of the Company. Both the new Directors were nominated by a group of funds and institutional investors.

At a meeting on 19 June 2019, Terna S.p.A.'s Board of Directors approved the new compositions of the "Audit, Risk, Corporate Governance and Sustainability Committee" and "Related Party Transactions Committee", as required following the Annual General Meeting's election of the above Directors.

405-1 > COMPOSITION OF THE BOARD OF DIRECTORS AS AT 10 MARCH 2020

	UNIT	
Men	%	55.6
Women	%	44.4
Under 30	%	-
Between 30 and 50	%	22.2
Over 50	%	77.8

²² Edition last updated in July 2018 and available on Borsa Italiana S.p.A.'s website at <http://www.borsaitaliana.it/comitato-corporate-governance/codice/2018clean.pdf>. The Code was drawn up by the Corporate Governance Committee for listed companies established by ABI, Ania, Assonime, Assogestioni, Borsa Italiana and Confindustria).

Board of directors

Chairwoman
Catia Bastioli

Chief Executive Officer
Luigi Ferraris

Directors
Paolo Calcagnini (from 15/2/2019)
Fabio Corsico
Paola Giannotti
Marco Giorgino (from 8/5/2019)
Yunpeng He
Gabriella Porcelli
Elena Vasco

Board of statutory auditors

Chairman
Riccardo Enrico Maria Schioppo

Standing Auditors
Vincenzo Simone
Maria Alessandra Zunino de Pignier

Alternates
Cesare Felice Mantegazza
Renata Maria Ricotti
Davide Attilio Rossetti

Independent Auditors

PricewaterhouseCoopers S.p.A.

Board committees

Audit, Risk, Corporate Governance and Sustainability Committee
Paola Giannotti (Chairwoman, independent)
Marco Giorgino (independent)
Gabriella Porcelli (independent)

Remuneration Committee
Fabio Corsico (Chairman, independent)
Gabriella Porcelli (independent)
Elena Vasco (independent)

Nominations Committee
Gabriella Porcelli (Chairwoman, independent)
Fabio Corsico (independent)
Yunpeng He

Related Party Transactions Committee
Elena Vasco (Coordinator independent)
Paola Giannotti (independent)
Marco Giorgino (independent)

- Aspects worthy of note include:
- the high level of attendance of Directors;
 - the presence of sustainability goals in the remuneration packages of the Chief Executive Officer and management.

Further information on Terna's corporate governance may be found in the "Report on Corporate Governance and Ownership Structures", which was approved by the Board of Directors on 10 March 2020, and is available in the "Investor Relations" section of Terna's website, and in the "Remuneration Report", also available on Terna's website.

Business model and activities

Terna plays a central role in the energy transition process underway: in a context of radical change with decarbonisation emerging as a global objective, the electricity grid is one of the main enabling factors.

