



**INTEGRATED REPORT**

“ Electricity is an essential good, above all during a health emergency. During 2020, marked by the pandemic, Terna introduced a series of measures designed to guarantee the **uninterrupted continuity of the electricity service** and the safety of our people. To ensure the continuity of the electricity service, we acted on a number of fronts, safeguarding the security of our operations as a Transmission System Operator (TSO) and of the associated supply chains, whilst at the same time guaranteeing the **health and safety of our operational personnel** and, more generally, everyone who works for us. ”

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At the centre of  
the ecological transition

#TernaPeople #Covid\_19 #DrivingEnergy

# A system undergoing a transformation



## The challenges of the transition

### The international environment

The United Nations has established a roadmap setting global goals. Central to this agenda are the **17 sustainable development goals designed to bring an end to poverty, protect the planet and guarantee sustainable development**. We need to act immediately, as the climate emergency and the erosion of natural resources is accelerating. The sustainable development goals were adopted in 2015, after a lengthy consultation process, with the aim of creating a sustainable, inclusive society. These goals have a crucial role to play in ensuring that the efforts of institutions, businesses and communities are fully aligned. Terna can and wants to play its part on a number of fronts:



**To increase energy efficiency**  
**Research** into Non-regulated Activities  
**Active role in international associations**



Implementation of **Development and Resilience Plans**  
 Construction of **cross-border interconnections**  
 Development of **international activities**



Implementation of the **Resilience Plan**  
**Research, Development and Innovation** in Non-regulated Activities  
**Innovation** designed to boost the **resilience of the grid**



Strengthen the **means of implementation**  
 Revitalise **partnerships** for **sustainable development**



### The European context

In September 2020, the EU Commission set a path towards reducing greenhouse gas emissions, targeting a 55% cut by 2030. The new proposal is in keeping with the commitment made in December 2019 and is in line with the objective set in the Paris agreement to keep the rise in global temperatures to below 2°C compared with pre-industrial levels, with the willingness to intensify efforts in order limit the increase to 1.5°C.



The **European Green Deal sets out a new growth strategy** that envisages the European Union as **a modern, efficient economy in terms of resources and competitiveness**, in which:

- the **efficient use of resources is promoted**, involving a switch to a clean, circular economy and breaking the link between economic growth and the use of resources;
- **biodiversity is restored and pollution is reduced by cutting net greenhouse gas emissions to zero** by 2050.

This new deal thus establishes a shared timetable for making the European economy sustainable, turning climate issues and environmental challenges into opportunities for every sector and ensuring a fair, inclusive transition.

To achieve these objectives, the Green Deal envisages €1,000 billion in investment over the next ten years, with around a half of this to be invested in energy and approximately €100 billion in grids.

### The Italian context

The Integrated National Plan for Energy and the Climate (*Piano Nazionale Integrato per l'Energia e il Clima* or PNIEC), published in January 2020, has established national targets to be met by 2030 regarding energy efficiency, renewable sources and cuts in CO<sub>2</sub> emissions, as well as setting goals for energy security, interconnections, the single energy market and competitiveness, development and sustainable mobility, in each case describing the measures needed to ensure their achievement. Italy's objective is to **make a decisive contribution to bringing about the necessary changes in the European Union's energy and environmental policy**, by identifying agreed measures capable of also assisting in the transition underway in the industrial sector towards the Green Deal.

By June 2021, the Commission will re-examine and, if necessary, propose changes to energy legislation, with the potential for a revisitation of the targets set out in the national energy and climate plans submitted by individual member states.

TARGETS SET IN THE PROPOSED PNIEC  
(*Piano Nazionale Integrato per l'Energia e il Clima*)



-33% greenhouse gas emissions compared with 2005 levels	-43% primary energy consumption compared with the trend scenario	30% penetration of renewables as a proportion of gross final energy consumption	10% interconnection target	2025 phase-out of coal
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The key **interventions and tools** indicated in order to achieve these **ecological transition** goals are:

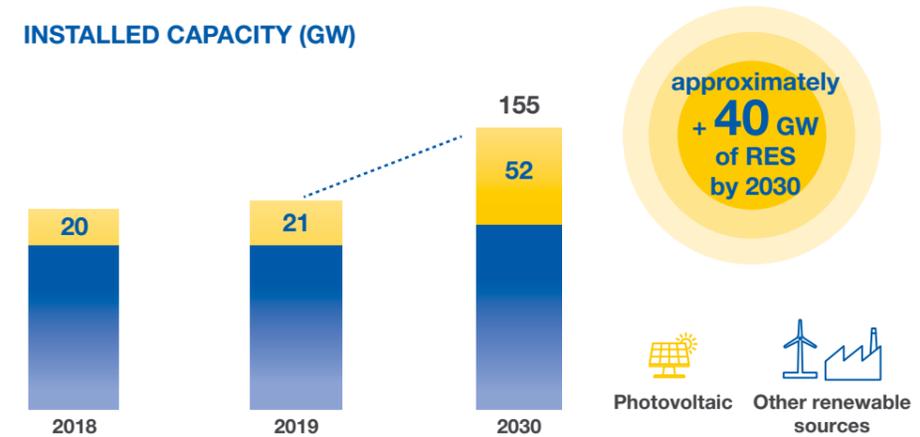
- **an increase in renewable energy production**, above all photovoltaic and wind power, as a share of gross final energy consumption;
- **major development of grids so as to integrate non-programmable renewables**, boost the system's security and resilience and resolve bottlenecks, partly by strengthening cross-border interconnections;
- **energy efficiency**, above all with regard to housing, thanks above all to the progressive switch to electric heating systems;
- **storage systems** (above all electrochemical and hydroelectric) to ensure system security and reduce grid congestion to a minimum;
- **green and sustainable transport** by using electric or low-emission vehicles facilitated by the rollout of charging infrastructure.

## Development of the system

### Growth in renewable production

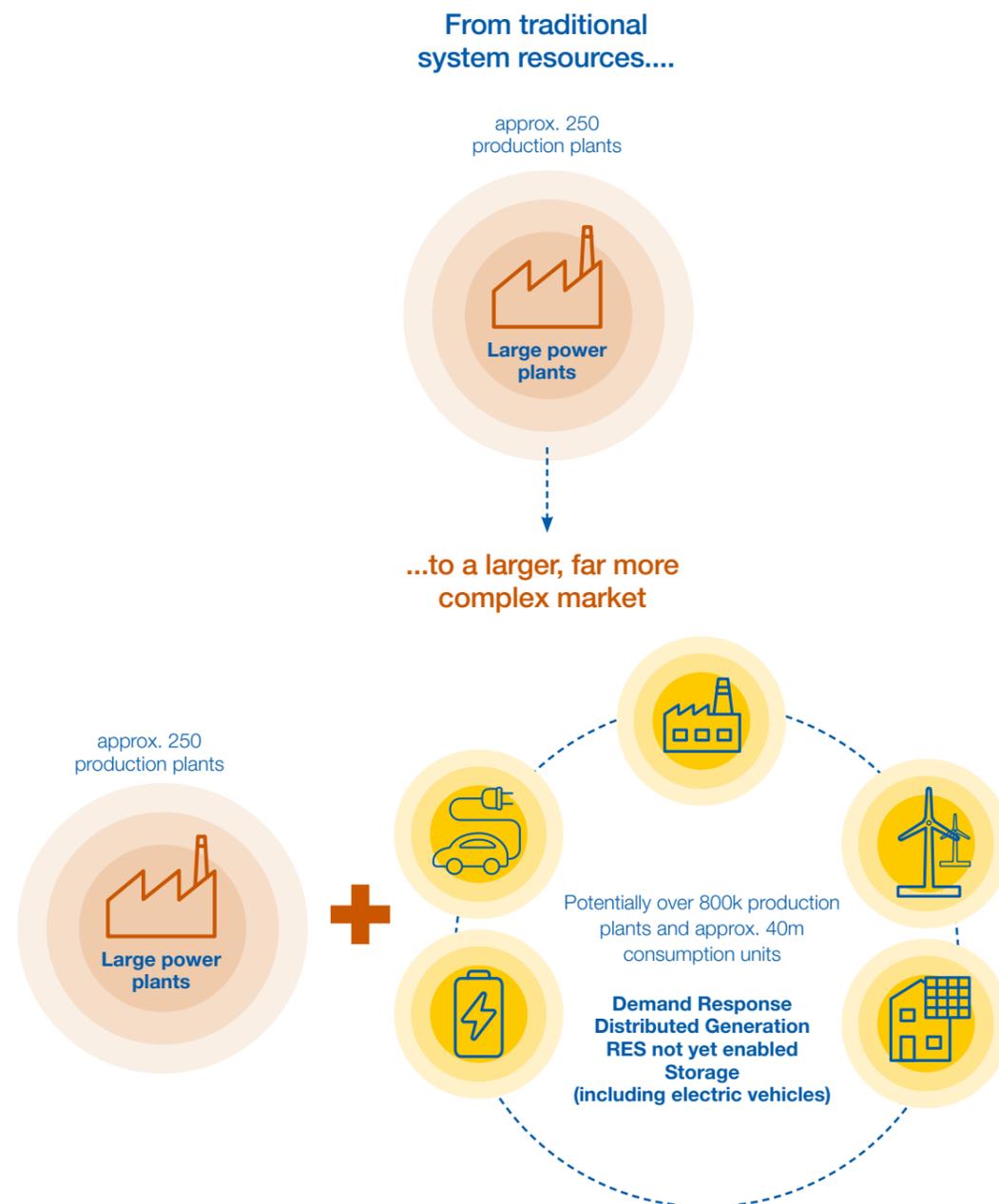
The electricity sector has **a central role to play in achieving the decarbonisation targets for the energy system** as a whole, thanks to the intrinsic efficiency of electricity as an energy carrier and the technological maturity of renewable energy sources (RES). This will translate into strong growth by 2030, with total installed capacity due to rise from the current 115 GW to 155 GW, almost entirely in the form of non-programmable sources, such as wind and photovoltaic. Photovoltaic energy alone is expected to see an increase in capacity from the current 21 GW to 52 GW in 2030 (up 30 GW), whilst wind is due to see growth of around 9 GW.

### INSTALLED CAPACITY (GW)



## The transformation to a distributed model

The national electricity system is evolving **from a centralised to an integrated, distributed model**: if only 15 years ago there were no more than around 250 large production plants, today there are over 800,000 throughout Italy. Proof of this is the fact that Terna is handling requests for the connection of new plants with a total capacity of approximately 70 GW, having recently registered an upward trend. To meet the targets for 2030, we will in any event need the sizeable contribution made by grid-scale plants, meaning plants connected to the transmission grid. We are still some way from achieving this objective, but this will be our big challenge for the future.



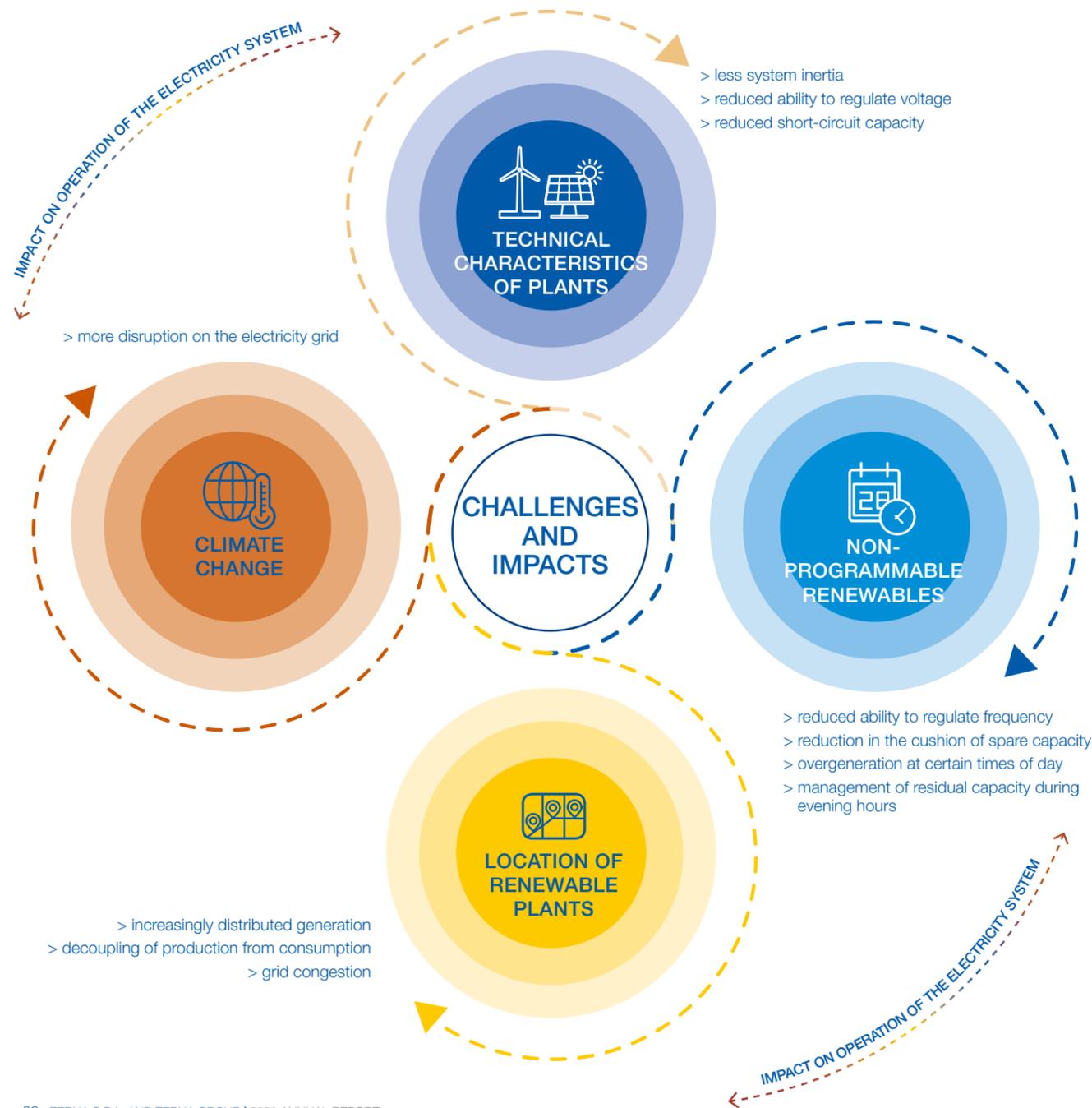
## Covid-19 and the step change brought about by the lockdown

Among the many effects on the lives of millions of Italians, the Covid-19 pandemic also led to a **collapse in demand for electricity and a resulting sharp rise in the share of total consumption met from RES**. In practice, this was a **foretaste of what will happen in 2025** and later on in 2030, if the Integrated National Plan for Energy and the Climate is effectively implemented as expected. At the start of spring 2020, the sharp decline in demand for electricity (down 10.2% in March 2020, 17.2% in April and 10.3% in May) was matched by a significant increase in the share of energy consumption met by renewable sources. This meant that, for example, 47% of Italian demand for electricity in March and April was met by green sources, rising to an all-time high of 51.2% in May. In terms of consumption, April saw the biggest decline, with a fall of 17.2% compared with the same month of the previous year. This was followed by a slow recovery from May onwards, before a return to a level in September broadly in line with the figure for September 2019 (26.6 billion kWh).



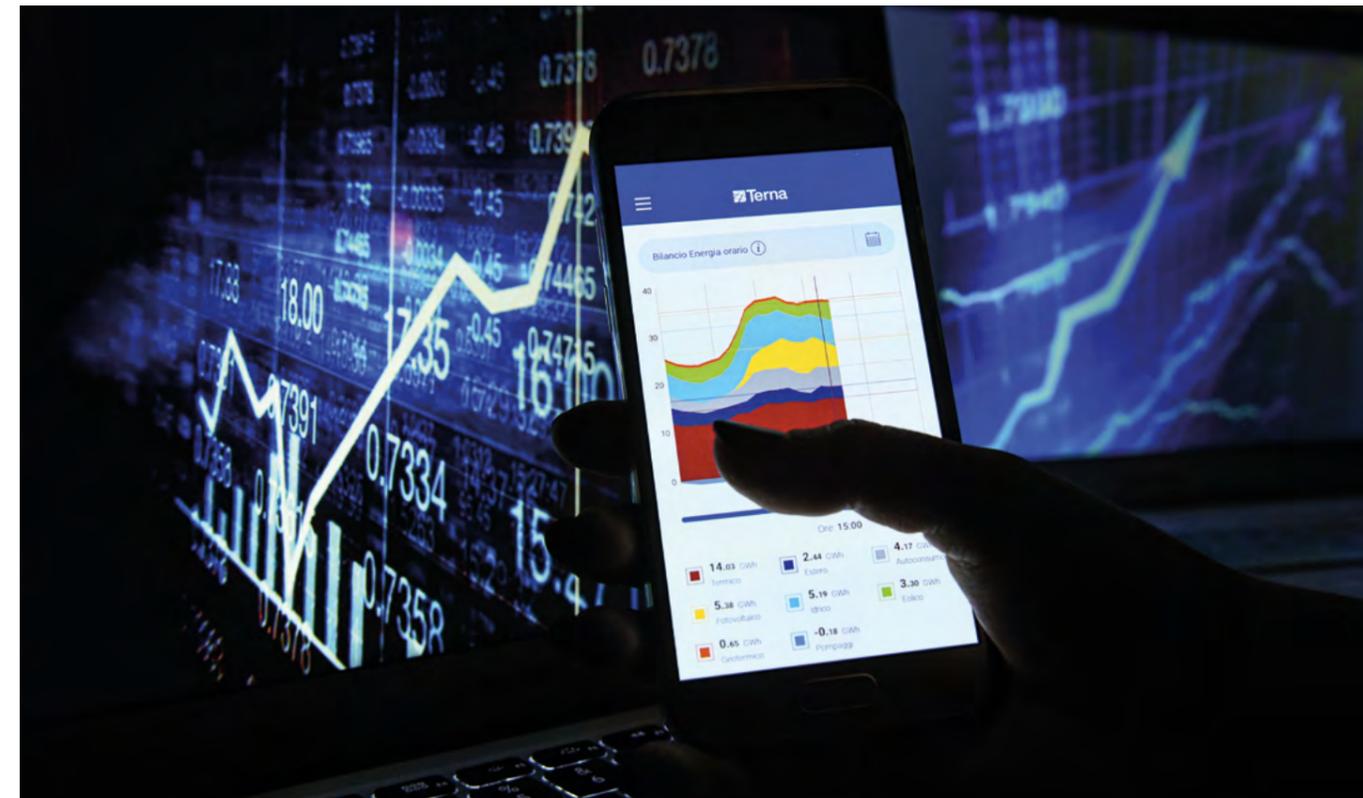
## The impact on the electricity system

The progressive switch to a decarbonised energy scenario, allied with the growing intensity of extreme weather events in recent years, means that transmission system operators (TSOs) are faced with a series of challenges in order to effectively deliver on the ecological transition, whilst maintaining existing levels of service quality and avoiding an excessive increase in costs for the community. The effects of the above problem are amplified by the structural nature of the Italian electricity grid which, as a result of the country's geography, makes management of the electricity even more complicated in the new scenario.



To respond to these challenges and achieve decarbonisation targets, **we will need a large-scale plan for digitalisation**. The tools we use must be ever more effective, powerful, interactive and modern. This is a major opportunity to acknowledge the role that technology has to play as an important enabler of change. The key factors enabling this transformation include, on the one hand, new digital technologies that allow data to be gathered at low cost (such as IoT, smart meters, etc.), big data flows to be transferred using reliable connectivity solutions (such as fibre or 5G) and data to be effectively stored and analysed (advanced analytics and data driven decision making), on the other, investment in innovation projects bringing together new digital solutions enabling the response to the new challenges presented by the energy environment, including cybersecurity. Moreover, the growing need to integrate renewable sources calls for an increasingly sophisticated approach to forecasting and planning in order to manage the grid in real time, including the use of artificial intelligence. Finally, robotics will play an extremely important role in maintenance, particularly with regard to the use of drones for the automated inspection of power lines and other system assets.

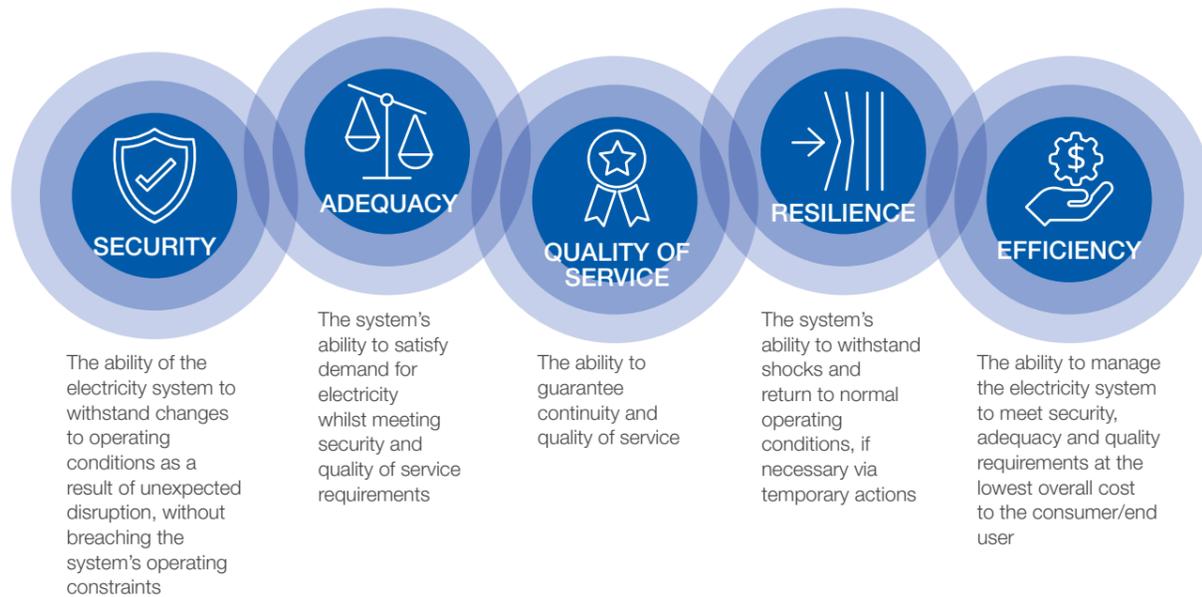
The ecological transition **is a major opportunity for investment, growth and job creation for all**. It represents a shared challenge that requires, and will in the future increasingly require, all the stakeholders involved, such as government institutions, businesses and associations in Italy and overseas, to come together to forge a strategy based on a coherent interpretation of the potential scenarios and ensuring that all the various actors play their part in the process.





## Terna's role Driving the system

Terna has a central role in achieving the objectives to be met in this period of transformation: from being a simple operator, we are becoming drivers of the system, leveraging innovation and our distinctive competencies and technologies. The electricity grid has in fact a key role to play in enabling progressive decarbonisation and driving the ever-greater integration of renewable energy plants. To fulfil this increasingly strategic role, Terna focuses on **five key dimensions of the electricity system: security, adequacy, quality of service, resilience and efficiency.**



It must be emphasised that all our objectives are aligned with those of the regulator (the *Autorità di Regolazione per Energia Reti e Ambiente* or ARERA) in ensuring both the security of the supply chain and the lowest possible cost for end users. This is why it is of fundamental importance to ensure that investment remains on track to provide a secure and efficient system.

Our investment not only enables the system, but also represents a way of getting back to work and creating new jobs. It is a major driver of the country's restart following the Covid-19 emergency. According to a recent study, each investment in the grid has a multiplier effect on GDP, worth two to three times the cost of the infrastructure built: **every €1 billion invested by Terna generates almost €3 billion in GDP<sup>5</sup>.**

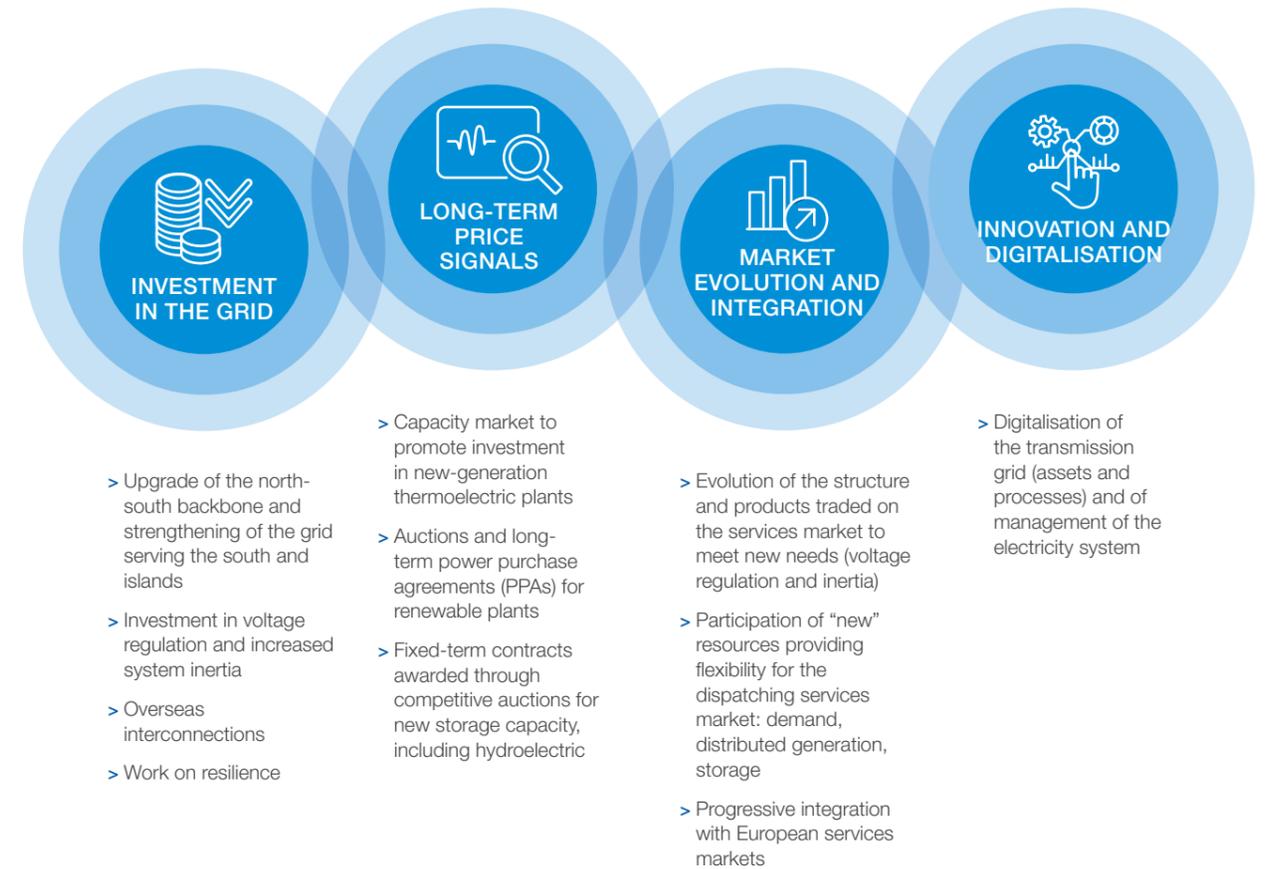
<sup>5</sup> Source: ICE Infrastructure as a stimulus – laying the foundations for the new normal - <https://www.ice.org.uk/getattachment/5537b8f1-755d-458d-b578-d02db60a436c/attachment.aspx>

## Driving Energy

### Regulated Activities

Our strategy, in this challenging environment, is based on further accelerating investment in the grid to enable the transition to sustainable energy. 95% of this investment is classifiable as green under the criteria used in the EU Taxonomy, whilst 70% of projects are focused on achieving the goals set in the PNIEC and, in particular, on integrating renewables and cutting CO<sub>2</sub> emissions by approximately 1.5 million tonnes.

Terna believes that it is crucial to act now in order to hand over an increasingly reliable, efficient and decarbonised electricity system to future generations, by carrying out a set of essential, coordinated and coherent actions. These are four categories of intervention that have a key role to play in achieving Italy's decarbonisation targets.



For additional information, go to page 94





Terna has been actively contributing to the achievement of these objectives for some time, including through concrete initiatives and cutting-edge innovation to support the ecological transition, such as the **Equigy platform** and the **Fast reserve project**.

## EQUIGY

Terna, in partnership with the Dutch TSO, TenneT, and Switzerland's Swissgrid, has developed a new platform based on blockchain technology that aims to facilitate the participation of new flexible resources in the system services market. The aim is to ensure a balance between demand and supply. Equigy is a crowd balancing platform ("CBP") that can potentially involve millions of small consumers.



## Fast Reserve

Terna awarded approximately 250 MW of energy storage capacity in the auction for the Fast Reserve pilot project, which aims to enable batteries to play a part in the dispatching services market. With bids amounting to six times the request capacity, the outcome confirms the enormous interest among operators and the maturity of storage technology. Terna is one of the first in the world to promote this project, which enable batteries to provide services that have a key role to play in guaranteeing the flexibility, stability and security of the national grid.

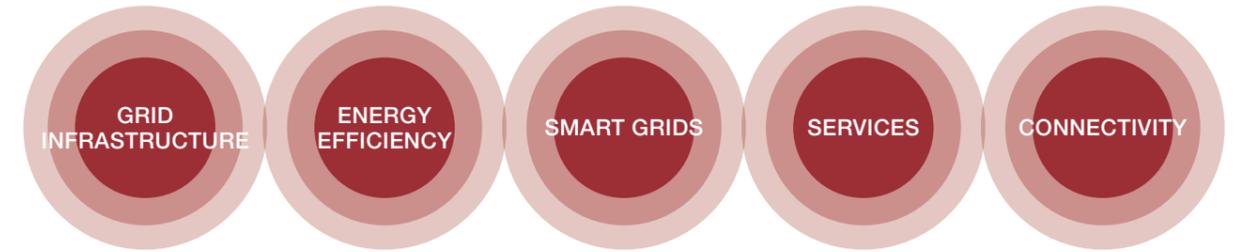
### Dialogue with local communities

Every project designed to create new infrastructure or modernise existing elements of the grid has a series of effects on the local area. For this reason, in the coming years we are not only committed to stepping up investment, but also to engaging ever more closely with all the parties affected by the infrastructure planning and development process, using an approach based on listening and dialogue. Terna has thus adopted the very latest forms of "participatory design" and stakeholder engagement, enabling us to consult widely with citizens and government institutions and work together with local communities in order to agree on innovative technical solutions.

For additional information, go to page 76

### Non-regulated Activities

Our strong background enables us to offer **solutions allowing customers to take full advantage of the ecological transition**. To get the most out of this new energy economy, we use Terna's design, engineering, operational and maintenance expertise to offer complex solutions that increasingly resemble what we like to classify as "from watts to bytes", thanks in part to the integration of telecommunications networks with proprietary systems.



**We create and upgrade transmission infrastructure** (lines and substations) with turnkey solutions to satisfy the requirements of both industrial customers and demand for grid connection of new renewable plants. We deal with the **authorisation, design, construction and operation of assets**, assuming ownership and operation thereof for a set period where requested (BOOT – Build, Own, Operate, Transfer).

We offer **support to companies in the optimisation of energy consumption**, designing and developing **innovative solutions** to reduce energy supply costs and the optimisation of production processes, and for Energy Efficiency Certificates (white certificates).

**We offer turnkey solutions to islands and businesses looking to evaluate, design and integrate renewable energy plants** (photovoltaic and wind), storage systems (batteries) and co-generation/tri-generation solutions **into their renewable production cycles**. We create **advanced generation systems, storage, active demand behind the meter, utility scale and control systems for the plants themselves**, capable of optimising their operation.

We offer high-tech solutions for the **maintenance and monitoring of both infrastructure** (substations, power lines and fibre cable) and grid systems (renewables plants, storage systems, CHP), with the goal of **preventing and reducing outages and minimising the risk of faults and unavailability of the service**. The use, development and calibration of algorithms for predictive and preventive maintenance allow increased/optimised performance of plants.

Transformation of the energy world travels very quickly via an enormous and continuous mass of data. **We offer our fibre infrastructure**, located throughout the country, **to meet the growing need for fast and reliable digital connections**. We also support our partners in the development of smart solutions in the telecommunications sector.

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### International Activities

For many years, our Group has provided support for TSOs and energy companies in developing countries, including as part of multilateral projects and programmes. We make available to international operators the technological know-how acquired **in managing complex systems, in transmission, in the integration of renewable sources and in storage systems**, together with our exceptional experience in the construction, management and operation of infrastructure for all voltages. **In this way, we are promoting the ecological transition at international level and the development of markets**, mindful of the fact that the radical transformation the world is undergoing is a shared responsibility.



INFRASTRUCTURE DEVELOPMENT



SYSTEMS INTEGRATION



TECHICAL ADVISORY

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# A shared challenge: partnerships

The ecological transition is a major opportunity for investment, growth and job creation for all. Terna's commitment to driving this transformation also takes the shape of efforts to encourage ever closer strategic cooperation with government institutions, businesses and associations.

## The new European platform for the exchange of Replacement Reserve

On **15 January 2021**, Europe's **TERRE** (Trans European Replacement Reserves Exchange) went live: Terna is now connected to the European platform for the exchange of Replacement Reserve (RR). The new platform facilitates the integration of the balancing markets of EU countries, guaranteeing the cost-efficient exchange of reserves for the benefit of the electricity system's security. As well as Italy, the Czech Republic, the UK, Poland, Switzerland, France, Spain and Portugal are also taking part in the project.

## Resilience: partnership with ENEA to develop new grid technologies

On **14 January 2021**, **Terna and ENEA**, the Italian agency for new technologies, energy and sustainable economic development, launched a partnership for research aimed at increasing the security and resilience of the high-voltage grid. Artificial intelligence, sensors and IoT data analytics will be used to develop models and tools for the prevention and management of emergencies linked to extreme weather events, air pollution and geological events.

## The Carabinieri police force and the security of energy infrastructure

A memorandum, further strengthening physical protection of the country's strategic electricity infrastructure, was signed on **7 January 2021** in the presence of the Commander General of the Carabinieri, General Giovanni Nistri, and Terna's Chief Executive Officer, Stefano Antonio Donnarumma. Terna will supply 675 new, state-of-the-art devices to the units directly involved in monitoring the infrastructure.

## Sharing know-how for an increasingly participatory electricity system

### EQUIGY

A joint venture with TenneT and SwissGrid was entered into on **18 December 2020**, resulting in the launch of **Equigy**, the new crowd balancing platform (CBP) that has the potential to involve millions of small consumers. Using blockchain technology, TSOs and aggregators can keep track of all energy transactions through a secure, permanent ledger, validating the flexibility available from small distributed resources in real time. A veritable #EnergyofThings.

Ten of Europe's leading transmission system operators (TSOs) launched a joint initiative on **18 December 2020** as part of efforts to decarbonize the electricity system. The project will enable the TSOs to reduce their carbon footprints, at the same time creating even more significant opportunities at the level of the system, thanks to electrification and the integration of renewable sources. In addition to Terna, the other participants are Amprion (Germany), APG (Austria), Elia Group (Belgium and Germany), Red Eléctrica (Spain), RTE (France), Swissgrid (Switzerland) and Tennet (the Netherlands and Germany).

## Ten European system operators join forces to cut emissions

Drones, electric mobility, augmented reality and new digital tools to be installed on high-voltage pylons. These are the projects that Terna presented during the eighth edition of the Maker Faire in Rome held between **10 and 13 December 2020**. The fair is the number one event in Europe that specialises in innovation, organized by the Rome Chamber of Commerce through its "Innova Camera" initiative. The common thread linking all of these projects is the challenge offered by the ecological transition, involving the switch from fossil fuels to renewables, requiring the major adoption of digital technologies, including those needed to make the grid ever more sustainable.

Drones, robots, augmented reality: Terna attends the Makers Fair in Rome

ROME



THE EUROPEAN EDITION

On **13 October 2020**, more than 100 CEOs from major Italian companies who are part of the ELIS Consortium (63 in attendance and 40 participating remotely) met in Rome to plan the country's recovery based on education, business and work, having accepted the invitation made by Terna's CEO, Stefano Antonio Donnarumma. "Our commitment is to help give young people the skills they will need in the future, enabling them to play a full part in this future" commented Donnarumma on the margins of the meeting at Villa Blanc, the Rome campus of the Luiss Business School.

## ELIS Consortium: one hundred CEOs to train young people in the skills of the future



On **14 September 2020**, Terna, FCA and Engie Eps inaugurated their Vehicle-to-Grid (V2G) charging hub at FCA's Mirafiori complex in Turin. One of the most interesting technologies for the energy sector, the project marks nothing less than a structural revolution, featuring the bidirectional charging of electric vehicles which can thus both withdraw and inject energy from and into the grid, "supporting it" in times of difficulty. The project was developed entirely in Italy and aims to become the world's leading V2G solution, with the potential to charge up to 700 vehicles at the same time.

## V2G "made in Italy" as part of the ecological transition



With investment of €110 billion planned for the period between 2018 and 2030, energy infrastructure is a key driver not only of GDP growth, but above all of the post-Covid-19 recovery. According to the study entitled "Energy infrastructure for Italy and the Mediterranean", conducted by Confindustria Energia, and in which Terna also took part, grids will play a major role in enabling economic development in Europe, above all in countries around the Mediterranean. The study was presented on **20 July 2020** during a webinar in which Terna's CEO, Stefano Antonio Donnarumma, also took part.

## Energy infrastructure key to the recovery

#### An increasingly sustainable Convent in Assisi

A memorandum of understanding was signed on **16 April 2020** governing collaboration with the General Custody of the Sacred Convent of Saint Francis of the Friars Minor Conventual. In keeping with our mission and our commitment to sustainable growth and the development of local areas, Terna will contribute with targeted initiatives and projects, carried out by Terna Energy Solutions, to developing a sustainability project for the Monumental Area close to the Basilica of Saint Francis in Assisi.

#### The roadmap to a sustainable development model

On **15 April 2020**, Snam and Terna renewed and extended their partnership regarding coordinated research and development, aimed at exploiting potential synergies between the gas and electricity systems. After renewing their memorandum of understanding, the two companies intend to carry on working together to identify, define and implement joint initiatives, with the aim of further strengthening their commitment as key players in the current ecological transition. Together with Italy's gas system operator, since 2019 Terna has published a joint study on future energy scenarios, in readiness for the preparation of their respective grid development plans.

#### Agreement with Finance Police (*Guardia di Finanza*) renewed

The strategic memorandum of understanding between Terna and the Finance Police was renewed on **4 March 2020**. The agreement centres around efforts to safeguard the construction of electricity infrastructure by ensuring the proper and transparent conduct of tenders for the award of contracts for works, services and goods. The agreement also covers efforts to combat informal employment and the evasion of contributions, as well as attempts by criminal organisations to infiltrate the economy.

#### Launch of the "*Cantiere dei Consumatori*" initiative to look into the future of the electricity system

Terna and eleven consumer associations signed a memorandum of understanding on **31 January 2020**, setting up a permanent focus group to discuss operation and development of the grid, above all looking at the objectives of security and efficiency. The shared goal is to work together continuously as part of the process of agreeing on the best locations for new electricity infrastructure. Adiconsum, Adoc, Altroconsumo, Asso-Consum, Assoutenti, Codacons, Codici, Federconsumatori, Lega Consumatori, Movimento Consumatori and Udicon are the associations involved.



# Highlights



The **2021-2025 Industrial Plan Driving Energy**, was presented on **19 November 2020**, following its approval by the Board of Directors.

Terna's commitment to developing the grid continues, with progress on all the major investment projects supporting the current ecological transition.

The **power line connecting Capri** with the mainland **was inaugurated** on 14 October in the presence of the Prime Minister and local dignitaries. The connection, 19 km in length, will cut air pollution following retirement of the island's diesel power station.

On 29 February 2020, Terna completed the acquisition of a **90% interest in Brugg Kabel AG**, 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.

A total of 112 km of new power lines **entered service** and 9 electricity substations were built and/or enlarged in 2020. On 4 February 2021, the new **23,2 km long 'invisible' power line connecting Cortina d'Ampezzo with Auronzo di Cadore entered service** in Veneto.

The second concession covered by the agreement between Construtora Quebec and **SPE Transmissora de Energia Linha Verde I S.A.**, relating to construction of the "Governador Valadares - Mutum" line, was agreed.

## AWARDS AND SUSTAINABILITY



Terna included for the third year in the **Bloomberg Gender Equality Index (GEI)**, for the sixteenth year running in the **FTSE4GOOD** and for the tenth consecutive year in the **STOXX® ESG** index.

Terna is the first Italian electric utility to join the **Nasdaq Sustainable Bond Network**, a platform focusing on sustainable finance.

**Terna Plus**, which has responsibility for overseas expansion, was **recognised as the world leader in the management and organisation of infrastructure projects**, being the only Italian energy company to be certified by IPMA Delta®.

### BUSINESS PERSON OF THE YEAR 2020

The Chief Executive Officer, **Stefano Antonio Donnarumma**, was awarded **Business Person of the Year** in the energy sector by **FORTUNE Italia**.

### DIGITAL COMMUNICATION

On 30 November 2020, Terna was ranked **number one in Italy and Europe for the quality of our digital communication**.

For the third year running, Terna ranks as the **number one Electric Utility in the Dow Jones Sustainability Index World**; this led to our inclusion in the **Gold Class in "The Sustainability Yearbook 2021"** published by **SAM** - S&P Global.

Terna is acknowledged as one of the **50 most sustainable businesses in the world** at the **2020 Seal Business Sustainability Awards**.

**S&P Global Ratings (S&P), Moody's, Fitch Ratings and Scope Ratings have confirmed Terna's long-term ratings**, in recognition of Terna's central role in driving and enabling the ecological transition.

## FINANCE

### New bond issues

New 10-year bonds worth €500 million, and paying coupon interest of 0.375%, were issued in September.

The issue of a 12-year green bond worth €500 million, paying an effective rate of interest of 0.78%, was completed in July.

### Three ESG-linked Term Loans agreed

In October and August, Terna agreed three ESG-linked loans worth a total of €500 million. The interest rate is indexed to Terna's performance against certain specific ESG objectives.

## BUSINESS ENABLERS



OUR PEOPLE

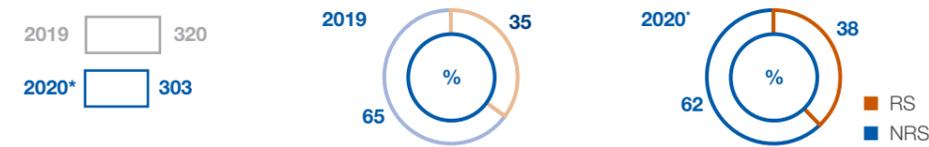
**381 personnel added** in 2020 following the acquisition of Brugg Kabel AG.



INNOVATION

**Call for Innovation - Energy Efficiency for Sustainability** and the **"Sustainable Materials" Hackathon**, two initiatives focusing on sustainability, completed in December.

### COVERED BY RENEWABLE SOURCES



(\*) Provisional data.  
RS: Renewable sources - NRS: Non-renewable sources

### PERFORMANCE OF THE ELECTRICITY SYSTEM



Demand [TWh]



### MAJOR INCIDENTS



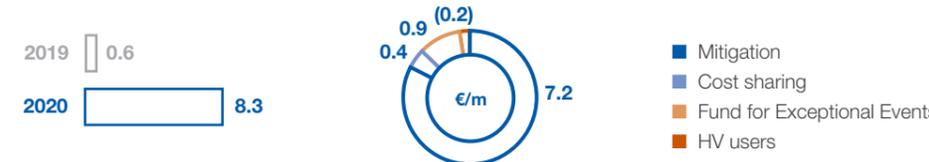
**Performance in 2019:** no incident classified as serious occurred in 2019.  
**Performance in 2020:** only one incident classified as serious was registered in 2020, but this was not included in the calculation of RENS as it affected an HV customer.

(\*) Provisional data.



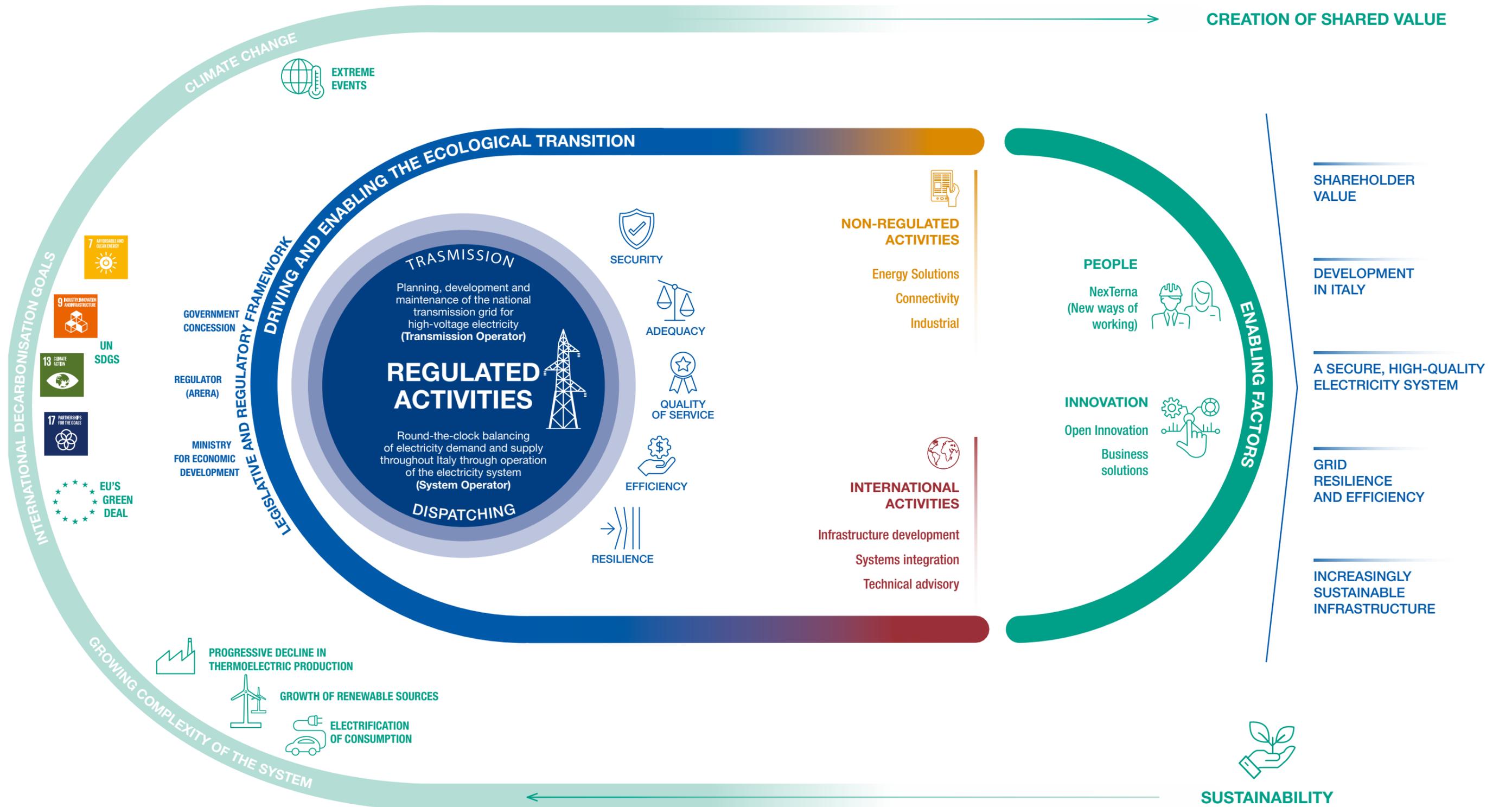
RENS quality [MWh]

### COST ALLOCATION 2020



Cost of quality [€/m]

# The business model



“ The national lockdown, imposed in response to Covid-19 from 9 March to 3 May 2020, unexpectedly projected the electricity system towards meeting the targets set in Italy’s Integrated National Plan for Energy and the Climate, with the entire system undergoing nothing less than a sort of stress test. The sharp decline in demand for electricity in this period (-10.2% in March, -17.2% in April and -10.3% in May) led to a **significant increase in the proportion of overall energy demand met from renewable sources**: in March and April, 47% of total demand was met from green energy sources, with the figure rising to an all-time high of 51.2% in May. ”

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# 2

A continually changing environment

#TernaPeople #Covid\_19 #electricityconsumption

# Macroeconomic environment

In 2020, the economy was hit hard by the effects of the Covid-19 pandemic, which from China initially spread to the rest of Asia before arriving in Europe, the Middle East and the United States early in the year and then spreading to the rest of the world.

