INTEGRATED REPORT

Terna's role in the energy transition

The electricity system supply chain is made up of several segments: production, transmission, distribution and the sale of electricity. Tasked with **transmission** and **dispatching**, Terna is responsible for the key transmission segment. As Transmission System Operator (TSO), Terna must on the one hand design a grid capable of handling the progressive decarbonisation of the sources of production and the growing integration of renewables ("**transmission operator**"), whilst on the other guaranteeing that, at all times, energy demand from consumers is always balanced by the amount produced through so-called "dispatching" ("**system operator**").

This is an extremely complex task, requiring an independent central coordinator capable of taking an overall view and controlling a high number of actors, both on the supply and the demand side: this is why we refer to ourselves as "**driving the transition**".

From the point of view of transmission, this challenge calls for a major effort to plan, approve and carry out investment projects on a scale not seen in recent decades in Italy. It is crucial to be able to identify rapid, effective solutions, if necessary using funds made available by the European Union in response to the post-Covid situation through the National Recovery and Resilience Plan (NRRP). Against this backdrop, we have further accelerated work on key investment projects of most importance to the electricity system, envisaging **expenditure of over €18 billion on the projects included in our ten-year Grid Development Plan**.

In terms of the "system", on the other hand, the transition to a "distributed production" system based on renewable sources is rapidly altering the market with the rise of the "prosumer" (at the same time a producer and consumer) in place of the traditional "consumer". This is leading to exponential growth in active distributed resources connected to the grid. By managing demand for HV connections, coming directly or indirectly (via distribution companies) from entities proposing renewable initiatives, we can obtain a systematic view of the current situation and future scenarios. In this manner, **Terna can monitor the system's ability to meet demand for electricity whilst satisfying security and quality of service requirements**: in a word, the system's "adequacy".

An electricity system is deemed to be adequate if it has sufficient resources in terms of generation, storage, demand control and transport capacity to meet expected demand for electricity with a reasonable degree of confidence. Thanks to advanced forecasting and planning tools, together with innovative data management and analytics solutions, we constantly assess the **generation resources needed to ensure the system adequacy**. We do this in the short, medium and long term, also with a view to producing new flexible resources for the system.

An extremely complex challenge. Economic growth is based on an energy model that is no longer sustainable, whilst the world is crying out for a collective commitment to cutting greenhouse gas emissions as quickly as possible. Taking up (and meeting) this challenge means proposing a new approach to efficiency, sustainability and security in all areas of the economy, starting with the energy sector.

In 2015, a meeting of world leaders in Paris reached a historical agreement to deal with climate change. The shared goal is to keep the rise in the average global temperature to below 2°C compared with pre-industrial levels, with the willingness to intensify efforts in order limit the increase to 1.5°C. **COP26 held in Glasgow** between 31 October and 12 November 2021, and presided over by the United Kingdom in partnership with Italy, reinforced the international commitment to decarbonisation and sustainable development. Such a commitment plays a key role in our Group's strategic thinking.

Terna plays a central role in this major transition process, as we enable the integration of renewables and the electrification of consumption. Development of the electricity grid is the main enabling factor in achieving decarbonisation of the entire energy system.

What does this mean? Achieving the ambitious European and international goals will obviously require the participation of all members of society, but the energy sector must take the lead, given that it is by a long way the biggest producer of emissions at global level. Just to get an idea, our sector accounts for approximately 82% of Europe's total greenhouse gas emissions.

Under the European Green Deal, the net zero emissions target is to be achieved in two main ways: by increasing use of renewables and through growing electrification of consumption. In this sense, an essential role in all the various scenarios designed to arrive at "carbon neutrality" is played by **the key tool of energy efficiency**.

Introducing the "energy efficiency first" principle, the European Commission invited member states to include this principle in all their decisions regarding policy, planning and investment. In this way, in keeping with the EU's long-term strategy, final energy consumption in Europe is expected to fall by (at least) 35% by 2050 compared with the levels in 2019[4].

The key consideration, in this sense, is that **electricity will be the main energy carrier** and the electricity grid will operate as the "backbone" for decarbonisation for all the other energy sectors. This reflects the carrier's intrinsic efficiency and the technological maturity of renewable energy sources (RES).

To fully exploit this potential, the proportion of total energy demand met by electricity needs to grow progressively, involving what is defined as **electrification of the system**. Europe expects to see the percentage of final energy demand met by electricity rise from the current 23% to 30-31%[5] by 2030 and to between 47%[6] and 60%[7] by 2050. Currently, electricity accounts for approximately 2% of demand from transport, 24% of household demand and 34% of industrial demand[8].

This factor, together with the growing penetration of renewables (which are projected to cover over 85% of the electricity generation mix by 2050, under the European Commission's long-term strategy and excluding nuclear power), will help to fully decarbonise energy consumption by 2050, starting with light transport, housing and services.

[4] EU long-term strategy.
[5] The European Commission's impact assessment accompanying its announcement of 2030 Climate Target Plan (September 2020).
[6] Idem.
[7] ENTSOE & ENTSOG TYNDP 2020 Scenario Report (June 2020).
[8] Eurostat for EU27 2019.

Highlights

(€m)

Revenue
2,604.8
+4.6%

Profit attributable to owners of the Parent
789.4
+0.5%

Net debt
10,002.5

EBITDA
1,854.8
+2.4%

Capital expenditure
1,520.7
+12.6%

Terna's share price

PERFORMANCE IN 2021
+13.82 %

€7.114 per share at 31 December 2021
versus € 6.250 per share at 31 December 2020

ALL-TIME HIGH:
€7.476 per share recorded on 1 March 2022.

FINANCIAL CAPITAL

2021

Euro Medium Term Note (EMTN) Programme increased to **€9 billion**

New **green bond issue** worth **€600 million**

New **EIB loan** of **€300 million**

Launch of first **Euro Commercial Paper** programme worth up to **€1 billion**

S&P Global Ratings upgrade Terna S.p.A.'s outlook from stable to positive.

2022

Successful launch of **Italy's first ever non-convertible, perpetual, subordinated hybrid green bonds** for institutional investors, amounting to a nominal value of **€1 billion**

Agreement for bilateral **ESG-linked Term Loan** of **€300 million**

Acquisition of **75%** stake in **LT S.r.l.**, one of the leading providers of maintenance services for photovoltaic plants.

INFRASTRUCTURAL CAPITAL

After purchasing portions of the grid from other operators, 2021 saw Terna achieve **99.9% ownership of the NTG.**

In 2021, **Terna obtained consents for a total of 37 new grid development projects**, amounting to **total investment of more than €1 billion.**

96 km of new power lines and **4 new substations** were **completed** in 2021, whilst **137 km of power lines** and **5 substations** were **purchased**

Launch of **Terna4Green**, a one-of-a-kind digital platform for **monitoring the progress made towards Italy's decarbonisation**, comparing and correlating thousands of data and estimates on the country's electricity production in real time with figures for the related CO_2 emissions.

ELECTRICITY SYSTEM

Demand
318* TWh
+5.6%

Percentage of demand met from RES
36* %
-5.3%

RENS quality
380* MWh
vs target 820

Performance well below targets set by ARERA

Cost of quality
€5.9 million
-28.9%

** Provisional data.*

Highlights

HUMAN CAPITAL

5,136 employees
+401 units

223 people under 30 hired

2.6 Terna's injury rate
(-31% versus 2020)

0.08 Terna's serious injury rate
(-58% versus 2020)

In September and November 2021, Terna was named **Italy's Best Employer 2022** in the energy sector and **World's Best Employer 2021** in the utilities category. The Group was named the world's best employer based on the results of a survey conducted by Forbes in partnership with the international research company, Statista.

INTELLECTUAL CAPITAL

8 patents filed in 2021

69 projects in the innovation portfolio

SOCIAL AND RELATIONSHIP CAPITAL

66% of community initiatives in line with SDGs 4, 7, 9 and 11

476 meetings with local authorities

NATURAL CAPITAL

86% of waste is recycled

SF_6 leakage rate of **0.40%** as a percentage of the total installed

International ESG indices

Inclusion in the **Dow Jones Sustainability World Index** for the thirteenth consecutive year and in the even more selective **S&P Global Dow Jones Sustainability Index for Europe**.

Inclusion in the **STOXX® Global ESG Leaders** sustainability index for the eleventh year running, thanks to our performance in the three sub-indices for Environmental, Social and Governance ("ESG") performance.

Inclusion in the new **MIB 40 ESG** index for Italian blue-chips, the first to focus on ESG best practices, and in the **GLIO/GRESB ESG Index**, the first global index to specialise in assessing the ESG best practices adopted by listed companies that manage key infrastructure in the energy, transport and telecommunications sectors.

Terna has been recognised as one of those **leading the way in efforts to combat climate change**: CDP (formerly the Carbon Disclosure Project), a global not-for-profit organisation specialising in environmental reporting and in measuring the performances and climate strategies adopted by businesses.

Inclusion for the seventeenth year running in the **FTSE4GOOD** index managed by the rating agency, FTSE Russell, which selects the best global companies based on sustainability criteria.

In January 2022, Terna's membership of the **Bloomberg's Gender Equality Index (GEI)** was reconfirmed for the fourth consecutive year. This is an international index that measures companies' performance regarding gender equality issues, inclusiveness and the quality and transparency of their public reporting.

In February 2022, Terna was included in **Standard & Poor's Gender Equality & Inclusion Index**, the new international index, launched in August 2021, that measures the performance of listed companies in relation to issues regarding gender equality and inclusion.

In November 2021, for the second year running Terna was ranked number one in the **Webranking Europe 500**, a leading European agency that for over twenty years has measured the quality and transparency of the digital communication of listed companies.

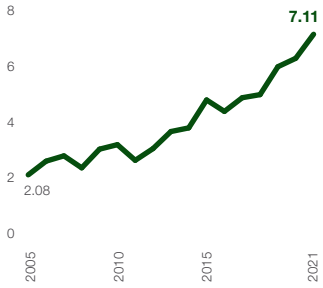
For additional information, go to page 157

Our milestones

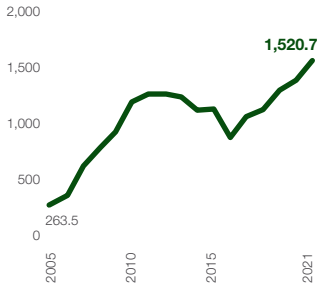
1962
2005

2006
2016

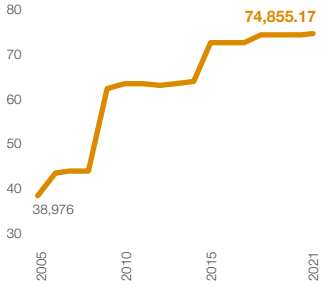
SHARE PRICE PERFORMANCE (€)



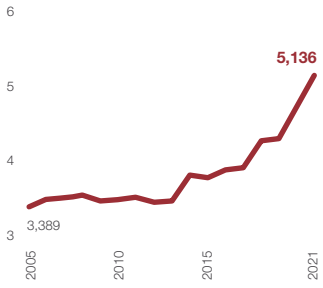
CAPITAL EXPENDITURE (€m)



KM OF POWER LINES MANAGED (n.)



WORKFORCE (n.)



DEVELOPMENT OF THE ITALIAN ELECTRICITY SYSTEM

From nationalisation to reform of the Italian electricity system.

Terna's principal activities are rooted in Italy's history: on 6 December 1962, Law 1943 paves the way for nationalisation of the electricity industry, handing ENEL (Ente Nazionale Energia Elettrica) responsibility for all the stages of the electricity supply chain (production, transmission and distribution), previously in private hands, in order to facilitate the country's electrification.

In the second half of the 1990s, the European Union embarks on a process of deregulation aimed at making grid management independent. In Italy, this leads to the issue of Legislative Decree 79/1999 (the so-called "Bersani Decree"), marking a starting point for reform of the Italian electricity market with the separation of ownership of the National Transmission Grid ("NTG") from management of the grid itself (transmission and dispatching) along the lines of the "Independent System Operator" ("SO") model.

Terna is established in 1999. ENEL consists of two distinct companies: Terna S.p.A., assigned ownership of over 90% of the NTG, and GRTN ("Gestore della Rete di Trasmissione Nazionale"), which at this time manages electricity transmission and dispatching and planning for the development of the NTG.

The Cabinet Office Decree of 11 May 2004, in application of Law 290/2003, establishes the electricity exchange and **brings back ownership and management of the transmission grid under the control of one entity**. This process is completed in 2005, with the transfer to Terna of the GRTN business unit relating to transmission and dispatching and the award of the **concession** to carry out these activities throughout the country by the Ministry of Productive Activities: Terna thus becomes Italy's TSO.

On 24 June 2004, 50% of the Company's share capital is floated on the Italian Stock Exchange and, in September 2005, Cassa Depositi e Prestiti acquires a 29.99% stake, thereby becoming the relative majority shareholder.

DEVELOPMENT OF THE NATIONAL TRANSMISSION GRID AND NEW BUSINESS OPPORTUNITIES

"Utili per il Paese" ("Working for the country"), Terna's new role.

Having taken on the dual roles of TSO and SO, Terna's role evolves as it becomes a provider of strategic infrastructure for the country, as expressed in the payoff, "Working for the country".

This period sees the Company progressively expand the NTG. Following the acquisition of 18,600 km of high-voltage lines from ENEL in 2009, Terna owns 98.6% of the national grid and becomes the leading independent grid operator in Europe and the seventh largest in the world. **In 2015, Terna acquires the Ferrovie dello Stato group's high-voltage grid**, consolidating its leadership in Europe with approximately 72,600 km of grid managed.

At the same time, Terna plans and delivers major new 380 kV connections to bring the transmission grid into line with the country's energy needs: the Chignolo Po-Maleo (Lombardy) and the SA.PE.I submarine connection (from Sardinia to the Italian mainland) enter service in 2011, whilst the Trino-Lacchiarella (Lombardy) and Villanova-Gissi (Abruzzo) lines and the submarine connection linking Sorgente and Rizziconi (Calabria-Sicily) enter service in 2014 and 2016, respectively.

In keeping with changes in the operating environment, the Group is restructured with the establishment of **two new operating companies in 2012: Terna Rete Italia S.p.A.** for Regulated Activities, and **Terna Plus S.r.l.** to drive the growth of services in the Non-regulated sector. Tamini, an Italian 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 convertors used in electrochemical production and electrolysis, joins the Terna Group in 2014.

2017 2019

ENABLING THE ENERGY TRANSITION

Energy is our responsibility. Responsibility is our energy.

The 2010s end with an accelerating shift towards a new energy paradigm that requires Terna to assume an ever more central role in the electricity supply chain.

With the entry into service of the Sorgente-Rizziconi submarine connection, Terna removes the last major bottleneck at zonal level and, with the 2017-2021 Strategic Plan, begins a new chapter in its history by focusing on the **role of the National Transmission Grid in enabling the energy transition**.

Further priorities for Terna are to strengthen Italy's electricity infrastructure, add further exchange capacity between the different areas that make up the Italian electricity market and increase overseas interconnections, with the Company, year after year, presenting ever more ambitious strategic plans, featuring significant growth in investment.

Work begins on major electricity infrastructure projects, such as SA.CO.I 3 (connecting Sardinia, Corsica and the Italian mainland) and the Italy-Austria interconnector, whilst the Italy-Montenegro interconnector, at 445 km the longest ever connection ever built by Terna, is completed. It is the first electricity bridge between Italy and the Balkans, a key link that will enable Italy to reinforce its role as a **European and Mediterranean electricity transmission hub**.

From 2018, Terna funds its investment in infrastructure using new financial instruments: in July, the Company becomes the first Italian utility to issue green bonds, successfully placing its **first Green Bond worth a total of €750 million**, followed by a further three issues with a total value of €2 billion.

2020 2022

AT THE HEART OF THE TRANSFORMATION

Driving Energy.

The start of the new decade, marked by the continuing global pandemic caused by Covid-19, coincides with a further change in the role assigned to Terna, which, from a TSO enabling the energy transition, is increasingly taking the form of a System Operator ("SO") and, as such, assuming responsibility for driving the entire electricity system.

Leveraging distinctive innovation, competencies and technologies, the Company is increasingly focused on the five key dimensions of the electricity system: security, adequacy, quality of service, resilience and efficiency.

Featuring total investment of €8.9 billion (up 22% on the previous plan), the "Driving Energy" **Industrial Plan for the period 2021-2025 is presented to the market in November 2020**. Its sets out Terna's commitment to supporting the country as it recovers from the pandemic and strives to achieve the goals set in the European Green Deal and in the National Integrated Energy and Climate Plan ("PNIEC"). This will above all involve cutting CO_2 emissions by 55% by 2030, to arrive at net zero by 2050.

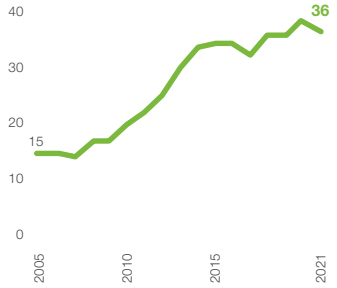
The ten-year **Development Plan**, presented in July 2021, envisages **investment in grid infrastructure amounting to over €18 billion**, compared with the €1,000 billion in investment at European level envisaged in the Green Deal.

An early tangible result of this commitment is reflected in the number of grid development projects authorised in 2021 alone: 37 (23 in 2020), amounting to total investment of more than €1 billion (€266 million in 2020). In socio-economic terms, this has led to the start-up of work throughout Italy, involving approximately 200 contractors and more than 1,000 skilled labourers and technicians.

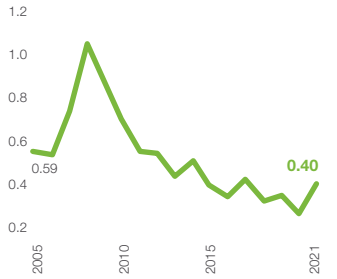
On the corporate front, in February 2020, the subsidiary, Terna Energy Solutions, strengthened its "industrial" side by acquiring the Swiss company, Brugg Kabel AG, one of Europe's leading manufacturers of terrestrial cables.

In November 2021, Terna's Chief Executive Officer, Stefano Antonio Donnarumma, becomes the first Italian to be appointed to the role of **President of GO15** (an association bringing together the world's largest power grid operators) for 2022.

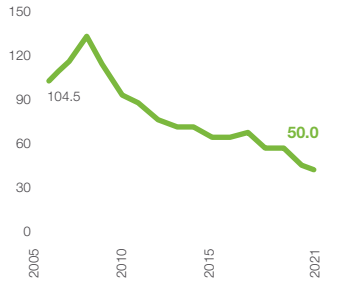
PERCENTAGE OF ELECTRICITY MET FROM RENEWABLE SOURCES (%)

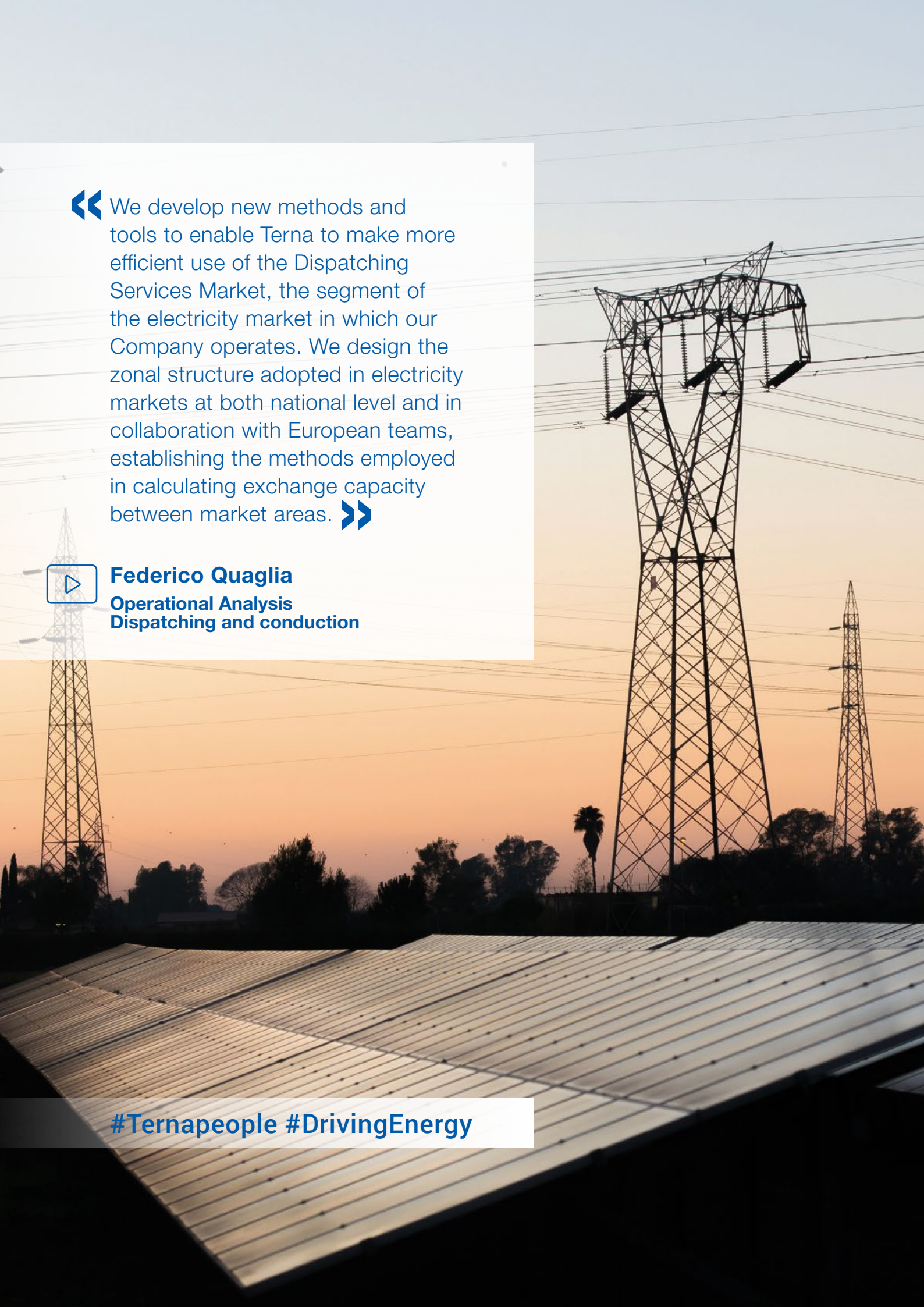


SF_6 LEAKAGE AS A PERCENTAGE OF TOTAL GAS INSTALLED



CARBON INTENSITY – TONNES OF CO_2 EQUIVALENT / REVENUE (€m)





We develop new methods and tools to enable Terna to make more efficient use of the Dispatching Services Market, the segment of the electricity market in which our Company operates. We design the zonal structure adopted in electricity markets at both national level and in collaboration with European teams, establishing the methods employed in calculating exchange capacity between market areas.

Federico Quaglia
Operational Analysis
Dispatching and conduction

#Ternapeople #DrivingEnergy

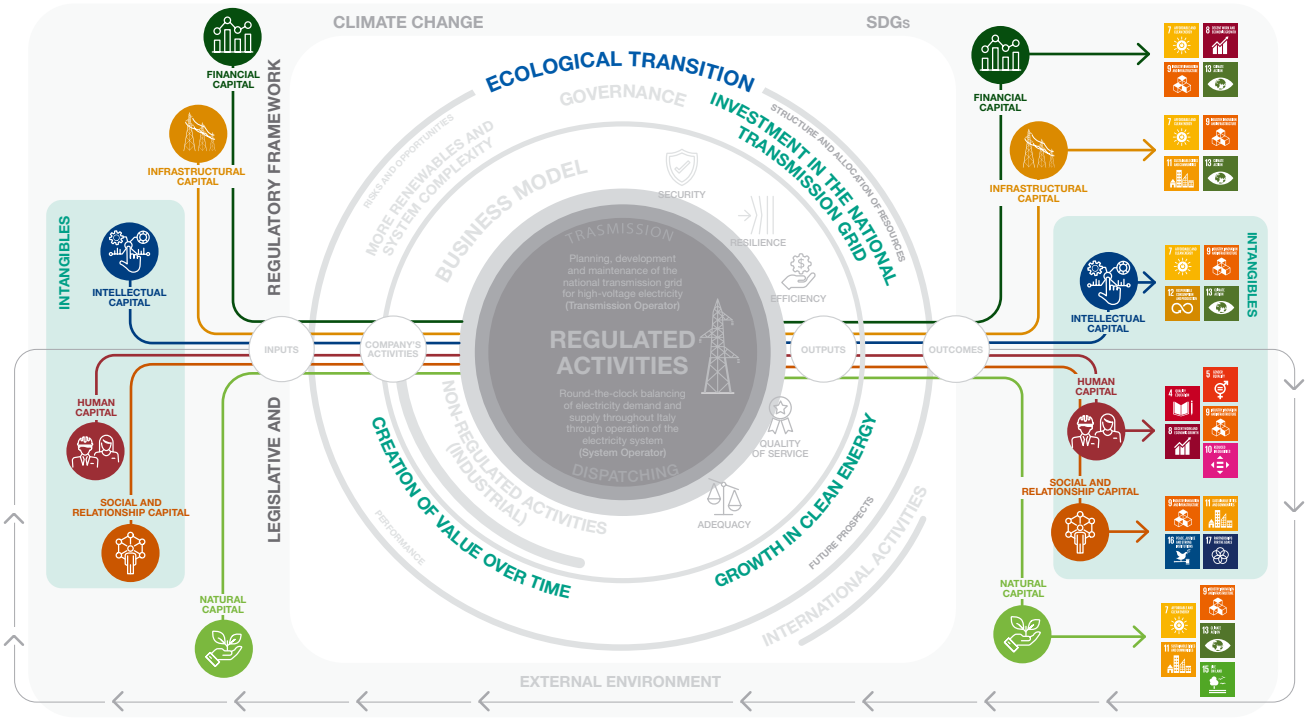
1

Scenarios, strategy and the creation of value

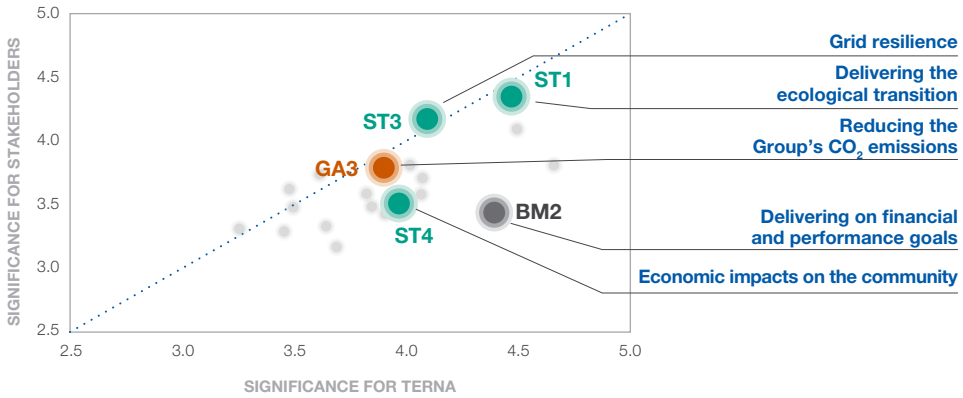
In this section

The process of creating value over time and the materiality matrix, linked to each other and both connected with the sustainable development goals (SDGs), form the methodological basis and the common thread running throughout this Report. This section describes the scenarios having the greatest impact on how we define the process and on the capitals available to Terna in order to implement the process in the best possible way, following the principles behind our ethical approach to doing business. This is followed by a description of the most important strategic documents, starting with the 2021-2025 Industrial Plan through to NexTerna, the change management programme for our employees.

VALUE CREATION



MATERIALITY



These infographics highlight the topics dealt with in this section with the aim of **facilitating information connectivity**: in this way, the section offers an overall view showing the links between all the factors that influence Terna's ability to create value over time and how they are dependent on each other. Material topics are indicated with a cross-reference in blue, showing the relevant code.

The reference scenario

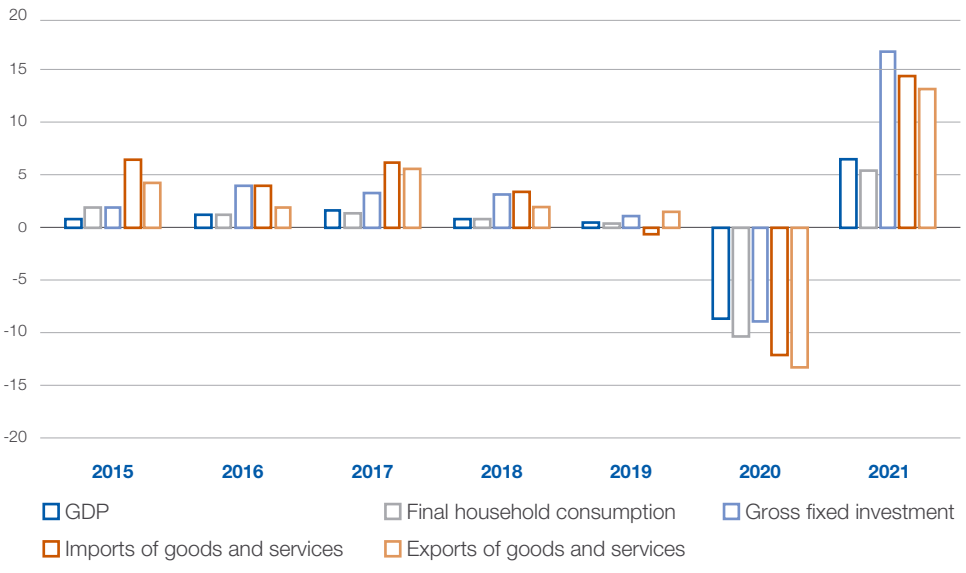
Macroeconomic environment

Following the restrictive measures introduced to contain the Covid-19 epidemic, **2020 recorded an unprecedented decline in GDP**, household income and consumption. This resulted in a **reduction in demand for energy**, pushing down commodity and energy prices.

Thanks to vaccine rollouts and the introduction of large-scale fiscal and monetary support packages (Europe's response was led by the Next Generation EU programme, providing approximately €750 billion to be accessed by individual states on the basis of national investment and reform programmes approved by the European Council), **many areas of the economy were able to restart in 2021**. This was in spite of the ongoing restrictions needed in order to limit the spread of the virus.

The economic recovery, which was particularly strong in the first half of the year, began, however, to show **signs of slowing later in the year**. The upturn in economic activity was accompanied by **supply chain shortages affecting products and intermediate goods**, often resulting from production difficulties caused by mini-lockdowns or local quarantines. The microchip crisis is a case in point, with the shortages creating problems for sectors such as automotive and consumer electronics. Another unforeseen effect was the lack of skilled workers, above all in the United States and the United Kingdom, which tended to drive up wages. Late 2021 also witnessed **new outbreaks of infection linked to the appearance of new variants of the virus**. As described below, this situation was accompanied by a sharp rise in energy prices, linked to geopolitical tensions in Asia.

Global **GDP rose 5.9%** in 2021 according to the International Monetary Fund. The US economy is also estimated to have seen strong growth, rising 6.0%. According to European Central Bank projections, **euro area GDP rose 5.3%**, with the decline registered in 2020 only expected to be fully made up in 2022. This trend was seen across all the major European economies, **with the pace of recovery expected to be maintained in 2022**.



Data from ISTAT, March 2022.

In Italy, **GDP grew at a rate of 6.6% in 2021** (source: ISTAT, March 2022), thanks to a strong upturn in consumer spending (+5.2%) and gross fixed investment (+17%). **The role played by Terna's capital expenditure**, the pace of which was stepped up in 2021, is worthy of note in this regard, due to its positive impact on the country's GDP (on average, every euro spent adds three euros to GDP). In terms of the manufacturing sector, output rose 12.4% in 2021 compared with 2020. **The Bank of Italy expects to see a continuation of this positive trend in 2022**, helping to drive **GDP growth of 3.8%**.

However, the recent conflict in Ukraine and the potential impact on energy supplies threaten the future recovery.

Energy price pressures

One of the most significant economic trends of 2021 was the **rise in inflation** accompanying the economic recovery. Prices have begun to rise faster than at any time in recent decades, driven above all by an unprecedented **increase in energy prices**.

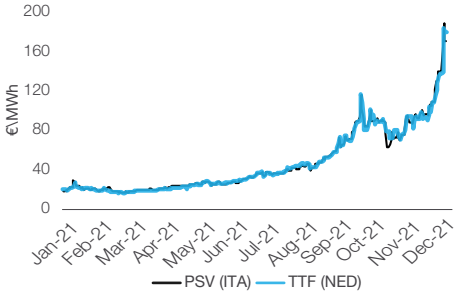
After the crisis of 2020, the **supply of energy commodities has failed to keep pace with the sharp increase in global demand** for energy as a result of the economic recovery. Europe has been affected by other more specific factors: particularly low gas stocks and, above all, geopolitical problems linked to the Nord Stream 2 gas pipeline and tensions over Ukraine, together with further tensions in the international liquified natural gas market, which makes up the remainder of the EU's supply needs. As a result, the fourth quarter of 2021 saw **natural gas prices soar** to record highs in all the European markets, reaching a peak of **€180 per MWh** in December 2021 (up 496% on the average for the month of January 2021).

There was also a **sharp increase in the price of CO_2**, which rose to **€90 a tonne** at the beginning of December 2021. This trend is due to the European Commission's decision to set new targets for cutting emissions, to the launch of the so-called phase IV of the ETS, and the resulting increase in market prices.

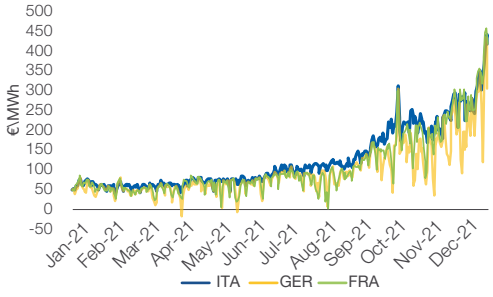
Towards the end of 2021, all these factors, in addition to the tensions caused by the unexpected shutdown of French nuclear plants, led to **the biggest rises in wholesale electricity prices seen in the last 20 years**, with spot prices increasing to well above **€400 per MWh** on leading European markets in December 2021.

In addition, the beginning of 2022 has seen a deterioration in relations between the West and Russia, which have reached a crisis point following the invasion of Ukraine at the end of February. This scenario has exacerbated an already tense situation, with the price of gas rising above the record level of €200 per MWh in early March. In response to the price increase, the European Union and Member States are seeking solutions that would reduce Europe's dependency on the importation of fossil fuels from Russia (above all natural gas, which accounts for approximately 40% of Europe's domestic consumption).

GAS – SPOT PRICES



ELECTRICITY BASELOAD DAY-AHEAD SPOT PRICES

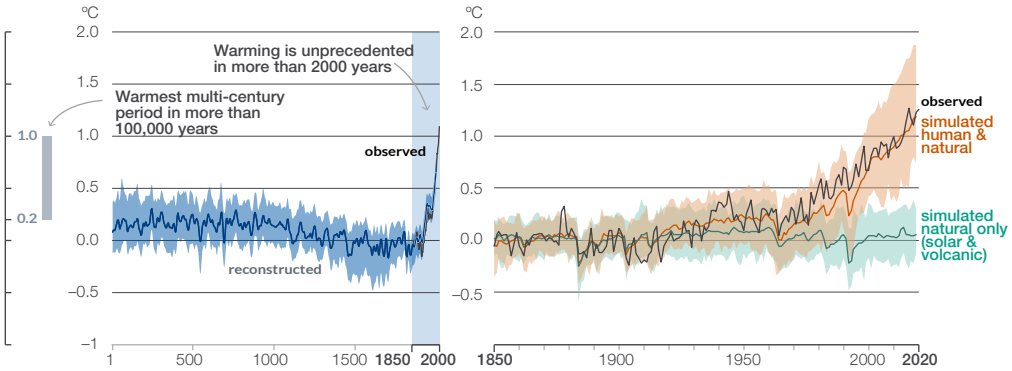


Source: Terna based on Bloomberg data.

The market environment

The latest report published by the IPCC[9] confirms that the increase observed in the concentration of greenhouse gases (GHGs) is linked to human activity. **Each of the last 4 decades has been warmer than the previous one**: the average surface temperature on earth **has risen by 1.1 °C compared with the period 1850-1900**.

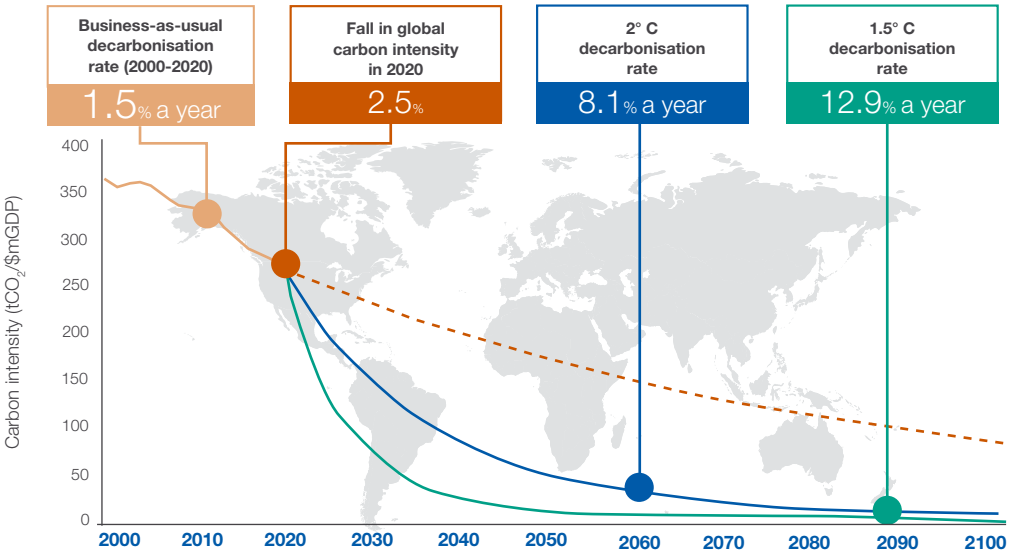
IPCC – GLOBAL TEMPERATURE CHANGES (°C)



This warming has led to an increase in the frequency and intensity of extreme weather events, in terms of both temperature extremes (hot and cold) and violent and unpredictable precipitation events. The above report also states that there is a broadly linear relationship between cumulative CO_2 emissions and rising temperatures, estimated to be approximately 0.45°C for every 1,000 $GtCO_2$ released into the atmosphere. This additional scientific evidence confirms the need to achieve carbon neutrality by 2050 to keep **the rise in the global temperature below 2°C** compared with pre-industrial levels.

The global rate of decarbonisation (the reduction in carbon intensity) was 2.5% in 2020. This rate, partly the result of the pandemic, marks a slight improvement compared with the previous year, when the figure was 2.4%, but is well below the **annual global rate of decarbonisation of 12.9% required** if we are to meet the target of limiting global warming to approximately 1.5°C[10].

NET ZERO ECONOMY INDEX 2021



Fonte: Net Zero Economy Index 2021, PwC.

[9] Intergovernament Panel on Climate Change, AR6 2021.
[10] Source: "The Net Zero Economy Index 2021", PwC.

In 2020, the global economy was hit hard by the Covid-19 pandemic and, compared with 2019, **demand for energy fell 4.3%**. The sector's emissions fell **5.6%** and there were sharp reductions of 4.6% of coal consumption and 9.3% in oil consumption[11]. The need to restart economic activity, despite the continuing pandemic, **resulted in a sharp rise in emissions in 2021**, driven by increased demand for coal, above all for use in generating electricity. According to the quarterly survey carried out by Enea, energy demand in Italy in the third quarter of 2021 rose 7% compared with the same period of 2020. This was accompanied by a rise in CO2 emissions caused by increased use of fossil fuels (+4%), above all oil (+8%) and coal (+25%). It is therefore expected that 2021 will have registered an annual increase of **more than 7% in energy consumption** and greenhouse gas emissions **compared with 2020**, even if the figures are due to have remained below pre-Covid levels.

According to the IEA[12], **the energy sector is largely responsible for the greater part of emissions** produced by human activity and its decarbonization is thus key to avoiding the potential effects of climate change. Under the net-zero pathway developed by the IEA, by 2030 the global economy will have grown by 40%, but must use 7% less energy than today. **Energy efficiency and the electrification of final consumption** (given that, as an energy carrier, electricity is intrinsically efficient) will be the key drivers of decarbonisation. The real enabler of this transformation is **electricity as an energy carrier**, given the high level of intrinsic efficiency of final uses based on this carrier (resulting from thermodynamic laws and thus independent of any effective technological development): an electric vehicle is from 3 to 5 times more efficient than any technology based on the use of liquid or gaseous fuels, whilst a heat pump is 5-6 times more efficient than any fuel-based alternative.

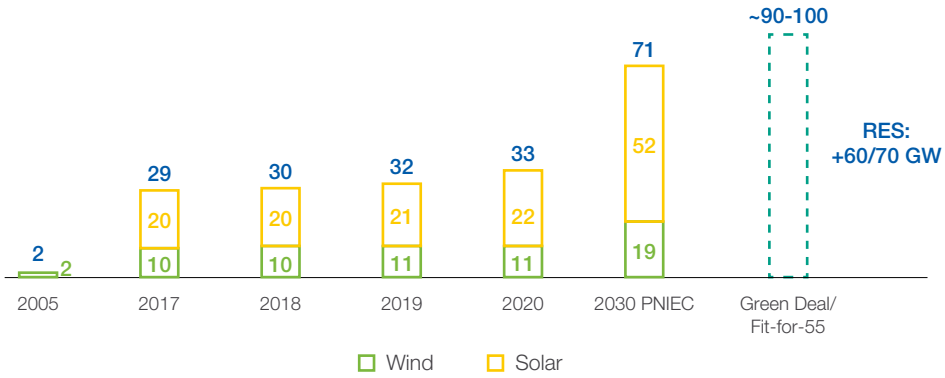
Europe's approach to shaping the future of its energy sector is set out in the guidelines and regulations in the European Union's **Clean Energy Package**, adopted at the end of 2018 in response to the commitments made in the Paris Agreement. The bar was further raised in terms of targets for cutting emissions, renewable energy and energy efficiency, with the publication, at the end of 2019, of the **Green Deal**. This aims to transform the European Union into a net-zero economy by 2050. This will require us to **cut greenhouse gas emissions by at least 55%** by 2030 compared with 1990 levels. In addition, on 14 July 2021, the European Commission presented a package of proposals aimed at achieving the targets set for 2030 and 2050. The package, called **Fit for 55**, has strengthened the guidelines with 8 revisions of existing legislation and 5 new proposals. On 15 December 2021, the Commission also presented the second part of the package of proposals.