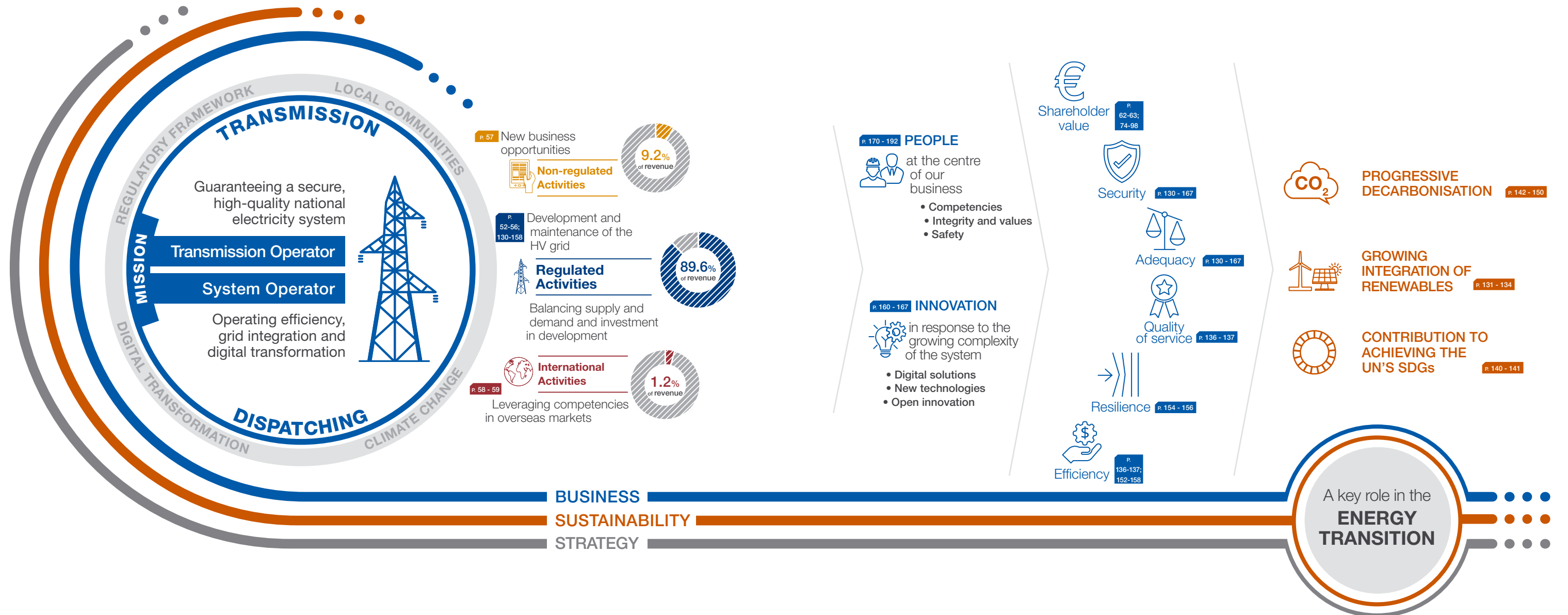
ROLE

ACTIVITIES

ENABLERS

VALUE CREATION

SYSTEM EFFECTS



Electricity transmission



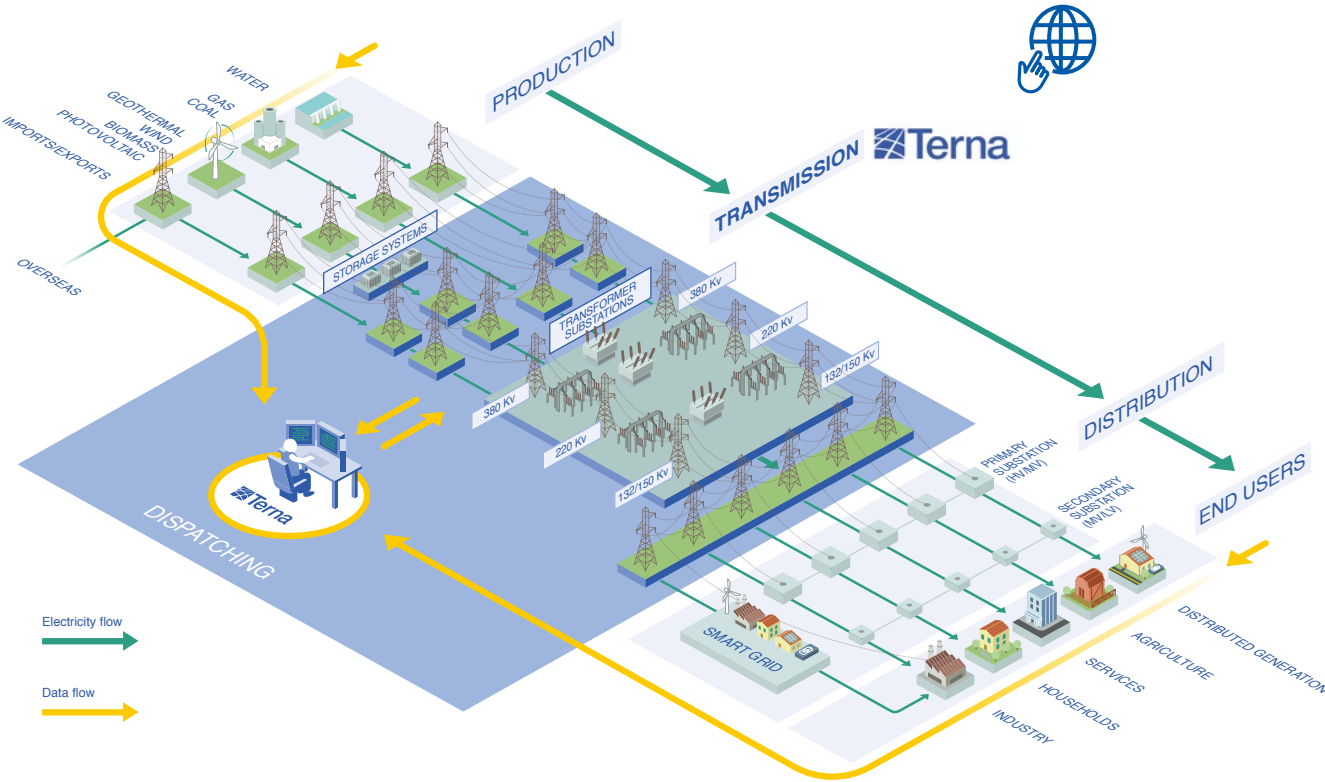
The Italian electricity system chain consists of four segments: production, transmission, distribution and the sale of electricity.

This chart illustrates the two main activities carried out by Terna and that make up its core business (Regulated Activities in Italy): transmission, to which most of this Report is dedicated, and dispatching (see page 56).

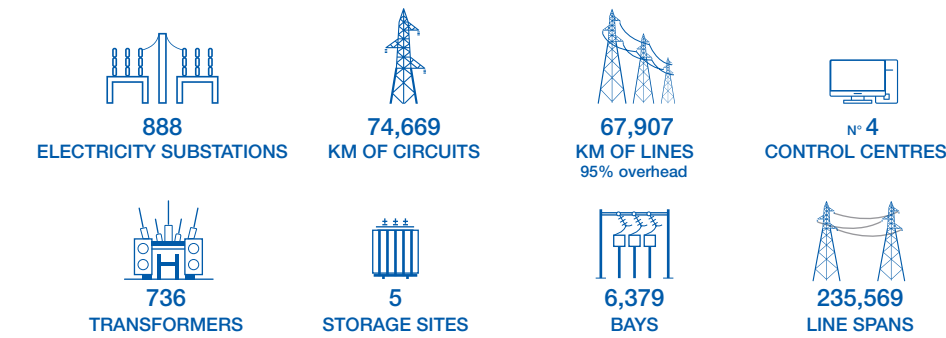
These activities constitute a vital segment of the electricity service which, while not perceived as such by end users or the customers of companies that distribute and sell electricity, makes Terna ethically responsible towards the whole community. For Terna, this means adopting a sustainable approach to its business, primarily expressed through responsible management of the NTG.

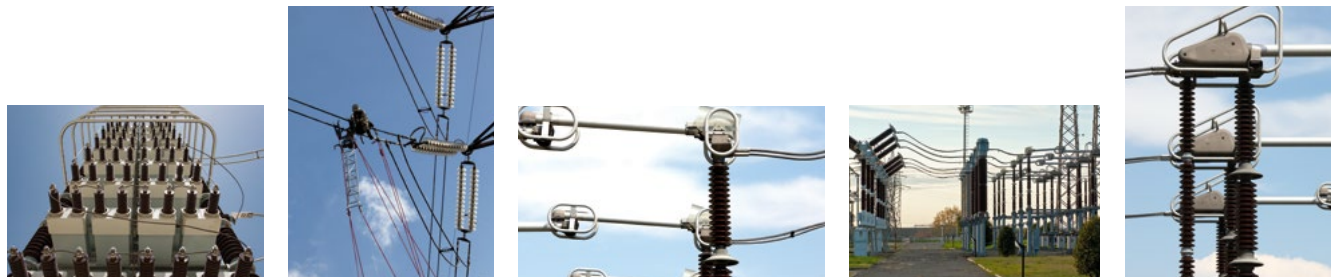


ITALIAN ELECTRICITY SYSTEM CHAIN



TERNA'S INFRASTRUCTURE





Electricity transmission depends on the following assets:

Planning

The grid planning process identifies the structural changes needed so that the transmission system can best carry out its role of guaranteeing the secure, cost-effective transport of the power generated by existing and future production centres to the distribution system and load centres.