The highly contagious nature of the virus forced governments to impose **severe restrictions on movements and to halt non-essential activity**. The adoption of these measures, whilst differing in terms of duration and severity, was more or less ubiquitous, with changes introduced depending on specific developments in each country. In general, **there were significant declines in GDP, household income and consumption**, which went beyond anything previously seen in times of crisis. The halt to business activity and travel also led to a **reduction in demand for energy**, pushing down commodity and energy prices. With no upward pressure on prices, **inflation was weak everywhere**. In contrast, unemployment rose significantly and many businesses were forced to close. To offset the devastating economic effects, governments and central banks took unprecedented steps to ease budgetary and monetary policy.

The crisis caused by the pandemic thus resulted in **falling GDP throughout the world** in 2020, with the World Bank **estimating the decline at 4.3%** compared with the previous year, when GDP grew by 2.3% (growth in 2019 was already at its lowest level in the last ten years). In the United States, where ten years of expansion came to an end in February 2020, the fall in GDP was 3.5% (+2.2% in 2019), proving to be the best of a bad bunch among the leading advanced economies.

In the euro area, after a very difficult start to the year – when the European Central Bank was forced to strengthen its expansionary monetary policy by increasing the size and duration of its asset purchase programme - **economic activity recovered well in the third quarter, coinciding with an easing of the earlier restrictions designed to curb the spread of the virus**. This was followed, in the autumn, by a new upturn in infections, leading once again to the imposition of restrictions, though less drastic than before. According to figures from EUROSTAT, **euro area GDP fell 6.6% in 2020 compared with the previous year** (+1.3% in 2019).

In Italy, the government responded to the seriousness of the pandemic at the end of February with a strict lockdown in the period covering March and April. The easing that took place in the following months, as the health situation improved, never fully restored the country to normal, given the need for social distancing. In economic terms, this had a notable impact on the services sector (such as transport, hospitality, entertainment, etc.), where the upturn in activity seen in the third quarter was not sufficient to make up for the decline registered in the first half of the year, unlike the performance of value added in the manufacturing sector.

Falling GDP throughout the world by Covid-19 pandemic crisis

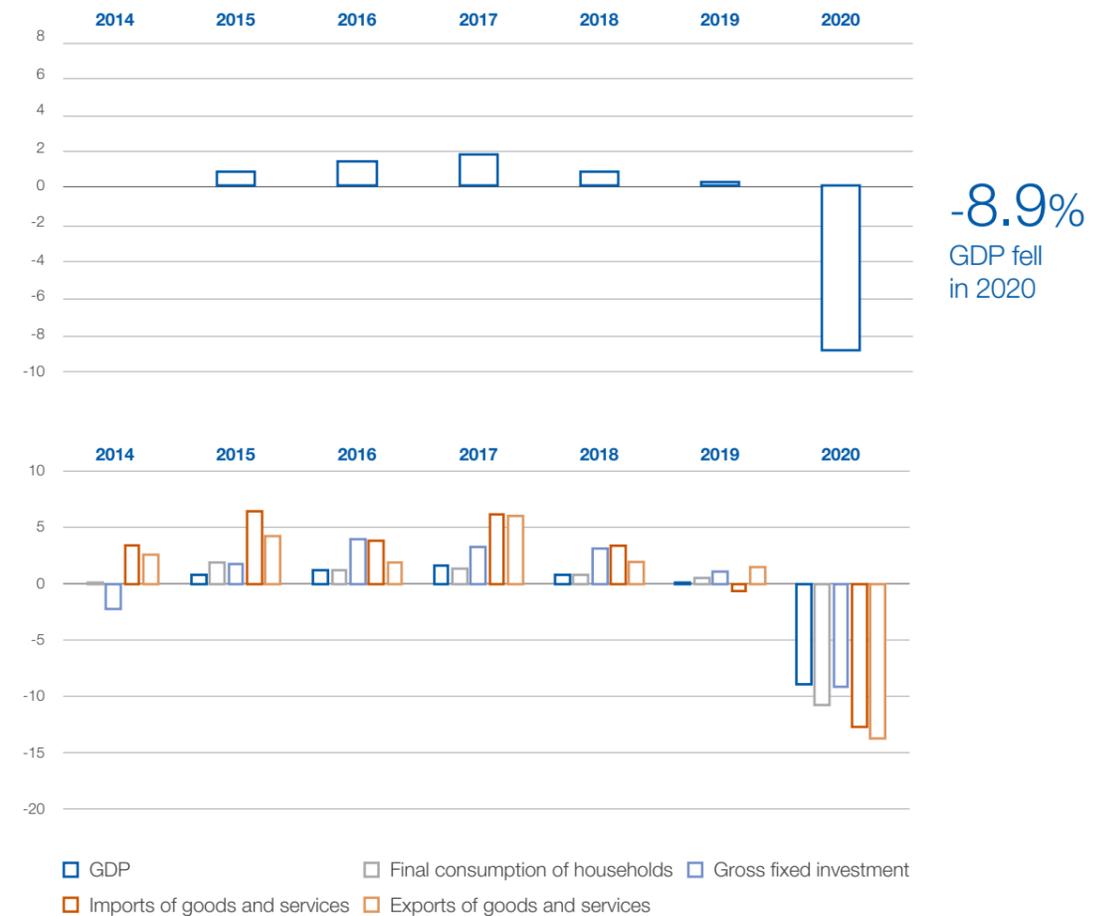
-6.6% GDP fell in the euro area in 2020

As regards the labour market, the negative impact was softened by the freeze on layoffs and by the provision of income support. Further aid was provided by the European Union under the Sure (Support to mitigate Unemployment Risks in an Emergency) programme. In the last quarter of the year, the new wave of infections, with the resulting restrictions, resulted in a 2.0% decline in economic activity compared with the previous quarter. According to figures from ISTAT, **GDP fell 8.9% in 2020 compared with the previous year** (+0.3% in 2019). This reflects a reduction in internal demand (household consumption down 10.7% and gross fixed investment down 9.1%) and a downturn in net external demand.

Industrial output fell 11.4% in 2020 compared with 2019, the worst performance since 2009. Output declined across the board, with the biggest declines registered for textiles, clothing, leather goods and accessories (down 28.5%), vehicles (down 18.3%) and the manufacture of machinery and equipment n.e.c. (down 14.8%).

## ITALIAN GDP AND KEY ECONOMIC INDICATORS

% annual change in volume



Source: ISTAT, March 2021 edition

# The energy sector

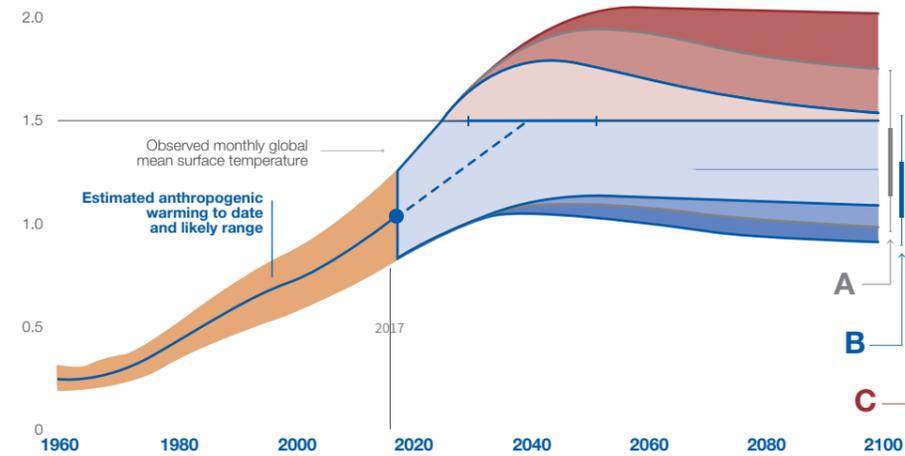
The ecological transition is an obligatory, irreversible process. Progressive changes in generation technologies and consumption patterns, together with the application of international directives in Italian energy sector regulations, mean that we are at the centre of a radical transformation: to achieve national and European climate targets, whilst also making a decisive contribution to restarting the post-Covid-19 economy, Terna has, in keeping with our role in driving Italy's energy system, decided to significantly step up investment in Regulated Activities, which over the 2021-2025 Plan will amount to €8.9 billion.

## The outlook for the energy sector

In order to combat global warming, in December 2015, at the end of the twenty-first Climate Change Conference (COP21), 185 countries and international organisations drew up and decided to adopt **an action plan designed to keep the rise in the global temperature below 2°C compared with pre-industrial levels, and preferably below 1.5°C.**

The study published by the Intergovernmental Panel on Climate Change (IPCC) on 6 October 2018 officially announced that global warming is already within the range of 0.8 to 1.2 °C, with a rising trend of 0.2 °C per decade.

### GLOBAL WARMING COMPARED WITH THE PERIOD 1850-1900 (°C)



Source: "Global Warming of 1.5 °C", Intergovernmental Panel on Climate Change, 2018

#### BASELINE SCENARIO (A)

- Global CO<sub>2</sub> emissions reach net zero by 2055.
- Emissions of greenhouse gases other than CO<sub>2</sub> will be reduced from 2030.

#### SCENARIO (B)

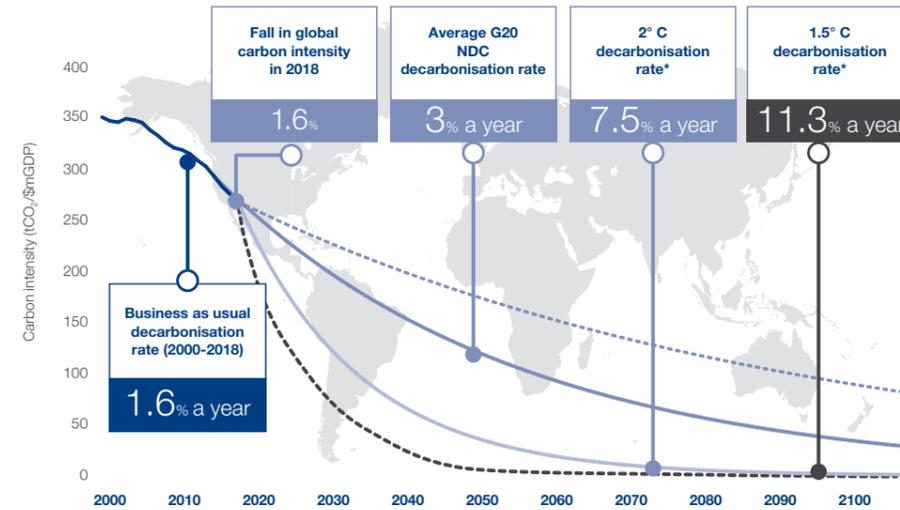
**Best-case scenario:** global CO<sub>2</sub> emissions reach net zero by 2040 (greater likelihood of limiting the temperature rise to 1.5 °C).

#### SCENARIO (C)

**Worst-case scenario:** emissions of greenhouse gases other than CO<sub>2</sub> are not reduced from 2030 (less likelihood of limiting the temperature rise to 1.5 °C).

To prevent warming from rising above 2°C compared to pre-industrial levels, **the global economy must commit to cutting its carbon intensity by 7.5% per year until 2100** (source: "The Low Carbon Economy Index 2019", PwC). A necessary condition for achieving the COP 21 targets is decarbonisation of the electricity sector together with acceleration of the decoupling of economic growth and energy consumption via the electrification of final consumption.

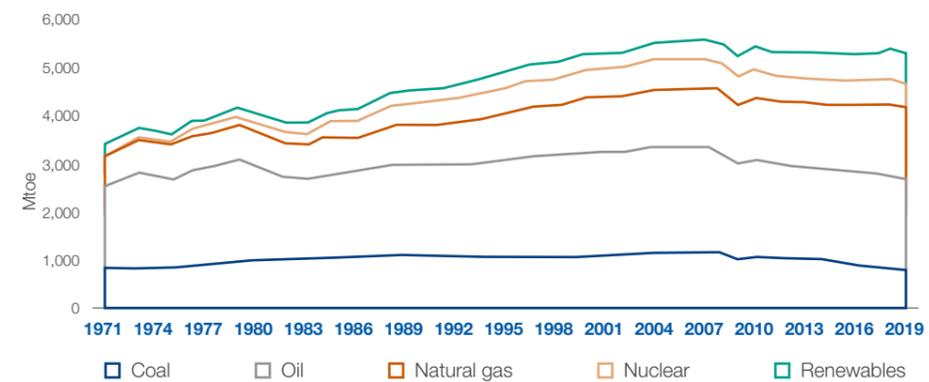
### LOW CARBON ECONOMY INDEX 2019



\* Source: The Low Carbon Economy Index 2019, PwC

**World primary energy consumption is growing steadily**, although the share of primary energy consumption met from RES has not registered a net growth trend. With regard to OECD countries, for example, in 2019 the share of primary consumption met from RES was approximately 11%, a figure broadly in line with the previous decade. In this sense, it appears evident that there is a need to speed up the penetration of RES in all sectors at global level, so as to achieve decarbonization targets and contain the rise in the global temperature.

### TOTAL SUPPLY OF PRIMARY ENERGY\*, OECD COUNTRIES



\* Excluding electricity trading. Source: International Energy Agency - World Energy Balances, 2020.



The European approach to development of the energy sector are set out in the guidelines and regulations in the European Union's **Clean Energy Package**, presented on 30 November 2016 and including a number of legislative measures introduced in 2018 and 2019. These include:

- **Regulation (EU) 2018/1999** which established the Governance of the Energy Union and Climate Action, in line with the Paris Agreement of 2015 (COP21) and the United Nations Sustainable Development Goals (SDGs);
- the Energy Efficiency Directive 2018/2002;
- the Energy Performance of Buildings Directive 2018/844;
- the Renewable Energy Directive 2018/2001;
- the Internal Market for Electricity Regulation 2019/943;
- the Common Rules for the Internal Market for Electricity Directive 2019/944;
- the Risk-preparedness in the Electricity Sector Regulation 2019/941;
- the Regulation establishing an Agency for the Cooperation of Energy Regulators (ACER).

Several of the above directives provide for their transposition into national law by 2021.

### The United Nations SDGs

Approved by 193 member states of the United Nations in September 2015, the 17 Sustainable Development Goals (SDGs) form the heart of the 2030 Agenda, the global plan that aims to eradicate poverty and promote economic prosperity, social development and protection of the environment.

Terna is playing a central role in enabling the energy system's transition to one in which production is based on renewable sources.

For further details on Terna's commitment to the SDGs, reference should be made to the Sustainability Report.

<p><b>7 AFFORDABLE AND CLEAN ENERGY</b></p> <p>Energy efficiency Research in Non-regulated Activities Active role in international associations</p>	<p><b>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</b></p> <p>Development and Resilience Plans Interconnections International Activities</p>	<p><b>13 CLIMATE ACTION</b></p> <p>Implementation of the Resilience Plans Research, Innovation and Development Focus on resilience of the grid</p>		
<p><b>8 DECENT WORK AND ECONOMIC GROWTH</b></p> <p>Promote lasting, inclusive and sustainable growth</p>	<p><b>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</b></p> <p>Guarantee sustainable patterns of production and consumption</p>	<p><b>15 LIFE ON LAND</b></p> <p>Protect and promote a sustainable use of the ecosystem</p>	<p><b>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</b></p> <p>Promote a peaceful, inclusive society</p>	<p><b>17 PARTNERSHIPS FOR THE GOALS</b></p> <p>Revitalise partnerships for sustainable development</p>

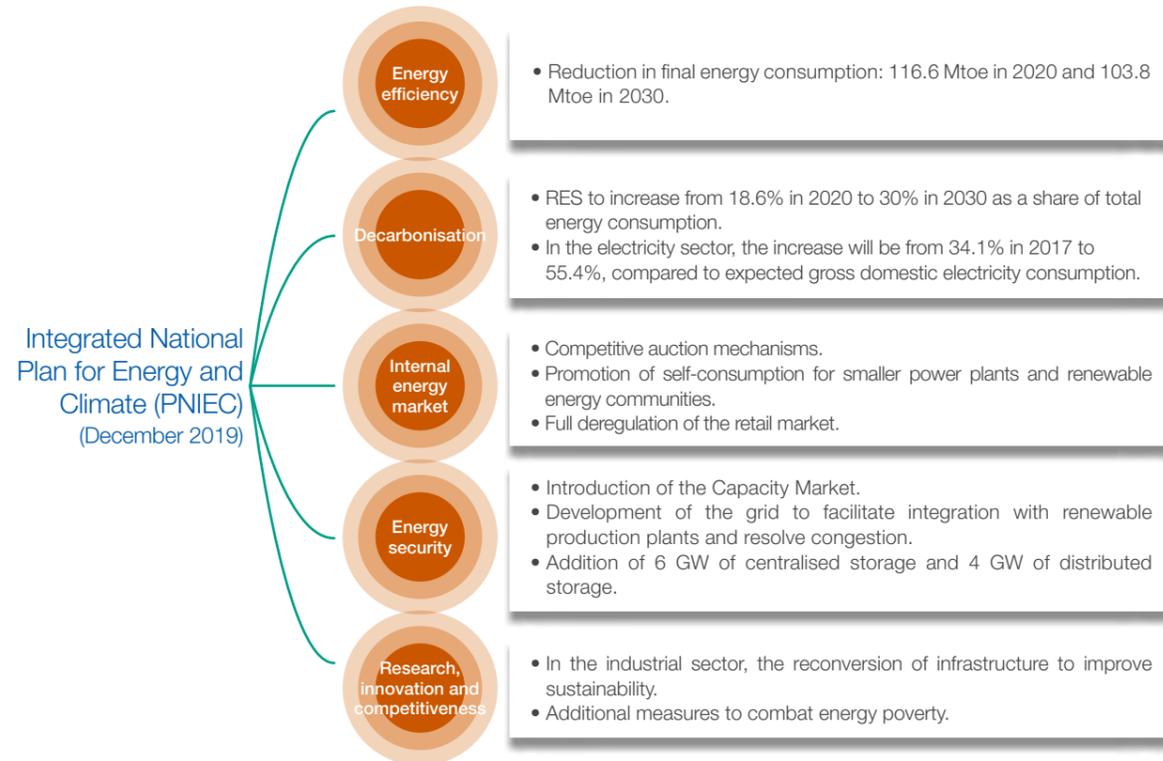
### Key SDGs for Terna

In line with these guidelines, at the end of 2018 the Italian government finally prepared a **Proposed Integrated National Plan for Energy and Climate (PNIEC)**, produced by the Ministry of Economic Development, the Ministry of the Environment and Protection of Land and Sea and the Ministry of Infrastructure and Transport. This provides key guidelines on the development policies for the national energy system. Following the recommendations received from the European Commission in June 2019, Italy drew up and submitted the final version of the country's PNIEC at the end of 2019.

The final document does not differ significantly from the proposal put forward at the end of 2018 in terms of structure and targets for 2030, providing a number of clarifications and proposing slight changes, above all linked to the transport sector.



5 KEY DIMENSIONS



To **reduce energy demand**, it will be necessary to deploy major initiatives. The expected reduction in final energy consumption will result in overall savings of 51.0 Mtoe, and development of renewable resources that will enable an increase in the consumption of RES as a share of total consumption.

6 million plug-in hybrid vehicles by 2030

**Sustainable growth** will also be enabled through the development of new technologies - such as electric vehicles (up to 4 million fully electric and 2 million plug-in hybrid vehicles by 2030) - and applications relating to air conditioning that ought to be used more widely, in view of the energy efficiency savings they offer. Finally, a measure adopted in the 2017 SEN for the electricity sector regarding the phase-out of coal for power generation by 2025 is maintained.

Plans to increase the capacity of storage systems

+6 GW centralised storage

+4 GW distributed storage

The regulatory measures regarding the **security of supply for energy**, above all electricity, are dependent on the introduction of the Capacity Market, as well as revision of the Emergency Plan for the Security of the Electricity System (*Piano di Emergenza per la Sicurezza del Sistema Elettrico* or "PESS").

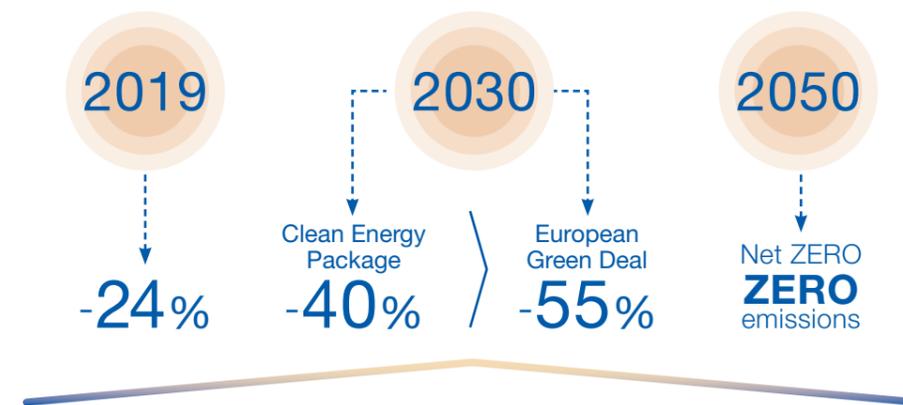
There are also plans to increase the capacity of storage systems (an additional 6 GW of centralised storage and 4 GW of distributed storage), above all through the use of pumps, and for further expansion of interconnections with neighbouring countries (up to 14.375 MW).

**Investment in resilience**, in relation to transmission grids and interconnector projects, will also play a major role, by helping to increase the network's ability to cope with increasingly frequent extreme weather events and the emergencies they create, including boosting coordination at European level. This has taken on added importance given the structural changes currently taking place in the electricity systems of many European countries, primarily linked to progressive decarbonisation and the reduction in nuclear generation capacity.

**Even more challenging are the goals set for the electricity sector:** in 2030 RES (renewable energy sources) must cover over half of gross electricity consumption (the target is 55.4%, compared with a figure of 35% in 2019), increasing the amount generated from renewables to 186.8 TWh by 2030, compared with 117.7 TWh in 2019. By 2030, it will thus be necessary

to install around a further 40 GW of new RES capacity, to be provided almost exclusively by non-programmable renewable sources, such as wind and photovoltaic.

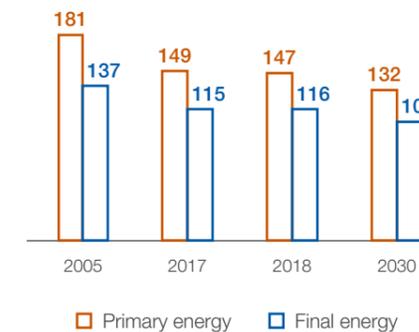
As part of the European Green Deal, in September 2020, the European Commission approved the proposal to raise the target for the reduction of greenhouse gas emissions by 2030, including emissions and removals, from 40% (as set in the Clean Energy Package) to 55%, compared with 1990 levels. This was done taking into account all the steps needed in all sectors, including an increase in energy efficiency and in renewable energy. The process of drawing up detailed draft legislation will begin in June 2021.



European drivers: CO<sub>2</sub> EMISSIONS TARGETS



TREND IN PRIMARY AND FINAL ENERGY CONSUMPTION TO 2030 [Mtoe]



TREND IN WIND AND SOLAR INSTALLED CAPACITY TO 2030 [GW]



Application in Italy: EFFICIENCY FIRST AND DEVELOPMENT OF RES



This represents an enormous challenge. To achieve these targets, it will be necessary to rapidly implement a series of initiatives:

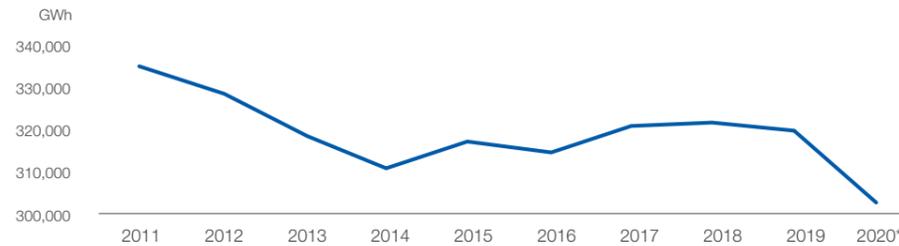
- investment in electricity grids**, to upgrade the so-called north-south transmission backbones, interconnections with the islands and other countries and to facilitate the full integration of green sources. In the period 2021-2025, planned investment in the electricity grid will total a record €8.9 billion for our country;
- enable the development of resources** (RES, storage, gas-fuelled plants) by giving long-term price signals to stimulate investment and streamlining consents processes;
- encourage the electrification of consumption**, as the energy carrier is intrinsically efficient and capable of bringing the energy produced from renewable sources directly to all sectors of consumption;
- drive the growth of the market for flexible services**, enabling the participation of RES and distributed resources (demand, small plants, electric vehicles), whose contribution will be increasingly important as the availability of traditional resources declines.



## Electricity demand and production in Italy

Terna monitors domestic demand trends and takes appropriate actions, in full implementation of EU directives.

### DEMAND TREND OVER THE LAST 10 YEARS



\* Provisional data

### Demand for electricity in Italy

Demand for electricity in Italy amounted to 302,751 GWh in 2020, a reduction of 5.3% compared with 2019, which registered a slight decrease of 0.6% compared with the previous year.

ELECTRICITY BALANCE IN ITALY (GWH)*	2020**	2019	CHANGE	% CHANGE
Net production	273,108	283,950	(10,842)	(3.8%)
From overseas suppliers (imports)	39,787	43,975	(4,188)	(9.5%)
Sold to overseas customers (exports)	(7,587)	(5,834)	(1,753)	30.0%
For use in pumping***	(2,557)	(2,469)	(88)	3.6%
<b>Total demand in Italy</b>	<b>302,751</b>	<b>319,622</b>	<b>(16,871)</b>	<b>(5.3%)</b>

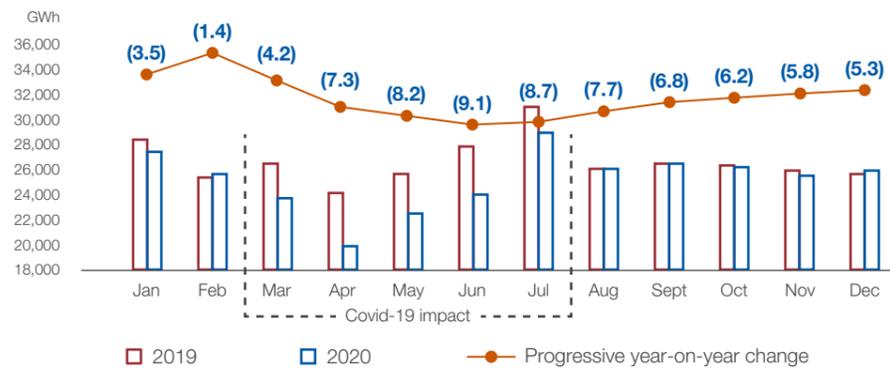
\* Does not include demand for energy for ancillary services related to electricity production.

\*\* Provisional data.

\*\*\* Electricity used for pumping water, for sole subsequent use in electricity production.

Monthly demand for electricity in Italy in 2020 was sharply down compared with the previous year, due essentially to the legislation enacted in response to the Covid-19 pandemic. The reduction can be seen across every month, with the exception of February and December, which registered slight increases, essentially due to calendar effects (the leap year effect in February and the fact that December contained one more working day).

### MONTHLY DEMAND FOR ELECTRICITY \*



\* Provisional data

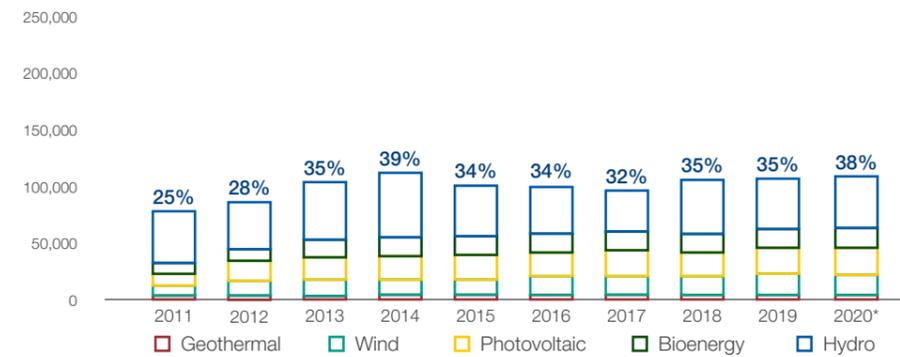
## Meeting demand and energy production

In 2020 (provisional data), approximately **38% of total energy demand was met by renewable energy sources**, marking an increase with respect to 2019. The increase is partially due to the sharp fall in demand during the Covid-19 lockdown.

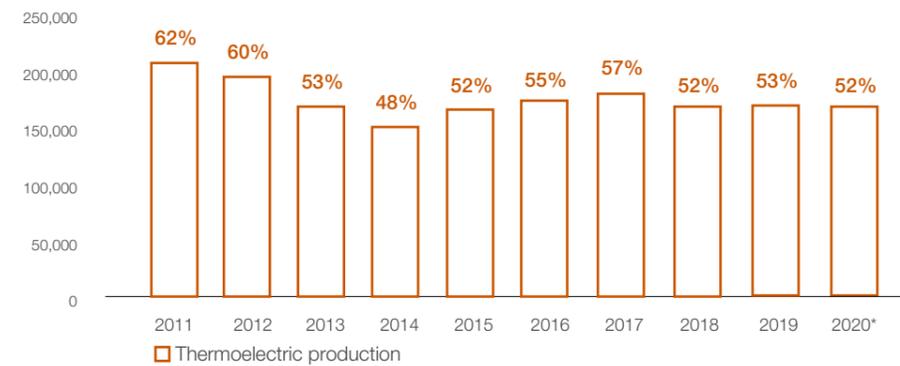
In terms of the performance of the various renewable sources, there were increases in photovoltaic production (up 10%) and hydro production (up 1%) which offset the significant decline in wind production (down 7%).

### PERFORMANCE OF PRODUCTION SOURCES AS A PROPORTION OF DEMAND<sup>6</sup>

#### Renewable sources



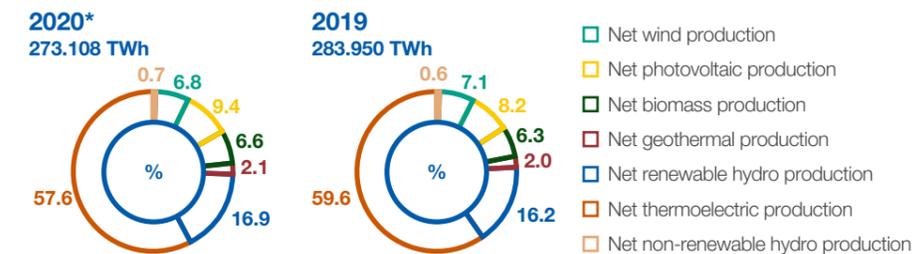
#### Traditional sources



\* Provisional data

As can be seen from the charts, Italy met the target set in European Community directives, which required that renewable sources account for over 27% of demand by 2020, from as early as 2012.

### NET ELECTRICITY PRODUCTION BY SOURCE



\* Provisional data

<sup>6</sup> The percentages shown in the two charts compared refer to the share of demand met by renewable sources and thermoelectric sources (traditional sources).

The two charts on the left show the performance of renewable production in Italy over recent years, compared with the performance of thermoelectric production over the same time period.

# European and international relations



Terna plays a strategic role in the integration of Europe's main electricity grids. Our goal is to achieve an increasingly secure and efficient continental system that serves citizens and businesses. As Europe's leading independent network operator, we play an active part in the initiatives of European, national and trade associations.

Opportunities for engagement and dialogue are provided by Terna's membership of the **principal European and international trade associations**, as well as of the leading associations connected with sustainability issues.

Stakeholder

EUROPEAN RELATIONS

<p><b>ENTSO-E</b> (European Network of Transmission System Operators for Energy)</p>	<p>ENTSO-E is the European Network of Transmission System Operators for Electricity including 43 operators which is involved in the process of integrating national electricity markets, coordinating the secure operation of interconnected electricity systems and developing electricity transmission grids, in implementation of EU legislation (the latest of which being the CEP- Clean Energy Package). ENTSO-E's main objectives are to: draw up European network codes, guarantee the coordinated development of the electricity grid at European level by drawing up the European Electricity Grid Development Plan (TYNDP) and the related benchmark scenarios, and draw up the Research, Development and Innovation Plan at European level. ENTSO-E's activities focus on four courses of action (security of supply, functioning of the energy market, promotion of energy saving, and promotion of the interconnection of energy networks), which generate new tasks for ENTSO-E (implementation of the Regional Coordination Centres - RCC, enhanced cooperation with DSOs, digitisation of networks and development of demand response). These activities will be developed in line with the new climate policies previously set out by the European Commission with the launch of the so-called European Green Deal, a roadmap that seeks to make the EU the first climate-neutral continent by 2050.</p>
<p><b>EASE</b> (European Association for Storage of Energy)</p>	<p>The European association that is responsible for promoting industrial research and development in the field of electricity storage system applications in Europe and around the world and the use of this technology for the transition to a stable, flexible, sustainable and cheaper continental energy system. In particular, EASE is working on the development of a European platform for sharing information in the field of energy storage.</p>
<p><b>RGI</b> (Renewable Grid Initiative)</p>	<p>An association consisting of eleven European TSOs and twelve environmental NGOs which aims to promote the integration of renewable energy sources through the development of electricity grids. RGI is committed to promoting strategic planning and participating in the construction of new power lines, via a meeting platform involving environmental NGOs and European TSOs.</p>

INTERNATIONAL RELATIONS

Stakeholder

<p>An international non-profit association that conducts research regarding high-voltage grids. It has over 90 member countries, represented by 60 national committees, and Terna is currently the Chair and Vice Chair of the Italian Committee.</p>	<p><b>CIGRE</b> (Conseil International des Grands Réseaux Electriques)</p>
<p>An independent, nonpartisan US-based organisation dedicated to the study and analysis of global problems. The organisation promotes debate on key strategic and political issues of international importance.</p>	<p><b>CFR</b> (Council on Foreign Relations)</p>
<p>An association, based in Rome, that promotes dialogue between diplomats and institutions of international importance.</p>	<p><b>DIPLOMATIA</b></p>
<p>An international association that promotes the global interconnection of electricity systems in order to meet demand for electricity in a sustainable way, by creating shared technical standards and fostering cooperation in research and innovation.</p>	<p><b>GEIDCO</b> (Global Energy Interconnection Development and Cooperation Organization)</p>
<p>An international association bringing together the 17 leading grid operators worldwide in order to share best practices in the management of electricity transmission grids. In addition to being present on the Steering Board and Governing Board, Terna is co-chairing the Strategic Working Groups on "Pathways to a Low Emission Power Grid" (SWG1) and "Resilience, infrastructure development and interconnections" (SWG2).</p>	<p><b>GO15</b> (Reliable and Sustainable Power Grids)</p>
<p>A Harvard University think tank bringing together leading international stakeholders in the electricity sector to analyse and discuss technical, legal and regulatory issues linked to the electricity industry.</p>	<p><b>HEPG</b> (Harvard Electricity Policy Group)</p>
<p>This association brings together the TSOs from 19 Mediterranean countries, with the aim of promoting the standardisation of development plans and the coordinated management of grids. The association also works to facilitate the creation of a legislative and regulatory framework designed to drive the development of interconnection projects and promote the exchange of electricity between electricity systems in the Mediterranean area. Terna hosts the association's offices in Rome and appoints its Secretary General, as well as chairing the Technical Planning Committee.</p>	<p><b>Med-TSO</b> (Mediterranean Transmission System Operators)</p>
<p>This is a foundation established by the association of the same name on 7 June 2019. Its objective is to promote the use of renewable sources and the widespread adoption of energy efficiency measures, and to support the creation of favourable conditions for investment in renewable energies in countries in the southern and eastern Mediterranean and Sub-Saharan Africa. Its registered office is in Rome.</p>	<p><b>RES4MED/RES4FRICA</b> (Renewable Energy Solutions for the Mediterranean &amp; Africa)</p>
<p>The Italian national committee of the WEC, an international organisation that brings together operators from over 90 countries, with the aim of promoting a sustainable energy system worldwide. Terna is a member of the Managing Board.</p>	<p><b>WEC Italia</b> (World Energy Council - Comitato operativo Italia)</p>
<p>A regional body, whose members include energy companies and local government institutions. The organisation's aim is to pursue the integration of energy systems at regional level through cooperation among its members.</p>	<p><b>CIER</b> (Comision de Integration Energetic Regional)</p>



In spite of the limitations imposed by the difficult international situation, Terna continued to work with European and non-European transmission system operators in 2020, with the aim of concluding **cooperation agreements**, at both bilateral and multilateral level, **in areas of common interest**, particularly with regard to:

- grid development;
- electricity system operations;
- technological innovation.

The various initiatives pursued during the year include the following:

- On **18 December 2020**, the **Energy of Things** was established, thanks to the joint venture entered into with TenneT and SwissGrid that led to the launch of **Equigy**, the innovative digital platform supporting the ecological transition. Millions of small consumers will be increasingly involved in the management of the electricity system, making active contributions to balancing and efficiency of the national grid. Domestic and industrial electrical devices will play leading roles in this Energy of Things, including residential heating and cooling climate control systems, photovoltaic systems with batteries, as well as e-cars, interconnected and capable of regulating energy exchanged with the grid through an innovative digital platform providing services that support the grid managed by Terna and, in turn, the ecological transition. Equigy will offer innovative and intelligent support for the participation of multiple devices of varying size, and in different locations, in order to handle energy demands on the grid as required. This will benefit the flexibility, security, sustainability and cost-efficiency of the system, but will also benefit the owners of the devices in the form of revenue generated by the supply of grid services;
- On **18 December 2020**, ten leading European transmission system operators launched a **joint initiative to reduce greenhouse gas emissions**. The group will work together to assess their role in decarbonising the energy system. The results of the joint initiative will be announced by mid-2021. The final document will deal with a number of issues, including:
  - the TSOs' plans and direct initiatives for continuing to reduce the carbon footprint of their own activities and controlling the carbon footprint of their value chains;
  - how TSOs enable secure electrification and RES integration while contributing to the decarbonisation of the energy system as a whole, and how these contributions can be assessed and monitored under a common framework;
  - the most efficient instruments to be implemented and/or supported by TSOs that should be fully activated in the public interest to enable the decarbonisation of the energy system;
- In November 2020, a Greek-registered entity, **SEleNe CC**, was set up as Regional Security Coordinator for the GRIT region (an area that covers the borders between internal market areas in the Italian system and the interconnection with Greece). The new entity is jointly owned by Terna S.p.A., ADMIE (Greece), ESO-EAD (Bulgaria) and Transelectrica (Romania) who own equal shares. The entity is tasked with carrying out the regional activities provided for in European Regulations (EU) 2017/1485 and 2015/1222 (respectively, the "Guidelines on system operation" and the "Guidelines on capacity allocation and congestion management"): calculation of the exchange capacity between market areas, regional coordination of operational security and of the available countermeasures, the creation of a shared grid model, regional coordination of unavailability and the assessment of regional adequacy. The company owns 99% of **ESPERIA-CC S.r.l.** (the other 1% is held by Terna, which exercises control), which operates as the Regional Security Coordinator for the GRIT region;

- In 2020, Terna took part in the **States General of the Economy** organized by the Italian government in order to discuss plans for the country's restart and recovery following the Covid-19 emergency;
- Via **ELMED Etudes SARL**<sup>7</sup>, work continued on development of the electricity interconnector project between Italy and Tunisia. In particular, the tender for conducting the survey for the submarine section was launched. Surveys for the submarine section, the overland section and the environmental and social impact assessment are funded by the two credit facilities granted by the World Bank to the Tunisian Republic in relation to the project to provide technical assistance for the Tunisia - Italy electricity interconnector. ELMED Etudes has also been appointed the implementing agency. On 27 May 2020, the promoters Terna and STEG applied to the EU's **Connecting Europe Facility (CEF)** for funding for the Tunisia - Italy electricity interconnector. The CEF was set up to enable the delivery of projects of common interest;
- In addition to consolidating its presence in the trade associations it leads, Terna has also joined the **Harvard Electricity Policy Group (HEPG)**, a Harvard University think tank that analyses policies relating to the electricity sector from various aspects, with a special focus on the US experience;
- In 2020, Terna **took part in the steering committees set up by the Ministry of Foreign Affairs** to examine issues relating to energy, the climate and the environment. In addition to describing the status of electricity interconnections in the Mediterranean area and the electricity transmission operator's commitment to decarbonisation and the economic sustainability, Terna also used the committees to express its views on the opportunities and challenges faced by the national transmission grid as a result of EU (Green Deal) and international (COP26) policies. This included highlighting the positive role played by European funding programmes, above all with regard to the interconnection infrastructure needed to further upgrade the national and European transmission grid;
- In 2019, Terna, together with seven other European TSOs, signed a **joint declaration aimed at highlighting the crucial role played by transmission system operators** in guaranteeing the security of electricity systems during the pandemic, ensuring that markets can continue to operate when demand for electricity is falling and the performance of priority maintenance interventions where necessary.

During the Covid-19 emergency, Terna provided an example of **best practice for transmission operators** who are members of the various trade associations (including GO15, WEC, etc.), with regard to both measures aimed at combating the spread of the virus among personnel and activities linked to operation of the grid against a backdrop of significant, abrupt changes in the structure of consumption. Terna also played an active role in the international debate on the measures to be adopted by grid operators in order to support the economic recovery post-Covid-19.

Despite the evident logistical difficulties caused by the Covid-19 emergency, Terna's Brussels office, set up in 2018 in synergy with other entities in which CDP owns stakes, continued to conduct its activities without interruption. This entailed strengthening both relations with other European TSOs and links with EU institutions, including on a technical level, in order to take advantage of the Company's technical contribution regarding European matters ahead of implementation of European legislation to reform the electricity sector (the Clean Energy Package and the European Green Deal) in support of the ecological transition and the EU's decarbonisation goals.

<sup>7</sup> This is the 50/50 Tunisian joint venture between Terna S.p.A. and STEG (Tunisia's vertically integrated, state-owned electrical utility) established in 2009 with the role of conducting studies and providing technical assistance for the Tunisia-Italy electricity interconnector.



# Regulatory framework

Regulated revenues represents approximately the **83.4%** of the Group's total revenue

Terna operates as a natural monopoly and within a market regulated by the Regulatory Authority for Energy, Networks and the Environment (ARERA).

Regulated revenue from transmission and dispatching activities represents approximately 83.4% of the Group's total revenue, and is determined on the basis of the regulatory framework established by the **Regulatory Authority for Energy, Networks and the Environment (ARERA)**.

In Resolutions 653/2015/R/eel, 654/2015/R/eel and 658/2015/R/eel, ARERA set the tariff regime for electricity transmission, distribution, metering and dispatching services and regulations regarding the quality of the transmission service for the first four-year period of the fifth regulatory period (sub-period "NPR1", 2016-2019). The regulatory framework for the second four-year period (sub-period "NPR2", 2020-2023) was revised by Resolutions 567/2019/R/eel, 568/2019/R/eel and 574/2019/R/eel.

The framework for the period 2020-2023 (NPR2) is broadly in line with the criteria applied in the previous four-year period from 2016 to 2019 (NPR1), with the principles for recognising the cost of capital (rate of return) and operating costs (price cap and profit sharing) unchanged with respect to the previous regime. The most important change regards readmission of the return on fixed assets in progress, under a mechanism that reflects the related expenditure in tariffs based on rates of return differentiated on the basis of how long ago the expenditure was incurred and for a maximum of four years (beyond four years, the tariff will take into account interest expense incurred whilst work was in progress)<sup>8</sup>. The change will enable operators to recover earlier costs, together with those relating to the Italy-France Interconnector project. At the end of NPR2, and on a trial basis in 2023, the regulations provide for adoption of a **TOTEX/OUTPUT BASED approach**. This recognises costs based on total expenditure incurred (operating and capital expenditure) and shares the resulting benefits for the community.

In Resolution 583/2015/R/com, ARERA announced the procedure for determining and revising the **Weighted Average Cost of Capital (WACC)** for a period of six years (2016-2021). This applies to infrastructure services in the electricity and gas sectors and is subject to revision, mid-way through the period, which, with Resolution 639/2018/R/COM, enabled adjustment of the allowed WACC in a predictable and transparent manner in keeping with the economic cycle. The WACC the period 2019-2021 has been set at 5.6%. This is a vital element in guaranteeing an adequate return on capital, a key factor in enabling Terna to complete the substantial investment programme needed to meet the challenges of the ecological transition. In October 2020, ARERA published Resolution 380/2020/R/com, launching the procedure for redetermining the allowed WACC for infrastructure services in the electricity and gas sectors with effect from 1 January 2022, identifying the initial general criteria – broadly unchanged – for revising the method for determining the WACC.

A number of key aspects of regulation in the fifth regulatory period are described below, with regard to allowed revenue for transmission and dispatching services.

<sup>8</sup> When reviewing transmission tariffs for 2020, ARERA also accepted Terna's request for the partial readmission of the Italy-Montenegro Interconnector project among the list of strategic projects in the regulatory period 2012-2015. This means restoring the return on the related LICs not already included in the tariffs, in relation to the share of public investment (not covered by the interconnectors).

**Transmission revenue** makes up the most significant portion of regulated revenue and is generated from application of the related transmission charge (**TC**), billed by Terna to distributors connected to the National Transmission Grid. This charge pays for the transmission services provided by all transmission service operators, including the owners of residual portions of the grid (external to the Terna Group), and is divided into two components: a power component (equal to 90% of revenue, expressed in euro cents/kW/year) and an energy component (10% of revenue, expressed in euro cents/kWh).

Transmission revenue makes up the most significant portion of regulated revenue

The **dispatching service charge (DSC)** aims to recompense Terna for carrying out the activities relating to the dispatching service and is billed by Terna to users of the dispatching service in proportion to the quantity of energy dispatched.

Allowed costs that combine to determine the TC and DSC components are attributable to three main categories, as summarised below.

## THE THREE MAIN TYPES OF ALLOWED COST

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.	1. To cover the return on capital (RAB)
The methods of determining and revising the WACC are established by the regulator.	
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.	2. To cover depreciation
Allowed costs are determined by the regulator at the beginning of the regulatory sub-period, based on operating costs recognised during the relevant year, increased by any remaining portions of additional efficiencies achieved in previous regulatory periods.	3. To cover operating costs
The resulting amount is revalued annually to take account of inflation and reduced by an efficiency factor designed to ensure that additional efficiencies are, over time, passed back to end users in full.	