At national level, with reference to 2030, the National Integrated Energy and Climate Plan (PNIEC) remains our reference scenario, with the aim of adding 40 GW of renewable energy capacity by 2030, equally distributed between north and south. However, the targets in the PNIEC will have to be revised in line with the Green Deal. This will mean **adding 60/70 GW of new renewable capacity**, requiring the installation of approximately 6-8 GW of new capacity each year (to date the figure stands at around 1 GW per year). This will enable renewable to meet at least 65% of consumption, compared with the 55% initially targeted. In addition, as regards transport, the PNIEC envisages that there will be 6 million more electric vehicles on the roads by 2030, whilst there are expected to be around 4 million more heat pumps for summer and winter use installed in homes and approximately 10 GW/50 GWh in additional (hydroelectric and electrochemical) storage capacity in the next 10 years. These goals will also have to be raised as part of the process of adopting the new EU targets.

[11] PWC 2021.
[12] IEA: International Energy Agency. "Net Zero by 2050" report.

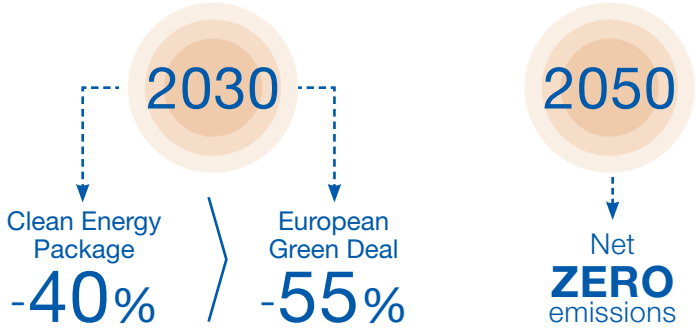
The Italian approach: EFFICIENCY FIRST AND DEVELOPMENT OF RES

WIND AND SOLAR INSTALLED CAPACITY TRENDS THROUGH TO 2030 [GW]



Consumption of electricity is thus destined to rise: the PNIEC predicts that **electricity demand will total approximately 331 TWh by 2030**. As highlighted earlier, given the growing adoption of electric-powered heating and cooling systems for buildings, electric vehicles and the increased electrification of consumption in general, we expect a further increase in demand between 2030 and 2040. The figures for electricity demand are clearly also subject to revision based on how Italy plans to meet the Green Deal goals.

European driver: CO_2 EMISSIONS TARGETS



To achieve these objectives, it will be necessary to implement a series of actions:

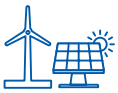
INVESTMENT IN INFRASTRUCTURE

Develop grid infrastructure to enable the integration of renewable sources and the large-scale electrification of final consumption.

For Terna, investment of €18.1 billion over 10 years (up 25% on the 2020 Development Plan) **to deliver on the PNIEC**: strengthening the grid and overseas interconnections, digitalisation, investment in boosting resilience, inertia and voltage regulation;

develop infrastructure to enable the integration of RES;

accelerate consents processes that today represent the main obstacle to achieving decarbonisation targets.



DEVELOPMENT OF RES

Increase the pace of deployment, giving priority at administrative level to the deployment of RES and simplifying the consents processes for plant installation;

ensure adequate security of supply, leveraging the **range of technologies available**;

ensure a coherent approach at both the **planning and installation** stages in terms of timing and geographical location.

For Terna, guide the correct choice of **technology mix** and **location for plants**, diversifying sources of supply;

confirm the use of **reverse auctions**.

STORAGE

Deploy **new hydroelectric and electrochemical storage systems** to manage overgeneration, grid congestion and **residual load ramping events**, and provide high-quality services to the system.

For Terna, identify the **optimal amount and mix of technologies.**

MARKET DEVELOPMENTS

Identify a **correct market design mix** to achieve an optimal combination of forward markets (RES auctions, storage auctions, the Capacity Market) and spot markets, for both energy and services markets;

broaden the participation of **"new" resources** (RES, EVs, DSR) in the provision of **flexibility services**.

For Terna, open up the dispatching services market (DSM) to resources that are currently not enabled, as non-conventional resources (Virtually Aggregated Mixed Units, the Fast Reserve, the secondary pilot and voltage regulation).

In brief, the coordinated development of non-programmable renewable sources, electricity infrastructure and storage systems, accompanied by greater penetration of electricity as an energy carrier and market developments, have a key role to play in the ecological transition. This is needed not only to combat climate change and boost environmental sustainability, but also to reduce the country's energy dependence, limit energy price pressures due to commodity costs (gas and CO_2), and to drive the country's economic growth and technological research and innovation.

This represents an extremely challenging, long-term commitment, which will require a **coordinated approach to timing and geographical location to channel the massive investment being undertaken by operators in a way that is in keeping with the related plans**. This transformation is a major opportunity to boost Italy's competitiveness: the country's lack of energy resources has historically meant that energy costs were higher than the European average and that the country was highly dependent on imported energy. This situation has been highlighted by recent tensions regarding the import of gas from Russia. In this new scenario, Italy will see a reduction in its energy dependence and could enjoy far more competitive energy costs thanks to the availability of sun and wind.

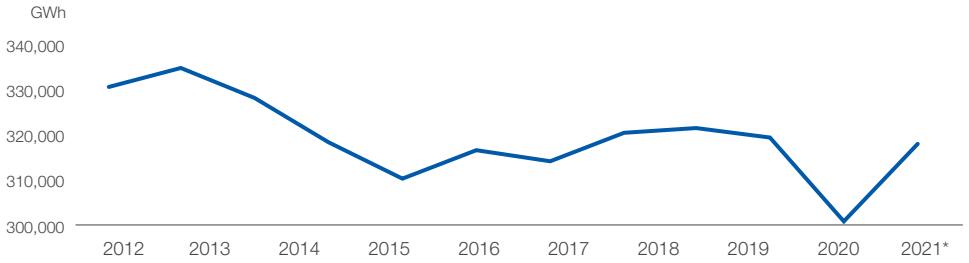
The investment planned for the coming years will determine our country's strategic position in the global economic system of the future. **Terna is thus driving the transformation of the energy system as part of the country's ecological transition**. This commitment also takes the shape of efforts to promote ever **closer strategic cooperation with other players in the sector**, including through the membership of various European bodies (e.g. ENTSO-E) and partnerships with other European TSOs (e.g. the Equigy initiative, whose partners, in addition to Terna, include the TSOs TenneT, TransnetBW, Swissgrid and APG).

Share of demand met from RES

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

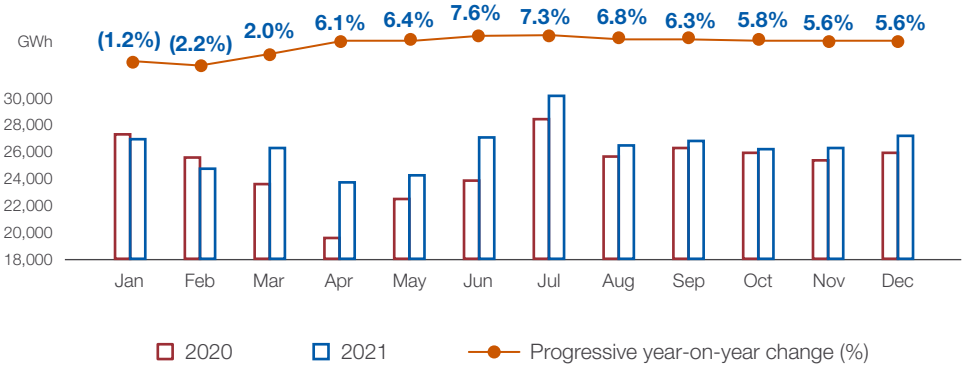
Demand for electricity in Italy amounted to 318,075 GWh in 2021 (provisional data), an **increase of 5.6% compared with 2020**, which recorded a decline of 5.3% compared with the previous year.

ELECTRICITY BALANCE IN ITALY (GWh)*	2021**	2020	CHANGE	% CHANGE
Net production	278,109	271,648	6,461	2.4%
From overseas suppliers (imports)	46,564	39,790	6,774	17.0%
Sold to overseas customers (exports)	(3,771)	(7,590)	3,819	(50.3%)
For use in pumping***	(2,827)	(2,668)	(159)	6.0%
Total demand in Italy	**318,075**	**301,180**	**16,895**	**5.6%**

* *Does not include demand for energy for ancillary services related to electricity production.*
** *Provisional data.*
*** *Electricity used for pumping water for subsequent use in the production of electricity or as a way of immediately balancing overproduction.*

Monthly demand for electricity in Italy in 2021, compared with the previous year, performed differently in the months of January and February with respect to the following months. Despite a slight fall due partly to the calendar effect (fewer working days), monthly demand for electricity in the first two months of the year was comparable to the same period in the previous year. However, from March electricity demand increased considerably, reflecting the downturn in demand in 2020 due to the total lockdown and the shutdown of productive activity in response to the Covid-19 emergency last spring (following issue of the Cabinet Office Decree of 9 March 2020).

MONTHLY DEMAND FOR ELECTRICITY*



** Provisional data.*

Meeting demand and energy production

In 2021 (provisional data) approximately **36% of total energy demand was met from renewable energy sources**. The value of production from renewable sources was stable compared with the previous year, whilst the percentage met from these sources is slightly down due to the increase in overall demand for electricity.

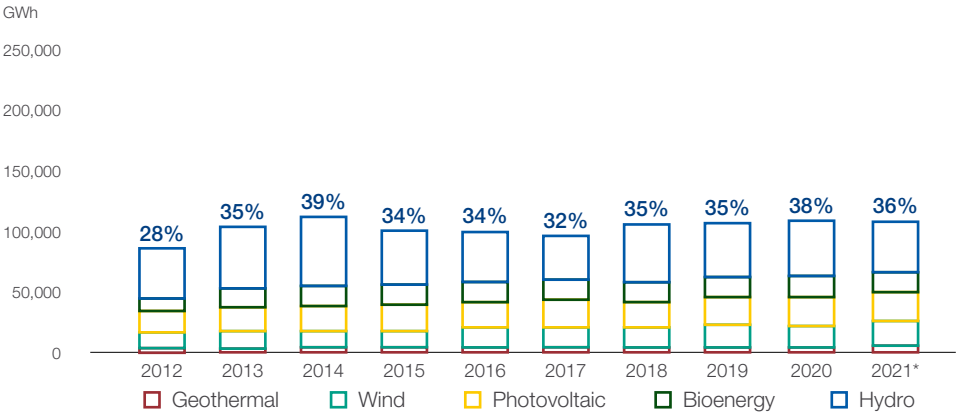
In terms of the performance of the various renewable sources, there were increases in photovoltaic production (up 2.1%) and wind production (up 10.8%), which in effect offset the significant drop in hydro production (down 5.4%).

In this context, with the European drive towards decarbonisation and the strong penetration of renewables, high-voltage grids continue to play a key role in enabling the growth in renewable generation capacity. Development of the power grid is thus crucial in responding to the increased amount of electricity fed into the system from renewable sources, above all those of an intermittent nature, such as wind and photovoltaic. Despite this, even on days when the situation was at its most critical, the robustness of grid infrastructure and Terna's actions in managing the system meant that major problems on the national grid were avoided.

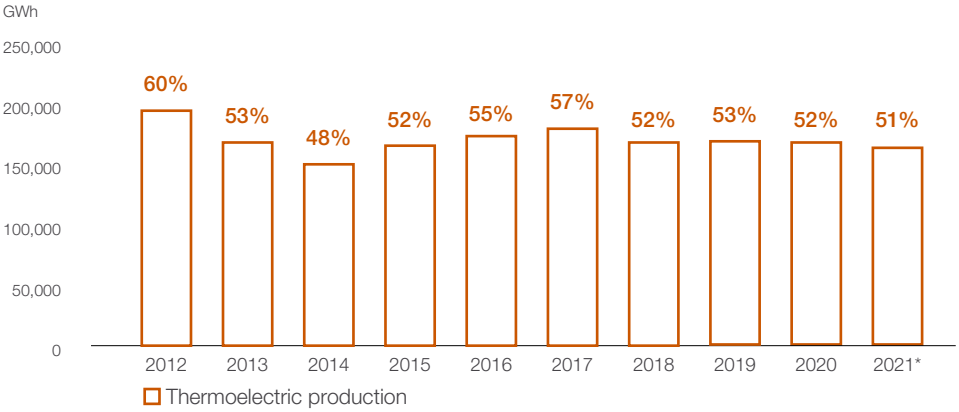
The two charts on the left show the performance of renewable production in Italy over recent years, compared with the performance of thermoelectric production over the same time period.

PERFORMANCE OF PRODUCTION SOURCES AS A PROPORTION OF DEMAND[13]

Renewable sources



Traditional sources



** Provisional data.*

[13] The percentages shown in the two charts compared refer to the share of demand met from renewable sources and thermoelectric sources (traditional sources).

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 and has continued to do so.

NUMBER OF HOURS IN WHICH THE VOLUME OF DEMAND MET FROM RENEWABLE SOURCES EXCEEDED THE THRESHOLDS

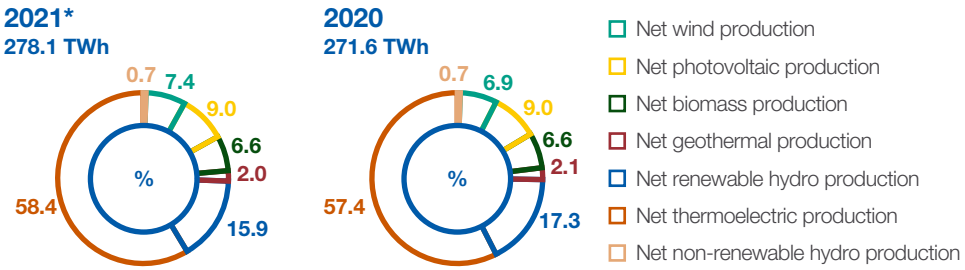
	>30%	>40%	>50%
2019	6,117	2,622	701
2020*	6,467	3,621	1,509
2021**	**6,146**	**2,745**	**885**

* *A leap year.*
** *Provisional data.*

Considering that there are 8,760 hours in a year (8,784 in a leap year), the trend in the last three years shows an overall increase in the number of hours during which the volume of demand met from renewable energy sources exceeded the thresholds of 30% and 40% (it should be noted that the increase in 2020 is positively influenced by the impact of the Covid-19 pandemic, with the increase in the related percentages linked to the shutdown of productive activity and the resulting collapse in demand for electricity).

This reflects both an increase in renewable installed capacity and increasingly integrated management of the different available sources of generation and an easing of the restrictions on exchanges between different market areas.

NET ELECTRICITY PRODUCTION BY SOURCE



** Provisional data.*

Regulatory framework

Terna operates as a natural monopoly and within a market regulated by the **Regulatory Authority for Energy, Networks and the Environment** (**ARERA**, or the *Autorità di Regolazione per Energia Reti e Ambiente*), which determines the level of regulated revenue for transmission and dispatching activities, currently representing approximately 86.5% of the Group's total revenue.

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 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)[14]. The change will enable operators to recover earlier costs, together with those relating to the Italy-France Interconnector project.

At the end of NPR2, the regulations provide for adoption of a Totex/Output-based approach. This recognises costs based on total expenditure incurred (operating and capital expenditure) and focuses more on outputs and the levels of service provided.

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 for the period 2019-2021 has been set at 5.6% for the transmission service. In Resolution 614/2021/R/com, ARERA set out the procedure for determining and revising the WACC for the various regulated infrastructure services in the electricity and gas sectors in the 2022-2027 period, setting a WACC of 5.0% for the transmission service in 2022. In this Resolution, ARERA confirmed the adoption of a mechanism for revising key macroeconomic parameters at the end of the first three years (2022-2024) and also envisaged the possibility, in the same three-year period, of a further annual revision if the change observed in the key market parameters used in the calculation formula were to result in a change in WACC of at least 0.5%.

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.

[14] 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 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. The methods of determining and revising the WACC are established by the regulator.	1. To cover the return on capital (RAB)
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. 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.	3. To cover operating costs
In addition to the above items, a portion of the remuneration of transmission and dispatching services derives from regulatory incentives linked to the achievement of specific objectives, such as improvements in the quality of the transmission service, increases in transmission capacity between market areas, relieving congestion within those areas, network constraints and conditions for essential service provision, and reductions in dispatching services market costs, in accordance with the provisions of ARERA Resolutions 567/2019/R/eel, 699/2018/R/eel and 597/2021/R/eel.	4. Output-based regulation

The value creation process

The objective of creating value over time is at the heart of all organisations. The growing realisation that a business's activities have social and environmental impacts has given birth to a sustainable approach to doing business. This has provided the tools enabling us to identify, monitor and measure such aspects using specific indicators, mitigating any resulting risks and helping to boost the resilience of all business processes.

Starting from solid principles, which in Terna's case, are enshrined in our Code of Ethics and reflected in the way our strategies are influenced by the Sustainable Development Goals, the creation of value is thus a process shaped by the legitimate expectations of stakeholders and increasingly urgent and unavoidable environmental considerations.

This section of the Report describes Terna's approach to creating value over time, with the aim of achieving sustainable development.

Benchmark SDGs

The United Nations' Sustainable Development Goals ("SDGs"), form the heart of the 2030 Agenda, represent a benchmark closely linked to our mission and the strategic objective of implementing a new carbon-free model based on the use of renewable energy sources.

Delivery of the energy transition is an objective fully in line with achievement of SDGs 7 ("Affordable and clean energy"), 9 ("Industry, innovation and infrastructure") and 13 ("Climate action"). Meanwhile, SDG 17 ("Partnership for the goals") can provide an additional push in terms of speeding up the timeline and improving overall quality.

TERNA'S BENCHMARK SDGs

Ensure access to affordable, reliable, sustainable and modern energy for all.

Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.

Take urgent action to combat climate change and its impacts.

Strengthen the means of implementation and revitalise the global partnership for sustainable development.

Taken as a whole and including general sustainability considerations able to create value in the medium- to long-term, the SDGs are also a clear benchmark from an operational standpoint to which Terna's refers in carrying out its activities. These SDG's steer Terna towards achieving environmental objectives (e.g., efficient use of natural resources, respect for the environment, reduction of CO_2 emissions, the reduction and recycling of waste), social objectives (quality education, respect of human rights and gender equality) and sound governance objectives (fighting corruption and transparent reporting), as shown in the materiality matrix (see page 42).

In this sense, Terna also strives to achieve SDGs 4 ("Quality education"), 5 ("Gender equality"), 8 ("Decent work and economic growth"), 10 ("Reduced inequalities"), 11 ("Sustainable cities and communities"), 12 ("Responsible consumption and production"), 15 ("Life on land") and 16 ("Peace, justice and strong institutions").

BENCHMARK SDGs FOR THE MANAGEMENT OF TERNA'S ACTIVITIES

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Achieve gender equality and empower all women and girls.

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Reduce inequity within and among countries.

Make cities and human settlements inclusive, safe, resilient and sustainable.

Ensure sustainable consumption and production patterns.

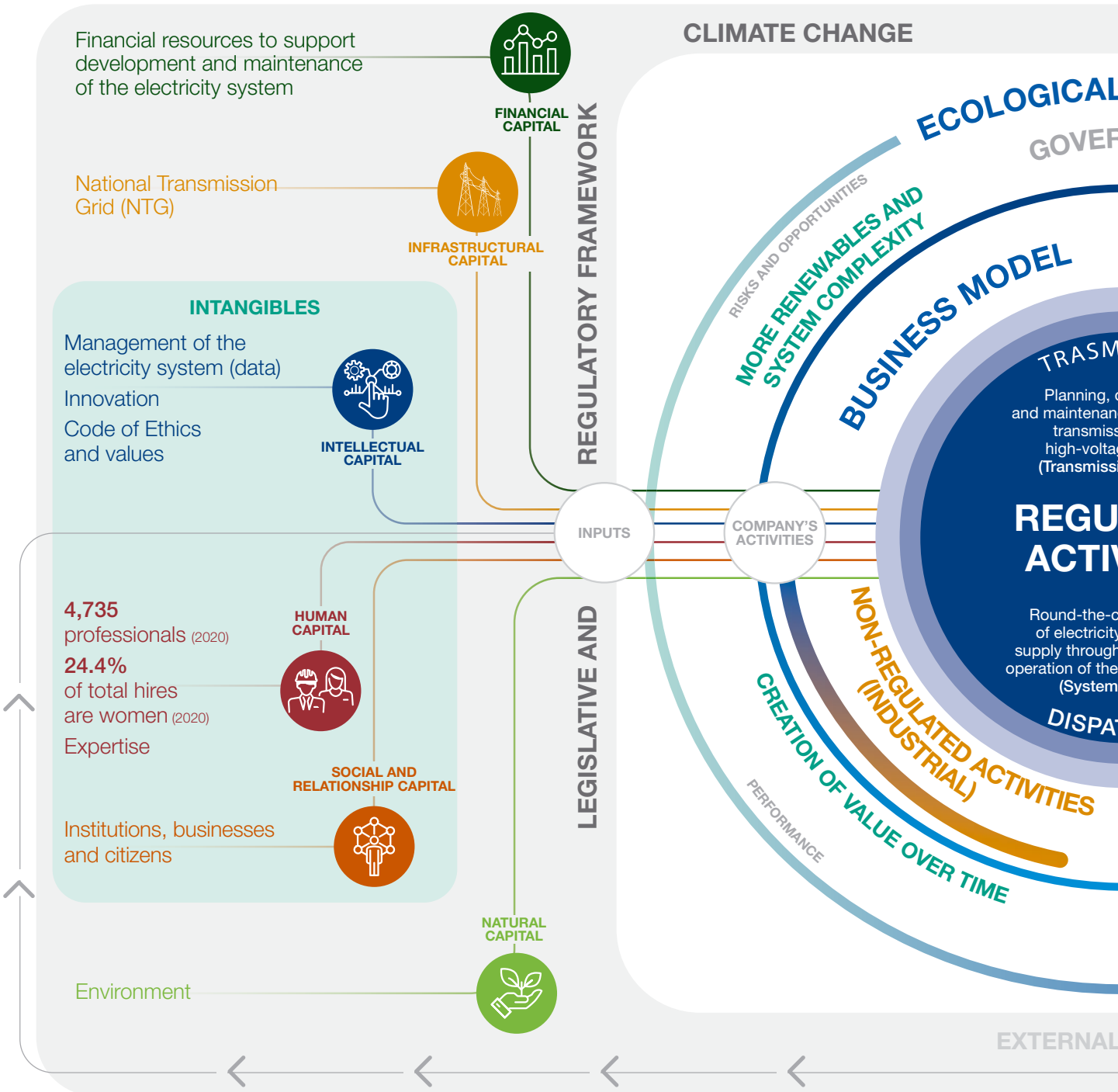
Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

The value creation process and the business model

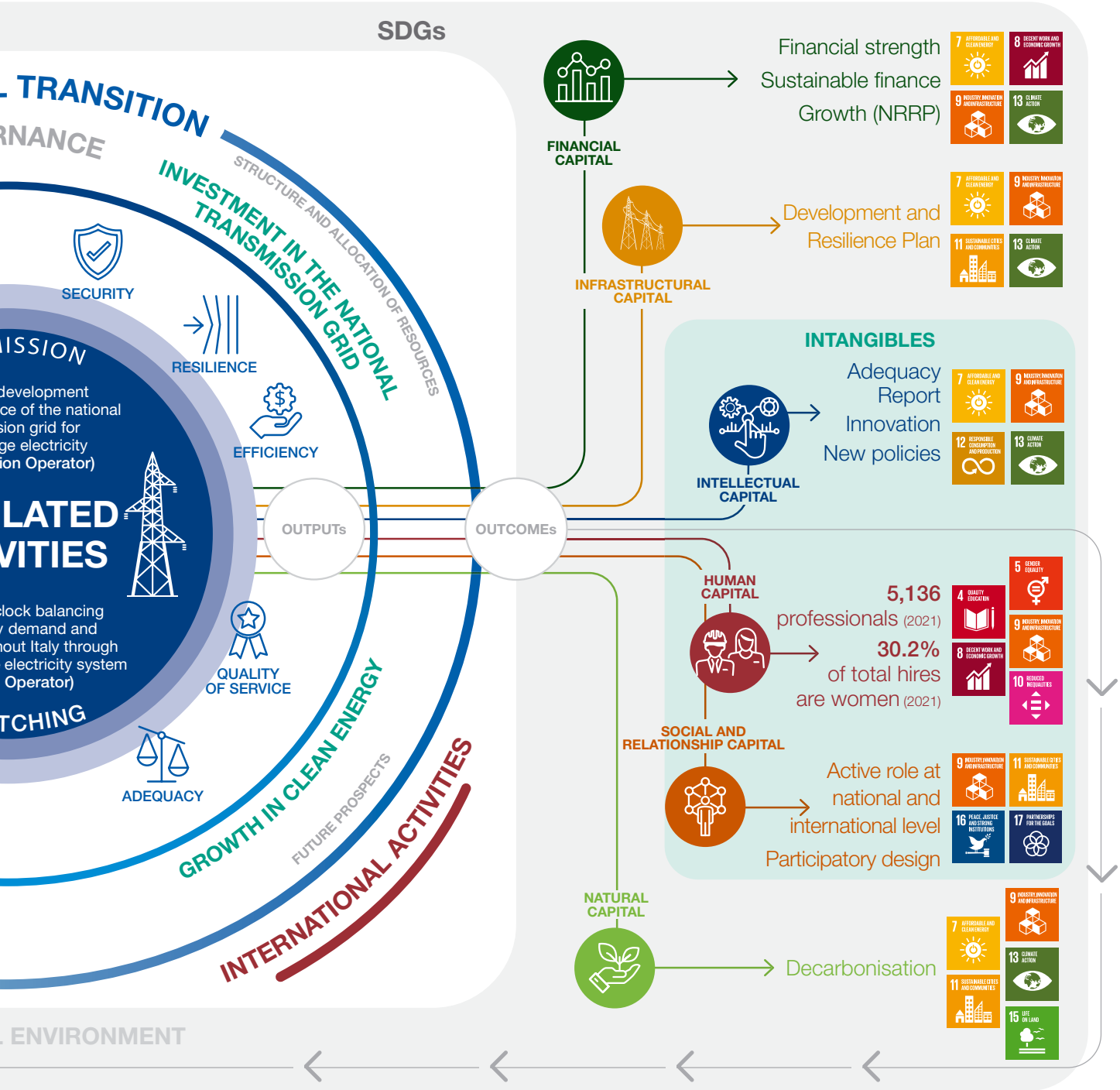
Terna's **process for creating value over time**[15] is based on shaping a medium- to long-term **strategy** focusing on delivery of the **energy transition**, the essential foundation on which to build a new decarbonised, sustainable economic model. This means making the best possible use of all the **capitals** at the Company's disposal, beginning with the external environment in which we operate and the potential economic, financial and ESG risks and opportunities, in order to develop a **sustainable business model**.

PROCESS FOR CREATING VALUE OVER TIME



[15] Terna has adopted the principle-based framework proposed by the International Integrated Reporting Council ("IIRC"). The guiding principles are: (1) Strategic focus and future orientation, (2) Connectivity between information, (3) Stakeholder responsiveness, (4) Materiality, (5) Conciseness, (6) Reliability and completeness, (7) Consistency and comparability. These form the basis of the framework. Their almost total coincidence with the guiding principles in the GRI standard 101 – Foundation setting out the content of quality ESG reporting further strengthens the structure of this Report.

Starting from the available capitals, this model brings together the external scenario, the Group's strategy, its governance, risk management and the related potential opportunities, and future prospects to shape our performance, which in turn drives further development of the different capitals. Terna's model, built around three separate areas of business (Regulated Activities, Non-regulated Activities and International Activities) corresponding with the core business (Electricity Transmission and Dispatching) and the two complementary deregulated areas of operation, is designed to pursue **sustainable growth**. By maximising the impact of all the available **capitals**, the model focuses all our operating activities on achievement of the single goal of delivery an inclusive energy transition, thus taking into account social needs.



The capitals

The capitals, as shown in the value creation process, represent the key resources at Terna's disposal to create value over the short, medium and long term. At the same time, the capitals determine the nature of the Company's outcomes through their continual combination and interaction, both within the Company and with the outside world.

The capitals thus represent the basic principle underpinning the process of creating value over time. This is because they are, at one and the same time, inputs that can be measured from one year to another, and outcomes that represent their ability to grow or change or to contribute to the achievement of the objectives set by the Company in its strategic plans.

The representation of Terna's ability to create value over time by developing our capital is the most effective response to growing demand for reporting that is not just aimed at financial stakeholders, whose are quite legitimately focused on making a return on their investment, but that also includes the intangible value generated for the benefit of all the other stakeholders and the environment in which the Company operates.

The different types of capital possessed by the Company can be aggregated within two larger categories: **tangible capitals** and **intangible capitals**. Only **natural capital** remains outside these categories, as it is a common good to be protected, also with future generations in mind.

TANGIBLE CAPITALS

Tangible capitals are the assets that are immediately perceptible within a Company's business, represented by available financial resources (**financial capital**) and capital assets (**infrastructural capital**) that constitute the tangible basis on which to create value over time. These capitals represent the cornerstones of Terna's **operating activities** (described in detail in section 3, "The Group's business").

FINANCIAL CAPITAL

Terna's financial resources are essential to delivering the investment needed to support the ecological transition and maintain and develop the infrastructure managed by the Company.

INPUTS

We finance our business through the generation of cash from **operating activities** and through **debt** consisting of bonds and loans at sustainable rates from the European Investment Bank. **Share price** and **dividend** growth over time guarantee a return on equity.

OUTCOMES

An increasingly ambitious plan for **new investment** accompanied by **continuing improvements** in our **operating and financial performance**. A cost of debt below the market average and a TSR of 18.8% (2021) from 9.4% (2020).

INFRASTRUCTURAL CAPITAL

The National Transmission Grid ("NTG") is the backbone and enabling factor of the ecological transition.

INPUTS

Terna is the largest independent electricity transmission system operator in Europe. In our role as **Transmission System Operator ("TSO") and System Operator ("SO")**, we manage the Italian transmission grid, working to develop and integrate the European grid and guaranteeing equal access to all grid users.

OUTCOMES

The **2021 Development Plan** sets out the aims and criteria forming the basis for planning the future NTG, within the Italian and European context: under the Plan, Terna will invest **over €18 billion** in the next 10 years in more than **30 strategic projects**.

The **Resilience Plan**, enabling us to take the action necessary to make power lines more able to withstand the impact of extreme weather events.

INTANGIBLE CAPITALS

Intangible capitals are not immediately perceptible but are key to creating and preserving value over time. This category includes the knowledge and expertise of Company's workforce (**human capital**), its innovation and organisational capability (**intellectual capital**) and stakeholder relations (**social and relationship capital**).

INTELLECTUAL CAPITAL

Terna considers intellectual capital to consist of the know-how, skills, sense of loyalty and innovation capabilities shown by the Company's people, but also the key data assets used in managing the electricity system.

INPUTS

Terna has identified cross-cutting elements of this capital that contribute to enabling the ecological transition, such as **policies, guidelines, certifications, patents and know-how**.

One of the main enabling factors for the Company, forming part of this capital, is **innovation**, reinforced by the continuous **digitalisation** of processes.

The cornerstone of everything is represented by the key data that the TSO gathers and processes in **managing the electricity system** and on which it bases its statistics, scenarios and analysis, but also processes, maintenance activities and the strategic development of assets.

OUTCOMES

Innovative projects, of which 70% focus on maintenance of the national transmission grid and on dispatching, involving the increased use of robotics, drones and augmented and virtual reality to improve processes and outcomes.

A total of 69 high value added projects have been mapped as of 2021 and **8 patent applications** were filed during the year.

The **Adequacy Report for Italy**, in which Terna provides an assessment of the generation resources needed to ensure the adequacy of the electricity system over a ten-year period.

HUMAN CAPITAL

For Terna, people represent a key enabling factor for the ecological transition.

INPUTS

People, with their **skills developed and updated** through **continuous training**, are a key capital for achieving the goals set out in the Industrial Plan.

People are also individuals with rights to be guaranteed and protected: this is the sense behind our approach to health and safety, but also to diversity and inclusion and, more generally, to the adoption of company welfare policies and the promotion of new ways of working.

OUTCOMES

Continuous renewal of our distinctive technical expertise, often rare or unique in the electricity industry.

NexTerna, a cultural transformation programme designed to lead Terna's professionals towards new ways of working, touching every aspect of what we do: from the definition of a new inclusive leadership model to alternative ways of using physical and virtual space.

Constant attention to occupational safety, intensified by the fact that many activities are exposed to particular risks, such as working at height and maintenance work on live power lines.

SOCIAL AND RELATIONSHIP CAPITAL

Social and relationship capital regards the quality of the relationships cultivated and consolidated with all our stakeholders, whose engagement plays a key role in ensuring that they can participate and share in the Company's activities.

INPUTS

Citizens, businesses, institutions, electricity companies, financial analysts, the media, the world of universities and research: Terna attaches enormous importance to **stakeholder relations**, ensuring an ongoing focus on their legitimate expectations and interests, through specific **engagement initiatives**, based on established communication channels.

A key resource in planning and achieving the Company's objectives is **the involvement of all stakeholders in the process of creating value over the short, medium and long term**.

OUTCOMES

Continuous relations at institutional level in Italy to contribute through the development of electricity infrastructure to the country's growth, and within Europe to share and capitalize on the Company's best practices.

Engagement programmes, including through the use of digital channels.

Meetings and social, cultural and environmental initiatives aimed at local communities, with whom dialogue is considered to be strategic importance for investment in the electricity grid.

Content, tools and dialogue and communication channels, both traditional and innovative.

NATURAL CAPITAL

The natural ecosystem that all businesses are part of, and in which they operate to create value over time, is a shared capital, the most important and the most fragile. The particular nature of this capital commits Terna to finding the correct balance between satisfying the community's energy needs and its responsibility for protecting and preserving the environment and biodiversity. The resulting solutions ensure that we are able to supply the country with the electricity it needs whilst delivering reliability, value for money and sustainability.

INPUTS

To preserve **natural capital** Terna has committed to achieving ambitious environmental goals, in line with European programmes. In driving the ecological transition and as a TSO, we are committed to **developing the electricity grid** so we can meet a growing proportion of our energy needs from **renewable sources** and support **the electrification of consumption**, whilst at the same time achieving a progressive reduction in CO_2 emissions.

OUTCOMES

The formal adoption of a **Science Based Target ("SBT")**: Terna is committed to reducing its emissions by approximately 28% by 2030 compared with 2019 levels.

The materiality matrix

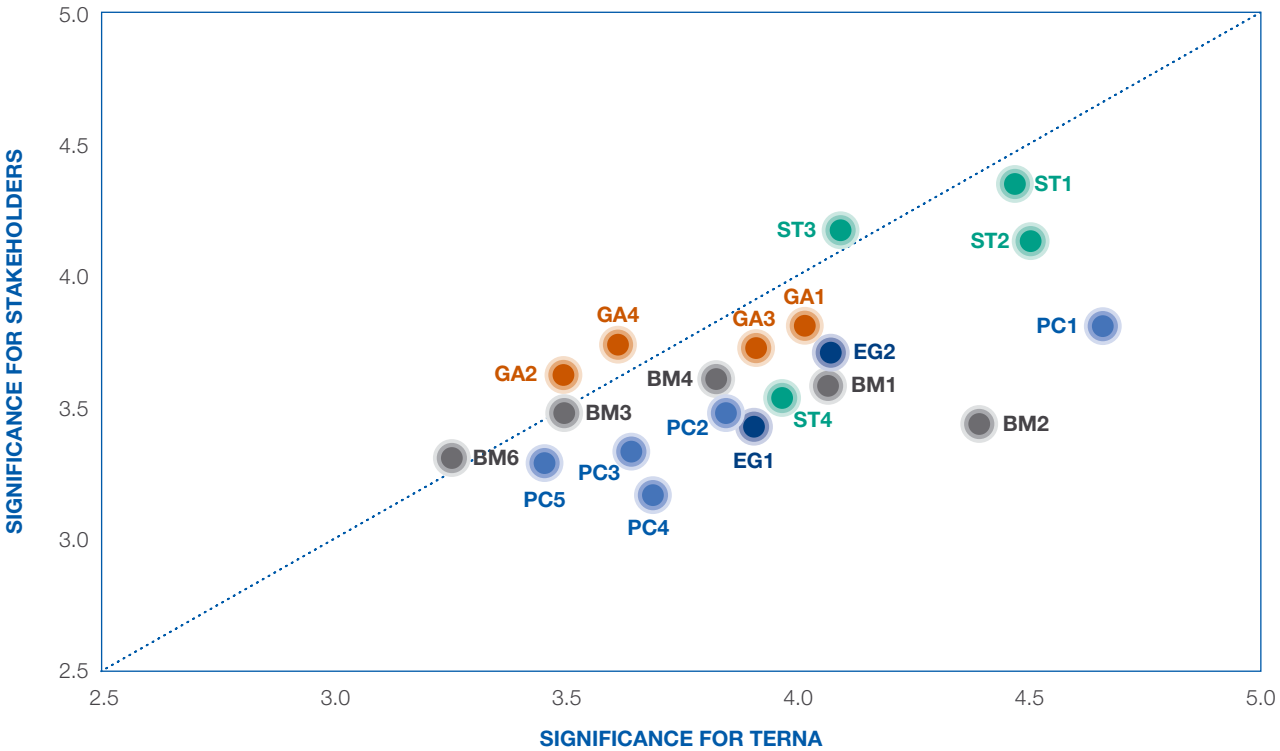
NFS

The materiality matrix offers a graphic summary of the materiality analysis, carried out annually with the aim of identifying, in consultation with the Company's managers and key stakeholders, the topics that are most significant for both groups.

This is a tool that is useful not only in terms of effective reporting – it is no accident that materiality (or significance) is one of the guiding principles adopted in the leading international reporting standards and in Legislative Decree 254/2016, which introduced the "Consolidated non-financial statements" – but also from a strategic planning viewpoint and, more generally, in external communication with stakeholders. Indeed, the topics included in the matrix are directly reflected in the value creation process and, even more explicitly, in the business model.

The following materiality matrix is the result of the analysis conducted at the end of 2021. Details of the methodology are provided on page 260. In addition to showing individual topics, the key also highlights the connection with the related SDGs, the matching criteria used by the Sustainability Accounting Standards Board ("SASB") and the main capital involved.

MATERIALITY MATRIX



AREA	MATERIAL TOPIC	CAPITAL	SASB	SDGs
ETHICS AND GOVERNANCE MODEL	**EG1:** Governance model effectiveness			16
	EG2: Business integrity			
BUSINESS MANAGEMENT	**BM1:** Strategic approach to stakeholder management			9, 12, 17
	BM2: Delivering on financial and performance goals		SASB	
	BM3: Information security		SASB	
	BM4: Optimal management of relations with local stakeholders			
	BM5: Growing and diversifying the business			
	BM6: Supply chain sustainability			
	BM7: Innovation and digitalisation		SASB	
TRANSMISSION SERVICE	**ST1:** Delivering the ecological transition		SASB	7, 9, 11, 13, 17
	ST2: Quality, security and continuity of the electricity service		SASB	
	ST3: Grid resilience			
	ST4: Economic impacts on the community			
MANAGEMENT OF ENVIRONMENTAL IMPACT	**GA1:** Mitigating the impact of infrastructure			12, 13, 15
	GA2: Protecting biodiversity			
	GA3: Reducing the Group's CO_2 emissions		SASB	
	GA4: Reuse and recycling of materials			
PEOPLE AND COMMUNITIES	**PC1:** Workplace health and safety and workers' rights		SASB	4, 5, 8, 10
	PC2: HR development			
	PC3: Promoting wellbeing within the workforce			
	PC4: Advancement of inclusion and diversity			
	PC5: Social responsibility initiatives			

Key to Capitals

Financial capital | *Human capital* | *Social and relationship capital*

Infrastructural capital | *Intellectual capital* | *Natural capital*

The material topics BM5 (Growing and diversifying the business) and BM7 (Innovation and digitalisation) were below the minimum materiality threshold based on a distribution of the scores for overall significance – provided by adding up the significance scores for stakeholders and Terna – and by the distribution of significance for Terna. This is the reason why these two topics have not been inserted in the materiality matrix.

2021-2025 Industrial Plan
DRIVING ENERGY - Update

The **updated 2021-2025 Industrial Plan, "Driving Energy"**, approved by the Board of Directors on 24 March 2022, envisages **total investment of €10 billion**, enabling Terna to accelerate its commitment to the country's ecological transition, energy independence and decarbonization. This will strengthen our role in driving the Italian electricity system, in keeping with the challenging objectives set in the National Integrated Energy and Climate Plan ("PNIEC") and the targets in the EU's Green Deal, which aim to cut greenhouse gas emissions by at least 55% by 2030.

The key driver in the 2021-2025 Industrial Plan is **sustainable investment**, a concept embedded in the Company's value creation process and in the benefits for the system and the environment. Terna's capital expenditure, **99%** of which is classified as sustainable based on the eligibility criteria in the **EU Taxonomy**, targets the development of renewable sources. This will involve strengthening the transmission backbones that transport energy from points of production, increasingly located in Italy's southern regions, to where demand is highest in the

Driving the Ecological Transition

REGULATED ACTIVITIES
Develop, modernize and strengthen the National Transmission Grid

€9.5 billion in investment, the highest ever seen in Italy

including **99%** in sustainable investment

RAB of € **22.7** bn in 2025
7% CAGR over life of Plan

north of the country. This will be made possible by resolving issues caused by grid congestion and further development of cross-border interconnections. Thanks to its strategic geographical location, Italy will thus be able to reinforce its **role as a European and Mediterranean electricity transmission hub**, becoming a leading player at international level.