Planning and development of the NTG takes into account the objectives set out in the Concession Arrangement and the needs emerging as a result of European scenarios and/or national energy policy.

Development of the NTG reflects the need to:

- overcome problems that have come to light during operation of the grid;
- prevent the occurrence of problems linked to the evolution of the related energy scenario, in terms of increased demand for electricity and changes in the mix of generation assets (the phase-out of coal and growing use of renewable energy sources);
- guarantee the integration of European grids so as to drive the process of integrating European markets.

The new works to be carried out are included in the NTG Development Plan, presented to the Ministry for Economic Development for approval, also taking into account the consultation process carried out by ARERA. Terna follows the complex authorisation process.

Implementation of development initiatives

Responsibility for the design and construction of the works included in the Development Plan has been assigned to Terna Rete Italia S.p.A., which decides on the need for external resources and establishes the related solutions and the technical specifications for the components and materials to be used, in compliance with the technical regulations in force.

Terna Rete Italia also defines the engineering standards for plants connected to the grid, above all standards of construction and the performance standards for equipment, machinery and substation and power line components. The construction of new plants is usually outsourced, whilst maintaining strict control over contractors' approaches to environmental and social concerns (see page 190). Development initiatives also include the construction of interconnectors with other countries (see page 149).

>>

Dispatching

Dispatching ensures a balance between the quantity of electricity injected into and withdrawn from the system, between energy supply and demand, round the clock, 365 days a year.

This activity has become more complex over time, partly due to significant growth in non-programmable renewable sources ("NPRS"), requiring greater flexibility, especially in situations where the supply from renewable sources is very high and demand for energy is low.

Infrastructure maintenance and renewal

The maintenance of power lines, electricity substations and storage systems is carried out by Terna Rete Italia, which is also responsible for defining the technical criteria and standards for the maintenance and the renewal of assets (see page 152).

As the TSO, Terna is also responsible for managing producers' registers, handling the data on injections and withdrawals for use in determining the related revenues and costs, and for processing statistics on the Italian electricity industry. This entails having access to confidential data regarding operators in the system, especially electricity producers. To protect this data, Terna has adopted the best data protection practices in order to prevent the information it holds from being accessible or disclosed to unentitled third parties.

Dispatching of electricity



As the Italian System Operator, Terna is responsible for the dispatching service forming part of the National Electricity System.

Dispatching is the set of activities necessary to ensure that there is always a balance between demand for electricity throughout the country (manufacturers, service providers, agriculture and households) and the energy produced by power plants.

The high degree of complexity and coordination necessary to guarantee the correct operation of the system require the presence of a central coordinator, the provider of the dispatching service. This coordinator has control over a high number of both supply-side and demand-side players, and in the last few years also over production from non-programmable renewable sources.

Terna has the key and delicate role of guaranteeing this balance through a high-technology system, using a specific market (the dispatching services market or “MSD”), in which it makes daily purchases of the “services” necessary to constantly ensure the continuity and security of electricity supply.



Dispatching includes planning for the unavailability of the grid and of production plants over different time-scales, forecasting national demand for electricity, comparing demand for consistency with planned production in the free energy market (the Power Exchange and over-the-counter contracts), the acquisition of resources for dispatching and monitoring power transported for all the power lines that make up the grid.

In particular, “real-time” control of the National Electricity System is ensured by the National Control Centre, the nerve centre for Italy’s National Electricity System, which coordinates the other centres around the country, monitors the system and dispatches electricity. The Centre intervenes, by issuing instructions to producers and Remote Centres, in order to modify supply and capacity on the grid. To avoid the risk of prolonged power outages, it may also intervene in an emergency to reduce demand.

In 2019, dispatching activities were affected by a number of important events that have had an impact on efficient operation of the grid. Further details are provided on page 138.

Other activities in Italy

The Terna Group pursues business opportunities that go beyond its Regulated Activities and that provide a source of the Group’s revenue diversification.



The Italian activities are the responsibility of Terna Energy Solutions S.r.l., a wholly owned subsidiary of Terna S.p.A. This company’s goal is to identify and carry out **projects generated by technological discontinuities and trends in the energy sector**, such as growth in renewable sources, the development of Smart Grids, energy efficiency and telecommunications. The range of projects is described below²³.

Connectivity

The core Connectivity business involves making Terna’s infrastructure available to meet the rapidly increasing need for fast, reliable digital connections.

The offering relates to:

- **The lease of dark fibre** - The use of fibre-optic pairs already installed along Terna’s power lines, with connections over shorter distances and offering lower rates of attenuation compared with traditional cables (underground).
- **The lease of power lines** - Thanks to their height and widespread presence throughout the country, pylons are ideal for installing telecommunications antennae in order to expand and strengthen mobile networks and Wi-Fi devices, as well as monitoring systems and sensors.
- **Housing and facilities** - The installation of telecommunications equipment at Terna sites already in operation (cabinets, technology hubs for telecoms networks, data centres), with major benefits in terms of security and the guaranteed redundancy and reliability of connection, both electrical and in fibre optic.