“ We have not altered our approach to **maintenance of the grid**: we check that circuits are working properly, resolve any major issues and, in general, ensure that all the vital components of electricity substations are fully functional. Indeed, you could say that we have sharpened our focus even more. We keep our distance and wear the necessary protective equipment, as required by the Company and more in general. But **we are fully operational** and our teams continue to be made up of four to six people as before, because certain jobs cannot be carried out without the physical presence of Terna’s professionals. ”

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# 3

#TernaPeople #Covid\_19 #gridmaintenance

The Group's  
strategy

# 2021-2025 Industrial Plan

## DRIVING ENERGY

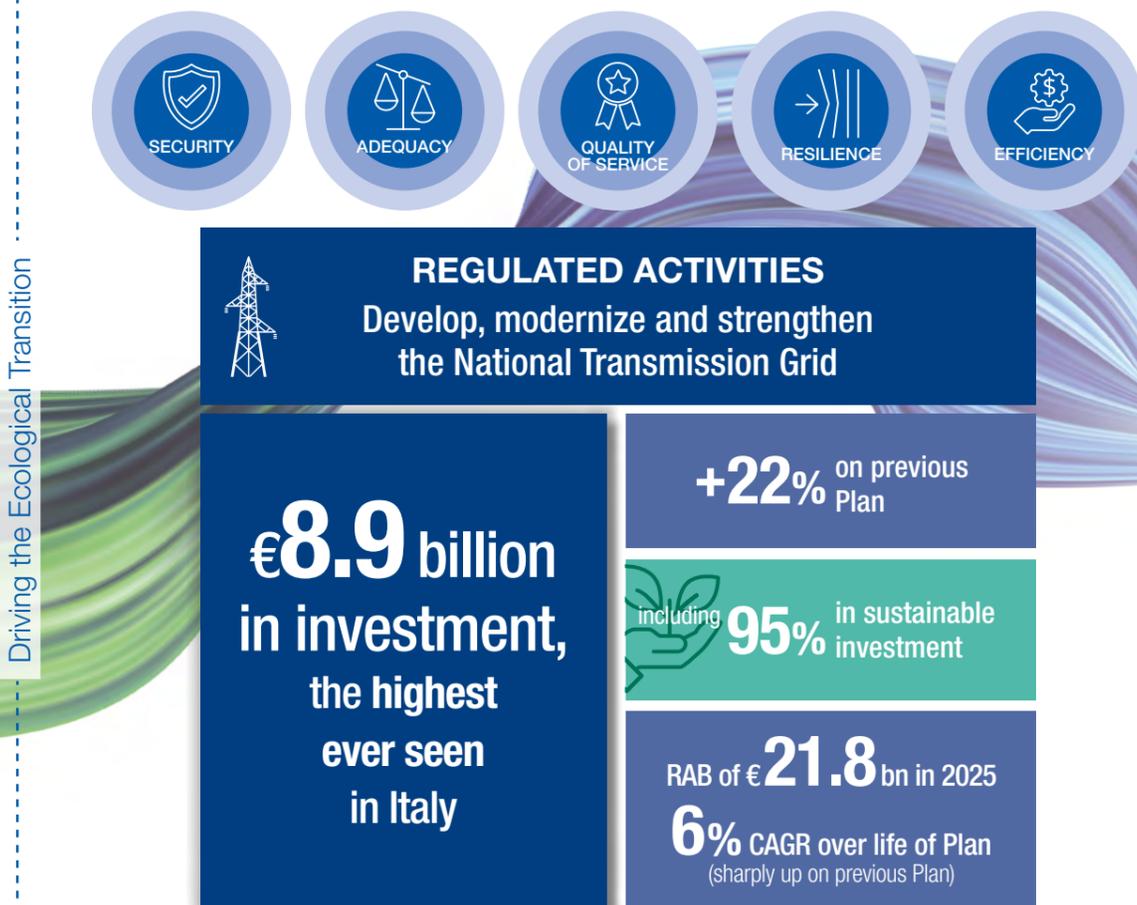
The 2021-2025 Industrial Plan, **Driving Energy**, aims to confirm and reinforce Terna's central role in managing and enabling the Italian energy system and the ecological transition, and as the main driving force behind the country's efforts to achieve the targets in the European Green Deal and Italy's Integrated National Plan for Energy and the Climate, above all the 55% reduction in emissions by 2030, marking the first step on the road to achieving zero emissions by 2050.

The exponential increase in global primary energy consumption, the increase in CO<sub>2</sub> emissions and the impact on our planet's ecosystem are evidence of the fact that the energy model on which the planet's development has depended in recent years is no longer sustainable. It is, therefore, necessary for national and international institutions to commit to a progressive and as rapid as possible decarbonisation and improved efficiency across all forms of energy. In this context, the electricity sector has a central role to play in achieving the energy system's overall decarbonisation goals, thanks to the intrinsic efficiency of electricity as an energy carrier compared with other forms of energy and the technological maturity of renewable energy sources (RES).

This transformation will not have zero impact on the electricity system, but will face us with a series of challenges that we must meet in order to ensure decisive and effective delivery of the ecological transition, whilst **maintaining the current high levels of service quality and, at the same time, avoiding an excessive increase in the cost to society.**

The growing presence of renewable energy plants has a significant impact on the way in which Terna manages the grid. These intermittent sources of energy, not as flexible as traditional power plants and sometimes far away from centres of consumption, result in an increase in grid congestion, especially on sections connecting the south with the north.

In addition, the growing frequency of extreme climate events, allied with the structural nature of the Italian transmission grid, puts major demands on the TSO, which is called on to protect and manage the national grid in order to **guarantee the security of electricity supply.**



Enablers

**NON-REGULATED ACTIVITIES**  
Technological, innovative and digital solutions to support the ecological transition

Contributing **€450** million to EBITDA

**INTERNATIONAL ACTIVITIES**  
Putting our competencies and know-how into grids worldwide

**€300m** in investment  
Contribution to EBITDA **+€200m**

**PEOPLE**  
**+10%** workforce in next 3 years

**NexTerna (New ways of working)** project launched

**INNOVATION AND DIGITALISATION**  
**€900m** invested in digitalisation, innovation and new technologies

Enablers

## Major projects:

Power lines - Colunga (BO) - Calenzano (FI) - Chiaramonte Gulfi (RG) - Ciminna (PA)	HVDC connection Sardinia - Corsica - Italy (SA.CO.I.3)	HVDC connection Mainland - Sicily - Sardinia (Tyrrhenian Link)
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Under Terna's approach, ensuring that the ecological transition provides the necessary security requires the following key elements: **investment in the grid** (to enable security, resilience and the integration of non-programmable RES), the installation of renewable energy sources and storage systems, providing additional storage capacity for electricity that will allow the system to operate and minimize overgeneration.

With specific regard to investment in the grid, Terna's Plan focuses on efforts to significantly accelerate sustainable investment, the integration of non-programmable renewable sources and the strengthening of system security and resilience, thereby supporting the ecological transition and the phase-out of coal. The aim of this strategy is to resolve grid congestion and upgrade the transmission backbones that play an essential role in linking places of production with consumption. This goal will be achieved by reinforcing connections between the north and south of the country and with the islands, and by boosting cross-border interconnection capacity. To achieve this, the Terna Group plans to invest a total of €9.2 billion over the next five years.

Our development initiatives will focus on three strategic areas: Regulated Activities, Non-regulated Activities and International Activities.

In terms of **Regulated Activities**, which continue to represent the Group's core business, Terna plans to **invest €8.9 billion**, a record level of investment for Italy and up 22% compared with the target of €7.3 billion set in the previous Plan. This investment will bring major benefits for the entire system, well beyond their initial cost, and will focus on developing, modernising and strengthening the national transmission grid, confirming Terna's role as the enabler of an increasingly complex, sustainable and technologically advanced electricity system. In addition, 95% of this investment is classifiable as green under the criteria used in the EU Taxonomy currently being devised.

The most important projects include the **Tyrrhenian Link**, which will contribute to the decarbonisation of Sardinia, integrating different market areas with major benefits in terms of efficiency; the power line that will link the **Colunga zone (Bologna)** with the **Calenzano zone (Florence)**, significantly boosting exchange capacity between south-central and north-central Italy; the power line that will connect southern and northern Sicily between **Chiaramonte Gulfi (Ragusa)** and **Ciminna (Palermo)**, improving the quality and continuity of electricity supply in the region; and **SA.CO.I.3**.

As a result of this investment, the value of our regulated asset base (RAB) will rise to €21.8 billion in 2025, with a CAGR of 6% over the life of the Plan, a significant increase compared with the previous Plan.

**Non-regulated Activities** will focus on the development of innovative, digital solutions to support the ecological transition, fully in line with the Group's core business. These activities include:

- Energy Solutions: services for high-voltage infrastructure and smart grids, and energy efficiency services offered through Avvenia;
- Connectivity: the offer of connectivity, dark fibre and housing and hosting services for telecommunications providers;
- Manufacturing: the production of power transformers and terrestrial cables carried out by Tamini and Brugg, whose growth will help to drive efficient delivery of Terna's existing strategy for insourcing distinctive capabilities.

Non-regulated Activities are expected to contribute a cumulative total of approximately €450 million to the Group's EBITDA over the life of the Plan, in return for limited investment and risk exposure.

In terms of **International Activities**, Terna now operates in a number of Latin American countries, where we aim to maintain a presence in order to exploit our expertise and build on our know-how in cross-border high-voltage and very high-voltage connections. In addition to the projects currently underway in Brazil, Peru and Uruguay, the 2021-2025 Industrial Plan envisages that we will take advantage of new opportunities capable of driving further EBITDA growth in return for low levels of risk and modest capital outlays. Terna expects to invest up to €300 million in new projects over the life of the Plan.

Terna thus expects that its International Activities will contribute a cumulative total of over €200 million to the Group's EBITDA over the life of the Plan.

To help drive delivery of the Plan and enable Terna to effectively transform our business processes, two strategic enablers have been identified: the development of new technologies and of our people.

In this regard, the **Group has earmarked approximately €900 million** of the total budget of €8.9 billion for expenditure on **digitalisation and innovation**, which will play an increasingly central part in keeping with their crucial role in enabling the ecological transition for the benefit of the entire system. This form of investment will generate value for the entire system and the market.

In addition, in order to optimise the working environment for our people, we have launched a project called **NexTerna**, with the aim of reengineering our processes through the use of digital technologies and by rethinking physical workplaces.

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

Investments in Regulated Activities  
€8.9 billion  
a record level of investment for Italy

Investments digitalisation and innovation  
approximately €900m

## Outlook



As described above, with our new Industrial Plan, Terna aims to confirm and strengthen our central role in driving and enabling the Italian energy system and the ecological transition. As a result, despite the ongoing pandemic, 2021 will see the Group committed to delivering on its 2021-2025 Industrial Plan. Of the €9.2 billion to be invested over the next five years, approximately €1.4 billion will be invested in 2021.



The Group will continue to invest in our **Regulated Activities** and in strengthening the core business. This will involve direct engagement across the country, through listening and dialogue with all the key stakeholders, local communities, authorities and institutions.

The principal electricity infrastructure under construction includes the interconnection with France, which is due to enter service in 2021, and the start of work on the new SA.CO.I.3 project (strengthening the link between Sardinia, Corsica and the Italian mainland). In addition, the main projects to increase the exchange capacity between the various areas of the Italian electricity market include the Colunga-Calenzano and Paternò-Pantano-Priolo power lines, whilst the reorganisation of electricity grids in metropolitan areas will primarily involve the renewal of existing infrastructure, with new technologically advanced connections meeting the highest standards in terms of environmental sustainability (e.g., Naples, Milan and Rome).



During 2021, Terna will also engage in the usual dialogue with ARERA as part of the process of establishing the methods and criteria for determining and revising the allowed WACC for the electricity and gas sectors from 2022.



With regard to **Non-regulated Activities**, Terna will continue to consolidate our role as a provider of both energy solutions, developing high value-added services for corporate customers, including energy efficiency solutions, and taking advantage of market opportunities for traditional and renewable customers, and connectivity, pursuing opportunities based on exploiting the Group's own fibre infrastructure. In terms of manufacturing, the aim is to build on Tamini's performance and complete the integration of Brugg in order to take advantage of significant potential synergies with the non-regulated business and exploit the company's distinctive expertise in the production of terrestrial cables.



**International Activities** will continue to focus on managing and maintaining the power lines that have entered service in Brazil, and on completing existing projects in Peru and Brazil.

The process of scouting for further opportunities in overseas markets will continue. This may take the form of partnerships and will involve the careful selection of projects with a view to ensuring a low risk profile and avoiding the need to tie up large amounts of capital.

Investment in innovation and digital solutions will play a crucial role in supporting these initiatives, as part of the transformation that will enable us to manage the growing complexity of the system. Attention will also be paid to the development and insourcing of strategic competencies, to the strengthening of departments, and to optimising the working environment for our people through delivery of the NexTerna project.

The Industrial Plan, based on sustainability and respect for the ESGs, will ensure that we are able to minimise our environmental impact, involve local stakeholders and meet the need for integrity, responsibility and transparency, principles that have always formed the basis of Terna's approach to doing business.

The above objectives will be pursued whilst maintaining our commitment to maximising the cash generation necessary ensure a sound, balanced financial structure.

# Our people



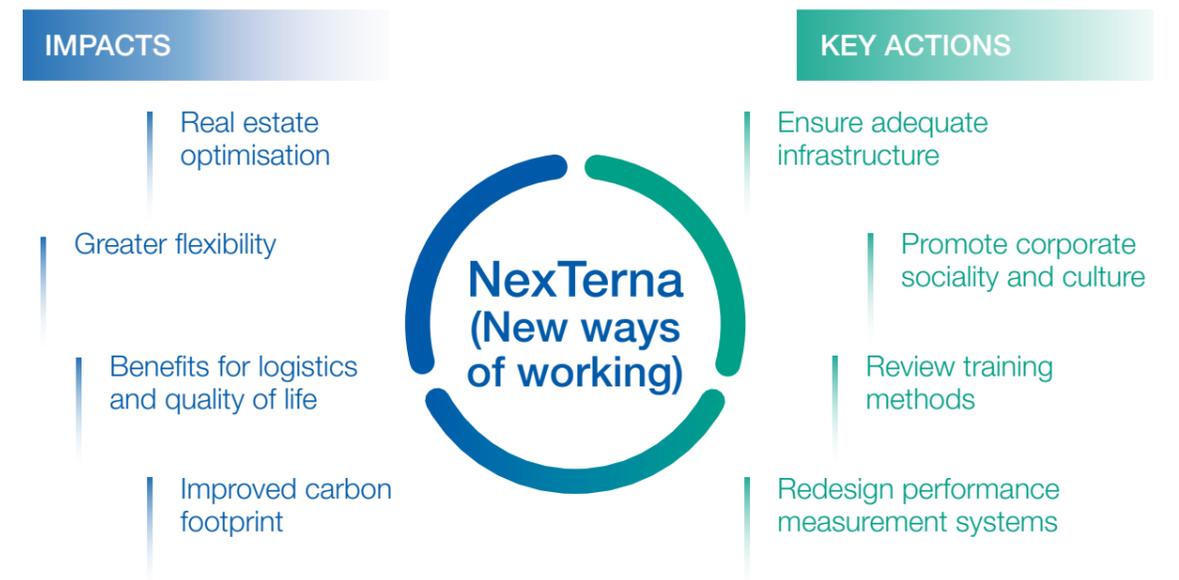
People are Terna's most important asset, the main enabling factor in the Strategic Plan. Each of us brings skills and experience that can help to increase the value of the Company.

The new 2021-2025 Industrial Plan, approved on 19 November 2020, confirms and strengthens Terna's central role in driving and enabling the Italian energy system and the ecological transition.

Terna's strategy is based around a **significant acceleration in investment, technology and digitalisation and our people**.

Comprising a wide range of professionals across a broad spectrum of skills, Terna's team places great emphasis on working together. For us it is vital to have the best talent on our team, so we seek to identify new ways of working, tapping into new ways of thinking, and thus creating more productive and satisfying working conditions and corporate wellbeing.

People will be at the heart of the **New Ways of Working** project, an ambitious plan designed to develop a new mindset, with the aim of putting in place new ways of working through the **active, informed involvement of people** in order to enable the Group to achieve the challenging objectives set in the 2021-2025 Industrial Plan. The response to these new challenges is **NexTerna**, which we launched in February 2021. The programme is due to develop over several years and is aimed at everyone who works for the Company.



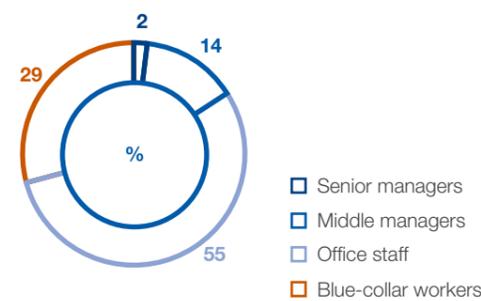
The plan also aims to boost the contribution made by Terna's people, with the workforce due to increase by as much as 10% in the first three years to over 5,000, enabling the development and insourcing of strategic skills.

WORKFORCE	unit		
	AT 31 DECEMBER 2020	AT 31 DECEMBER 2019	CHANGE
Senior managers	80	72	8
Middle managers	672	617	55
Office staff	2,587	2,382	205
Blue-collar workers	1,396	1,219	177
<b>Total</b>	<b>4,735</b>	<b>4,290</b>	<b>445</b>

The increase in the Terna Group's workforce at 31 December 2020 primarily reflects the growth of international Non-regulated Activities, with the addition of 381 new personnel following the acquisition of Brugg Kabel AG.

At 31 December 2020, the number of agency workers employed totalled 25 (29 in 2019).

**% BREAKDOWN OF THE WORKFORCE**



**WORKFORCE TRENDS**



COMPOSITION OF THE WORKFORCE	2020	2019	CHANGE
Permanent employees	100%	100%	-
Average age (in years)	41	41	-
University and high-school graduates	96.2%	95.6%	0.6%
Women as a % of the total	14.2%	13.9%	0.3%
Women in senior and middle management roles (out of total senior and middle managers)	19.8%	19.8%	-

The average age of the workforce is 41, in line with 2019. University and high-school graduates make up 96.2% of the total workforce, up 0.6% compared with 2019. In terms of gender, there has been an **increase in women employed (up 0.3%)**, although the majority of the Group's workforce consists of men (accounting for 85.8%).

The **presence of women in the workforce has grown steadily over the years**, rising from 8.8% in 2005 to 14.2% in 2020. In addition, in 2020, 24.4% of new recruits, excluding operating personnel, were women.

In terms of type of contract, all employees are on permanent contracts.

## The measures introduced in response to the Covid-19 emergency

Terna responded to the emergency by progressively adopting **specific organisational measures designed to contain and reduce the risk of infection from Covid-19**, as summarized below:

- the introduction of remote working for all administrative and business support staff, as an exception to the requirements of Law 81/2017, and personnel within infrastructure units, introducing suitable shift arrangements for employees. The adoption of organisational solutions designed to spread operational personnel workers across different locations with the aim of ensuring that teams were kept apart and cutting the risk of infection;
- measures were introduced for the Dispatching control and operations centres with the aim of reducing the risk of infection among shift personnel. These included alternating use of the main control rooms with the use of backup facilities, rotating staff between places of work and changes on the ground with personnel on part shifts of 16 hours being switched to shifts of 24 hours to limit the possibility of workers infecting each other. Solutions were also introduced in order to isolate control room personnel if someone tested positive for Covid-19 among the people in service;
- the alternate use of rooms and the potential isolation of personnel at the Security Operation Centre.

For the so-called re-entry phase - from 4 May - a **"Sicuri Insieme"** ("Safe Together") campaign was launched, aimed at providing "operating instructions" on behaviours to be adopted in the workplace. This involved placing posters containing behavioural guidance directly in the various workplaces (entrance halls, meeting rooms, lifts, canteens, corridors, break areas, etc.). Terna also obtained a specific **Covid-19 insurance policy** for all our personnel, which includes the payment of compensation in the event of hospitalisation due to infection with Covid-19.

As part of the *Sicuri Insieme* campaign, **serological tests** were offered to all Terna's employees from September. This was followed, in December, by a seasonal influenza vaccination campaign and, from January to March, continuing with the Covid-19 prevention campaign, an agreement was entered into with Rome's Agostino Gemelli Hospital to provide a special area in which to offer molecular testing to staff from the Group's Rome offices.

There was constant dialogue with the national labour unions in 2020, resulting in the signature of eight agreements linked to the emergency situation.

The widespread and generalised introduction of remote working during the Covid-19 emergency progressively led to a cultural change among Terna's personnel, encouraging more people to work from home in order to safeguard the health and safety of the workforce. Partly on the basis of this experience, on 9 November 2020, an important, innovative agreement was reached with the national labour unions that, once the state of emergency has ended, provides for the introduction of remote working in a structured form.



## Terna's approach

**Safety and accident prevention to guarantee the physical integrity of employees are among the Company's main priorities.**

In 2020, Terna continued with the **"Zero Accidents"** project, which aims to promote a global approach to safety involving all the Company's staff, as well as people working at Terna's plants in various capacities. Through the definition of improvement and prevention plans, including awareness raising and training initiatives, the project aims to ensure that safety becomes nothing less than a way of life.

The objective is to obtain a significant reduction in accident indicators over the years, in order to achieve and then maintain the target of **zero accidents**.

A total number of 27 accidents was registered in 2020, one of which had an initial prognosis of more than 40 days of estimated recovery time, while 8 accidents had a subsequent ongoing prognosis of more than 40 days, which therefore had not been deemed serious<sup>9</sup> on initial prognosis. Two accidents were also registered with an initial prognosis of less than 3 days of estimated recovery time<sup>10</sup>.

OCCUPATIONAL INJURIES SUFFERED BY TERNA EMPLOYEES - GRI-ILO DEFINITIONS	2020	2019
Injury rate	0.77	0.95
Lost day rate	40.07	35.77
Number of injuries	27	33
- of which serious (initial prognosis > 40 days)	1	-
- of which serious (subsequent ongoing prognosis > 40 days)	8	7
- of which fatal	-	-

The injury rate and the lost day rate in 2020 are down compared with the previous year. For further details on this matter, reference should be made to the "Sustainability Report".



**Environmental protection is a priority** for the Company, which has always been committed to improving its ESG (Environmental, Social, Governance) performance. This commitment is reflected positively in the sustainability ratings, in the Company's inclusion in the leading international sustainability indices and in the appreciation shown by socially responsible investors.

2020 witnessed the extension of two projects launched in 2019: Plastic Free (the procurement of drinking fountains and the provision of personalised bottles) and Recycling (the creation of little "internal eco-islands"). As a result, all Transmission Operations departments and many Infrastructure Units became "plastic free". This process will be completed in the first quarter of 2021.

In December, specific training was provided to all personnel involved in the procurement of goods and services and the award of design and construction contracts for buildings and electricity substations.

This year, Terna sponsored the **XIV<sup>th</sup> edition of the CompraVerde BuyGreen Forum** (the most important event in Italy and Europe dedicated to public and private Green Procurement policies, projects, goods and services). The Company played an active part, making a specific presentation during the conference on the "Sustainability Monitor Report: a survey of procurement and sustainable supply chains in Italy in 2020", organised by the Ecosistemi Foundation in collaboration with Confindustria (the Confederation of Italian Industry). The survey covered 200 of Italy's largest public and private companies, representing approximately 50% of the country's GDP, and assessed the steps taken by businesses in applying sustainability criteria in their direct and indirect procurement.

<sup>9</sup> Since 2018, the criterion for classifying an injury as serious has become more detailed. A serious injury is now defined as resulting in a total absence from work of 40 days or more, excluding the day of the event, as an initial prognosis or as a subsequent ongoing prognosis accompanied by medical certificates. Previously, only injuries with an initial prognosis of 40 days or more were registered as being serious, excluding the day of the event.

<sup>10</sup> Since 12 October 2017 (art. 3, paragraph 3-bis of Law Decree 244/2016), companies have an obligation to report to INAIL any injuries resulting in an absence from work of at least one day, excluding the day of the relevant event. Previously, the obligation only applied to absences of over 3 days, excluding the day of the event. Absences of less than 3 days were only registered internally.



As a result of the Covid-19 emergency, training in 2020 was conducted in digital format, with the organisation of **virtual classrooms** for all activities not involving practical or on-the-job sessions. Despite the limitations, at **31 December 2020, over 132,000 hours of training had been provided, equal to 34 hours per capita.**

In the area of **online training**, approximately 108,000 hours of training in the **study of the main operating instructions** took place (with the aim of developing and consolidating knowledge of conventional methods applicable to work on de-energised lines and substations), as did the **Train the Trainers** initiative for internal personnel used as teachers, tutors and trainers on the various courses, with the aim of developing new skills and experimenting with innovative teaching methods in order to encourage the sharing, development and preservation of knowledge within the Company.

Health, Safety and Environment courses, focusing on the Covid-19 health emergency, were also run during the year. These included, for example, online training on the content of Terna's anti-infection safety protocol and mandatory training in the requirements imposed by the Consolidated Act 81/08, including the course on how to manage Covid-19, which examined the knowledge, competencies and responsibilities of people tasked with coordinating the implementation of Covid-19 prevention and anti-infection measures.

In the **corporate** sphere, Terna continued to participate in the main initiatives in progress, such as, for example, **"Valore D"**, an association that promotes skills development and networking (courses, programmes and mentoring) with a special focus on diversity and women's career development; **"Musica e Management"**, a programme run in collaboration with the Luiss Business School and the National Academy of Santa Cecilia; the **"Project Management Fundamentals"** course, involving virtual classroom sessions and remote participation led by tutors; the **"Program for Management Development (PMD)"**, organised by the IESE Business School-University in Navarra and specifically dedicated to the TSO community. The **Virtual Language Learning** project forming part of the Training Programme for Dispatching Personnel, drawn up on the basis of the new European regulations governing this area, is also in progress.

Two projects deriving from the **"Call For Innovation"**, also took place in 2020. These focused on HR processes and were hosted at the Naples Innovation Hub. Both are based on the concept of "readiness" as a skill enabling people to meet challenges in a continually changing world. The first project, **"Ready To Live"**, trains participants in parenting and caring skills, with the aim of putting them to use in a working environment. The second, **"Ready To Lead"**, involved talented young colleagues in training designed on the basis of Terna's Leadership Model.

The **Terna Skill Mapping** project was launched in 2020. This provides a tool for assessing and mapping the Group's key skills thanks to a special library. The project is designed to periodically assess the penetration and distribution of these skills via a series of surveys, thus developing a more accurate picture of the skills profile of each employee and allowing us to increase our skills base by accurately targeting training and development pathways.





During 2020, staff recruitment and selection activities focused on technical and operational roles to complete the generational turnover process launched in previous years and on staff roles (maternity leave) and roles for people covered by Law 68/99.

New partnerships with the STEM departments of leading Italian universities were entered into, with the aim of making Terna more attractive for recent graduates in physics, statistics, mathematics and data science.

The **Terna "Sustainable materials" Hackathon**, a contest of ideas for technical college graduates, recent university graduates and PhD students at the University of Padua who have studied STEM subjects. In order to foster a virtuous circle of exchange between the corporate and academic worlds and to support the new staff recruitment process, Terna also engages with schools, universities and employment centres.



Following specific agreements with the unions, the **"Terna Welfare"** initiative was reconfirmed and reinforced in 2020. This initiative allows Group employees to allocate part of their performance bonus for the purchase of welfare goods and services and supplementary pension schemes.

In order to help take advantage of the opportunities offered by existing legislation, the Company will again, in the three-year period 2020-2022, increase the share of bonuses converted into welfare goods by 16% (compared with 15% in 2019), including amounts invested in supplementary pension schemes. In defining the management service for the welfare plan, special attention was paid to the "Family" category. Indeed, employees allocated a significant portion of their bonuses to reimbursement of this type of expenditure, especially school expenses relating to tuition fees, study vacations and books.

### Performance Share Plan 2020-2023

On 29 July 2020, the Board of Directors approved the Terms and Conditions of the **Performance Share Plan 2020-2023**, in implementation of the terms established by the Annual General Meeting of shareholders held on 18 May 2020.

The LTI Plan 2020-2023 involves the grant of the right to the award of a certain number of shares in Terna S.p.A. (Performance Shares) free of charge at the end of a performance period, provided that the performance objectives to which the Plan is linked have been achieved.

Further details are provided in the Information Circular on the Performance Share Plan 2020-2023 and in the Report on the Remuneration Policy and Remuneration Paid, published on the Company's website ([www.terna.it](http://www.terna.it)).

### Terna ranked number one in Italy and in Europe for the quality of our digital communication

On 30 November 2020, Terna was ranked **number one in Italy and Europe for the quality of our digital communication**. The Webranking by Comprend 2020-2021 study on the quality and transparency of the digital communication of listed companies, carried out in collaboration with Lundquist, ranked Terna number one in Italy and Europe. Ranked first among the 122 biggest Italian blue chips and among the 500 largest companies in Europe by market capitalization, the study acknowledged Terna's excellence in terms of the credibility, transparency and accessibility of information.

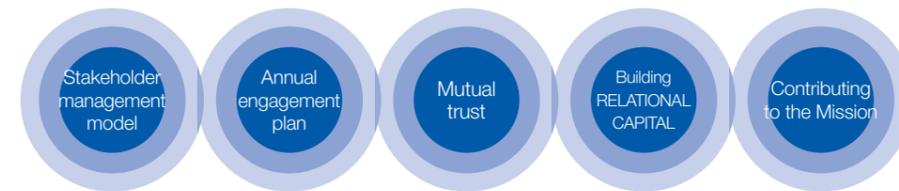
**OBJECTIVE**  
**Human Resources: to enhance and protect in-house expertise and reduce workplace injuries and accidents**

**ACTIONS**  
**Steps taken to mitigate and control the identified risks > page 88**

# Local stakeholders

Engagement with local communities is a key part of our Grid Development Plan. This allows us to create the conditions in which together we can build an increasingly sustainable national grid.

A favourable social environment, coinciding with the availability of sufficient relational capital, is essential to Terna's ability to carry out the investments envisaged in the Grid Development Plan within the established time-scale and to exploit available opportunities for its Non-regulated business, in Italy and overseas.



## Participatory design

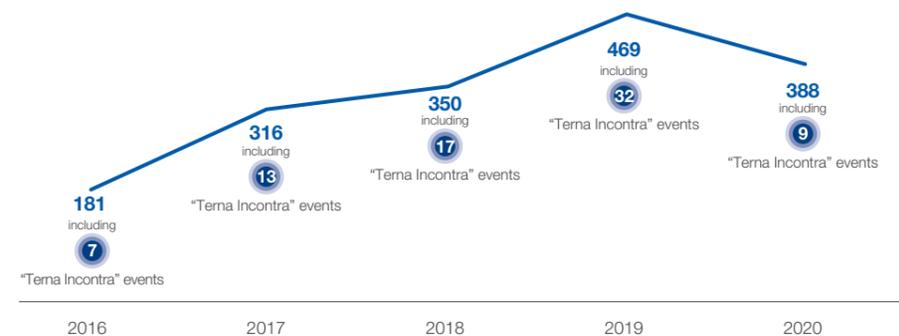
To create the best conditions for building and maintaining high-quality stakeholder relations, Terna has developed a number of tools and procedures within its "Stakeholder Engagement Model" designed to engage with and monitor public opinion, with the aim of creating an increasingly efficient and sustainable grid together.

A specific engagement programme is conducted each year to identify the actions to be taken in order to bring the Group's relations into line with best practices and to ensure that stakeholders are listened to on a regular basis.

In line with this approach, Terna:

- speaks directly to people living in the areas where new infrastructure is to be located;
- presents and explains projects, and listens to local communities' opinions and requests for clarification;
- shares improvement solutions regarding the location of new infrastructure or the reorganisation of existing assets, always respecting environmental and landscape constraints.

### NUMBER OF LOCAL MEETING



### SUSTAINABILITY INITIATIVES

#### Stakeholder

Terna has, since 2002, adopted a voluntary approach designed to foster the prior involvement of local government. For some years, alongside meetings with government institutions, representing the lion's share of our engagement activities, Terna has adopted a further tool for engaging with local communities, called **"Terna Incontra"**. These are planned events that institute a continuous communication channel with people from the communities directly affected by new electricity infrastructure, whether a power line or a substation, in order to enter into a participatory design process.

Due to the restrictions imposed as a result of the Covid-19 pandemic, in 2020, Terna devised and implemented an innovative form of engagement based on a digital format. This consists of a new way of consulting local citizens and stakeholders, combining paper communication (leaflets and pamphlets) with digital content on the website (web pages providing digital information for online meetings) and social media (the publication of social media kits among local stakeholders and sponsored campaigns) in an integrated, coordinated manner. A total of 9 "Terna Incontra" meetings were held in 2020, including 2 in person at the beginning of the year, and 7 via digital platforms.

**Local communities:** more engagement and consultation

**Terna's commitment to the environment and biodiversity** led, in 2009, to the conclusion of partnership agreements with critical stakeholders, such as leading environmental organisations, with the aim of arriving at shared solutions designed to boost the environmental sustainability of the National Transmission Grid (NTG). Growing concerns over the impact of climate change, and the accompanying focus on ecological transition initiatives, has led to further cooperation between Terna and these organisations. Terna currently has partnerships with Legambiente, the WWF and Greenpeace.

**Environmental organisations:** strengthening partnerships

Approaches to climate change and the ecological transition **have widened calls from numerous institutional investors** for major companies to conduct an informed and full assessment of the business risks linked to ESG (environmental, social and governance) issues. Of particular importance, in terms of transparency and reporting, are the recommendations from the Task Force on Climate-related Financial Disclosures (the so-called Bloomberg Task Force) regarding the publication of information on the implications of climate change for business strategies, in terms of risks and opportunities. This is considered of central importance, with regard to both the best possible allocation of investment and efforts to combat climate change. Terna has for some time now implemented these recommendations (an examination of the emerging risks has also been included this year in the section "Dispatching of electricity").

**Investors:** a growing request for transparency regarding environmental, social and governance aspects

# Innovation



Innovation and digital transformation are essential in an increasingly complex energy sector. Decisions regarding future development focus on the technology trends most relevant to our business.

The current **ecological transition** process requires a new systemic and organic approach to innovation, based around the acceleration of a portfolio of effective research, development and innovation initiatives in keeping with the Group's strategies. Terna has decided to further speed up its innovation process via a centralised and coordinated vision, in order to promote research and development into ideas and synergistically manage the innovation ecosystem, so as to **enable the transition to the new TSO 2.0 model**.

The change brought about by the transition requires an increasingly intelligent and flexible electricity system management model, both at the level of the grid, thanks to 4.0 enabling technologies (the Internet of Things - IoT, big data, advanced analytics), and in terms of the market. This will bring about an unprecedented revolution that will rapidly result in the integration of distributed generation resources, storage and market demand for services, and the Europe-wide integration of national markets. Moreover, in the medium term, it will be necessary to ensure the progressive integrability and interoperability of electricity grids and other networks (transport, gas, water, etc.), in order to make the Italian and European economies stronger and more eco-sustainable.

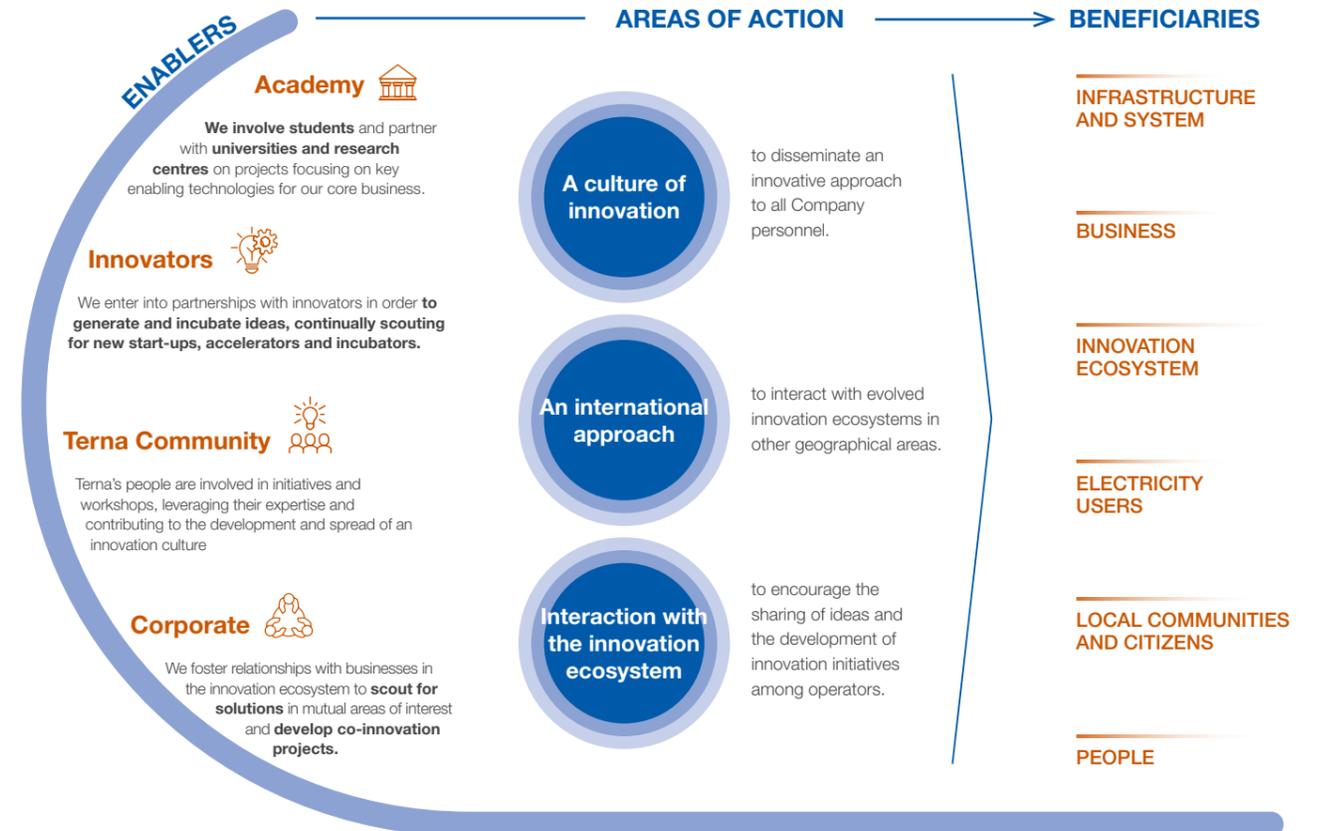
Innovation is one of the pillars of Terna's businesses. Indeed, in the new 2021-2025 Industrial Plan more than €900 million have been earmarked for **innovation and digitalisation**. During the second half of 2020, the new Terna management drew up the **2021-2025 Innovation Plan**, which sets out the new innovation model.

Terna has developed an innovation model geared towards meeting new needs and generating value for the Company and our stakeholders, via an approach that is:

- > **Concrete:** from needs to solutions, via a process that develops ideas and implements projects.
- > **Open:** with the involvement of external actors as enablers and beneficiaries.
- > **Inclusive:** with the involvement of the whole Company in the innovation process.
- > **Distributed:** with gathering of needs and development of ideas and projects in the various organisational departments.

The new Innovation Plan is focused on critical enabling technologies, including a balanced portfolio of initiatives to grasp even the most disruptive challenges.

## 2021-2025 INNOVATION PLAN



The Covid-19 emergency posed Terna another important challenge regarding digital systems to support operations strongly impacted by remote working during lockdowns. Several initiatives have been implemented and launched that have enabled full remote operations, with a gradual shift of working practices towards a new normal. Specific actions have also been undertaken in support of internal processes and skills to promote and sustain NexTerna, a key element of the Company's resilience during the Covid-19 health emergency.



The initiatives provided for regard various technological clusters (Full Internet of Things, Advanced Materials, Energy Tech, Digital and Computing, Cybertech and Analytics), and the main tools Terna has implemented to develop innovation include:

- creation of **Terna Innovation Hubs**;
- implementation of an **Open Innovation** process;
- execution of projects within the Innovation Hubs via the **Innovation Factories and central departments**.



## Terna Innovation Hubs

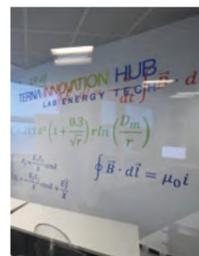
Laboratories where new business projects can actually be created, developed and tried out. The aim is to bring together a community of people with different experiences and skills, to promote skills integration and development of industrial solutions that can be applied on a larger scale. Synergy with the local community is vital, partly to identify excellence and distinctive skills in local areas.



During 2020, the first four workshops in the **Terna Start Hub** series took place virtually in the Milan, Turin and Naples Hubs, with the aim of disseminating specialist content and presenting best practices and examples of technological applications to the community of Terna's local Transmission Operating Areas. The initiative was made possible by the **Terna Innovation Hub Digital Twin**, which was set up in the first quarter of 2020.



At the **Milan Innovation Hub**, the first phase of development and training for the predictive modelling of electricity transits on a limited portion of the National Transmission Grid was completed. Three start-ups each implemented prototype software trained with the most up-to-date machine learning techniques, made available to Terna for an initial assessment and testing; the results obtained will be evaluated in the upcoming predictive maintenance and advanced analytics initiatives of the System Operator and Transmission Operator Innovation Factories.



The second phase, which is still in progress, involves two start-ups, and is aimed at an operational application to be used in short-term planning of the electricity system.

At the Turin Innovation Hub, initiatives were concluded with:

- the **ISI Foundation** research institute, which led to the development of a prototype algorithm for forecasting the generation capacity needed for primary substations in a portion of the NTG using advanced analytics techniques. The application of advanced mathematics and statistics also enabled the project to investigate the issue of adequacy margins in the electricity system, defining the scope of potential future projects;
- the start-up **WaterView**, regarding the potential for video cameras to identify the weather conditions leading to the formation of ice coatings. This will continue in 2021 with an application along new lines that are far from the transformer stations. The activity was carried out as a continuation of the engagement phase after Next Energy.

At the **Padua Innovation Hub**, five innovative projects, connected with the Advanced Materials for Sustainability call held in 2019, were launched. The projects, currently in progress, regard the use of bio-materials to boost the energy efficiency of Terna's buildings, and nano coatings to prevent the formation of ice on overhead power lines and ground wires.

Finally, December 2020 saw the launch and completion of the **Turin E.mobility Lab**, which involves testing the V2G (Vehicle-to-Grid) behaviour of electric car charging station systems. Moreover, in collaboration with Engie-EPS and FCA, the first facilities have been installed and initial testing has begun.

## Open Innovation

The Open Innovation approach encourages the opening up of new development fronts within and beyond the Company. We promote dynamic interaction with universities and research centres, collaborate with peers and large industrial players, and facilitate access to start-ups and small and medium enterprises.

The portfolio of innovation initiatives is coherently organised through the Innovation Plan, from the birth of new ideas to the development of projects. The new initiatives, which may arise from internal Company needs or from the Open Innovation process, are included in a framework encompassing the key areas of technological development Terna has identified: digital, energy tech, advanced materials, robotics.



In collaboration with universities and research centres, basic research is conducted on key enabling technologies for the core business, and ideas are also generated and incubated via specific agreements.

- Agreements regarding research, development and innovation activities at Innovation Hubs, and teaching, training and networking activities at the **Universities of Padua** (June 2020) and **Naples** (December 2020); in May 2020 a similar agreement with the **Polytechnic University of Turin** was revised;
- A second research project was developed as part of the five-year partnership with the **University of Stanford** in California, involving selection of a Terna member of staff as a visiting scholar. The aim of the study is to design and test mechanisms to improve the efficiency of electricity markets in Italy;
- Idea generation initiatives:
  - In November 2020, as part of the **Sustainable Materials Hackathon**, held with students from Padua University and in collaboration with UniSMART, an in-house company at the university, Terna awarded a prize to the coatings project for the renovation of overhead lines;
  - The **Smart Tower Hackathon**, developed with the Polytechnic University of Turin and with the support of CLICK Torino concluded in July 2020. This led to the prototyping of two solutions proposed in the idea generation phase regarding monitoring and warning tools for fire risk and air quality.
  - Between March and October 2020, Terna took part in the Veneto region **Contamination Lab** initiative, a multidisciplinary cross-contamination project involving university students, recent graduates, PhD students, teachers, experts, professionals and companies in which, thanks to the support of UniSMART, project challenges proposed by the participating companies are developed. The challenge launched by Terna comes within the scope of additive manufacturing and regards the application of 3D printing in corporate operations.
- Other initiatives: In October, Terna took part in the seventh edition of the **Start-up Intelligence** Observatory promoted by PoliHub which is sponsored by the Polytechnic University of Milan. This innovative research, scouting and community programme is aimed at innovation managers and people involved in corporate digital innovation.

## Innovators

Initiatives involving innovative companies, solvers and start-ups that propose ideas and solutions at various stages of technological maturity, with the aim of seeking new ideas or solutions, at different stages of maturity, which create value for Terna.

- **Next Energy:** the fourth edition of Next Energy, an Open Innovation initiative consisting of three Calls, was completed in 2020:
  - the Call for Talents, which gave 10 new graduates access to a 6-month internship at several of Terna's facilities;
  - the Call for Ideas, which was won by the start-up **Nemesys** in June. Collaboration with other start-ups participating in the programme is being evaluated for possible future developments;
  - the Call for Growth which, following an engagement process conducted by the five selected start-ups and supported by the **Cariplo Factory**, concluded with a technical assessment of the use cases presented for potential collaborations with Terna.
- Terna participates in the **Open Italy** programme, an ELIS Open Innovation initiative set up to encourage dialogue and collaboration between large companies, Italian start-ups/SMEs and innovation facilitators such as accelerators and research centres, regarding concrete innovation projects relating to eight areas of innovation. The 2020 edition, for which Terna identified three priority areas of innovation (Urban Intelligence and Smart Mobility, Cybertech and Clean Technologies and Advanced Materials), enabled two co-innovation projects to be carried out with Snam regarding cyber security and satellites.
- Call for Innovation:
  - In June 2020, the **Call for Innovation I4G - Innovation For the Grid** concluded with the award of a cash prize of €15,000 to the start-up InSensus Project S.r.l.. The call, which is aimed at start-ups and innovative SMEs offering solutions relating to the digitalisation and increased resilience of the NTG, was conducted digitally with the support of Digital Magics, a business incubator listed on Borsa Italiana's AIM Italia. In September, three more start-ups were selected to take part in a co-design process with Terna and the partner Digital Magics, in order to define a technical and economic deliverable for application of the solution developed on an industrial scale. This Call, which is specifically focused on seeking solutions that can be integrated with the IoT monitoring network Terna is installing on various assets of Italy's high-voltage electricity system, was aimed at identifying advanced analytics algorithms and developing specialised sensors for power lines that can be integrated with the monitoring network to enhance and improve it;
  - The Call for Innovation, **EES - Energy Efficiency for Sustainability**, which is aimed at identifying sustainable solutions focused on energy efficiency that can benefit Terna and may be exploited in the market by Avvenia, concluded in December 2020. The winner was the start-up **Hive Power**, which has developed an innovative digital platform solution that improves data management of energy efficiency and smart grids by applying machine learning and artificial intelligence algorithms. Hive Power was awarded a prize of €15,000 and, together with other interesting start-ups, will have access to a co-design phase relating to the definition of a use case, with a view to evaluating possible commercial and technological partnerships with the selected companies.

## Terna Community

Initiatives that involve Terna's community of people, with the aim of enhancing, expanding and disseminating skills and a culture of innovation.

In January 2020, specific activities relating to **Intellectual Property Protection** were defined with a view to implementing a process for leveraging and protecting the intellectual property generated by Terna. A process of raising stakeholders' awareness of the intellectual property management procedure is underway. A screening phase has also begun for ongoing activities that can be leveraged accordingly, in terms of intellectual property. During 2020, four new Italian patent applications were filed as well as another four at international level, and one design registration was obtained at EU level. In 2020, the asset portfolio consists of 19 assets in the pipeline (compared with 6 in 2019), with 3 patents granted, 8 applications filed and 8 under assessment.

The start-up ecosystem developed by Open Innovation has proved useful during the Covid-19 emergency in providing and developing **smart PPE** solutions for social distancing and contact tracing. Four solutions were trialled between July and September, enabling experience to be gained of the technologies deployed in these areas, as well as preparation of the subsequent market survey. Four solutions have been submitted to management and possible developments are being defined.

In December, technology scouting activities were launched on a global scale, with participation in the first international scale-up summit in Paris, focusing on the ecosystem. During the event, which was held remotely, Terna's team had the opportunity to evaluate technological solutions proposed by innovative international companies regarding the areas of safety and energy harvesting, and to exchange views with teams from other corporations on key innovation topics, including intrapreneurship and corporate venture capital.



## Corporate

Initiatives involving large companies and industrial partners, to foster cross-contamination and dissemination of best practices and the development of co-innovation projects.

- On 15 April 2020, **Snam** and Terna relaunched and extended their partnership regarding coordinated research, development and innovation activities, aimed at leveraging potential synergies between the electricity and gas systems, by renewing their memorandum of understanding (first signed on 1 March 2019). The two companies intend to carry on working together to identify, define and implement joint initiatives, also sharing their expertise and best practices, with the aim of further strengthening their commitment as key players in the current ecological transition.