The Terna Group's development initiatives will focus on three strategic areas: **Regulated Activities in Italy, Non-regulated Activities and International Activities**.

In terms of **Regulated Activities in Italy**, which continue to represent the Group's core business, Terna plans to invest **€9.5 billion** in developing, modernising and strengthening the national transmission grid, confirming our role in driving the energy transition and enabling an increasingly complex, sustainable and innovative electricity system. This investment, focused on increasing the country's energy security, will generate major benefits for the system as a whole, with a significant multiplier effect.

The planned investment will increase the **value of our RAB** to **€22.7 billion in 2025**, with a CAGR of 7% over the life of the Plan. By the end of 2022, the value of the RAB will be €17.9 billion, compared with €16.9 billion at the end of 2021.

Enablers

PEOPLE

Approx. **5,900**

Number of employees in 2025

NexTerna continues first major project milestones achieved in 2021

NON-REGULATED ACTIVITIES

Technological, innovative and digital solutions to support the ecological transition

Contributing over €**450**m to EBITDA

INTERNATIONAL ACTIVITIES

Putting our competencies and know-how into grids worldwide

> Sale of LatAm assets

> Scouting for new opportunities in international markets

INNOVAZIONE E DIGITALIZZAZIONE

€**1.2**bn

invested in digitalisation, innovation and new technologies

Enablers

The updated 2021-2025 Industrial Plan targets increased **investment in development of the national transmission grid**, which is due to **total €5.6 billion**. This is primarily linked to the construction of high-voltage direct current lines with the aim of resolving grid congestion, boosting transmission capacity between the various market areas, fully integrating renewable sources and improving quality of service. This type of investment will also involve the construction of submarine cable connections. The most important project is the Tyrrhenian Link, the power line that will connect Sardinia, Sicily and Campania and that will contribute to the development of renewable energy production and the phase-out of the most polluting coal- and oil-fired power stations. The other projects include Sa.Co.I.3, the interconnector linking Sardinia with Corsica and Tuscany, and the 'Colunga-Calenzano' power line between Emilia-Romagna and Tuscany.

Investment in **renewing and improving the efficiency of assets**, covering the reorganisation of existing infrastructure, with the replacement – where technically feasible – of overhead lines with underground cable, will amount to **€2.6 billion**.

Finally, Terna plans to invest a total of **€1.3 billion** in the **Security Plan**, over the life of the Industrial Plan, with the aim of boosting the system's technical and technological capabilities to increase system functionality.

Non-regulated Activities will help to generate new business opportunities thanks to the development of innovative, digital solutions in keeping with Terna's public service role in supporting the energy transition. These activities include:

- *industrial activities* in the field of transformers, thanks to the consolidation of Tamini, and in underground cables, leveraging the distinctive expertise in terrestrial cables acquired with Brugg Cables, to respond to the system's growing needs in both sectors;
- *connectivity offerings*, including in partnership, involving the provision of housing and hosting services to enable telecommunications providers to use our fibre network, one of the best in terms of coverage and quality, and the installation of telecommunications equipment at Terna's existing sites;
- *energy solutions and energy efficiency services* for industrial customers and O&M activities for photovoltaic plants, leveraging the expertise acquired with the LT Group and through the use of innovative technologies to collect and analyse data.

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

In terms of our **International Activities**, following the decision to extract value from our South American assets, we will continue with the strategic assessment of opportunities. These may take the form of partnerships, involving 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.

Terna will look to exploit new opportunities in low-risk markets with attractive growth potential, such as the United States, where the Company can make available our experience and expertise in the design and management of infrastructure, in line with our business strategy.

Over the coming years, **innovation**, new technologies and digitalisation will acquire ever greater importance, playing an increasingly central part in enabling the energy transition for the benefit of the entire system. In response to the growing complexity of the system, Terna intends **to invest approximately €1.2 billion** from the total of €10 billion earmarked for capital expenditure in the 2021-2025 Industrial Plan in digitalisation and innovation. We will concentrate our efforts on the use of advanced technology to remotely control electricity substations and transmission infrastructure. The Industrial Plan has identified four technology clusters around which the new projects and initiatives will be focused. The clusters, identified taking into account global technology trends and Terna's needs, are: Digital (intelligent energy and capacity management solutions); Energy Tech (innovative solutions using more efficient, greener technologies); Advanced Materials (research and development resulting in eco-compatible materials to reduce our environmental impact); and Robotics (process automation).

Terna's people, with their unique and distinctive, world-leading technical expertise, are a key asset in enabling the Group to achieve the challenging goals we have set ourselves. The Company has launched an ambitious cultural transformation called **NexTerna**, involving the definition of a new leadership model and new ways of working and operating that are a response to the current scenario. This innovative approach is based on the digitalisation of processes and tools in order to increase people's efficiency and productivity, bringing logistical benefits and, above all, improving quality of life for all our workers. Terna's people-centric approach is also reflected in the creation of jobs: over the life of the Plan, we expect the **number of employees to rise to approximately 5,900 by 2025**.

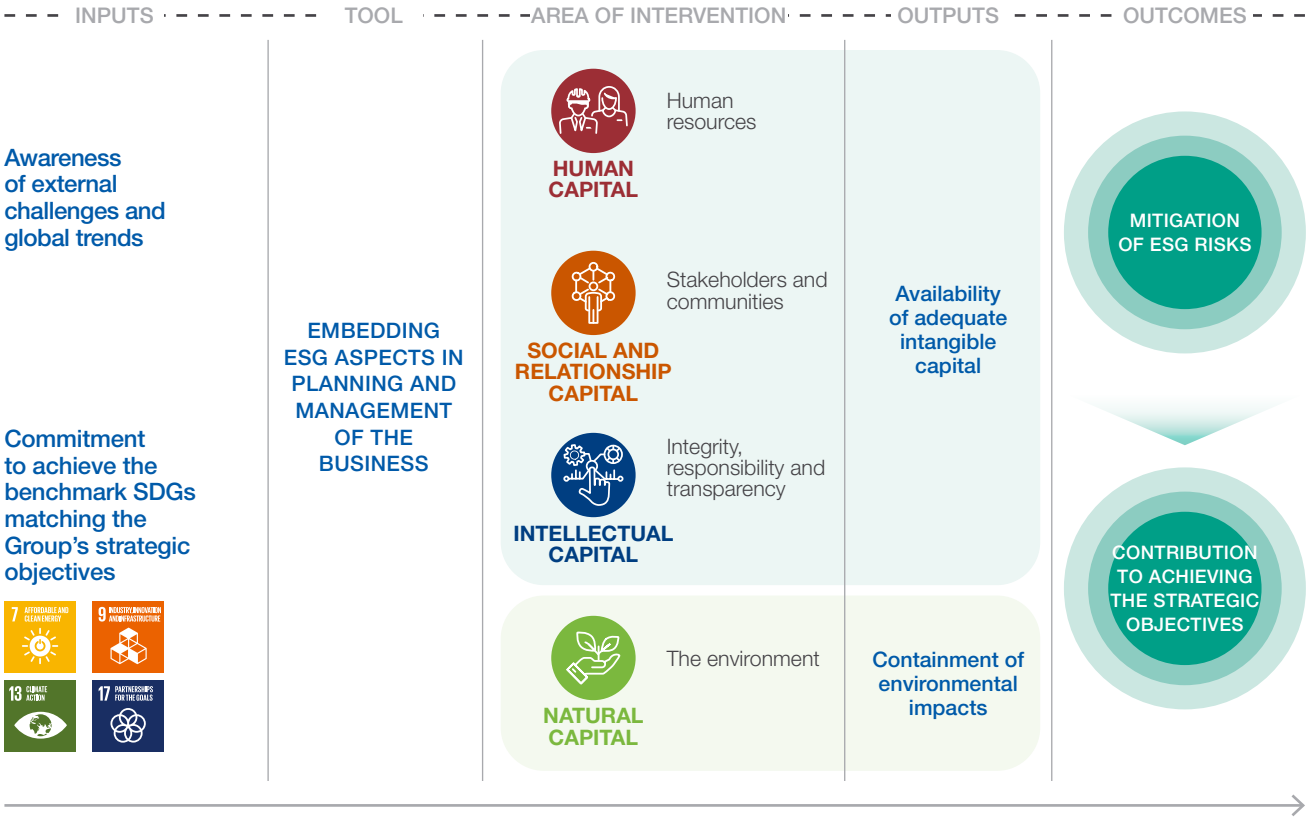
Finally, our ability to maintain a solid capital structure thanks to robust cash generation will contribute to supporting an attractive dividend policy.

ESG goals for the 2021-2025 Industrial Plan

In March 2022, at the same time as presentation of the "2021-2025 Industrial Plan", the Company's ESG goals were revised. In keeping with the new overall approach to reporting the Group's operations, adopted for the preparation of this Report, the goals have been reorganised on the basis of capitals.

The process of embedding a sustainable approach to doing business involves defining goals that aim to increase intangible capitals and respect natural capital.

THE CONTRIBUTION OF ESG CRITERIA TO THE CREATION OF VALUE



The goals help to increase the availability of certain enabling factors needed for full implementation of the Industrial Plan, mitigate the ESG risks linked to the Group's activities, aim to ensure the sustainability of business and the creation of value over time, consolidate the process of embedding sustainability in the Group's value proposition and preserving Terna's position as one of the most attractive companies to investors, whose analyses increasingly take into account these aspects.

ESG GOALS FOR THE 2021-2025 INDUSTRIAL PLAN

The main ESG goals for the period 2021-2025, linked to the benchmark SDGs and their position in the materiality matrix, are covered in the sections on human capital (pages 159, 160 and 164), intellectual capital (pages 149 and 150) and natural capital (pages 185 and 194). The progress made in 2021 towards achieving the targets set in the previous Plan is also reported on, with a summary provided in the following table.

TARGETS AND RESULTS IN 2021

CAPITAL	KPI	2021 TARGET	2021 RESULT
HUMAN	Zero fatal accidents (Terna staff)	-	-
	Safety indicator (*)	≤ 1	0.49
	Infrastructure Unit personnel involved in the "Zero Accident" Training Plan (%)	100%	91%
	Number of people trained in digital skills (cumulative)	1,300	1,291
	Staff with performance evaluation (%).	95%	94%
SOCIAL AND RELATIONSHIP	The previous KPI expired on 31 December 2019, before being reformulated in 2021 with the first target set for 2022.	=	=
INTELLECTUAL	Product categories ("PG") falling within the type of work requiring obligatory certifications ISO:14001 and OHSAS:18001/45001 (**)	100%	100%
NATURAL	Km of overhead lines removed/year	16	30
	Km of new underground and submarine lines (***)	138	32
	SF_6 leakage as a percentage of total installed	0.45	0.40

(*) The safety indicator is the ratio between the weighted injury rate (weighting: 30%) and lost day weight (weighting: 70%) for the target year and that for the previous three-year period.
(**) The KPI has been renamed (from "Suppliers" to "Product category") following a reclassification of the PGs.
(***) Failure to achieve this target is due to the postponement to 2022 of the entry into operation of the "Italy-France", equal to approximately 95 km.

2021-2025 Innovation Plan

In an increasingly complicated and complex electricity system, **innovation** and **digitalisation** play an ever more important role and represent two of the pillars on which Terna has based its virtuous path to growth.

For Terna, innovation has the purpose of developing new solutions to respond to the growing needs and challenges connected with the ecological transition, in keeping with our role as driver and enabler in accordance with the Company's strategy. Digitalisation is the key enabler of innovation and the ecological transition, to be implemented in the areas of connectivity, synchronous and asynchronous data management and the "NexTerna" project.

Specifically, the **2021–2025 Innovation Plan** consists of a series of innovative initiatives and projects designed to achieve three key objectives:

1. to respond the main challenges faced by the Company in relation to the **Energy Transition**. The planned initiatives aim to improve the **flexibility of the grid**, both in response to growing demand flexibility, and to facilitate the creation of a framework for development and integration of renewable sources into the national electricity system, taking into account that such sources are cleaner but by their nature non-programmable;
2. to improve the **resilience of the grid**, a central issue in the new energy and climate scenario. The increased frequency of extreme weather events in recent years makes it necessary to make the electricity system more durable through targeted investment designed to prevent and mitigate the risk of outages, to reduce the likelihood of major damage to electricity infrastructure and to manage any emergencies;
3. to respond to the need for **digitalisation** of the Company itself by transforming the mindset of its people.

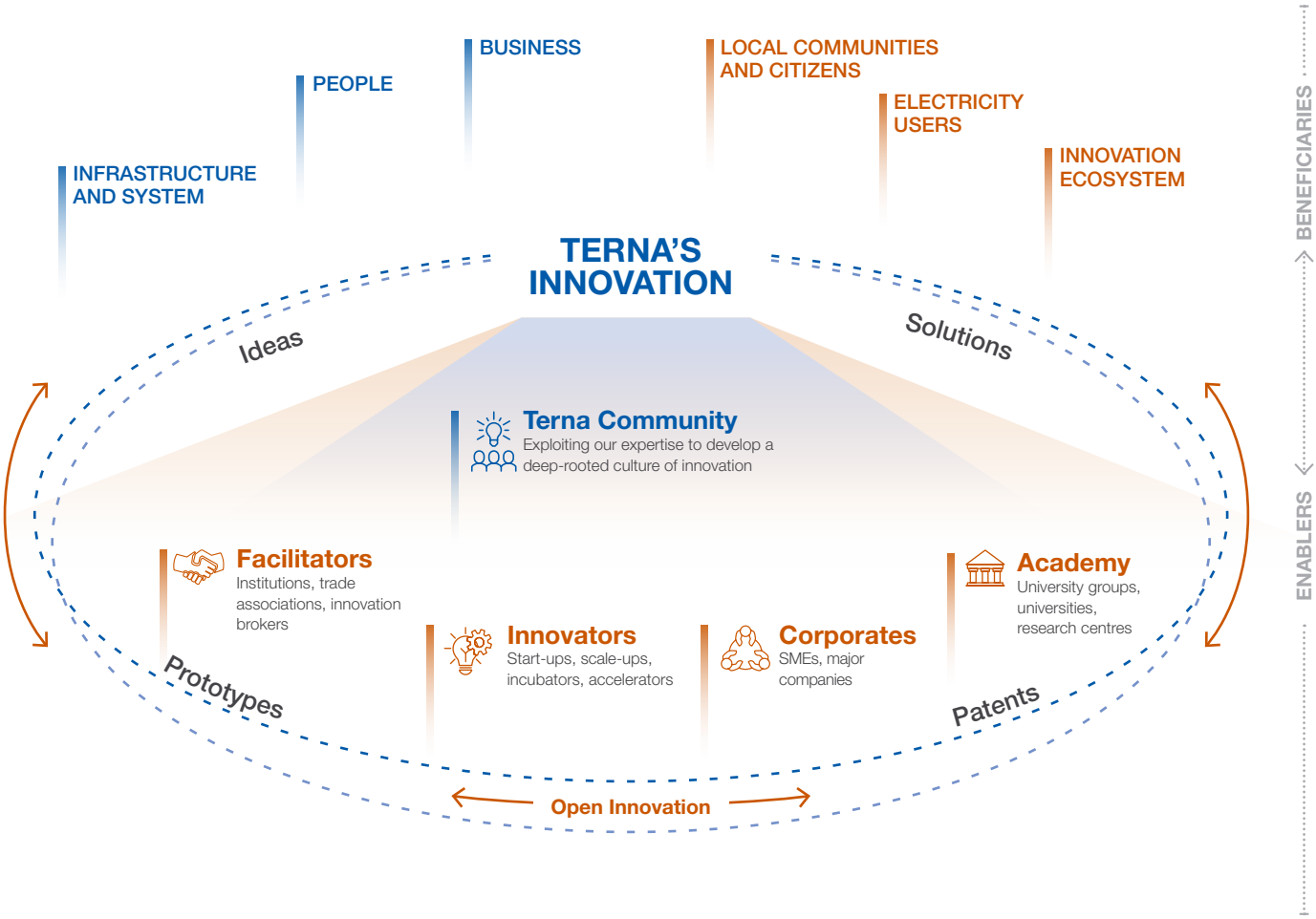
In response to the challenges and the **Company's needs**, Terna has kept track with technological developments and identified the emerging issues that will affect the Italian energy system. Based on their potential impact on the business, we have identified four **technology clusters** around which the new initiatives and projects will be focused:

- **Digital** – intelligent energy and capacity management solutions;
- **Energy Tech** – innovative solutions using more efficient, greener technologies;
- **Advanced Materials** – research and development resulting in eco-compatible materials to reduce our environmental impact;
- **Robotics** – the automation of operating and administrative processes.

For additional information, go to page 172

Terna has thus adopted and developed an innovation model geared towards meeting new needs and generating value for the Company and our stakeholders, via an **approach that is concrete, open, inclusive and distributed**, and that responds to the identified needs. The model provides the involvement of both external players (at one and the same time, both enablers and beneficiaries), and internal actors with the aim of developing, **protecting and safeguarding our intellectual property**. This broadly-based innovation ecosystem facilitates Open Innovation, entailing the beneficial, continuous exchange of ideas and generating a range of initiatives:

- **Academy:** We involve students in the generation and incubation of ideas. We partner with universities and research centres on projects designed to develop new enabling technologies for our core business.
- **Corporate:** We foster relationships with businesses in the innovation ecosystem to scout for solutions in mutual areas of interest and develop co-innovation projects, with the aim of sharing experience, know-how and best practices.
- **Innovators:** We enter into partnerships with innovators in order to generate and incubate ideas, continually scouting for new start-ups, accelerators and incubators.
- **Terna Community:** Terna's people are involved in initiatives and workshops aimed at generating and incubating ideas. This allows us to leverage their expertise and contributes to the development and spread of an innovation culture.

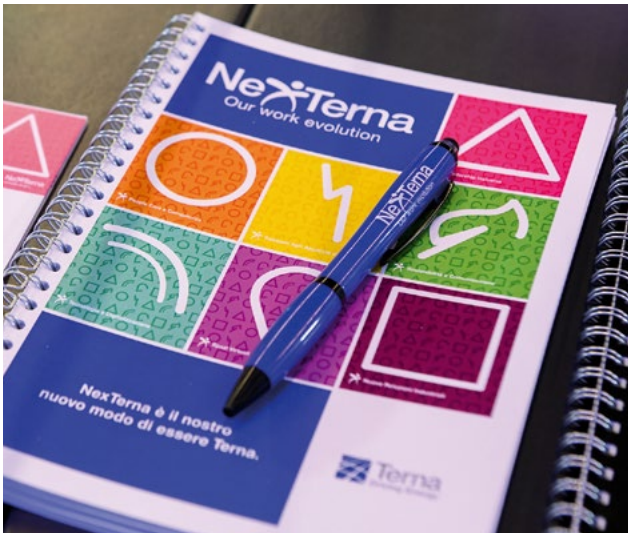


NexTerna

Launched at the beginning of 2021, NexTerna is a multi-year programme aimed at Terna's people. Starting from the approach to work adopted during the pandemic, it aims to bring about a cultural transformation in all areas of the Company. Beginning with the introduction of a new inclusive leadership model through to achieving an effective work-life balance by optimising workplaces and the way they are used, the aim is to ensure efficiency, productivity, logistical benefits and an enhanced quality of life.

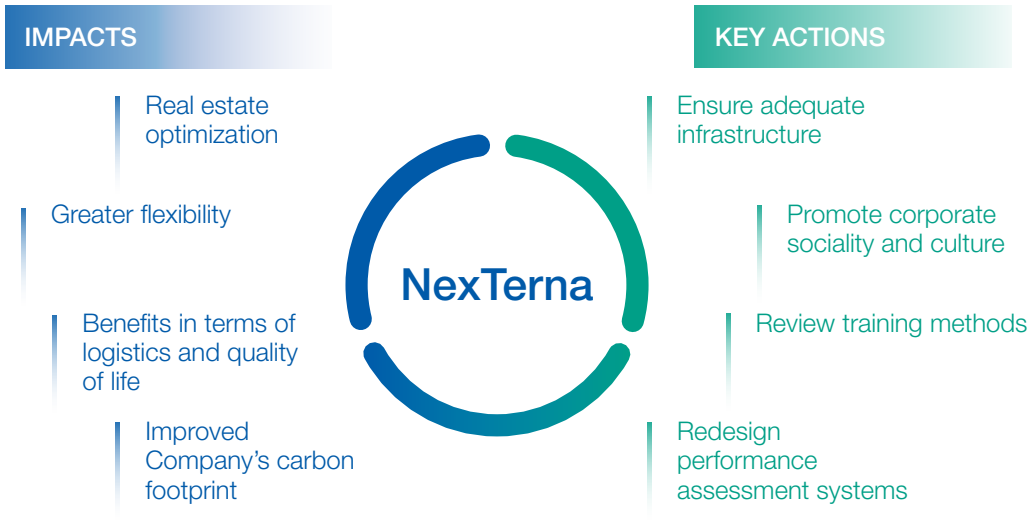
Responsibility for the NexTerna programme lies with a Steering Committee chaired by the Chief Executive Officer and consisting of the executives who report directly to him, whilst coordination has been assigned to the "People Organization & Change" and "Innovation & Market Solutions" departments. In line with its goals, the programme focuses on seven topic areas:

1. inclusive leadership
2. people care and skills
3. agile solutions applied to processes
4. sustainability and communication
5. technology and digitalisation
6. virtual and physical spaces
7. a new approach to industrial relations



For additional information, go to page 193

Pilot projects covering all the topics were carried out in 2021, with details of the progress made communicated to everyone in the Company through a dedicated portal accessible via the intranet and mobile devices via a special App. In the two-year period 2022-2023, the pilot projects will be extended to cover new areas of the organisation. In terms of the key results achieved in 2021, these are reported on the part focusing on "Human capital" on pages 193.



« I like to associate the idea of maintenance with a common good that we need to look after. Our infrastructure units are primarily responsible for replacing conductors, pylon supports and foundations, and for carrying out technical inspections with our operational personnel. I carry out most of my tasks from the office or remotely, although I do sometimes go out to directly check on the work being done: the main thing is to always maintain human contact, between colleagues. »

Laura Beccari

Operation & Maintenance,
power line technical team
Central and North Transmission Area

#Ternapeople #DrivingEnergy

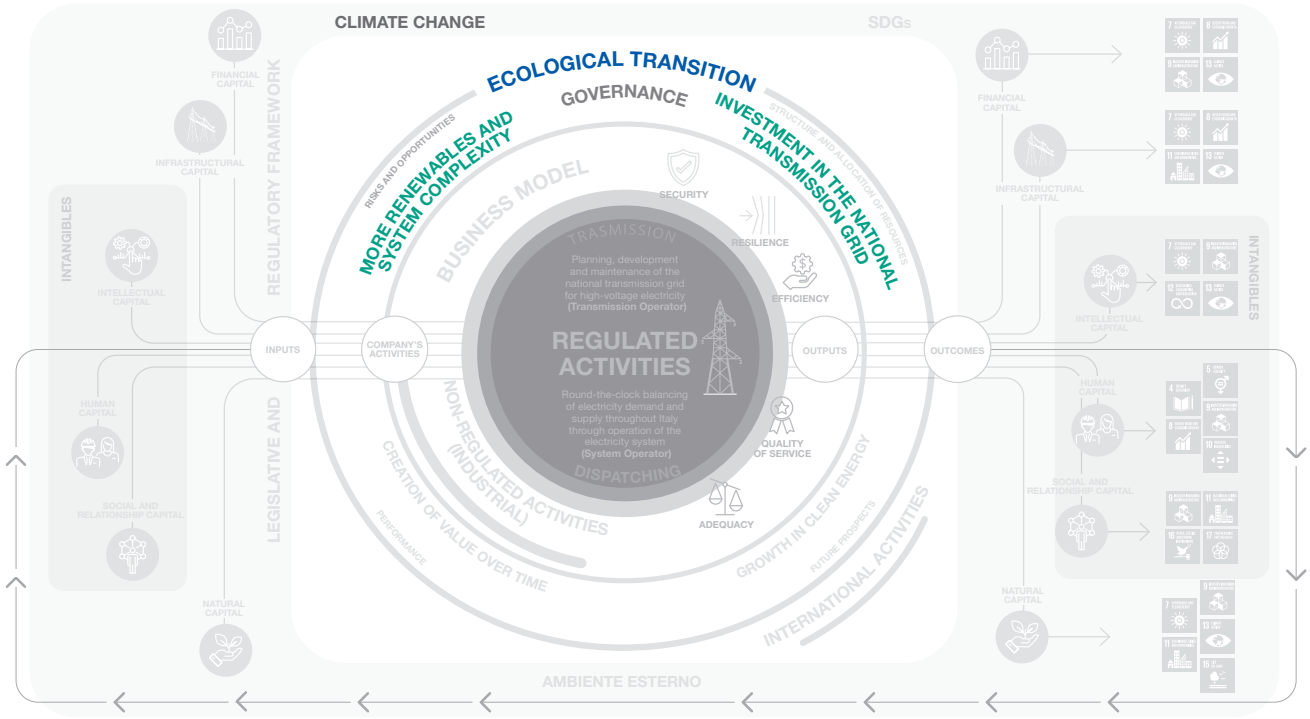
2

Corporate governance, risk management and opportunities

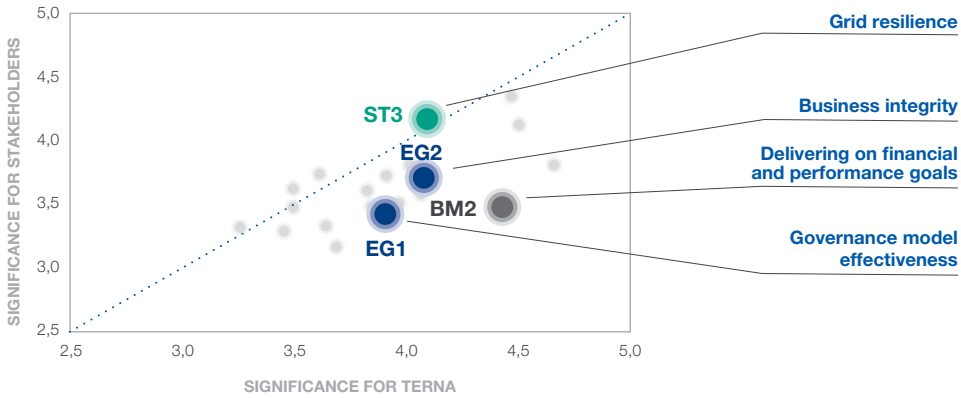
In this section

One of the aspects that characterises the Group is how our organisation and shareholder base have evolved, with growing interest shown by investors who have in part chosen to buy Terna's shares based on their assessment of our approach to aspects relating to ESG and Corporate Governance. The latter aspect is linked to the topic of risk management, but also to new opportunities both in terms of business and with regard to reinforcing our reputational capital. We have included a specific description of the risks and opportunities related to climate change, with efforts to combat this phenomenon representing Terna's strategic goal.

VALUE CREATION



MATERIALITY



These infographics highlight the topics dealt with in this section with the aim of **facilitating information connectivity**: in this way, the section offers an overall view showing the links between all the factors that influence Terna's ability to create value over time and how they are dependent on each other. Material topics are indicated with a cross-reference in blue, showing the relevant code.

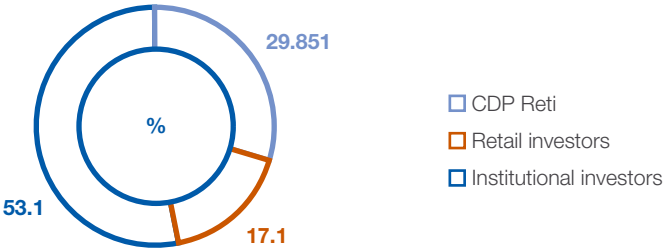
Ownership structure

At the date of preparation of this report, **Terna's share capital amounts to €442,198,240**, comprising 2,009,992,000 fully paid-up ordinary shares with a par value of €0.22 each.

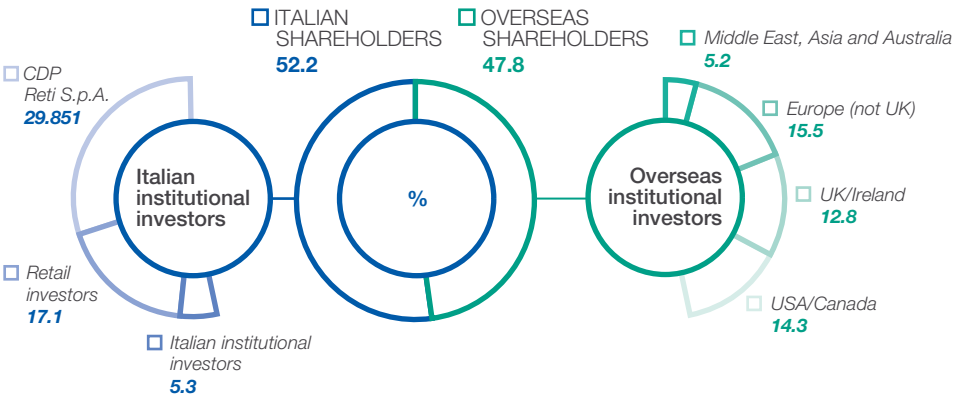
Based on periodic surveys carried out by the Company, it is estimated that 52.2% of Terna's shares are held by Italian shareholders, with the remaining 47.8% held by overseas institutional investors, primarily from Europe (not UK) and the USA.

Based on information from the shareholder register and other data collected in February 2022, Terna's shareholder structure breaks down as follows.

SHAREHOLDERS BY CATEGORY



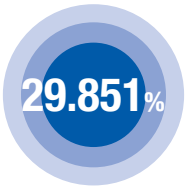
SHAREHOLDERS BY GEOGRAPHICAL AREA AND CATEGORY



The Parent Company's buy back of **1,569,292 own shares** (equal to 0.078% of the share capital) was completed in June at a total cost of approximately €10 million. The shares have been purchased to service the Performance Share Plan 2021-2025.

Major shareholders[16]

CDP RETI S.p.A.[17]
(a company controlled by Cassa Depositi e Prestiti S.p.A.):



SRIs

At the end of 2021, 161(160 in 2020 and 147 in 2019) socially responsible investors (SRIs) had invested in Terna's shares using an approach that takes into account ESG (Environmental, Social, Governance) aspects. Overall, at the end of 2021, SRIs represented 18.8% of Terna's free float (16% in 2020 and 11.8% in 2019) and 25.2% of the capital held by identifiable institutional investors (21.4% at the end of 2020 and 15.4% at the end of 2019).

Terna has adopted a policy that provides for the payment of dividends twice a year.

The interim dividend for 2021 amounted to 9.82 euro cents (payable from 24 November 2021), whilst the Board of Directors will propose payment of a final dividend of 19.29 euro cents at the Annual General Meeting to be held on 29 April 2022. Further information on the dividend history is available on the website at www.terna.it.

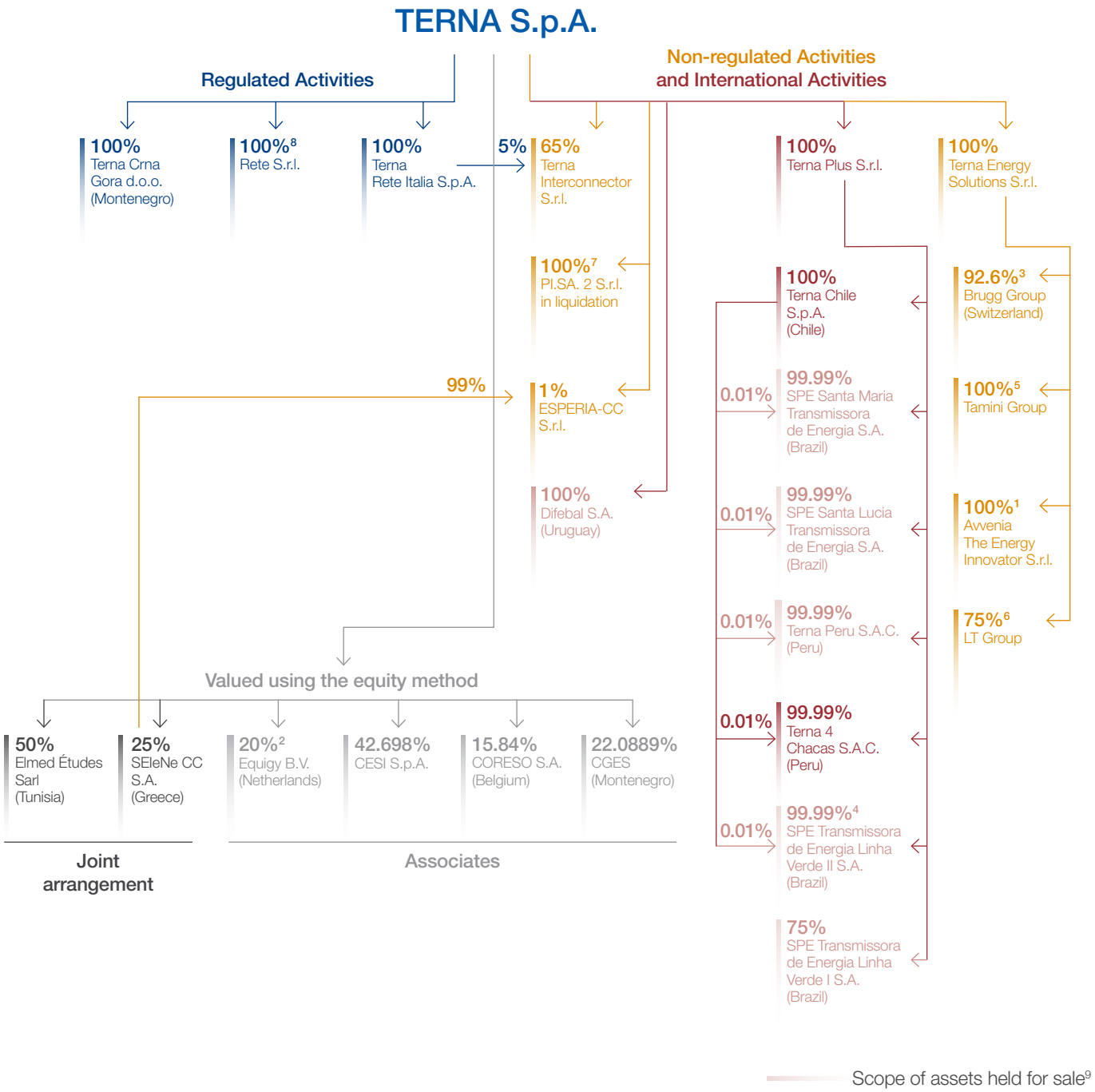
Information on the ownership structure, restrictions on the transfer of shares, securities that grant special rights, and restrictions on voting rights, as well as on shareholder agreements, is provided in the "Report on Corporate Governance and Ownership Structures" for 2021. This is published together with the Annual Report of Terna and the Terna Group and is available in the "Sistema di Corporate Governance – Governance Report" section of Terna's website.

[16] Shareholders who, based on the available information and notifications received from the CONSOB, own interests in Terna S.p.A. that are above the notifiable threshold established by CONSOB Resolution 11971/99 and Legislative Decree 58/98, as amended.

[17] On 27 November 2014, a shareholder agreement was entered into by Cassa Depositi e Prestiti S.p.A. (CDP), on the one hand, and State Grid Europe Limited (SGEL) and State Grid International Development Limited (SGID), on the other, in relation to CDP Reti S.p.A., Snam S.p.A. and Terna S.p.A.. This was later amended and supplemented to extend the scope of the agreement to include ItalgasS.p.A..

Structure of the Group

In line with the role of enabler and driver of the current ecological transition and the related objectives, the structure of the Group reflects a series of changes at 31 December 2021. These are described in the following notes.



Compared with 31 December 2020:

[1] On **26 January 2021**, Terna, acting through its subsidiary, Terna Energy Solutions S.r.l., completed the acquisition of the remaining 30% of Avvenia the Energy Innovator S.r.l. from the minority shareholder, Avvenia S.r.l.. Avvenia the Energy Innovator S.r.l. has thus become a "sole shareholder" company wholly owned by Terna.

[2] On **1 February 2021**, after APG (the Austrian TSO) became the fifth European transmission system operator to enter into partnership with Equigy, Terna S.p.A.'s interest in Equigy decreased from 25% to 20%.

[3] The reorganisation of the Brugg Group, designed to take full advantage of the Group's distinctive expertise in terrestrial cables and of synergies with the Terna Group's businesses, was completed on **31 March 2021**. As a result, Terna S.p.A.'s interest in the Brugg Group has increased from 90% to 92.6%.

[4] On **10 June 2021**, Terna, acting through its subsidiaries, Terna Plus S.r.l. and Terna Chile S.p.A., completed the acquisition of the remaining 25% interest in the Brazilian-registered company, SPE Transmissora de Energia Linha Verde II S.A., held by the minority shareholder, Construtora Quebec. SPE Transmissora de Energia Linha Verde II S.A. is now 99.9999994% owned by Terna Plus S.r.l., with the remaining shares held by Terna Chile S.p.A..

[5] On **5 August 2021**, Terna, acting through its subsidiary, Terna Energy Solutions S.r.l., completed the acquisition of the remaining 30% of Tamini Transformers S.r.l., which as a result is now a sole shareholder company fully owned by Terna.

[6] On **12 October 2021**, Terna, acting through its subsidiary, Terna Energy Solutions S.r.l., completed the acquisition of a 75% stake LT S.r.l. (the LT Group), one of the leading Italian operators providing maintenance services for photovoltaic plants, and engaged in the design and implementation of revamping and repowering projects for existing plants and in the construction of new plants for third parties.

[7] On **26 October 2021**, the return of the entire investment in PI.SA. 2 S.r.l., formerly held by Terna Interconnector S.r.l., to Terna S.p.A. was completed. On **10 December 2021**, the company went into voluntary liquidation and the liquidation was completed on **27 January 2022**.

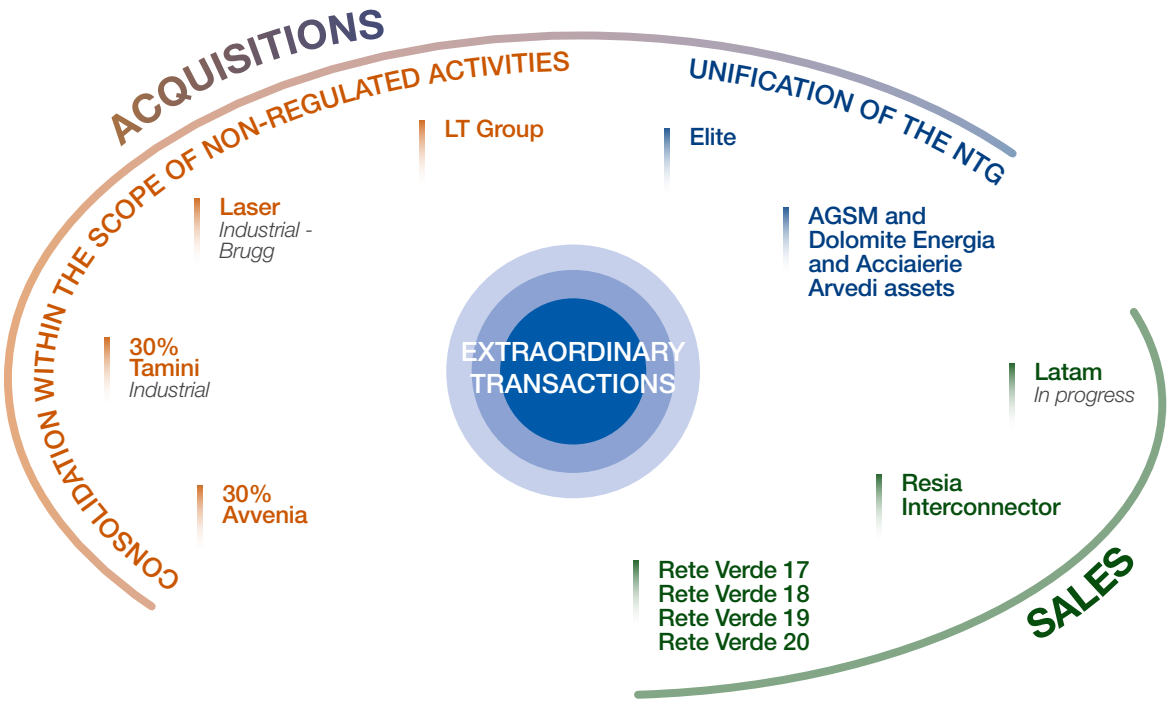
[8] The merger of Elite S.r.l. with and into Rete S.r.l. was completed on **24 December 2021**. Previously, on **27 July 2021**, Terna had completed the acquisition of a 100% stake in EL.IT.E. S.p.A.. The acquired company was simultaneously renamed Elite S.r.l., a vehicle company that owns and manages (under a service agreement entered into with Repower) the approximately 4-km long 150kV merchant line connecting Italy and Switzerland between Tirano and Campocologno. The company also currently owns the Tirano electricity substation, in addition to the 150kV cable connection between the Tirano electricity substation and the Italian border with the related tunnel section.

[9] Companies involved in the planned sale of subsidiaries operating in Latin America, classified as assets held for sale (further information is provided in the paragraph on "International Activities").

On **3 August 2021**, Terna, acting through its subsidiary, Terna Energy Solutions S.r.l., completed the sale of 100% stakes in Rete Verde 17 S.r.l., Rete Verde 18 S.r.l., Rete Verde 19 S.r.l. and Rete Verde 20 S.r.l. to Banca del Fucino, the purchaser chosen following a competitive auction.

On **16 September 2021**, Terna, pursuant to Law 99/2009, completed the sale of its 100% stake in Resia Interconnector S.r.l. to Interconnector Energy Italia S.c.p.A., Consorzio Toscana Energia S.p.A. and VDP Fonderia S.p.A., entering into agreements for the construction and operation of the private part, located in Italian territory, of the alternating current power line between Italy and Austria.