Energy Solutions

The Energy Solutions offering regards:

- **Grid Infrastructure** - The construction and renewal of transmission infrastructure (lines and substations), providing turnkey solutions to meet the needs of both industrial customers and those of new plants using renewable fuels.
- **Smart Grids:**
 - **Energy efficiency** - Support for businesses in delivering energy efficiency, designing and developing innovative solutions to cut energy costs, optimise production processes and obtain Energy Efficiency Certificates (white certificates).
 - **Microgrids** - Turnkey solutions for businesses looking at the potential to design and integrate renewable plants (photovoltaic and wind) into their production cycles, storage systems (batteries), co-and tri-generation solutions, electricity charging systems (charging hubs) and the related advanced control systems capable of optimising performance.
 - **Services** - Solutions for maintaining and monitoring the solutions designed and implemented (renewable energy plants, storage systems, CHP, etc.) with the aim of preventing, reducing and minimizing the risk of malfunctions and service disruptions.
- **Digital Services** - The operation of plant surveillance and remote grid management systems. Other value added services, some provided over software platforms.

Non-regulated Activities also include the activities of the Tamini Group (see the specific section on page 225) and private interconnector projects (see page 151).

²³ Further information on Non-regulated Activities is provided in the Integrated Report for 2019.



International Activities



The Terna Group's overseas investments are directed towards countries with a stable political and regulatory framework that need to build electricity infrastructure. The aim is to diversify with respect to the activities carried out in Italy, potentially in collaboration with energy operators that have an established overseas presence.

International markets offer opportunities to participate in the development of transmission infrastructure, driven by growing demand for electricity and the opening up of markets to external operators.

Terna's strategic priorities with regard to its International Activities regard:

- **Europe** - To strengthen the Group's presence, monitoring M&A opportunities and developing merchant interconnector projects;
- **Latin America** - To complete ongoing projects in Brazil and Peru and operate the infrastructure built in Brazil and Uruguay, consolidating its position in the countries of interest;
- **Other geographies** - To develop advanced services that take advantage of the technical expertise Terna has acquired in Italy. These initiatives are low-risk and capital-light.

Overseas initiatives of interest to the Terna Group are:

- **Concessions**: this model envisages the acquisition and operation of transmission systems abroad by taking part in international concession and/or secondary market awards, leveraging the core competencies and experience developed in the international arena;
- **Energy solutions**: this includes all high value-added non-traditional activities aimed at exporting the experience Terna has in Italy in the fields of Energy Storage and Smart Solutions;
- **Technical assistance**: this involves the provision of consulting and technical assistance services regarding a TSO's core activities, as well as the definition and implementation of regulatory and market frameworks in the local energy context, with a view to exporting and taking advantage of the distinctive expertise acquired in Italy;
- **Project Management**: Project Management (EPCM) activities enable the Group to leverage its expertise in carrying out projects overseas and managing infrastructure.

Work in progress in South America

Uruguay



Construction of the 213 km Melo-Tacuarembò 500kV transmission line has been completed and the line has been in operation since 24 October 2019.

The line is of major importance for the Uruguayan electricity transmission system, above all as it marks completion of the 500kV ring and will help to increase the production of electricity from renewable sources.

Brazil



Operation and maintenance of the Santa Maria Transmissora de Energia (SMTE) power line in the State of Rio Grande do Sul continued. 77% of the line, which has been in commercial service since 2018, was built using single-pole cable-stayed pylons with a low environmental impact.

The power line located in the Santa Lucia Transmissora de Energia (SLTE) concession in the State of Mato Grosso entered commercial service on 30 April 2019 and the Group is responsible for operation and maintenance. 75% of the line was built using single-pole cable-stayed pylons with a low environmental impact.

In April 2019, the Group signed a preliminary agreement with Construtora Quebec for the acquisition of two new concessions for the construction of power lines in Brazil. This will involve construction of electricity infrastructure in the State of Minas Gerais, with the aim of boosting the efficiency, security and sustainability of local grids and facilitate the full integration of renewable sources.

Acquisition of one of the concessions was completed on 11 November, with the acquisition of the second concession expected to complete in the first quarter of 2020.

Peru



Work, which began in 2017, on construction of 132 km of new 138kV lines between Aguaytia and Pucallpa is continuing.

The process of acquiring the related easements was substantially completed in 2019 (see page 108) and construction work and the assembly of pylons have begun. The procurement of transmission line materials has been completed.

The project is expected to be completed by the end of 2020.

Revenue

Revenue from Regulated Activities of €2,055.0 million represents approximately 90% of Terna’s total revenue. It is determined on the basis of ARERA resolutions establishing the structure and criteria to be used, which the regulator revises each year, if necessary.

Main types of allowed cost

To cover the return on capital (RAB)

Determined on the basis of the Regulated Asset Base (RAB) and the Weighted Average Cost of Capital (WACC). The RAB represents net invested capital for regulatory purposes. It is revalued annually on the basis of data from ISTAT (Italy’s Office of National Statistics) on the change in the deflator applied to gross fixed investment and revised on the basis of the performance of investment and disposals. The WACC represents the weighted average cost of equity and debt. The methods of determining and revising the WACC are established by ARERA.

To cover depreciation

Allowed depreciation (calculated on the basis of an asset’s useful life for regulatory purposes) is revalued annually based on the change in the deflator applied to gross fixed investment.

To cover operating costs

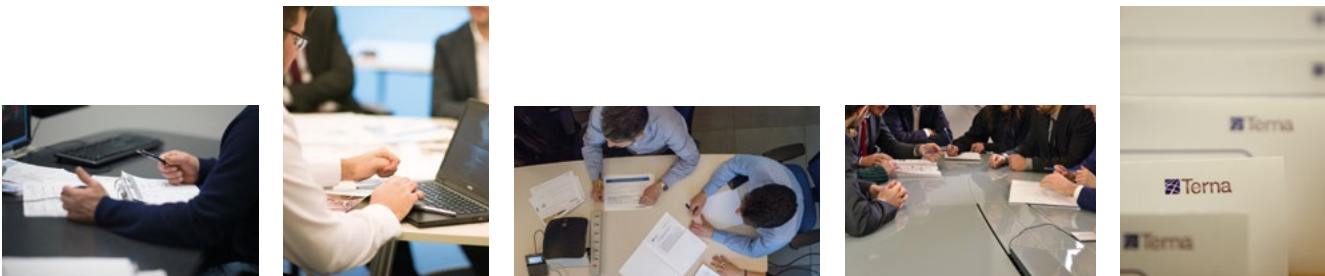
Allowed costs are determined by ARERA at the beginning of the regulatory period, based on operating costs recognised during the relevant year (which, in the case of the first regulatory sub-period 2016-2019 - NPR1 - was 2014) and increased by any remaining portions of additional efficiencies achieved in the previous two regulatory periods. The resulting amount is revalued annually on the basis of inflation and reduced by an efficiency factor designed to ensure that additional efficiencies are, over time, passed back to end users in full.