Specifically, the MoU breaks down into three areas of interest:

- “dual fuel” power plants, in which Snam plans to convert its compression and storage plants to gas-electric power, entailing significant environmental benefits for the national economy in terms of reducing CO<sub>2</sub> emissions, and the development of new flexibility resources for the electricity system;
- research and development, in which initiatives relating to so-called “sector coupling” will be developed, with particular reference to power to gas technologies; Development of a roadmap for the construction of pilot electrolysis plants in Italy, aimed at power to gas (P2G) and the consequent provision of flexibility services to the NTG;
- co-innovation, to continue the testing and development of innovative initiatives and technological solutions regarding the sustainability of energy networks, via infrastructure monitoring using drones, satellites and IoT sensors, as well as workers’ safety and the environment.

## Other initiatives

- On the international front, **NDAs were signed with US companies**, as well as an MoU with **Brugg eConnect**, and opportunities were explored in the charging hubs sector.
- As part of the integration programme for Brugg, 964 programmes were launched in 2020, aimed at developing IoT and sensor synergies.
- As a partner of the **Maker Faire Rome**, which took place in December, Terna set up a virtual stand to present our latest innovation ideas. Three projects were presented: lot4thegrid, drones and robotics for line monitoring; E-mobility lab (experimental electric mobility demonstrator); and the Terna lines simulator (virtual and augmented reality technologies to simulate the impact of electricity infrastructure).

## Factories

The main strategic project streams have been identified in the Transmission Operator (TO) and System Operator (SO) areas. Therefore, two related Factories were set up in 2018: **Innovation Factory Transmission Operator** and **Innovation Factory System Operator**.

- **The TO Innovation Factory** includes the field of **Transmission Technologies** and is related to asset management, engineering and plant construction processes. It provides support for technological scouting, identification and implementation of technologies, and innovative processes and solutions for the evolution and continuous improvement of the NTG.
- **The SO Innovation Factory** includes the **Dispatching and Conduction** process, as well as **System Engineering** (upgrade and management of the national electricity system, preparation of defence and restart plans, and actions for the commissioning of plants). It also deals with the process of grid research and measurement, calibration and protection systems, malfunction analysis and statistics, functional requirements and system innovation.

Therefore, the SO Innovation Factory mainly focuses on enabling participation in distributed power generation resource markets, electricity demand and storage, with the key objective of promoting the penetration and integration of non-programmable renewable sources into the national electricity and energy system. The priority innovation project streams in this sector thus regard flexibility of the electricity system (e.g., vehicle-to-grid projects, demand-side response, etc.) and its secure management (e.g., R&D relating to the resilience of the electricity system, pilot projects on improved observability of distributed resources, etc).



Cybersecurity & Data Protection



**Terna has adopted a Cyber Security Governance model that has enabled the top cyber risks to be identified and kept under control.** The Company pays constant attention to new cyber threats by implementing threat modelling procedures and complying with industry regulations (Network and Information Security - NIS, National Cyber Security Perimeter - PSNC, Privacy with the General Data Protection Regulation - GDPR). This model is based on constantly evolving risk analysis methodology, guidelines and operating procedures, inspired by national and international reference standards (including: National Institute of Standards and Technology - NIST, National Cyber Security and Data Protection Framework, ISO 27001) and Security by Design principles (defence in depth, need to know, etc.).

In 2020, Terna continued to focus on cyber defence with several projects, including:

- strengthening of **Perimeter Defence** solutions, through adoption of Technological Perimeter (IT/OT/IoT/Cloud) Defence and Protection technologies, and implementation of new security features to counter new threats;
- evolution of **CERT** via the boosting of monitoring, identification and incident response capabilities, in line with new cyber risk and threat intelligence scenarios;
- **cyber protection of the industrial domain (OT)**, through adoption of technologies and new security solutions to strengthen the capabilities of context visibility, active defence and threat identification in the industrial domain;
- **IoT security**, through adoption of technologies to defend against cyberattacks on Terna's IoT infrastructure and IT system;
- design of a **Cyber LAB** for testing innovative cyber security solutions in a controlled security environment, and to support Terna's cyber security awareness programme, via awareness-raising campaigns on cyber issues with a focus on simulating attacks (e.g., phishing), and related training courses for users;
- continuous improvement of the tools and methodologies that support the **Information Security Framework** within Governance Risk and Compliance (GRC) processes, and security assessment solutions relating to vulnerability assessments, penetration tests and red team initiatives.

**The operational nerve centre for the management of cyber events is the Computer Emergency Readiness Team ("TERNA-CERT")**, which from 1 January 2021 will operate within Terna's newly established Cyber Defence Centre. TERNA-CERT provides centralised real-time monitoring of the Group's security, and preventive and reactive monitoring of potential cyber threats.



# Risk management

We carefully analyse all types of risk and assess the most suitable “sustainable” actions to take in order to mitigate any resulting effect, adopting specific safeguards, tools and organisational structures for this purpose.

In view of the distinctive and specific nature of the core business, regulated primarily through a government concession arrangement and by the Regulatory Authority for Energy, Networks and the Environment (ARERA, or the *Autorità di Regolazione per Energia reti e Ambiente*), Terna is not so much exposed to the usual price- and market-related risks (or is so only to a limited extent with regard to our Non-regulated and International Activities, which in any event involve a low level of economic and financial risk), as we are to regulatory and legislative risk, as well as the traditional operational risks that have become increasingly critical during the current ecological transition.

Regulatory risk derives from potential changes in the criteria used to determine regulated revenue, particularly following a multi-year review of the regulatory framework. Legislative risk relates to potential changes in Italian and European laws governing matters relating to the environment, energy, tax and social aspects (above all labour and tenders).



## Risk framework

The Terna Group has for some time used an **Enterprise Risk Management (ERM)** framework based on the standards contain in the Corporate Governance Code for listed companies promoted by Borsa Italiana S.p.A., and more generally on the relevant national and international best practices. This framework, continually added to and improved, includes both specific practices for managing risk and objectives and elements relating to aspects such as: the organisation, skills and ethics. Risk management takes place throughout the Company, based on a structured, systemic approach organised on three levels, each with different objectives and responsibilities:



Terna implements procedures and processes created to coordinate relations between and the activities of the various internal auditors tasked with carrying out controls at the different levels. **Coordination of the activities carried out by second and third level auditors** is of particular importance in order to minimise the duplication of activities and maximise the efficiency of the Internal Control and Risk Management System.

## The risk management process

Terna's Risk Management is based on a widespread process within the organization, involving the systematic, iterated **identification, assessment, treatment and monitoring** of risk.

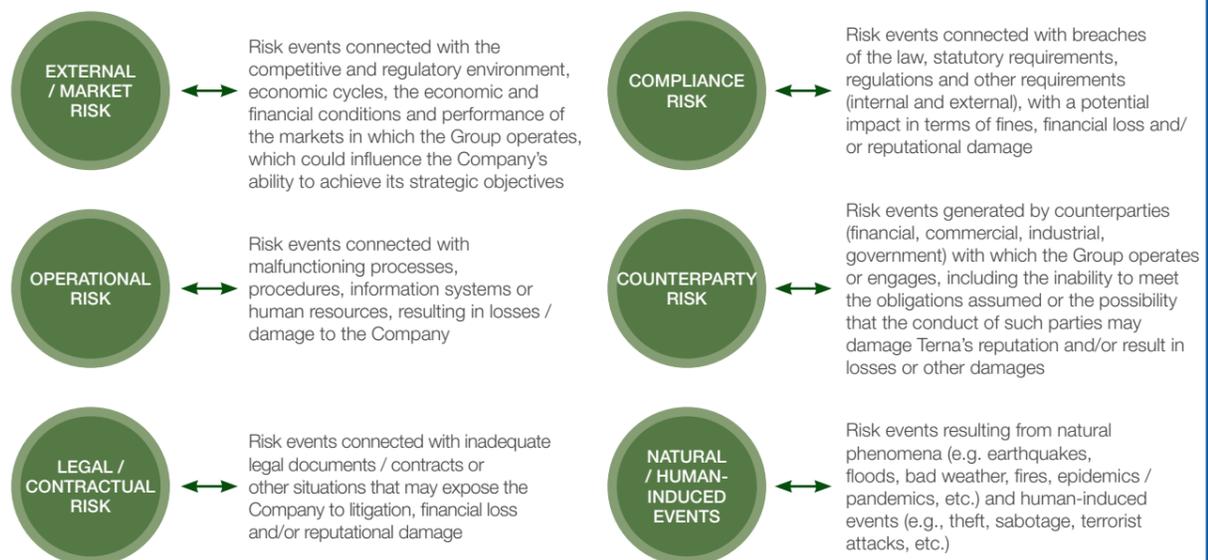
### IDENTIFICATION



An important role in enabling Management to identify risk events is the corporate objectives framework, which shows the targets to be met and whose achievement may be compromised, divided into Strategic (linked to the Industrial Plan) and Recurring (continuous risks linked to the activities carried out under concession, the corporate mission and the codes of conduct adopted).



For each of these objectives, potential risk events applicable to the various areas of the organization and that may have an impact on achievement of the objectives, including events that may be emerging, are identified. Risk events are classified in the following categories:



### ASSESSMENT



Each risk event is assessed on the basis of the combination between **Impact** (divided into four types: financial, reputational, operational and HSE-Sustainability) and **Probability** of occurrence over the life of the Plan. The assessment also takes into account the **Level of Maturity** of existing Risk Management systems. Based on the outcome of this process, the risk treatment priorities are selected.

### TREATMENT



A risk management strategy is devised, identifying specific initiatives and the related timing of implementation.

### MONITORING



Objectives and the associated risks may change over time. There may be changes in the cost and effectiveness of mitigation and corrective initiatives. As a result, the above phases of the process are regularly repeated (at least once a year).

Risk assessment cycles were completed in 2020 applying the above framework and involving Terna's middle and senior management. The risk assessments resulted in the identification of **64** risk events that were assessed in terms of impact, probability of occurrence over the life of the plan and the level of maturity of existing risk management systems. This enabled us to closely examine the systems and take further steps to mitigate the identified risks. Based on this assessment, the following table shows the **12 priority risks** identified, the associated objectives and their classification based on the above risk categories, as well as the main actions taken to mitigate and control such risks.

OBJECTIVE	RISK EVENT	CATEGORY	MANAGEMENT ACTION
CONTINUITY AND QUALITY OF SERVICE	<b>Increased severity of weather events</b>		
	The risk connected with the intensification of extreme weather events (tornados, heavy snowfall, ice, flooding) with a resulting impact on the continuity and quality of the service provided by Terna and/or damage to equipment, machinery, infrastructure and the grid.	Natural/human-induced events	New investment to increase the resilience of the electricity grid and identify mitigation strategies.
	<b>Separation of the European transmission grid</b>		
	The risk connected with extreme weather events / incorrect setup of the structure of the grid in accordance with n-1 security criteria for the European transmission grid, with the potential for cascading failures triggering overloads / line failures, critical events and major incidents on the interconnected European transmission grid with separation of the grid and widespread blackouts.	Operational risk	- Control processes and systems to defend the electricity system - Involvement in working groups and programmes analysing security / defence scenarios at European level, with the aim of improving the security and coordination of the interconnected grid.
	<b>Cyberattack</b>		
The risk connected with a cyberattack, using for example ransomware, that could cause: - the loss of visibility of infrastructure - the temporary shutdown of systems - data loss and / or additional costs for recovery.	Natural/human-induced events	- Internet and perimeter security systems and the segregation of IT and OT networks - Consolidated IT monitoring processes (CERT - Computer Emergency Response Team) - Awareness campaigns.	
HUMAN RESOURCES	<b>Enhancement and oversight of internal competencies</b>		
	Enhancement and oversight of adequate specialist knowledge to enable achievement of the challenging goals contained in the Plan.	Operational risk	- Expansion of the workforce - Training and skills development.
REGULATORS AND OTHER GOVERNMENT STAKEHOLDERS	<b>Workplace injuries / incidents</b>		
	The risk connected with serious/fatal injuries and/or incidents that may have consequences for the health of employees and/or contractors and sub-contractors, as well as impeding the Company's efforts to achieve goals relating to safeguarding people's health and having a serious impact on the Group's reputation and credibility.	Operational risk	A strategic steering committee with the aim of achieving continuous overall improvements throughout the Group (procedures, technologies, working practices, etc.) with a specific focus on HSE issues.
REGULATORS AND OTHER GOVERNMENT STAKEHOLDERS	<b>Evolution of rates of return</b>		
	The risk connected with the introduction of new frameworks and changes to the parameters used in determining revenue from regulated activities carried out under concession.	External / market risk	Focus on output-based regulation linked to investment in projects providing major benefits for the electricity system.

OBJECTIVE	RISK EVENT	CATEGORY	MANAGEMENT ACTION
DEVELOPMENT OF THE NATIONAL TRANSMISSION GRID	<b>Timing of the issue of consents for projects with an impact on the investment programme</b>		
	The risk connected with delays or missed deadlines in obtaining the necessary consents for the construction of infrastructure, resulting in delays to the entry into service of infrastructure and an impact on the investment programme.	External / market risk	Identification of back-up projects to start work on in the event of delays to certain projects.
	<b>Extended consents processes due to opposition from local bodies /environmentalists</b>		
	The risk connected with the possibility that opposition from local bodies, environmentalists, the public and local authorities may lead to major delays in concluding the agreements necessary in order to complete projects involved in the development and security of the national grid.	External / market risk	As regards the impact on the landscape, assessment of the need to expand and encourage the use of underground / submarine cable in place of overhead lines, when this is compatible with the security and operation of the national grid.
	<b>Delays in obtaining consents due to the imposition of conditions prior to granting consent</b>		
CUSTOMERS, SUPPLIERS AND BUSINESS PARTNERS	The risk connected with the presence, in intermediate opinions and/or Environmental Impact Assessments and/or landscape assessments, of conditions resulting in the need to "make changes to projects for which consent has been applied for" or to change parts of the project, thus lengthening the consents process in order to ensure compliance.	External / market risk	Planning of back-up projects to start work on in the event of delays to certain projects.
	<b>Timing of compliance and implementation of environmental restrictions imposed following the receipt of consents, specialist advice and environmental controls of construction sites</b>		
	The risk connected with possible delays during construction in order to comply with restrictions imposed as a condition for granting consent, and to comply with and monitor all the environmental requirements (archaeological, wildlife, geology, environmental engineering and green engineering); in order to engage with the entities responsible for inspection and involved in compliance with the restrictions imposed (e.g., dialogue with entities and third parties regarding the Environmental Monitoring Plan); in order to arrange specialist technical support for environmental matters so as to ensure full compliance with the restrictions imposed prior to and during the works and checks on construction sites to verify compliance with the law.	Operational risk	Conduct of coordinated activities designed to reach agreement with the various parties as part of a structured process for managing the issues in question, with well-defined internal procedures and roles.
CUSTOMERS, SUPPLIERS AND BUSINESS PARTNERS	<b>Suppliers operational capacity reaches saturation point, resulting in delays in the construction and maintenance of infrastructure</b>		
	The risk connected with the ability of suppliers to follow a demanding programme and/or their inability to rapidly adjust their supply chain to meet Terna's increased demands, resulting in delays to the construction of infrastructure included in the Plan.	Counterparty Risk	Steps to boost capacity in key supply chains.
CUSTOMERS, SUPPLIERS AND BUSINESS PARTNERS	<b>Changes to the strategy or priorities of major key suppliers, resulting in delays and additional costs in the construction of infrastructure</b>		
	The risk connected with changes in the strategy of key suppliers as they shift their focus to other, more attractive sectors (e.g., renewable energy, industrial automation), geographical markets (e.g., India) and/or changes to priorities resulting in delays / additional costs in the construction of infrastructure included in the Plan.	Counterparty risk	Initiatives designed to pre-empt any such changes (the inclusion of "notices to proceed"), within the limits imposed by the Tenders Code, in order to tie up key suppliers' operational capacity so that they can meet Terna's requirements on time.

# Regulated Activities

## The National Transmission Grid

We are responsible for planning, development and maintenance of the grid, contributing our expertise, technology and innovation (as the Transmission Operator). We are responsible for the transmission and dispatching of electricity (as the System Operator), with the aim of ensuring access to electricity for everyone with the highest level of quality and at the lowest possible cost.

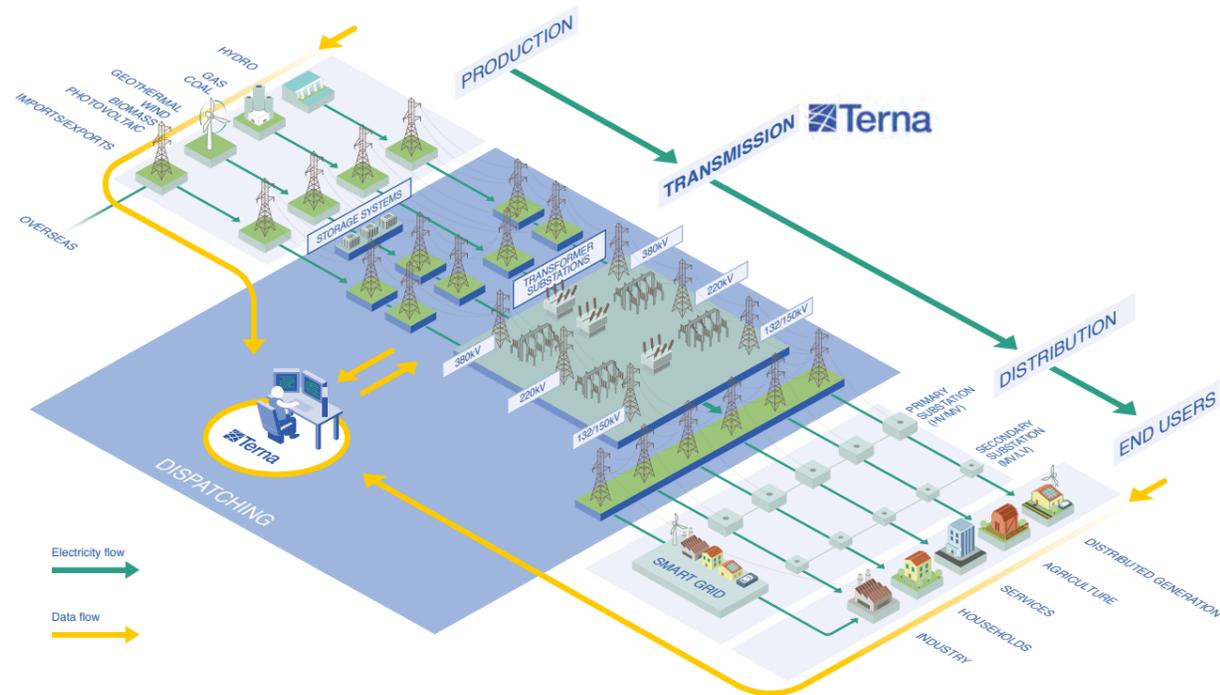
### Terna's role in the Italian electricity supply chain

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

The Terna Group's main regulated activities are the transmission and dispatching of electricity in Italy.

**Terna performs these activities in its role as the Italian TSO (Transmission System Operator) and ISO (Independent System Operator), under a monopoly arrangement and a government concession.**

#### THE NATIONAL ELECTRICITY SYSTEM SUPPLY CHAIN



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

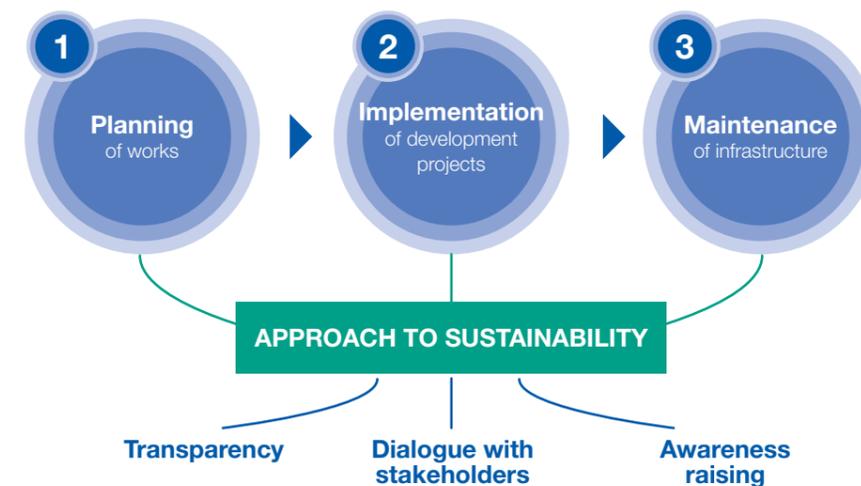
One of the peculiarities of every electricity system is the need to be able to continuously guarantee that demand for energy from end users (households and businesses) is always balanced by the energy produced by power plants.

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.



### Electricity transmission

Planning for development of the National Transmission Grid, the performance of construction services and the maintenance of electricity infrastructure are the three areas of responsibility included in the regulated electricity transmission business.



The Group adopts a sustainable approach throughout every stage of the process. This takes the form of transparency in managing the Group's social capital through engagement with the stakeholders directly affected by the Group's development initiatives, with a view to building awareness of the importance of delivering the planned new electricity infrastructure.

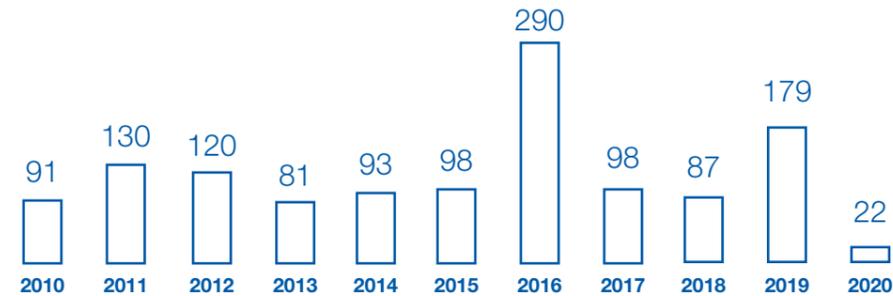
#### TERNA'S INFRASTRUCTURE\*

889 ELECTRICITY SUBSTATIONS	74,723 KM OF CIRCUITS	67,954 KM OF LINES 94% overhead	4 CONTROL CENTRES
744 TRANSFORMERS	5 STORAGE SITES	6,439 BAYS	23,459 LINE SPANS

\* Figures updated to 31 December 2020, except for the figure for line spans, which is updated to early 2021.

Risk management permeates each phase of the operational process for regulated transmission activities. Each risk identified by the Group's adopted ERM methodology is assigned a level of importance. For risks that are above the selected acceptance threshold (risk appetite), possible mitigation actions are identified and implementation times estimated.

**POWER LINES REMOVED (KM)<sup>(1)</sup>**



<sup>(1)</sup> The figure for 2016 is exceptional due to the fact that over 200 km of obsolete power lines were demolished in Valtellina as a result of work that began in previous year. After adjusting for this event, a total of approximately 80 km of line was demolished, in line with previous years (approximately 100 km a year). The outperformance registered in 2019, due to accelerated implementation of the plans, explains the lower target in 2020.



**Key environmental performances**

The main initiatives designed to mitigate Terna's environmental impact are described below.

- **Rationalisation:** complex initiatives involving several components of the grid, replacing certain components with others of a superior type, thereby eliminating parts of the grid that are of little use following the installation of new infrastructure or adding new elements of the grid to avoid the upgrade of power lines that have reached saturation point. The demolition of obsolete lines represents one of the most important positive contributions that Terna makes to improving the environment: 22 km of lines were demolished in 2020, freeing up an area equal to 78 hectares. This brings the total number of kilometres of line demolished since 2010 to 1,290. Demolition is defined as the physical removal of overhead lines (or their replacement with underground cable) and does not include downgraded or upgraded lines;
- **Use of pylons with reduced visual impact:** Terna increasingly uses new single-pole pylons with a low environmental impact (occupying only 10 m<sup>2</sup> of ground, rather than the 150 m<sup>2</sup> occupied by the traditional pad/pyramid type pylons). Other mitigation measures consist of camouflaging pylons with paint and the use of coloured insulators that enable the new lines to blend in better with the landscape;
- **Use of underground cables:** may eliminate or reduce the typical visual impact of overhead lines. Over 60% of the new power lines entering service during the timeframe of the new Plan will be "invisible", as they will be made of terrestrial or submarine cable; In 2020, 71 km of underground cable lines were laid;
- **Camouflaging electricity substations:** use of natural engineering techniques for habitat reconstruction and the stabilisation of slopes and embankments.

Electricity substations are significant from an environmental viewpoint partly as they are the principal source of the Group's direct greenhouse gas emissions. These consist of leakages of SF<sub>6</sub> (sulphur hexafluoride), a gas used as insulation in certain electrical equipment (circuit breakers, current transformers and armoured equipment). Leakages as a percentage of installed gas capacity in 2020 stood at 0.32%, marking a record performance.

The Group's direct CO<sub>2</sub> equivalent emissions have thus fallen.

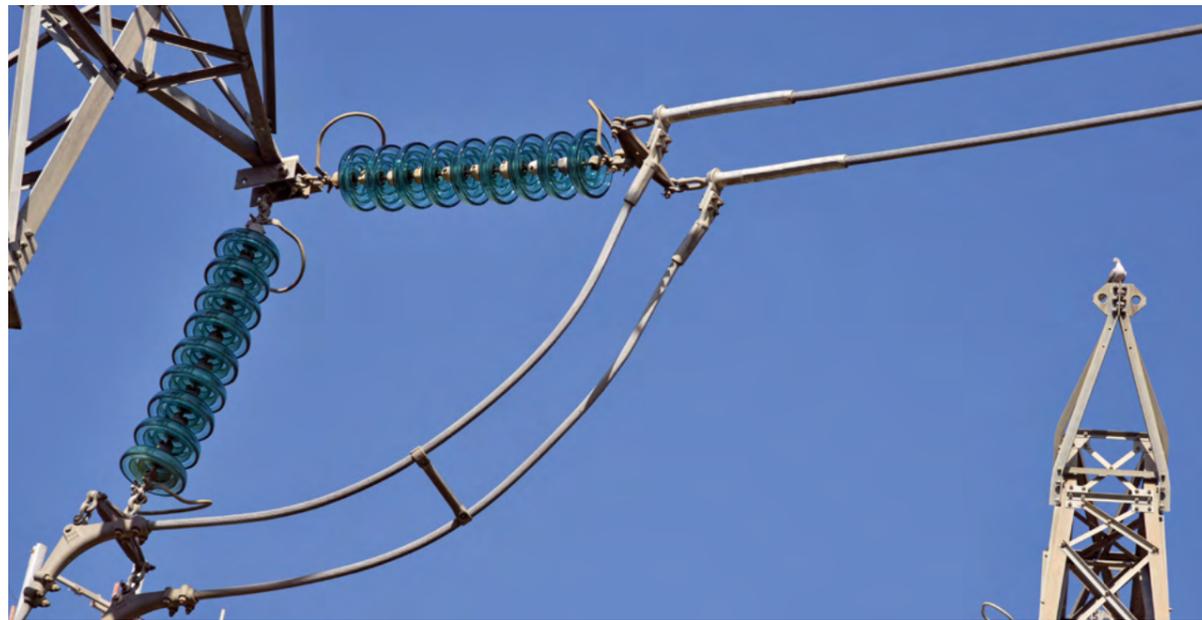


TOTAL DIRECT AND INDIRECT GREENHOUSE GAS EMISSIONS - TONNES OF CO <sub>2</sub> EQUIVALENT	2020	2019	2018
<i>Direct emissions</i>			
Total direct emissions	56,202.6	68,404.4	62,999.2
<i>of which: Leakages of SF<sub>6</sub></i>	49,013.7	60,162.2	54,846.1
<i>Indirect emissions</i>			
Electricity	59,490.7	65,246.9	64,050.5
<b>Total direct and indirect emissions</b>	<b>115,693.3</b>	<b>133,651.3</b>	<b>127,049.7</b>

CARBON INTENSITY - TONNES OF CO <sub>2</sub> EQUIVALENT / REVENUE (€M)	2020	2019	2018
Total emissions (direct and indirect)	115,693.3	133,651.3	127,049.7
Ratio of total emissions to revenue	46.0	58.2	57.8

At the end of their normal lifecycle, the materials used in electricity infrastructure are recovered for reuse in operations. Only a residual portion is sent to landfill and has an impact on the environment.

The percentage of waste recovered amounted to 95% in 2020 (94% in 2019, 86% in 2018), or 96% including Tamini. The effective amount recovered depends on the materials contained in the waste: some of them are easy to separate out and thus reuse (for example, the iron parts of pylons); in other cases, instead, it is not possible or it is too costly to separate the various parts, above all when dealing with the most obsolete equipment. For this reason, annual changes in the amount of waste generated and the percentage of waste recycled should not be interpreted as indicating a trend.



## The 2021 Development Plan

In continuity with the previous Development Plan, the main investment objectives of the 2021 Development Plan are set out below:

- **To boost overall exchange capacity with other countries**
- **To reduce congestion**
- **To cut energy losses**
- **To reduce CO<sub>2</sub> emissions** as a result of the production mix and lower grid losses.

1. The electricity system's transition to complete decarbonisation requires use of all the tools necessary in order to fully integrate renewable production plants in order to reduce emissions over the long term, guaranteeing the system's security.
2. The structure and mix of Europe's generation mix in general and of Italian generation in particular are undergoing a radical transformation, just as transmission lines are being developed in keeping with new European directives regarding Market Design. The adoption of new mechanisms at national level (in particular, the Capacity Market and the reform of the dispatching services market) will have a major impact on development of the electricity system.
3. Security of supply ensures the security of the national electricity system and, at the same time, creates an increasingly resilient system, capable of handling critical events external to the system itself.
4. The ability to conceive, design and implement following rigorous analysis capable of maximising the environmental and economic benefits is the only possible guarantee of sustainability.



### CAPITAL EXPENDITURE

### DRIVERS

DECARBONISATION 

MARKET EFFICIENCY 

SECURITY, QUALITY AND RESILIENCE 

SUSTAINABILITY 

### PROJECT PRIORITISATION

Reorganise the project mix, focusing on the most useful electricity projects that can guarantee the greatest benefit for Italy.

### INTEGRATION WITH LOCAL PLANNING

Focus on local development needs in response to Italy's new challenges, such as the new electric mobility projects, paying attention to metropolitan areas and reviewing projects in order to make them eco-sustainable.

### GRID OPERATION

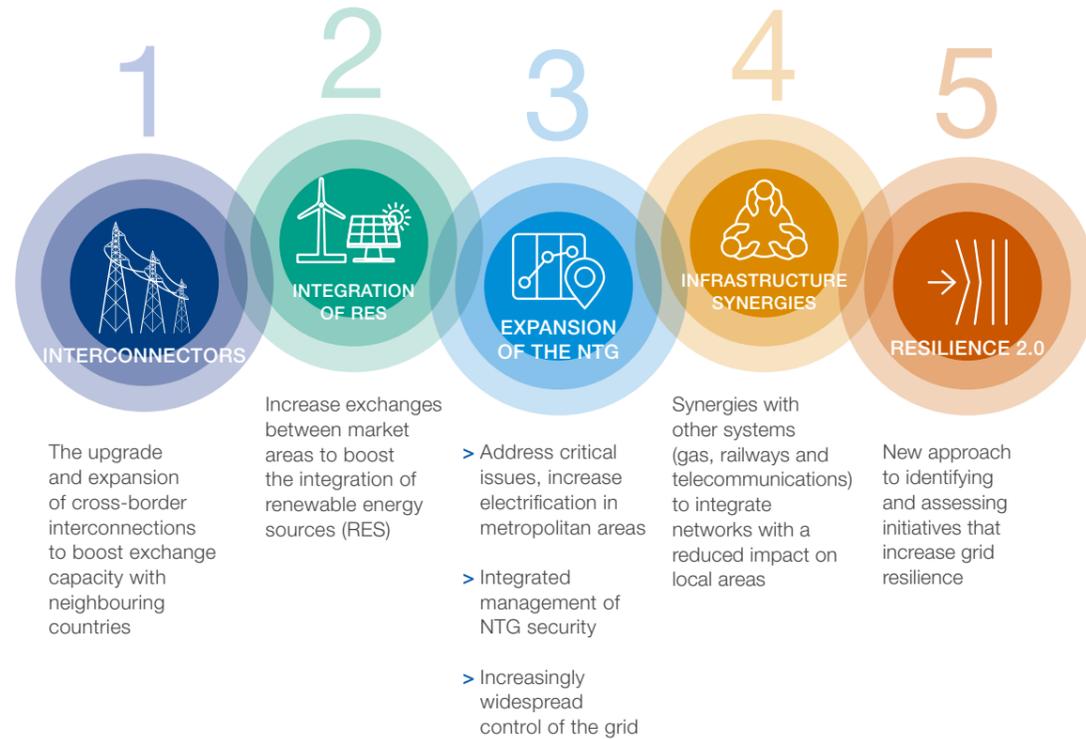
Identify and develop initiatives aimed at improving grid operation, with a special focus on enhancing the quality of service and the resilience of the system.

### ENVIRONMENTAL SUSTAINABILITY

Support and guide the ecological transition through the growing connection and integration of new renewable energy plants.

### PROJECT GUIDELINES

The key project guidelines have been divided into **five areas of action**, the main aspects of which are:

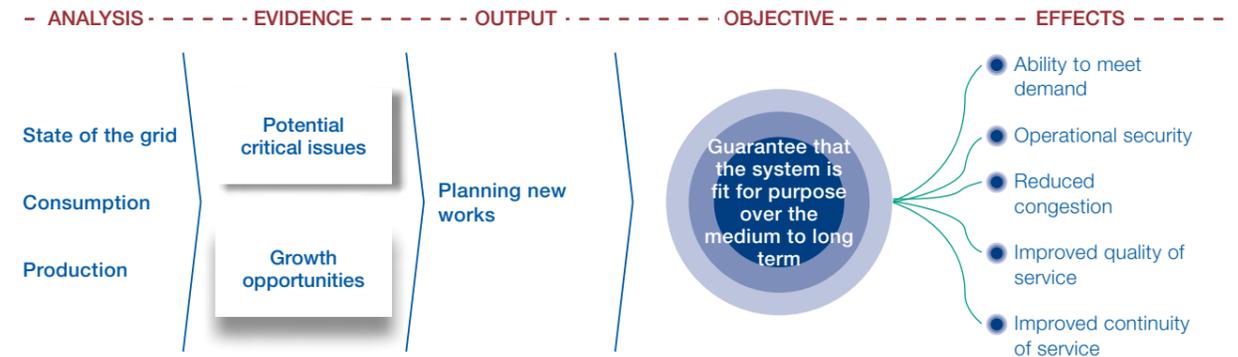


With regard to decarbonisation, in line with Legislative Decree 93/11 and Resolution 627/16, as amended<sup>11</sup>, Terna has included a specific section in the National Development Plan setting out the actions needed in order to make full use of the power produced by renewable plants. The network assessments conducted with a view to facilitating the use and development of renewable production have led to the identification of the work to be carried out on both the primary 380-220kV transmission grid and on the 150-132kV high-voltage grid.

<sup>11</sup> Resolution 627/2016/R/eel, as amended - Provisions for consultation on the ten-year National Transmission Grid Development Plan and approval of the minimum requirements for the Plan, in relation to the assessments for which the regulator is competent.

### The national electricity grid planning process

Analysis of the state of the grid (electricity flows through the grid and electricity market trends), and the evolution and distribution of consumption and production, enables Terna to identify critical issues and development opportunities and, consequently, to plan the new works required to ensure that the system is adequate, including in the medium to long term with regard to meeting demand, operational safety, reducing congestion and improving service quality and continuity.



The new works to be carried out are included in the **National Transmission Grid Development Plan**, which is submitted annually to the Ministry of Economic Development for approval. Law Decree no. 76 of 16 July 2020 (article 60, paragraph 3) requires Terna to prepare the National Transmission Grid Development Plan every two years instead of annually. The approval process also includes adoption by the Ministry of the Environment and Protection of Land and Sea (MATTM) in agreement with the Ministry of Cultural Heritage (MIBAC) of the opinion relating to the Strategic Environmental Assessment (SEA) pursuant to Legislative Decree 152/06.

The **NTG Development Plan** sets out the grid development initiatives envisaged over the next ten years, as well as the state of progress of the development works planned in previous years.

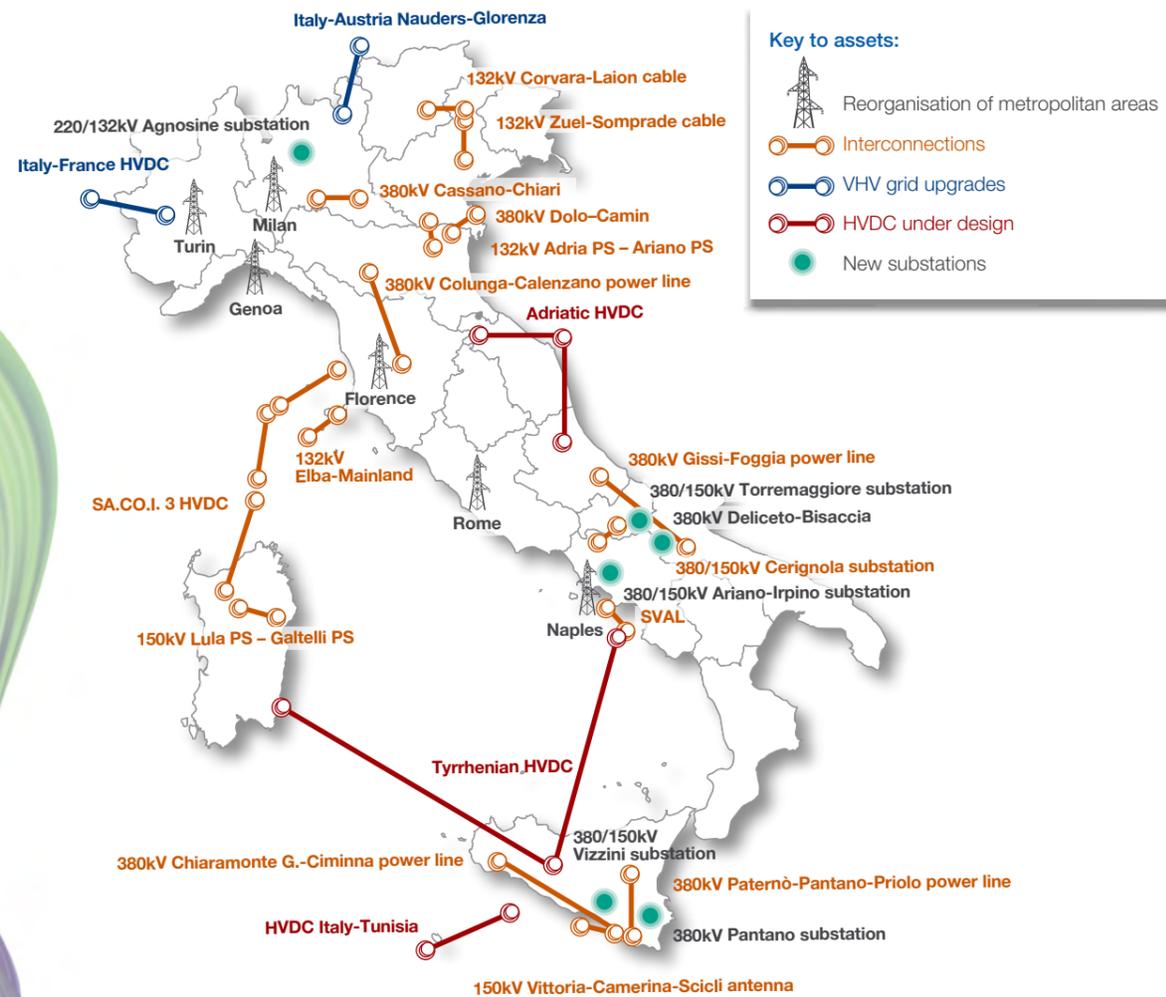
The Plan contains all the investments that Terna is committed to carrying out in order to guarantee the efficiency of the grid, the security of supply and of the service and the integration of production from renewable sources in keeping with the objectives identified in the recent **Proposal for an Integrated National Plan for Energy and Climate (PNIEC)**, provided for by Regulation 2016/0375 of the European Parliament and of the Council on the Governance of the Energy Union.

Any investment in development of the grid amounting to more than €15 million is subject to a prior cost-benefit analysis, comparing the related expenditure with the resulting benefits, expressed in monetary terms, resulting from its implementation.

**A positive cost-benefit ratio is an essential requirement for an investment project's inclusion in the Development Plan.**

### Principal projects for the National Transmission Grid

The Development Plan envisages capital expenditure of over €5 billion in the period 2021-25, which is in addition to expenditure on the Security Plan, the Electricity Asset Renewal Plan and other investment:



### DEVELOPMENT PLAN

Interconnectors and lines	Km of circuit	Status	Driver
Italy-France interconnector	190	○	☁️ ⚡️ 🌱
Italy-Austria interconnector	24	○	☁️ ⚡️ 🌱
Italy-Switzerland Interconnector	100	○	☁️ ⚡️ 🌱
Italy-Slovenia interconnector	114	○	☁️ ⚡️ 🌱
Sardinia-Corsica-Italy interconnector	540	○	☁️ ⚡️ 🌱
HVDC Centre South - Centre North	221	⦿	☁️ ⚡️ 🌱
HVDC Italy-Tunisia	200	⦿	☁️ ⚡️ 🌱
HVDC Mainland Sicily-Sardinia	950	⦿	☁️ ⚡️ 🌱
Reorganisation of metropolitan areas ✓	182	○	🌱
Chiamonte-Gulfi-Ciminna	173	○	☁️ ⚡️ 🌱
Reorganisation in the Mid Piave Valley ✓	90	○	☁️ ⚡️ 🌱
Colunga-Calenzano ✓	85	○	☁️ ⚡️ 🌱
Gissi-Foggia	140	○	☁️ ⚡️ 🌱
Cassano-Chiari	36	○	☁️ ⚡️ 🌱
Deliceto Bisaccia	36	○	☁️ ⚡️ 🌱
Upgrade North-Calabria	10	○	☁️ ⚡️ 🌱
Paternò-Pantano-Priolo	63	○	☁️ ⚡️ 🌱
Elba-Mainland	35	○	☁️ ⚡️ 🌱
<b>Substations</b>			
Agnosine substation			
Vizzini substation		○	🌱
Pantano substation			
Torremaggiore substation			
Cerignola substation		●	🌱
Ariano Irpino substation			

### SECURITY PLAN

Projects	Status	Driver
Fiber for the Grid	○	☁️ ⚡️ 🌱
Ice and snow risk mitigation systems ✓	○	☁️ ⚡️ 🌱
Control devices	○	☁️ ⚡️ 🌱
Cyber security	○	🌱

### RENEWAL PLAN

The Plan to renew electricity assets provides for widespread initiatives across the entire NTG, aimed at improving the reliability of the electricity grid. In the period 2021-2025, we will continue to be committed to boosting service quality through the renewal of line and substation components, environmental quality through the use of equipment offering a high degree of environmental compatibility (e.g., the replacement of fluid-oil cables and the installation of equipment with insulation using vegetable esters) and the quality of our processes by digitalising our electricity assets (e.g., overhead lines, cables and substations).

#### Legenda Resilience and Status \*

- ✓ Resilience Plan
- Completed/ in service
- Under construction
- Awaiting consents
- ⦿ Consultation
- Under design
- Planned

#### Legenda Driver \*

- ☁️ De-carbonisation
- ⚡️ Market efficiency
- 🌱 Security of supply
- ☁️ Systemic sustainability

\* The other initiatives completed in 2020 are shown in the section "Changes in the dimensions of the NTG" in the annexes.

Capital expenditure 2020  
+6.9%  
compared to 2019

## The Group's capital expenditure

The Terna Group's total capital expenditure in 2020 amounts to €1,351.1 million, compared with €1,264.1 million in the previous year (up 6.9%), thus confirming Terna's great capacity to pursue its objectives despite the difficulties arising from the Covid-19 pandemic.

	2020	2019	CHANGE	% CHANGE
Development Plan	484.9	488.1	(3.2)	(0.7%)
Security Plan	228.0	188.1	39.9	21.2%
Projects to renew electricity assets	409.7	372.4	37.3	10.0%
- of which electricity assets	343.9	312.7	31.2	10.0%
- of which functional separations	65.8	59.7	6.1	10.2%
Other capital expenditure	110.8	99.0	11.8	11.9%
<b>Total regulated assets</b>	<b>1,233.4</b>	<b>1,147.6</b>	<b>85.8</b>	<b>7.5%</b>
<b>Non-regulated assets<sup>(1)</sup></b>	<b>107.6</b>	<b>104.4</b>	<b>3.2</b>	<b>3.1%</b>
<b>Capitalised financial expenses</b>	<b>10.1</b>	<b>12.1</b>	<b>(2.0)</b>	<b>(16.5%)</b>
<b>TOTAL CAPITAL EXPENDITURE</b>	<b>1,351.1</b>	<b>1,264.1</b>	<b>87.0</b>	<b>6.9%</b>

(1) Non-regulated assets primarily regards private interconnectors, the Brugg group (mainly contracts that fall within the scope of IFRS 16), the re-routing of power lines for third parties and activities in Peru.

## MAIN REGULATED WORKS CARRIED OUT DURING THE YEAR

Due to the restrictive conditions connected with the Covid-19 emergency, the main construction sites were suspended from 13 to 20 March. Operations were gradually resumed from 20 April in full compliance with the new agreements to prevent infection, which had been drawn up in the meantime in coordination with the trade associations and contractors (e.g., the agreement between Terna and ANIE - National Federation of Electrotechnical and Electronic Companies). The agreements identify measures to prevent infection (e.g., new access procedures, body temperature scanning, site preparation, social distancing) and new PPE.

With the gradual resumption of activities from the end of April 2020, works were gradually restarted as soon as practically possible, in compliance with the current regulations applied through implementation of the above-mentioned new working methods and procedures.

### Development Plan – €484.9 million

Paternò-Pantano-Priolo  
(€43.9 million)

**380kV Paternò-Pantano power line:** Preliminary activities relating to removal of unexploded war-time bombs, geological and archaeological surveys, preparation of the executive design and the related approval process have been completed. Construction work began at the end of September, with building of the first foundations.

**380kV Paternò-Priolo power line:** the removal of unexploded war-time bombs and geological and archaeological surveys are in progress; the executive design of the various lots is nearing completion.

**380/220/150kV Pantano substation:** Following completion of the executive design, the contract was awarded for civil works. Work began at the end of September, and site preparation excavations are in progress.

The procurement of materials is in progress.

**Piosasco converter station:** all the activities in the station have been completed, except for the command, protection and control system that is due to be completed by the beginning of 2021.

**Cable connection:** cables have been laid over a 95-km section. The remaining work on completion of the power line, including the laying of fibre cable and the installation of monitoring systems, will take until mid-June 2021.

**132kV Zuel-Somprade cable:** the connection was completed, energised and handed over at the end of December.

**Garaguso substation:** the connection was completed, energised and handed over in December.

**220kV Castelluccia-Naples Primary Substation cable:** construction work is in progress, with 3.1 km of cable laid out of 3.6 km.

**220kV Astroni-Naples Centre cable:** construction work is in progress, with 7.5 km of cable laid out of 9.4 km.

**220kV Castelluccia-San Sebastiano power line:** once construction work has been completed; the new cable will enter service from December 2020. Removal of the old oil-filled cable has begun.

**Agrosine substation:** the site is being prepared with excavation and earthworks and construction of the perimeter wall in progress.

**Bisaccia-Deliceto power line:** construction work is in progress, with 60% of the foundations completed, and 10% of the pylons assembled.

**Expansion of the Bisaccia electricity substation and the installation of PSTs:** the extension of the existing substation was energised and handed over in December; transportation of PSTs is in progress.

**Pianezza connections - phase 2:** demolition of the section of the line not in service (2.3 km) has begun. The executive design has been completed and materials procured for construction of the Grugliasco-Pianezza cable connection (6.5 km). Civil works are scheduled in 2021.

**Reconstruction of 132kV Rivoli-Paracca and Paracca-Collegno cables:** construction in progress, including pipe laying on 2.3 out of 4.4 km for the first connection, and on 1.7 out of 2.7 km for the second connection.

**SE Pianezza - installation of 220kV reactor:** the executive design has been completed and the 220kV reactor supplied. Award of the contract for the civil works is in progress.