On **11 November 2021**, Terna, acting through the Brugg Group, completed the acquisition of a 100% stake in Laser TLC S.r.l., a company that provides fibre telecommunications systems to Italian and international customers and that operates in the energy sector, mounting accessories on high-voltage power lines and supervision of their installation.



NFS

207-4 >

PARENT COMPANY

Terna S.p.A.
Employees: 917
Revenue: €2,224.1m

SUBSIDIARIES WITH REGULATED ACTIVITIES

COMPANY	BUSINESS
Terna Rete Italia S.p.A. Employees: 3,206 Revenue: €443.9 m	Development of all regulated activities related to operation, routine and extraordinary maintenance, management and development of the NTG.
Rete S.r.l. Employees: - Revenue: €140.8m	Acquired in 2015 from Ferrovie dello Stato Italiane (Italian State Railways) Group, the company owns 8.3% of the NTG infrastructure.
Terna Crna Gora d.o.o. *Incorporated under Montenegrin law* Employees: 11 Revenue: €15.9m	Management of construction of the Italy-Montenegro interconnector, on the Montenegrin side.

SUBSIDIARIES WITH NON-REGULATED ACTIVITIES

COMPANY	BUSINESS
Terna Energy Solutions S.r.l. Employees: 63 Revenue: €20.8m	Development of new activities and business opportunities in the Italian non-regulated market.
Tamini Group Employees: 342 Revenue: €157.5m	Production and marketing of industrial and power transformers via six production plants located in Italy in Legnano (MI), Melegnano (MI), Novara, Valdagno (VI), Ospitaletto (BS) and Rodengo (BZ).
Avvenia The Energy Innovator S.r.l. Employees: 18 Revenue: €1.8m	Implementation of energy efficiency projects, including via EPC (Energy Performance Contract) solutions.
Terna Interconnector S.r.l. Employees: - Revenue: €15.4m	Development and construction of private infrastructure for interconnections with other countries.
PI.SA. 2 S.r.l. in liquidation Employees: - Revenue: -	Construction of the Italy-France interconnector following a restructuring of the related activities
LT Group Employees: 69 Revenue: €12.1m	Design, construction and maintenance of renewable power plants.
ESPERIA-CC S.r.l. Employees: - Revenue: €1.1m	Services for calculating electricity transmission capacity to allocate in the energy markets. Provision of studies, analyses, data, research and services in the role of Regional Security Coordinator or Regional Coordinator Center, including the coordination of security assessments.
Brugg Group *Incorporated under Swiss law* Employees: 435 Revenue: €181.1m	Design, development, production, installation and maintenance of terrestrial electric cables and accessories for high-voltage cables.

SUBSIDIARIES WITH NON-REGULATED INTERNATIONAL ACTIVITIES

COMPANY	BUSINESS
Terna Plus S.r.l. Employees: 38 Revenue: €0.6m	Development of new activities and business opportunities in the non-regulated international market, in particular in South America.
Terna Chile S.p.A. *Incorporated under Chilean law* Employees: - Revenue: -	Management of activities involved in the design, construction and maintenance of electricity infrastructure.
SPE Santa Maria Transmissora de Energia S.A. *Incorporated under Brazilian law* Employees: 2 Revenue: €7.0m	Management of activities involved in the design, construction and maintenance of electricity infrastructure.
SPE Santa Lucia Transmissora de Energia S.A. *Incorporated under Brazilian law* Employees: 18 Revenue: €24.8m	Management of activities involved in the design, construction and maintenance of electricity infrastructure.
Terna Peru S.A.C. *Incorporated under Peruvian law* Employees: 6 Revenue: €3.6m	Management of activities involved in the design, construction and maintenance of electricity infrastructure.
Difebal S.A. *Incorporated under Uruguayan law* Employees: 2 Revenue: €0.4m	Management of activities involved in the design, construction and maintenance of electricity infrastructure.
Terna 4 Chacas S.A.C. *Incorporated under Peruvian law* Employees: - Revenue: €1.3m	Construction of the Parish of San Martàn Papa de Chacas in Peru, of a power line in the city of San Luis and the supply of a number of components to be used in the construction of a substation.
SPE Transmissora de Energia Linha Verde I S.A. *Incorporated under Brazilian law* Employees: 3 Revenue: (€5.6m)	Management of activities involved in the design, construction and maintenance of electricity infrastructure.
SPE Transmissora de Energia Linha Verde II S.A. *Incorporated under Brazilian law* Employees: 6 Revenue: €13.1m	Management of activities involved in the design, construction and maintenance of the electricity infrastructure.

ASSOCIATES OR JOINT ARRANGEMENTS

COMPANY[18]	BUSINESS
CESI S.p.A. Employees: 878 Revenue: €138.7m	Pure and applied scientific research aimed at making advances in the electro-technical, energy, electronic and IT sectors.
CORESO S.A. *Incorporate under Belgian law* Employees: 72 Revenue: €20.1m	Management of daily forecasting and real-time analysis of energy flows in central and western Europe, identifying possible critical issues and promptly informing the TSO concerned.
CGES[19] *Incorporated under Montenegrin law* Employees: 302 Revenue: €48.8m	TSO for Montenegro's electricity market. Investment acquired as part of the Italy-Balkans interconnector project.
Elmed Études Sarl *Incorporated under Tunisian law* Employees: 2 Revenue: -	Jointly controlled by Terna and the Tunisian company, STEG, the company is engaged in carrying out preparatory studies for construction of the infrastructure required to connect the Tunisian and Italian electricity systems.
SEleNe CC S.A. *Incorporated under Greek law* Employees: 5 Revenue: €108.2m	The company's objective is to enhance the secure supply of electricity in markets adhering to the relevant European Regional Initiative.
Equigy B.V. *Incorporated under Dutch law* Employees: -	Management of a blockchain platform to foster the inclusion of new flexible resources in the system services market.

[18] The data refer to 2020 and the latest approved financial statements.
[19] In full, "Crnogorsk Elektroprenosmi Sistem Ad".

Corporate governance

EG1

Our corporate governance system has been designed with the aim of creating value for shareholders, whilst recognising the social importance of what we do. Promoting collaboration and listening in order to tackle future challenges and apply a culture of responsibility are the underlying principles of our approach.

The governance system is broadly aligned with the principles contained in the Corporate Governance Code[20] for listed Companies, which Terna adhered to on 27 January 2021, with the related recommendations published by the CONSOB and, more generally, with the international best practices used by the Company as benchmarks.

The Annual General Meeting of shareholders held on 18 May 2020 elected Terna S.p.A.'s current Board of Directors, whose term of office will end with approval of the financial statements for the year ended 31 December 2022.

On the same date, the Board of Directors nominated the Chief Executive Officer and determined the members of Board Committees.

The current Board of Directors has 13 members, including a single Chief Executive Officer to whom the Board assigned the relevant powers by resolution of 18 May 2020, defining the content, limitations and the manner in which they may be exercised.

On 14 October 2021, Terna's Board of Directors decided to increase the number of members of each Board Committee to four.

The Board of Directors' activities are coordinated by the Chairwoman, with support provided by the Secretary.

[20] The new Corporate Governance Code, available on Borsa Italiana S.p.A.'s website, came into effect on 1 January 2021.

Corporate bodies

BOARD OF DIRECTORS

Chairwoman
Valentina Bosetti

Chief Executive Officer
Stefano Antonio Donnarumma

Directors
Alessandra Faella
Qinjing Shen[21]
Valentina Canalini
Ernesto Carbone
Giuseppe Ferri
Antonella Baldino
Fabio Corsico
Marco Giorgino
Gabriella Porcelli
Paola Giannotti
Jean-Michel Aubertin

BOARD OF STATUTORY AUDITORS

Chairman
Mario Matteo Busso

Standing Auditors
Vincenzo Simone
Raffaella Fantini

Alternates
Massimiliano Ghizzi
Maria Assunta Damiano
Barbara Zanardi

INDEPENDENT AUDITORS

Deloitte & Touche S.p.A.

MANAGER RESPONSIBLE FOR FINANCIAL REPORTING

Agostino Scornajenchi

BOARD COMMITTEES

Audit, Risk, Corporate Governance and Sustainability Committee

This Committee has the task of performing research and analyses to advise the Board in its assessments and decisions relating to the "Internal Control System" and the regular monitoring of the adequacy of such system. The Committee is also responsible for studying specific aspects relating to the identification of the main business risks (for example, operational risk, financial risk, market risk, and compliance risk, in addition to accounting compliance risks), reporting periodically to the Board on the suitability of the system and the activities performed.

- Paola Giannotti (Chairwoman, independent)
- Giuseppe Ferri (independent)
- Marco Giorgino (independent)
- Alessandra Faella (independent)[22]

Remuneration Committee

This Committee's remit covers the remuneration policy for Directors and Key Management Personnel, recommendations and opinions on the remuneration of executive Directors and other Directors with delegated powers, setting performance objectives linked to the variable part of this remuneration, monitoring application of the decisions taken by the Board, and assessing the effective achievement of performance objectives.

- Fabio Corsico (Chairman, independent)
- Gabriella Porcelli (independent)
- Alessandra Faella (independent)
- Jean-Michel Aubertin (independent)[22]

[21] Coopted onto the Board on 26 January 2022, following the resignation of the Director, Yunpeng He, on 11 January 2022. Qinjing Shen will remain in office until the new General Meeting of shareholders.
[22] Nominated on 14 October 2021.

Nominations Committee

This Committee supports the Board of Directors by conducting reviews, making recommendations and providing advice in relation to assessments and decisions regarding the size and composition of the Board.

- Gabriella Porcelli (Chairwoman, independent)
- Fabio Corsico (independent)
- Jean-Michel Aubertin (independent)
- Ernesto Carbone (independent)[23]

Related Party Transactions Committee

This Committee has the role of conducting reviews, making recommendations and providing advice in relation to assessment and approval of the above related party transactions, covering the approval of both transactions of greater significance and those of lesser significance, as indicated in Terna's procedure. The Committee's role also extends to recommendations for amendments to the procedure adopted by Terna.

- Marco Giorgino (Chairman, independent)
- Ernesto Carbone (independent)
- Paola Giannotti (independent)
- Giuseppe Ferri (independent)[23]

NFS

405-1 >

COMPOSITION OF THE BOARD OF DIRECTORS AT 17 MARCH 2022[24]

	UNIT	
Men	%	53.85
Women	%	46.15
Under 30	%	-
Between 30 and 50	%	38.46
Over 50	%	61.54

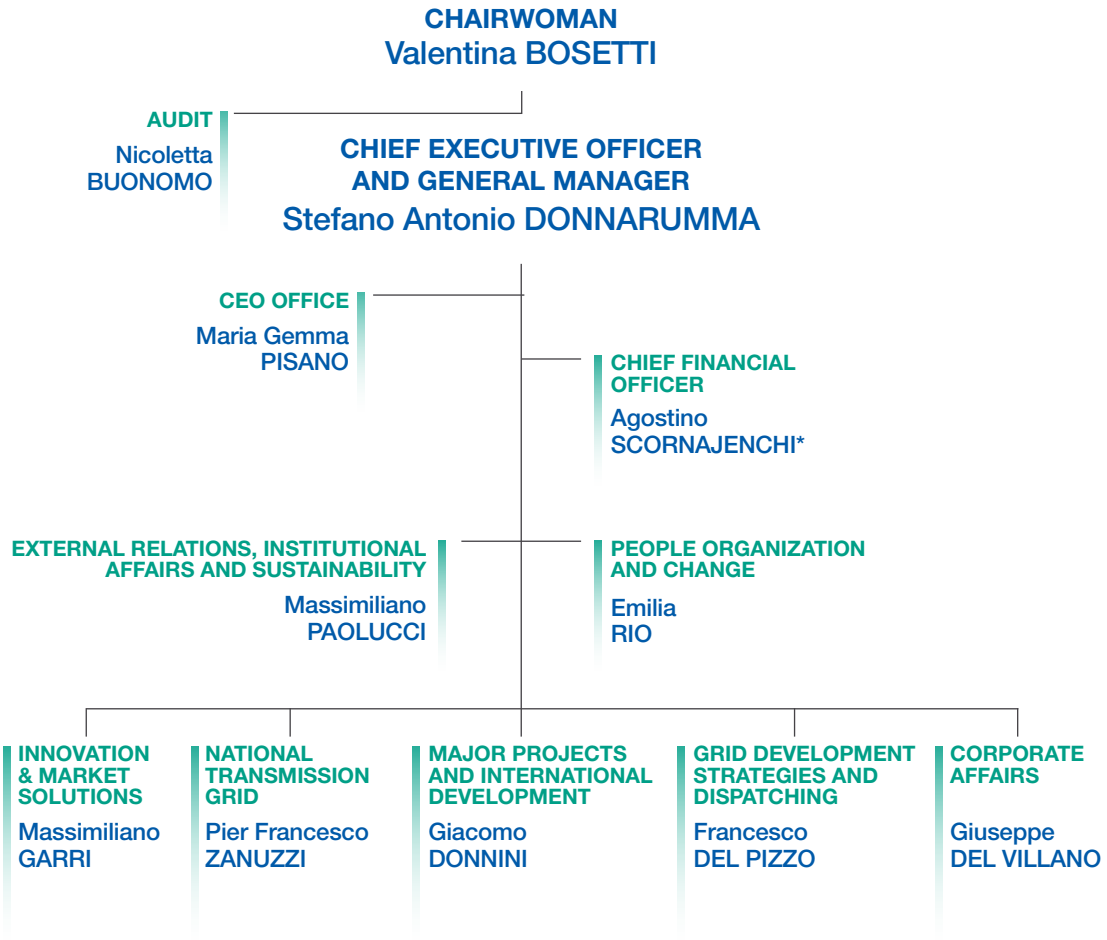
Aspects worthy of note include:

- the high level of attendance of Directors at Board meetings and Board Committee meetings;
- the presence of sustainability goals in the remuneration packages of the Chief Executive Officer and senior management;
- the close attention paid to ESG matters during both meetings of the Audit, Risk, Corporate Governance and Sustainability Committee and the Remuneration Committee and during specific induction sessions for the Board of Directors as a whole.

Further information on Terna's corporate governance may be found in the "Report on Corporate Governance and Ownership Structures", approved by the Board of Directors on 17 March 2022 and available in the "System of Corporate Governance – Governance Report" section of Terna's website, and in the "Remuneration Report", also available on Terna's website.

[23] Nominated on 14 October 2021.
[24] Further details of Terna S.p.A.'s corporate governance is provided in the "Report on Corporate Governance and Ownership Structures" published on the website (www.terna.it).

The structure of Terna's management team at 17 March 2022 is as follows:



** Manager responsible for financial reporting.*

Sustainability governance

EG1

Responsibility for identifying and managing issues, projects and policies relating to sustainability has been assigned to two units that report periodically to a Board Committee, the "Audit, Risk, Corporate Governance and Sustainability Committee".

One of these units, called "Investor Relations & ESG", is tasked with strategic planning, monitoring, reporting and conducting relations with international sustainability rating agencies and ESG investors, whilst the second, called "Sustainability", focuses on the development and execution of projects involved in the drive to achieve the Group's strategic objectives.

Both these units operate within the "External Relations, Corporate Affairs and Sustainability" department and interact with all the Company's other departments, starting from "Management Systems" (part of the "Quality and Risk Management" department), which, via the Integrated Management System, is able to optimise coordination of all the actors involved in monitoring quality, environmental performance and occupational safety, as part of a unified Group-wide approach to sustainability.

In line with the growing awareness of the important role played by sustainability in the Group's value creation process, in December 2021 Terna's Board of Directors approved the **Sustainability Policy**. This renews the Company's formal commitment to the adoption of sustainable behaviours and initiatives that are consistent with the UN SDGs and the targets set in the National Integrated Energy and Climate Plan ("PNIEC") and the European Green Deal. In accordance with the values expressed in the Code of Ethics, the Policy guidelines call for responsibility and transparency, efforts to foster stakeholder engagement, the development of people, inclusion and protections for human rights, the environment and ecosystems.

Risk management

EG2

The Terna Group's main business is operated as a legal monopoly, subject to the terms of the government concession and the regulations defined by the Regulatory Authority for Energy, Networks and the Environment (ARERA, or the *Autorità di Regolazione per Energia reti e Ambiente*). This means that regulatory risks and risks that may have an impact not so much on Terna, as on the entire electricity system (for example, power outages), are particularly significant. In this regard, risks that may also have long-terms effects, such as those deriving from climate change, are relevant to Terna (further details are provided in the paragraph, "The market environment").

Terna has identified the main risks associated with its activities and prepared organisational measures, controls and specific instruments with the aim of reducing them and keeping any effects within acceptable limits.

From an organisational point of view, the Group is structured in such a way as to guarantee management and supervision of all its operations and the risks associated with them, as well as a clear allocation of roles and responsibilities. In line with the provisions of the Corporate Governance Code for listed companies, which the Group has voluntarily adopted, the Audit and Risk, Corporate Governance and Sustainability Committee (hereinafter the "Committee"), consisting of the independent directors, supports the Board of Directors in making its assessments and taking decisions relating to the **Internal Audit and Risk Management System (IARMS)**.

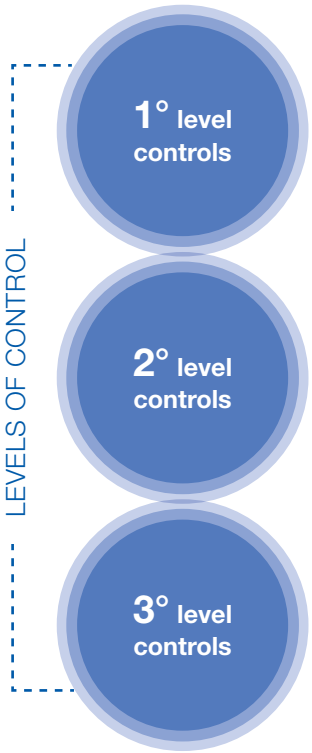
The Committee has a direct relationship with the **Chief Risk Officer (CRO)**, who is appointed by the Director that heads the IARMS (in consultation with the Committee), with the task of supporting senior management in the effective implementation and management of the risk management process at Group level, and in ensuring effective coordination of the actors involved in the IARMS. The CRO reports to the Chief Executive Officer and the Committee on the outcomes of risk management activities.

Under the Internal Audit and Risk Management System, the Audit department has the task of verifying that the IARMS is operating smoothly. Audit activities extend to all business processes (including risk management), with particular attention paid to the most important processes due to their impact on the Company's value, the degree of risk they pose in respect of achievement of the Company's objectives, or their influence on aspects of broad interest to the Company.

Risk framework

The Terna Group has for some time used an **Enterprise Risk Management (ERM)** framework based on the standards contained 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:



	RESPONSIBILITY	OBJECTIVES
1° level controls	**Head of the organization**	To identify, assess, manage and monitor risks within their areas of responsibility in order to design and implement specific risk treatment initiatives to ensure that work is carried out in a correct manner.
2° level controls	**Autonomous, independent units that are separate from operational units**	To keep track of changes in external regulations and developments in the related best practices, governance policies and the management process for the risks for which they are responsible. To also assess whether or not the controls for the categories of risk/objective they are responsible for are fit for purpose.
3° level controls	**Audit**	To provide an independent assessment of the design and functionality of the Internal Control and Risk Management System (assurance). The entity that has this role has a high degree of organizational, hierarchical and functional independence

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 minimising the duplication of activities and maximising the efficiency of the Internal Control and Risk Management System, in keeping with the respective roles and responsibilities, and the necessary independence requirements.

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:

EXTERNAL / MARKET RISK
Risk events connected with the competitive and regulatory environment, economic cycles, the economic and financial conditions and performance of the markets in which the Group operates, which could influence the Company's ability to achieve its strategic objectives.

OPERATIONAL RISK
Risk events connected with malfunctioning processes, procedures, information systems or human resources, resulting in losses / damage to the Company.

LEGAL / CONTRACTUAL RISK
Risk events connected with inadequate legal documents / contracts or other situations that may expose the Company to litigation, financial loss and/or reputational damage.

COMPLIANCE RISK
Risk events connected with breaches of the law, statutory requirements, regulations and other requirements (internal and external), with a potential impact in terms of fines, financial loss and/or reputational damage.

COUNTERPARTY RISK
Risk events generated by counterparties (financial, commercial, industrial, government) with which the Group operates or engages, including the inability to meet the obligations assumed or the possibility that the conduct of such parties may damage Terna's reputation and/or result in losses or other damages.

NATURAL / HUMAN-INDUCED EVENTS
Risk events resulting from natural phenomena (e.g. earthquakes, floods, bad weather, fires, epidemics / pandemics, etc.) and human-induced events (e.g., theft, sabotage, terrorist attacks, etc.).

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. Similarly, 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).

In continuity with what was done in 2020, risk assessments were fully updated in 2021, applying the above framework and involving Terna's middle and senior management. The risk assessments resulted in the identification of **63 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 **13 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.

Principal risks for the Company, how they are managed and the related opportunities

NFS

OBJECTIVE	RISK EVENT	CATEGORY	MANAGEMENT ACTION	OPPORTUNITIES
CONTINUITY AND QUALITY OF SERVICE	**Increased severity of weather events**			
	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.	**Development of innovative technologies** – including through structured partnerships with start-ups ("Open Innovation") – with the aim of monitoring climate events and boosting the resilience of the NTG. **Patentability** of the above solutions with related non-regulated business opportunities. **Terna's increased attractiveness** to international ESG rating agencies.
	Separation of the European transmission grid			
	The risk connected with extreme weather events / incorrect setup of the structure of the grid in accordance with the n-1 security criterion[25], with the potential for cascading failures triggering overloads / line failures, critical events and major incidents on the interconnected European transmission grid with separation of portions 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.	Further **consolidation of Terna's international standing** by sharing our best practices (the above innovative technologies). Active participation in the search for shared solutions and their subsequent adoption, boosting the resilience of the NTG.
	Cyberattacks			
	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.	**Development of partnerships with start-ups and innovative businesses** to identify appropriate solutions that may then be patented and provide further non-regulated business opportunities.
HUMAN RESOURCES	**Permanent adoption of a hybrid way of working**			
	At the end of the state of emergency, the hybrid model (a combination of remote working and working at the office) will become permanent. The introduction of this way of working could encounter resistance among the Company's employees, reducing the related benefits and inconsistent adoption of the new corporate culture.	Operational risk	Projects and initiatives accompanying the change towards new ways of working supporting performance, wellbeing and the engagement of people.	External promotion of the outcomes (in terms of employee participation and KPIs) with a resulting **increase in Terna's reputational capital** as a company that cares about its employees' work-life balance.
	Workplace injuries / incidents			
	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.	External promotion of the processes and solutions adopted (e.g., Smart DPI) by Terna and the outcomes achieved with a resulting **increase in Terna's reputational capital** as a company that cares about workers' human rights. **Terna's increased attractiveness** to socially responsible investors (SRIs). Positive impact on financial capital of containing cost of **premiums paid to INAIL** to insure against workplace injuries and occupational diseases among workers.
	Enhancement and oversight of internal competencies / organizational changes			
	Enhancement and oversight of adequate specialist knowledge to enable achievement of the challenging goals contained in the Plan, including following organizational changes.	Operational risk	Expansion of the workforce. Training and skills development. Skill mapping. Change management initiatives.	**Significant increase in intangible capitals** (above all human and intellectual) available to the Group, with benefits in terms of a greater focus on the Group's strategic goals.

[25] The n-1 security criterion is a preventive assessment carried out by the grid operator, on the basis of which the electricity system is deemed to be secure, if key grid parameters (power flows, voltages and current) remain within their respective operational limits when faced with any form of individual contingency (e.g., the loss of a power line).

OBJECTIVE	RISK EVENT	CATEGORY	MANAGEMENT ACTION	OPPORTUNITIES
REGULATORS AND OTHER GOVERNMENT STAKEHOLDERS	**Evolution of rates of remuneration due to intra-period changes**			
	The risk connected with changes to the parameters used in determining revenue from regulated activities carried out under concession.	External / market risk	Monitoring of regulatory developments and process of revising tariffs.	Execution of the investment projects in the Industrial Plan, in line with the goal of delivering the ecological transition for the **benefit of the system**, is an opportunity for Terna as it is consistent with the Regulator's focus on output-based solutions.
	Introduction of totex- and output-based regulation			
	Risk connected with the introduction, in 2024, of totex- and output-based regulation, which will lead to a change in the criteria used in recognising invested capital.	External / market risk	Monitoring of regulatory developments and adaptation of business procedures and processes in line with the new approach to determining allowed costs.	As above.
	Introduction of auction mechanisms for the deployment of storage systems			
	Reputational risk connected with eventual inefficiencies / difficulties in identifying demand, locating and defining and managing the new rules for auctions aimed at driving the deployment of storage systems.	External / market risk	Adoption of international best practices for the conduct of the activities covered by the legislation.	**Increase in Terna's reputational capital** – increasingly perceived as driving the ecological transition - through the optimal interaction between its intangible capitals (human, intellectual and relationship) with the aim of minimizing the risks connected with the introduction of such auction mechanisms.
DEVELOPMENT OF THE NATIONAL TRANSMISSION GRID	**Timing of the issue of consents for projects with an impact on the investment programme**			
	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	Monitoring of consents processes. Ongoing dialogue with local authorities and associations.	**Increase in social and relationship capital** through the external promotion of the Company's best practices (e.g., our participatory approach to planning new infrastructure projects and extracting value from our "Terna incontra" initiatives).
	Timing of compliance and implementation of environmental restrictions imposed following the receipt of consents, specialist advice and environmental controls of construction sites			
	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.	**Increase in reputational capital** through external promotion, at the most appropriate levels of government, of the internal solutions adopted as part of a more structured approach.
CUSTOMERS, SUPPLIERS AND BUSINESS PARTNERS	**Suppliers' operational capacity reaches saturation point**			
	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.	Counter-party risk	Steps to boost capacity in key supply chains. Assessment of the risks associated with each supplier.	**Increase in the Group's reputational capital** through dialogue and support for suppliers most exposed to this risk.
	Supply chain crises and/or changes to the strategies of key suppliers			
	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, heightened by the crisis in the global supply chain following the pandemic and the energy transition launched in many countries.	Counter-party risk	Initiatives designed to pre-empt any such changes (the inclusion of "notices to proceed"). Increased scouting activity based on a proactive approach and expansion of the supplier base.	**Increase in the Group's reputational capital** by helping to create new jobs (Full-Time Equivalents - FTEs), made possible by the inclusion of new suppliers in the relevant register.

Management of the health emergency

Two years on from the beginning of the Covid-19 pandemic, and after recording a progressive decline in infections in mid-2021, the spread of the Delta and Omicron variants led to further large-scale outbreaks from November 2021.

Against this backdrop, given the continuing state of health emergency (until 31 March 2022, at the time of preparing this Report), Terna has proceeded to apply all the measures put in place since February 2020.

Work thus continued to be organised in full conformity with these measures in 2021, with close controls on the number of people coming into work in offices. This is reflected in the fact that 30% of the total workforce came into work, whilst most administrative staff continue to **work remotely**, an arrangement progressively extended in line with the measures introduced by the various Cabinet Office decrees.

With the certification, in July 2021, of our **Management System for the Prevention and Control of Infections**, implemented at our headquarters premises (the "Galbani Hub") in Rome, in accordance with **Biosafety Trust Certification** standards, **Terna became the first and only European TSO to adopt such a system, which is fully embedded in our management systems** (see the specific box on page 183).

403-6 >

The internal ***Sicuri Insieme*** ("Safe Together") campaign continued. As well as maintaining the spotlight on prevention through awareness and information initiatives, in September 2021 the range of free services offered to employees was expanded, with the addition of serological testing at work (approximately 2,300 tests had been carried out at 31 December 2021) in order to determine the level of antibodies developed by fully vaccinated personnel. In the autumn months, Terna offered employees (and their families) the opportunity of getting a free flu vaccination (resulting around 800 jabs) and continued to offer all employees the option having a monthly molecular test free of charge (approximately 22,000 tests carried out at 31 December 2021).

201-2 >

Opportunities and risks connected with climate change

NFS

Climate change brings a series of opportunities and risks for the Company that must be properly evaluated to ensure that they are effectively managed. To identify them, Terna applies the framework used by the **Task Force on Climate-related Financial Disclosures (TCFD)**, which divides climate-related risks into two main categories:

- **Transition risks:** transitioning to a lower-carbon economy may entail policy and legal risks, due to different regulatory requirements across different geographies, or to new impacts and/or uncertainties resulting from the policies adopted. The transition may also result in technology risk, due to uncertainties surrounding the role of emerging technologies, and market risk, linked to new dynamics, shifts in supply and demand and an increasingly complex market environment, which could expose organisations to reputational risks;
- **Physical risks:** physical risks resulting from climate change can be event driven (acute) or longer-term shifts (chronic) in climate patterns. Physical risks may have financial implications for organizations, such as direct damage to assets and indirect impacts from supply chain disruption.

The following is a description of the climate-related opportunities and risks identified by Terna.

OPPORTUNITIES

The opportunities linked to climate change constitute a cornerstone of Terna's strategy, regarding both Regulated and Non-regulated Activities in Italy and overseas.

Electrification of consumption and investment

In addition to the need to integrate large numbers of RES plants, another key element in the ecological transition is the electrification of financial consumption. Electricity as an energy carrier is an enabler of this transformation, as final consumption powered by this carrier is by its nature far more efficient than any fuelled by combustion.

The ecological transition will thus be based on a series of indispensable actions. It is will immediately be necessary to develop **additional renewable generation capacity** that will have to be connected to the electricity grid. At the same time, it will be necessary to invest in the **development of the grid infrastructure** needed to transport and distribute the electricity and in **storage systems**. Finally, we will also need to deploy mature technologies, such as electric mobility, heat pumps for heating and colling and induction cooking. **Under this scenario, Terna is engaged in driving the change: increasing the integration of renewable sources and boosting the resilience of the grid are in fact two of the main actions included in the 2021 Development Plan**. This approach is also consistent with a form of regulation that is increasingly focused on output-based solutions that will make it possible to raise Terna's returns in step with our ability to create benefits for the system.

Macroeconomic impacts

Terna is driving the ecological transition, having set aside €18 billion in its Development Plan (25% up on the 2020 Plan) for investment in enabling Italy's National Integrated Energy and Climate Plan ("PNIEC") over the next ten years. This investment aims to increase transmission capacity between the various market areas, streamline grids, and boost cross-border exchange capacity and the security and resilience of the system. The investment is expected to have a multiplier effect in terms of both GDP growth and the creation of new jobs.

Energy dependency

The ecological transition is also a major opportunity to boost Italy's competitiveness: the country's lack of energy resources has historically meant that energy costs were higher than the European average and that the country was highly dependent on imported energy (today at approximately 73%). As a result of the ecological transition, Italy will see a reduction in its energy dependence and could enjoy far more competitive energy costs thanks to the availability of sun and wind. The actions taken in the coming years will determine our country's strategic position in the global economic system of the future.

The ecological transition and trends that encourage the development of new opportunities in Italy are of global significance, opening up new opportunities overseas. Within the scope of the non-regulated business, this situation will therefore also bring new potential in connection with Terna's international activities concentrated in Latin America, linked above all to the identification and development of new energy solutions.

TRANSITION RISKS

Political and legal

Terna is not currently subject to legal obligations regarding cuts in emissions and, there are therefore no specific risks with regard to the introduction of a carbon tax or rising carbon prices. An increase in reporting obligations would also not pose any problems for Terna, which has been providing full disclosure on its emissions for some time.

In terms of the regulation of quality of service, the Company is already subject to a series of rewards and penalties linked to continuity, which may be affected by extreme climate events.

Technological

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

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

Market

The closing months of 2021 registered sharp increases in wholesale energy prices, reflecting pricing pressures relating above all to gas and, to a lesser extent, CO_2. This led electricity prices to rise by around 10% in the third quarter and by approximately 30% in the fourth quarter, increases that were moreover limited by government intervention (otherwise the increases would have been 20% and 40%, respectively). These price rises, the biggest in the last 20 years, drove the cost of electricity for consumers to its highest ever level. Although this does not fall within the scope of the risks to which Terna is effectively exposed, the increase in RES envisaged in the EU's recent **Fit-For-55** and **Green Deal** packages may be of major benefit to Italy's economy. To achieve the policy objectives set for 2030, it will be necessary to install approximately 60 GW additional non-programmable renewable energy capacity. These new non-programmable renewable energy plants will be able to produce around 100 TWh of electricity, which will replace an equivalent quantity of energy produced by gas-fuelled thermoelectric plants. To ensure that these plants are built, it is essential to speed up consents processes and devise auction mechanisms with ambitious quotas, that will effectively enable achievement of the European targets. Terna will play its part as the operator of the transmission grid in integrating such plants into the grid and encouraging their correct location and a suitable technology mix.

Reputational

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

PHYSICAL RISKS

< 201-2

Climate change and rising temperatures can impact quality of service and grid infrastructure. Increasing the **resilience of the Italian electricity system** is one of the major challenges posed by the ecological transition. The increasingly serious and devastating impacts on electricity infrastructure provoked by extreme weather events, above all heavy snowfall and strong winds, make it necessary to draw up a specific plan to boost the resilience of the electricity system and the high-voltage grid. To achieve this goal, Terna has launched a new Resilience 2.0 project that aims:

1. to apply an innovative new approach with the use of probabilistic weather event prediction models and an engineering-based approach to assessing the vulnerability of Terna's assets;
2. to quantify the probability of failures to identify, via cost-benefit analysis, the interventions needed to enhance the resilience of the system.

Terna provides details of its strategy in the Resilience Plan.

Conflict in Ukraine: assessing and managing the risks for the Terna Group

The very recent international events involving **Russia** and **Ukraine** are being closely watched by the Terna Group as part of our continuous monitoring of ongoing geopolitical developments and, in particular, the related legislation, above all with regard to international sanctions. This assessment is normally conducted on an ongoing basis to **exclude, mitigate and prevent risks that could have an impact on operations and on the security of the transmission service, our business and on the Terna Group's commercial and financial transactions (the "Activities")**. Given the exceptional nature and size of this global crisis, Terna has moved proactively to set up specific task forces to monitor any new sanctions and to strengthen our due diligence procedures and ordinary controls, partly in view of the related policies adopted by the Terna Group. Whilst there are obvious concerns about how the crisis might develop and within a scenario marked by significant uncertainty, there is not at this time any evidence of an immediate, concrete impact on the normal conduct of our Activities or on the Group's strategy of combining sustainability with growth. Terna will, however, continue to closely follow any developments that could have currently unforeseeable consequences.

The remuneration system

In line with Terna's governance framework, the Board of Directors is responsible for setting the objectives and approving the results of the incentive schemes to which the variable remuneration of the Chief Executive Officer and general Manager is linked, and for defining the general criteria for the remuneration of Key Management Personnel.

In keeping with the recommendations in the Corporate Governance Code, relating to matters concerning remuneration, the Board of Directors is supported by a Remuneration Committee consisting of independent, non-executive Directors tasked with providing related recommendations and advice.

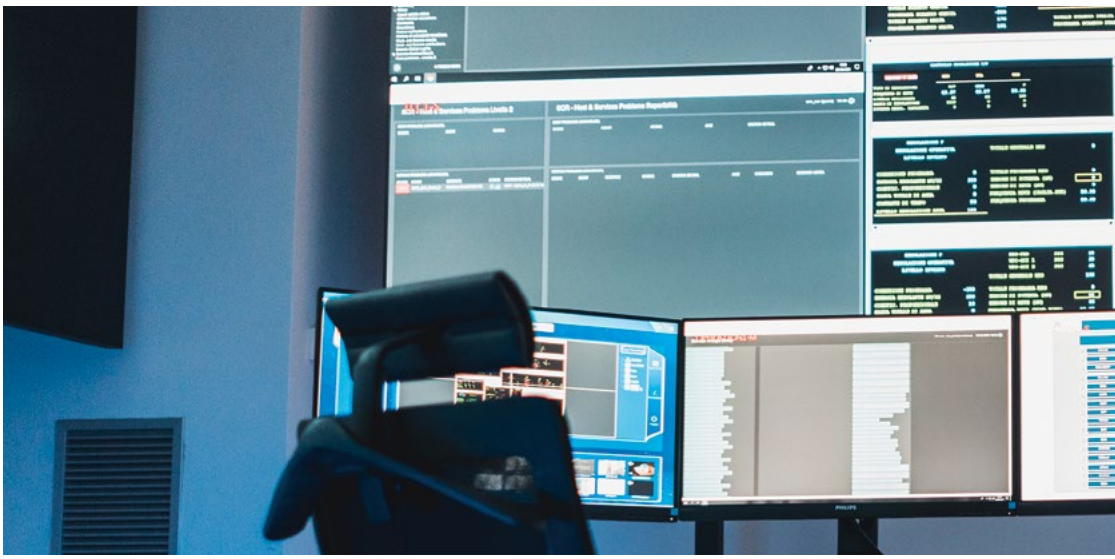
Performance Share Plan 2021-2025

The Board of Directors approved the Terms and Conditions of the Performance Share Plan 2021-2025 on 16 June 2021, in implementation of the terms established by the Annual general Meeting of shareholders held on 30 April 2021.

The LTI Plan 2021-2025 envisages the grant of the right to receive free of charge a given number of Terna S.p.A.'s ordinary shares at the end of a vesting period and on the achievement of the performance objectives to which the Plan is linked.

Further details are provided in the Information Circular on the Performance Share Plan 2021-2025 and in the "Report on the remuneration policy and remuneration paid", published on the Company's website (www.terna.it).

The share buyback programme to service the Plan was completed on 23 June 2021 at a total cost of approximately €10 million.



Remuneration policy for 2022

The Terna Group draws our Remuneration Policy in line with stakeholders' expectations and market best practices and in accordance with the principles and criteria set out in the Corporate Governance Code. We also ensure the maximum alignment between shareholders and management, in terms of both value creation and the risk profile established.

The Board of Directors ensures that the Chief Executive Officer and General Manager is the beneficiary of a policy that is in line with the principles contained in the Corporate Governance Code. This means ensuring that a significant part of remuneration is linked to the achievement of specific performance objectives, including those of a non-financial nature (e.g., ESG indicators). In the pay mix, care is also taken to ensure that long-term incentives are given more weight than those of a short-term nature.

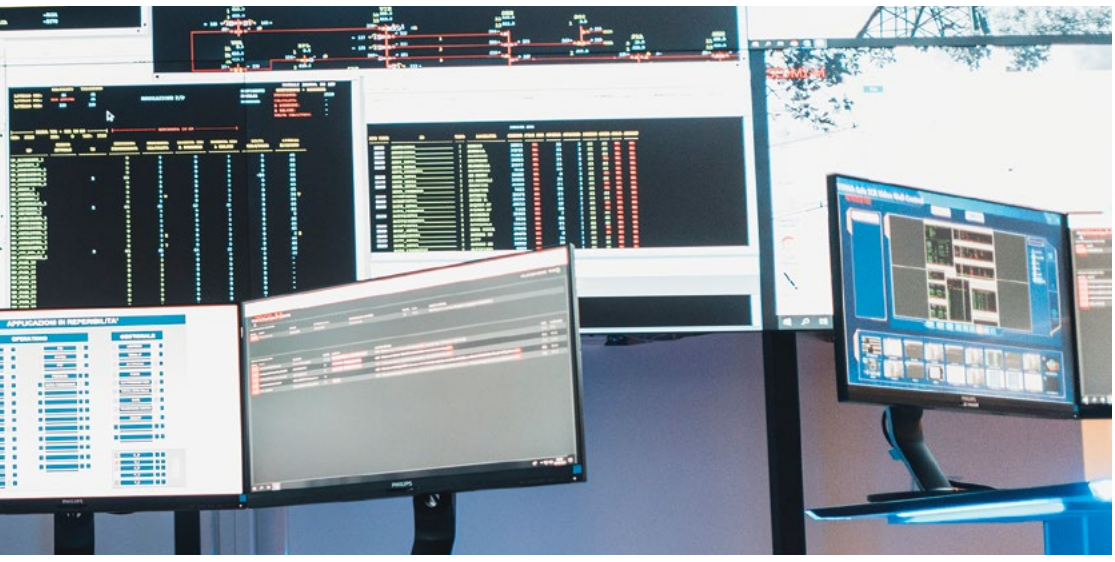
The same principles underpin the policy for Key Management Personnel.

To support achievement of our strategic objectives and the Company's performance, Terna has adopted variable incentives schemes diversified on the basis of the different roles within the Company:

- an MBO (Management By Objectives) scheme for the Company's management, linking the value of individual bonuses:
  - to the degree to which quantitative targets have been met, at both Company and individual level, with a portion linked to Terna's environmental and social commitments (e.g., workplace safety indicators);
  - to a qualitative assessment of performance, based on management behaviours.
- a long-term incentives (LTIs) linked to multi-year business objectives, including sustainability, for managers in the most important roles with regard to achievement of strategic results.

Remuneration packages also include welfare provision and benefits designed to promote solid ongoing improvements in the work-life balance of Terna's people, resulting in pay and welfare packages that are well above average for Italian companies.

Full details of the Terna Group's remuneration policy are provided in the Report on the Remuneration Policy and on Remuneration Paid, approved by the Board of Directors - on the recommendation of the Remuneration Committee - on 24 March 2022, and to be published by Terna in compliance with the requirements of art. 123-*ter* of the CLF, as amended.