For further details regarding the main types of costs recognised and the fees for transmission and dispatching services, reference should be made to the "Annual Report 2019".

In 2019, the Ministry for Economic Development (“MED”) paid Terna €7,342,518 as an advance on grants for projects financed from the National Operational Programme (*Programma Operativo Nazionale* or PON). Terna also received government grants of €5,272,640 to fund required modifications to its infrastructure.

201-4 >	GOVERNMENT GRANTS			
		2019	2018	2017
	Grants related to assets received from the Public Sector*	5,272,640	19,126,545	6,699,644
	MED-funded projects*	7,342,518	47,053,291	11,311,452
	EU-funded projects*	0	0	76,996,616

* These grants are deducted directly from the carrying amount of the related assets.



Pass-through items

As part of its dispatching operations, Terna manages the cost and revenue items relating to the purchase and sale of energy from and to operators in the electricity market. These are the so-called "pass-through" items that do not affect the Terna Group’s profitability, as the revenues equal the costs.

In 2019, the Terna Group’s pass-through revenues and expenses amounted to a total of €5,320.1 million. For further details, reference should be made to the “Annual Report 2019”.

Incentive mechanisms

Terna monitors continuity of the service provided through a range of indicators, as defined by ARERA (Resolution 250/04) and in Terna’s Grid Code. These continuity indicators are important to the system, as they record the frequency and impact of events on the electricity network and linked to faults or external factors, such as weather events. All of the indicators are shown over a four-year period, in which there were no significant changes, providing confirmation of the high level of quality achieved (see also page 136).

The principal continuity indicators are Regulated Energy Not Supplied (RENS) and Average Service Availability (ASA).

In 2019, the other activities carried out by the Group generated revenue of €211.7 million from Non-regulated Activities (including €110.2 million generated by the Tamini Group) and €28.4 million from International Activities (directly including the margin earned on overseas concessions), which primarily reflect the results generated by assets operated under concession in Brazil, which are now fully operational.

Strategic Plan 2020-2024



The current energy transition²⁴ is radically changing the electricity system; in response, Terna has to focus on five key dimensions of the system: Security, Adequacy, Quality of service, Resilience and Efficiency. In this regard, the Company has confirmed the strategy set out in the Plan for the period 2019-2023, further stepping up infrastructure investment to meet the new requirements of the electricity system, as part of an integrated approach based on sustainability values, community engagement, skills development and the promotion of innovation.

Consequently, the strategic guidelines for the various areas of the Group have been identified:

- **Regulated Activities:** to give top priority to all the activities that enable Italy to tackle its energy challenges in a safe, efficient and sustainable way by leveraging the specific characteristics of local areas;
- **Non-regulated Activities:** to launch new services to support the energy transition, taking advantage of opportunities beyond our core activities, to be pursued in line with Terna's mission, and if distinctive and/or of high added value;
- **International Activities:** to leverage the core competencies developed in Italy as a TSO through growth opportunities overseas.

Strategy

TO PLAY A LEADING ROLE IN THE SUSTAINABLE ENERGY TRANSITION, BY LEVERAGING OUR DISTINCTIVE INNOVATION CAPABILITIES, COMPETENCIES AND TECHNOLOGIES FOR THE BENEFIT OF ALL STAKEHOLDERS

Pillars



Enablers



A key driver of this strategy will be investment in the innovation and digital solutions needed to manage an increasingly complex, integrated and distributed system. Attention will also be paid to the development and insourcing of the strategic skills required to cope with projects of growing size and complexity.

²⁴ See the paragraph "Opportunities and risks connected with climate change" on page 64 and the section "Electricity service and innovation" on page 129.

The guidelines identified for the Group's various strategic business areas have been divided into appropriate priority actions to be carried out over the life of the Plan.

With reference to **Regulated Activities**, the system needs a new investment drive to respond to developing needs, with a focus on maximising long-term use and sustainability. The role of proactive system operator in defining the grid's structure and in digitally managing assets should also be strengthened by combining Terna's specialist expertise with the experience gained in the most advanced markets. In this regard, Terna is to invest €7.3 billion over the five-year period 2020-2024, making the Company's largest ever investment programme.

Non-regulated Activities will be geared towards supporting the energy transition, with competency-based initiatives focusing on the development of services for corporate customers and on taking advantage of value added market opportunities for traditional and renewable customers.

Asset-based initiatives will, on the other hand, aim to pursue opportunities based on connectivity and computing linked to the Group's infrastructure.

International Activities will focus on the execution of projects in progress and the management of projects in operation, taking advantage of the Group's specialist expertise. Among the priority actions, the main focus will be on selecting international growth opportunities with a high technological content (a key aspect for Terna) and involving potential agreements/partnerships, including the management of assets without the need to tie up large amounts of capital.

Maintenance of a strong capital structure through robust cash generation will also help to support an attractive dividend policy.