**Vizzini substation:** the procurement of materials is in progress, whilst the executive design and the related checks have been completed; the contract for civil works has been awarded. The start of construction works is subject to compliance with the regulations regarding site activities laid down by the Ministry of the Environment.

**150kV Sorrento substation:** on completion of the works, all the bays were energised and handed over in December.

Italy-France interconnector  
(€36.3 million)

Reorganisation in Alto  
Bellunese  
(€29.0 million)

Garaguso substation  
(€15.6 million)

Reorganisation in Naples  
(€15.0 million)

Reorganisation in Valle Sabbia  
(€13.7 million)

Grid upgrades in the  
Foggia-Benevento area  
(€12.6 million)

Reorganisation in Turin  
(€11.4 million)

Vizzini substation  
(€11.1 million)

Sorrento Peninsula  
interconnector  
(€7.7 million)

### Security Plan – €228.0 million

Synchronous compensators  
(€114.2 million)

The planned installation of 16 synchronous compensators in Sardinia and central and southern Italy, under the 2021-2025 Plan, is being carried out. This will support the regulation of short-circuit voltage and power in areas of the country characterised by a high level of production from renewable sources and a significant reduction in traditional production.

**Selargius and Matera compensators:** the equipment was completed, energised and handed over in December.

**Garigliano and Foggia compensators:** the civil works are nearing completion and transportation of machinery to the site is in progress.

**Maida, Candia, Fano and Brindisi compensators:** the construction sites have been opened and the site-layout civil works have begun; production of the related supplies is in progress.

Fiber for the Grid  
(€32.9 million)

This project aims to boost the availability of data on the grid in order to make it easier to monitor and manage the security of the electricity system, by increasing and expanding the fibre network.

A further 40 electricity substations on the NTG (making a total of 476 substations) were connected and lit in December 2020.

Brindisi Pignicelle – Brindisi  
EniPower 380 kV cable  
(€15.6 million)

The new connection was completed, energised and handed over at the end of December.



### Renewal plan – €409.7 Million

The commitment to carry out works to renew electricity assets in order to improve the reliability and resilience of the NTG has been confirmed.

The renewal of overhead lines and substation equipment continued during 2020: approximately 2,300 km of conductors and 22 pieces of equipment were replaced, 4 with “green” pieces of equipment, insulated using vegetable esters.

Renewal of electricity assets  
(€343.9 million, before  
functional separations)

Work continued on the project involving the separation of Rete S.r.l.'s substations, aimed at progressive integration into the grid of the HV substations acquired from FSI S.p.A.. Separation of the substations is nearing completion.

Separation of Rete  
S.r.l.'s substations  
(€65.8 million)

### Consent processes in progress

Various consents processes for new works or projects were initiated in 2020. These include those for:

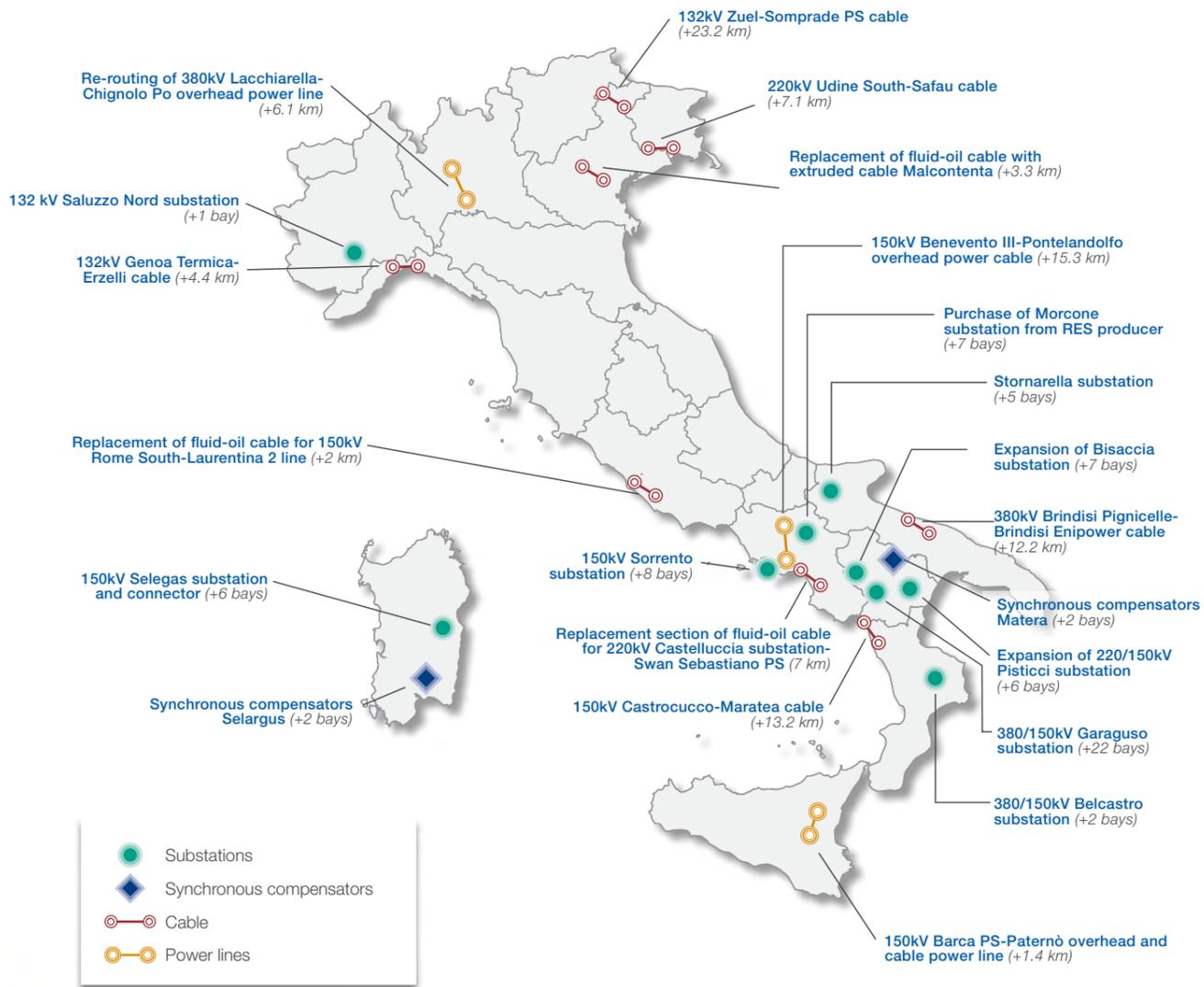
- Reorganisation of the grid between Dolo and Camin;
- Partial undergrounding and subsequent demolition of the Mercallo–Cameri power line;
- Reorganisation of the grid serving towns in the Novara area;
- Reorganisation of the grid between Catanzaro and Calusia;
- Construction of the grid between Malcontenta and Fusina;
- Reorganisation of the grid in Teramo and Pescara;
- Reorganisation of the HV grid in the Bologna area.

### Projects initiated during 2020

A number of projects were approved and initiated in the during 2020. These include:

- the start-up of work on the reorganisation of 5 132kV power lines in the Magenta area;
- approval of final design for the construction of the 150kV underground Pettino–Torrione line;
- the start-up of work on new chromatic experimentation on pylons located close to the San Bellino electricity substation, in the province of Rovigo;
- the start-up of work on removing reinforced concrete foundations in the Venetian Lagoon;
- the signature of an agreement with the Municipality of Foiano for the implementation of public utility works, linked to construction of a new substation at Ariano Irpino and of a power line approximately 20 km long.

PRINCIPAL PROJECTS CARRIED OUT IN 2020



On **14 October 2020**, in the presence of the Prime Minister, Giuseppe Conte, local dignitaries and Terna's CEO, Stefano Antonio Donnarumma, the **new power line that connects Capri to the mainland was inaugurated**. This technologically advanced project will enable Capri to be supplied with renewable energy and the elimination of polluting emissions, thanks to decommissioning of the current oil-fired power station, while at the same time increasing the island's security. The new "Capri-Sorrento" submarine power line built by Terna is 19 km long and completes the 160 MW electricity ring of which the first section between Capri and Torre Annunziata was completed in 2017.



The following projects also entered service in early 2021: to coincide with the 2021 FISU World Alpine Ski Championship, organised by the Federazione Italiana Sport Invernale, the new 23,2 km-long "invisible" power line linking Cortina d'Ampezzo with Auronzo di Cadore, in Veneto, was energized on 4 February 2021; the new 150 kV power station at Porto Torres 2 (Sassari), in north-western Sardinia, entered service on 10 February.

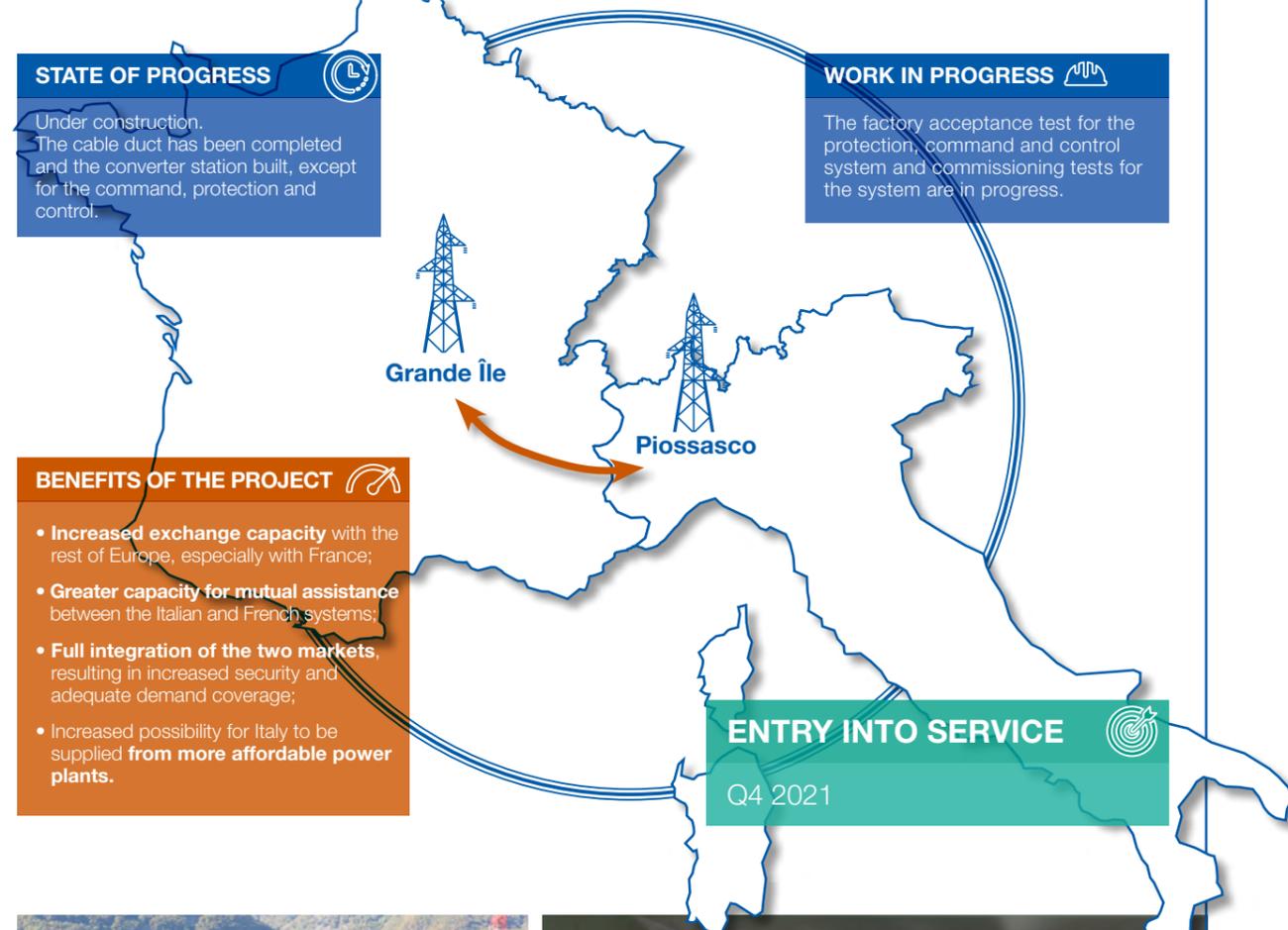


# FOCUS

## Special projects

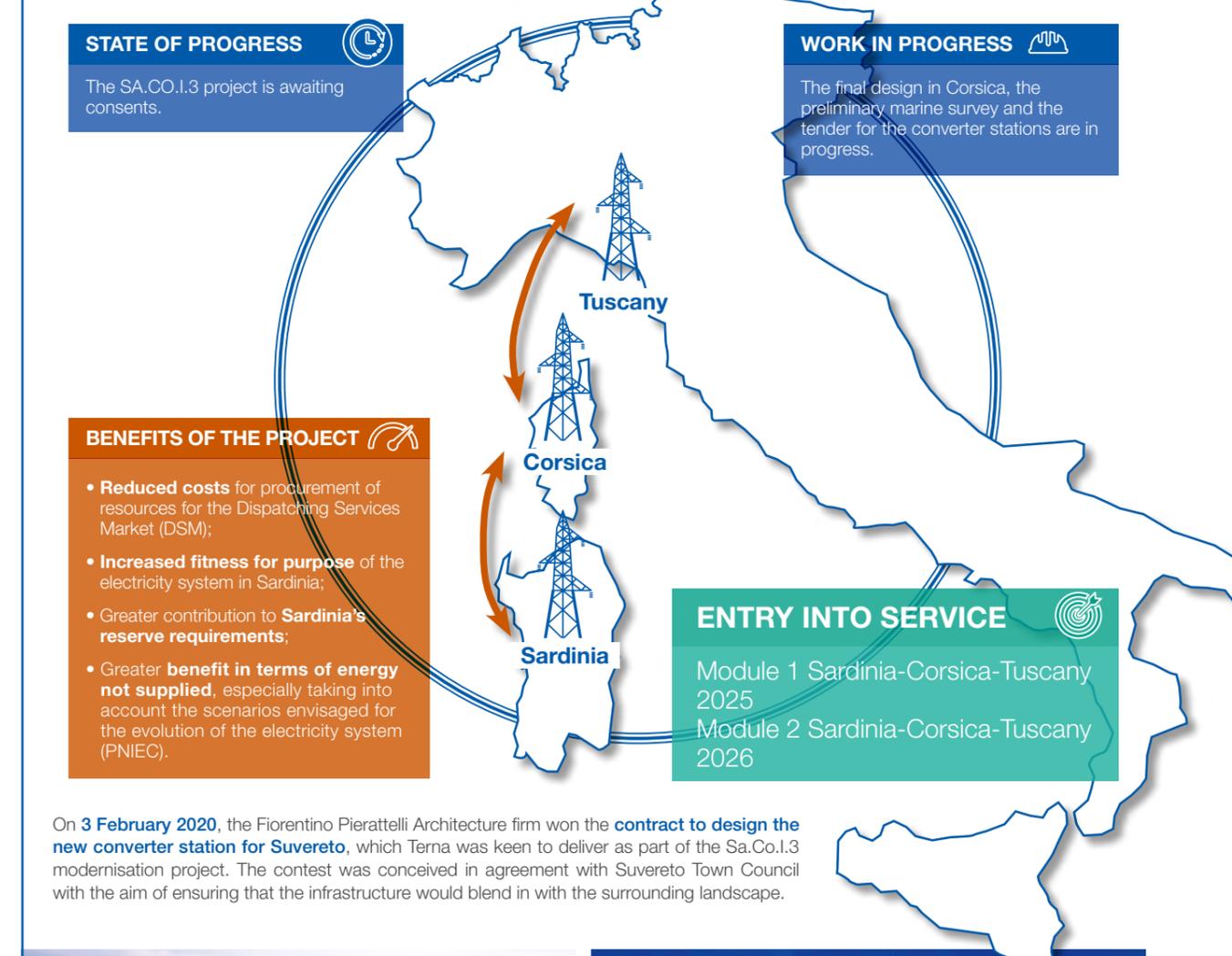
### 1 Interconnector Italy-France

The new direct current interconnection between Piossasco (IT) and Grande Île (FR) will increase interconnection capacity between Italy and France by **1,200 MW**, raising it from approximately the existing **3 GW** to over **4 GW**. The "Grande Île - Piossasco" project is **190 km** long.



### 2 HVDC connection Sardinia - Corsica - Italian mainland (SA.CO.I.3)

The new tri-terminal high-voltage direct current (HVDC) connection consists of **renovation and modernisation** of the existing electricity connection between Sardinia, Corsica and the Italian mainland. It will enable the use of total transport capacity of up to **400 MW**. The project will be **540 km** long.



On **3 February 2020**, the Fiorentino Pierattelli Architecture firm won the **contract to design the new converter station for Suvereto**, which Terna was keen to deliver as part of the Sa.Co.I.3 modernisation project. The contest was conceived in agreement with Suvereto Town Council with the aim of ensuring that the infrastructure would blend in with the surrounding landscape.



>> continued SPECIAL PROJECTS FOCUS

### 3 HVDC connection Mainland-Sicily-Sardinia (Tyrrhenian Link)

The new submarine interconnection is a state-of-the-art project that will connect **Campania - Sicily - Sardinia** via two submarine, **1,000 MW**, direct current power lines. The project will be **950 km** long.

#### STATE OF PROGRESS

The Tyrrhenian Link project is in the preliminary stages of the consents process.

#### WORK IN PROGRESS

Technical working groups involving stakeholders, planning for the consents process and procurement of converter systems and cables (EPC contracts) and a preliminary marine survey are in progress.

#### BENEFITS OF THE PROJECT

- Increased **stability and security** of the grid;
- Full **integration of existing and scheduled renewable power generation** on the island;
- Greater **fitness for purpose** of the island's electricity system, partly in anticipation of the phase-out of coal.

#### ENTRY INTO SERVICE

Module 1 Sicily-Campania 2025  
 Module 2 Sicily-Sardinia 2026  
 Module 3 Sicily-Campania 2027  
 Module 4 Sicily-Sardinia 2028

In February, Terna launched the **public consultation on the Tyrrhenian Link**, organizing two *Terna Incontra* events for the public. During the events, held in digital format, Terna presented the project and provided all the related information. The Company illustrated the two different locations for the converter station in the Municipality of Eboli, both situated on farmland adjacent to the existing overhead line. The outcome of the public consultation will then be passed on to the relevant ministries in order to initiate the consents process.

TERNI INCONTRA: DIALOGO CON IL TERRITORIO

**INSIEME PER UNA RETE SEMPRE PIÙ SOSTENIBILE**



## Infrastructure maintenance

### Giving priority to quality and security

Maintenance of electricity grid infrastructure is essential in order to guarantee quality of service, the security of the assets managed and the performance of power line and substation components. These operations are carried out on the basis of a predictive and conditional approach. **The tools used to support maintenance activities are subject to continuous innovation.** In particular, the maintenance engineering "engine" is the expert decision support system (DSS) called **MBI (Monitoring and Business Intelligence)** whose engineering models are continuously updated. For scheduling and execution of operations, **WFM (Work Force Management)** software is used. Terna has, for many years, participated in international benchmarking for the sector, with the aim of sharing best maintenance practices. It has consistently ranked as one of the best TSOs in terms of fault rates and the efficiency of its maintenance process.

#### INFRASTRUCTURE MONITORING AND CONTROL



#### ROUTINE MAINTENANCE

Repairs are carried out when signs of deterioration are identified as a result of the monitoring process or by on-line sensors. These indications and any problems identified are processed by the expert system used to support decision-making (MBI- Monitoring and Business Intelligence). This system draws up the maintenance plan on the basis of engineering models developed by the Asset Management department.

#### VEGETATION MANAGEMENT



#### LIVE-LINE WORKING



#### RENEWAL PLAN

The Renewal Plan is based on an analytical method that, starting from consistent, objective technical criteria, identifies and evaluates extraordinary maintenance works ("renewal"), assessing the state of repair and technical status of line components and substation equipment, using a priority clustering approach with the aim of improving the quality of the electricity service and prolonging the useful lives of assets.

Renewal work is associated with the following benefits:

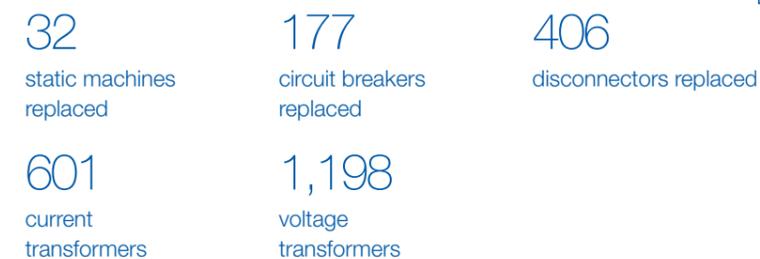
- **Sustainability**, resulting from the use of more eco-friendly components, the replacement of fluid-oil cables and improvements to the reliability of assets;
- **Innovation and digitalisation**, reflecting the adoption of monitoring systems for existing assets using digital and innovative solutions;
- **Resilience**: work on strengthening the NTG in order to increase the resilience of the infrastructure.

The main renewal initiatives ("extraordinary maintenance") are described below:

#### POWER LINES



#### SUBSTATIONS



#### EXTRAORDINARY MAINTENANCE

## Quality of service

Each segment of the electricity system - generation, transmission and distribution - plays a role in ensuring the availability of electricity in Italy, guaranteeing adequate quality standards and keeping the number of outages below pre-set thresholds.

Terna monitors service continuity through various indicators defined by ARERA (Resolution 567/19) and in Terna's Grid Code.

These continuity indicators are significant for the system, as they monitor the frequency and impact of events that have occurred on the electricity grid as a result of faults or due to external factors, such as weather events. In all cases, the period of observation is four years, a period in which there have been no significant changes, testifying to the high quality of service achieved.

### CONTINUITY INDICATORS

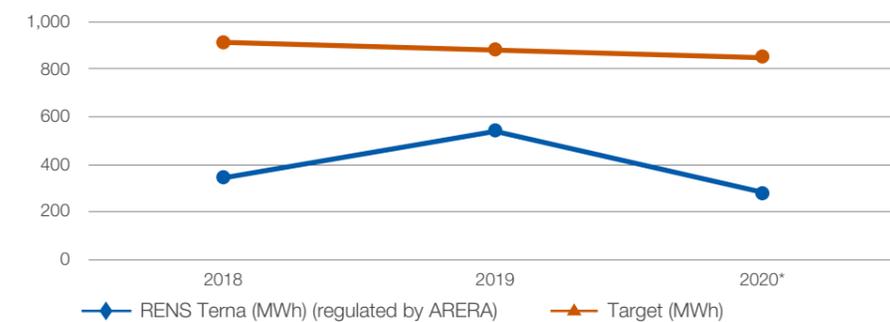
#### RENS\*

**What it measures**  
Energy not supplied following events affecting the relevant grid.\*\*

**How it is calculated**  
The sum of the energy not supplied to users connected to the NTG (following events affecting the relevant grid, as defined in the ARERA regulations governing quality of service).

\* Regulated Energy Not Supplied.  
\*\* The "relevant grid" refers to all of the high-voltage and very high-voltage network.

RENS INDICATOR PERFORMANCE<sup>12</sup> 2018-2020



\* Provisional data

The "NTG RENS" indicator for the period from January to December 2020, based on preliminary data, amounts to approximately 275 MWh (compared with an annual target of approximately 850 MWh set by ARERA).

As regards the **ASA** indicator, availability was 99.99908% in 2020 (provisional data), compared with 99.99982% in the previous year. The operating performance shows that ASA has remained stable at a high level over the years (the higher the indicator, the better the performance). This indicator shows that the energy not supplied following a fault on the owned grid represents a minimal part of the total quantity of energy supplied to users of the grid.

#### ASA\*\*\*

**What it measures**  
Availability of the service provided by the NTG.

**How it is calculated**  
Based on the ratio of the sum of energy not supplied to users connected to the NTG (ENS) and energy fed into the grid.

\*\*\* Average Service Availability.

<sup>12</sup> The targets for 2016–2023 have been set as an average of the 2012–2015 RENS indicator, referred to in ARERA Resolution 653/15/R/eel, with a 3.5% improvement in performance required for each year compared with the previous one. Since 2016, Terna's bonus/penalty mechanism also includes the performance of the grid operated by Terna Rete Italia S.r.l. (merged with Terna S.p.A. on 31 March 2017).

Existing regulations (set out in Resolution 567/2019/R/eel) envisage a series of mechanisms designed to regulate and encourage improvements in the quality of service provided by Terna. The overall economic effects of these mechanisms are accounted for at year end (including RENS). With regard to costs, which are determined periodically on the basis of occurring events, Terna registered a balance of €8.3 million in 2020, compared to €0.6 million in 2019. The overall economic effects of the bonus/penalty mechanisms related to quality of service for 2020, compared with 2019, are shown below.

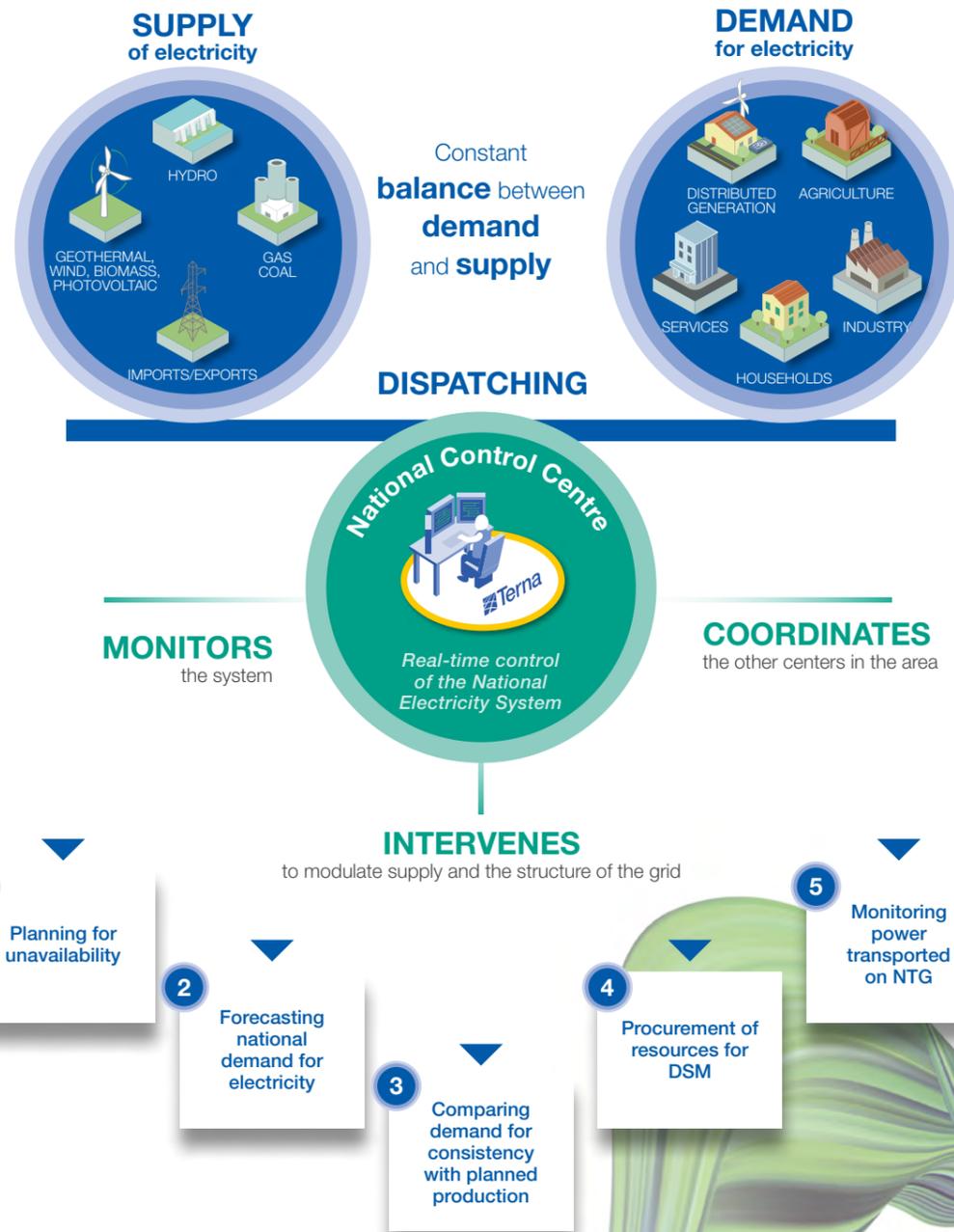
	(€m)		
QUALITY OF SERVICE	2020	2019	CHANGE
RENS bonuses/(penalties)	29.4	20.2	9.2
<b>Revenue</b>	<b>29.4</b>	<b>20.2</b>	<b>9.2</b>
Mitigation and sharing mechanisms	10.4	4.3	6.1
Contributions to the Fund for Exceptional Events	0.8	0.6	0.2
Compensation mechanisms for HV users	0.3	0.6	(0.3)
Contingent assets	(3.2)	(4.9)	1.7
<b>Costs</b>	<b>8.3</b>	<b>0.6</b>	<b>7.7</b>
<b>TOTAL</b>	<b>21.1</b>	<b>19.6</b>	<b>1.5</b>





## Dispatching of electricity

“Dispatching” is the set of activities necessary to ensure that there is a balance between supply and demand in the country’s electricity system. 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.



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 transfers for all the power lines that make up the grid.

This area of operation also includes management of the **Dispatching Services Market (DSM)**, through which the resources for dispatching services are procured.

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.

The following key events in relation to efficient management of the grid took place in 2020.

## KEY EVENTS IN 2020

### Safe management of the electricity system during the Covid-19 health emergency

From mid-March, the National Electricity System registered a sharp load reduction, due to the measures introduced by the Government to contain the pandemic. These extraordinary operating conditions were determined by: a reduction in demand for power at a time of year (spring) when the load is already low and renewable production is high. This made it difficult to regulate voltage, partly due to the lower number of available thermoelectric plants and an uneven load variation across the various regions of Italy. (The reduction was initially very sharp in the northern regions most affected by the epidemic, where demand is highest).

In this situation, the Dispatching unit implemented a series of effective **countermeasures to ensure continuity of the national electricity service at all times**.

### Black start simulations

Black start simulations are needed to check that the electricity system is working properly and to improve its efficiency by ensuring a rapid reboot of the system in the event of a blackout. In 2020, three live tests **were successfully conducted**, followed by the related black starts. Black start testing was carried out in Trentino-Alto Adige in September, in Sicily in October, and in Tuscany and Emilia-Romagna in November.

### Opening up of the DSM to new types of resources

In accordance with ARERA Resolution 300/2017/R/EEL (which set up pilot projects as part of the progressive opening up of the dispatching services market to new types of resources, including storage systems and distributed demand and generation), on 20 November 2019, Terna published a document, to be consulted on with entities interested in making use of the **Fast Reserve** service, in the "Pilot Projects" section of its website. These projects aim to increase the resources available to provide grid services, try out new forms of revenue and test new kinds of fixed-term procurement of resources, partly in view of the future scenarios described in the proposed National Integrated Plan for Energy and Climate (PNIEC). The Fast Reserve service can thus contribute to system security by improving the speed of response to frequency changes, a service up to now provided by traditional generating plants, which provide a slower response.

The auction for provision of this service was held on **10 December 2020**. A high number of bidders participated in the auction: 53 operators and 117 Fast Reserve Units, with allocation of power totalling approximately 249.9 MW.

The TERRE (Trans-European Replacement Reserve Exchange) project began in 2013 as an early implementation of the Electricity Balancing Guidelines regarding the design, development, implementation and management of a **platform to share balancing resources among European countries**.

The project involves 11 countries of which nine are full members (France, the UK, Switzerland, the Czech Republic, Poland, Spain, Portugal, Romania and Italy) and two are observers (Bulgaria and Hungary).

The platform successfully went live on 13 January 2021. Italy is connected to "Region 1", which also includes France, Switzerland, Spain and Portugal.

### TERRE project

On 15 December 2020, all operations relating to the **coupling of the Greek and Italian electricity markets** were successfully completed for the first time.

Market coupling enables integration of electricity markets and ensures energy flows from the lower-price country to the higher-price country. This benefits end-consumers by helping to reduce price differentials with neighbouring markets, optimising the use of transport capacity on the interconnector and improving the overall efficiency of the Day-Ahead Market. In particular, market coupling enables use of interconnection capacity without the need to explicitly acquire physical transmission rights prior to importing or exporting electricity, via an implicit auction mechanism whereby capacity is allocated and priced on the Day-Ahead Market, at the same time as the electricity.

### Coupling with Greece

## ELECTRICITY COST TRENDS

### Electricity prices

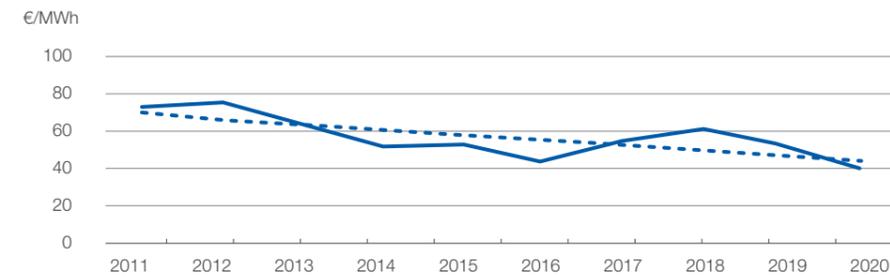
**-26%**  
SNP 2020

The average hourly price on the Italian Power Exchange (IPEX /SNP<sup>13</sup>-Single National Price) for 2020 is €39 per MWh, down 26% compared with 2019, reflecting a sharp reduction in energy demand due to the Covid-19 health emergency and a reduction in commodity prices (especially the price of gas).

The Day Ahead Market, which sets the SNP, is based on supply and demand, although Italy must, by necessity, also take account of its particular geography, with the physical nature of the electricity grid, the widespread nature of its infrastructure and the location of consumption, and the resulting grid congestion. This means that there are a number of “bottlenecks” on the transmission grid, which have made it necessary to identify “market zones” and set transmission limits. Eliminating these bottlenecks is one of Terna’s tasks, above all through development of the grid.

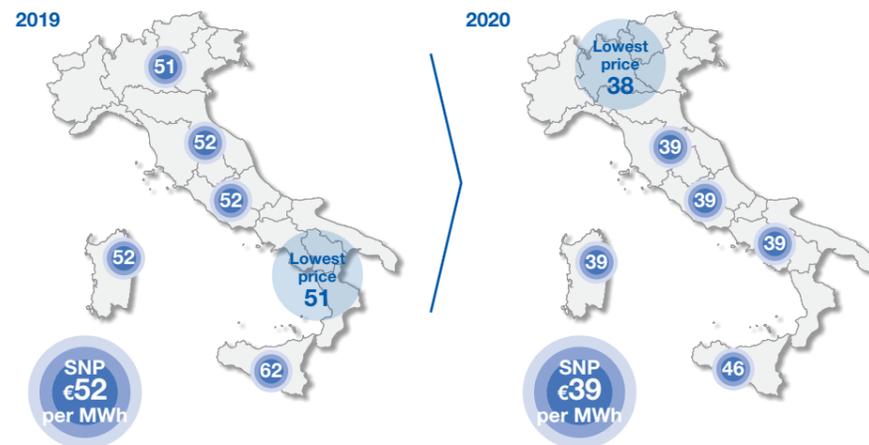
The following chart shows the performance of the SNP from 2011 to 2020, highlighting a declining trend.

### PERFORMANCE OF THE SINGLE NATIONAL PRICE (SNP) FROM 2011



Over the years, prices in the principal zones that make up the Italian electricity market and the Single National Price (SNP) have fallen into line.

### PERFORMANCE OF ITALY'S SNP AND ZONAL PRICES



<sup>13</sup> IPEX: Italian Power Exchange.

### Trade with other countries

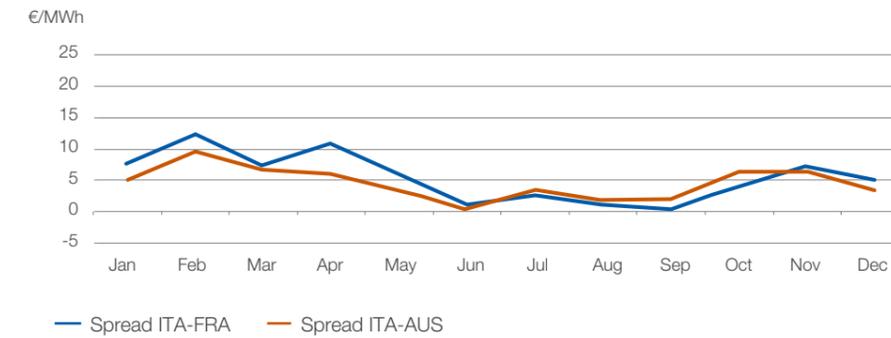
Trade with other countries across the northern border in 2020 resulted in a reduction in net imports, which are down approximately 6 TWh (14%) compared with the previous year.

**-6 TWh**  
net imports

In 2020, the reduction derives from the Covid-19 health emergency, which strongly affected electricity demand.

Prices on the French (PNX) and Austrian (EEX) exchanges fell year on year in line with the reduction in demand and the decline in commodity prices (especially the price of gas).

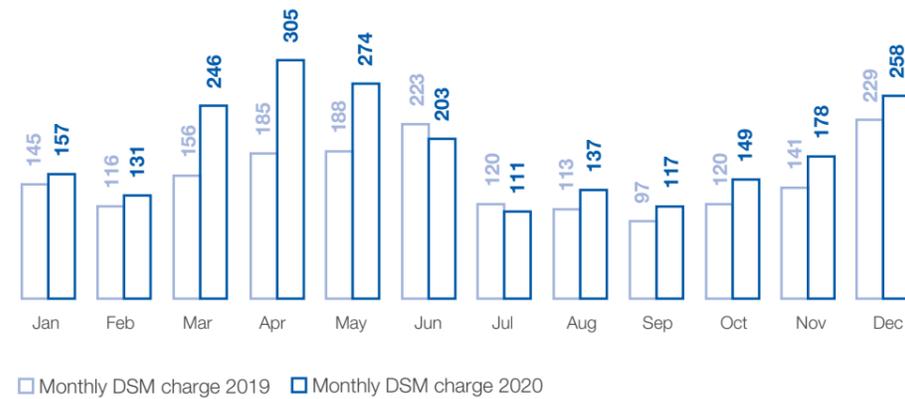
### MONTHLY SPREAD FOR ENERGY PRICES COMPARED WITH FRANCE (PNX) AND GERMANY/AUSTRIA (EEX)



In particular:

- The Powernext (French price) registered an average increase in the cold months of the year during which, traditionally, energy demand in France rises sharply, whilst recording lower average prices in the summer. The average annual price was €32 per MWh (down €7 per MWh or 18% compared with the previous year).
- The Austrian price (EEX) registered the same trend as the French price. The average annual price was €33 per MWh (down €7 per MWh or 17% compared with the previous year).

ANNUAL AND MONTHLY DSM COSTS (€M)



Net DSM charge up in 2020

Dispatching Services Market (DSM)

The net charge for using the DSM was €2,266 million in 2020, up on the same period of the previous year (€1,833 million). The increase is primarily due to an increase in the cost of selection to aid in resolving local technical constraints throughout the year, especially in the period from March to June, as well as to the Covid-19 health emergency and the sharp reduction in demand.

Terna procures dispatching resources on the Dispatching Service Market (DSM) to ensure the security and adequacy of the electricity system.

PERFORMANCE OF REVENUE AND UPLIFT COSTS IN 2020 (€M)



Cost of procuring resources on the Dispatching Services Market (Uplift)

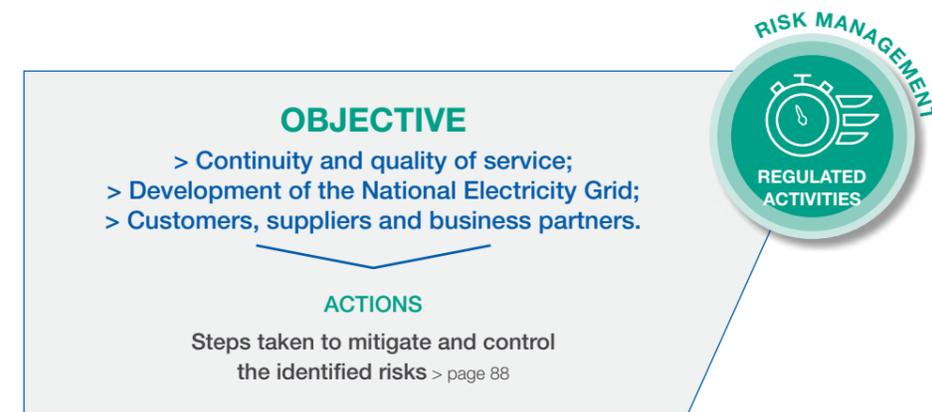
In 2020, the total Uplift was €2,339<sup>14</sup> million, up 22% on the previous year. The rise was primarily due to the increased cost of procuring services on the DSM, relating in particular to the Services component (reflecting the increase in black starts), in terms of both volumes and prices, and a reduction in congestion revenue.

+22% UPLIFT in 2020

Uplift payments are the tool used by the system to recover the net costs deriving from energy-related items from the end user, including the supply of services and energy to cover system imbalances in the DSM, imbalance costs, congestion revenue and the related coverage (CCT, CCC, CCP and DCT<sup>15</sup>) and the cost of the virtual interconnection (the Interconnector).

ARERA Resolution 111/06 (TITLE 4) regulates charges for dispatching services and the connected guarantees. Dispatching charges include the cost of procuring resources on the Dispatching Services Market (known as the Uplift), pursuant to article 44, as amended.

The charge is invoiced pro-rata to dispatching users based on energy withdrawn, to cover the expected accrued monthly cost and any prior differences.



<sup>14</sup> The Uplift includes the virtual interconnection, amounting to approximately €150 million in 2020 (compared with approximately €232 million in 2019).

<sup>15</sup> CCT - Fees for Assignment of Rights of Use of Transmission Capacity;  
 CCC - Contract Covering the Risk of Volatility of the Fee for Assignment of Rights of Use of Transmission Capacity (between zones);  
 CCP - Contract Covering the Risk of Volatility of the Fee for Assignment of Rights of Use of Transmission Capacity (between industrial centres);  
 DCT - Contract Covering the Fee for Assignment of Rights of Use of Transmission Capacity on Foreign Interconnections.

## Operating results of Regulated Activities

The following table shows a breakdown of the results from the Terna Group's Regulated Activities in 2020 and 2019<sup>16</sup>.

	2020	2019	CHANGE
<b>Total regulated revenue</b>	<b>2,148.9</b>	<b>2,055.0</b>	<b>93.9</b>
Tariff revenue	2,047.8	1,973.1	74.7
- Transmission revenue	1,938.5	1,860.2	78.3
- Dispatching, metering and other revenue	109.3	112.9	(3.6)
Other regulated revenue	72.6	54.3	18.3
Revenue from construction services performed under concession in Italy	28.5	27.6	0.9
<b>Total cost of Regulated Activities</b>	<b>428.2</b>	<b>397.5</b>	<b>30.7</b>
Personnel expenses	221.3	213.1	8.2
External resources	149.2	150.6	(1.4)
Other	29.2	6.2	23.0
Cost of construction services performed under concession in Italy	28.5	27.6	0.9
<b>EBITDA from Regulated Activities</b>	<b>1,720.7</b>	<b>1,657.5</b>	<b>63.2</b>

€63.2m  
the increase of  
EBITDA from  
Regulated Activities

**EBITDA from Regulated Activities amounts to €1,720.7 million, an increase of €63.2 million** compared with the previous year. This primarily reflects the tariff increase provided for by ARERA Resolution 568/19 and recognition in the regulated activities segment of part of the revenue relating to the acquisition of Brugg Cables.

**Regulated revenue** is up €93.9 million, primarily due to the impact on transmission revenue (up €78.3 million) following an increase in the RAB, the accrued amount due as a return on digital substation systems (up €29.3 million, reflecting systems entering service through to 2018, in accordance with ARERA Resolution 565/2020) and the release of provisions following settlement of a liability with an operator (up €10.6 million), partly offset by the negative impact of the volume effect.

There was also an increase in revenue in the form of the bonus receivable under the RENS (Regulated Energy Not Supplied) incentive mechanism (up €9.2 million), primarily due to the pro-rata valuation of the 2020 RENS performance (given the estimated overall results expected in the 2020-2023 regulatory period) and definition of the RENS performance for 2019 (as per ARERA Resolution 540/2020), as well as recognition of revenue resulting from the higher value of the net assets acquired following the acquisition of Brugg Cables compared with the consideration paid (the gain resulting from a bargain purchase, totalling €22.6 million), offset by the impact of greater revenue in the form of insurance proceeds (down €8.4 million) and other non-recurring items recognised in 2019.

The **cost of Regulated Activities** is up €30.7 million, primarily reflecting the impact on personnel expenses (up €8.2 million) of provisions relating to bonuses, higher costs relating to quality of service (up €7.7 million, primarily due to the impact of outages at the end of 2020) and the adjustment of the Group's provisions for taxation recognised in 2019 (up approximately €15.1 million), linked to prior provisions made in relation to Land Registry Circular 6/2012.

<sup>16</sup> The Terna Group's operating segments are consistent with the internal control system adopted by the Parent Company, in line with the 2021-2025 Industrial Plan.

# Non-regulated Activities

## Energy market solutions

Using our distinctive competences, we develop value added services as an Energy Solutions Provider for businesses. Our Non-regulated Activities are designed to support the ecological transition, in keeping with our core business.

The main areas of business in this segment are:

- **INDUSTRIAL**
  - TRANSFORMERS – TAMINI GROUP
  - TERRESTRIAL CABLES – BRUGG GROUP
- **CONNECTIVITY**
- **ENERGY SOLUTIONS**
- **PRIVATE INTERCONNECTORS PURSUANT TO LAW 99/2009**



## Acquisition of Brugg Cables

On 29 February 2020, in implementation of the preliminary agreement signed on 20 December 2019, Terna acquired a 90% interest in Brugg Kabel AG (Brugg Group), one of the leading European operators in the terrestrial cable sector, specialising in the design, development, construction, installation and maintenance of electrical cables of all voltages and accessories for high-voltage cables.

The acquisition, which Terna financed with its own funds, was finalised through the subsidiary Terna Energy Solutions S.r.l.. The preliminary amount paid for acquisition of the equity interest is CHF25.8 million.

The acquisition of Brugg Kabel provides Terna with a centre of excellence for research, development and testing in one of the core technologies for the TSO, such as terrestrial cable technology.

In particular, the transaction gives Terna the opportunity to rapidly integrate core competencies, by acquiring a company featuring:

- specialisation in 150kV cables with standards in line with those Terna requires;
- HV cable production capacity in line with Terna S.p.A.'s requirements;
- expertise consolidated over 120 years, which has been widely verified by Terna;
- significant potential synergies with the Group's Non-regulated Activities.

It should be noted that Terna's Development Plan, in line with the objectives of greater sustainability and resilience for the NTG, envisages doubling the number of terrestrial cables over the next 10 years. Consequently, the development of distinctive expertise in the underground cable sector to support cable design and construction activities, as well as O&M, may well have a key role to play in Terna's future.

From an organisational point of view, Samuel Ansorge has been confirmed in the role of COO, while Agostino Scornajenchi has been appointed Executive Chairman.



## INDUSTRIAL

### TRANSFORMERS – TAMINI GROUP

Tamini operates in the electromechanical sector and is a leader in the design, production, commercialisation and repair of power transformers for electricity transmission and distribution grids, of industrial transformers for the steel and metals industry and of special transformers for converters used in electrochemical production.

With over a hundred years of experience, Tamini has a well-established name in Italy and overseas, thanks to its technological and engineering capabilities, combined with the degree of customisation and production flexibility it can offer.

Tamini has five production plants in northern Italy - at Legnano, Ospitaletto, Valdarno, Novara and Rodengo - and two trading companies in the United States and India. The Rodengo plant specialises in services, whilst the Novara production plant continues to manufacture coils, operating as a service centre for all the production sites that manufacture for both the Power and Industrial sectors.

## The Tamini Group in 2020

Tamini received orders for transformers worth approximately €108 million in 2020, down 11% on the previous year.