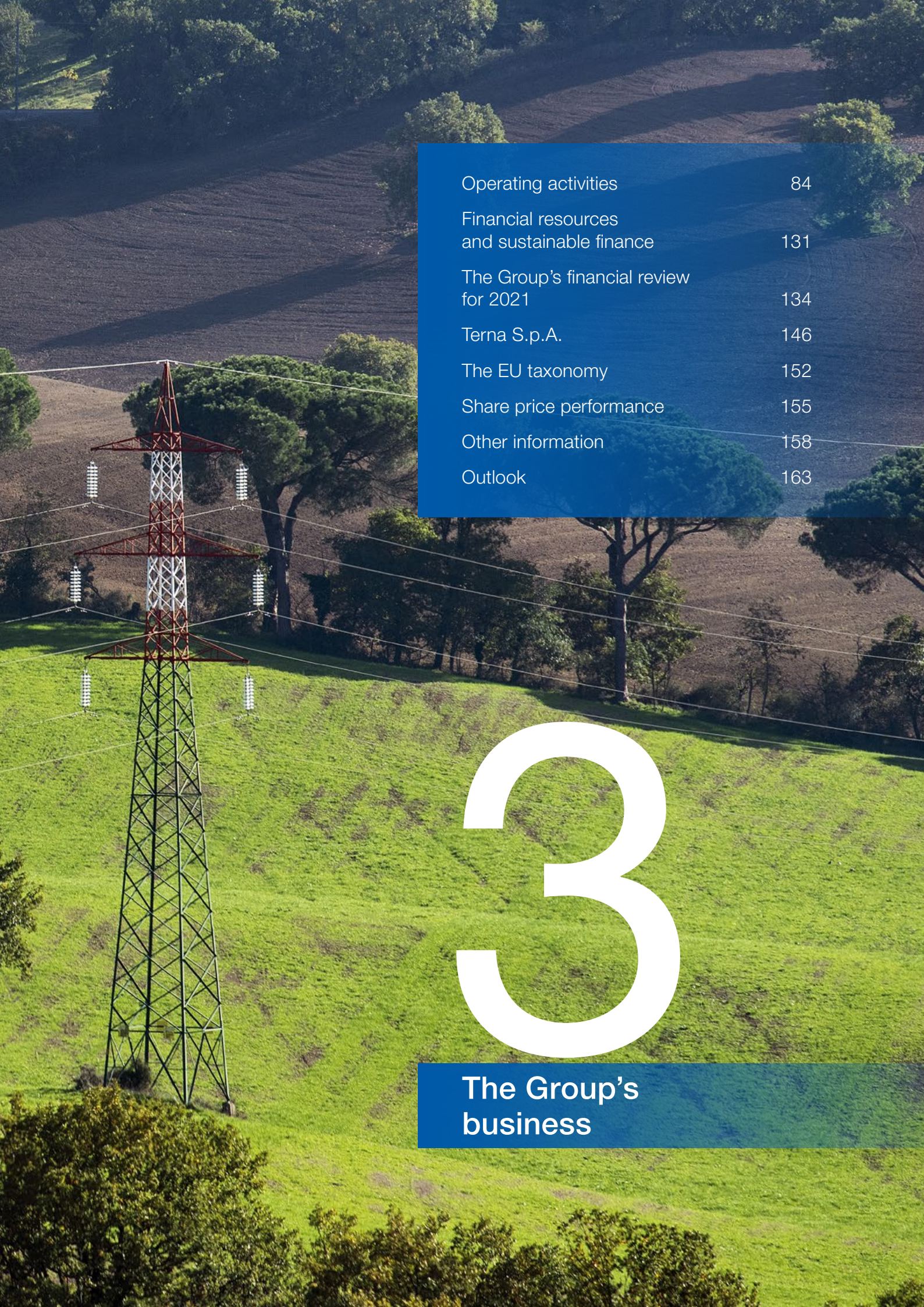


« The aim of my work is to shape the grid of tomorrow, but this doesn't just involve the simple updating of work programmes: the scenario is in constant flux, as the priorities and challenges shift and take on new forms. In addition to being aware of our major role in enabling the phase-out of coal, we also have shared responsibility for helping to drive the country's post-Covid economic recovery. The significant increase in investment is our response to this dual objective: sustainability and growth. »

Simona Baldissoni

Planning
Grid and interconnection planning

#Ternapeople #DrivingEnergy



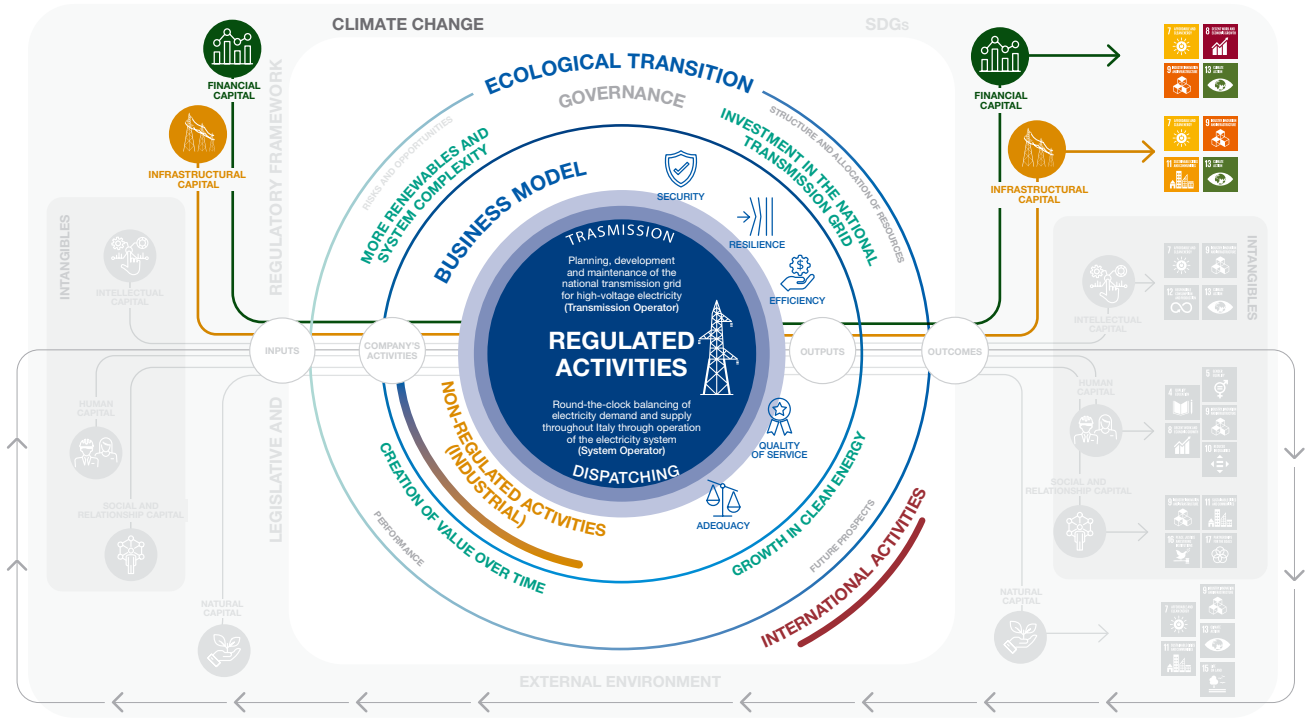
3

The Group's business

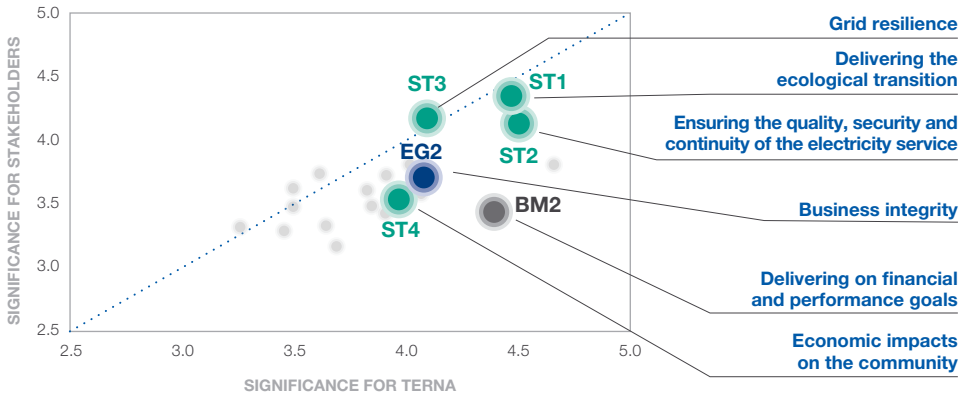
In this section

At the heart of our story are our tangible capitals, which create value through the fully implementation of Terna's business model. Our operating activities are divided into three main lines of business: "Regulated Activities", "Non-regulated Activities" and "International Activities". Progress in delivering on the 2021-2025 Industrial Plan and the Development Plan is highlighted, as this represents the Group's ability to carry out the planned investment in electricity infrastructure needed to progressively integrate renewable sources into the country's electricity system and to help drive economic growth. Information on the operating and financial performance of each line of business is provided.

VALUE CREATION



MATERIALITY



These infographics highlight the topics dealt with in this section with the aim of **facilitating information connectivity**: in this way, the section offers an overall view showing the links between all the factors that influence Terna's ability to create value over time and how they are dependent on each other. Material topics are indicated with a cross-reference in blue, showing the relevant code.

TANGIBLE CAPITALS

Terna's infrastructural capital is represented by the National Transmission Grid, the Group's key asset that drives and defines our mission. It would, however, be impossible for Terna to develop and maintain the grid without the support of a range of financial resources, necessary in order to carry out the investment programmes and strategic initiatives needed to deliver the Energy Transition. This is why our tangible capitals are at the very heart of everything we do.

Operating activities

The Terna Group's business model is divided into three areas of business. The main area is Regulated Activities, which coincides with the obligations deriving from the government concession, together with Non-regulated Activities and International Activities.

NFS

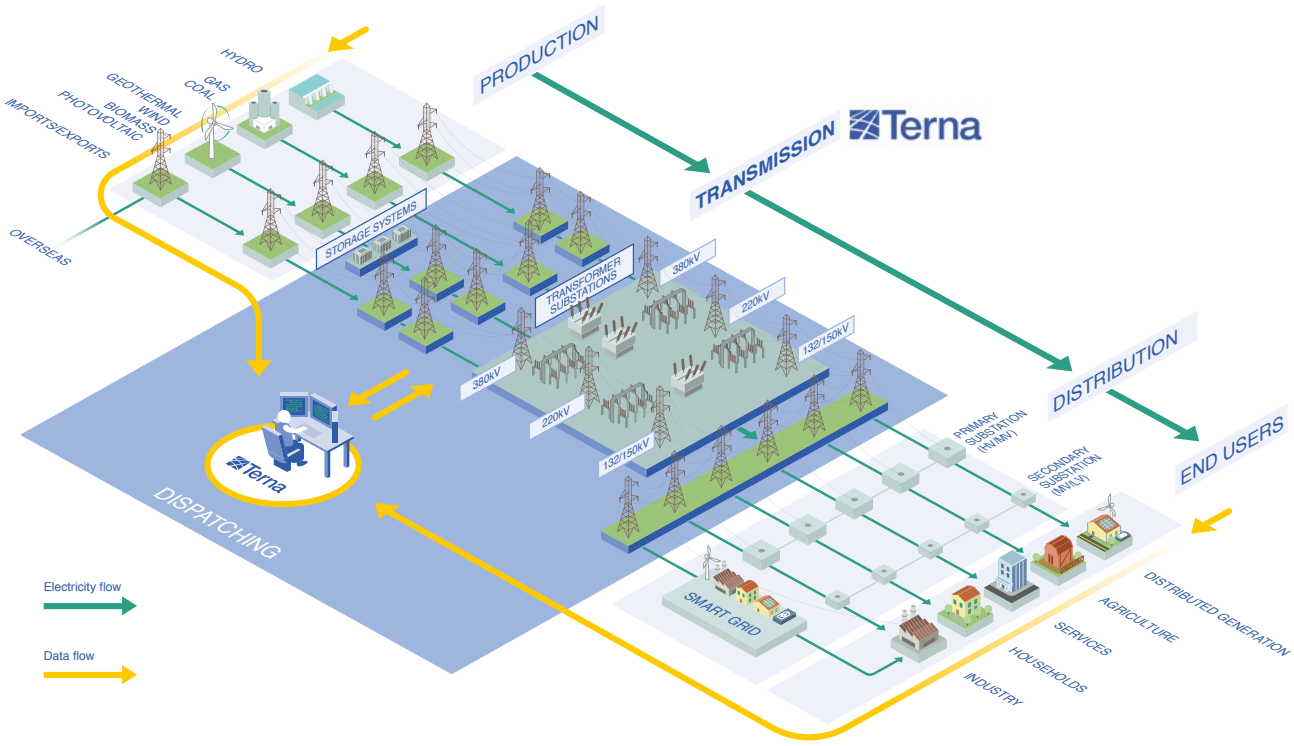
Regulated Activities: the National Transmission Grid

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



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, in which it makes daily purchases of the "services" necessary to constantly ensure the continuity and security of electricity supply.

In addition to strengthening the domestic grid, Terna is required to develop interconnection capacity with other countries' electricity systems. Indeed, Italy is electrically interconnected with France, Switzerland, Austria, Slovenia, Montenegro and Greece via 26 interconnectors.

ELECTRICITY TRANSMISSION

NFS

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 and relationship 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*

< EU4

896 electricity substations	74,855 km of circuits	68,054 km of lines 94% overhead	n° 4 control centres
759 transformers	5 storage sites	6,970 bays	234,937 line spans

** Figures updated to 31 December 2021, except for the figure for line spans, which is updated to early 2022.*

For additional information, go to page 289

Connecting new plants

Terna has an obligation to connect all potential users requesting connection to the grid, identifying connection solutions in terms of criteria that guarantee the continuity and safe operation of the grid to which an applicant's new plant will be connected. Terna is responsible for high and very high voltage connections to the NTG of plants with a capacity of 10 MW or more.

At any one time, Terna handles around 3,200 applications for connection to the grid in relation to future or existing initiatives. More than 2,200 applications for connection using the general minimum technical solution, relating in particular to the connection of plants using renewable energy sources (RES) to the NTG and representing total capacity of 102.5 GW, are currently in progress.

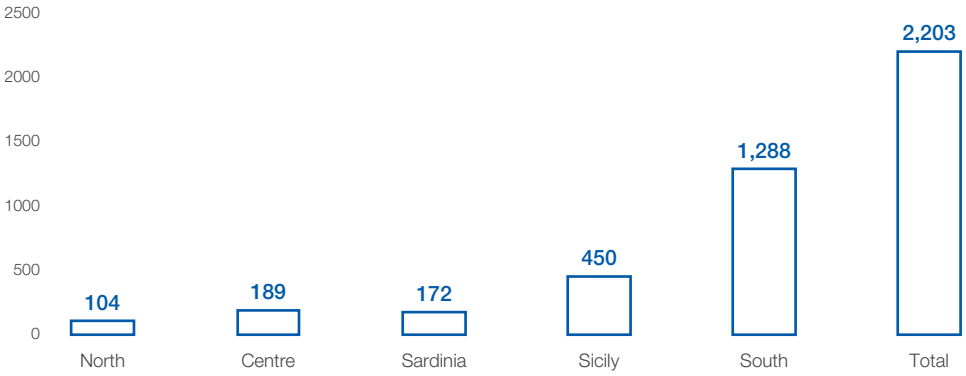
The publication of the Decree of the Minister for Economic Development and of the Minister for the Environment (4 July 2019), providing incentives in the three-year period 2019-2021 for electricity produced by plants powered by onshore wind, solar panels, hydro power and residual gas from treatment processes, has rekindled interest in the development of projects for RES plants and a rapid increase in applications for new connections to the NTG.

New projects at the development stage primarily regard wind and solar power plants.

This shows that:

- 87% of the applications received are from southern Italy and the islands (representing capacity equivalent to over 88% of the total);
- a sharp increase was registered in applications for the connection of new distribution plants and for upgrades to existing plants by local distributors, with the aim of harnessing production from renewable sources;
- **23 connection contracts** were signed in 2021 (representing **total capacity of 632 MW**), relating to the construction of new RES plants.

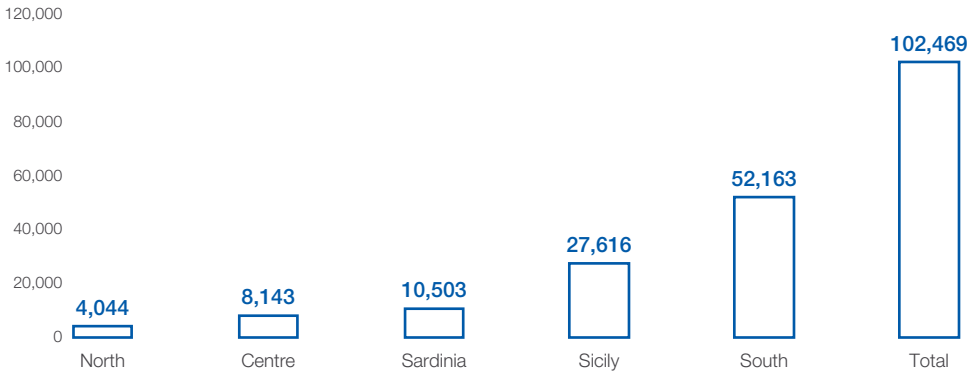
NUMBER OF APPLICATIONS



Data at 31 December 2021.

CAPACITY

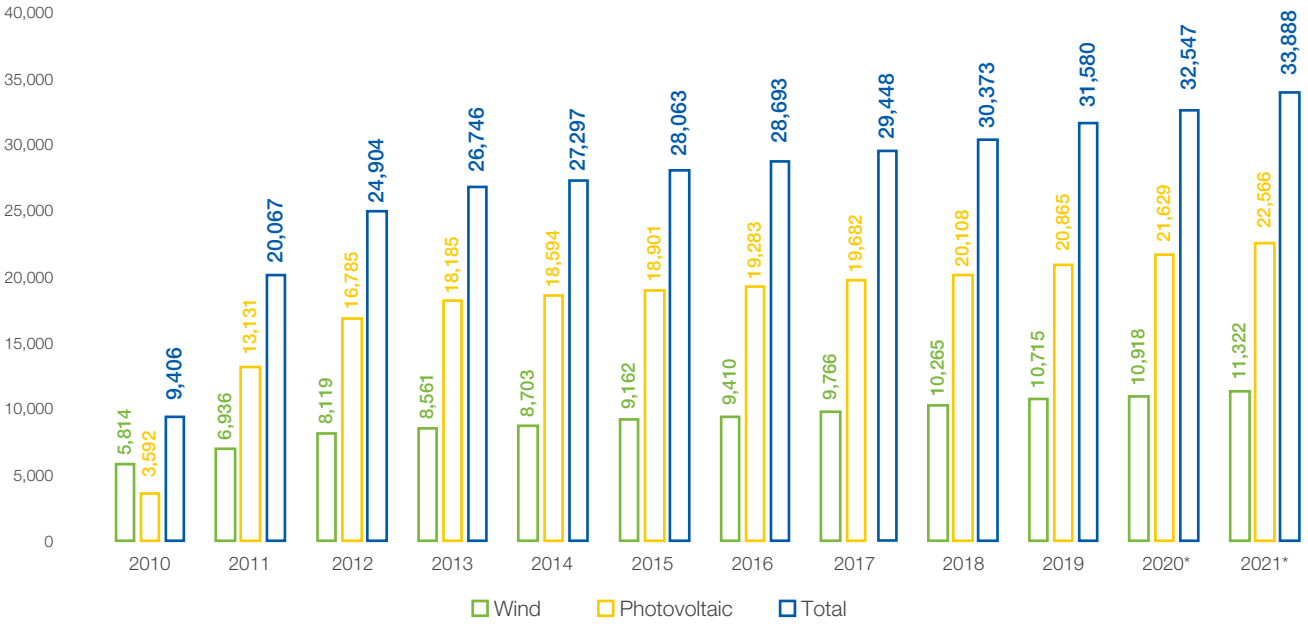
(MW)



Data at 31 December 2021.

INSTALLED PHOTOVOLTAIC AND WIND CAPACITY 2010-2021

(GW)



(*) Provisional data from Terna for 2020 and 2021.

ST2 ST1

NFS

SASB

13 CLIMATE ACTION

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

7 AFFORDABLE AND CLEAN ENERGY

2021 Development Plan

On 7 July 2021, the latest available 2021 Development Plan for the National Electricity Grid, approved by Terna's Board of Directors on 12 May 2021, was presented to the Ministry of Ecological Transition, in line with the provisions of art. 60 of the "Simplification Decree", which requires Terna to prepare a ten-year Development Plan for the national transmission grid every two years.

The National Transmission Grid **Development Plan** provides for investment of **€18.1 billion over the next ten years**, marking an increase of 25% compared with the previous ten-year plan. As well as the works planned for the period, the Plan also covers the state of progress of works planned in previous years.

The Plan must guarantee the sustainable development of the National Transmission Grid (NTG), by enabling the implementation of RES, and supporting the energy transition and the phase-out of coal. It 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 line with the objectives set out in the **Proposal for a National Integrated Energy and Climate Plan (PNIEC)**, provided for by Regulation 2016/0375 of the European Parliament and Council on the Governance of the Energy Union.

To achieve this, four drivers have been identified:

DECARBONISATION

Grid development to support the ecological transition and combat climate change, by:

- facilitating RES deployment and integration;
- facilitating the spread of electric mobility and reducing emissions in the long term;
- supporting the increase in electricity penetration.

MARKET EFFICIENCY

Supporting economic growth and improving the quality of life by reducing system costs, by:

- building market integration infrastructure;
- integrating the Dispatching Services Market.

SECURITY, QUALITY AND RESILIENCE

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, by:

- investing in research and using innovative technologies;
- investing in operation, maintenance, upgrades, new grid connections and cabling.

SUSTAINABILITY

The ability to plan, design and implement based on rigorous analyses that maximise the environmental benefits together with the economic benefits is the only possible guarantee of sustainability:

- investment in innovative technologies to mitigate environmental impact;
- projects to protect biodiversity and natural habitats;
- constant stakeholder engagement;
- efforts to make grids more efficient.

The drivers are pursued along five **lines of action**:

1. INTERCONNECTORS

The upgrade and expansion of cross-border interconnections to boost exchange capacity with neighbouring countries.

2. INTEGRATION OF RES

Increase exchanges between market areas to boost the integration of renewable energy sources (RES).

3. EXPANSION OF THE NTG

> Address critical issues, increase electrification in metropolitan areas

> Integrated management of NTG security

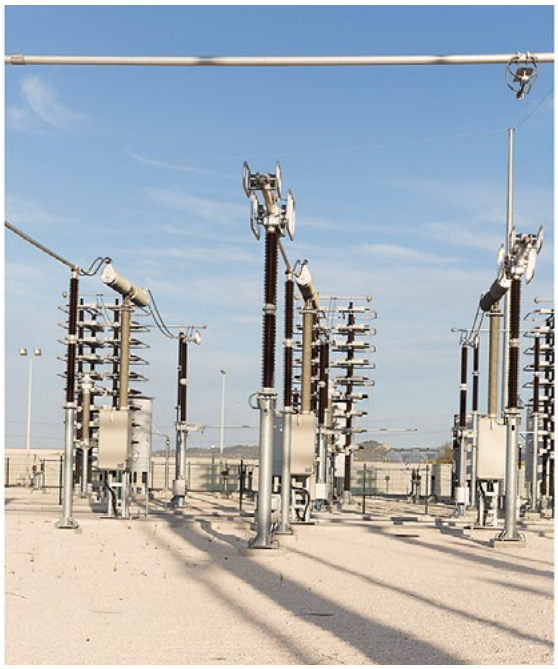
> Increasingly widespread control of the grid.

4. INFRASTRUCTURE SYNERGIES

Synergies with other systems (gas, railways and telecommunications) to integrate networks with a reduced impact on local areas.

5. RESILIENCE 2.0

New approach to identifying and assessing initiatives that increase grid resilience.


With regard to decarbonisation, in line with Legislative Decree 93/11 and Resolution 627/16, as amended[26], 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 grid 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.

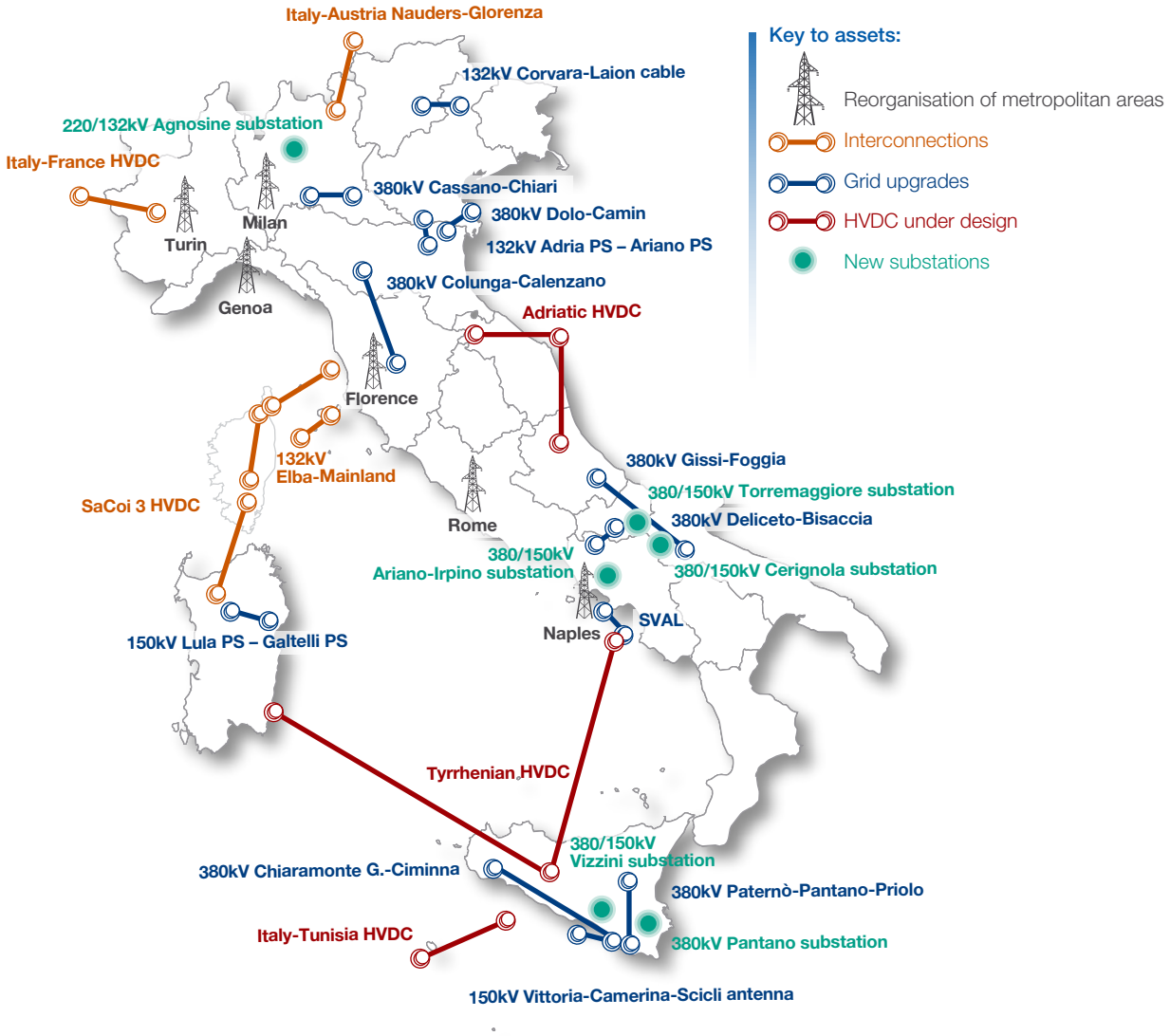
The planning process, leading to the definition of the Development Plan, can be divided into four main phases:

1) collection of physical grid and economic market parameters, and implementation of the main forecast scenarios at national and European level;
2) analysis of the current operational state of the electricity grid and forecast analyses on shared scenarios in order to identify critical areas of the grid, which underlie new development needs and priorities, and also to assess future problems and identify future grid development needs;
3) feasibility studies and cost-benefit analyses carried out in order to assess the overall benefits (including those relating to environmental and social sustainability) compared with the associated costs for each investment project;
4) planning of the works with the greatest added value for the system, followed by the subsequent phases of consultation and authorisation, procurement and delivery.

[26] 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 responsible.

Principal projects for the National Transmission Grid 2021-2025

The Development Plan envisages capital expenditure of approximately €6 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	180	○	◎ CO2 ⚡ ✳
Italy-Austria interconnector	24	○	◎ CO2
Italy-Switzerland Interconnector	100	○	◎ CO2 ⚡ ✳
Italy-Slovenia interconnector	154	○	◎ CO2 ✳
Sardinia-Corsica-Italy interconnector	778	○	◎ ⚡ ✳
HVDC Centre South - Centre North	221	◉	◎ CO2 ⚡ ✳
HVDC Italy-Tunisia	200	◉	◎ CO2 ✳
HVDC Mainland Sicily-Sardinia	950	◉	◎ CO2 ⚡ ✳
Reorganisation of metropolitan areas ✓	182	○	⚡ ✳
Chiaramonte-Gulfi-Ciminna	173	○	◎ CO2 ⚡ ✳
Upgrade in the Mid Piave Valley ✓	90	○	CO2 ⚡ ✳
Colunga-Calenzano ✓	85	○	◎ CO2 ⚡ ✳
Gissi-Foggia	140	○	◎ CO2 ⚡ ✳
Cassano-Chiari	36	○	◎ ⚡
Deliceto Bisaccia	36	○	◎ CO2 ⚡ ✳
Upgrade North-Calabria	10	○	◎ CO2 ⚡ ✳
Paternò-Pantano-Priolo	63	○	◎ CO2 ⚡ ✳
Elba-Mainland	35	○	◎ ⚡ ✳
Substations			
Agnosine substation Vizzini substation Pantano substation		○	⚡ ✳
Torremaggiore substation Cerignola substation Ariano Irpino substation		●	⚡ ✳

Legenda Resiliece and Status*

✓ Resilience Plan | ● Completed/ in service | ○ Under construction | ○ Awaiting consents | ◉ Consultation | ● Under design | ● Planned

Legenda Driver*

CO2 De-carbonisation | ◎ Market efficiency | ⚡ Security of supply | ✳ Systemic sustainability

** The other initiatives completed in 2021 are shown in the section "Changes in the dimensions of the NTG" in the annexes.*

ST3

Security Plan

The National Electricity System Security Protection Plan, also known as the Security Plan, is a four-year programme of interventions to protect the security of the electricity system. Prepared by Terna pursuant to Law 290 of 27 October 2003, the Plan is submitted to the Ministry for the Ecological Transition for approval by 31 May of each year.

The 2021 Security Plan is fully in line with the evolution of the energy sector towards scenarios characterised by increased use of renewable energy sources, the decommissioning of thermoelectric plants and climate change. The Plan provides for the necessary measures to regulate the system's voltage and the dynamic stability, to adapt the Control and Protection Systems, and to strengthen electricity system management initiatives and the physical and cyber security of grid infrastructure. Attached to the Security Plan is the Resilience Plan, which is defined by applying the new Resilience 2.0 methodology, and includes all the investments set out in Terna's strategic plans (Development, Safety and Renewal). The Resilience Plan is designed to boost the resilience of the electricity system, thus enabling it to withstand the extreme weather events that have become increasingly frequent in recent years due to climate change.

SECURITY PLAN

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

Legenda Resiliece 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

FOCUS

Focus on Resilience 2.0 methodology

Weather events over the last 20 years show that the main causes of disruption to the National Transmission Grid are accumulations of wet snow and strong gusts of wind, resulting in vegetation falling onto power lines, as well as flooding, landslides and salt pollution. These critical issues highlight the need for increasingly effective NTG planning aimed at dealing with the risk of extreme events in the areas of the country affected.

Therefore, Terna defined a new methodology, called Resilience 2.0, which assesses the benefits of interventions by comparing the energy not supplied before and after such interventions, taking into account climate risk projections and the vulnerability of the electricity grid's assets. The Resilience 2.0 methodological approach:

- is innovative, as it uses predictive climate models to identify the likelihood of the NTG's exposure to the severe weather events expected in the coming decades;
- uses engineering to assess the behaviour of electricity assets subject to severe weather events, by means of vulnerability curves;
- assesses the likelihood of occurrence and extent of disruption, in terms of power outage, taking into account the possible ripple effect on the section of the electricity system involved.

The methodology enabled definition of Terna's Resilience Plan, including identification of precise preventive measures to increase the robustness of the NTG and the resilience of the area exposed to such events, in order to mitigate the effects of severe weather events, as well as interventions to monitor and restore grid operation if disruptions caused by such weather events occur.

With Resolution 9/2022/R/eel, ARERA confirmed the new methodology for measuring the increased resilience of the NTG, as set out in Annex A.76 of the Grid Code.

NFS

Infrastructure maintenance

Maintenance of electricity grid infrastructure is essential in order to guarantee quality of service, as well as the security of the assets managed (power lines and substations) and their performance. These operations are carried out on the basis of a conditional approach. **The tools used to support maintenance activities are subject to continuous innovation**, and primarily include: the **MBI (Monitoring and Business Intelligence)** decision-support system, which suggests maintenance activities to be carried out and indicates whether or not they can be postponed, and **WFM (Work Force Management) software**, which manages the workforce by planning and scheduling MBI maintenance activities.

In addition, Terna has participated for many years in international benchmarking activities aimed at sharing O&M and renewal best practices, consistently ranking among the best TSOs in terms of asset management process efficiency and optimal service provision quality.

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.

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 three types of benefit:

- **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.

In the new Industrial Plan, Terna confirms our commitment to increasing service quality through renewal of power line and substation components, environmental quality through environmentally friendly measures (e.g. replacement fluid-oil cables, installation of green equipment insulated with vegetable esters) ,and process quality through implementation of digitisation projects for electricity assets (e.g. overhead lines, cables, substations).

Maintenance operations

INFRASTRUCTURE MONITORING AND CONTROL

~39,800
substation checks for various voltage levels

~2.7
average number of inspections per year per overhead line

~190,800 km
ground and helicopter inspections of overhead lines

~63,400 km
inspections of underground cable lines

~145,600 km
helicopter inspections of overhead lines

~28
average number of inspections per year per underground cable

ROUTINE MAINTENANCE

~20,100 km
of power lines on which vegetation was cut back to ensure their correct and safe operation

~1,700
monitoring checks and maintenance work carried out using live-line working

EXTRAORDINARY MAINTENANCE

LINES

~3,000 km
of conductors replaced

~3,700 km
of ground wires replaced

~190
pylons replaced

SUBSTATIONS

30
static machines replaced

220
circuit breakers replaced

205
disconnectors replaced

550
current transformers replaced

640
voltage transformers replaced

ST1 203-1 >

NFS SASB

The Group's capital expenditure

The Terna Group's **total capital expenditure** in 2021 amounts to **€1,520.7 million**, a significant increase compared with €1,351.1 million in the previous year **(up 12.6%)**, and compared to €1,264.1 million in 2019, thus confirming Terna's great capacity to pursue its objectives despite the critical situation arising from the Covid-19 pandemic.

(€m)

	2021[1]	2020	CHANGE	% CHANGE
Development Plan[2]	574.0	482.9	91.1	18.9%
Security Plan[2]	274.9	228.7	46.2	20.2%
Projects to renew electricity assets[2]	484.7	411.7	73.0	17.7%
Other capital expenditure[2]	127.3	110.1	17.2	15.6%
Total regulated assets	**1,460.9**	**1,233.4**	**227.5**	**18.4%**
Non-regulated assets	**49.0** [3]	**107.6** [4]	**(58.6)**	**(54.5%)**
Capitalised financial expenses	**10.8**	**10.1**	**0.7**	**6.9%**
Total capital expenditure	**1,520.7**	**1,351.1**	**169.6**	**12.6%**

(1) *The figures for non-regulated assets do not include assets held for sale reclassified in accordance with IFRS 5.*
(2) *The figures for 2020 have been restated following changes to the purposes of investments, without modifying the overall value of investment in regulated assets.*
(3) *Non-regulated assets primarily regard the private Italy-France and Italy-Austria interconnectors and the re-routing of power lines for third parties.*
(4) *Non-regulated assets in 2020, which include the amount reclassified in 2021 to assets held for sale, primarily relate to private interconnections, the Brugg Group (mainly regarding contracts within the scope of IFRS 16), the re-routing of power lines for third parties and assets in Peru.*

MAIN REGULATED WORKS CARRIED OUT DURING THE YEAR

> DEVELOPMENT PLAN – €574.0 million

Tyrrhenian Link (€70.4 million)

Consents: the consents process for the Campania-Sicily section (East Link) of the connection has begun, and the public consultation for the Sicily-Sardinia section (West Link) is in progress.

Cable connection: the framework contracts regarding the executive design, and the supply and laying of marine and terrestrial cables have been formalised. The preliminary marine survey for the East Link has been completed.

Converter stations: procurement for both sections of the connection is in progress.

Paternò-Pantano-Priolo (€34.3 million)

380kV Paternò-Pantano power line: work is nearing completion on construction of the foundations and assembly of the pylons (44 out of a total of 50).

380kV Paternò-Priolo power line: work is continuing on construction of the foundations (23 out of a total of 115) and assembly of the first pylons (7 out of a total of 115).

380/220/150kV Pantano substation: consents have been obtained for the local re-routing, and work has restarted on the site with completion of the excavations for the site layout.

Vizzini substation (€17.2 million)

Vizzini substation: construction of the foundations and buildings has been completed, and electromechanical assembly on the 380kV section has begun.

Vizzini substation connections: work has begun on the 380kV connections.

Auronzo substation: the civil works regarding the perimeter and retaining walls and the foundations for the machinery are nearing completion, and the tender for construction of the building that will house the GIS (gas insulated substation) has been launched; production of the equipment is in progress.

Auronzo substation connections: construction work has begun.

Reorganisation in the Upper Bellunese area (€16.3 million)

Commissioning trials for the connection are in progress, with entry into service scheduled in 2022.

Italy-France interconnector (€13.4 million)

Pianezza connections - phase 2: demolition of the section of the line not in service (2.3 km) has been completed. 13 foundations for pylons on the overhead section have been completed, and regarding the cable section 5.6 km has been excavated and 4.3 km of cable out of a total of 6.3 km has been laid.

132kV Rivoli-Paracca and Paracca-Collegno cables: work has been completed and the Rivoli-Paracca (4.4 km) and Paracca-Collegno (2.7 km) connections have both entered service.

Pianezza substation - installation of 220kV reactor: work has been completed and the reactor entered service in December 2021.

Reorganisation in Turin (€12.9 million)

Scafati substation and related connections: the connection has been completed and energised and entered service in October 2021.

150kV Sorrento – Vico – Agerola – Lettere power line: the executive design has been completed, and execution of the checks required before work can start are awaited.

Sorrento Peninsula interconnector (€11.2 million)

Bisaccia-Deliceto power line: 95% of the foundations and assembly of the pylons (75 out of a total of 78) have been completed, and 90% of the conductors (32.3 km out of a total of 35.8 km) have been installed. Planning permission is awaited for three pylons, which will complete the infrastructure.

Enlargement of the Bisaccia electricity substation and the installation of PSTs: following the entry into service of the substation's enlargement (in December 2020), permission has been received from the relevant authorities for transportation of the PSTs and the transformer to the site.

Grid upgrades in the Foggia-Benevento area (€11.1 million)

220kV Castelluccia-Naples cable: the connection has been completed and energised and entered service at the end of December 2021.

220kV Astroni-Naples Centre cable: the connection has been completed and energised and entered service at the end of November 2021.

Reorganisation in Naples (€9.6 million)

> SECURITY PLAN – €274.9 million

Synchronous compensators (€119.0 million)

Garigliano, Foggia, Fano, Candia and Brindisi compensators: the equipment has been completed and energised and has entered service.

Maida compensator: civil works are nearing completion, and permission has been granted by the relevant authorities for transportation of machinery to the site.

Villanova and Rosara compensators: civil works on the site layout have begun; production of the related supplies is in progress.

Codrongianos and Suvereto compensators: the contracts have been awarded, design is in progress and production of the related supplies has begun.

Fiber for the Grid (€24.0 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 optic network.

At the end of 2021, the target of 34 substations connected via proprietary fibre was reached, adding to a total of 510 substations covered.

> PROJECTS TO RENEW ELECTRICITY ASSETS – €484.7 million

Renewal of electricity assets

The delivery of the commitment to carry out works to renew electricity assets to improve the reliability and resilience of the NTG has continued.

The renewal of overhead lines and substation equipment continued during 2021: approximately 3,000 km of conductors and 22 items of equipment were replaced, 4 with "green" equipment, insulated using vegetable esters.

RESEARCH AND DEVELOPMENT

In 2021, the Terna Group invested approximately €9 million in research and development and incurred costs of approximately €6 million.

CONSENT PROCESSES

Completed processes

During 2021, the Ministry of Ecological Transition and regional authorities **authorised** a total of **37 new Terna projects relating to the development of the electricity grid**.

This marks an unprecedented achievement in Terna's history, confirming our key role as driver and enabler of the energy transition aimed at reaching national and European climate targets. 2021 saw a sharp uptick compared with 2020, when 23 projects with a total value of €266 million were authorised.

Eight of the authorisation decrees issued regard Sicily and account for almost half of the total value of the investments, including the most economically significant project relating to the construction of the 172-km long "Chiaramonte Gulfi-Ciminna" power line. In terms of investment value, this project is followed by the reorganisation of the electricity grid between Malcontenta and Fusina in the province of Venice, the new submarine link that will connect the island of Elba to the municipality of Piombino in the province of Livorno, and the reorganisation of the electricity grid in Bologna.

Other consent processes were completed in early 2022, including reorganisation of the grid in the Teramo and Pescara area; the new electricity connection between the Adria South substation in Veneto and the Ariano primary substation in Emilia-Romagna; the new 150kV power line which runs almost entirely underground that connects the "Sant'Angelo - Cocullo Brulli" power line and the Roccaraso primary substation; and construction of two new 132kV cable power lines in the municipality of Caselle Torinese, in the metropolitan area of Turin.

The completion of consents processes enabled work to begin on various projects during the year, including the following: i) modernisation of the 132kV power line between San Giuseppe and Portoferraio on the island of Elba and the 220kV underground line between Naples Centre and Astroni; ii) demolition of the Lizzana-Pista, Dolo-Camin, Figline-Pirelli, Castelluccia-San Sebastiano, Schio-Arserio and Albarola di Lodi district power lines; iii) reorganisation of the metropolitan areas of Milan, Turin and Rome; iv) restructuring of the HV grids serving Florence and Catania metropolitan area; v) increases to the capacity of the Tyrrhenian-Adriatic backbone; and vi) construction of the 380/150kV Vizzini substation, of the armoured substation for Foiano, the 150kV Foiano-Ginestra-Ariano power line and of the cable linking Augusta and Filonero.