	Plan 2020-2024	Plan 2019-2023	
Net capex	€7.3 bn	6.2 bn €	Regulated Activities
RAB (end of Plan)	€19.7 bn	18.5 bn €	
CAGR RAB ¹	5%	> 4%	
EBITDA	€~ 450 m	> 400 m €	Non-regulated Activities
Capex	€ ² ~ 150 m	350 m €	International Activities
EBITDA ³	€~ 200 m	150 m €	
Capex ⁴	€~ 900 m	700 m €	Digitalisation and innovation
CAGR EBITDA	> 4%	> 4%	Efficiency and value creation
CAGR EPS	5%	> 3%	

1. Calendar RAB, including work in progress;
2. Capex in execution + to be identified;

3. Includes financial income from Uruguay project;
4. Already included in investment plan for Regulated Activities.

Opportunities and risks connected with climate change

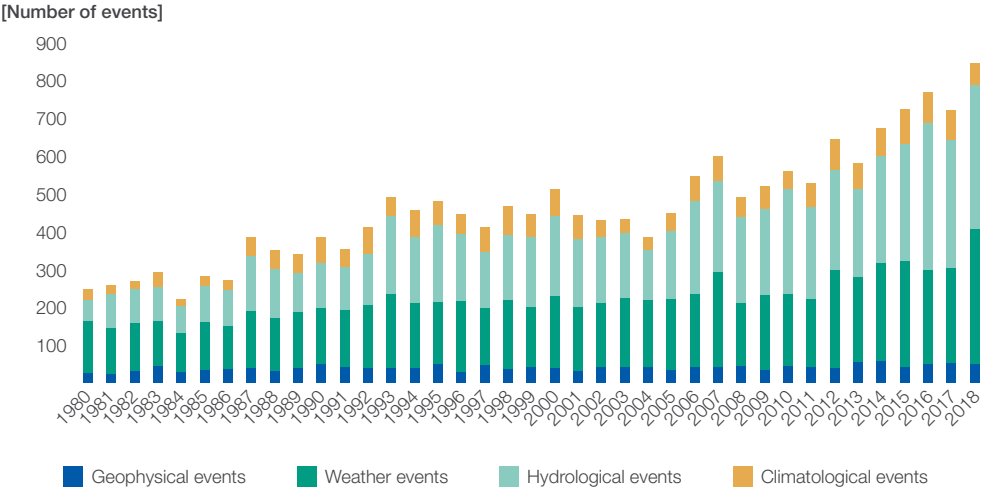
201-2 >

Greenhouse gas emissions represent the most significant impact of human activity on the environment.

It is by now widely accepted among the scientific community that there is a direct link between the growing concentration of greenhouse gases in the atmosphere and progressive changes in the planet's climatic balance. This is resulting in significant rises in temperature, prolonged periods of drought and increasingly frequent and serious extreme climatic events.

These events are capable of having a growing impact on human activity.

MAJOR CLIMATIC EVENTS RECORDED ACROSS THE WORLD BETWEEN 1980 AND 2018



There is therefore a clear need to take action in the sectors that have the greatest impact on the related dynamics, above all the energy sector, which even today remains highly dependent on the exploitation of fossil fuels.

In this context, given the European drive towards decarbonisation and the significant penetration of renewable forms of energy, high-voltage grids have a major role to play in enabling growth in renewable generation capacity.

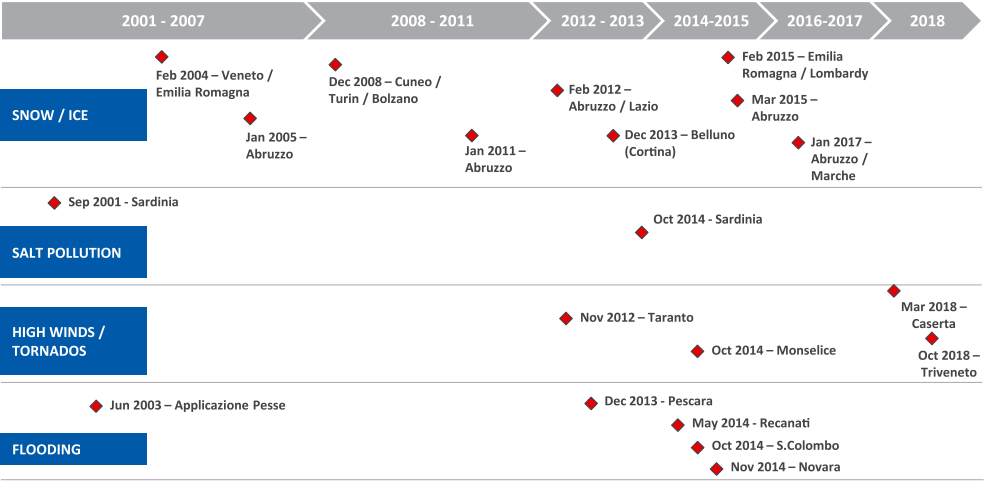
Development of the electricity grid is therefore crucial in accommodating the growing amount of power injected into the grid by renewable energy plants, above all those that use intermittent sources such as wind and photovoltaic.

Moreover, an enabling factor common to all efforts to reduce CO₂ emissions is the progressive electrification of end uses, where the energy carrier assumes a growing importance in meeting our energy needs. This trend will have a particularly significant impact in areas where the effects have so far been minimal, such as the residential sector (e.g. heat pumps, induction cooking), transport (electric and/or hybrid vehicles) and in certain high-temperature industrial processes. The use of electricity, compared with the other types of fuel such as liquid and solid fuels and gas, has major advantages as a means to achieving decarbonisation. It does not produce climate-changing emissions and by its nature is used to transport energy produced from renewable sources.

Terna must respond to the current transformation, whilst continuing to provide a reliable, high-quality service for the community.

The progressive electrification of end uses brings with it a growing exposure to the risks resulting from potential interruptions to the supply of electricity to grid users due to extreme climatic events. The electricity grid is a strategic infrastructure asset that is by its very nature exposed to such events. In Italy, the greatest risks are linked to hydrogeological instability caused by exceptional rainfall, as well as to major ice and snow events and high winds that can cause damage to overhead power lines. In addition, the progressive increase in unusual and extreme heat events brings further problems relating to reduced grid efficiency (closely linked to temperature) and an increase in the risk of fires, which can seriously damage grid infrastructure.