Orders in the Power sector amounted to approximately €66 million, a reduction of 15%, primarily due to delays in the award of major contracts in Italy and Europe until 2021. At the beginning of 2021, Tamini won an important framework contract to produce large transformers in the period 2021-23, worth over €40 million.

Orders in the Industrial sector amounted to approximately €41 million, in line with 2019, with business picking up significantly in the second half of the year.

Orders for Services in 2020 amounted to approximately €10 million, a decline of 24% compared with 2019. Services suffered most in 2020 due to the restrictions introduced in response to the Covid-19 pandemic.

The value of factory order books is, in any event, in line with the end of 2019 at approximately €75 million.

[Order book](#)

Revenue for 2020 is down compared with the previous year (a decline of 5.7%), reflecting the fact that production at plants slowed in March and April due to Covid-19. Six 290 MVA step-up transformers for compensators and a Phase Shifting Transformer (PST) are currently being produced, whilst work for industrial customers includes a furnace transformer that uses smart technology, designed and produced as a result of research carried out by Tamini.

[Results for 2020](#)

Strong growth in the volume of vegetable oil transformers for the Power sector continued in 2020. Seven 250 MVA and 400 MVA vegetable oil transformers, built at the Legnano plant, were produced and successfully tested. In addition, Tamini also produced and tested two vegetable oil transformers for industrial use.

[Vegetable oil transformers](#)

## TERRESTRIAL CABLES – BRUGG GROUP

The Brugg group operates in the terrestrial cable sector, specialising in the design, development, construction, installation and maintenance of electrical cables of all voltages and accessories for high-voltage cables.

Orders acquired in 2020 amounted to approximately CHF150 million (approximately €140 million), marking a significant increase with respect to 2019 (CHF127 million, equal to approximately €119 million). The High Voltage System segment made a major contribution, primarily due to contracts awarded by the Swiss company, Brugg Kabel AG, with the remaining order obtained from overseas subsidiaries. The Low Medium Voltage segment also made a significant contribution.



**CONNECTIVITY**

**FIBRE**

*OPEN FIBER PROJECT*

The plan to make available long-distance fibre infrastructure (regional rings) for Open Fiber S.p.A. was substantially completed in 2020. With respect to the terms of the related agreement, which call for a total of 21,000 km of long-distance fibre, at 31 December 2020 a total of approximately 21,157 km has been delivered. Following the halt to work at a number of sites due to the Covid-19 emergency and the planned shutdown of the electricity service to enable the installation of certain sections, the delivery of further sections amounting to a total of around 1,013 km was rescheduled for 2021.

Customers can acquire new infrastructure, which performs better than standard underground cables in terms of both reliability (much lower number of faults per km per year) and quality (low attenuation), with significant savings in terms of length compared with terrestrial connections (> 20% over long distances).

**HOUSING SERVICES**

*FWA PYLONS*

By relying on Terna infrastructure (NTG pylons) and taking advantage of its nationwide reach, Open Fiber and Eolo will be able to achieve Fixed Wireless Access coverage in rural areas. The plan is to install antennae on Terna's pylons to cover remote areas with Open Fiber (a contract for up to 500 pylons in the three-year period 2020-2022) and with Eolo (for up to a further 500 pylons in the three-year period 2020-2022). In the future, the design of software-defined radio solutions could prove to be a strategic enabler in rolling out new technologies, above all 5G, in geographies where there is a lack of infrastructure.

Survey, design and authorisation activities began in 2020 under the agreements with Open Fiber and Eolo, having been in part delayed until 2021 due to the Covid-19 emergency.



**ENERGY SOLUTIONS**



**SMART GRIDS**

On 14 September 2020, Terna, FCA and Engie Eps presented their pilot Vehicle-to-Grid (V2G) project at FCA's Mirafiori complex in Turin. Joint trials of sustainable mobility technologies and services were launched following the signature, on 25 March 2020, of a contract between the investee, Avvenia, and FCA regarding the identification of possible areas of efficiency recovery, white certificate management and improved sustainability performance, to be partly achieved through the design and installation of monitoring plans.

The preliminary design for a roof-mounted photovoltaic plant providing capacity of around 9 MWp, to serve the car park at the Mirafiori production plant, was carried out. In addition to cutting CO<sub>2</sub> emissions by approximately 115 million tonnes over its life, the plant will also be equipped with fibre infrastructure that will enable electric vehicles to provide grid services, whilst also allowing, thanks to IoT applications, the customer to optimise management of its fleet of electric vehicles from a technical and financial viewpoint. The procedure for FCA's award of the contract to install the plant is being drawn up.

In relation to the energy efficiency initiatives covered by the Memorandum of Understanding, signed on 30 September 2019, a number of proposals for boosting efficiency and enabling flexibility services have been put forward. A response to the data request made in order to ensure that the initiatives to be carried out are of the right scale is awaited, in part due to delays caused by the current health emergency.

Avvenia is the Terna Group company that plays an active role regarding energy efficiency issues by providing specific technical support, in the identification of possible areas of efficiency recovery, and in extracting value from services and any ad hoc initiatives.

This memorandum of understanding regards collaboration between the General Custody of the Sacred Convent of Saint Francis of the Friars Minor Conventual, with the aim of implementing sustainability initiatives meeting shared needs.

On 18 December 2020, work on the projects aimed at improving energy efficiency and cutting CO<sub>2</sub> emissions at the convent, as envisaged in the contract signed in April 2020, was completed. This involved conducting a feasibility study, preparing the preliminary and final designs and the working drawings, carrying out all the project management activities and the supply of 2 working recharging stations, a 50 kW gas-fuelled cogeneration plant and an absorption refrigeration unit. The system will be powered up in 2021, following the customer's receipt of the necessary permit. The plant will avoid 35 tonnes of CO<sub>2</sub> emissions a year and save the Convent approximately €45,000 per annum.

Avvenia took an active role in installation of the DIANA platform, which plays a key role in enabling the assessment designed to detect any malfunctions and, therefore, areas for improvement, and provide quantitative analysis of the performance of the Convent's electricity consumption and heating needs.

The revamp of the units that make up the Ferrara Focomorto 2 photovoltaic plant was begun and completed in 2020. The plant in question, which was constantly underperforming due to the age and poor state of most of the panels, is part of the portfolio of plants owned by EF Solare, for which Terna already provides Operation & Maintenance services. The project involved the replacement (and rewiring where necessary) of around 3 MW of installed capacity. Revamping work for the same customer, EF Solare, under an EPC contract for the supply and replacement of inverters at a number of plants, with a total capacity of approximately 16 MW, also began.

>>

*MEMORANDUM OF UNDERSTANDING BETWEEN TERNA AND FCA*

*MEMORANDUM OF UNDERSTANDING BETWEEN TERNA AND ANSALDO ENERGIA*

*SACRED CONVENT OF SAINT FRANCIS*

*REVAMP OF PHOTOVOLTAIC PLANTS*

SMART ISLANDS

**“GIANNUTRI PROJECT”**

The Giannutri project was handed over to the island's electricity operator on 21 February 2020. Once it enters service, the new arrangement will contribute to meeting the island's energy needs. During the middle of the day (when loads are low and the sun is at its hottest), the island's grid will be able to function without the need for traditional generation, allowing Giannutri to become 100% renewable.

**PANTELLERIA**

An agreement between Terna and the island's Electricity Operator, S.Med.E. Pantelleria, regarding a contract for the design and support during the application for consents for photovoltaic plants (with capacities of up to 5 MW) and electrochemical storage systems was signed on 27 April 2020. Once the related consents have been obtained, Terna may be commissioned to build the above plants.

Following the signature of the contract, a feasibility study was conducted with regard to the construction of a ground-based photovoltaic plant with capacity of approximately 2.2 MWp. The plant will be located in the island's industrial area and will help to reduce the island's dependence on diesel for its power by generating around 3.5 GWh per year.

**GIGLIO**

In accordance with the guidelines set out in the memorandum of understanding signed in 2015 by Terna Plus with the Municipality of the Island of Giglio, the Tuscan Archipelago National Park Authority and SIE, the concessionaire for the production and distribution of electricity on the island, all the necessary preparatory activities for the development of renewable power generation were carried out. Work continued on development of an innovative photovoltaic plant at the island's landfill site, which is necessary to achieve the challenging objectives set by the Ministerial Decree of 14 February 2017, in the relation to meeting the energy needs of smaller islands.

On 28 October 2020, the Ministry for Economic Development published a call for tenders for **“Innovative integrated projects for non-interconnected smaller islands”**. This is in implementation of the Ministerial Decree of 14 February 2017, which permits the use of the total amount of €10 million allocated to fund government grants for Smart projects that contribute to achievement of the targets for progressive development of the islands' ability to meet their energy needs from renewable sources.

Following publication of the call, work began on preparing the documentation necessary in order to take part in the tender process for Innovative Projects for Giglio and Pantelleria. Studies looking at the development of renewable energy production that will meet the requirements for participation in the project (at least 20% of annual consumption to be met by renewable production) are currently underway.

**HIGH VOLTAGE**

Changes to the electricity substation connected with the Mercure production plant (the voltage level has been modified from 220 kV to 150 kV) were completed in 2020. The work was carried out under an EPC contract with the customer, San Marco Bioenergie (Mercure S.r.l.).

Under the Framework Agreement entered into with RFI in December 2018, relating to the “Design, supply, installation, certification and entry into service of metering devices”, in 2020, the customer issued executive contracts for 55 devices that, once suitably finalised, enabled the Terna Group to complete work on the related designs (24 of which have been formally approved by RFI, with 31 awaiting approval) and begin planning for their installation.

The customer has also made a formal commitment with an attached request to bring forward the procurement of a further 91 devices. Terna has initiated all the necessary steps in the procurement process, completing most of the process by the end of the year.

The installation of 5 devices was completed in 2020.

**Other projects**

**FTV control and monitoring centre - Myleaf for Non-Regulated Activities**

This project regards implementation of the platform for gathering and processing data from the assets managed by Terna as part of our Energy Solutions, optimising performance and maintenance processes.

The MyLEaf platform, available for remote use by all the personnel involved in the plant O&M process from December 2020, is the only system in operation for monitoring and operating FTV plants by Terna.

Testing and debugging of all the functions of the MyLEaf platform was carried out in 2020.

The system will permit constant remote monitoring of the status of plants, with diagnostics and synthetic KPIs. It will provide the possibility to carry out optimised planning of maintenance interventions and implement purpose-built algorithms for the predictive maintenance of assets, including an advanced reporting system. In addition to ensuring contract compliance, the system will optimise performance and maintenance processes.

*ELECTRICITY SUBSTATIONS*

*FRAMEWORK AGREEMENT WITH RFI*



## PRIVATE INTERCONNECTORS PURSUANT TO LAW 99/2009

In order to develop a single electricity market by expanding cross-border interconnection capacity, EU legislation has set out guidelines for the creation of interconnections with other countries by entities other than grid operators.

The European guidelines have been introduced into Italian legislation by [Law 99/2009](#), which assigned Terna responsibility for selecting undertakings (the "selected undertakings"), on the basis of public tenders, willing to finance specific interconnectors in exchange for the benefits resulting from a decree granting a third-party access exemption with regard to the transmission capacity provided by the new infrastructure.

The law states that these private backers, in exchange for a commitment to finance such projects, are required to commission Terna to build and operate the interconnectors.

The cross-border interconnectors with Montenegro (completed in December 2019), France (at an advanced stage of completion), Austria (preliminary work has begun), Switzerland and Slovenia (currently awaiting the necessary consents) are part of this overall project.

### ITALY-MONTENEGRO INTERCONNECTOR PROJECT

On 28 December 2019, the first module of the 500kV direct current interconnector between the substations of Villanova (Italy) and Lastva (Montenegro) entered commercial operation. The line, part in submarine cable and part in terrestrial cable, extends for approximately 445 km and provides interconnection capacity of 600 MW between the two countries, including 200 MW available under the exemption to the private backers pursuant to Law 99/09.

The private portion of the project is owned by Monita Interconnector S.r.l., which the Terna Group sold to private backers on 17 December 2019. From the date of entry into commercial operation of the asset until the end of the exemption period, Terna will manage routine and special maintenance activities and operate the interconnector for an annual fee to be paid by Monita.

### ITALY-FRANCE INTERCONNECTOR PROJECT

In implementation of Law 99/2009, the Terna Group has continued work on construction of the private line (corresponding with the Italian portion of one of the two direct current lines forming the interconnector) on behalf of Piemonte Savoia S.r.l. (Pi.Sa.), which was transferred to the private backers selected under the same law on 4 July 2017, following the issue of the exemption decree for 350 MW of capacity.

With regard to work in progress, out of a total of approximately 95 km of cable for the Italian end of the interconnection, at December 2020, the laying of cable for the entire section running along the A32 motorway and through the Frejus motorway tunnel had been completed. The remaining work on completion of the power line, including the laying of fibre cable and the installation of monitoring systems, will take until mid-June 2021. The civil works for the Piosasco converter station and assembly of all the electromechanical equipment had been completed by December 2020. Preparation and testing of the protection system and checks of the functioning of the converter are, on the other hand, still in progress.

Given the delays to work on both the Italian and French sides in 2020, as a result of the Covid-19 emergency, the interconnector's entry into service is currently expected to take place in the fourth quarter of 2021.

The Italy-Austria interconnector (the Reschenpass project) involves construction of a new 220kV AC interconnection between the Glorenza (Italy) and Nauders (Austria) substations. This will consist of 28 km of underground cable and the necessary upgrade of the domestic grid. The project will increase cross-border interconnection capacity between Italy and Austria by around 300 MW, practically doubling the currently available capacity. The cost of the project is expected to be approximately €85 million.

On 16 March 2020, the exemption process formally began with Resia submitting an exemption application to the Ministry for Economic Development. The Ministry for Economic Development subsequently submitted the exemption application to ARERA to enable the regulator to issue its opinion. On 6 May 2020, Resia submitted the application for exemption, translated into English and German, to the Austrian regulator, E-Control. On 17 November 2020, ARERA granted its approval for the issue of the exemption decree to Resia.

On 16 July 2018, the Terna Group had set up the special purpose vehicle, Resia Interconnector S.r.l., to prepare and submit, on behalf of the private backers, a request for exemption from the right of third parties to access capacity of 150 MW, for a period of 10 years, and to build the interconnector.

On 18 April 2019, Terna received clearance for the laying and operation of the 220kV cable for the Italian section between the Glorenza substation and Passo Resia, which, together with enlargement of the Glorenza substation and the related works, comprises the Italy-Austria interconnector envisaged pursuant to Law 99/2009. Similarly, the Austrian grid operator has obtained the consents needed for its part of the project.

In addition, on 1 October 2019, the Ministry for Economic Development issued the decree transferring the consents for the interconnector to Resia.

The project involves the development of new transmission lines between Italy and Switzerland, with the aim of increasing interconnection capacity between the two countries.

The creation of a direct current line is planned, partly in undersea cable, between the substations of Salgareda (IT) and Divača/Beričevno (SL), together with work on upgrading the domestic grids in Italy and in Slovenia. The project is currently awaiting the necessary consents on the Italian side. The expected increase in cross-border capacity of approximately 1 GW will raise the interconnection capacity to more than double the current level.

### PROGETTO INTERCONNECTOR ITALIA - AUSTRIA

### ITALY-SWITZERLAND INTERCONNECTOR PROJECT

### ITALY-SLOVENIA INTERCONNECTOR PROJECT

## Operating results of Non-regulated Activities

A breakdown of the Terna Group's results from its Non-regulated Activities for 2020 and 2019 is shown below<sup>17</sup>.

	2020	2019	CHANGE
(€m)			
<b>Revenue from Non-regulated activities</b>	<b>341.0</b>	<b>211.7</b>	<b>129.3</b>
Industrial	253.8	110.2	143.6
- Brugg	149.9	-	149.9
- Tamini	103.9	110.2	(6.3)
Connectivity	33.4	39.9	(6.5)
Energy Solutions	39.1	41.2	(2.1)
- High Voltage	28.8	29.5	(0.7)
- Smart Grids	8.7	10.5	(1.8)
- Digital Services	1.6	1.2	0.4
Private interconnectors	11.4	18.4	(7.0)
Other	3.3	2.0	1.3
<b>Cost of Non-regulated Activities</b>	<b>244.1</b>	<b>141.7</b>	<b>102.4</b>
<b>EBITDA from Non-regulated Activities</b>	<b>96.9</b>	<b>70.0</b>	<b>26.9</b>

**EBITDA from Non-regulated Activities amounts to €96.9 million for 2020, an increase of €26.9 million** compared with the previous year. This primarily reflects recognition of the segment's share of the revenue resulting from the higher value of the net assets acquired following the acquisition of Brugg Cables compared with the consideration paid (the gain resulting from a bargain purchase, totalling €48.1 million) and the reduced contribution from private interconnector project pursuant to Law 99/2009 (down €6.8 million), following the entry into service of the Italy-Montenegro interconnector at the end of 2019 and the different rate of progress on the Italy-France interconnector. The result also reflects a reduction in the contribution from services for third parties (down €8.5 million), due primarily to the postponement of many activities relating to Connectivity until 2021 and the lower contribution from Tamini (down €4.5 million), linked to the impact of the Covid-19 pandemic on its operations.

<sup>17</sup> The Terna Group's operating segments are consistent with the internal control system adopted by the Parent Company, in line with the 2021-2025 Industrial Plan.

## International Activities

International markets offer opportunities to leverage the expertise developed in Italy in our role as a TSO, including the integration of renewables and development of electricity grids. For many years, our Group has offered technical support to TSOs and energy companies in developing countries, also in relation to multilateral projects and programmes.

Overseas investment focuses on countries with stable political and regulatory regimes and a need to develop their electricity infrastructure, with a view to transferring the expertise acquired in our Italian operations, on occasion in collaboration with international energy companies.

International markets offer opportunities in terms of the development of transmission infrastructure, driven by growing demand for electricity and a regulatory system that offers access to external operators.

Terna's strategic priorities with regard to its overseas operations include:

- **Europe:** to strengthen our presence, with the aim of enabling Italy to become an energy hub serving the Mediterranean area.
- **Latin America:** to consolidate our position in countries of interest by acquiring further concessions, developing projects already in progress in Brazil and Peru and operating the lines that have entered service in Brazil and Uruguay; to integrate our value proposition with services for third parties falling within the scope of both regulated and non-regulated activities.
- **Other geographical areas:** to develop services supporting the ecological transition, and that involve a low level of risk and absorb a limited amount of capital.

**Overseas initiatives** of interest to the Terna Group are:

- **Development and operation of 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 managing overseas projects and in infrastructure management.

## Initiatives in progress in South America

In common with the rest of the world, Latin America witnessed a gradual worsening of the situation brought about by Covid-19 during 2020 and, at 31 December 2020, a number of countries are still in the throes of a full-blown health emergency.

Progress on projects in Brazil and Peru has been affected by the emergency. In Peru, after suspending work in response to measures introduced by the government, onsite activity restarted in line with local regulations and the best practices applied by the Terna Group. In Brazil, both operation & maintenance and construction activities have restarted thanks to the implementation of health protocols specifically designed for the kind of work carried out.



URUGUAY

Activities connected with the line that has entered service continued in 2020.



BRAZIL

Operation and maintenance of the **Santa Maria Transmissora de Energia (SMTE)** power line in the State of Rio Grande do Sul and the **Santa Lucia Transmissora de Energia (SLTE)** power line in the State of Mato Grosso continued in 2020.

In addition, onsite activity began and engineering work and the acquisition of rights and easements for the **SPE Transmissora de energia Linha Verde II S.A.** project began. This is the first of the two concessions covered by the preliminary agreement with Construtora Quebec, regarding the construction of a 150-km 500kV power line in the State of Minas Gerais.

Acquisition of the second concession covered by the above agreement was completed in August. This regards the **SPE Transmissora de Energia Linha Verde I S.A.** project, involving the construction of a 150-km long 500kV power line dubbed the "Governador Valadares-Mutum" in the State of Minas Gerais. The consents process and related design engineering work is underway.



PERU

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

Construction, which was temporarily interrupted in March by the lockdown imposed by the government in response to the Covid-19 pandemic, resumed in July 2020.

In the meantime, the procurement of transmission line materials and the related civil engineering works have been completed and the project is expected to reach completion in the first half of 2021.

## Operating results of International Activities

A breakdown of the Terna Group's results from International Activities for 2020 and 2019 is shown below<sup>18</sup>.

It should be noted that "Revenue from International Activities" directly includes the margin earned on work in progress on overseas concessions. Operating costs and maintenance expenses associated with infrastructure now in operation, together with other operating costs, are classified in the "Cost of International Activities".

	(€m)		
	2020	2019	CHANGE
Revenue from International Activities	23.6	28.4	(4.8)
Cost of International Activities	10.8	14.7	(3.9)
<b>EBITDA from International Activities</b>	<b>12.8</b>	<b>13.7</b>	<b>(0.9)</b>

**EBITDA from International Activities amounts to €12.8 million for 2020**, marking a reduction of €0.9 million compared with the previous year. The reduced contribution from activities carried out under concession in Brazil, due to the recognition, in 2019, of penalties applied to suppliers, after additional provisions for risks and charges and a deterioration in the exchange rate between the Brazilian real and the euro, was broadly offset by the expansion of operations linked to development of the new lines in Minas Gerais and a reduction in the costs incurred by central departments in order to support overseas initiatives, linked above all to the postponement of certain activities.



<sup>18</sup> The Terna Group's operating segments are consistent with the internal control system adopted by the Parent Company, in line with the 2021-2025 Industrial Plan.

# Financial resources

Our financial management is based on an approach that aims to maximise efficiency and achieve and maintain a solid financial structure, whilst adopting a highly prudent stance towards mitigation of the potential risks.

The key aspects of the resulting financial strategy are:

- **diversification** of the sources of financing, raising funds on both the capital markets and in the form of borrowings from major banks and supranational financial institutions;
- a **balance** between short and medium-term instruments, in keeping with the composition of assets;
- the **proactive management** of debt in order to take advantage of the opportunities offered by the capital markets;
- a commitment to maintaining **high credit ratings**, based on a strong financial position;
- **active management of the financial risks** to which the Company is exposed, as set out in more detail in the section, "Risk management".

## Sustainable finance

Fully in line with Terna's strategy, which aims to combine investment and sustainability to drive growth and value creation, it is Terna's ambition to play a leading role in the sustainable finance market. This strategy was confirmed in 2020: on **17 July 2020, Terna launched a green bond issue for institutional investors**, with a nominal value of €500 million. The issue, which forms part of Terna's €8 billion Euro Medium Term Notes (EMTN) Programme, was very popular with investors, with a request of more than €2 billion, the bonds being four times oversubscribed, and was notable for the high quality and wide geographical diversification of investors. The green bond has a term of twelve years and will mature on 24 July 2032. The issue was priced at 99.623%, with a spread of 90 basis points with respect to the midswap rate. The bond pays a coupon of 0.75% and an effective coupon of 0.78%.

Terna has now issued green bonds worth €2 billion: in July 2018, Terna successfully issued its first green bond worth €750 million, whilst two issues with a total value of €750 million were launched in 2019.

These green issues are to be used to finance or refinance "Eligible Green Projects". These are projects producing environmental benefits that meet certain criteria (the use of the issue proceeds, the process of selecting and assessing projects, management of the issue proceeds and reporting) listed in the "Green Bond Framework", published by Terna in compliance with the "Green Bond Principles 2018" drawn up by the ICMA (International Capital Market Association).

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Specifically, the net proceeds from the issues will be used to finance:

- projects that aim to increase renewable energy production – for example, infrastructure enabling renewable energy plants to be connected to the national grid or that allow for a larger volume of renewable energy to be injected into the grid;
- projects designed to cut carbon emissions by reducing grid losses – for example, infrastructure designed to boost the efficiency of the electricity transmission grid;
- projects that aim to reduce land use and protect biodiversity.

On **30 September 2020**, Terna's three green bond issues were admitted to listing in **Borsa Italiana's ExtraMOT PRO segment**, created to offer institutional and retail investors the opportunity of investing their capital where the proceeds will be applied to environmental and social projects.

Terna also has access to two **ESG-linked Revolving Credit Facilities**: these facilities, amounting to €2.65 billion, apply a mechanism based on a series of bonuses and penalties linked to the achievement of specific ESG objectives.

On **28 October** and **6 and 3 August 2020**, Terna also agreed three **bilateral ESG-linked Term Loans**, amounting to €200 million, €100 million and €200 million, respectively, and having terms of 2, 3 and 2 years. The interest rates for both loans are indexed to EURIBOR, with a margin linked to Terna's performance with respect to specific environmental, social and governance ("ESG") indices.

On **6 August 2020**, the **ESG-linked share buyback programme** to service the Performance Share Plan 2020-2023 was completed. Under the programme, Terna has acquired 1,525,900 own shares (equal to 0.076% of its share capital) at a total cost of approximately €9.5 million. The programme includes a mechanism based on bonuses and penalties linked to the Company's achievement of specific environmental, social and governance objectives. This mechanism will enable the Company to support reforestation projects and the creation of green spaces around Italy, consolidating the key role played by sustainability in driving the creation of value for all our stakeholders.

From **January 2021**, Terna is the first Italian electric utility to join the **Nasdaq Sustainable Bond Network**, the sustainable finance platform operated by Nasdaq that brings together investors, issuers, investment banks and specialist organisations. Terna's leadership in sustainable finance is widely acknowledged by the market which, since 2018, has given a warm welcome to the green bonds issued by Italy's national grid operator.

In addition, from **February 2020**, Terna forms part of the **CFO Taskforce for the SDGs**, an initiative launched by the UN Global Compact to develop sustainable finance. Through the implementation of standards and guidelines, the Taskforce aims to align corporate finance and investment with the sustainable development goals promoted by the United Nations.

Further confirmation of our commitment to playing an active role in developing sustainable finance, Terna is taking part in the **Corporate Forum for Sustainable Finance**, a network of major European businesses committed to the development of sustainable finance as a means to promote a more sustainable and responsible society.

Key events relating to finance during 2020 are described below:

- on **18 September 2020**, Terna S.p.A. successfully launched a €500 million **bond issue** for institutional investors. The issue, which was popular with investors, being three times oversubscribed, forms part of Terna's €8,000,000,000 Euro Medium Term Notes (EMTN) Programme. The bonds have a term of ten years and will mature on 25 September 2030, paying a coupon of 0.375%. At the time of the issue, this was the lowest coupon ever payable on a bond with the same term to maturity issued by an Italian corporate issuer. The bonds were issued at a price of 99.502, with a spread of 65 basis points with respect to the midswap rate and an indicative spread approximately 50 basis points below Italian treasury bills (BTPs) with the same term. The effective cost of the issue to Terna is 0.426%;
- on **9 June 2020**, Terna renewed its €8,000,000,000 Euro Medium Term Notes (EMTN) Programme. The programme has been assigned ratings of "BBB+/A-2" by S&P, "(P) Baa2 /(P)P-2" by Moody's, "BBB+" by Fitch and "A-/S-1" by Scope.

Debt is described in detail in the section, "The Terna Group's financial review".



Terna adopts a dynamic approach to managing the various forms of financial risk, including market risk (interest rate, exchange rate and inflation risk), liquidity risk and credit risk. This approach includes constant monitoring of the financial markets, in order to carry out planned hedging operations under favourable market conditions, but also to take advantage of opportunities to improve existing hedges, when changes in market conditions make previous hedges unsuitable or excessively costly. Further details are provided in the notes to the consolidated financial statements and to the Parent Company's separate financial statements.

[Market, liquidity and credit risk](#)

## Ratings

	SHORT-TERM	MEDIUM/LONG-TERM	OUTLOOK
<b>Terna S.p.A.</b>			
Standard & Poor's	A-2	BBB+	Stable
Moody's	Prime-2	Baa2	Stable
Fitch*	F2	BBB+	Stable
Scope	S-1	A-	Stable
<b>Italian state</b>			
Standard & Poor's	A-2	BBB	Stable
Moody's	Prime-3	Baa3	Stable
Fitch	F3	BBB-	Stable
Scope	S-2	BBB+	Negative

\* Rating valid until 31 December 2020.

On 27 October 2020, Standard & Poor's again confirmed Terna S.p.A. long-term rating as "BBB+" and, following the change to the outlook for the rating of Italian government bonds, revised Terna's outlook, upgrading it from negative to stable.

In November 2020, following the presentation of the 2021-2025 Industrial Plan, which targets a significant acceleration in investment, the rating agencies, Standard & Poor's (S&P), Moody's, Fitch Ratings (Fitch) and Scope Rating (Scope) confirmed their long-term ratings of the issue as "BBB+", "Baa2", "BBB+" and "A-", respectively, acknowledging Terna central role in driving and enabling the ecological transition.

It should be noted that, in December 2020, Terna requested Fitch Ratings to withdraw all its ratings of the Group and to cease rating the Group in the future. The decision, effective as of 1 January 2021, is part of the Group's long-term strategy designed to rationalise as much as possible the resources allocated to this activity in order to make it more efficient.

The Company's long-term ratings are all one notch above those assigned to the Italian state.



“ Before the pandemic the teams in our **control rooms** switched places every day. Our colleagues changed daily to ensure consistency in operations and relationships. Now teams are permanent, so as to reduce unnecessary contacts, and alternate between the various locations. For this reason, **the handover from one team to another takes place remotely**: a solution that initially raised concerns, but that has taught us how to use new digital tools, and to share our work thanks to technology. It’s a shame that we can no longer meet up with our colleagues, but we have come to feel at home with this new way of working. ”

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Terna S.p.A.	161

# 4

#TernaPeople #Covid\_19 #DispatchingOfElectricity

Performance

# The Terna Group's financial review for 2020

## Introduction

The Annual Report for 2020 has been prepared in accordance with the requirements of art. 154-ter of Legislative Decree 58/98 introduced by Legislative Decree 195 of 6 November 2007 (the "Transparency Decree"), as amended by Legislative Decree 27 of 27 January 2010.

As required by Legislative Decree 38 of 28 February 2005 and EEC Regulation 1606/2002, the financial statements of the parent company Terna S.p.A. and the consolidated financial statements of the Terna Group for the year ended 31 December 2020 were prepared in compliance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board and endorsed by the European Commission (hereinafter "EU-IFRS").

In compliance with the provisions of art. 2364 of the Italian Civil Code and art. 9.2 of the Company's Articles of Association, the Board of Directors has decided to call an Annual General Meeting of shareholders within 180 days of the end of the annual reporting period, given that Terna S.p.A. is a company required to prepare consolidated financial statements.

## Basis of presentation

The accounting standard and the measurement and recognition criteria applied in this Annual Report are consistent with those adopted in the consolidated financial statements for the year ended 31 December 2019.

In order to present the performance of the Terna Group and Terna S.p.A. and to analyse the financial positions, separate reclassified statements have been prepared. These differ from the statements required by the EU-IFRS adopted and described in the consolidated and separate financial statements for the year ended 31 December 2020.

These reclassified statements contain alternative performance indicators, which differ from those resulting directly from the separate and consolidated financial statements. Management considers these indicators to be useful in assessing the performances of the Group and of Terna S.p.A. and representative of the business's operating results and financial position.

In line with the guidance provided by ESMA/2015/1415, the criteria used in constructing these indicators are described in specific notes, reconciling them with the amounts presented in the consolidated and separate financial statements. The notes are contained in an annex to this Integrated Report.

## Scope of consolidation

The following changes in the structure of the Group have taken place with respect to 31 December 2019:

- the acquisition, on 29 February, of a 90% interest in Brugg Kabel AG through the subsidiary, Terna Energy Solutions S.r.l., as part of the Company's growth strategy;
- the establishment, on 22 May, with another three European TSOs, of SEleNe CC S.A., a joint venture 25%-owned by the Group. The company will operate as a Regional Security Coordinator, in accordance with European Regulation 2017/1485, for the TSOs who own shares in it;
- the acquisition of control of the Brazilian-registered company, SPE Transmissora de energia Linha Verde I S.A. on 11 August, with the acquisition of a 51% interest from Construtora Quebec, rising to 75% on 9 September;
- the establishment with SEleNe CC S.A., on 20 November, of ESPERIA-CC S.r.l., in which Terna holds a 1% interest (compared with the 99% owned by the Greek partner), and which is a wholly owned subsidiary as a result of its corporate governance structure;
- Terna's acquisition, on 1 December, of a 25% stake in Equigy B.V., a limited liability company registered in the Netherlands and jointly controlled by Terna and the other TSOs who hold its shares. The investment represents a joint operation under IFRS 11 – *Joint Arrangements*.

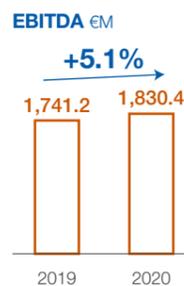




## The Group's reclassified income statement

The Terna Group's operating results for the year 2020, compared with those for the previous year, are summarised in the following reclassified income statement, obtained by reclassifying amounts in the statutory consolidated income statement.

	2020	2019	CHANGE	% CHANGE
<b>TOTAL REVENUE</b>	<b>2,513.5</b>	<b>2,295.1</b>	<b>218.4</b>	<b>9.5%</b>
- Regulated revenue	2,148.9	2,055.0	93.9	4.6%
<i>of which Revenue from construction services performed under concession</i>	28.5	27.6	0.9	3.3%
- Non-Regulated revenue	341.0	211.7	129.3	61.1%
- International revenue	23.6	28.4	(4.8)	(16.9%)
<b>TOTAL OPERATING COSTS</b>	<b>683.1</b>	<b>553.9</b>	<b>129.2</b>	<b>23.3%</b>
- Personnel expenses	282.9	251.6	31.3	12.4%
- Cost of services, leases and rentals	174.0	171.8	2.2	1.3%
- Materials	155.6	86.2	69.4	80.5%
- Other costs	33.8	16.1	17.7	109.9%
- Quality of service	8.3	0.6	7.7	-
- Cost of construction services performed under concession	28.5	27.6	0.9	3.3%
<b>GROSS OPERATING PROFIT (EBITDA)</b>	<b>1,830.4</b>	<b>1,741.2</b>	<b>89.2</b>	<b>5.1%</b>
- Amortisation, depreciation and impairment losses	643.8	586.1	57.7	9.8%
<b>OPERATING PROFIT (EBIT)</b>	<b>1,186.6</b>	<b>1,155.1</b>	<b>31.5</b>	<b>2.7%</b>
- Net financial income/(expenses)	(93.5)	(77.7)	(15.8)	20.3%
<b>PROFIT/(LOSS) BEFORE TAX</b>	<b>1,093.1</b>	<b>1,077.4</b>	<b>15.7</b>	<b>1.5%</b>
- Income tax expense for the year	297.8	313.5	(15.7)	(5.0%)
<b>PROFIT FOR THE YEAR</b>	<b>795.3</b>	<b>763.9</b>	<b>31.4</b>	<b>4.1%</b>
- Profit/(Loss) attributable to non-controlling interests	9.8	6.6	3.2	48.5%
<b>PROFIT FOR THE YEAR ATTRIBUTABLE TO OWNERS OF THE PARENT</b>	<b>785.5</b>	<b>757.3</b>	<b>28.2</b>	<b>3.7%</b>

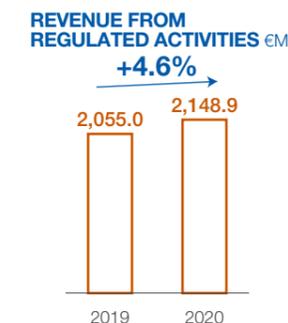


**Gross operating profit (EBITDA)** for the year amounts to **€1,830.4 million**, up €89.2 million compared with the €1,741.2 million of 2019. This primarily reflects the improved result from Regulated Activities and the recognition of revenue resulting from the bargain purchase gain recognised following the acquisition of Brugg Cables.

EBITDA BY OPERATING SEGMENT	2020	2019	CHANGE
Regulated Activities	1,720.7	1,657.5	63.2
Non-regulated Activities	96.9	70.0	26.9
International Activities	12.8	13.7	(0.9)
<b>EBITDA</b>	<b>1,830.4</b>	<b>1,741.2</b>	<b>89.2</b>

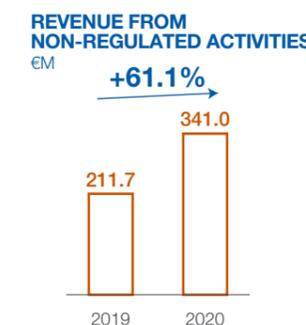
## Revenue

REGULATED ACTIVITIES	2020	2019	CHANGE
Tariff revenue	2,047.8	1,973.1	74.7
Other regulated revenue	72.6	54.3	18.3
Revenue from construction services performed under concession in Italy	28.5	27.6	0.9
<b>TOTAL</b>	<b>2,148.9</b>	<b>2,055.0</b>	<b>93.9</b>



Revenue from **Regulated Activities** is up €93.9 million, primarily reflecting the tariff adjustment provided for in ARERA Resolution 568/19 that has increased the RAB, increased revenue generated by quality of service incentives in the form of the RENS (Regulated Energy Not Supplied) bonus (essentially following the pro-rata assessment of the performance in 2020 and final assessment of the performance in 2019) and recognition of the segment's share of the revenue resulting from the higher value of the net assets acquired following the acquisition of Brugg Cables compared with the consideration paid.

NON-REGULATED ACTIVITIES	2020	2019	CHANGE
Industrial (Tamini and Brugg)	253.8	110.2	143.6
Services for third parties (Connectivity, Energy Solutions, other)	75.8	83.1	(7.3)
Private interconnectors	11.4	18.4	(7.0)
<b>TOTAL</b>	<b>341.0</b>	<b>211.7</b>	<b>129.3</b>



The increase in revenue from **Non-Regulated Activities**, totalling €129.3 million, primarily reflects the overall contribution resulting from the integration of Brugg Cables, partly offset by a decline in revenue at Tamini and from services for third parties linked to the Covid-19 health emergency, as well as reduced revenue from private interconnector projects pursuant to Law 99/2009, compared with the previous year.

Revenue from **International Activities** is down €4.8 million, essentially reflecting the higher penalties applied to suppliers in the previous year in connection with contract work in Brazil and Uruguay.

### Costs

After stripping out the contribution from Brugg (up €100.9 million), **operating costs** are up €28.3 million compared with the previous year. This primarily reflects increased provisions for staff incentives (up €7.7 million), an increase in costs for quality of service (up €7.7 million) and an addition to the provisions for risks and charges to cover the Group's potential tax liabilities recognised in 2019 (up €15.1 million).

**Amortisation, depreciation and impairment losses** for the year amount to €643.8 million, an increase of €57.7 million compared with 2019. This primarily reflects the entry into service of new infrastructure (with particular regard to the Italy-Montenegro interconnector) and an increase in impairment losses on assets recognised during the year (up €15.2 million, including €9.2 million relating to assets in Peru).

Operating profit (**EBIT**), after amortisation, depreciation and impairment losses, amounts to **€1,186.6 million**, compared with €1,155.1 million for 2019 (up 2.7%).

**Net financial expenses** for the year total €93.5 million, an increase of €15.8 million compared with the €77.7 million of 2019. This primarily reflects interest expense on the debt of the overseas companies and the reduced value of investments in associates.

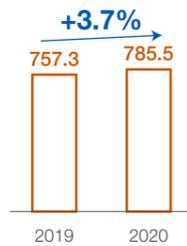
After net financial expenses, **profit before tax** amounts to **€1,093.1 million**, up €15.7 million compared with the previous year (up 1.5%).

**Income tax expense for the year** totals €297.8 million, a decline of €15.7 million (5.0%) compared with the previous year, essentially due to the increase in tax-exempt income recognised during the year. As a result, the tax rate is 27.2%, compared with the 29.1% of 2019.

**Profit for the year** amounts to **€795.3 million**, an increase of €31.4 million (4.1%) compared with the €763.9 million of 2019.

**Profit for the year attributable to owners of the Parent** (after excluding the share attributable to non-controlling interests) amounts to **€785.5 million**, up €28.2 million (3.7%) compared with the €757.3 million of 2019.

### PROFIT ATTRIBUTABLE TO OWNERS OF THE PARENT €M

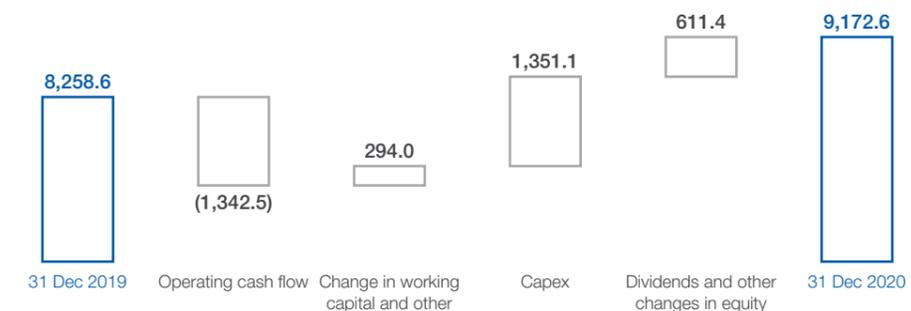


### Cash flow

The above performance, combined with non-cash items and other cash flows from and for operating activities, has resulted in a cash inflow of €1,048.5 million, enabling the Group to finance a part of its investing activities (€1,351.1 million) and movements in equity (€611.4 million, including €515.0 million in the form of dividends paid to shareholders). The remainder was financed by net debt, which totals €9,172.6 million compared with the €8,258.6 million of 2019 (up €914 million).

	(€m)	
	CASH FLOW 2020	CASH FLOW 2019
- Profit for the year	795.3	763.9
- Amortisation, depreciation and impairment losses	643.8	586.1
- Net change in provisions	(88.9)	(97.3)
<i>of which contributed by Brugg Cables</i>	10.4	-
- Net losses/(gains) on sale of assets	(7.7)	(12.9)
<b>Operating cash flow</b>	<b>1,342.5</b>	<b>1,239.8</b>
- Change in net working capital	(272.0)	386.2
<i>of which contributed by Brugg Cables</i>	21.1	-
- Other changes in property, plant and equipment and intangible assets	(15.3)	46.8
<i>of which contributed by Brugg Cables</i>	(62.4)	-
- Change in investments	3.6	(3.3)
- Change in financial assets	(10.3)	(178.4)
<b>Cash flow from operating activities</b>	<b>1,048.5</b>	<b>1,491.1</b>
- Total capital expenditure	(1,351.1)	(1,264.1)
<b>Free cash flow</b>	<b>(302.6)</b>	<b>227.0</b>
- Dividends paid to the Parent Company's shareholders	(515.0)	(479.7)
- Cash flow hedge reserve after taxation and other movements in equity attributable to owners of the Parent	(91.0)	(106.5)
- Other movements in equity attributable to non-controlling interests	(5.4)	-
<b>Change in net debt</b>	<b>(914.0)</b>	<b>(359.2)</b>

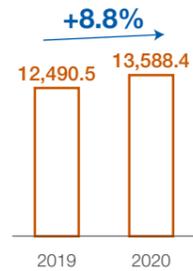
### CHANGE IN NET DEBT (€m)



## The Group's reclassified statement of financial position

The Terna Group's financial position at 31 December 2020 and 31 December 2019 is summarised below in the reclassified statement of financial position, obtained by reclassifying amounts in the statutory consolidated statement of financial position.

### NET INVESTED CAPITAL €M



	AT 31 DECEMBER 2020	AT 31 DECEMBER 2019	CHANGE
<b>Total net non-current assets</b>	<b>15,645.9</b>	<b>14,908.5</b>	<b>737.4</b>
- Intangible assets and goodwill	577.9	542.7	35.2
- Property, plant and equipment	14,559.7	13,864.2	695.5
- Financial assets	508.3	501.6	6.7
<b>Total net working capital</b>	<b>(1,936.2)</b>	<b>(2,207.8)</b>	<b>271.6</b>
- Net energy-related pass-through payables	(385.0)	(575.8)	190.8
- Net receivables resulting from Regulated Activities	230.9	320.4	(89.5)
- Net trade payables	(818.0)	(899.1)	81.1
- Net tax assets	40.5	(5.3)	45.8
- Other net liabilities	(1,004.6)	(1,048.0)	43.4
<b>Gross invested capital</b>	<b>13,709.7</b>	<b>12,700.7</b>	<b>1,009.0</b>
Sundry provisions	(121.3)	(210.2)	88.9
<b>NET INVESTED CAPITAL</b>	<b>13,588.4</b>	<b>12,490.5</b>	<b>1,097.9</b>
Equity attributable to owners of the Parent	4,369.8	4,190.3	179.5
Equity attributable to non-controlling interests	46.0	41.6	4.4
Net debt	9,172.6	8,258.6	914.0
<b>TOTAL</b>	<b>13,588.4</b>	<b>12,490.5</b>	<b>1,097.9</b>

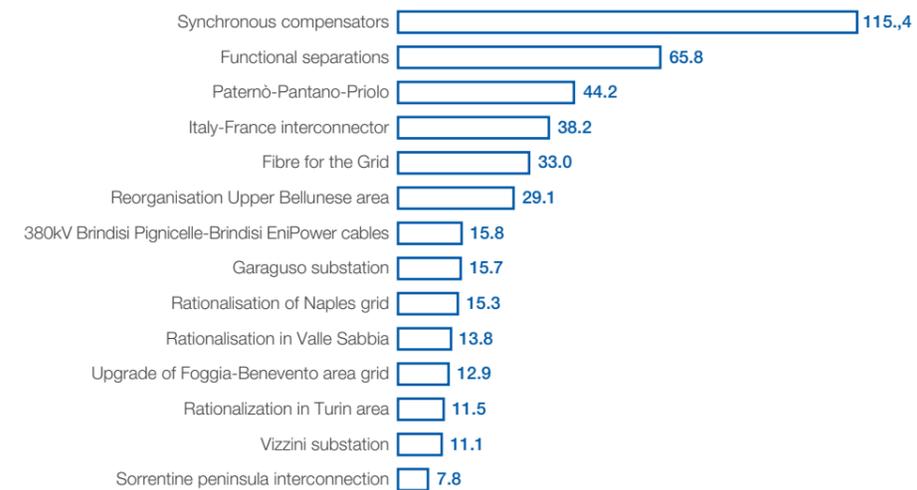
The €737.4 million increase in **net non-current assets** compared with 31 December 2019 primarily reflects a combination of the following:

- total capital expenditure of €1,351.1 million, as described in the section on “Regulated Activities”;
- an increase of €6.7 million in financial assets, primarily reflecting the purchase, in May 2020, of Italian government bonds (“BTP”) with a notional value of €21.2 million, maturing in May 2025 and paying interest at a rate of 1.4% (€22.5 million at 31 December 2020), an increase in the Interconnector Guarantee Fund, set up to fund investment in interconnections by art. 32 of Law 99/09 (up €22.0 million) and the recognition of benefit plan assets attributable to the employees of Brugg Cables (€9.7 million), partially offset by the fees collected on infrastructure under concession in Brazil (down €22.2 million) and a reduction in the amounts deposited by operators who participate in the capacity market pursuant to Resolution 98/2011/R/eel<sup>19</sup>, as amended, after definition of each party's committed capacity following the auctions held in November 2019 (down €26.0 million);
- amortisation and depreciation for the year, totalling €625.9 million;
- the previously mentioned contribution of assets resulting from the acquisition of Brugg Cables (up €62.3 million at the acquisition date);
- other movements during the year, resulting in a decrease of €29.2 million, including grants related to assets (primarily in relation to the re-routing of power lines at the request of third parties); disposals and impairment losses amount to €25.3 million (including €18 million relating to the impairment of assets).

The Terna Group's **total capital expenditure** during 2020, amounting to **€1,351.1 million**, is up **6.9%** compared with the €1,264.1 million of 2019.

<sup>19</sup> The regulations regarding the system of remuneration for availability of production capacity was approved by a Ministerial Decree of 28 June 2019. The deposits were paid by the energy-intensive operators after the competition held by Terna on 6 and 28 November 2019. These provide a guarantee for the entire capacity market from 2022, with the aim of ensuring the achievement and maintenance of the adequacy of the national electricity system, in order to structurally fulfil expected electricity consumption and the power reserve margins needed to meet predetermined levels of safety and quality of service.

### MAIN INVESTMENT in the NTG\* (€m)



\* Amounts include financial expenses.