In early 2022, work also began on the new "Colunga-Calenzano" power line between Emilia-Romagna and Tuscany, the construction of the 150kV Pettino - Torrione (AQ) underground cable line, the first steps in the plan to reorganise and modernise the electricity grid in the metropolitan area of Catania, replacement of the underground cable linking the "Naples Centre" primary substation with the "Doganella" primary substation and work on the installation of the synchronous compensator for the Suvereto substation.

Processes initiated

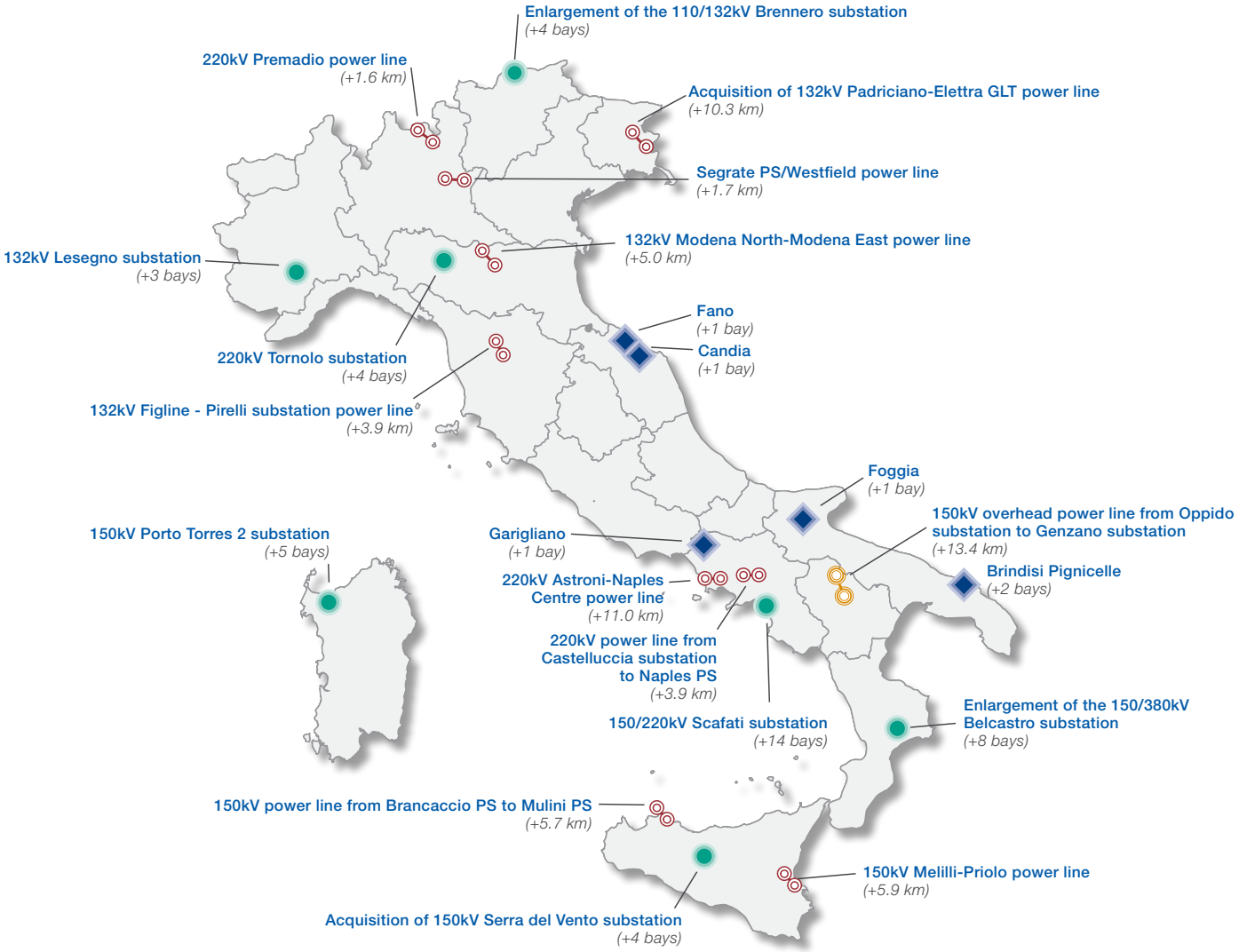
In addition, **a number of consent processes** were initiated during 2021, including:

- "Tyrrhenian Link - East Link", the section of Terna's undersea power line that will connect Campania and Sicily;
- the 150kV underground power line that will connect the Rome South substation and the Ciampino primary substation;
- reorganisation of the Val Formazza electricity grid, which will affect the municipalities of Formazza, Premia, Crodo, Montecrestese, Crevoladossola, Masera and Baceno in the province of Verbano-Cusio-Ossola;
- the Santa Teresa-Tempio-Buddusò power line, new infrastructure serving northern Sardinia;
- reorganisation of the grid in the province of Sondrio, including the construction of new 380kV substations; 13.5 km of new 380kV cable lines; 2.8 km of new 220, 150 and 132kV cable connections and 4.2 km of overhead connections to the new electricity substations;
- reorganisation of power lines in the Cepagatti area in the province of Pescara;
- construction of a substation and two 150kV power lines in the provinces of Enna and Catania.

Consultations

Projects in the **consultation** phase include the Adriatic Link, the new submarine power line which, at a cost of €1 billion, will link the Abruzzo and Marche regions. Following a participatory design stage, Terna is about to conclude the public consultation for this project, carried out in compliance with Law Decree 76/2020 and to which the procedures provided for in Regulation (EU) 347/2013 will be applied. At the same as submitting an application for consent, Terna will also provide the Ministry for the Ecological Transition with details of the outcome of the consultation for its approval.

MAIN PROJECTS CARRIED OUT IN 2021



FOCUS

Special projects

1

Interconnector

Italy-France

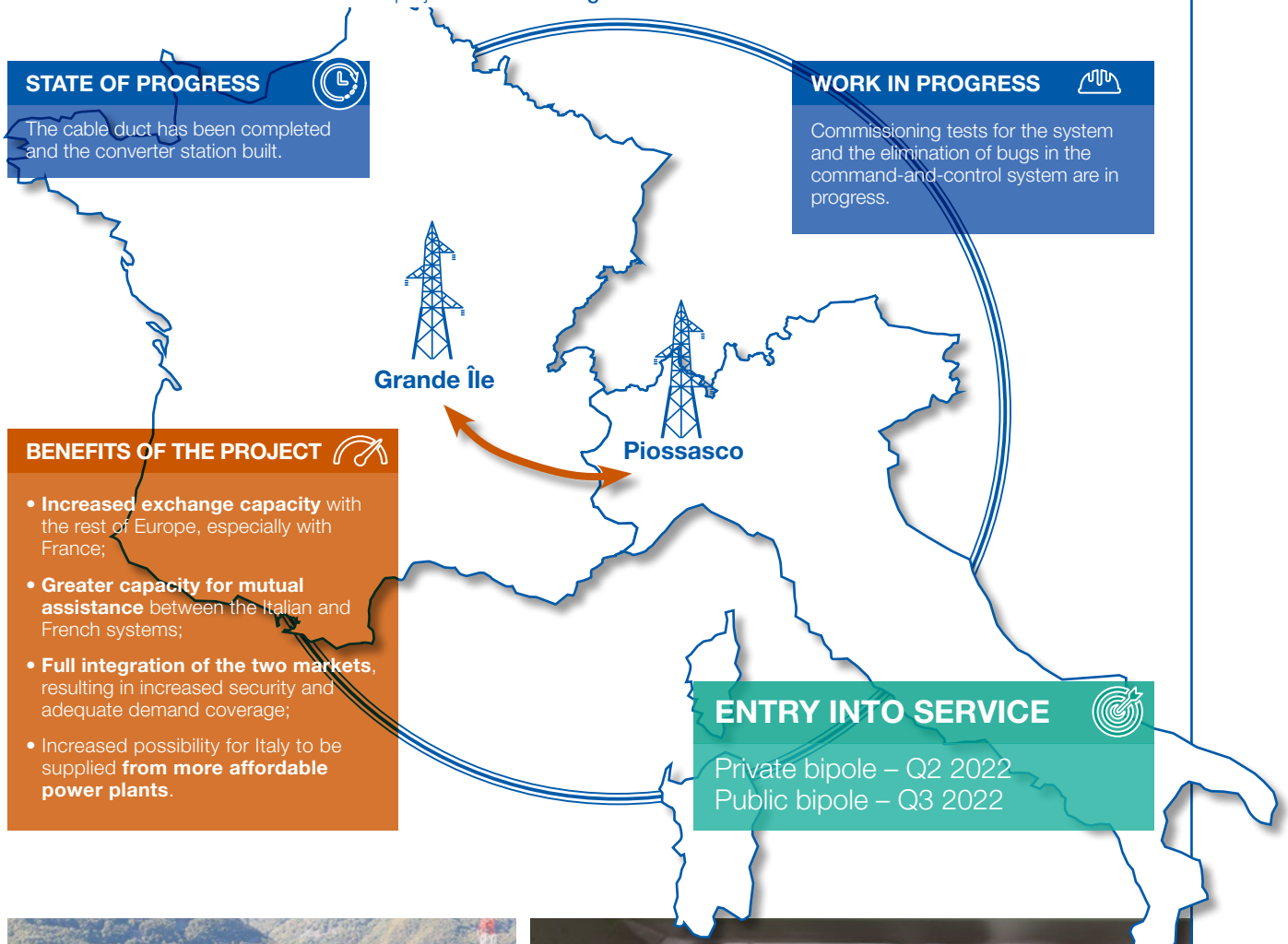
The new direct current interconnection between Piossasco (IT) and Grande Ile (FR) will increase interconnection capacity between Italy and France by **1,200 MW**, raising it from approximately the existing **3 GW** to over **4 GW**. The "Grande'Ile - Piossasco" project is **190 km long**.

STATE OF PROGRESS

The cable duct has been completed and the converter station built.

WORK IN PROGRESS

Commissioning tests for the system and the elimination of bugs in the command-and-control system are in progress.



BENEFITS OF THE PROJECT

- **Increased exchange capacity** with the rest of Europe, especially with France;
- **Greater capacity for mutual assistance** between the Italian and French systems;
- **Full integration of the two markets**, resulting in increased security and adequate demand coverage;
- Increased possibility for Italy to be supplied **from more affordable power plants**.

ENTRY INTO SERVICE

Private bipole – Q2 2022
Public bipole – Q3 2022

San Valeriano viaduct

Laying cables inside a viaduct

>>

>> continued **SPECIAL PROJECTS FOCUS**

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 connection between Tuscany, Corsica and Sardinia will have a length of approximately 388 km per pole (including approximately 140 km of marine and terrestrial cables and approximately 248 km of overhead lines).

STATE OF PROGRESS

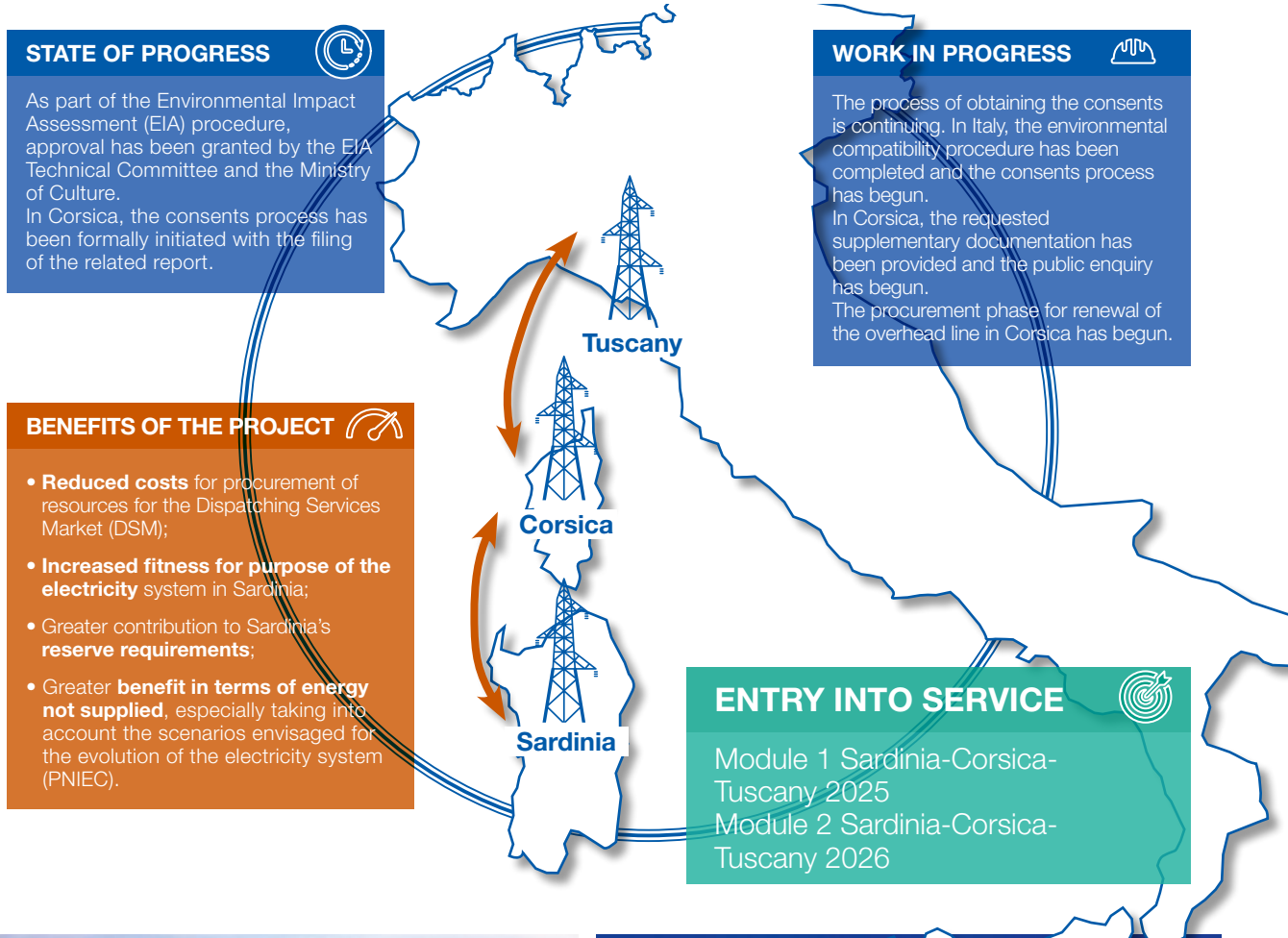
As part of the Environmental Impact Assessment (EIA) procedure, approval has been granted by the EIA Technical Committee and the Ministry of Culture.
In Corsica, the consents process has been formally initiated with the filing of the related report.

WORK IN PROGRESS

The process of obtaining the consents is continuing. In Italy, the environmental compatibility procedure has been completed and the consents process has begun.
In Corsica, the requested supplementary documentation has been provided and the public enquiry has begun.
The procurement phase for renewal of the overhead line in Corsica has begun.

BENEFITS OF THE PROJECT

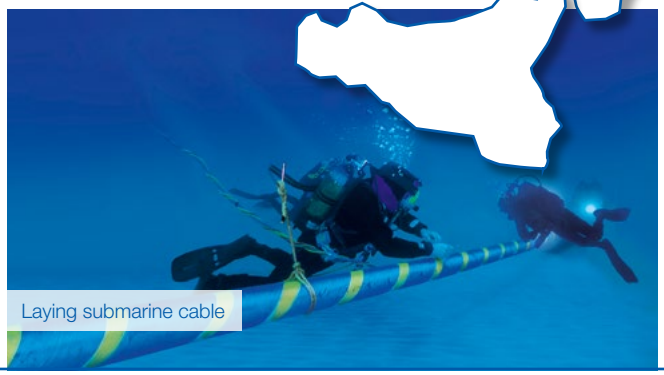
- **Reduced costs** for procurement of resources for the Dispatching Services Market (DSM);
- **Increased fitness for purpose of the electricity** system in Sardinia;
- Greater contribution to Sardinia's **reserve requirements**;
- Greater **benefit in terms of energy not supplied**, especially taking into account the scenarios envisaged for the evolution of the electricity system (PNIEC).



ENTRY INTO SERVICE

Module 1 Sardinia-Corsica-Tuscany 2025
Module 2 Sardinia-Corsica-Tuscany 2026

SA.CO.I.3 - Suvereto Converter Station (Beauty Contest)



Laying submarine cable

>>

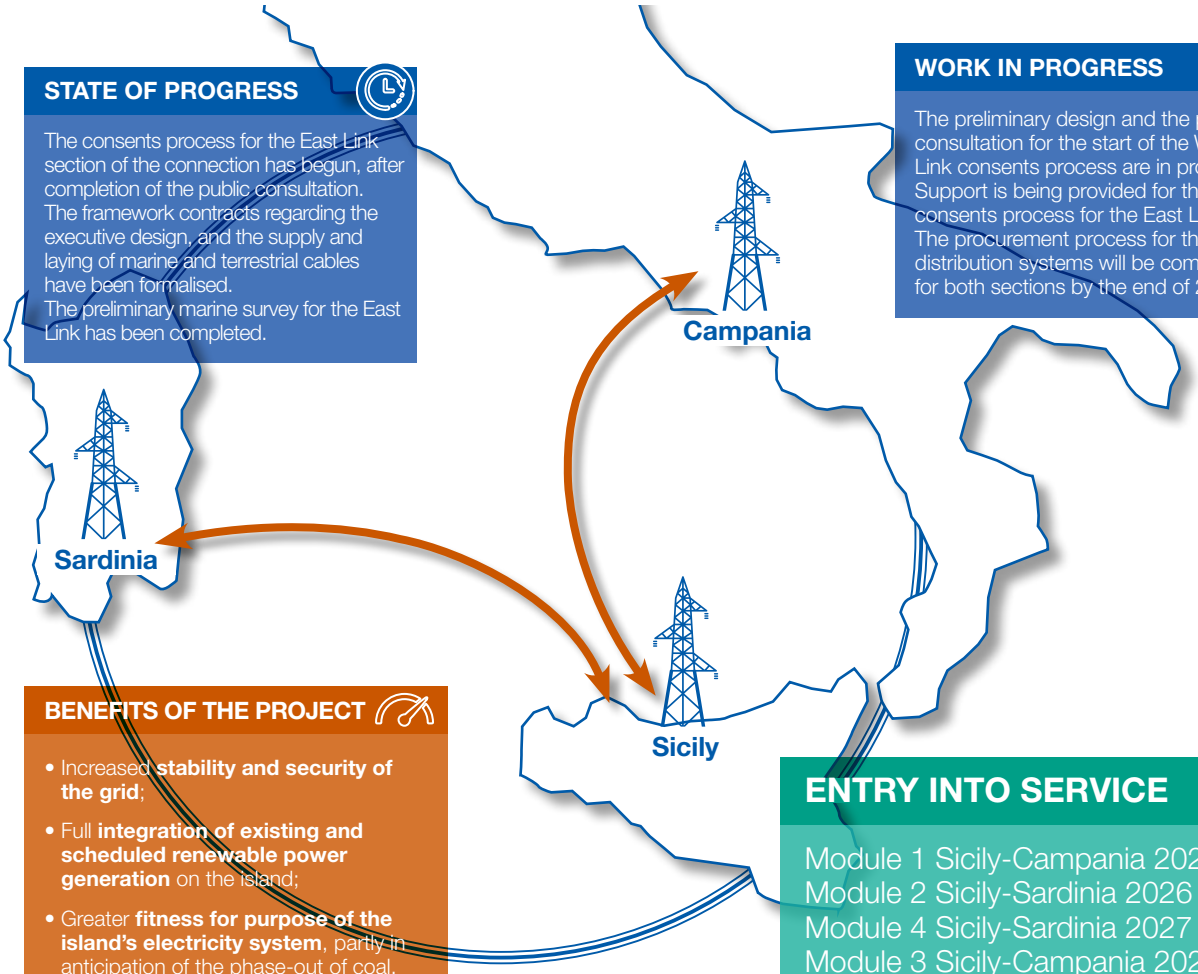
>> continued **SPECIAL PROJECTS FOCUS**

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 has been subdivided into an East Link (Campania – Sicily) and a West Link (Sicily– Sardinia). The connection has a submarine section that is approximately **1,000 km long**, including in very deep waters, which means it is one of the new global benchmarks for this type of highly complex infrastructure.



STATE OF PROGRESS

The consents process for the East Link section of the connection has begun, after completion of the public consultation.
The framework contracts regarding the executive design, and the supply and laying of marine and terrestrial cables have been formalised.
The preliminary marine survey for the East Link has been completed.

WORK IN PROGRESS

The preliminary design and the public consultation for the start of the West Link consents process are in progress.
Support is being provided for the consents process for the East Link.
The procurement process for the closed distribution systems will be completed for both sections by the end of 2022.

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 4 Sicily-Sardinia 2027
Module 3 Sicily-Campania 2028

Terna Incontra Suvereto

Continuity and quality of service

< EU28 | < EU29 | ST2

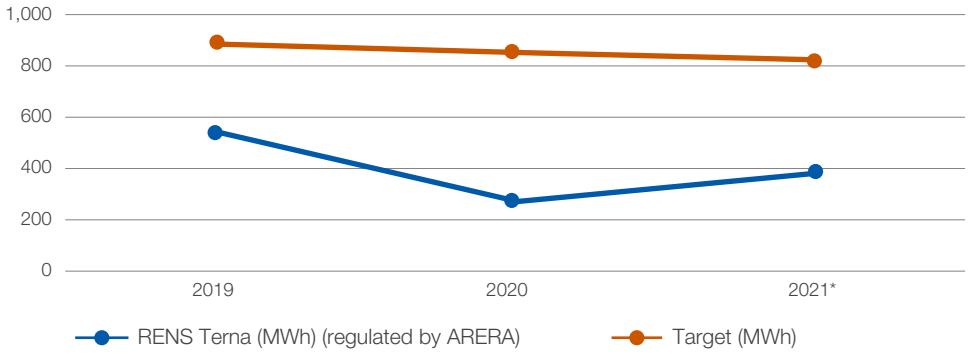
NFS

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 three years, a period in which there have been no significant changes, testifying to the high quality of service achieved.

NTG RENS INDICATOR[27]



** Provisional data.*

The **"NTG RENS"** indicator for the period from January to December 2021, based on preliminary data, amounts to approximately 380 MWh (compared with an annual target of approximately 820 MWh set by ARERA).

As regards the **ASA** indicator, availability was 99,99991% (provisional figure) in 2021, compared with 99,99986% 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.

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.*

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..*

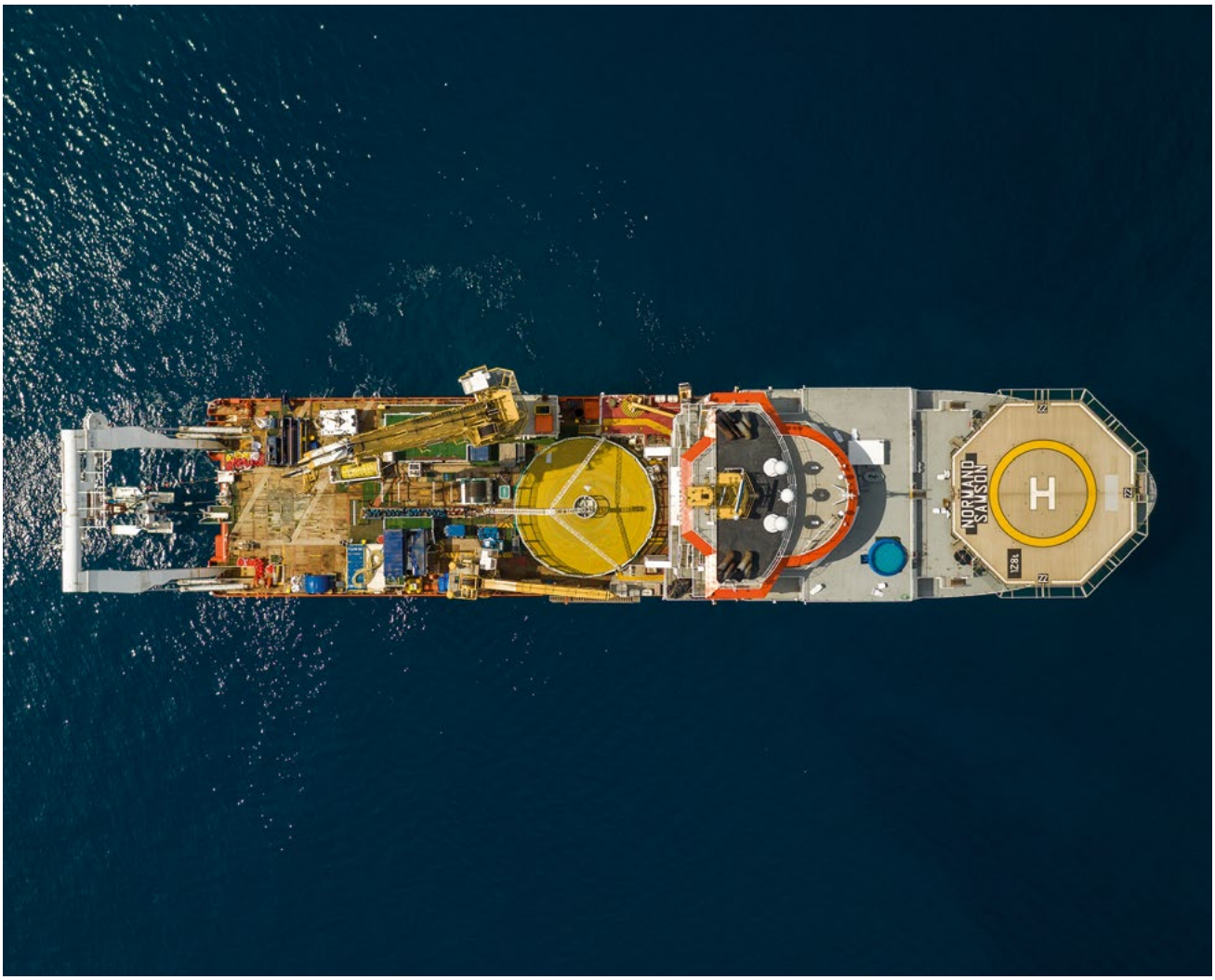
[27] The targets for 2016–2023 have been set as an average of the 2012–2015 RENS indicator, referred to in ARERA Resolution 567/19/R/eel, with a 3.5% improvement in performance required for each year compared with the previous one. Since 2016, Terna's bonus/penalty mechanism also includes the performance 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 €5.9 million in 2021, compared to €8.3 million in 2020. The overall economic effects of the bonus/penalty mechanisms related to quality of service for 2021, compared with 2020, are shown below.

(€m)

QUALITY OF SERVICE	2021	2020	CHANGE
RENS bonuses/(penalties)	11.6	29.4	(17.8)
Revenue	**11.6**	**29.4**	**(17.8)**
Mitigation and sharing mechanisms	5.2	10.4	(5.2)
Contributions to the Fund for Exceptional Events	0.6	0.8	(0.2)
Compensation mechanisms for HV users	0.3	0.3	-
Contingent assets	(0.2)	(3.2)	3.0
Costs	**5.9**	**8.3**	**(2.4)**
TOTAL	**5.7**	**21.1**	**(15.4)**



DISPATCHING OF ELECTRICITY

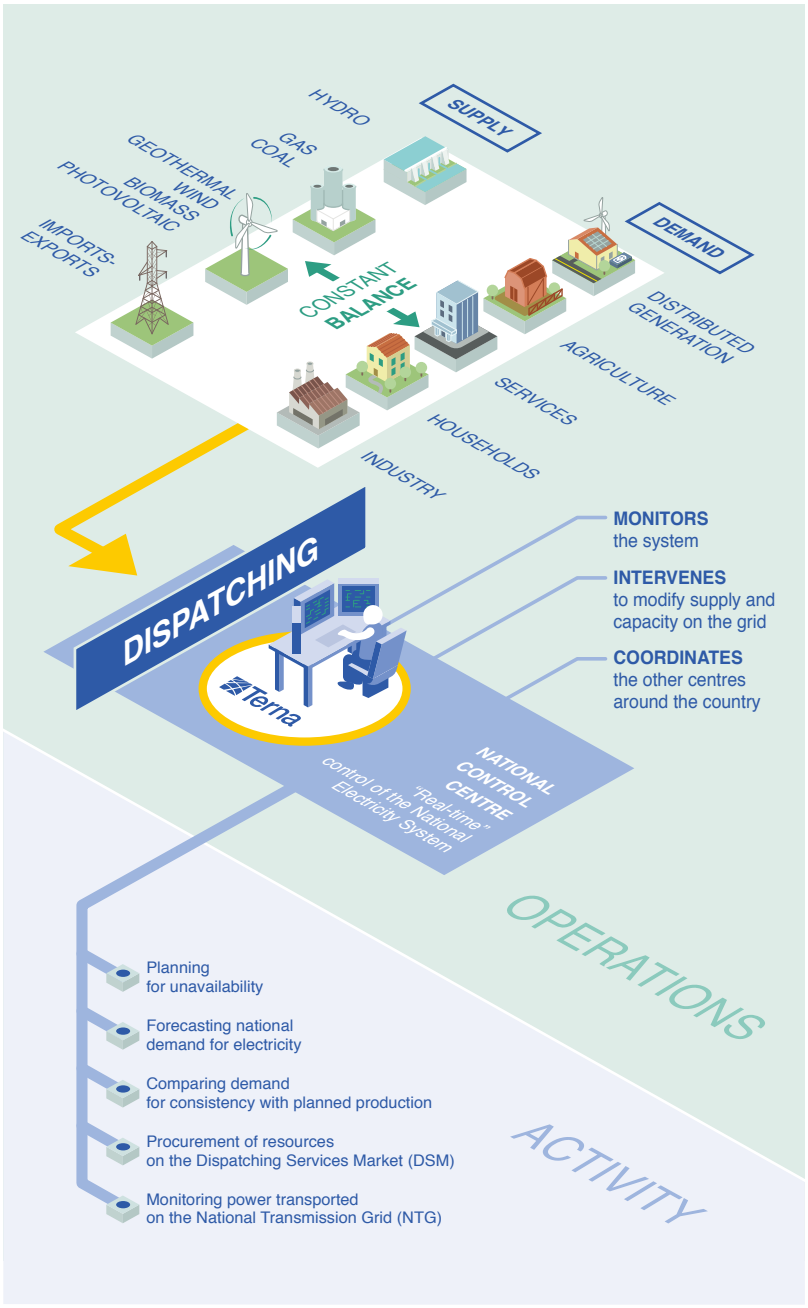
NFS

Except in specific and limited circumstances, electricity cannot be stored. Therefore, it is necessary to produce - moment by moment - the amount of energy required by all consumers (households and companies) and to manage its transmission so that supply and demand are always balanced, thus guaranteeing the continuity and security of the electricity supply. Terna manages these energy flows through the grid via dispatching activities.

Dispatching includes planning for the unavailability of the grid and of production plants over different timescales, 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.

"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.



KEY DISPATCHING EVENTS IN 2021

Once again in 2021, management of the system during lockdown periods was particularly tricky. Indeed, situations characterised by a low load and high renewable production sometimes occurred, resulting in difficulties in regulating voltage, which was partly due to the smaller number of available thermoelectric plants. Despite this, Terna's Dispatching unit managed the system **to ensure the continuity and security of the country's 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 2021, three **live tests were successfully conducted**, followed by the related black starts. In July, a test was carried out involving the black start team in the metropolitan area of Rome. In October, a test was carried out in Lombardy, especially the Val Brembana area (BG).

In November, a repowering test was carried out involving power supplied from Italy to overseas. This is the **first such test** since the creation of the European interconnection system, involving the repowering of supply from Italy to a portion of the overseas network. All the previous tests had involved power supplies originating in France, Switzerland and Slovenia for the Italian grid. The test was carried out by transmitting power from our Venaus substation to Villarodin (RTE), and then continuing with stepped repowering of the French 400kV line called the "Lyon Backbone" between the Villarodin - Praz - Coche - Albertville – Grand Ile - Chaffard substations, and installation of two autotransformers at the Albertville and Chaffard substations.

New transmission limits

There are a number of "bottlenecks" on Italy's 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.

In 2021 - through a cross-cutting working group involving more than 200 experts in dispatching, systems engineering, technology, maintenance, operations and territory, planning and regulation - Terna implemented a high-tech project which, via low-capital-intensive measures, enabled transfer of significant benefits to the electricity system by pursuing "rapid" and efficient investment solutions that have less impact on consumers.

The synergy between this type of measure (which does not require authorisation) and the works envisaged in the Development Plan to increase transmission capacity will help to accelerate the achievement of decarbonisation targets thanks to greater integration of renewable sources.

Since January 2021, implementation of these measures has enabled an increase in transport capacity, allowing more power to be transmitted from areas with high renewable production to areas where energy consumption is high.

Esperia

On 10 September, the Southeast Electricity Network Coordination Centre (SEleNe CC) was inaugurated in Thessaloniki. In addition to Terna, its shareholders include the TSOs of southeast Europe: Greece (IPTO), Bulgaria (ESO) and Romania (Transelectrica).

For the four TSOs, the Company takes on the role of Regional Security Coordinator, which will soon evolve into a Regional Coordination Centre, in the context of the European Union's Clean Energy Package (CEP). The aim is to step up cooperation between the various TSOs through coordinated management of a series of activities, such as measurement of transmission capacity, coordinated security analyses, and supranational fit-for-purpose assessments.

The Italian subsidiary, Esperia - which is part of the Terna Group and is based in Rome - serves as the regional sub-desk of the holding company. Esperia will be responsible for the new process of measuring the energy exchange capacity between the various market zones in the Energy Markets (MGP and some MI sessions) for the entire Italy-Greece region, namely for all the interconnectors between internal Italian zones and for the interconnector with the Peloponnese peninsula. This activity is carried out daily in shifts, using forecast scenarios updated and processed by our Company and the Greek TSO ADMIE on the basis of forecasts made two days before the actual day of flow (D-2). Esperia will face the challenge of expanding its activities to include coordinated assessments of grid operational security, coordination of planned outages, short- and very short-term adequacy forecasts, the modelling of individual and common networks, and the compilation of data sets.

TERRE project

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.

XBID European platform

On 21 September, Single Intraday Coupling (SIDC) went live on Italy's borders, thereby connecting Terna to the XBID European platform, in which European market and grid operators participate, thus creating a single EU wholesale intraday electricity market. Via this platform, energy buyers and sellers can submit bids to exchange electricity between all interconnected European systems, on a continuous basis, when the energy is needed, up to one hour before delivery.

The pooling all available resources promotes competition, increases liquidity and facilitates the sharing of power generation sources, thus making it easier for operators to manage any unforeseen changes in renewable generation, load, or as a result of any accidents.

The change in the organisation of the Italian intraday market, which until now has been based exclusively on auctions, has required a radical change in the Dispatching Services Market (MSD), which will no longer operate exclusively to correct energy market outcomes, but rather run in parallel with them. This will be achieved through the partial correction of trades that have already taken place, and partly by imposing preliminary constraints on subsequent trades (only for production units qualified for the MSD) in the form of so-called "feasibility intervals".

Single Intraday Coupling implements European legislation on electricity markets, which provides for the trading of energy on a continuous basis and the simultaneous allocation of available inter-zonal capacity, interspersed with three implicit auctions aimed, among other things, at enhancing residual inter-zonal capacity. Implementation of implicit auctions at European level is scheduled in 2023, but on the Italy-Slovenia, Italy-Greece borders and between Italy's internal market areas it has been decided to activate them in parallel with SIDC[28].

[28] SIDC is a project that includes 25 countries and 45 counterparties among European TSOs and NEMOs, which entails the active and coordinated involvement of more than 40 people from Terna's Dispatching and Operations, Regulatory Affairs and Process Technologies and Systems departments.

Electricity market trends

ELECTRICITY COST TRENDS

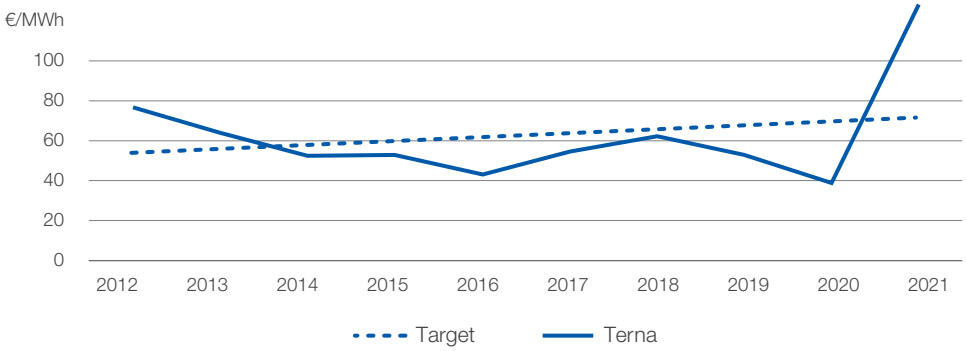
Electricity prices

The average hourly price on the Italian Power Exchange (IPEX /SNP[29] – Single National Price) for 2021 is €125 per MWh, up sharply (222%) compared with 2020. This increase primarily reflects the surge in commodity prices, especially gas prices in the second half of the year.

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.

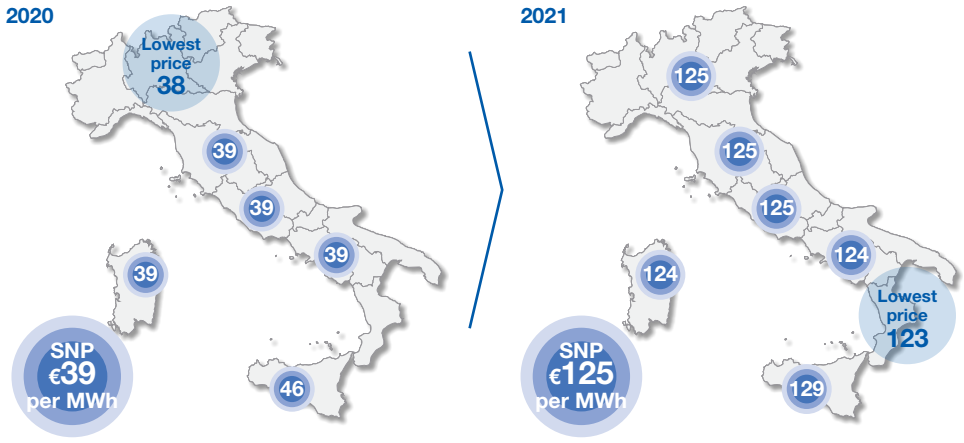
The following chart shows the performance of the SNP from 2012 to 2021, **highlighting a declining trend until 2020. This trend has radically reversed due to sharp increases in 2021**, driven by soaring commodity prices, especially the price of gas.

PERFORMANCE OF THE SINGLE NATIONAL PRICE (SNP) FROM 2012



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



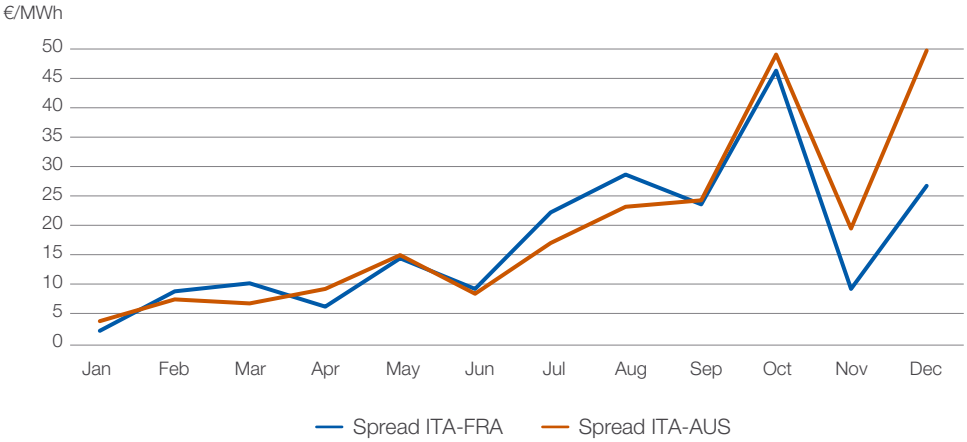
Trade with other countries

Trade with other countries across the northern border in 2021 resulted in an increase in net imports, which are up approximately 3 TWh (8%) compared with the previous year. This change reflects the increase in energy demand in 2021 compared to 2020, when demand fell sharply due to the stoppage of production caused by the Covid-19 health emergency.

[29] IPEX: Italian Power Exchange; SNP: Single National Price.

Prices on the French (PNX) and Austrian (EEX) exchanges rose year on year in line with the increase in commodity prices (especially the price of gas).

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



Prices in France and Austria also increased substantially in 2021. In particular:

- The French Powernext average annual price was €100 per MWh (up €68 per MWh or 215% compared with the previous year);
- The Austrian price (EEX) registered the same trend as the French price. The average annual price was €199 per MWh (up €66 per MWh or 200% compared with the previous year).

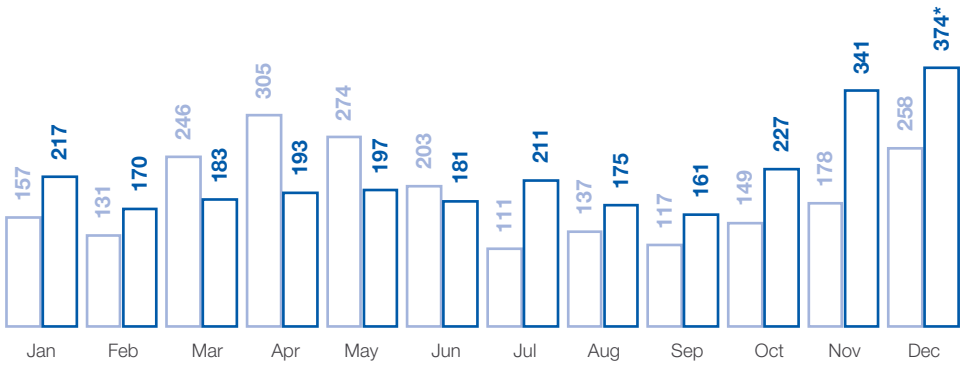
Dispatching Services Market (DSM)

The net charge for using the DSM was €2,630 million in 2021 (provisional data), up on the same period of the previous year (€2,266 million).