HISTORICAL RECORD OF SEVERE METEOROLOGICAL EVENTS IN ITALY



The extreme meteorological events of recent years and, in particular, the variable and extensive nature of such events, makes it necessary to plan for a grid that is capable of coping with these changes.

The following description of the opportunities and risks connected with climate change is presented in accordance with the recommendations for companies published by the Task Force on Climate-related Financial Disclosures.

Opportunities

The opportunities linked to climate change affect Terna's strategy, with potential economic effects in the medium term, regarding both Regulated and Non-regulated Activities in Italy and overseas. Possible sources of opportunity include:

Products and services

As regards Regulated Activities, both the Development Plan and the Electricity System Security Plan include investments that have assumed greater importance in relation to climate change. In the 2020 Development Plan, components designed to drive the integration of renewable sources and grid resilience form a significant part of the overall Plan. This approach is in line with a regulatory framework that is moving increasingly towards the use of output-based solutions, which could boost Terna's returns in relation to its ability to generate benefits for the system.

Terna's Non-regulated Activities will, in the future, also benefit from new possibilities, relating above all to the identification and development of new energy solutions.

Markets

The scenarios and trends that encourage the development of new opportunities in Italy are of global significance, and therefore also open up new opportunities overseas. See, for example, Terna's international activities in Brazil, Uruguay and Peru²⁵.

Risks

Transition risks

Political and legal

There are no specific risks with regard to the introduction of a carbon tax as Terna is not subject to legal obligations regarding cuts in emissions and registers low greenhouse gas emissions. The same applies to a likely increase in the carbon price, which would in fact improve the ratio between benefits for the system and Terna's investment costs. An increase in reporting obligations would also not pose any problems for Terna, which has been providing full disclosure on its emissions for some time.

As far as the regulation of service quality is concerned, an incentive-based scheme linked to service continuity, including rewards and penalties, is already in place and this may be affected by extreme weather events. The scheme has generated different outcomes from year to year, ranging from penalties of approximately €15 million to bonuses of around €21 million in the period from 2010 to 2018. Terna's response to this risk is its Resilience Plan, which sets out all the actions taken and the measures adopted by Terna in order to more promptly and effectively respond to adverse events.

>>

Technological

The growing use of renewable sources and the progressive electrification expected over the coming years mean that investment in the transmission grid is of primary importance, given the role that the grid will play in helping to achieve decarbonisation targets. There are no specific risks linked to the replacement of technology.

Given the new complexities to be dealt with, the drive for constant innovation remains a priority, with continued attention to the most promising technology streams on which to focus both investment and R&D efforts. Terna identifies these technology streams in its Innovation Plan.

Market

No current risks have been noted relating to cost increases deriving from the rise in the price of raw materials due to climate change, which in any case would not to any great extent form part of the risks to which Terna is exposed.

The future performance of electricity consumption in Italy is uncertain, reflecting two contrasting factors: on the one hand, energy efficiency, which is driving down consumption, and, on the other, the progressive switch to electricity in sectors that have typically been tied to the use of fossil fuels, above all transport and heating.

However, even if the amount of electricity transported over the transmission grid were to decline, the regulatory approach to grid assets would normally mitigate the impact volume risk on operators by guaranteeing stable revenues and the recovery of investment costs.

Reputational

The growing complexity of the electricity system and the increased frequency and seriousness of adverse climatic events requires constant monitoring of the system's adequacy and resilience. The occurrence of malfunctions, potentially of a widespread nature, could increase Terna's reputational exposure to public authorities and stakeholders in general.

Physical risks

Acute

In addition to quality of service, the occurrence of extreme climatic events poses a considerable risk to grid infrastructure. Terna has set out its strategy in its Resilience Plan and, with a view to future readiness, its Innovation Plan.

Chronic

Rising temperatures directly interfere with grid operation, as higher temperatures limit the possible amounts of electricity transmission. Other systemic phenomena, such as rising sea levels, do not have a direct impact.

²⁵ See the paragraph "International Activities" on page 58.

Main economic impacts

201-1 > Value added²⁶

Value added measures the value created by an enterprise, but also by an entire economy, over a certain period, usually a year. In corporate accounting terms, value added is calculated by subtracting the costs of purchasing the intermediate goods and services used in operations from the value of production (revenue attributable to the goods and services produced during the year). These costs do not include personnel expenses, which instead form part of the value added by the enterprise to the intermediate goods and services as a result of its operations. The difference between revenue generated by the sale of the final product and the cost of the raw materials (and the related support services) is the value added, which, in addition to personnel expenses, also includes any profit and the share of income used to pay the interest on any debt and income taxes.

DETERMINATION AND REDISTRIBUTION OF VALUE ADDED ⁽¹⁾

	UNIT	2019	2018	2017	CHANGE 19-18	CHANGE % 19-18
A - Remuneration of employees	€	334,976,124	313,038,619	322,058,429	21,937,505	7
B - Payments to the government	€	310,119,263	302,842,820	301,533,096	7,276,443	2
C - Payments to credit providers	€	96,611,961	104,044,756	97,746,883	-7,432,795	-7
D - Payments to providers of risk capital ⁽²⁾	€	501,493,004	468,730,134	442,198,240	32,762,870	7
E - Retained by the Company	€	262,448,402	242,888,183	252,011,601	19,560,219	8
TOTAL NET VALUE ADDED	€	1,505,648,753	1,431,544,513	1,415,548,249	74,104,240	5

* Amounts relating to the creation and distribution of value added have been taken from the consolidated financial statements prepared in accordance with IFRS/IAS. In particular, the Terna Group has used IFRS/IAS since 2005.

** Payments to the providers of risk capital in 2019 regard the interim dividend paid in November 2019 (€169.2 million) and the final dividend that the Board of Directors decided on 10 March 2020 to propose to shareholders at the Annual General Meeting (€332.3 million).

Taxes paid overseas

With regard to taxes paid overseas by the Group's subsidiaries in 2019, the following should be noted:

Terna

With reference to the activities relating to the Italy-Greece interconnector²⁷, income taxes totalling €1,922,665 paid in Greece.