**Net working capital (net current liabilities)** of -€1,936.2 million resulted in a cash outflow of €271.6 million compared with 31 December 2019. This reflects the combined effect of:

### Cash outflows

- a decrease in **net energy-related pass-through payables** of €190.8 million, primarily reflecting the combined effect of:
  - a decrease in net payables relating to essential plants for the security of the electricity system - UESS (€241.4 million), reflecting the impact of increased payments made during the year and an increase in amounts receivable as a result of the increase in the unit charge determined for 2020;
- partially offset by
  - an increase in net amounts payable due to an increase in the costs linked to the need to meet localised technical limitations and an increase in selections in relation to the Dispatching Service Market – DSM (€77.1 million) and an increase in balancing costs (€59.7 million); the upward trend in costs over recent months incorporates the recovery of DSM costs;
- a reduction of €81.1 million in **net trade payables**, largely due to the different performance of payments to suppliers;
- an increase of €45.8 million in **net tax assets**, primarily due to an increase in net refundable VAT as a result of increased investment (up €31.7 million) and net tax assets (up €16.3 million), reflecting an increase in payments on account made to cover tax expense for the previous year net of the recognition of tax for the year;
- the reduction in **other net liabilities** of €43.4 million, primarily due to the contribution from Brugg Cables (down €22.4 million, essentially consisting of inventories), the change in guarantee deposits received from operators participating in the capacity market and electricity market operators to guarantee the obligations undertaken regarding dispatching and virtual interconnection contracts (down €26 million and €14 million, respectively), and an increase in prepayments to suppliers in relation to work taking place in South America (down €8.3 million).

Cash inflows

- a reduction in **net receivables resulting from Regulated Activities** of €89.5 million, broadly reflecting the collection of receivables in the form of transmission and dispatching service charges (originally falling due in January 2021) factored on a non-recourse basis (a total of €152.7 million); this movement was partially offset by recognition of amounts due in relation to the annual RENS bonus (up €29.4 million) and an increase in receivables represented by the last two transmission service charges for the year, which reflect both the tariff adjustment and the impact of ARERA Resolution 565/2020 regarding digital substation systems (amounting to an increase of €38.6 million).

**Gross invested capital** thus amounts to €13,709.7 million, marking an increase of €1,009.0 million compared with the previous year.

**Sundry provisions** are down €88.9 million, primarily due to:

- net provisions for net deferred tax assets (up €47.8 million), primarily due to the effect on taxation of movements in derivative financial instruments held by the Group, amortisation and depreciation and movements in provisions for risks and charges;
- net uses of provisions for amounts payable to personnel (down €19,1 million), to fund urban and environmental redevelopment schemes (down €6.3 million) and settlement of a liability with an operator (down €10.6 million).

**Net invested capital** of €13,588.4 million is up €1,097.9 million compared with 31 December 2019 and is financed by equity attributable to owners of the Parent, totalling €4,369.8 million (compared with €4,190.3 million at 31 December 2019), equity attributable to non-controlling interests of €46.0 million (€41.6 million at 31 December 2019) and net debt of €9,172.6 million (up €914 million compared with the €8,258.6 million of 31 December 2019).

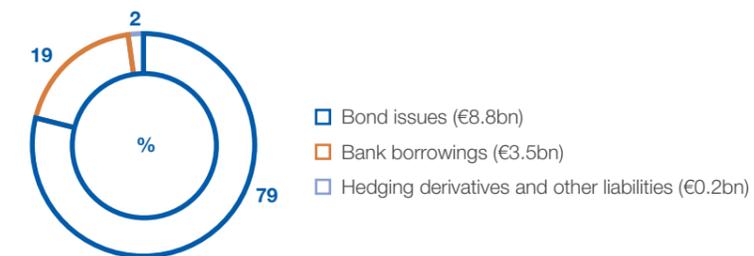


Net debt

The Group's financial policy and gross debt

The Terna Group's financial management is based on an approach that aims to maximise efficiency and achieve and maintain a solid financial structure, whilst adopting a highly prudent stance towards mitigation of the potential financial risks. The key aspects of the Group's financial policy are diversification of the sources of funding, a balance between short- and medium/long-term forms of debt and the proactive management of debt.

**Gross debt** at 31 December 2020 amounts to approximately **€13 billion**, consisting of approximately €9 billion in the form of bond issues and approximately €4 billion in bank borrowings. The average term to maturity of debt, which is almost all fixed rate, is approximately 5 years.



Bonds have been issued in the form of both public and private placements under the €8 billion Euro Medium Term Notes (EMTN) Programme (in which a large number of Italian and overseas banks participate), in addition to a stand-alone issue of €800 million dating back to 2004. Focused specifically on qualified investors and listed on the Luxembourg Stock Exchange, Terna's bonds have a very diverse investor base, in terms of both sector and geographical profile.

The main provider of Terna's bank loans is the European Investment Bank (EIB). Total borrowings from the EIB at 31 December 2020 amount to approximately €2 billion (including €343 million yet to be drawn on). Thanks to its strong credit ratings, Terna is able to obtain financing from banks on extremely good terms, as shown by the two bond issues launched in 2020, amounting to a total of €1 billion, and the arrangement and disbursement, in 2020, of bank loans totalling €600 million. The Group also has two committed revolving credit facilities, amounting to approximately €2.7 billion.

### Net debt

The Group's net debt at 31 December 2020 amounts to €9,172.6 million, marking an increase of €914,0 million compared with 31 December 2019.

	(€m)		
NET DEBT (BY TERM TO MATURITY)	31.12.2020	31.12.2019	CHANGE
<b>Total medium/long-term debt</b>	<b>10,019.8</b>	<b>9,596.1</b>	<b>423.7</b>
- Bond issues	7,485.7	7,757.3	(271.6)
- Borrowings	2,374.5	1,723.4	651.1
- Derivative financial instruments	159.6	115.4	44.2
<b>Total short-term debt/ (funds)</b>	<b>(847.2)</b>	<b>(1,337.5)</b>	<b>490.3</b>
- Bond issues (current portions)	1,258.8	-	1,258.8
- Short-term borrowings	1,002.2	25.0	977.2
- Borrowings (current portions)	129.2	126.5	2.7
- Other current financial liabilities net	80.4	81.8	(1.4)
- Derivative financial instruments	-	(0.1)	0.1
- Financial assets	(628.8)	(513.3)	(115.5)
- Cash and cash equivalents	(2,689.0)	(1,057.4)	(1,631.6)
<b>Total net debt</b>	<b>9,172.6</b>	<b>8,258.6</b>	<b>914.0</b>
<b>NET DEBT (BY TYPE OF INSTRUMENT)</b>			
- Bond issues	8,744.5	7,757.3	987.2
- Borrowings	2,503.7	1,849.9	653.8
- Short-term borrowings	1,002.2	25.0	977.2
- Derivative financial instruments	159.6	115.3	44.3
- Other financial liabilities net	80.4	81.8	(1.4)
<b>GROSS DEBT</b>	<b>12,490.4</b>	<b>9,829.3</b>	<b>2,661.1</b>
- Financial assets	(628.8)	(513.3)	(115.5)
- Cash and cash equivalents	(2,689.0)	(1,057.4)	(1,631.6)
<b>Total net debt</b>	<b>9,172.6</b>	<b>8,258.6</b>	<b>914.0</b>

Changes in the **Group's net debt** are as follows:

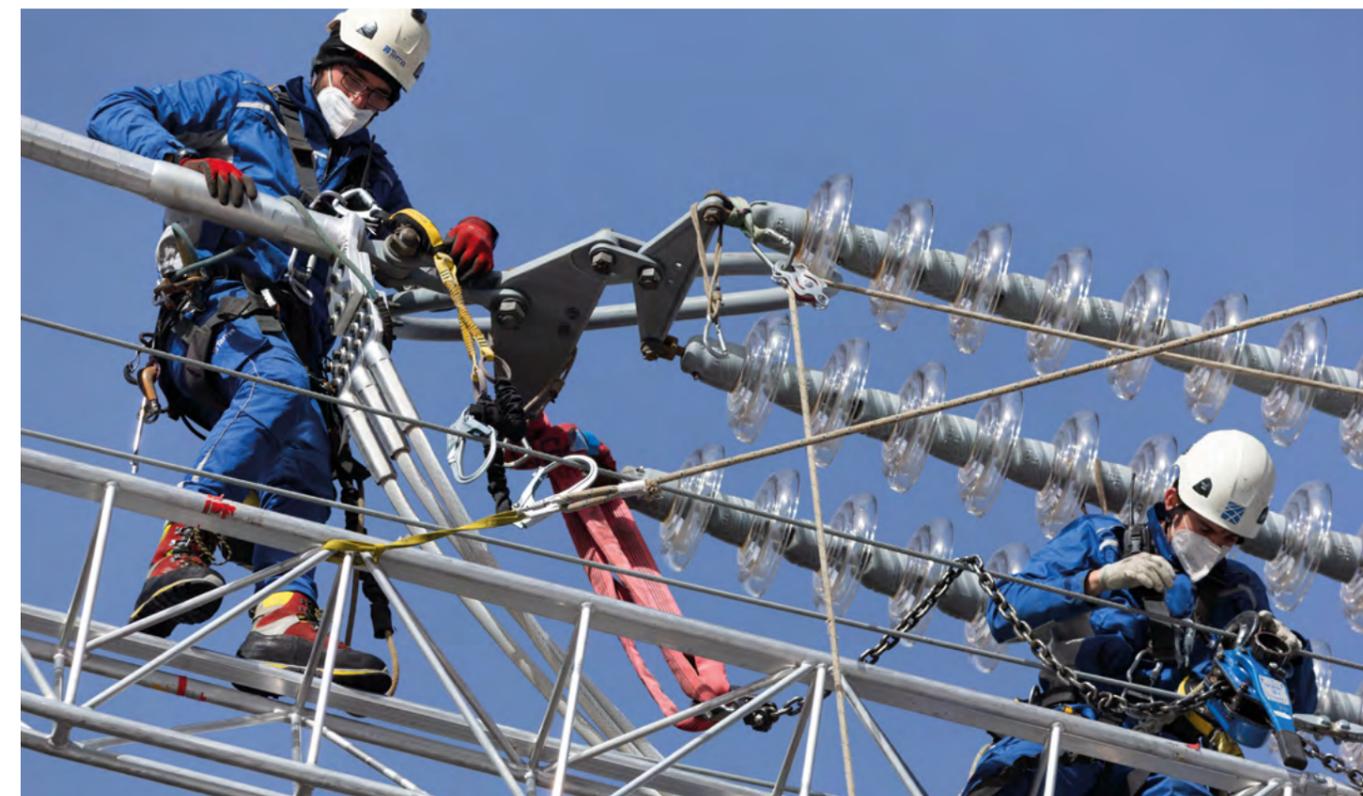
- an increase in bond issues (up €987.2 million), primarily due to the two issues, totalling €1,000 million, carried out by Terna S.p.A. in July and September 2020;
- an increase in borrowings (up €653.8 million), primarily due to the drawdown of new bank facilities, amounting to €747.0 million, after repayments of existing borrowings;
- an increase in short-term borrowings (up €977.2 million) primarily due to the Parent Company's use of short-term credit facilities;
- an increase in the fair value of derivative financial instruments (up €44.3 million), primarily due to movements in market interest rates;
- an increase in financial assets (up €115.5 million), reflecting an increase in Italian government securities held by the Group and recognition of the short-term portion of investment in infrastructure operated under concession in Brazil, recognised in application of IFRIC 12;
- an increase in cash and cash equivalents (up €1,631.6 million). Cash amounts to €2,689.0 million at 31 December 2020, including €1,380.8 million invested in short-term, readily convertible deposits and €1,308.2 million held in bank current accounts and in the form of cash in hand.

### Reconciliation of the Group's profit for the period and equity with the corresponding amounts for the Parent Company

The reconciliation of consolidated equity and consolidated profit for 2020 and the corresponding amounts for the Parent Company is shown below.

	(€m)	
	PROFIT FOR FY 2020	EQUITY AT 31 DECEMBER 2020
<b>Parent Company's financial statements</b>	<b>687.6</b>	<b>4,083.6</b>
Profit and equity contributed by Group companies:		
- Group companies – Regulated Activities	102.5	277.4
- Group companies – Non-regulated Activities*	12.2	63.4
- Group companies – International Activities**	(3.1)	(39.7)
Companies accounted for using the equity method	(3.9)	31.1
<b>Total consolidated financial statements</b>	<b>795.3</b>	<b>4,415.8</b>
Share attributable to non-controlling interests – Regulated Activities	2.3	2.3
Share attributable to non-controlling interests – Non-regulated Activities	7.9	43.1
Share attributable to non-controlling interests – International Activities	(0.4)	0.6
<b>Terna Group's consolidated financial statements</b>	<b>785.5</b>	<b>4,369.8</b>

\* includes the segment's share of the higher value of the net assets acquired following the purchase of the interest in Brugg Cables compared with the consideration paid, offset by payment of the dividend by Terna Interconnector S.r.l. and a different presentation of the interconnector transaction compared with the Parent Company's results.  
 \*\* includes the impairment of assets in Peru and the overheads incurred by Terna Plus S.r.l.



# Terna's shares

## Terna and the financial markets

Terna S.p.A. has been listed on Borsa Italiana's screen-based trading system (*Mercato Telematico Azionario*) since 23 June 2004. **From the date of floatation to the end of 2020, the share price has risen 268% (a capital gain)**, providing a Total Shareholder Return (TSR<sup>20</sup>) of 802%, ahead of both the Italian market (the FTSE MIB, up 43%) and the relevant European sector index (DJ Stoxx Utilities), which is up 280%.

Europe's leading stock markets registered negative performances in 2020 due to the health emergency linked to the spread of Covid-19, with the exclusion of Frankfurt, which ended the year up 0.43%. Milan fell 5.4%, Madrid and Paris registered falls of 15.2% and 6.4%, respectively, whilst London closed 2020 having lost 13.6%.

## Performance of Terna's shares

In contrast to the leading European stock markets, Terna's shares ended the period in positive territory at €6.250 per share, marking an increase of 4.97% for the year. The daily average volume traded during the year amounted to approximately 5.7 million. The share price registered an all-time high of €6.786 on 19 February 2020. It should also be noted that the ex-dividend date for the interim dividend for 2020, amounting to 9.09 euro cents per share, was 23 November.

### KEY INDICATORS PER SHARE

	2020	2019	2018	2017	2016	2015
Number of shares (in millions)*	2,010	2,010	2,010	2,010	2,010	2,010
Price at year end (€ per share)	6.25	5.95	4.95	4.84	4.35	4.76
Market capitalisation** (€m)	12,142	11,273	9,507	9,668	9,367	8,482
Average price for year (€ per share)	6.04	5.61	4.73	4.81	4.66	4.22
Earnings per share (€)	0.391	0.377	0.352	0.339	0.315	0.296
Dividend per share (€)	0.270	0.250	0.233	0.220	0.206	0.200
Payout ratio***	68.98%	66.22%	66.34%	64.24%	65.40%	67.51%
Dividend yield****	4.3%	4.2%	4.7%	4.5%	4.7%	4.2%
Total shareholder return	9.4%	25.1%	7.3%	15.9%	(4.3%)	32.5%

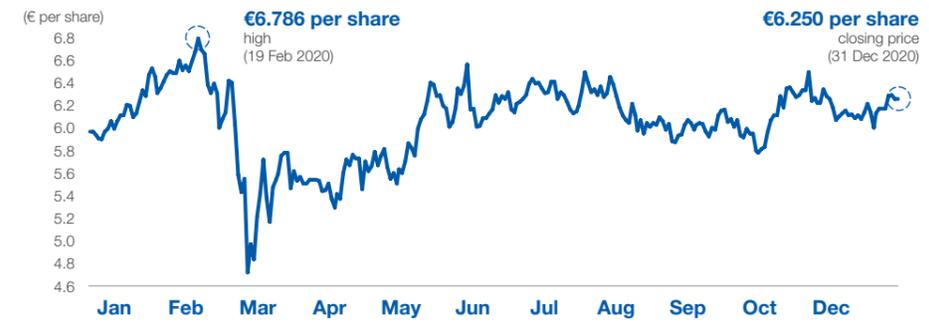
\* The total number of shares representing the share capital. The number of shares in circulation amount to 2,008 million, following the buyback of own shares to service the Performance Share Plan 2020-2023.  
 \*\* Based on the average price for the year.  
 \*\*\* The ratio of the total dividend to profit attributable to owners of the Parent  
 \*\*\*\* Dividend per share for the year as a percentage of the share price at year end.

<sup>20</sup> Total Shareholder Return (TSR): total return on an equity investment, calculated as the sum of:  
 I. capital gain: the change in the share price (difference between the price at the end and at the beginning of the relevant period) as a percentage of the price at the beginning of the period;  
 II. reinvested dividends: the ratio between dividends per share paid out during the period and the share price at the beginning of the period. Dividends are assumed to have been reinvested in the shares.

WEIGHTING OF TERNA'S SHARES	2020	2019
> on the FTSE MIB index	2.44%	2.27%

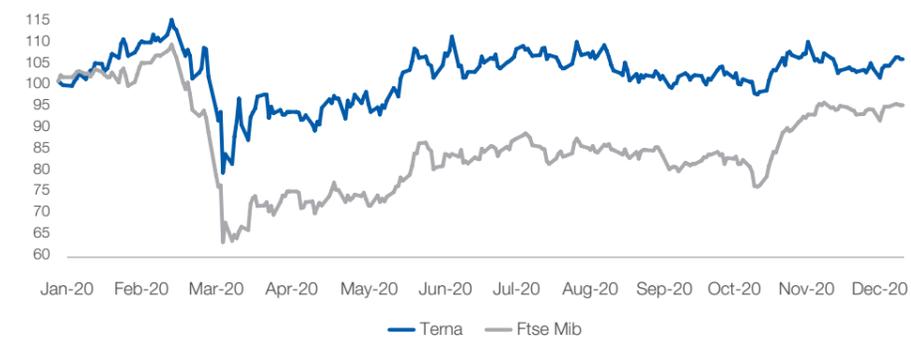
Fonte: Borsa Italiana

### PERFORMANCE OF TERNA'S SHARES - (Price from 1 January to 31 December 2020)



Source: Bloomberg

### TERNA'S SHARES AND THE FTSE MIB (Price between 1 January and 31 December 2020)



Source: Bloomberg

**TOTAL SHAREHOLDER RETURN ON TERNA'S SHARES AND THE FTSE MIB AND DJ STOXX UTILITIES** (from the flotation to the end of December 2020)



Source: Bloomberg

— Terna — Ftse Mib — Dj Stoxx Utilities

**Inclusion in stock exchange sustainability indices**

Terna's commitment to measuring and improving its ESG (Environmental, Social and Governance) performance is reflected positively in sustainability ratings.

Terna's inclusion in all the leading international stock exchange sustainability indices was confirmed in and the Company was, for the third year running, named **Industry Leader in the Electric Utilities segment** of the Dow Jones Sustainability Index World.

INDEX	TERNA
BLOOMBERG GENDER EQUALITY INDEX	Included since 2019
DOW JONES SUSTAINABILITY INDEX	Included since 2009
ECPI	Included since 2007
ETHIBEL SUSTAINABILITY INDEX (ESI)	Included since 2009
EURONEXT VIGEO	Included in the World 120, Eurozone 120 and Europe 120 baskets since 2012
FTSE ECPI	Included since 2010
FTSE4Good	Included in the index (Global and Europe baskets) every year since 2005
MSCI GLOBAL SUSTAINABILITY	Included regularly in the index since 2007
STOXX® ESG	Included in the index since 2011
STOXX® LOW CARBON	Included in the index since February 2016, the date the index was launched
UNITED NATIONS GLOBAL COMPACT ("GC100")	Included in the index since 2013

In recognition of its ranking as **Industry Leader in the Electric Utilities** segment, Terna was included in the Gold Class in SAM's "Sustainability Yearbook 2021", published in February 2021.

# Terna S.p.A.

A review of the operating performance and financial position of the Parent Company, Terna S.p.A., is provided below.

**Terna S.p.A.'s reclassified income statement**

Terna S.p.A.'s operating results for the years 2020 and 2019 are summarised in the following reclassified income statement, obtained by reclassifying amounts in the statutory income statement.

	2020	2019	CHANGE	% CHANGE
<b>TOTAL REVENUE</b>	<b>2,086.8</b>	<b>2,054.5</b>	<b>32.3</b>	<b>1.6%</b>
- Tariff revenue	1,906.2	1,838.5	67.7	3.7%
<i>of which transmission revenue</i>	1,796.9	1,725.6	71.3	4.1%
<i>of which dispatching, metering and other revenue</i>	109.3	112.9	(3.6)	(3.2%)
- Other operating income	152.1	188.4	(36.3)	(19.3%)
- Revenue from construction services performed under concession*	28.5	27.6	0.9	3.3%
<b>TOTAL OPERATING COSTS</b>	<b>499.7</b>	<b>451.0</b>	<b>48.7</b>	<b>10.8%</b>
- Personnel expenses	70.8	60.0	10.8	18.0%
- Cost of services, leases and rentals	369.2	354.5	14.7	4.1%
- Materials	0.7	1.2	(0.5)	(41.7%)
- Other costs	22.2	7.1	15.1	212.7%
- Quality of service	8.3	0.6	7.7	-
- Cost of construction services performed under Concession*	28.5	27.6	0.9	3.3%
<b>GROSS OPERATING PROFIT (EBITDA)</b>	<b>1,587.1</b>	<b>1,603.5</b>	<b>(16.4)</b>	<b>(1.0%)</b>
- Amortisation, depreciation and impairment losses	571.2	540.7	30.5	5.6%
<b>OPERATING PROFIT/(LOSS) (EBIT)</b>	<b>1,015.9</b>	<b>1,062.8</b>	<b>(46.9)</b>	<b>(4.4%)</b>
- Net financial income/(expenses)	(59.0)	(63.6)	4.6	(7.2%)
<b>PROFIT/(LOSS) BEFORE TAX</b>	<b>956.9</b>	<b>999.2</b>	<b>(42.3)</b>	<b>(4.2%)</b>
- Income tax expense	269.3	285.7	(16.4)	(5.7%)
<b>PROFIT FOR THE YEAR</b>	<b>687.6</b>	<b>713.5</b>	<b>(25.9)</b>	<b>(3.6%)</b>

\* Recognised in application of interpretation IFRIC 12 – Service Concession Arrangements.

**Gross operating profit (EBITDA)** for the year is **€1,587.1 million**, a reduction of €16.4 million compared with the €1,603.5 million of 2019, primarily reflecting the impact of a number of non-recurring events in 2019.

**Revenue of €2,086.8 million** is up €32.3 million compared with the previous year, due primarily to the impact of transmission revenue (up €71.3 million) following an increase in the RAB, the accrued amount due as a return on digital substation systems (up €29.3 million, reflecting systems entering service through to 2018, in accordance with ARERA Resolution 565/2020) and the release of provisions following settlement of a liability with an operator (up €10.6 million), partly offset by the negative impact of the volume effect.

There was also an increase in revenue in the form of the bonus receivable under the RENS (Regulated Energy Not Supplied) incentive mechanism (up €9.2 million, essentially following the pro-rata assessment of the performance in 2020 and final assessment of the performance in 2019), offset by the following:

- recognition, in 2019, of revenue resulting from the sale of the private Italy-Montenegro Interconnector (on 17 December 2019), amounting to €25.8 million, and greater revenue in the form of insurance proceeds (down €8.4 million);
- a reduction in revenue resulting from the adjustment, in 2020, to the amount payable by Terna Rete Italia S.p.A. for the business unit leased to it as a result of the reduced volume of activity<sup>21</sup> (down €12.8 million).

**Operating costs** for the year, amounting to **€499.7 million**, are up €48.7 million on the previous year. This essentially reflects an increase in personnel expenses (up €10.8 million), primarily due to provisions for staff incentive schemes, an addition to the provisions for risks and charges to cover the Group's potential tax liabilities recognized in 2019 (up €15.1 million), an increase in costs for quality of service (up €7.7 million, essentially reflecting the outages that occurred at the end of 2020) and the cost of work on private interconnector projects in progress.

**Amortisation, depreciation and impairment losses** for the year amount to €571.2 million, an increase of €30.5 million compared with 2019. This primarily reflects the entry into service of new infrastructure, with particular regard to the Italy-Montenegro interconnector, and an increase in impairment losses on assets (up €7.2 million).

**EBIT** (operating profit) of €1,015.9 million is down €46.9 million compared with 2019 (down 4.4%).

**Net financial expenses** for the year total €59 million, a reduction of €4.6 million compared with the €63.6 million of 2019. This primarily reflects an increase in net income from subsidiaries, partially offset by a decline in capitalised costs and impairment loss on the Uruguayan subsidiary.

**Income tax expense** for the year amounts to €269.3 million, a reduction of €16.4 million compared with the previous year. This essentially reflects the reduction in pre-tax profit and an increase in tax-exempt income recognised during the year. The resulting tax rate is 28.1%, compared with the 28.6% of 2019.

**Profit for the year** thus amounts to €687.6 million, compared with the €713.5 million of 2019.

## Cash flow

The above performance, combined with non-cash items and other cash flows from and for operating activities, has resulted in a cash inflow of €943.8 million, enabling the Parent Company to finance a part of its investing activities (€1,134.3 million) and movements in equity (€585.1 million, including €515 million in the form of dividends paid to shareholders). The balance is financed by net debt, which totals €9,137.2 million compared with €8,361.6 million at the end of 2019 (up €775.6 million).

	(€m)	
	CASH FLOW 2020	CASH FLOW 2019
- Profit for the year	687.6	713.5
- Amortisation, depreciation and impairment losses	571.2	540.7
- Net change in provisions	(75.6)	(86.3)
- Net losses/(gains) on sale of assets	(5.5)	(11.2)
<b>Operating cash flow</b>	<b>1,177.7</b>	<b>1,156.7</b>
- Change in net working capital	(152.1)	130.5
- Change in investments	(102.9)	(29.2)
- Other movements in property, plant and equipment and intangible assets	40.1	275.6
- Change in financial assets	(19.0)	(164.5)
<b>Cash flow from operating activities</b>	<b>943.8</b>	<b>1,369.1</b>
- Total capital expenditure	(1,134.3)	(1,045.6)
<b>Free cash flow</b>	<b>(190.5)</b>	<b>323.5</b>
- Dividends paid to shareholders	(515.0)	(479.7)
- Cash flow hedge reserve after taxation and other movements in equity	(70.1)	(103.6)
<b>Change in net debt</b>	<b>(775.6)</b>	<b>(259.8)</b>

<sup>21</sup> The lease agreement for the business unit was adjusted to reflect the volume of activity on the basis of a specific independent appraisal, set out in the deed of acknowledgement of 11 March 2020, and subsequently updated by a deed of acknowledgement dated 29 September 2020.

## Terna S.p.A.'s reclassified statement of financial position

Terna S.p.A.'s financial position at 31 December 2020 and 2019 is summarised in the following statement, obtained by reclassifying amounts in the statutory statement of financial position.

	(€m)		
	AT 31 DECEMBER 2020	AT 31 DECEMBER 2019	CHANGE
<b>Total net non-current assets</b>	<b>14,632.1</b>	<b>13,981.2</b>	<b>650.9</b>
- Intangible assets and goodwill	475.9	443.8	32.1
- Property, plant and equipment	12,755.2	12,258.3	496.9
- Financial assets	1,401.0	1,279.1	121.9
<b>Total net working capital</b>	<b>(1,365.8)</b>	<b>(1,517.4)</b>	<b>151.6</b>
- Net energy-related pass-through payables	(408.9)	(598.6)	189.7
- Net receivables resulting from regulated activities	230.9	320.4	(89.5)
- Net trade payables	(615.4)	(592.5)	(22.9)
- Net tax assets	(25.6)	(79.3)	53.7
- Other liabilities net	(546.8)	(567.4)	20.6
<b>Gross invested capital</b>	<b>13,266.3</b>	<b>12,463.8</b>	<b>802.5</b>
Sundry provisions	(45.5)	(121.1)	75.6
<b>NET INVESTED CAPITAL</b>	<b>13,220.8</b>	<b>12,342.7</b>	<b>878.1</b>
<b>Equity</b>	<b>4,083.6</b>	<b>3,981.1</b>	<b>102.5</b>
<b>Net debt</b>	<b>9,137.2</b>	<b>8,361.6</b>	<b>775.6</b>
<b>TOTAL</b>	<b>13,220.8</b>	<b>12,342.7</b>	<b>878.1</b>

The principal changes with respect to 31 December 2019 are described below.

**Net invested capital** amounts to €13,220.8 million at 31 December 2020, an increase of €878.1 million compared with the previous year. This reflects an increase in **net non-current assets** (€650.9 million), cash used for **net working capital** (up €151.6 million) and a reduction in sundry provisions (€75.6 million).

**Net non-current assets** are up €650.9 million, primarily due to the Company's capital expenditure (€1,134.3 million, including €1,041.9 million in Regulated Activities), after amortisation and depreciation for the year (€563.0 million) and disposals, impairments and other movements (a total reduction of €42.3 million, including €28.4 million in grants related to assets), the capital contribution paid to Terna Plus S.r.l. (up €70 million) and the capital increase carried out by Terna Crna Gora d.o.o. (up €35 million) and the purchase, in May 2020, of Italian treasury bills (BTPs) (up €22.5 million).

The change in **net working capital**, represented by an increase of €151.6 million, is primarily due to reductions in net trade payables, VAT and income tax payable, guarantee deposits received from electricity market operators and accrued grants related to assets.

**Sundry provisions** are down €75.6 million, primarily due to an adjustment to provisions for potential tax liabilities, mainly reflecting the impact on taxation of movements in derivative instruments held by the Company, of amortisation and depreciation and of movements in provisions for risks and charges (up €40.2 million), net uses of provisions for amounts payable to personnel (down €17.2 million), provisions to fund urban and environmental redevelopment schemes (down €6.3 million) and settlement of a liability with an operator (down €10.6 million).

**Net debt** of €9,137.2 million is up €775.6 million.

	(€m)		
	AT 31 DECEMBER 2020	AT 31 DECEMBER 2019	CHANGE
<b>NET DEBT (BY TYPE OF INSTRUMENT)</b>			
- Bond issues	8,710.1	7,757.3	952.8
- Borrowings	2,298.5	1,665.5	633.0
- Short-term borrowings	977.1	-	977.1
- Other financial liabilities net	80.1	81.4	(1.3)
- Derivative financial instruments	157.2	114.0	43.2
<b>Gross debt</b>	<b>12,223.0</b>	<b>9,618.2</b>	<b>2,604.8</b>
- Long-term loans to subsidiaries	(22.5)	(24.1)	1.6
- Financial assets	(611.4)	(513.3)	(98.1)
- Cash and cash equivalents (including the net balance on intercompany current accounts)	(2,451.9)	(719.2)	(1,732.7)
<b>Total net debt</b>	<b>9,137.2</b>	<b>8,361.6</b>	<b>775.6</b>

Given that the change in the Company's net debt is broadly in line with the change in the Group's net debt, reference should be made to the above description of changes in the Group's debt. In particular, there is an increase in cash and cash equivalents, totalling €1,732.7 million (including an increase of €115.3 million due to a reduction in the net amount payable on intercompany current accounts held by the Company on behalf of its subsidiaries) and a reduction in the long-term loan granted by Terna S.p.A. to the subsidiary in Uruguay (down €1.6 million).

## Proposal for the Annual General Meeting regarding the distribution of Terna S.p.A.'s profit for the year

Terna S.p.A.'s Board of Directors proposes to pay a total dividend of €541,692,844.00 for 2020, equal to €0.2695 per share, of which €0.0909 per share was declared in the form of an interim dividend on 11 November 2020.

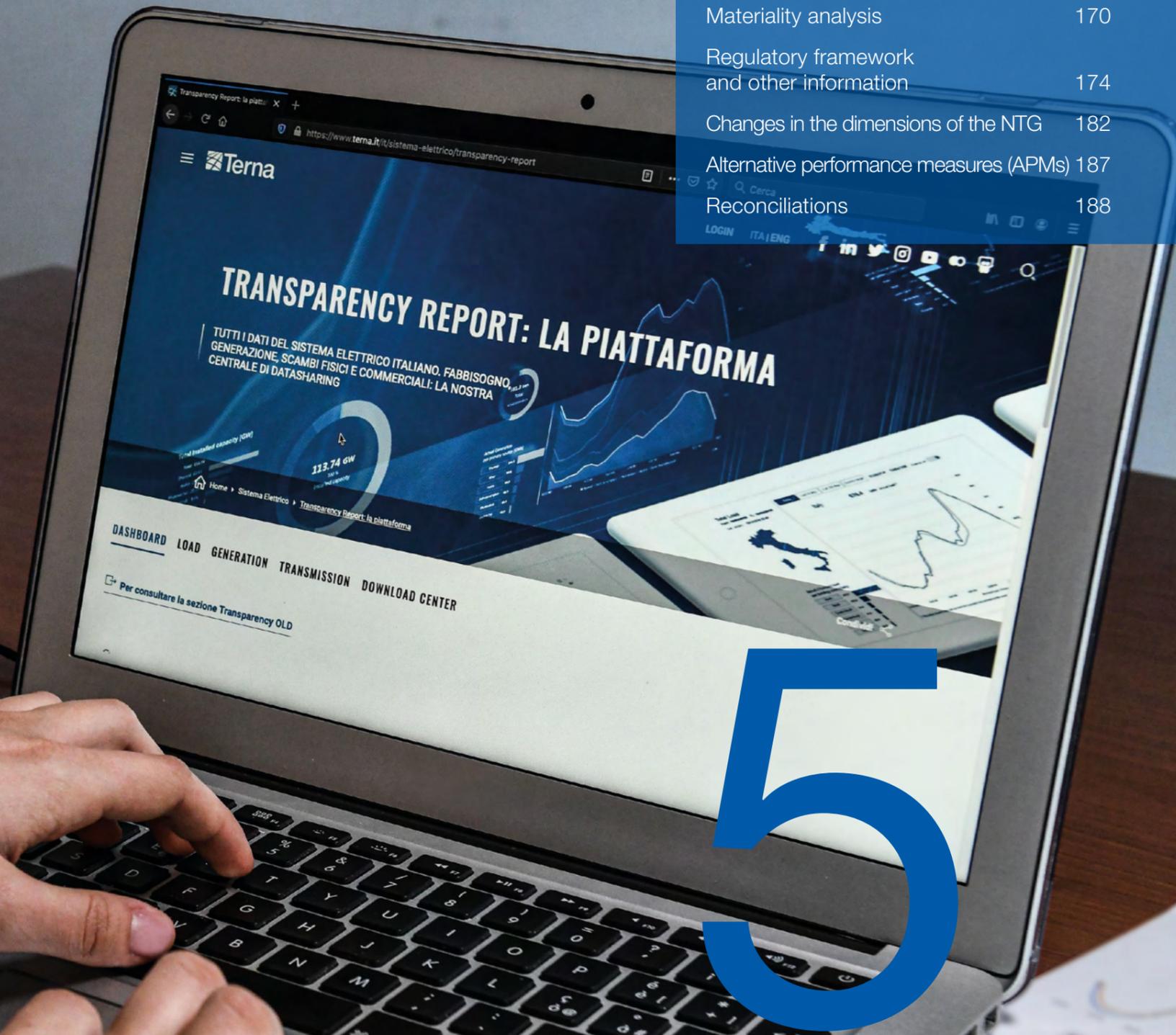
The Board of Directors thus proposes to appropriate Terna S.p.A.'s profit for 2020, amounting to €687,571,266.41, as follows:

- €182,708,272.80 to cover payment of the interim dividend payable from 25 November 2020 to the holders of each of the ordinary shares outstanding after adjusting for the treasury shares held at the "record date" of 24 November 2020 (with the relevant amount of €138,704.31 taken to retained earnings);
- €358,984,571.20 to pay a final dividend of €0.1786 to the holders of each of the 2,009,992,000 ordinary shares representing the share capital at the date of this Board of Directors' meeting. The final dividend will be payable on 23 June 2021, with an ex-dividend date for coupon 34 of 21 June 2021 (a record date, as defined by art.83-terdecies of Legislative Decree 58 of 24 February 1998, the Consolidated Law on Finance, of 22 June 2021). The treasury shares held as of the above record date will not participate in the distribution. The final dividend for 2020 attributable to the treasury shares held by the Company at the record date will be taken to retained earnings;
- €145,878,422.41 to be taken to retained earnings.



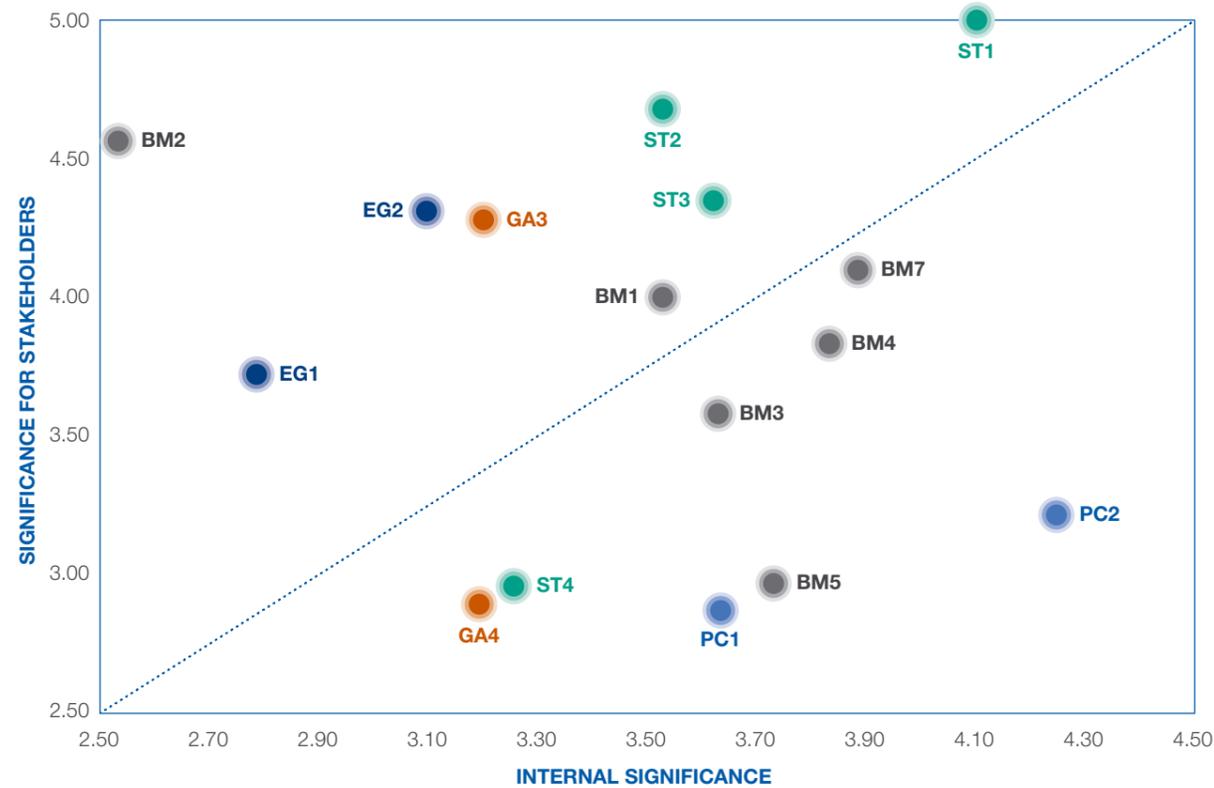
“ The heads of our operational units around the country have been equipped with **satellite phones**, and everyone most exposed to critical situations has been provided with a **backup SIM** from another operator with respect to the one they normally use. The average number of connections each day shot up in the first 15 days of March 2020 to 3,400, with large numbers of meetings held remotely at the same time, via video and audio: **3.5 Terabytes of data traffic** per day, a volume of text that would require the paper from around two thousand trees if we were to print it out. ”

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# Materiality analysis

## PROSPECTIVE MATERIALITY MATRIX



KEY	MATERIAL TOPIC	KEY	MATERIAL TOPIC
ETHICS AND GOVERNANCE MODEL	EG1: Governance model effectiveness	TRANSMISSION SERVICE	ST1: Delivering the ecological transition
	EG2: Business integrity		ST2: Ensuring the quality, security and continuity of the electricity service
BUSINESS MANAGEMENT	BM1: Strategic approach to stakeholder management		ST3: Grid resilience
	BM2: Delivering on financial and performance goals		ST4: Economic impacts on the community
	BM3: Information security	MANAGEMENT OF ENVIRONMENTAL IMPACTS	GA1: Mitigating the impact of infrastructure*
	BM4: Optimal management of relations with local stakeholders		GA2: Protecting biodiversity*
	BM5: Growing and diversifying the business		GA3: Reducing the Group's CO <sub>2</sub> emissions
BM6: Sustainable supply chains*	GA4: Reuse and recycling of materials		
BM7: Innovation and digitalisation	PEOPLE AND COMMUNITIES	PC1: Workplace health and safety and workers' rights	
		PC2: HR development	
		PC3: Promoting wellbeing within the workforce*	
		PC4: Advancement of diversity and equal opportunities*	
		PC5: Social responsibility initiatives*	

(\*) This topic is below the materiality threshold and does not, therefore, appear in the Materiality Matrix.

The matters covered in the Integrated Report for 2020 are consistent with the materiality matrix on the previous page. Construction of the prospective materiality matrix also played a part in the materiality analysis carried out during preparation of the Sustainability Report, which for the last four years also has the role of "Consolidated Non-financial Statement", now obligatory in accordance with Legislative Decree 254/2016 and also based on the materiality principle. Key steps in this process are as follows.

**Selection of key topics:** the selection was conducted in 2016 on the basis of an in-depth analysis of internal and external documents and revised in 2019 to take into account changes in Terna's strategic guidelines. 22 topics, belonging to 5 areas, were identified: ethics and the governance model; the transmission service; the management of environmental impacts; business management; people and communities.

**Determination of the significance for Terna:** the selected topics were then classified according to their importance for Terna, also in the light of the guidelines in the new 2021-2025 Industrial Plan. The assessment was conducted with the involvement of Terna's senior management, who took part in a series of in-depth interviews, followed by compilation of a questionnaire. The aim was to take a snapshot of the company's perspective following the re-election of governance bodies and presentation of the new 2021-2025 Industrial Plan, as well as to evaluate the impact of Covid-19 on the significance of the topics explored. The outcomes were then weighted against the assessments completed in 2019, involving a survey completed by managers (on two levels starting from the Group Parent's Chief Executive Officer) in order to determine the significance of each topic. The results were then submitted to and validated by the Chairman and Chief Executive Officer via an interview.

**Determination of the significance for stakeholders:** each topic was ranked by combining the significance of the topic for each category of stakeholder with the weighting assigned to that category in Terna's stakeholder map. The significance of each topic for a given category of stakeholder was assessed on the basis of a desk review designed to identify new external sustainability trends. In addition, the results obtained in 2019 were taken into account, via completion of a questionnaire by over 40 external stakeholders, including institutional equity investors, distributors, national and local media, national and international opinion groups, non-regulated customers, core suppliers and representatives of local business groups.

Further details are provided in the section on materiality in the Sustainability Report/Non-financial Statement for 2020.

The materiality matrix used for the Integrated Report differs from the one used for the Sustainability Report/Non-financial Statement as regards the following key aspects:

- in determining the significance for Terna, only the opinions of senior management on **prospective significance** were taken into account, focusing on the need for investment – in terms of boosting operational capacity – in order to achieve the objectives in the 2021-2025 Industrial Plan;
- in determining significance for **stakeholders** only the opinions of those belonging to the **financial category**, meaning “shareholders” (including financial analysts and institutional investors) and “credit providers” (e.g., banks), were taken into account;
- the topics placed in the matrix (16) are those for which, in the set of sources analysed, it was possible to identify the information of significance to financial stakeholders.

In the matrix, the most significant topics are those furthest away from the origin, for both axes.

To complete the analysis of prospective materiality, partly in view of the presence of institutional investors from North America among Terna's overseas shareholders, a comparison was made between the topics deemed significant for Terna and the categories established by the **Sustainability Accounting Standards Board (“SASB”)**.

The **SASB** is an independent non-profit organization, founded in 2011, that sets and maintains specific standards for each sector, to guide the disclosure of financially material sustainability information by companies to their investors. The standards, adopted above all in the USA, use the Materiality Map<sup>22</sup> as a tool for identifying sustainability-related issues that can influence the financial and operating performances of companies within a certain sector.

For the **“Electric utilities & Power generators”** sector, the SASB has identified nine topics that may be material for companies operating in this sector. Of these nine topics, considering the scope of Terna's business with respect to the definition of the sector used by the SASB (e.g., the absence of any relationship with final consumers, the fact that Terna does not operate as power generator), the related metrics were analysed and the degree to which Terna is aligned with the standards was assessed. The results, summarised in the following table, reveal good coverage on the part of Terna in terms of the disclosures provided to its stakeholders, after taking into account the categories that do not apply<sup>23</sup>. The nine topics identified by the SASB were put into two groups: the **first group** includes four topics for which Terna reports at least one of the quantitative indicators required by the standard; the **second group**, on the other hand, includes three topics whose metrics regard the generation and sale of electricity (e.g., indicators relating to the number of nuclear plants owned, the disposal of coal ash) and therefore not applicable to Terna. Despite this, it is possible to link these topics to aspects that are material for Terna's business, and these are reported on in the Non-financial Statement or in the Integrated Report (see the references in the following table).

<sup>22</sup> <https://materiality.sasb.org/>

<sup>23</sup> The topics excluded from the comparison are Air Quality and Water and Wastewater Management, as they do not apply to Terna's business. In terms of the SASB, these topics relate solely to power generation companies.

GROUPS	GENERAL CATEGORY OF SASB TOPIC	TERNA TOPIC	REF. DISCLOSURE BY TERNA
Group 1	<b>GHG emissions</b> The category addresses direct (Scope 1) greenhouse gas (GHG) emissions that a company generates through its operations. This includes GHG emissions from stationary (e.g., factories, power plants, etc.) and mobile sources (e.g., trucks, delivery vehicles, planes, etc.), whether a result of combustion of fuel or non-combusted direct releases during activities such as natural resource extraction, power generation, land use or biogenic processes. The category further includes management of regulatory risks, environmental compliance and reputational risks and opportunities, as they relate to direct GHG emissions. The seven GHGs covered under the Kyoto Protocol are included within the category – carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ), nitrous oxide (N <sub>2</sub> O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF <sub>6</sub> ) and nitrogen trifluoride (NF <sub>3</sub> ).	Reducing the Group's CO <sub>2</sub> emissions	Page 221 of the Sustainability Report
	<b>Employee health and safety</b> The category addresses the company's ability to create and maintain a safe and healthy workplace environment that is free of injuries, fatalities and illness (both chronic and acute). It is traditionally accomplished through implementing safety management plans, developing training requirements for employees and contractors and conducting regular audits of their own practices as well as those of their subcontractors. The category further captures how companies ensure physical and mental health of their workforce through technology, training, corporate culture, regulatory compliance, monitoring and testing and personal protective equipment.	Workplace health and safety	Page 245 of the Sustainability Report
	<b>Business model resilience</b> The category addresses an industry's capacity to manage risks and opportunities associated with incorporating social, environmental and political transitions into long-term business model planning. This includes responsiveness to the transition to a low-carbon and climate-restrained economy, as well as growth and creation of new markets among unserved and underserved socio-economic populations. The category highlights industries in which evolving environmental and social realities may challenge companies to fundamentally adapt or may put their business models at risk.	Innovation and digitalisation Delivering the ecological transition	Respectively page 194 and page 174 of the Sustainability Report
	<b>Systematic risk management</b> The category addresses the company's contributions to or management of systemic risks resulting from large-scale weakening or collapse of systems upon which the economy and society depend. This includes financial systems, natural resource systems and technological systems. It addresses the mechanisms a company has in place to reduce its contributions to systemic risks and to improve safeguards that may mitigate the impacts of systemic failure. For financial institutions, the category also captures the company's ability to absorb shocks arising from financial and economic stress and meet stricter regulatory requirements related to the complexity and interconnectedness of companies within the industry.	Information security Ensuring the quality, security and continuity of the electricity service Delivering on financial and performance goals	Respectively page 192, page 168 and page 73 of the Sustainability Report
Group 2	<b>Waste and hazardous materials management</b> The category addresses environmental issues associated with hazardous and non-hazardous waste generated by companies. It addresses a company's management of solid wastes in manufacturing, agriculture and other industrial processes. It covers treatment, handling, storage, disposal and regulatory compliance. The category does not cover emissions to air or wastewater, nor does it cover waste from end-of-life products.	Reuse and recycling of materials	Page 212 of the Sustainability Report
	<b>Access and affordability</b> The category addresses a company's ability to ensure broad access to its products and services, specifically in the context of underserved markets and/or population groups. It includes the management of issues related to universal needs, such as the accessibility and affordability of health care, financial services, utilities, education and telecommunications.	Strategic approach to stakeholder management Economic impacts on the community Innovation and digitalisation	Respectively page 129, page 88 and page 194 of the Sustainability Report
	<b>Critical incident risk management</b> The category addresses the company's use of management systems and scenario planning to identify, understand and prevent or minimise the occurrence of low-probability, high-impact accidents and emergencies with significant potential environmental and social externalities. It relates to the culture of safety at a company, its relevant safety management systems and technological controls, the potential human, environmental and social implications of such events occurring, and the long-term effects to an organisation, its workers and society should these events occur.	Business integrity Ensuring the quality, security and continuity of the electricity service Delivering on financial and performance goals Strategic approach to stakeholder management	Respectively page 107 and 114, page 168, page 73 and page 129 of the Sustainability Report

# Regulatory framework and other information

## Summary of the principal legislative measures

A brief description is provided below of the principal legislation of interest to the Group issued during 2020 and, subsequently, up to the date of preparation of this Annual Report.