This cost increase affected all months of the year, with a higher concentration in the later months due to the rise in commodity prices. In 2020, the sharp rise in costs was concentrated in the months affected by the Covid-19 health emergency.

Terna procures dispatching resources on the Dispatching Service Market (DSM) to manage and control the system (freeing up intra-zonal congestion, creation of power reserves, real-time balancing) in order to ensure the security and adequacy of the electricity system.

MONTHLY DSM COSTS (€m)



** Provisional data.*

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

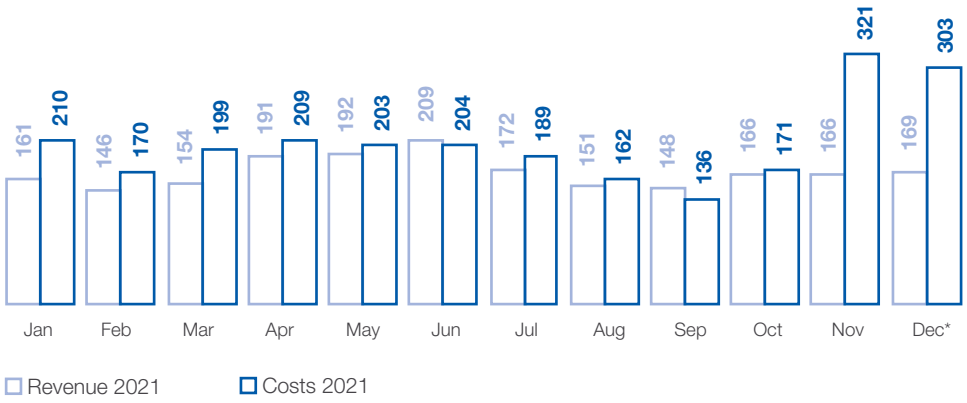
Uplift payments are the tool used by the system to recover the net costs deriving from energy-related items from the end user, including the supply of services and energy to cover system imbalances in the DSM, imbalance costs, congestion revenue and the related coverage (CCT, CCC, CCP and DCT[30]) and 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.

In 2021, the total Uplift was €2,477[31] million, up 6% on the previous year. The rise was primarily due to the increased cost of procuring services on the DSM, partly offset by increases in congestion revenue and imbalance revenue.

PERFORMANCE OF REVENUE AND UPLIFT COSTS IN 2021 (€m)



** Provisional data.*

[30] 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.

[31] The Uplift includes the virtual interconnection, amounting to approximately €130 million in 2021 (compared with approximately €149 million in 2020).

Business relations with electricity service operators

In providing the public electricity transmission and dispatching services operated by the Company under concession, Terna maintains business relations with various categories of operator, including:

- dispatching users (producers, wholesalers or end customers) with regard to the provision of dispatching services;
- distribution companies and other private grid operators in relation to transmission and aggregate metering, required with regard to regulate the dispatching service.

As part of dispatching activities, as the sole counterparty, Terna procures the resources needed to meet requirements and to guarantee a reserve margin on the DSM. In 2021, transactions in the DSM amounted to approximately €2.6 billion.

Since 2017, Terna is also responsible for the settlement of amounts due to and from balancing service providers (BSPs) that provide services on the Dispatching Services Market (DSM), as part of pilot projects launched by Terna in accordance with ARERA resolution 300/2017, including the Mixed Enabled Virtual Units (UVAM) project. In particular, as part of the latter project, Terna procured forward balancing resources totalling 1,000 MW from 31 BSPs.

In addition, for dispatching services purposes, Terna checks the consistency between the final programmes of operators (producers and consumers) with the amounts that have actually been withdrawn from/input into the grid. Any deviations represent so-called "imbalances", the value of which entails invoicing the related energy imbalance prices to the individual parties responsible for the imbalance costs. This is done in order to cover the costs generated for the system as a result of their conduct.

Further categories of operator with whom Terna trades include applicants who have requested connection of their plants to the NTG (producers and consumers) and interruptible users, namely customers who are willing to have their electricity supply suspended. Terna signs contracts with these operators regarding the interruptibility service, which is required for the secure operation of the electricity system, and especially with the aim of mitigating the risk of widespread power outages.

Participants in the interruptibility service numbered 175 in 2021, accounting for 4,573 MW of power. The related annual cost amounts to approximately €0.29 billion.

EU3 >

ELECTRICITY SECTOR OPERATORS IN RELATIONS WITH TERNA - NUMBER OF CUSTOMERS

CUSTOMERS	2021	2020	2019
Interruptible users	175	212	221
Distributors directly connected with the NTG*	55	54	54
Supply-side dispatching service users (producers and traders)	135	136	130
Demand-side dispatching service users (traders and end users, including the Single Buyer)	188	193	187

** In addition to licensed distribution companies, the figure includes operators of closed distribution systems for internal user networks directly connected to the NTG and, from 2019, the Autonomous State Corporation for Public Utilities in the Republic of San Marino.*

Operating results of Regulated Activities

BM2

The following table shows a breakdown of the results from the Terna Group's Regulated Activities in 2021 and 2020[32].

(€m)

	2021	2020	CHANGE
Total regulated revenue	**2,253.5**	**2,148.9**	**104.6**
Tariff revenue	2,154.8	2,047.8	107.0
- Transmission revenue	*2,041.0*	*1,938.5*	*102.5*
- Dispatching, metering and other revenue	*113.8*	*109.3*	*4.5*
Other regulated revenue	51.8	72.6	(20.8)
Revenue from construction services performed under concession in Italy	46.9	28.5	18.4
Total cost of Regulated Activities	**453.0**	**428.2**	**24.8**
Personnel expenses	226.9	221.3	5.6
External resources	157.1	149.2	7.9
Other	22.1	29.2	(7.1)
Cost of construction services performed under concession in Italy	46.9	28.5	18.4
EBITDA from Regulated Activities	**1,800.5**	**1,720.7**	**79.8**

EBITDA from Regulated Activities amounts to €1,800.5 million, an increase of €79.8 million compared with 2020. This primarily reflects the tariff adjustment provided for in ARERA Resolution 565/20 and recognition of the efficiency bonus linked to the cost of investment in boosting transmission capacity in 2020 (under Resolution 23/2022), partly offset by the one-off effect of recognition in the Regulated Activities segment in 2020 of the revenue relating to the acquisition of Brugg Cables.

After excluding revenue from construction services performed under concession (up €18.4 million), **revenue from Regulated Activities** is up €86.2 million, primarily reflecting:

- the impact on transmission revenue (up €102.5 million) of the tariff adjustment resulting from the increase in the RAB (up €64 million), the effects of output-based incentive mechanisms[33] (up €48.1 million, under ARERA Resolutions 23/2022, 579/2017, 884/2017, 319/2021, 395/2021 and 25/2022), and the positive impact of the volume effect, offset by the impact of the release in 2020 of provisions for amounts payable to an operator (down €10.6 million) following settlement of the related risk;
- a reduction in revenue in the form of the bonus receivable under the RENS (Regulated Energy Not Supplied) incentive mechanism (down €17.8 million), broadly due to the greater amount of revenue recognised in 2020 following final assessment of the performance in 2019 (€23.4 million under ARERA Resolution 540/2020) and recognition of the pro-rata assessment of the performance in 2021 (€5.9 million, based on the estimated overall outcome for the 2021-2023 regulatory period);

[32] 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.

[33] An efficiency bonus linked to the cost of investment in boosting transmission capacity in 2020 (under Resolution 23/2022), efficiency bonuses for development works completed by 30 September 2020, rewards linked to preparations for the introduction of output-based regulation in 2018 and 2019, the reward for unification of the NTG.

- the higher amount of revenue recognised in 2020 due to recognition of the higher value of the net assets acquired following the acquisition of Brugg Cables compared with the consideration paid (proceeds from the gain resulting from a bargain purchase, totalling €22.6 million), net of revenue resulting from the outcome of the claim for a refund of stamp duty paid on the acquisition of Rete S.r.l. (up €13.4 million).

After excluding the cost of construction services performed under concession (up €18.4 million), the **cost of Regulated Activities** is up €6.4 million, primarily reflecting:

- the impact on personnel expenses (up €5.6 million) of an increase in the average workforce, partly offset by the higher amount of capitalised expenses;
- an increase in service costs (up €7.9 million), due to increased activity and new initiatives carried out by the Group;
- a decrease in the costs incurred for quality of service (down €2.4 million, primarily linked to the steps taken to mitigate the impact of events in December 2020 following heavy snowfall across northern Italy);
- the adjustment to provisions linked to amounts previously set aside in relation to Land Registry Circular 6/2012 and for litigation and disputes (down €5.3 million).

Non-regulated Activities:
Energy market solutions

Our Non-regulated Activities are designed to support the ecological transition, in keeping with our core business. We use Terna's know-how for the design, engineering, operation and maintenance of complex solutions, including the integration of telecommunications networks and proprietary systems. Our aim is to serve commercial and industrial customers with our expertise and experience in a wide range of solutions.

The main areas of business in this segment are:

- **INDUSTRIAL**
- **CONNECTIVITY**
- **ENERGY SOLUTIONS**
- **PRIVATE INTERCONNECTORS PURSUANT TO LAW 99/2009**

INDUSTRIAL

Via two leading companies in their fields, Terna is able to oversee expertise and supplies in two key areas for grid development:

- **Transformers – Tamini Group:** a world leader in the production of industrial transformers and in after-sales service;
- **Terrestrial cables - Brugg Group:** a centre of excellence for research, development and testing in the field of terrestrial cables, the Brugg Group is based in Switzerland and has several overseas subsidiaries.

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 convertors 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, Valdagno, 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 2021

Order book

Tamini received orders for transformers worth approximately €181.2 million in 2021, marking a sharp increase of 69% compared with the previous year.

Orders in the Power sector amounted to approximately €137 million, up 106% compared with 2020. This increase is primarily due to the awarding of major contracts in Italy and northern Europe. In addition, Tamini won an important framework contract to produce large transformers in the period 2021-23, worth approximately €60 million.

Orders in the Industrial sector amounted to approximately €44 million, up 8% compared with 2020. Orders for Services in 2021 amounted to approximately €14 million, an increase of 40% compared with 2020.

The value of factory backlogs, is significantly up compared with the end of 2020 at approximately €135 million (up 80%).

Results for 2021

Revenue rose strongly in 2021, increasing 17.9% compared with 2020. The average volume and size of the new transformers being produced and tested have also increased significantly.

The testing of ten step-up transformers of between 215 MVA and 290 MVA for synchronous compensators, one 500 MVA Power transformer, a phase-shifting transformer for utilities in northern Europe, and 13 autotransformers (12 250 MVA, and 1 600 MVA) was completed. In addition, several 400 MVA transformers are under construction for a major TSO in northern Europe.

Vegetable oil transformers

Tamini continued to be committed to the production of vegetable oil transformers for the Power sector in 2021. Two 250 MVA vegetable oil autotransformers and a 63 MVA transformer were produced and tested during the year, and a number of 250 MVA vegetable oil autotransformers are being built at the Legnano plant.

TERRESTRIAL CABLES – BRUGG GROUP

The Brugg Group operates in the terrestrial cable sector, producing low through to very high voltage products and specialising in the design, development, construction, installation and maintenance of electrical cables of all voltages and accessories for high and very high-voltage cables.

In line with the Terna Group's strategic objectives, in order to improve the Brugg Group's ability to respond to market needs, limit operational complexity and streamline operations, on 22 January 2021, the board of directors of Brugg Kabel AG launched a new operational structure. Brugg Kabel Services AG now acts as the Swiss holding company, controlling two subsidiaries, Brugg Kabel Manufacturing AG (100%-owned) and Brugg Kabel AG (90%-owned). The restructuring was implemented retroactively from 1 January 2021. Agostino Scornajenchi has been confirmed as the Group's Executive Chairman.

On 11 November 2021, Brugg Cables Italia S.r.l. (a wholly-owned subsidiary of Brugg Kabel Manufacturing AG) acquired 100% of Laser TLC S.r.l., a company specialising in the installation, maintenance and emergency assistance of high-voltage cable accessories and fibre optic telecommunications systems.

The Brugg Group in 2021

Order book

Orders acquired in 2021 amount to approximately CHF196 million. The High Voltage System segment made a major contribution (CHF136 million, of which CHF78 million is attributable to Terna). The Low Medium Voltage segment also made a significant contribution (CHF42 million), as did the High Voltage Accessories segment (CHF17 million).

Compared with 2020, production of high voltage cables is up 26%, whilst the volume of low and medium voltage cables produced is up 18%.

In the High Voltage System sector, the asset management services and EPC (engineering, procurement, construction) businesses are expanding. In the asset management segment, Brugg Cables has signed a contract for its first industrial order (a steel mill with its own power generation), while in the EPC segment the company has secured a major order from Tennet in Germany. In the Services business, Brugg Cables has acquired its first orders for the extended repair joint (a new accessory developed for emergency work on high-voltage systems), and also developed and introduced the new spare part box concept to the German and Swiss markets.

In the Low and Medium Voltage sector, two major framework contracts have been signed in Switzerland for the period 2021-2025, which will strengthen the company's presence in the medium and low voltage sector in Switzerland.

Results for 2021

Revenue rose strongly compared with 2020 (up 21%), thanks to the contributions from all lines of business. The main drivers of the performance were the increase in orders for cables for high voltage systems and growth in low and medium voltage cable output. Due to the company's excellent position in the Swiss market, this was followed by increased sales compared with the previous period.

HVA (High Voltage Accessories)

In the High Voltage Accessories segment, Brugg Cables achieved important milestones in 2021. With a view to expanding the business to the DC high-voltage sector, the first type tests (demonstration and validation of a product's compliance with required characteristics and performance) for 320kV DC voltage were carried out and passed in 2021. With particular reference to business with Terna, the new MPCC joint has been redesigned, including improved external protection, and the new, innovative gel-insulated composite dry type outdoor terminal is being tested, and has already passed the type test and the seismic test, with promising results for its upcoming production. A roadmap has also been approved to expand the offshore business, for which several orders were placed in 2021, especially for offshore wind farms.

CONNECTIVITY

We make our nationwide infrastructure available to meet the increasingly urgent need for fast and reliable digital connections. We also support our partners in developing smart connectivity solutions via the following services: optical fibre use rights, pylon rental, housing and facilities (installation of telecommunications equipment within Terna's already operational facilities).

Via optical fibre use rights, Terna enables customers to acquire new infrastructure, which performs better than underground cable standards, in terms of reliability (far fewer faults per year per km) and quality (low attenuation), with significant savings in terms of length compared to terrestrial connections (>20% over a long distance). Since 2017, indefeasible right of use (IRU) has been granted for a total of approximately 32,000 km of fibre, for which Terna provides maintenance and housing servicing for regeneration. The main contracts are with Open Fiber, TiSparkle, Retelit, Fastweb, Eolo and Wind 3.

FIBRE

Open Fiber project - fibre IRU and ancillary services (housing and maintenance)	Under the framework agreement regarding the provision of fibre infrastructure forming a national and regional backbone, 1,533 km of fibre was delivered in the 2021. By 2021, Terna had delivered a total of 23,170 km to the client.
Intercom - fibre IRU and ancillary services (maintenance)	The contract was signed on 16 February 2021 and 77 km were delivered during 2021.
Eolo - fibre IRU and ancillary services (housing and maintenance)	In 2021, the contract for the granting of fibre rights and the provision of ancillary services was signed, and 565 km were delivered during the year. The project provides for the delivery of a further 393 km in 2022 (Lot 2).

ENERGY SOLUTIONS

We provide engineering, procurement and construction (EPC), operation and maintenance (O&M), telecommunications (TLC) and digital services. Our services include the following activities:

- We build and renovate transmission infrastructure (power lines and substations) by developing turnkey solutions to meet the requirements of industrial customers, as well as the demand for connection of new renewable plants to the grid;
- We support companies in improving energy efficiency by designing and developing innovative solutions to reduce energy costs and optimise production processes;
- We offer turnkey solutions to islands and companies that want to evaluate, design and integrate renewable energy systems (photovoltaic or wind power), storage systems (batteries) and cogeneration/trigeneration solutions into their production cycle;
- We develop state-of-the-art tools for the maintenance and monitoring of infrastructure (substations, power lines and fibre) and grid installations (renewable energy plants, storage, CHP) with the aim of preventing, reducing and minimising the risks of faults and outages.

SMART GRID

RENEWABLES - LT GROUP

On 12 October 2021, Terna, acting through its subsidiary, Terna Energy Solutions S.r.l., completed the acquisition of a 75% stake LT S.r.l. (the LT Group). The purchase price for the equity interest was based on an equity value of €24 million for the entire company.
The acquisition of LT led to the creation of the first Italian operator in the photovoltaic plant operation & maintenance sector, with approximately 1,000 MWp under management, thus confirming Terna's role as driver and enabler of the energy transition and our constant support for the growth of renewables.
LT S.r.l. is also involved in the design and implementation of the revamping and repowering of existing plants, thereby helping to improve production from Italy's installed power assets and to achieve national energy transition goals. The company is also involved in the construction of new photovoltaic plants for third parties.

The LT Group in 2021

Turnover in 2021 amounted to approximately €24 million, marking a strong increase compared with the same period in 2020 (approximately €12.5 million), while EBITDA rose from €2.2 million to over €3.5 million. All lines of business saw significant growth: routine and extraordinary maintenance, revamping and repowering, and EPC. The forecast order book for 2021 is in line with projected turnover of more than €30 million.

OTHER PROJECTS

A contract was entered into in 2021 relating to engineering support and construction of an electrochemical storage unit in Assemini (approximately 14 MW). Design and system integration are currently underway, with construction work scheduled to start in March 2022.

Eni New Energy – fast reserve storage

During 2021, all construction and commissioning activities for the heat recovery cogeneration plant were completed with the client Tratos HV which, apart from adjustments to be made with the plant in service, was delivered to the client in December 2021.

Tratos HV - Construction of a CHP recovery trigeneration plant

During 2021, several revamping/repowering contracts were signed and secured, comprising the renewal and repowering of parts of photovoltaic plants.

Revamping and repowering of the Aurelia and Ozieri plants was completed, revamping of the Focomorto 2 plant and repowering of the Latina 2 plant were started, and the planning of construction work for the Caputo and Martimucci sites began.

EF Solare – Revamping FTV

HIGH VOLTAGE

Vetrerie Riunite - construction of new MV cable duct and replacement of transformer

In 2021, a contract was entered into with Vetrerie Riunite for revamping the plant's connection infrastructure. The project provides for replacement of a HV/MV transformer, as well as all civil and electromechanical upgrade works and the construction of a new MV cable duct. The first phase of preparing the cable duct and civil works has been completed.

Acciaierie Venete - Implementation and supply of 3 STATCOM systems

The contract, signed in February 2021, regards EPC implementation of three reactive energy compensation systems (STATCOM technology).

During 2021, the executive design was confirmed and "manufacturing" of the dedicated supplies (compensation systems) began on schedule. Commissioning of two of the three compensation systems was completed in 2021.

NLMK VERONA - HV cabling and installation of compact module

On 24 November 2021, a contract was entered into with NLMK Verona regarding construction of an HV line bay and a power line connecting this bay to the existing primary substation. The contract provides for the supply of a 145kV hybrid module, an HV line consisting of 4 cables and some revamping works on the existing primary substation infrastructure (needed to enable connection of the HV line to the primary substation), as well as the supply of the 20kV backup equipment.

Development of the detailed design of the entire project is in progress, and construction work will begin in March 2022.

EDPR – Construction of Aquilonia electricity substation

As part of the contract regarding construction of the Monte Mattina HV/MV electricity substation to connect the Aquilonia wind farm (25.2 MW) to the NTG, construction of the plant was completed and it entered service in 2021. Ancillary activities and civil works are to be completed.

RFI – Metering equipment

As part of the framework agreement with RFI, which was signed in December 2018 and relates to the "Design, supply, installation, certification and commissioning of metering equipment", during 2021 application contracts were signed regarding 38 installations and 21 installations were completed.

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 (in the final phases of commissioning), Austria (under construction), Switzerland and Slovenia (currently awaiting the necessary consents) are part of this overall project.

Italy–Montenegro interconnector project

Terna is responsible for managing routine and special maintenance activities and operating the interconnector in return for an annual fee. The infrastructure was completed on 28 December 2019 and is owned by Monita Interconnector S.r.l., which was sold to the private backers on 17 December 2019.

Italy–France interconnector project

Out of a total of approximately 95 km of cable for the Italian end of the interconnection, the laying of cable for the entire section running along the A32 motorway and through the Frejus motorway tunnel, has been completed. The remaining activities to complete the power line, including the laying of fibre and the installation of monitoring systems, continued throughout 2021. The civil works for the Piossasco converter station and assembly of all the electromechanical equipment have been completed. Preparation and testing of the protection system and checks of the functioning of the converter are, on the other hand, currently 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 works were completed during 2021. An application for an 11-month extension of the exemption was also made during the year, which is expected to be successful. The commissioning phase is in progress, which will enable the project to enter service in the first half of 2022.

Italy–Austria interconnector project

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, including 26 km on the Italian side, 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 €80 million.

The sale of Terna S.p.A.'s 100% stake in Resia to Interconnector Energy Italia S.C.p.A. ("IEI"), Consorzio Toscana Energia S.p.A. and VDP Fonderia S.p.A. was completed on 15 September 2021, together with the signature of agency agreements for the construction, operation and maintenance of the Italia-Austria Interconnector in accordance with Law 99/2009.

On 6 May 2021, the European Commission gave the go-ahead for exemption to be granted and, on 17 June 2021, Resia received confirmation of the exemption from the Ministry for Economic Development (for capacity of 150 MW for a period of 10 years), following the receipt of clearance from ARERA and the European Commission.

It should be noted that, on 16 March 2020, the exemption process formally began with the special purpose vehicle, Resia, submitting an exemption application to the Ministry for Economic Development. The Ministry then submitted the exemption application to ARERA to enable the regulator to issue its opinion. On 17 November 2020, ARERA granted its approval for the issue of the exemption decree to Resia.

The interconnector is due to enter service in 2023.

Italy–Switzerland interconnector project

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

Italy–Slovenia interconnector project

The creation of a direct current line is planned, partly in undersea cable, between the substations of Salgareda (IT) and Divaça/Beričevo (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.

Operating results of Non-regulated Activities

A breakdown of the Terna Group's results from its Non-regulated Activities for 2021 and 2020 is shown below[34].

(€m)

	2021	2020	CHANGE
Revenue from Non-regulated activities	**350.9**	**341.0**	**9.9**
Industrial	242.4	253.8	(11.4)
- Brugg	*119.9*	*149.9*	*(30.0)*
- Tamini	*122.5*	*103.9*	*18.6*
Connectivity	40.5	33.4	7.1
Energy Solutions	56.0	39.1	16.9
- High voltage	*32.2*	*29.9*	*2.3*
- Smart Grids	*23.8*	*9.2*	*14.6*
Private interconnectors	9.1	11.4	(2.3)
Other	2.9	3.3	(0.4)
Cost of Non-regulated Activities	**289.1**	**244.1**	**45.0**
EBITDA from Non-regulated Activities	**61.8**	**96.9**	**(35.1)**

EBITDA from Non-regulated Activities amounts to €61.8 million for 2021, a decrease of €35.1 million compared with the previous year. This primarily reflects:

- one-off revenue recognised in 2020 as a result of 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, including related ancillary costs, totalling €48.1 million);
- the lower contribution of private interconnector projects pursuant to Law 99/2009 (down €2.3 million), essentially due to the differing states of progress of works on the Italy-France interconnector;
- an increase in revenue from Connectivity (up €7.1 million, primarily due to IRU contracts for fibre);
- the higher contribution from the subsidiaries, Tamini Group and Brugg Group (totalling approximately €5 million), and from the LT Group in the Energy Solutions segment following its acquisition in October 2021 (up €1.1 million).

[34] 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 in the development of power lines and the integration of renewables.

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.

In the last part of the year, Terna looked at the opportunity to extract value from our activities in South America, with the aim of selling up to 100% of our Latin American assets.

Specifically, the potential scope of the transaction was defined, which includes a portfolio of six special purpose vehicles (SPVs): the Company's four subsidiaries in Brazil and Peru, and the Uruguayan company "Difebal S.A.". On the other hand, "Terna 4 Chacas S.A.C." (a charity project that will be transferred to the local diocese) and "Terna Chile S.p.A." are excluded.

During the initial phase, Terna and its subsidiary Terna Plus S.r.l. received declarations of intent from various industrial and financial investors, who each requested an "exclusivity period" to carry out their due diligence activities. A potential investor was selected from among these, having shown greater commitment to the transaction, and greater reliability in guaranteeing its actual success. This investor also included the subsidiaries in Uruguay and Peru in the scope of the transaction, thus leaving open the option for the Terna Group to remain in partnership with a minority interest (to be assessed during the due diligence phase). Due diligence is currently in progress and a binding offer is expected to be formalised after this phase, with finalisation of the transaction by the end of 2022.

Terna's strategic priorities with regard to its overseas operations include other **European countries**, in order to strengthen our presence, with the aim of enabling Italy to become an energy hub serving the Mediterranean area, and in **Latin America** where the Group is already present. Regarding other geographical areas, the aim is to develop services supporting the ecological transition, and that involve a low level of risk and absorb a limited amount of capital, in geographical areas characterised by strong political and economic stability.

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

Latin America continued to witness a worsening of the situation brought about by Covid-19 in 2021. At 30 December 2021, 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. Construction work is proceeding in Brazil thanks to the implementation of specific health protocols. Operation and maintenance activities are taking place under measures introduced in line with Terna's standards and local requirements.

Project included in assets currently up for sale

URUGUAY

Activities connected with contract management of the line that has entered service continued in 2021.

Projects included in assets currently up for sale

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 2021.

Onsite activity for the **SPE Transmissora de energia Linha Verde II S.A.** project continued. This is the first of the two concessions covered by the agreement with Construtora Quebec, regarding the construction of a 160-km 500kV power line in the State of Minas Gerais. The project is scheduled for completion in the first half of 2022.

Engineering work and the acquisition of rights and easements for the **SPE Transmissora de Energia Linha Verde I S.A.** project also continued. This project involves construction of a 150-km long 500kV power line dubbed the "Governador Valadares-Mutum" in the State of Minas Gerais.

Project included in assets currently up for sale

PERU

The 132-km 138kV power line between Aguaytìa and Pucallpa entered commercial service on 16 May 2021.

Operation and maintenance work continued in 2021, following the line's entry into service on 16 May 2021.

Operating results of International Activities

A breakdown of the Terna Group's results from International Activities for 2021 and 2020 is shown below[35].

EBITDA from International Activities for 2021 and 2020 does not include the results of the Latin American initiatives involved in the sale process described above. As required by IFRS 5, these initiatives are classified under "Profit/(Loss) for the year from assets held for sale" in the reclassified income statement in the paragraph entitled "The Terna Group's financial review for 2021".

(€m)

	2021	2020	CHANGE
Revenue from International Activities*	0.4	0.5	(0.1)
Cost of International Activities*	7.9	7.1	0.8
EBITDA from International Activities	**(7.5)**	**(6.6)**	**(0.9)**

** 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".*

EBITDA from International Activities reports a loss of €7.5 million for 2021, marking a deterioration of €0.9 million compared with the previous year (a loss of €6.6 million). This reflects an increase in the costs incurred by central departments to support overseas initiatives, primarily due to the resumption of scouting and business travel after the slowdown caused by Covid-19 health emergency.

Assets held for sale report a net loss of €12.8 million, marking a deterioration of €14.9 million compared to the previous year, mainly due to the adjustment of the value of net assets held for sale, recognised in accordance with IFRS 5.

[35] 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 and sustainable finance

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 also followed in 2021 and in early 2022.

On **28 February 2022**, Terna agreed **a bilateral ESG-linked Term Loan amounting to €300 million** with Intesa Sanpaolo's IMI Corporate & Investment Banking division, acting as Original Lender and Sustainability Coordinator. The credit facility has a 2-year term, with the interest rate linked to Terna's ESG performance. The transaction provides Terna with a level of liquidity appropriate to its current rating and confirms the Group's strong commitment to introducing a model that increasingly reinforces the role of sustainability as a strategic driver of value creation for all our stakeholders.

On **2 February 2022**, Terna successfully launched the Company's **first hybrid green bond with a nominal value of €1 billion**. The non-convertible, perpetual, subordinated green bonds are non-callable for six years and will pay coupon interest of 2.375% until 9 February 2028, the first reset date. After this date, the bonds will pay annual interest equal to the 5-year Euro Mid-Swap rate plus a spread of 212.1 basis points. This will be increased by a further spread of 25 basis points from 9 February 2033 and by an additional 75 basis points from 9 February 2048.

The issue, aimed at institutional investors, saw extremely high demand, with applications topping €4 billion and the issue being four times oversubscribed. The high quality of the hybrid bonds and the wide geographical diversification of investors mean that the issue was assigned ratings of "BBB-" by Standard and Poor's, "Ba1" by Moody's and "BBB" by Scope.

On **17 December 2021**, Terna agreed modifications to the Revolving Credit Facility obtained in 2018, extending its duration to 5 years, increasing the amount of credit up to a total of €1.65 billion and amending the ESG indicators. Terna currently has access to two **ESG-linked Revolving Credit Facilities** amounting to €3.15 billion. The two Revolving Credit Facilities include a mechanism based on bonuses and penalties linked to the achievement of specific ESG objectives.

On **16 July 2021**, Terna launched a three-year Euro Commercial Paper (ECP) programme worth €1 billion. The commercial papers can be designated **"ESG Notes"** provided that Terna achieves and maintains a ranking equal to or above Bronze Class in the S&P Sustainability Yearbook for the Electric Utilities sector.

On **13 July 2021**, Terna obtained **a loan of €300 million from the European Investment Bank**. The loan has a term of 22 years and will be used to fund the 2021-2025 Industrial Plan. Terna's investment over the next five years is aimed at integrating non-programmable renewable resources and increasing the system's security and resilience. The loan, which was obtained on more competitive terms and has a longer duration than those available in the market, forms part of Terna's strategy designed to optimise its financial structure.

The **ESG-linked share buyback programme** to service the Performance Share Plan 2021-2025 was completed on **23 June 2021**. Under the programme, Terna has purchased 1,569,292 own shares (equal to 0.078% of its share capital) at a total cost of approximately €10 million. In keeping with Terna's commitment to sustainability and social and environmental responsibility, the programme includes a mechanism based on bonuses and penalties linked to the Company's achievement of specific ESG objectives.

On **8 June 2021**, Terna renewed its **Euro Medium Term Note (EMTN) Programme**. As part of the renewal, the maximum value of the programme was increased to €9,000,000,000. The programme has been assigned ratings of "BBB+/A-2" by S&P, "(P)Baa2 /(P)P-2" by Moody's and "A-/S-1" by Scope.

Under this programme, on **16 June 2021**, **Terna launched a green bond issue** for institutional investors, with a nominal value of **€600 million**. The issue was very popular with investors, with demand topping €2.2 billion and making the bonds around four times overscribed. The issue is marked by the high quality of the bonds and the wide geographical diversification of investors. The green bonds have a term of eight years, will mature on 23 June 2029 and was priced at 99.819%, with a spread of 45 basis points over the mid-swap rate. Coupon interest is 0.375%, while the effective interest rate is 0.398%.

At 31 December 2021, the green bonds issued by Terna amount to €2.6 billion: prior to the latest issue in 2021, Terna had successfully launched its first green bond amounting to €750 million in July 2018, launching a further two issues totalling €750 million in 2019 and another €500 million issue in 2020.

These green issues are 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 2021" drawn up by the ICMA (International Capital Market Association). 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.

At 31 December 2021, Terna's four green bond issues have been 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.

In **January 2021**, Terna was 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.

Finally, Terna, both individually and as a member of the above Corporate Forum on Sustainable Finance, will continuously monitor developments in European legislation, with particular regard to the impact of the EU's sustainable finance taxonomy.

Debt is described in detail in the section, "The Terna Group's financial review for 2021".

Market, liquidity and credit risk

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.

Ratings

	SHORT-TERM	MEDIUM/LONG-TERM	OUTLOOK
Terna S.p.A.			
Standard & Poor's	A-2	BBB+	Positive
Moody's	Prime-2	Baa2	Stable
Scope	S-1	A-	Stable
Italian state			
Standard & Poor's	A-2	BBB	Positive
Moody's	Prime-3	Baa3	Stable
Scope	S-2	BBB+	Stable

On **29 October 2021**, following the reiteration of its 'BBB/A-2' rating for Italian government bonds and its upgrade of the outlook from stable to positive, S&P Global Ratings also reiterated its long- and short-term ratings for Terna S.p.A. ('BBB+' and 'A-2', respectively) and upgraded the outlook from stable to positive. The Company's long-term ratings all continue to be higher than those assigned to the Italian state.

The Terna Group's financial review for 2021

Introduction

The Annual Report for 2021 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 2021 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 "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 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 2020.

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 IFRS adopted and described in the consolidated and separate financial statements for the year ended 31 December 2021.

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 report on operations.

Given that the requirements of IFRS 5 have been met, the total results for 2021 and 2020 attributable to the South American subsidiaries included in the planned sale of assets have been classified in the item "Profit/(Loss) for the year from assets held for sale" in the Group's reclassified income statement. Likewise, the attributable assets and liabilities at 31 December 2021 have been reclassified to the item "Net assets held for sale" in the Group's reclassified statement of financial position, without modifying the comparative amount.

Scope of consolidation

The following changes in the structure of the Group have taken place with respect to 31 December 2020:

- on 26 January 2021, Terna, acting through its subsidiary, Terna Energy Solutions S.r.l., completed the acquisition of the remaining 30% of Avvenia the Energy Innovator S.r.l. from the minority shareholder, Avvenia S.r.l.. Avvenia the Energy Innovator S.r.l. has thus become a "sole shareholder" company wholly owned by Terna;
- on 1 February 2021, after APG (the Austrian TSO) became the fifth European transmission system operator to enter into partnership with Equigy, Terna S.p.A.'s interest in Equigy decreased from 25% to 20%;
- The reorganisation of the Brugg Group, designed to take full advantage of the group's distinctive expertise in terrestrial cables and of synergies with the Terna Group's businesses, was completed on 31 March 2021. As a result, Terna S.p.A.'s interest in the Brugg group has increased from 90% to 92.6%;
- on 10 June 2021, Terna, acting through its subsidiaries, Terna Plus S.r.l. and Terna Chile S.p.A., completed the acquisition of the remaining 25% interest in the Brazilian-registered company, SPE Transmissora de Energia Linha Verde II S.A., held by the minority shareholder, Construtora Quebec. SPE Transmissora de Energia Linha Verde II S.A. is now 99.9999994% owned by Terna Plus S.r.l., with the remaining shares held by Terna Chile S.p.A.;
- on 5 August 2021, Terna, acting through its subsidiary, Terna Energy Solutions S.r.l., completed the acquisition of the remaining 30% of Tamini Transformers S.r.l., which as a result is now a sole shareholder company fully owned by Terna;
- on 12 October 2021, Terna, acting through its subsidiary, Terna Energy Solutions S.r.l., completed the acquisition of a 75% stake LT S.r.l. (the LT Group), one of the leading Italian operators providing maintenance services for photovoltaic plants, and engaged in the design and implementation of revamping and repowering projects for existing plants and in the construction of new plants for third parties;
- on 26 October 2021, the return of the entire investment in PI.SA. 2 S.r.l., formerly held by Terna Interconnector S.r.l., to Terna S.p.A. was completed. On 10 December 2021, the company went into voluntary liquidation and the liquidation was completed on 27 January 2022;
- the merger of Elite S.r.l. with and into Rete S.r.l. was completed on 24 December 2021. Previously, on 27 July 2021, Terna had completed the acquisition of a 100% stake in EL.IT.E. S.p.A. on 27 July 2021. The acquired company was simultaneously renamed Elite S.r.l., a vehicle company that owns and manages (under a service agreement entered into with Repower) the approximately 4-km long 150kV merchant line connecting Italy and Switzerland between Tirano and Campocologno. The company also currently owns the Tirano electricity substation, in addition to the 150kV cable connection between the TIRANO ST electricity substation and the Italian border with the related tunnel section;
- on 3 August 2021, Terna, acting through its subsidiary, Terna Energy Solutions S.r.l., completed the sale of 100% stakes in Rete Verde 17 S.r.l., Rete Verde 18 S.r.l., Rete Verde 19 S.r.l. and Rete Verde 20 S.r.l. to Banca del Fucino, the purchaser chosen following a competitive auction;
- on 15 September 2021, Terna, pursuant to Law 99/2009, completed the sale of its 100% stake in Resia Interconnector S.r.l. to Interconnector Energy Italia S.c.p.A., Consorzio Toscana Energia S.p.A. and VDP Fonderia S.p.A., entering into agreements for the construction and operation of the private part, located in Italian territory, of the alternating current power line between Italy and Austria;
- on 11 November 2021, Terna, acting through the Brugg Group, completed the acquisition of a 100% stake in Laser TLC S.r.l., a company that provides fibre telecommunications systems to Italian and international customers and that operates in the energy sector, mounting accessories on high-voltage power lines and supervision of their installation.

The Group's reclassified income statement

The Terna Group's operating results for the year ended 31 December 2021, 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.

(€m)

	2021	2020	CHANGE	% CHANGE
TOTAL REVENUE	**2,604.8**	**2,490.4**	**114.4**	**4.6%**
- Regulated revenue	2,253.5	2,148.9	104.6	4.9%
of which Revenue from construction services performed under concession	*46.9*	*28.5*	*18.4*	*64.6%*
- Non-Regulated revenue	350.9	341.0	9.9	2.9%
- International revenue	0.4	0.5	(0.1)	(20.0%)
TOTAL OPERATING COSTS	**750.0**	**679.4**	**70.6**	**10.4%**
- Personnel expenses	289.0	281.3	7.7	2.7%
- Cost of services, leases and rentals	187.6	172.0	15.6	9.1%
- Materials	195.5	155.1	40.4	26.0%
- Other costs	25.1	34.2	(9.1)	(26.6%)
- Quality of service	5.9	8.3	(2.4)	(28.9%)
- Cost of construction services performed under concession	46.9	28.5	18.4	64.6%
GROSS OPERATING PROFIT (EBITDA)	**1,854.8**	**1,811.0**	**43.8**	**2.4%**
- Amortisation, depreciation and impairment losses	654.4	634.4	20.0	3.2%
OPERATING PROFIT (EBIT)	**1,200.4**	**1,176.6**	**23.8**	**2.0%**
- Net financial income/(expenses)	(78.9)	(86.0)	7.1	(8.3%)
PROFIT/(LOSS) BEFORE TAX	**1,121.5**	**1,090.6**	**30.9**	**2.8%**
- Income tax expense for the year	317.9	297.4	20.5	6.9%
PROFIT/(LOSS) FOR THE YEAR FROM CONTINUING OPERATIONS	**803.6**	**793.2**	**10.4**	**1.3%**
- Profit/(Loss) for the year from assets held for sale	(12.8)	2.1	(14.9)	-
PROFIT FOR THE YEAR	**790.8**	**795.3**	**(4.5)**	**(0.6%)**
- Profit/(Loss) attributable to non-controlling interests	1.4	9.8	(8.4)	(85.7%)
PROFIT FOR THE YEAR ATTRIBUTABLE TO OWNERS OF THE PARENT	**789.4**	**785.5**	**3.9**	**0.5%**

(€m)

EBITDA BY OPERATING SEGMENT	2021	2020	Δ
Regulated Activities	1,800.5	1,720.7	79.8
Non-regulated Activities	61.8	96.9	(35.1)
International Activities	(7.5)	(6.6)	(0.9)
EBITDA	**1,854.8**	**1,811.0**	**43.8**

Gross operating profit (EBITDA) for the year amounts to **€1,854.8 million**, up €43.8 million compared with the €1,811.0 million of 2020. This reflects the improved result from Regulated Activities.

Revenue

(€m)

REGULATED ACTIVITIES	2021	2020	CHANGE
Tariff revenue	2,154.8	2,047.8	107.0
Other regulated revenue	51.8	72.6	(20.8)
Revenue from construction services performed under concession in Italy	46.9	28.5	18.4
TOTAL	**2,253.5**	**2,148.9**	**104.6**

After excluding revenue from construction services performed under concession (up €18.4 million), revenue from **Regulated Activities** is up €86.2 million. This primarily reflects the tariff adjustment resulting from the increase in the RAB, increased revenue resulting from recognition of the efficiency bonus linked to the investment costs incurred on the expansion of transmission capacity for 2020, partly offset by reduced revenue in the form of the bonus receivable under the RENS (Regulated Energy Not Supplied) incentive mechanism (due essentially to the form in which revenue was recognised in the regulatory periods) and other non-recurring items.

(€m)

NON-REGULATED ACTIVITIES	2021	2020	CHANGE
Industrial	242.4	253.8	(11.4)
Services for third parties (Connectivity, Energy Solutions, other)	99.4	75.8	23.6
Private interconnectors	9.1	11.4	(2.3)
TOTAL	**350.9**	**341.0**	**9.9**

The increase in revenue from **Non-Regulated Activities**, totalling €9.9 million, primarily reflects the contributions from the companies operating in the Industrial segment (Tamini and Brugg, amounting to €39.0 million) and from the LT Group from the provision of Energy Solutions (€11.0 million, from the acquisition in October 2021), as well as increased revenue from Connectivity (€7.1 million). These increases were offset by recognition in 2020 of the attributable portion of the higher value of the net assets acquired following the acquisition of Brugg Cables compared with the consideration paid (totalling €50.4 million).

Revenue of €0.4 million from **International Activities** in 2021 is in line with the previous year (€0.5 million).