Terna Crna Gora

In 2019, the company invested a total of €6,466,283 in Montenegro, linked to supplies and work on construction of the power line, as provided for in the related contracts. Commissioning of the infrastructure (Pole 1 and Pole 2 of the converter station, cable and electrode) was completed and, in December 2019, the interconnector entered commercial service. In terms of operating performance in 2019, the company did not generate revenue and recorded a loss of €591,200; as a result, no income tax was paid to the State of Montenegro on Montenegrin territory. As regards other forms of taxation, in 2019 the company paid property taxes totalling €29,531 (including €26,201 on land it owns in the municipality of Kotor and the remainder on the property used as its registered office, located in the municipality of Podgorica).

Tamini Group

Approximately €744,151 was paid, primarily including taxes on services and withholding tax.

Terna Chile

The Group's Chilean subsidiary paid municipal tax of 4,253,444 Chilean pesos.

Difebal S.A.

The company paid 9,801,702 Uruguayan pesos in tax, primarily in the form of value added tax of 838,013 Uruguayan pesos, income tax on non-residents of 5,843,461 Uruguayan pesos and personal income tax of 3,099,121 Uruguayan pesos.

Terna Peru

The company paid value added tax of US\$1,536,017 and income tax on non-residents of US\$5,712.

Brazil

The Brazilian subsidiaries, Santa Maria Transmissora de Energia (SMTE), in the state of Rio Grande do Sul, and Santa Lucia Transmissora de Energia (SLTE), in the state of Mato Grosso, paid total income tax of 9,735,725 Brazilian reals in 2019, in addition to financial transaction tax totalling 2,110,381 Brazilian reals.

²⁷ Terna's presence in Greece consists of a series of plants and infrastructure assets that provide the DC interconnection between the Italian and Greek electricity systems (the section of submarine cable in Greek territorial waters, as well as the terrestrial connection from the terminal for the Greek cable to the Arachthos substation, which is also owned by Terna). As there is a production facility in Greece, a permanent company (or branch) has been established in that country.

²⁶ This section, including the table, shows the values regarding Terna Crna Gora and the Tamini Group.



Procurement

As well as providing a service of general importance, Terna's activities help to generate downstream supply chain activity, creating significant economic value and social benefits.

In 2019, total expenditure on the procurement of services, supplies and works amounted to over €1,484²⁸ million, spread across 2,251 suppliers contracted during the year. In terms of a breakdown of procurement by origin, 88% of the Group's suppliers are Italian and the remaining 12% are overseas.

Economic impact on the community

By developing the electricity network, Terna provides a strategic service that contributes towards Italy's economic growth.

The development of interconnections between grids in neighbouring countries facilitates the importation of electricity at competitive prices compared with domestic production, enables additional power reserves, and ensures greater energy market competition. Reducing grid congestion improves the exploitation of power generation resources to meet demand and enables the use of more competitive plants, with positive impacts on competition in the power generation segment and on final prices.

In accordance with the legislative and regulatory framework, all Terna's grid development investments are assessed from a technical and economic point of view by comparing the estimated cost of implementing a project with the related benefits in order to maximise the cost/benefit ratio. As a result, every euro invested by Terna generates, on average, multiple savings for grid uses, as ultimately reflected in the bills paid by the end customer. It is therefore significant that 2018 saw strong growth in Terna's capital expenditure, most of which was earmarked for grid development.

The Terna Group's total investment in 2019 amounted to €1,264.1 million, compared with €1,091.1 million in the previous year, an increase of 15.9% and ahead of target.

INVESTMENT - TERNA GROUP

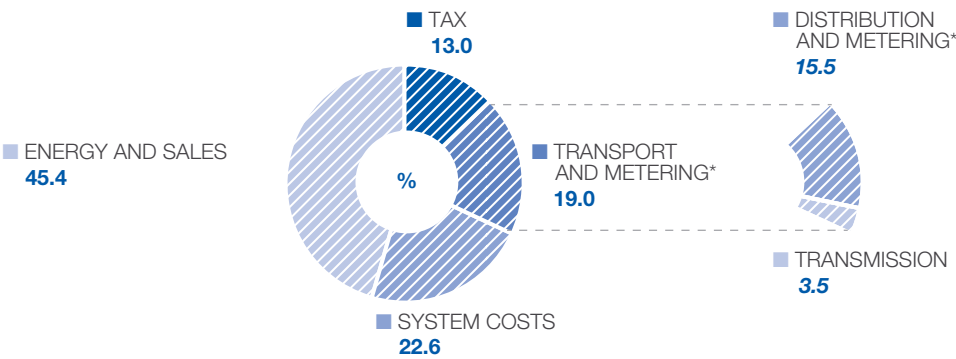
(€M)	2019	2018	2017
Total investment	1,264.1	1,091.1	1,033.9

Transmission costs in end users' bills

On the basis of data published by ARERA, the estimated portion of a typical electricity bill for domestic use²⁹, covering the cost of the transmission service in 2019 is approximately 3.5%.

Compared with the annual average cost to the typical domestic user, estimated at approximately €560 in 2019, the portion of the cost per household that pays for the transmission service is approximately €20 a year.

COMPOSITION OF A TYPICAL DOMESTIC USER'S BILL - AVERAGE % IN 2019



* Source: Terna, based on ARERA data.

²⁸ The figure refers to the amount ordered during the year. This means the sum of the amounts allocated for all contracts (works, supplies and services) signed during the year, net of options (amounting to approximately €694 million). An option is a provision added to supply contracts, clearly, precisely and unequivocally granting the contracting entity the right to increase the value of the contract in return for an increase in the contracted quantity or volume, subject to the same terms and conditions. Once introduced into the contract, such an option, though not constituting the assumption of an obligation on the part of the contracting entity, is included in the calculation of the overall amount.

²⁹ Household with 3 kW of subscribed demand and annual consumption of 2,700 kWh.