- **Law 178 of 30 December 2020, containing the Budget Law for the 2021 financial year and the long-term budget for the three-year period 2021-2023, published in Official Gazette no. 322 of 30 December 2020 (Budget law).**

The Budget Law contains, among other things, measures regarding: the establishment by the Ministry of the Economy and Finance of a fund for the tax reform (€8 million for 2022 and €7 million for 2023); the stabilisation of tax deductions for income from employment; youth employment incentives and a contributions holiday for employers who hire women; an increase in the fund to finance company's family policies; extension of the revaluation of business assets to include intangible assets without legal protection; contributions relief for employment in deprived areas; the extension of tax relief for investment in southern Italy; tax benefits for companies that invest in Special Economic Zones; measures to support businesses' liquidity; incentives for business combinations; extension of the so-called "women's option" to encourage early retirement; extension of the *Ape Sociale* and *Isopensione* early retirement schemes; the establishment of an infrastructure equalization fund; changes to the application criteria for the fee for permanent occupation of public space; extension of the regulations governing tax relief on investment in capital assets; tax relief on changes to workplaces; simplification of the VAT regulations; increase in the fund for the internationalisation of businesses.

- **Law Decree 3 of 5 February 2020, containing "Urgent measures to reduce employment taxes", converted into Law 21 of 2 April 2020, published in Official Gazette no. 90 of 4 April 2020 (the Tax Wedge Decree).**

This legislation provides for payment, in return for service provided by workers between 1 July and 31 December, of an additional sum of €600 not to be included in taxable income if the worker's total annual pay does not exceed €28 thousand. In the case of income above this threshold, the legislation provides for a different method of deduction.

- **Law Decree 23 of 8 April 2020, containing "Urgent measures on access to credit and tax obligations for businesses, special powers in strategic sectors, and measures regarding workplace health, extensions to deadlines for administrative and court proceedings", converted into Law 40 of 5 June 2020, published in Official Gazette no. 143 of 6 June 2020 (the Liquidity Decree).**

This has introduced the following tax-related measures:

- Payments on account: provisions concerning the sanctions and interest applicable in the case of non-payment or payment of an insufficient amount in relation to payments on account for personal income tax, corporation tax and regional tax on businesses do not apply in the event of payment of an insufficient amount if the sum paid is not less than 80% of the amount that would have been due in the form of a payment on account based on the tax return for the tax period in progress;

- Deferral of deadlines for payments to the Public Administration: payments due to public entities, including pension and social security contributions and mandatory insurance premiums, falling due by 16 March 2020, extended until 20 March 2020 by Law Decree 18/20, will be considered timely if made by 16 April 2020;
- Certificate of Income for 2020: for 2020, the deadline for withholding agents to send taxpayers certificates of income from employment or similar and income from self-employment was extended until 30 April;
- Withholding tax in tenders: the validity of the certificates issued by the tax authority, attesting to satisfaction of the requirements for the non-application of the obligations provided for in Law Decree 124/19, regarding the submission to the principal of payment authorisations for withholdings on amounts paid for work carried out under contract was extended until 30 June 2020.

- **Law Decree 34 of 19 May 2020, containing "Urgent measures regarding health, support for employment and the economy, and social policies connected with the Covid-19 health emergency", converted in to Law 77 of 17 July 2020, published in Official Gazette no. 180 of 18 July 2020 (the Restart Decree).**

This provides for an increase in tax relief on investment in research and development by businesses located in the south of Italy; exempts businesses with revenue of up to €250 million in 2019 from payment of the balance due as IRAP for the 2019 tax year, provided that the payment on account for the same period has been made, and from payment of the first instalment of the payment on account of IRAP for the 2020 tax year, which will be excluded from the calculation of the balance to be paid; an increase in tax relief on expenses incurred by businesses in 2020 in order to sanitise places of work and the tools used, and to purchase personal protective equipment and other equipment designed to safeguard the health of employees; an increase from €700 thousand to €1 million in the annual limit for credits offsettable against tax payable pursuant to art. 17 of Legislative Decree 241/97; repeal of the legislation providing for an increase in VAT from 2021; extension until 30 June 2020 of the deadline for completing the purchase of new capital assets qualifying for depreciation at a rate of 130%.

- **Legislative Decree 84 of 14 July 2020, concerning "Implementation of article 7 of Law 117 of 4 October 2019 regarding incentives for shareholders to assume a long-term commitment and corporate governance systems, published in Official Gazette no. 190 of 30 July 2020.**

This Decree alters the legislation regarding the sanctions introduced in Legislative Decree 58/1998 (the Consolidated Law on Finance), increasing the sanctions for listed companies and persons with administrative, management and oversight responsibilities: in the event a breach of the regulations requiring the preparation and publication of the report on corporate governance and ownership structures and in the event of the failure to comply with the legislation regarding related party transactions.

- **Legislative Decree 75 of 14 July 2020, concerning "Implementation of Directive (EU) 2017/1371, regarding efforts to combat fraud damaging the Union's financial interests by means of criminal law, published in Official Gazette no. 177 of 15 July 2020.**

This Decree has amended Legislative Decree 231/2001, containing provisions regarding the administrative liability of legal persons, companies and associations, including those without legal personality; with regard to tax fraud governed by Legislative Decree 74/2000, it introduces fines in the event of cross-border fraud and where there is an intention to evade VAT amounting to no less than €10 million; it amends the criminal code with regard to the offence of embezzlement, the misappropriation of funds to the detriment of the state, improper inducements to give or promise benefits when this regards the financial

interests of the EU; makes even attempts to defraud through the use of false invoices or other documents for non-existent transactions, false statements by other means and false statements made in another member state in order to evade VAT amounting to no less than €10 million punishable by law.

- **Law Decree 76 of 16 July 2020, containing “Urgent measures on simplification and digital innovation”, converted into Law 120 of 11 September 2020, published in Official Gazette no. 228 of 14 September 2020 (the Simplification Decree).**

Among other things, this legislation addresses the issue of tenders: exemptions from the provisions of the current Tenders Code applicable to procedures relating to which the decision to enter into a contract or to initiate an equivalent arrangement is taken by 31 December 2021; the possibility for companies of strategic importance for the country's economy and trade associations to agree compliance protocols with the Ministry of Internal Affairs extending the use of anti-mafia documentation and enabling private parties to request its issue; the possibility to suspend the performance of public works beyond the threshold through to 31 December 2021; an extension of the integrated tender; in the event of single proof of compliance with contributions obligations, the provisions regarding an extension of the deadline until 31 July 2020 of the validity of such documents expiring between 31 January 2020 and 31 July 2020, and documents whose validity was extended under such provision shall no longer be effective (art. 103, Law Decree 18/2020); in addition to single proof of compliance with contributions obligations, the legislation has added a document certifying that the proportionate use of labour with regard to specific interventions.

- **Law Decree 104 of 14 August 2020, containing “Urgent measures to support and restart the economy, converted into Law 126 of 13 October 2020, published in Official Gazette no. 253 of 13 October 2020 (the August Decree).**

This legislation provides for, among other things, contributions holidays for new jobs created; contributions relief for employees whose place of work is located in the south; the option of making use of income support for employers who have reduced their volume of work.

## Resolutions of the Italian Regulatory Authority for Energy, Networks and the Environment

A summary is provided below of the principal resolutions adopted by Italy's Regulatory Authority for Energy, Networks and the Environment (ARERA) during 2020 and, subsequently, up to the date of preparation of this Annual Report.

### ARERA determinations to recognise transmission and dispatching costs

- **Resolution 152/2020/R/eel** - Recognition of the costs incurred by Terna S.p.A. in 2019 in carrying out the activities involved in managing and developing the unique database of production plants (GAUDI).
- **Resolution 176/2020/R/eel** - Decision pursuant to Regulation (EU) 347/2013 regarding the allocation of the investment costs for project of common interest 3.27, the interconnector between Sicily and Tunisia.
- **Resolution 190/2020/R/eel** - Urgent measures regarding electricity tariffs in implementation of article 30 of Law Decree 34 of 19 May 2020.
- **Resolution 206/2020/R/eel** - Measures applicable to Terna S.p.A. in relation to receivables that are non-collectible due to the insolvency of dispatching users.
- **Resolution 380/2020/R/com** - Launch of procedure for adopting provisions regarding the methods and criteria to be used in determining and revising the rate of return on invested capital in the electricity and gas sectors for the second regulatory period.
- **Resolution 524/2020/R/eel** - Individual settlement of micro-outages for final HV and VHV customers.
- **Opinion 574/2020/I/eel** - Assessment of the outline ten-year development plan for the national transmission grid in 2019 and 2020.
- **Resolution 540/2020/R/eel** - Determination of the quality-of-service bonuses and penalties for electricity transmission for 2019.
- **Resolution 565/2020/R/eel** - Revision of tariffs for provision of the electricity transmission service for 2021.
- **Resolution 580/2020/R/eel** - Recognition of the final costs for 2018 and the estimated costs for 2020 incurred by Terna S.p.A. in carrying out its market monitoring activities.
- **Resolution 599/2020/R/eel** - Revision of dispatching fees from 1 January 2021.

### ARERA determinations to recognise transmission and dispatching activities

- **Resolution 36/2020/R/eel** - Compliance review of proposed changes to the Code for Transmission, Dispatching and Grid Development and Security for the purposes of implementing measures regarding data exchange, assessment of adequacy and unavailability planning introduced by Regulation (EU) 2017/1485.
- **Resolution 37/2020/R/eel** - Measures relating to changes to the process of terminating dispatching and transmission agreements and activating supplier of last resort services in the electricity sector.

- **Resolution 99/2020/R/eel** - Revision of the fee covering the cost of paying for the load interruptibility service.
- **Resolution 153/2020/R/eel** - Approval of the changes, drawn up by Terna S.p.A., to the regulation governing the pilot project for the participation of mixed virtual power plants in the dispatching services market (DSM), in accordance with ARERA Resolution 300/2017/R/eel.
- **Resolution 200/2020/R/eel** - Approval of the regulation, drawn up by Terna S.p.A., in accordance with ARERA Resolution 300/2017/R/eel, in relation to the pilot project for provision of the fast reserve service.
- **Resolution 271/2020/R/eel** - Approval of the method for coordinating the activities involved in maintaining the security of the grid for the (CCR) GRIT region, in accordance with article 76 of Regulation (EU) 2017/1485 (SO GL).
- **Resolution 282/2020/E/com** - Monitoring report on the dispatching services market and survey of the conduct of dispatching customers who own production plants capable of acting as reactive reserve providers and located in areas of southern Italy subject to voltage restrictions.
- **Resolution 322/2020/R/eel** - Approval of the method for coordinating the activities involved in maintaining the security of the grid for the (CCR) Italy North region, in accordance with article 76 of Regulation (EU) 2017/1485 (SO GL).
- **Resolution 324/2020/R/eel** - Bonus mechanism for the upgrade of production plants to meet the requirements regarding restoration of the electricity system in accordance with Regulation (EU) 2017/2196.
- **Resolution 344/2020/R/eel** - Compliance review of proposed changes to the Code for Transmission, Dispatching and Grid Development and Security with regard to aspects relating to dispatching and connections of electricity producers, partly in implementation of the EU regulation on electricity balancing.
- **Resolution 428/2020/R/eel** - Determinations regarding essential plants. Amendments to the related regulations.
- **Resolution 468/2020/R/eel** - Approval of Terna S.p.A.'s proposal for the implementation of auctions for the assignment of hedging instruments protecting against the risk of volatility of the fee for using transmission capacity for 2021.
- **Resolution 473/2020/R/eel** - Approval of the document "Glorenza (IT) – Nauders (AT)" exemption application - Opinion of the Italian Regulatory Authority for Energy, Networks and the Environment.
- **Resolution 492/2020/R/eel** - Approval of the draft contract for the virtual import service and of the regulation governing the auction to award the related contract for 2021.
- **Resolution 509/2020/R/eel** - Measures regarding essential plants for 2021. Amendments to the regulator's Resolution 111/06.
- **Resolution 558/2020/R/eel** - Revision, for the three-year period 2021-2023, of the regulations governing the procedures for the forward procurement of interruptible electricity resources. Approval of the new regulation for the procedures and the new standard contract for providing these services.
- **Resolution 33/2021/R/eel** - Establishment of Regional Coordination Centres (RCCs) for the Central Europe region (SOR), pursuant to article 35 of Regulation (EU) 2019/943.
- **Resolution 37/2021/R/eel** - Approval of the document, "Somplago (IT) – Würmlach (AT) Exemption application – Joint opinion of the National Regulatory Authorities ARERA and E-control".

- **Resolution 40/2021/R/eel** - Approval of the proposed amendment of Annex A.18 to the Transmission, Dispatching, Development and Grid Security Code.
- **Resolution 55/2021/R/eel** - Compliance review of the new version of the national black start plan, as amended following ARERA Resolution 324/2020/R/eel.
- **Resolution 64/2021/R/eel** - Measures regarding the resilience of the national electricity transmission grid.
- **Resolution 70/2021/R/eel** - Approval of the changes, drawn up by Terna S.p.A., to the pilot project for the participation of mixed virtual power plants in the dispatching services market (DSM), in accordance with ARERA Resolution 300/2017/R/eel.

### ARERA determinations relating to Covid-19 health emergency

- **Resolution 60/2020/R/com** - Initial urgent measures and establishment of an extraordinary management account for the Covid-19 epidemic.
- **Resolution 75/2020/R/com** - Urgent measures regarding the electricity, gas, water and integrated waste management and recycling services for urban and similar waste, for the municipalities of Bertinico, Casalpusterlengo, Castelgerundo, Castiglione D'Adda, Codogno, Fombio, Maleo, San Fiorano, Somaglia, Terranova dei Passerini and Vò.
- **Resolution 116/2020/R/com** - Urgent measures linked to the Covid-19 emergency, regarding the provision of electricity transmission and natural gas distribution services.
- **Resolution 148/2020/R/com** - Further extension of the urgent measures linked to the Covid-19 emergency to protect customers and end users: amendments to the regulator's Resolution 60/2020/R/com.
- **Resolution 149/2020/R/com** - Extension of the urgent measures linked to the Covid-19 emergency, regarding the provision of electricity transmission and natural gas distribution services: amendments to the regulator's Resolution 116/2020/R/com.
- **Resolution 192/2020/R/com** - Further extension of the urgent measures linked to the Covid-19 emergency regarding the provision of electricity transmission and natural gas distribution services and launch of the process for revising such measures.
- **Resolution 207/2020/R/eel** - Confirmation of the temporary evaluation of effective imbalances due to the Covid-19 emergency.
- **Resolution 248/2020/R/com** - Determinations regarding urgent measures linked to the Covid-19 emergency: procedure for compensating for amounts not paid by users of the electricity transmission and natural gas distribution services and the general system costs not paid to the CSEA and the GSE.
- **Resolution 436/2020/R/eel** - Extraordinary measures regarding regulation of the infrastructure used to provide the electricity transmission service in relation to the Covid-19 emergency and additional measures regarding output-based regulation of the transmission service.

Further details of the above resolutions, and information of further resolutions adopted by the regulator (ARERA), can be found on the regulator's website at [www.arera.it](http://www.arera.it).

## Other information

Additional information is presented below in accordance with specific statutory or industry requirements.

### Treasury shares

In implementation of the buyback programme linked to the Performance Share Plan 2020-2023, in the period between 29 June 2020 and 6 August 2020, the Parent Company purchased 1,525,900 own shares (equal to 0.076% of the share capital). The Company does not hold any additional treasury shares with respect to those purchased under the above programme, including through subsidiaries<sup>24</sup>.

The Parent Company does not directly or indirectly hold any of its own shares or the shares of CDP Reti S.p.A. or Cassa Depositi e Prestiti S.p.A., nor has it purchased or sold any such shares during the reporting period.

### Related party transactions

Given that Terna S.p.A. is subject to the de facto control of Cassa Depositi e Prestiti S.p.A., a situation ascertained in 2007, related party transactions entered into by Terna during 2020 include transactions with associates and employee pension funds (Fondenel and Fopen), as well as transactions with Cassa Depositi e Prestiti itself, with CDP Reti S.p.A. and with the companies directly or indirectly controlled by the Ministry of the Economy and Finance ("MEF").

Related party transactions in 2020 primarily regard services forming part of its ordinary activities and provided under normal market conditions, as described in greater detail in the consolidated financial statements for the year ended 31 December 2020<sup>25</sup>.

The Parent Company's corporate governance rules ensure that such transactions are conducted in accordance with the rules governing procedural and substantial correctness and on an arm's length basis, and in keeping with the regulations for transparent reporting to the market and in implementation of the regulations issued by the Consob<sup>26</sup>.

No material transactions<sup>27</sup> were carried out in 2020, nor were any transactions subject to the reporting requirements applicable in the event of exemptions applied in accordance with the relevant regulations<sup>28</sup>.

<sup>24</sup> In this regard, see the press release published on 10 August 2020, available at the following link [https://download.terna.it/terna/2020.08.10\\_CS%20TERNA%20operazioni%20su%20azioni%20proprie%20CHIUSURA%20ITA\\_\\_8d83d42cfd43cb6.pdf](https://download.terna.it/terna/2020.08.10_CS%20TERNA%20operazioni%20su%20azioni%20proprie%20CHIUSURA%20ITA__8d83d42cfd43cb6.pdf)

<sup>25</sup> Relations with members of the Parent Company's Board of Statutory Auditors, with particular regard to their remuneration, are described in the notes to the item, "Services" in the notes to the consolidated and separate financial statements for the year ended 31 December 2020. In addition, in implementation of CONSOB Resolutions 18049 of 23 December 2011 and 21623 of 10 December 2020, disclosures regarding the remuneration of "members of management and supervisory bodies and general managers", and their shareholdings in the Company and those of the other persons referred to in the above article, are included in the annual Report on the Remuneration Policy and Remuneration Paid published in accordance with the law.

<sup>26</sup> The Regulation containing provisions regarding related party transactions adopted in CONSOB Resolution 17221 of 12 March 2010, as amended. The Regulation was last amended by Resolution 21624 of 10 December 2020, the provisions of which come into effect from 1 July 2021.

<sup>27</sup> These are related party transactions classified in compliance with Annex 3 to the "Regulations on related party transactions".

<sup>28</sup> As "transactions falling within the scope of the ordinary activities of the Company or its subsidiaries or associates or of financing activities related thereto, provided that the transactions are conducted on equivalent to market or standard terms and conditions".

### Information on ownership structures

The disclosures required by art. 123-bis "Report on Corporate Governance and ownership structures" of the Consolidated Law on Financial Intermediation (Legislative Decree 58 of 24 February 1998) are provided in a separate document approved by Terna's Board of Directors ("Report on Corporate Governance and Ownership Structures" for 2020, available on Terna S.p.A.'s website ([www.terna.it](http://www.terna.it) – in the section, "Corporate governance system/Governance Report").

### Attestations pursuant to article 2.6.2, paragraphs 7 and 8 of the Regulations for the markets organised and managed by Borsa Italiana S.p.A., relating to the conditions described in articles 15 and 16 of the Consob's Markets Regulation (no. 20249 of 28 December 2017 in Official Gazette no.1 of 2 January 2018)

With reference to the provisions of article 15, paragraph one, letters a), b) and c) point i) of the Consob Markets Regulation, under the title *conditions for listing the shares of companies controlling companies incorporated and regulated under the laws of countries not belonging to the European Union*, we declare that Terna S.p.A. does not hold any significant controlling interests, as defined in Title VI, Chapter II of Consob Regulation 11971 of 1999, in companies incorporated and regulated under the laws of countries not belonging to the European Union. With reference to the provisions of article 16 of the Consob Markets Regulation, under the title *conditions prohibiting the listing of the shares of subsidiaries subject to management and coordination by another company*, we declare that Terna S.p.A. is subject to the de facto control of Cassa Depositi e Prestiti S.p.A., exercised through CDP Reti S.p.A. (a joint-stock company controlled by Cassa Depositi e Prestiti S.p.A.), which holds a 29.851% interest in the Parent Company. The checks, providing confirmation of the above situation of control, were conducted by Cassa Depositi e Prestiti and notified to the Company and the Consob with effect from 19 April 2007 and, subsequently, by letter dated 30 October 2014 and 2 December 2014. At this time, there are no formal arrangements for the management and coordination of the Company, nor have any such rights been exercised. Terna S.p.A. conducts its business either directly or through its subsidiaries in conditions of operational and contractual independence.

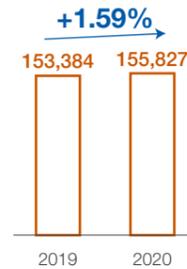
### Participation in the regulatory simplification process introduced by Consob Resolution 18079 of 20 January 2012

Pursuant to art. 3 of Consob Resolution 18079 of 20 January 2012, Terna has elected to adopt the simplified regime provided for in articles 70, paragraph 8, and 71, paragraph 1-bis of Consob Regulation 11971 of 14 May 1999, as amended (the Consob Regulations for Issuers). As a result, Terna exercises the exemption from disclosure requirements provided for in the above Regulations in respect of transactions of a significant nature involving mergers, spin-offs, capital increases involving contributions in kind, acquisitions and disposals.

# Changes in the dimensions of the NTG

Below are details of changes in the dimensions of the infrastructure available for use and in service with respect to the situation at 31 December 2019.

## POWER TRANSFORMED MVA



### DETAILS OF ELECTRICITY SUBSTATIONS OWNED BY THE TERNA GROUP\*

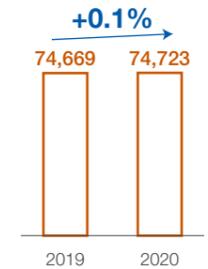
(AT 31 DECEMBER)	UNIT OF MEASUREMENT	2020	2019	CHANGE	% CHANGE
<b>380kV</b>					
Substations	no.	166	165	1	0.61
Power transformed	MVA	119,458	117,504	1,954	1.66
<b>220kV</b>					
Substations	no.	146	149	(3)	(2.01)
Power transformed	MVA	32,397	31,996	401	1.25
<b>Lower voltages (≤ 150kV)</b>					
Substations	no.	577	574	3	0.52
Power transformed	MVA	3,972	3,884	88	2.27
<b>Total</b>					
Substations	no.	889	888	1	0.11
Power transformed	MVA	155,827	153,384	2,443	1.59

\* MVA calculated to the third decimal place and rounded to a whole number. Percentages calculated to the fifth decimal place and rounded to the second decimal place.

### DETAILS OF POWER LINES OWNED BY THE TERNA GROUP\*

(AT 31 DECEMBER)	UNIT OF MEASUREMENT	2020	2019	CHANGE	% CHANGE
<b>380kV</b>					
Length of circuits	km	12,867	12,854	13	0.10
Length of lines	km	11,686	11,673	13	0.11
<b>220kV</b>					
Length of circuits	km	11,847	11,845	2	0.02
Length of lines	km	9,477	9,473	4	0.04
<b>Lower voltages (≤ 150kV)</b>					
Length of circuits	km	50,009	49,969	40	0.08
Length of lines	km	46,790	46,761	29	0.06
<b>Total</b>					
Length of circuits	km	74,723	74,669	54	0.07
overhead	km	70,780	70,815	(35)	(0.05)
underground cables	km	2,181	2,091	90	4.30
submarine cables	km	1,762	1,762	-	-
Length of lines	km	67,954	67,907	47	0.07
overhead	km	64,010	64,053	(43)	(0.07)
underground cables	km	2,181	2,091	90	4.30
submarine cables	km	1,762	1,762	-	-
<b>Incidence of direct current connections (200 - 380 - 500kV)</b>					
Circuits	km	2,435	2,435	-	-
	% of total	3,26	3,26	-	-
Lines	km	2,115	2,115	-	-
	% of total	3,11	3,11	-	-

## LENGTH OF CIRCUITS KM



\* Km calculated to the third decimal place and rounded to a whole number. Percentages calculated to the fifth decimal place.

## PRINCIPAL CHANGES IN THE SIZE OF THE TERNA GROUP'S INFRASTRUCTURE

### Substations<sup>29</sup>

#### New infrastructure:

The following substations have **entered service**:

- transformer substation at Garaguso [MT] (6 380kV bays, 7 150kV bays);
- switching substation at Selegas [SU] (6 150kV bays);
- switching substation at Sorrento [SA] (6 150kV bays);
- transformer substation at Saluzzo North [CN] (1 132kV bay);

and **the purchase** of the switching substation at Morcone [BN] (4 150kV bays).

In addition:

- **inclusion** of synchronous compensators at Matera and Selargius (2 380kV bays each), of pylon control devices installed in the Turin Transmission Operating Area (2 220kV bays) and the shunt reactor at Zuel (1 132kV bay);
- **retirement** of the substations at Rotonda [PZ] (1 220kV bay, 4 150kV bays), Tavazzano Ovest [LO] (1 220kV bay), Sarmato 220kV [PC] and Livorno Marzocco [LI] (9 150kV bays).

#### Existing infrastructure:

- **commissioning** of 23 new line bays for the substations at Piossasco (2 380kV bays), Bisaccia 380 (1 380kV bay, 5 150kV bays), Belcastro 380 (1 380kV bay), Santa Valburga (1 220kV bay), Rotonda 150 and Stornarella (2 150kV bays each), Rome North, Benevento III, Troia 380, Pontelandolfo, Valle, Chiamonte Gulfi, Ragusa and Nuraminis (1 150kV bay each), Genoa Termica (1 132kV bay);
- **commissioning** of 8 new machine bays for the substations at Ragusa (1 220kV bay and 1 150kV bay), Rome North and Bisaccia 380 (1 150kV bay each), Genoa Termica, Varna, Udine RT and Vipiteno (1 132kV bay);
- **commissioning** of 4 new parallel bays for the substations at Corriolo (1 220kV bay), Stornarella, Matera and Chiamonte Gulfi (1 150kV bay each);
- **demolition** of 1 132kV connector bay at the Varna substation.

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### Transformers

The following transformers **entered service**:

- 2 new 380/150kV 250 MVA autotransformers for the Garaguso substation;
- 2 new 380/20kV 290 MVA transformers associated with the synchronous compensators at Selargius;
- 2 new 380/20kV 200 MVA transformers associated with the synchronous compensators at Matera;
- 1 new 220/150kV 250 MVA autotransformer for the Ragusa substation;
- 1 new 150/20kV 40 MVA transformer for the Rome North substation;
- 1 new 132/15kV 40 MVA transformer for the Genoa Termica substation;

and the following **further changes** occurred:

- replacement of 1 380/150kV 250 MVA autotransformer with another 400 MVA autotransformer at the Rossano substation;
- replacement of 2 220/132kV 160 MVA autotransformers with other 250 MVA autotransformers at the Biella East and Arezzo C substations;
- replacement of 1 220/60 kV 75 MVA transformer with another 100 MVA autotransformer at the Vicenza Monteviale substation;
- replacement of 1 220/20 kV 63 MVA transformer with another with the same voltage at the Grugliasco substation;
- replacement of 2 220/20kV 40 MVA transformers with other 63 MVA transformers at the Conegliano and Verona Borgo Milano substations;
- replacement of 1 220/15kV 63 MVA transformer with another with the same voltage at the Biella East substation;
- replacement of 1 132/66kV 25 MVA transformer with another with the same voltage at the Nichelino substation;
- replacement of 1 132/20kV 25 MVA transformer with another with the same voltage at the San Floriano substation;
- replacement of 1 132/15kV 32 MVA transformer with another 40 MVA transformer at the Erzelli substation;
- demolition of 1 220/150kV 100 MVA autotransformer to coincide with retirement of the Rotonda substation.

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<sup>29</sup> The number of bays shown for each substation refers only to bays "in technical operation".

### Power lines

- **construction** of new 380kV Piossasco GIS - Piossasco HVDC connections (2 lines totalling 0.9 km in cable);
- **construction** of the new 220kV Udine South - Acciaierie Bertoli SAFAU line (7.1 km in cable);
- **construction** of the new 220kV Castelluccia - San Sebastiano line (7.0 km in cable);
- **construction** of the new 220kV Dalmine 1 - Tenaris connection (0.1 km overhead);
- **construction** of the new 150kV Benevento III - Pontelandolfo line (15.3 km overhead);
- **construction** of the new 150kV Castrocucco - Maratea line (13.2 km in cable);
- **construction** of the new 150kV Uditore - Cusmano line (2.8 km in cable);
- **construction** of the new 150kV Castellamare - Fincantieri line (2.6 km in cable);
- **construction** of the new 132kV Zuel - Somprade line (23.2 km in cable);
- **construction** of the new 132kV Erzelli - Genoa Termica line (4.4 km in cable);
- **commissioning** of the Chiaramonte Gulfi - Ragusa 1 line (22.5 km overhead), previously combined with another line in operation;
- **acquisition from third parties** of connections with the Morcone substation on the 150kV Castelpagano - Morcone and Morcone - Pontelandolfo lines (1.6 km overhead);
- **sale to third parties** of the Cardano - Bolzano Steelworks line, so-called Cons. HV Colle 60kV (5.5 km overhead);
- **construction** of 10 in-out derivations with an overall increase of the same number of circuits and 8.3 km of circuit, including: addition of 1 line and 1.8 km at 380kV, addition of 1 line and 0.2 km at 220kV, addition of 4 lines and 0.3 km at 150kV, addition of 4 lines and 5.9 km at 132kV;
- **construction of variants, rigid derivations, re-routings and/or changes to grid distribution** removing a total of 2 lines and adding 1.3 km of circuit, including: addition of 12.9 km at 380kV, removal of 1 lines and 3.6 km at 220kV, addition of 3.6 km at 150kV, removal of 1 line and 11.6 km of 132kV circuit;
- **downgrade** from 220kV to 150kV of 1 overhead line amounting to 1.5 km;
- **demolition and/or retirement** of 4 lines amounting to 10.9 km of circuit: 220kV Casalnuovo – Casoria 2 (limited to the overhead section from pylon 18/5A to pylon 21/A1, amounting to 4.1 km), 220kV Sarmato - La Spezia (limited to the overhead Sarmato - pylon 256 section, amounting to 3.0 km), 150kV Uditore - Cusmano (in cable, amounting to 2.8 km) and 132kV Sesto Fiorentino - Pontassieve (limited to the overhead Sesto Fiorentino - pylon 59 section, amounting to 1.1 km).

# Alternative performance measures (APMs)

In accordance with the guidelines in ESMA/2015/1415, the alternative performance measures used in this Integrated Report are described below.

MEASURE	DESCRIPTION
<b>OPERATING RESULTS</b>	
<b>Operating profit/(loss) - EBIT</b>	is an indicator of operating performance obtained by adding <b>Net financial income/(expenses)</b> to <b>Profit/(Loss) before tax</b> .
<b>Gross operating profit/(loss) – EBITDA</b>	is an indicator of operating performance obtained by adding <b>“Amortisation, depreciation and impairment losses”</b> to <b>Operating profit/(loss) (EBIT)</b> .
<b>TAX RATE</b>	is the amount of tax paid as a proportion of pre-tax profit and is based on the ratio of <b>“Income tax expense”</b> to <b>“Profit/(Loss) before tax”</b> .
<b>FINANCIAL POSITION</b>	
<b>Net working capital</b>	is an indicator of financial position, showing the Group's liquidity position; it is based on the difference between <b>Current assets and Current liabilities</b> of a non-financial nature, as presented in the statement of financial position.
<b>Gross invested capital</b>	is an indicator of financial position, showing the Group's total assets and is obtained by adding <b>Net non-current assets</b> and <b>Net working capital</b> .
<b>Net invested capital</b>	is calculated by deducting <b>Sundry provisions</b> from <b>Gross invested capital</b> .
<b>CASH FLOW</b>	
<b>Net debt</b>	is an indicator of the Group's financial structure and is obtained by deducting <b>Cash and cash equivalents</b> and <b>Financial assets from Short- and long-term financial liabilities</b> and the related <b>derivative instruments</b> .
<b>Free cash flow</b>	is the cash generated by operating activities less capital expenditure and is the difference between <b>Cash flow from operating activities</b> and <b>Cash flow for investing activities</b> .

# Reconciliations

In accordance with the guidelines in ESMA/2015/1415, reconciliations of the reclassified income statement and statement of financial position and of net debt and cash flow of the Terna Group and Terna S.p.A. with the related statutory income statement and statement of financial position are shown below.

## RECONCILIATION OF THE TERNA GROUP'S RECLASSIFIED INCOME STATEMENT AND STATEMENT OF FINANCIAL POSITION AND NET DEBT

THE GROUP'S RECLASSIFIED INCOME STATEMENT	€M	CONSOLIDATED INCOME STATEMENT
Regulated revenue	2,148.9	"Revenue from sales and services", totalling €2,461.9 million, "Other revenue and income", totalling €113.8 million, after the cost of International Activities, "Raw and consumable materials used", totalling €61.3 million, "Services", totalling €0.8 million, and "Other operating costs" of €0.1 million
Non-regulated revenue	341.0	
Revenue from International Activities	23.6	
Personnel expenses	282.9	"Personnel expenses" after the cost of construction services performed under concession in Italy in accordance with IFRIC 12 (€5.8 million)
Cost of services, leases and rentals	174.0	"Services" after the cost of construction services performed under concession in Italy in accordance with IFRIC 12 (17.0 million) and the cost of International Activities (€0.8 million)
Materials	155.6	"Raw and consumable materials used" after the cost of construction services performed under concession in Italy in accordance with IFRIC 12 (€5.7 million) and the cost of International Activities (€61.3 million)
Other costs	33.8	Other operating costs after the cost of International Activities (€0.1 million)
Quality of service	8.3	
Cost of construction services performed under concession	5.8	"Personnel expenses"
	17.0	"Services"
	5.7	"Raw and consumable materials used"
Net financial income/ (expenses)	(93.5)	Points 1, 2 and 3 of letter C - "Financial income and expenses"

THE GROUP'S RECLASSIFIED STATEMENT OF FINANCIAL POSITION	€M	CONSOLIDATED STATEMENT OF FINANCIAL POSITION
Financial assets	508.3	"Investment accounted for using the equity method", "Other non-current assets" and "Non-current financial assets", after the value of fair value hedges (€94.2 million)
Net energy-related pass-through payables	(385.0)	"Trade receivables" relating to the value of energy-related pass-through receivables (€797.7 million) and "Trade payables" relating to the value of energy-related pass-through payables (€1,182.7 million)
Net receivables resulting from Regulated Activities	230.9	"Trade receivables" relating to the value of receivables resulting from Regulated Activities (€247.3 million) and "Trade payables" relating to the value of payables resulting from Regulated Activities (€16.4 million)
Net trade payables	(818.0)	"Trade payables" after the value of energy-related pass-through payables (€1,182.7 million) and payables resulting from Regulated Activities (€16.4 million) and "Trade receivables" after the value of energy-related pass-through receivables (€797.7 million) and the value of receivables resulting from Regulated Activities (€247.3 million)
Net tax assets	40.5	"Tax assets", "Other current assets" relating to the value of other tax assets (€42.2 million), "Other current liabilities" relating to the value of other tax liabilities (€11.4 million) and "Tax liabilities"
Other liabilities net	(1,004.6)	"Other non-current liabilities", "Other current liabilities" after other tax liabilities (€11.4 million), "Inventories", "Other current assets" after other tax assets (€42.2 million) and "Discontinued operations and assets held for sale"
Sundry provisions	(121.3)	"Employee benefits", "Provisions for risks and charges" and "Deferred tax assets"
Net debt	9,172.6	"Long-term borrowings", "Current portion of long-term borrowings", "Non-current financial liabilities", "Short-term borrowings", "Cash and cash equivalents", "Current financial assets" and "Current financial liabilities" and "Non-current financial assets" relating to the value of fair value hedges (€94.2 million)

THE GROUP'S ANALYSIS OF NET DEBT	€M	CONSOLIDATED STATEMENT OF FINANCIAL POSITION
"Bond issues" and "Borrowings"	11,248.2	Corresponds with "Long-term borrowings" and "Current portions of long-term borrowings"
"Derivative financial instruments" – short- and medium/long-term	159.6	Corresponds with "Non-current financial liabilities" and "Non-current financial assets" relating to the value of fair value hedges (€94.2 million)
Other financial liabilities, net	80.4	Corresponds with "Current financial assets" relating to the value of accrued financial income (€9.7 million) and "Current financial liabilities"
Financial assets	(628.8)	Corresponds with "Current financial assets" relating to the value of government securities (€611.4 million) and the short-term portion of IFRIC 12 (€17.4 million)

## RECONCILIATION OF THE TERNA GROUP'S CASH FLOW

(€m)

	CASH FLOW 2020	RECONCILIATION WITH FINANCIAL STATEMENTS	CASH FLOW 2019	RECONCILIATION WITH FINANCIAL STATEMENTS
- Profit for the year	795.3		763.9	
- Amortisation, depreciation and impairment losses	643.8		586.1	
- Net change in provisions	(88.9)		(97.3)	
Employee benefits		(2.2)		(5.5)
Provisions for risks and charges		(38.9)		(31.1)
Deferred tax assets		(47.8)		(60.7)
- Net losses/(gains) on sale of assets <sup>(1)</sup>	(7.7)		(12.9)	
<b>Operating cash flow</b>	<b>1,342.5</b>		<b>1,239.8</b>	
- Change in net working capital:	(272.0)		386.2	
Inventories		(15.5)		12.5
Trade receivables		45.1		(122.8)
Income tax assets		(4.5)		14.1
Other current assets		(65.6)		(33.3)
Discontinued operations and assets held for sale		(1.3)		-
Trade payables		(227.9)		(94.4)
Tax liabilities		(11.8)		6.7
Other liabilities		9.5		603.4
- Other changes in non-current assets	(22.0)		(134.9)	
Intangible assets <sup>(2)</sup>		(8.7)		0.5
Property, plant and equipment <sup>(3)</sup>		(6.6)		46.3
Non-current financial assets		(7.3)		(177.3)
Other non-current assets		(3.0)		(1.1)
Investments accounted for using the equity method		3.6		(3.3)
<b>Cash flow from operating activities</b>	<b>1,048.5</b>		<b>1,491.1</b>	
<b>Capital expenditure</b>				
- Total Capital expenditure	(1,351.1)		(1,264.1)	
Property, plant and equipment <sup>(3)</sup>		(1,249.5)		(1,182.9)
Intangible assets <sup>(2)</sup>		(101.6)		(81.2)
<b>Total cash flow from (for) investing activities</b>	<b>(1,351.1)</b>		<b>(1,264.1)</b>	
<b>Free cash flow</b>	<b>(302.6)</b>		<b>227.0</b>	
- Cash flow hedge reserve after taxation and other movements in equity attributable to owners of the Parent <sup>(4)</sup>	(91.0)		(106.5)	
- Other movements in equity attributable to non-controlling interests	(5.4)		-	
- Dividends paid to Parent Company's shareholders <sup>(4)</sup>	(515.0)		(479.7)	
<b>Change in net debt</b>	<b>(914.0)</b>		<b>(359.2)</b>	
<b>- Change in borrowings</b>	<b>2,545.6</b>		<b>87.7</b>	
Non-current financial assets		(49.2)		(45.0)
Current financial assets		(119.2)		(114.8)
Non-current financial liabilities		93.4		101.2
Long-term borrowings		379.5		1,253.1
Short-term borrowings		977.2		-
Current portion of long-term borrowings		1,261.5		(1,104.1)
Current financial liabilities		2.4		(2.7)
<b>CHANGE IN CASH AND CASH EQUIVALENTS</b>	<b>1,631.6</b>		<b>(271.5)</b>	

(1) Included in "Other revenue and income" and "Other operating costs" in the consolidated financial statements

(2) See note 14 to the financial statements

(3) See note 12 to the financial statements

(4) See the consolidated statement of changes in equity

## RECONCILIATION OF TERNA S.P.A.'S RECLASSIFIED INCOME STATEMENT AND STATEMENT OF FINANCIAL POSITION AND NET DEBT

TERNA'S RECLASSIFIED INCOME STATEMENT	€M	INCOME STATEMENT
Tariff revenue	1,906.2	"Revenue from sales and services"
Revenue from construction services performed under concession	28.5	"Revenue from sales and services"
Other operating income	152.1	"Revenue from sales and services", totalling €102.4 million, and "Other revenue and income"
Personnel expenses	70.8	"Personnel expenses" after the cost of construction services performed under concession in accordance with IFRIC 12 (€0.3 million)
Cost of services, leases and rentals	369.2	"Services" after the cost of construction services performed under concession in accordance with IFRIC 12 (€25.9 million)
Materials	0.7	"Raw and consumable materials used" after the cost of construction services performed under concession in accordance with IFRIC 12 (€2.3 million)
Other costs	22.2	Other operating costs
Quality of service	8.3	
	0.3	"Personnel expenses"
Cost of construction services performed under concession	25.9	"Services"
	2.3	"Raw and consumable materials used"
Net financial income/(expenses)	(59.0)	Points 1 and 2 of letter C - "Financial income and expenses"

TERNA'S RECLASSIFIED STATEMENT OF FINANCIAL POSITION	€M	STATEMENT OF FINANCIAL POSITION
Financial assets	1,401.0	"Non-current financial assets" after loans to subsidiaries (€22.5 million) and the value of fair value hedges (€94.2 million) and "Other non-current assets" after amounts due from subsidiaries in relation to staff incentive plans (€0.3 million)
Net energy-related pass-through payables	(408.9)	"Trade receivables" relating to the value of energy-related pass-through receivables (€797.7 million) and "Trade payables" relating to the value of energy-related pass-through payables (€1,206.6 million)
Net receivables resulting from Regulated Activities	230.9	"Trade receivables" relating to the value of receivables resulting from Regulated Activities (€247.3 million) and "Trade payables" relating to the value of payables resulting from Regulated Activities (€16.4 million)
Net trade payables	(615.4)	"Trade payables" after the value of energy-related pass-through payables (€1,206.6 million) and payables resulting from Regulated Activities (€16.4 million) and "Trade receivables" after the value of energy-related pass-through receivables (€797.7 million) and the value of receivables resulting from Regulated Activities (€247.3 million)
Net tax liabilities	(25.6)	"Tax assets", "Other current assets" relating to the value of other tax assets (€14.3 million), "Other current liabilities" relating to the value of other tax liabilities (€43.1 million) and "Tax liabilities"
Other liabilities, net	(546.8)	"Other non-current liabilities", "Other current liabilities" after other tax liabilities (€43.1 million), "Inventories", "Other current assets" after other tax assets (€14.3 million) and "Other non-current assets" relating to amounts due from subsidiaries in relation to staff incentive plans (€0.3 million)
Sundry provisions	(45.5)	"Employee benefits", "Provisions for risks and charges" and "Deferred tax assets"
Net debt	9,137.2	"Long-term borrowings", "Current portion of long-term borrowings", "Non-current financial liabilities", "Short-term borrowings", "Cash and cash equivalents", "Non-current financial assets" relating to the value of fair value hedges (€94.2 million) and loans to subsidiaries (€22.5 million), "Current financial assets" and "Current financial liabilities"

TERNA'S ANALYSIS OF NET DEBT	€M	STATEMENT OF FINANCIAL POSITION
"Bond issues" and "Borrowings"	11,008.6	Corresponds with "Long-term borrowings" and "Current portions of long-term borrowings"
"Derivative financial instruments"	157.2	Corresponds with "Non-current financial liabilities" after the value of fair value hedges (€94.2 million)
"Short-term borrowings" and "Other financial liabilities, net"	1,057.2	Corresponds, respectively, with "Short-term borrowings" and "Current financial liabilities" relating to the value of deferred liabilities (€89.7 million) and "Current financial assets" relating to the value of accrued income (€9.6 million)
"Cash and cash equivalents (including the net balance on intercompany current accounts)"	(2,451.9)	Corresponds with "Cash and cash equivalents"
"Long-term loans to subsidiaries"	(22.5)	Included in the item "Non-current financial assets"
"Financial assets"	(611.4)	Corresponds with "Current financial assets" relating to the value of government securities

RECONCILIATION OF TERNA S.P.A.'S CASH FLOW

	CASH FLOW 2020	RECONCILIATION WITH FINANCIAL STATEMENTS	CASH FLOW 2019	RECONCILIATION WITH FINANCIAL STATEMENTS
- Profit for the year	687.6		713.5	
- Amortisation, depreciation and impairment losses	571.2		540.7	
- Net change in provisions	(75.6)		(86.3)	
Employee benefits		1.9		(0.1)
Provisions for risks and charges		(37.3)		(34.8)
Deferred tax assets		(40.2)		(51.4)
- Net losses/(gains) on sale of assets(1)	(5.5)		(11.2)	
<b>Operating cash flow</b>	<b>1,177.7</b>		<b>1,156.7</b>	
- Change in net working capital:	(152.1)		130.5	
Trade receivables		68.7		(69.2)
Income tax assets		0.3		12.5
Other current assets		(8.6)		(5.8)
Other non-current assets		(0.3)		-
Trade payables		(146.5)		(82.4)
Tax liabilities		(17.4)		9.3
Other liabilities		(48.3)		266.1
- Other changes in non-current assets	(81.8)		81.9	
Property, plant and equipment(2)		40.1		275.4
Intangible assets(3)		-		0.2
Non-current financial assets		(121.4)		(193.9)
Other non-current assets		(0.5)		0.2
<b>Cash flow from operating activities</b>	<b>943.8</b>		<b>1,369.1</b>	
<b>Capital expenditure</b>				
- Total Capital expenditure	(1,134.3)		(1,045.6)	
Property, plant and equipment(2)		(1,041.9)		(976.9)
Intangible assets(3)		(92.4)		(68.7)
<b>Total cash flow from (for) investing activities</b>	<b>(1,134.3)</b>		<b>(1,045.6)</b>	
<b>Free cash flow</b>	<b>(190.5)</b>		<b>323.5</b>	
- Dividends(4)	(515.0)		(479.7)	
- Cash flow hedge reserve after taxation and other movements in equity(4)	(70.1)		(103.6)	
<b>Change in net debt</b>	<b>(775.6)</b>		<b>(259.8)</b>	
- <b>Change in borrowings</b>	<b>2,508.3</b>		<b>33.9</b>	
Current financial assets		(101.8)		(25.2)
Non-current financial assets		(47.6)		(59.1)
Non-current financial liabilities		92.4		99.9
Long-term borrowings		325.4		1,133.5
Short-term borrowings		977.1		-
Current portion of long-term borrowings		1,260.4		(1,112.4)
Current financial liabilities		2.4		(2.8)
- <b>Change in cash and cash equivalents</b>	<b>1,732.7</b>		<b>(225.9)</b>	

(1) Included in "Other revenue" and "Other operating costs" in the financial statements.  
(2) See note 10 to the financial statements.  
(3) See note 12 to the financial statements.  
(4) See the statement of changes in equity.