Costs

After excluding the cost of construction services performed under concession (up €18.4 million), **operating costs** are up €52.2 million compared with the previous year. This broadly reflects the cost of the raw and intermediate materials used by the Brugg Group and the Tamini Group (up €14.5 million and €17.1 million, respectively), the contribution of the LT Group (up €9.9 million), an increase in personnel expenses due to the larger workforce and the higher cost of services due to the increase in activity and the new initiatives launched by the Group. These increases were partially offset by the adjustment to provisions linked to amounts previously set aside in relation to Land Registry Circular 6/2012 and for litigation and disputes.

Amortisation, depreciation and impairment losses for the year amount to €654.4 million, an increase of €20.0 million compared with 2020. This primarily reflects the entry into service of new infrastructure, after taking into account the higher value of impairment losses on assets recognized in the previous year (down €8.0 million).

Operating profit (**EBIT**), after amortisation, depreciation and impairment losses, amounts to **€1,200.4 million** compared with the €1,176.6 million of 2020 (up 2.0%).

Net financial expenses for the year total €78.9 million, a reduction of €7.1 million compared with the €86.0 million of 2020. This is primarily due to translation differences and the adjustment to the value of investments in associates, partially offset by the rise in inflation.

After net financial expenses, **profit before tax** amounts to **€1,121.5 million**, an increase of €30.9 million (2.8%) compared with the previous year.

Income tax expense for the year totals €317.9 million, an increase of €20.5 million (6.9%) on the previous year, essentially due to the increase in pre-tax profit and the higher amount of tax-exempt income recognised in the previous year. The tax rate of 28.3% compares with the rate of 27.3% for 2020.

The **profit from continuing operations** amounts to **€803.6 million**, an increase of €10.4 million (1.3%) compared with the €793.2 million of 2020.

The loss for the year from assets held for sale, totalling €12.8 million, is down €14.9 million on the figure for the previous year. This essentially reflects the adjustment to the value of the net assets held for sale recognised in application of IFRS 5.

Profit for the year amounts to €790.8 million, a reduction of 0.6% compared with the €795.3 million of 2020.

Profit for the year attributable to owners of the Parent (after excluding the share attributable to non-controlling interests) amounts to **€789.4 million**, up €3.9 million (0.5%) compared with the €785.5 million of 2020.

Cash flow

Operating cash flow for 2021 was used entirely to finance investing activities. The impact on working capital of movements in trading and tax assets and liabilities compared with 2020, and payment of the final dividend to shareholders, have resulted in an increase in net debt.

(€m)

	CASH FLOW 2021	CASH FLOW 2020
- Profit for the year	790.8	795.3
of which attributable to continuing operations	*803.6*	-
- Amortisation, depreciation and impairment losses	654.4	643.8
- Net change in provisions	(72.9)	(88.9)
of which attributable to continuing operations	*(53.1)*	-
- Net losses/(gains) on sale of assets	(13.7)	(7.7)
Operating cash flow	**1,358.6**	**1,342.5**
of which attributable to continuing operations	*1,391.2*	-
- Change in net working capital	(227.6)	(272.0)
of which attributable to continuing operations	*(296.8)*	-
- Other changes in property, plant and equipment and intangible assets	42.6	(15.3)
of which attributable to continuing operations	*27.7*	-
- Change in investments	(0.4)	3.6
- Change in financial assets	128.9	(10.3)
of which attributable to continuing operations	*(33.6)*	-
Cash flow from operating activities	**1,302.1**	**1,048.5**
of which attributable to continuing operations	*1,088.1*	-
- Total capital expenditure	(1,520.7)	(1,351.1)
Free cash flow	**(218.6)**	**(302.6)**
Net assets held for sale	**(117.7)**	**-**
- Dividends paid to the Parent Company's shareholders	(556.4)	(515.0)
- Cash flow hedge reserve after taxation and other movements in equity attributable to owners of the Parent	79.1	(91.0)
- Other movements in equity attributable to non-controlling interests	(16.3)	(5.4)
Change in net debt	**(829.9)**	**(914.0)**

The Group's reclassified statement of financial position

The Terna Group's financial position at 31 December 2021 and 31 December 2020 is summarised below in the reclassified statement of financial position, obtained by reclassifying amounts in the statutory consolidated statement of financial position.

(€m)

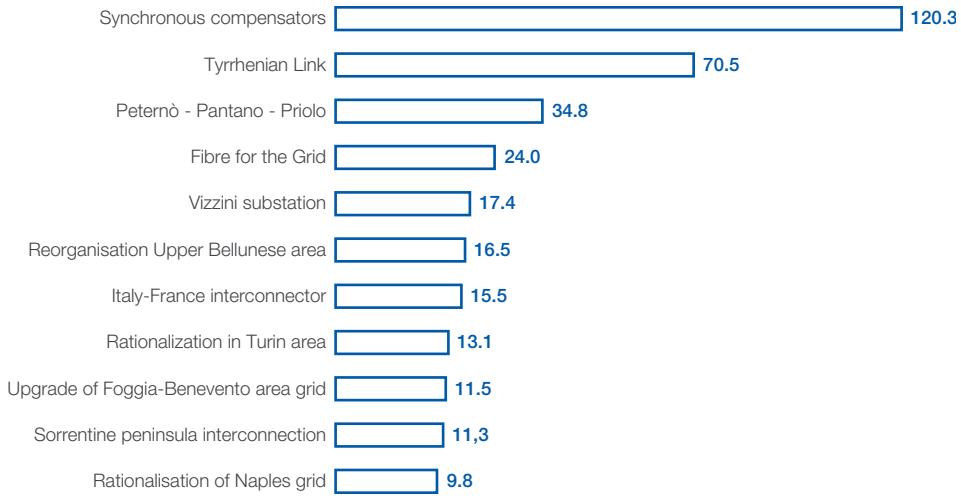
	AT 31 DECEMBER 2021	AT 31 DECEMBER 2020	CHANGE
Total net non-current assets	**16,352.9**	**15,645.9**	**707.0**
- Intangible assets and goodwill	656.5	577.9	78.6
- Property, plant and equipment	15,316.6	14,559.7	756.9
- Financial assets	379.8	508.3	(128.5)
Total net working capital	**(1,706.7)**	**(1,936.2)**	**229.5**
- Net energy-related pass-through payables	(209.1)	(385.0)	175.9
- Net receivables resulting from Regulated Activities	448.4	230.9	217.5
- Net trade payables	(737.5)	(818.0)	80.5
- Net tax liabilities	(50.6)	40.5	(91.1)
- Other net liabilities	(1,157.9)	(1,004.6)	(153.3)
Gross invested capital	**14,646.2**	**13,709.7**	**936.5**
Sundry provisions	(48.4)	(121.3)	72.9
Net invested capital	**14,597.8**	**13,588.4**	**1,009.4**
Net assets held for sale	**117.7**	**-**	**117.7**
TOTAL NET INVESTED CAPITAL	**14,715.5**	**13,588.4**	**1,127.1**
Equity attributable to owners of the Parent	**4,681.9**	**4,369.8**	**312.1**
Equity attributable to non-controlling interests	**31.1**	**46.0**	**(14.9)**
Net debt	**10,002.5**	**9,172.6**	**829.9**
TOTAL	**14,715.5**	**13,588.4**	**1,127.1**

The €707.0 million increase in **net non-current assets** compared with 31 December 2020 primarily reflects a combination of the following:

- total capital expenditure of €1,520.7 million, as described in detail in the section on "Regulated Activities";
- an increase of €26.4 million in goodwill, attributable to the acquisitions, in 2021, of the LT Group and Laser TLC S.r.l. (through the Brugg Group) and recognised on the provisional basis applicable to business combinations;
- the purchase of NTG assets from Acciaierie Arvedi for €5.1 million (May 2021) and from the AGSM Group and Dolomiti Energia for €10.5 million (December 2021);
- a decrease of €128.5 million in financial assets, including a reduction of €162.5 million compared with the amount at 31 December 2020 attributable to net assets held for sale, and an increase of €34.0 million broadly due to increases in the Interconnector Guarantee Fund, set up to fund investment in interconnections by art. 32 of Law 99/09 (up €18.7 million) and in the benefit plan assets attributable to the employees of the Brugg Group (up €11.7 million);
- amortisation and depreciation for the year, totalling €656.0 million;
- other movements during the year, resulting in a decrease of €41.7million, including grants related to assets (primarily in relation projects financed by the Ministry for Economic Development and the EU and the re-routing of power lines at the request of third parties) and disposals and impairment losses resulting in a reduction of €17.6 million;
- a reduction in intangible assets and property, plant and equipment compared with the amount at 31 December 2020 attributable to a total of €14.9 million in net assets held for sale.

The Terna Group's total **capital expenditure** during 2021, amounting to **€1,520.7 million**, is up **12.6%** compared with the €1,351.1 million of 2020.

MAIN INVESTMENT IN THE NTG* (€m)



** Amounts include financial expenses.*

Net working capital of €1,706.7 million resulted in a cash outflow of €229.5 million compared with 31 December 2020 (€296.8 million net of the amount at 31 December 2020 attributable to net assets held for sale, totalling €67.3 million). This reflects the combined effect of:

Cash outflows

- a decrease in **net energy-related pass-through payables** of €175.9 million, primarily reflecting the combined effect of:
  - an increase in net receivables (€308.8 million) linked to the Uplift component receivable in return for the procurement of energy on the Dispatching Services Market, reflecting a sharp increase in the related costs in the last quarter of the year; partially offset by
  - an increase in net payables relating to essential plants for the security of the electricity system - UESS (€142.5 million), reflecting reduced payments during the year to the owners of essential plants[36];
- an increase in **net receivables resulting from Regulated Activities** of €217.5 million, broadly due to amounts receivable for transmission services (up €195.2 million), reflecting the following:
  - revised tariffs and recognition of the accrued amount due as a return on digital substation systems in accordance with ARERA Resolution 565/2020 (totalling €54.7 million);
  - factoring transactions completed at the end of the year (€109.6 million);
  - discontinued application of the Split Payment regime when invoicing transmission services to certain counterparties following their participation in Group VAT arrangements (€30.9 million).

  There has also been an increase of €22.8 million in the amount due from the Fund for Energy and Environmental Services (*Cassa per i Servizi Energetici e Ambientali* - CSEA), due to:
  - the recognition of rewards under output-based incentive mechanisms[37], totalling €47.9 million;
  - a reduction of €25.1 million in the amount receivable in relation to the quality of service performance, following collection of the ENSR bonuses for 2019 and 2020 and recognition of the result for 2021.
- a reduction of €80.5 million **in net trade payables**, including an increase of €52.0 million relating to the amount at 31 December 2020 attributable to net assets held for sale, and a reduction of €132.5 million largely due to the different performance of payments to suppliers.

[36] ARERA ordered payments to the owners of essential plants via Resolutions 9-20-30-42-52-67-94-95-118-203-475-476-481-482-499-500-518-519-520-543-544-545-564-565/2021.

[37] An efficiency bonus linked to the cost of investment in boosting transmission capacity in 2020 (under Resolution 23/2022), efficiency bonuses for development works completed by 30 September 2020, rewards linked to preparations for the introduction of output-based regulation in 2018 and 2019, the reward for unification of the NTG following the MEGARETI acquisition.

Cash inflows

- an increase of €91.1 million in **net tax liabilities**, broadly due to the increase of €54.7 million in net VAT payable in line with the reduction in trade payables, and an increase in the amount of income tax payable for the year, after payments on account and the settlement of tax due for the previous year (up €33.0 million);
- an increase in **other net liabilities** of €153.3 million, including an increase of €14.0 million compared with the amount at 31 December 2020 attributable to net assets held for sale, and an increase of €139.3 million primarily attributable to an increase in guarantee deposits (up €49.1 million) received from operators participating in the capacity market and electricity market operators to guarantee the obligations undertaken regarding dispatching and virtual interconnection contracts, an increase in grants related to assets received from third parties (up €31.7 million), the recognition of prepayments received from the backers of the private Italia-Austria Interconnector (up €29.5 million) and an increase in the Interconnector Guarantee Fund set up by Terna S.p.A. following the issue of the 2016 Stability Law (up €20.0 million).

Gross invested capital thus amounts to €14,646.2 million, an increase of €936.5 million compared with the previous year, including the balance at 31 December 2020 attributable to net assets held for sale, totalling €244.7 million.

Sundry provisions are down €72.9 million, primarily due to net uses of provisions for amounts payable to personnel (down €17.7 million), to fund urban and environmental redevelopment schemes (down €9.1 million), for tax liabilities (down €6.6 million) and relating to quality of service (down €4.9 million). The performance also reflects net provisions for net deferred tax assets, totalling €34.8 million, primarily due to the effect on taxation of movements in provisions for risks and charges, in the Group's derivative financial instruments and amortisation and depreciation, in part relating to the amount at 31 December 2020 attributable to net assets held for sale.

Net assets held for sale, totalling €117.7 million at 31 December 2021, primarily regard the value of investment in infrastructure operated under concession in Brazil and the amount due from third parties in relation to construction services performed in Uruguay, partly offset by net debt.

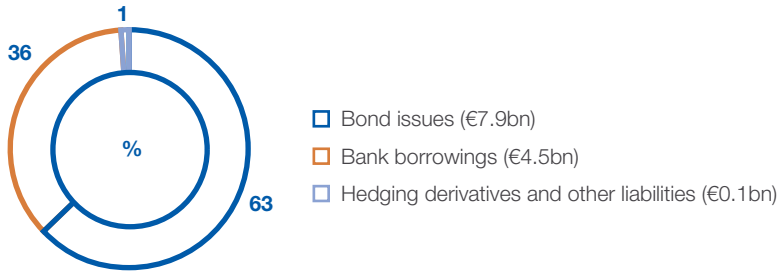
Total net invested capital, including assets held for sale of €117.7 million, amounts to €14,715.5 million, marking an increase of €1,127.1 million compared with 31 December 2020. This is financed by equity attributable to owners of the Parent, totalling €4,681.9 million (compared with €4,369.8 million at 31 December 2020), equity attributable to non-controlling interests of €31.1 million (€46.0 million at 31 December 2020) and net debt of €10,002.5 million (up €829.9 million compared with the €9,172.6 million of 31 December 2020).

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 2021 amounts to approximately **€13 billion**, consisting of approximately €8 billion in the form of bond issues and approximately €5 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 €9 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 2021 amount to approximately €2.2 billion (including €300 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 bond issue launched in 2021, amounting to €600 million, and the amount raised in the form of bank borrowings. In this regard, €343 million was disbursed in 2021 under the credit facility agreed with the EIB in 2020, whilst a further €300 million facility was agreed, again with the EIB, during the year. Terna also has access to two committed revolving credit facilities, amounting to approximately €3.2 billion.

	FY 2020		KEY MULTIPLES		RATING
	NET DEBT	EBITDA	NET DEBT / EBITDA	NET DEBT / EV[38]	STANDARD & POOR'S
Terna	**9,173**	**1,830**	**5.0**	**39%**	**BBB+**
RED ELÉCTRICA DE ESPAÑA	6,113	1,569	3.9	39%	A-
REN	2,741	470	5.8	68%	BBB
snam	12,892	2,197	5.9	42%	BBB+
enagas	4,288	943	4.5	46%	BBB
Average	***7,041***	***1,402***	***5.0***	***47%***	

Multiple above the average for the peer group

Multiple below or equal to the average for the peer group

Terna's leverage multiples are below the average for the chosen peer group

[38] EV: Enterprise Value=Net Debt + Market Cap.

Net debt

The Group's net debt at 31 December 2021 amounts to €10,002.5 million, marking an increase of €829.9 million compared with 31 December 2020.

(€m)

NET DEBT (BY TERM TO MATURITY)	31.12.2021	31.12.2020	Δ
Total medium/long-term debt	**8,917.1**	**10,019.8**	**(1,102.7)**
- Bond issues	6,925.6	7,485.7	(560.1)
- Borrowings	1,909.4	2,374.5	(465.1)
- Derivative financial instruments	82.1	159.6	(77.5)
Total short-term debt/ (funds)	**1,085.4**	**(847.2)**	**1,932.6**
- Bond issues (current portions)	999.9	1,258.8	(258.9)
- Short-term borrowings	1,947.0	1,002.2	944.8
- Borrowings (current portions)	640.1	129.2	510.9
- Other current financial liabilities net	23.6	80.4	(56.8)
- Derivative financial instruments	0.1	-	0.1
- Financial assets	(958.5)	(628.8)	(329.7)
- Cash and cash equivalents	(1,566.8)	(2,689.0)	1,122.2
Total net debt	**10,002.5**	**9,172.6**	**829.9**
NET DEBT (BY TYPE OF INSTRUMENT)			
- Bond issues	7,925.5	8,744.5	(819.0)
- Borrowings	2,549.5	2,503.7	45.8
- Short-term borrowings	1,947.0	1,002.2	944.8
- Derivative financial instruments	82.2	159.6	(77.4)
- Other financial liabilities net	23.6	80.4	(56.8)
GROSS DEBT	**12,527.8**	**12,490.4**	**37.4**
- Financial assets	(958.5)	(628.8)	(329.7)
- Cash and cash equivalents	(1,566.8)	(2,689.0)	1.122.2
Total net debt	**10,002.5**	**9,172.6**	**829.9**
Net debt attributable to net assets held for sale	**161.8**	**-**	**161.8**

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

- a reduction in bond issues (down €819.0 million), including reductions of €34.4 million compared with 31 December 2020 attributable to assets held for sale and €784.6 million attributable to the Parent Company, Terna S.p.A., primarily following repayment of a bond issue, totalling €1,250 million, partially offset by the green bond issue launched by Terna on 16 June 2021, with a nominal value of €600 million;
- an increase in bank borrowings (up €45.8 million), including a reduction of €168.7 million compared with 31 December 2020 attributable to assets held for sale and an increase of €214.5 million, primarily as a result of the drawdown of new bank facilities, amounting to €343.0 million, after repayments of existing borrowings;
- an increase in short-term borrowings (up €944.8 million), essentially due to the Parent Company's drawdown of amounts obtained under short-term credit facilities;
- a reduction in the fair value of derivative financial instruments (down €77.4 million), primarily due to movements in the derivatives held and in market interest rates;

- a reduction in other net financial liabilities (down €56.8 million) following the payment of accrued interest on financial products;
- an increase in financial assets (up €329.7 million), including a reduction of €17.4 million compared with 31 December 2020 attributable to assets held for sale and an increase of €347.1 million due to an increase in the Group's holdings of Italian government securities;
- a reduction in cash and cash equivalents (down €1,122.2 million), including a reduction of €69.3 million compared with 31 December 2020 attributable to assets held for sale. Cash amounts to €1,566.8 million at 31 December 2021, and includes €1,383.2 million invested in short-term, readily convertible deposits and €183.6 million held in bank current accounts and in the form of cash in hand.

Net debt attributable to assets held for sale, amounting to €161.8 million at 31 December 2021, essentially includes the value of bond issues, totalling €40.7 million and bank borrowings of €180.8 million, after the short-term portion of investment in infrastructure operated under concession in Brazil, recognized in application of IFRIC 12, totalling €20.1 million, and cash and cash equivalents of approximately €39.4 million.

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 2021 and the corresponding amounts for the Parent Company is shown below.

€m

	PROFIT FOR FY 2021	EQUITY AT 31 DECEMBER 2021
Parent Company's financial statements	**735.2**	**4.329.5**
Profit and equity contributed by Group companies:		
- Group companies – Regulated Activities	77.2	356.0
- Group companies – Non-regulated Activities	(9.8)	43.2
- Group companies – International Activities	(12.1)	(47.1)
Companies accounted for using the equity method	0.3	31.4
Total consolidated financial statements	**790.8**	**4.713.0**
Share attributable to non-controlling interests – Regulated Activities	-	2.3
Share attributable to non-controlling interests – Non-regulated Activities	0.8	27.4
Share attributable to non-controlling interests – International Activities	0.6	1.4
Terna Group's consolidated financial statements	**789.4**	**4.681.9**

Terna S.p.A.

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

As previously noted, given that the requirements of IFRS 5 have been met, gains and losses for 2021 and 2020 on the investment in the Uruguayan subsidiary involved in the planned sale of assets have been classified in the item "Profit/(Loss) for the year from assets held for sale" in the reclassified income statement. Likewise, the assets attributable to the same subsidiary at 31 December 2021 have been reclassified to the item "Assets held for sale" in the reclassified statement of financial position, without modifying the comparative amount.

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

Terna S.p.A.'s operating results for the years 2021 and 2020 are summarised in the following reclassified income statement, obtained by reclassifying amounts in the statutory income statement.

(€m)

	2021	2020	CHANGE	% CHANGE
TOTAL REVENUE	**2,224.1**	**2,086.6**	**137.5**	**6.6%**
- Tariff revenue	2,006.2	1,906.2	100.0	5.2%
of which transmission revenue	*1,892.4*	*1,796.9*	*95.5*	*5.3%*
of which dispatching, metering and other revenue	*113.8*	*109.3*	*4.5*	*4.1%*
- Other operating income	171.0	151.9	19.1	12.6%
- Revenue from construction services performed under concession*	46.9	28.5	18.4	64.6%
TOTAL OPERATING COSTS	**517.3**	**499.7**	**17.6**	**3.5%**
- Personnel expenses	75.8	70.8	5.0	7.1%
- Cost of services, leases and rentals	371.3	369.2	2.1	0.6%
- Materials	0.8	0.7	0.1	14.3%
- Other costs	16.6	22.2	(5.6)	(25.2%)
- Quality of service	5.9	8.3	(2.4)	(28.9%)
- Cost of construction services performed under Concession*	46.9	28.5	18.4	64.6%
GROSS OPERATING PROFIT (EBITDA)	**1,706.8**	**1,586.9**	**119.9**	**7.6%**
- Amortisation, depreciation and impairment losses	585.8	571.2	14.6	2.6%
OPERATING PROFIT/(LOSS) (EBIT)	**1,121.0**	**1,015.7**	**105.3**	**10.4%**
- Net financial income/(expenses)	(78.4)	(57.2)	(21.2)	37.1%
PROFIT/(LOSS) BEFORE TAX	**1,042.6**	**958.5**	**84.1**	**8.8%**
- Income tax expense	297.7	269.3	28.4	10.5%
PROFIT/(LOSS) FOR THE YEAR FROM CONTINUING OPERATIONS	**744.9**	**689.2**	**55.7**	**8.1%**
- Profit/(Loss) for the year from assets held for sale	**(9.7)**	**(1.6)**	**(8.1)**	**-**
PROFIT FOR THE YEAR	**735.2**	**687.6**	**47.6**	**6.9%**

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

Gross operating profit (*EBITDA*) for the year is **€1,706.8 million**, an increase of €119.9 million compared with the €1,586.9 million of 2020. This primarily reflects the tariff adjustment provided for in ARERA Resolution 565/20 and recognition of the efficiency bonus linked to the cost of investment in boosting transmission capacity in 2020 (under Resolution 23/2022) and a number of non-recurring items in 2021.

After excluding revenue from construction services performed under concession (up €18.4 million), **revenue** of **€2,224.1 million** is up €119.1 million compared with the previous year. This is due primarily to the impact on transmission revenue (up €95.5 million) of the tariff adjustment resulting from the increase in the RAB, the effects of output-based incentive mechanisms[39] (up €48.1 million, under ARERA Resolutions 23/2022, 579/2017, 884/2017, 319/2021, 395/2021 and 25/2022), and the positive impact of the volume effect, offset by the impact of the release in 2020 of provisions for amounts payable to an operator (down €10.6 million) following settlement of the related risk.

The following also had an impact:

- an increase in revenue resulting from the outcome of the claim for a refund of stamp duty paid on the acquisition of Rete S.r.l. (up €13.4 million), in revenue from Connectivity sales (up €6.3 million, primarily from IRU contracts for fibre), in revenue reflecting the state of progress of work on the private Italy-Austria interconnector (up €6.1 million) and from the subsidiary, Terna Rete Italia S.p.A. (up €3.1 million), primarily due to sureties and administrative services following changes to the range of activities carried out, as well as other non-recurring items;
- a reduction in revenue in the form of the bonus receivable under the RENS (Regulated Energy Not Supplied) incentive mechanism (down €17.8 million), broadly due to the greater amount of revenue recognised in 2020 following final assessment of the performance in 2019 (€23.4 million under ARERA Resolution 540/2020) and recognition of the pro-rata assessment of the performance in 2021 (€5.9 million, based on the estimated overall outcome for the 2021-2023 regulatory period).

After excluding the cost of construction services performed under concession (up €18.4 million), **operating costs** for the year, amounting to **€517.3 million**, reflect a slight reduction of €0.8 million compared with the previous year. This essentially reflects a combination of the following:

- the adjustment to provisions linked to amounts previously set aside in relation to Land Registry Circular 6/2012 and for litigation and disputes (down €4.0 million);
- a decrease in the costs incurred for quality of service (down €2.4 million, primarily linked to the steps taken to mitigate the impact of events in December 2020 following heavy snowfall across northern Italy);
- a reduction in amounts payable to the subsidiary, Terna Rete Italia S.p.A., regarding the state of work on private interconnector projects in progress (down €5.4 million);
- an increase in personnel expenses (up €5.0 million), primarily due to an increase in the workforce;
- an increase in the cost of professional and consultants' fees (up €4.8 million) and in expenses relating to Terna's investments in the companies, GRIT and CORESO (up €2.0 million).

Amortisation, depreciation and impairment losses for the year amount to €585.8 million, an increase of €14.6 million compared with 2020. This primarily reflects the entry into service of new infrastructure, after taking into account the greater amount of impairment losses on assets recognised in the previous year (down €7.4 million).

EBIT (operating profit) of €1,121.0 million is up €105.3 million (10.4%) compared with 2020.

Net financial expenses for the year total €78.4 million, an increase of €21.2 million compared with the €57.2 million of 2020. This primarily reflects the recognition in 2020 of the dividend distributed by the subsidiary, Terna Interconnector S.r.l., totalling €19.5 million, and the rise in inflation, partially offset by an increase in gains due to translation differences on intercompany loans granted to the Uruguayan subsidiary.

[39] An efficiency bonus linked to the cost of investment in boosting transmission capacity in 2020 (under Resolution 23/2022), efficiency bonuses for development works completed by 30 September 2020, rewards linked to preparations for the introduction of output-based regulation in 2018 and 2019, the reward for unification of the NTG.

Income tax expense for the year amounts to €297.7 million, an increase of €28.4 million compared with the previous year. This essentially reflects the impact of the increase in pre-tax profit and the greater volume of tax-exempt income recognised in 2020. The tax rate of 28.6% compares with the rate of 28.1% for 2020.

The profit **from continuing operations** amounts to **€744.9 million**, an increase of €55.7 million (8.1%) compared with the €689.2 million of 2020.

The **loss for the year from assets held for sale**, totalling €9.7 million, is down €8.1 million on the figure for the previous year. This essentially reflects the adjustment to the value of the net assets held for sale recognised in application of IFRS 5.

Profit for the year amounts to **€735.2 million**, an increase of €47.6 million (6.9%) compared with the €687.6 million of 2020.

Cash flow

Operating cash flow for 2021 was used entirely to finance investing activities. The impact on working capital of movements in trading and tax assets and liabilities compared with 2020, and payment of the final dividend to shareholders, have resulted in an increase in net debt.

(€m)

	CASH FLOW 2021	CASH FLOW 2020
- Profit for the year	735.2	687.6
- Amortisation, depreciation and impairment losses	585.8	571.2
- Net change in provisions	(37.9)	(75.6)
- Net losses/(gains) on sale of assets	(12.6)	(5.5)
Operating cash flow	**1,270.5**	**1,177.7**
- Change in net working capital	(162.0)	(152.1)
- Change in investments	3.1	(102.9)
- Other movements in property, plant and equipment and intangible assets	41.3	40.1
- Change in financial assets	(20.6)	(19.0)
Cash flow from operating activities	**1,132.3**	**943.8**
- Total capital expenditure	(1,376.6)	(1,134.3)
Free cash flow	**(244.3)**	**(190.5)**
Net assets held for sale	**(23.0)**	**-**
- Dividends paid to shareholders	(556.4)	(515.0)
- Cash flow hedge reserve after taxation and other movements in equity	67.1	(70.1)
Change in net debt	**(756,6)**	**(775,6)**

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

Terna S.p.A.'s financial position at 31 December 2021 and 2020 is summarised in the following statement, obtained by reclassifying amounts in the statutory statement of financial position.

(€m)

	AT 31 DECEMBER 2021	AT 31 DECEMBER 2020	CHANGE
Total net non-current assets	**15,409.7**	**14,632.1**	**777.6**
- Intangible assets and goodwill	543.8	475.9	67.9
- Property, plant and equipment	13,447.4	12,755.2	692.2
- Financial assets	1,418.5	1,401.0	17.5
Total net current liabilities	**(1,201.8)**	**(1,365.8)**	**164.0**
- Net energy-related pass-through payables	(234.3)	(408.9)	174.6
- Net receivables resulting from regulated activities	448.4	230.9	217.5
- Net trade payables	(671.7)	(615.4)	(56.3)
- Net tax liabilities	(110.1)	(25.6)	(84.5)
- Other liabilities net	(634.1)	(546.8)	(87.3)
Gross invested capital	**14,207.9**	**13,266.3**	**941.6**
Sundry provisions	(7.6)	(45.5)	37.9
NET INVESTED CAPITAL	**14,200.3**	**13,220.8**	**979.5**
Assets held for sale	**23.0**	**-**	**23.0**
TOTAL NET INVESTED CAPITAL	**14,223.3**	**13,220.8**	**1,002.5**
Equity	**4,329.5**	**4,083.6**	**245.9**
Net debt	**9,893.8**	**9,137.2**	**756.6**
TOTAL	**14,223.3**	**13,220.8**	**1,002.5**

The principal changes with respect to 31 December 2020 are described below.

Total net invested capital amounts to €14,223.3 million at 31 December 2021, an increase of €1,002.5 million compared with the previous year. This reflects an increase in **net non-current assets** (up €777.6 million), cash used for **net working capital** (up €164.0 million), a reduction in sundry provisions (€37.9 million) and the recognition of **assets held for sale** (up €23.0 million).

Net non-current assets are up €777.6 million, primarily due to the following:

- the Company's capital expenditure (€1,376.6 million, including €1,363.1 million relating to Regulated Activities) and the purchase of NTG assets from Acciaierie Arvedi for €5.1 million (May 2021) and from then AGSM group and Dolomiti Energia for €10.5 million (December 2021);
- amortisation and depreciation for the year (€587.5 million);
- disposals, impairments and other movements (a total reduction of €44.6 million, including €39.6 million regarding grants related to assets);
- an increase of €17.5 million in financial assets, including a reduction of €8.5 million compared with 31 December 2020 attributable to assets held for sale, and an increase of €26.0 million broadly due to an increase in the Interconnector Guarantee Fund, set up to fund investment in interconnections by art. 32 of Law 99/09 (up €18.7 million) and the acquisition, in July 2021, of a 100% interest in Elite S.r.l. (up €5.3 million), which was merged with the subsidiary, Rete S.r.l., at the end of the year.

The change in **net working capital**, represented by an increase of €164.0 million, is primarily due to an increase in net trade receivables, offset by an increase in VAT and income tax payable, an increase in guarantee deposits received from electricity market operators, an increase in the Interconnector Guarantee Fund set up by Terna S.p.A. following the issue of the 2016 Stability Law and grants related to assets received from third parties.

Sundry provisions are down €37.9 million, primarily due to net uses of provisions for amounts payable to personnel (down €15.5 million), to fund urban and environmental redevelopment schemes (down €9.1 million), for tax liabilities (down €6.7 million) and relating to quality of service (down €4.9 million).

Assets held for sale, amounting to €23.0 million, broadly include outstanding items due from the Uruguayan subsidiary in the form of a loan granted by Terna S.p.A. and the investment, after an adjustment to the value of these assets recognized in application of IFRS 5.

Net debt of €9,893.8 million is up €756.6 million.

(€m)

NET DEBT (BY TYPE OF INSTRUMENT)	31.12.2021	31.12.2020	CHANGE
- Bond issues	7,925.5	8,710.1	(784.6)
- Borrowings	2,523.3	2,298.5	224.8
- Short-term borrowings	1,917.6	977.1	940.5
- Other financial liabilities net	23.6	80.1	(56.5)
- Derivative financial instruments	82.1	157.2	(75.1)
Gross debt	**12,472.1**	**12,223.0**	**249.1**
- Long-term loans to subsidiaries	-	(22.5)	22.5
- Financial assets	(958.5)	(611.4)	(347.1)
- Cash and cash equivalents (including the net balance on intercompany current accounts)	(1,619.8)	(2,451.9)	832.1
Total net debt	**9,893.8**	**9,137.2**	**756.6**
Net debt attributable to assets held for sale	**(24.6)**	**-**	**(24.6)**

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 has been a decrease in cash and cash equivalents, totalling €832.1 million (including an increase of €190.4 million due to a rise in the net amount receivable on intercompany current accounts held by the Company on behalf of its subsidiaries), and a reduction of €22.5 million compared with 31 December 2020 in the long-term loan granted by Terna S.p.A. to the Uruguayan subsidiary, reclassified to net debt attributable to assets held for sale at 31 December 2021 (€24.6 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 €585,108,671.20 for 2021, equal to €0.2911 per share, of which €0.0982 per share was declared in the form of an interim dividend on 24 November 2021.

The Board of Directors thus proposes to appropriate Terna S.p.A.'s profit for 2021, amounting to €735,248,526.11, as follows:

- €197,381,214.40 to cover payment of the interim dividend payable from 24 November 2021 to the holders of each of the ordinary shares outstanding after adjusting for the treasury shares held at the "record date" of 23 November 2021 (with the relevant amount of €303,947.85 taken to retained earnings);
- €387,727,456.80 to pay a final dividend of €0.1929 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 22 June 2022, with an ex-dividend date for coupon 36 of 20 June 2022 (a record date, as defined by art. 83-terdecies of Legislative Decree 58 of 24 February 1998, the Consolidated Law on Finance, of 21 June 2022). The treasury shares held as of the above record date will not participate in the distribution. The final dividend for 2021 attributable to the treasury shares held by the Company at the record date, amounting to €597,062.54, will be taken to retained earnings;
- €150,139,854.91 to be taken to retained earnings.

EU Taxonomy
Regulation 2020/852

NFS

Introduction

The climate and energy targets that the European Union has set for 2030 and 2050, implementing the European Green Deal, also require the involvement of the private sector, with the aim of directing investment towards sustainable projects and activities. With this in mind, European institutions have introduced a taxonomy of economic activities that can be considered as "sustainable", namely they are potentially able to help achieve pre-set environmental objectives. The classification system introduced by EU Regulation 2020/852 (also "EU Taxonomy Regulation" or "Taxonomy" or "Regulation") aims to provide investors, businesses and public organisations with reliable shared criteria and methods to identify sustainable economic activities.

According to the Regulation, an economic activity can be defined as "environmentally sustainable" if it:

- **Contributes substantially to the achievement of at least one of the six environmental objectives set out** in Article 9 of the Regulation: climate change mitigation; climate change adaptation; the sustainable use and protection of water and marine resources; the transition to a circular economy; pollution prevention and control; the protection and restoration of biodiversity and ecosystems;
- **Does No Significant Harm** to any of the above environmental objectives;
- **Respects minimum social safeguards**, recognising the importance of international rights and standards;
- **Meets the technical screening criteria**, which, based on scientific evidence, specify the minimum conditions that must be met if the contribution of an economic activity to one of the defined environmental objectives is to be recognised as substantial. The Regulation identifies specific technical screening criteria for each of the environmental objectives. An activity is deemed to be in line when it meets the specific technical screening criteria.

From January 2022, the disclosure of information pursuant to the Taxonomy in consolidated non-financial statements is mandatory for companies that are already subject to the obligations laid down by Directive 2014/95/EU on non-financial reporting. However, for the first year of application of the Regulations, companies are required to disclose the share - in terms of revenue, capital expenditure (**CapEx**) and operating expenditure (**OpEx**) - of "taxonomy eligible" (also defined as "eligible") and "non-eligible" activities relating to climate change objectives, namely those activities included in Annexes 1 and 2 of Delegated Regulation 2139/2021, without having to comply with the technical screening criteria, the "Do No Significant Harm" criterion and the minimum social safeguards.

In this context, the Group's activities have been mapped - taking into account both the Regulated and the Non-regulated segments (which are fully described in section 3, "The Group's business") - in order to identify those activities that are taxonomy eligible, namely potentially able to contribute to climate change mitigation and adaptation objectives.

Following these analyses, the Group's activities were associated with **four eligible activities** that could potentially contribute to climate change mitigation. The following activities were identified:

- **4.9 Electricity transmission and distribution:** including activities in the **Regulated Activities** segment, primarily regarding the development, operation and maintenance of the National Transmission Grid, as well as dispatching and metering activities. **Non-regulated Activities** that serve electricity transmission are also included.
- **7.3 Installation, maintenance and repair of energy efficiency devices:** a number of projects to develop integrated solutions for third parties to meet high sustainability and flexibility standards implemented in 2021 were included.
- **7.6 Installation, maintenance and repair of renewable energy technologies:** including maintenance, plant monitoring and other services for third parties operating in renewable energy production.
- **9.1 Market-driven research, development and innovation:** including the Group's activities aimed at helping companies to make their energy consumption more efficient, designing and developing innovative solutions to cut energy costs, optimising production processes and obtaining Energy Efficiency Certificates (white certificates).

Accounting standards and contextual information

The **accounting policy**, namely the method for calculating the shares of revenue, CapEx and OpEx associated with the eligible activities identified by the Group, is based on the provisions of Annex 1 of Delegated Regulation 2178/2021.

For the purposes of allocating revenue, CapEx and OpEx to eligible activities, Terna has defined a clear and traceable methodology to meet quantitative and qualitative information needs. Specifically, the Group has reconstructed the indicators using data from the general, business and regulatory accounts.

To calculate the **eligible share of revenue**, the numerator is taken to be the consolidated net revenue generated by the sale of products or services, including intangibles, associated with taxonomy eligible economic activities, and the denominator is taken to be total net revenue (based on the criteria set out in point 1.1.1 of Annex 1 to Delegated Regulation 2178/2021). **Net revenue** has been identified by using data from the consolidated financial statements prepared in accordance with international accounting standards and with reference to the provisions of IAS 1, paragraph 82(a). None of the figures in the reported amounts relate to economic activities included in the taxonomy carried out for the Group's internal consumption.

To calculate the **eligible share of CapEx**, the numerator is taken to be capital expenditure recognised as assets in the consolidated balance sheet and associated with eligible activities, as defined according to the criteria set out in point 1.1.2.2 of Annex 1 of Delegated Regulation 2178/2021. The denominator is taken to be total capital expenditure, quantified in accordance with the criteria set out in point 1.1.2.1 of Annex 1 of Delegated Regulation 2178/2021. Specifically, the denominator comprises additions to tangible and intangible assets for the period before depreciation and amortisation, impairment losses and any revaluations, including those arising restatements and impairments, and excluding changes in fair value. In order to create the indicator, capital expenditure was identified using data from the consolidated financial statements, with reference to (a) IAS 16: Property, Plant and Equipment; (b) IAS 38: Intangible Assets and (c) IFRS 16: Leases. The reported amounts

do not include amounts relating to economic activities included in the taxonomy regarding expenses capitalised in accordance with d) IAS 40: Investment Property and e) IAS 41: Agriculture, as they are not applicable to the Group.

To calculate the **eligible share of Opex**, the numerator is taken to be the operating expenditure associated with eligible activities and defined according to the criteria set out in point 1.1.3.2 of Annex 1 of Delegated Regulation 2178/2021, and the denominator is taken to be total operating expenditure, quantified in accordance with the criteria set out in point 1.1.3.1 of Annex 1 of Delegated Regulation 2178/2021. The latter includes the following costs: direct non-capitalised costs relating to research and development; building renovations; short-term rentals; and maintenance and repair, as well as any other direct expenditure relating to the day-to-day maintenance of property, plant and equipment, carried out either by the company or by third parties to whom these tasks are outsourced, as needed to ensure the continuous and efficient operation of these assets.

As required by the Regulation, the table below shows the Terna Group's three KPIs for 2021, referring to **taxonomy eligible** and **taxonomy non-eligible** activities:

KPI	SHARE OF ELIGIBLE ACTIVITIES	SHARE OF NON-ELIGIBLE ACTIVITIES
CapEx	99%	1%
Revenue	88%	12%
OpEx	95%	5%

Share price performance

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 2021, the share price has risen 318% (a capital gain)**, providing a Total Shareholder Return (TSR[40]) of 971%, ahead of both the Italian market (the FTSE MIB, up 81%) and the relevant European sector index (DJ Stoxx Utilities), which is up 319%.

Europe's leading stock markets ended 2021 in positive territory on the back of the post-Covid economic recovery. Milan rose 23.0% during the year, whilst Paris and Frankfurt were up 28.9% and 13.0%, respectively. Madrid rose 7.9% and London 14.3%.

Performance of Terna's shares

Terna's shares closed 2021 having risen to €7.114, marking an increase of 13.82% (DJ Stoxx Utilities up 5.43%). The daily average volume traded during the year amounted to approximately 4.8 million. The share price reached a high for the year of €7.184 on 19 August 2021, achieving a new all-time high of €7.476 on 1 March 2022. It should also be noted that the ex-dividend date for the interim dividend for 2021, amounting to 9.82 euro cents per share, was 22 November.

KEY INDICATORS PER SHARE

	2021	2020	2019	2018	2017	2016
Number of shares (in millions)*	2,010	2,010	2,010	2,010	2,010	2,010
Price at year end (€ per share)	7.11	6.25	5.95	4.95	4.84	4.35
Market capitalisation** (€m)	12,898	12,142	11,273	9,507	9,668	9,367
Average price for year (€ per share)	6.42	6.04	5.61	4.73	4.81	4.66
Earnings per share (€)	0.393	0.391	0.377	0.352	0.339	0.315
Dividend per share (€)	0.291	0.270	0.250	0.233	0.220	0.206
Payout ratio***	74.12%	68.98%	66.22%	66.34%	64.24%	65.40%
Dividend yield****	4.1%	4.3%	4.2%	4.7%	4.5%	4.7%
Total shareholder return	18.8%	9.4%	25.1%	7.3%	15.9%	(4.3%)

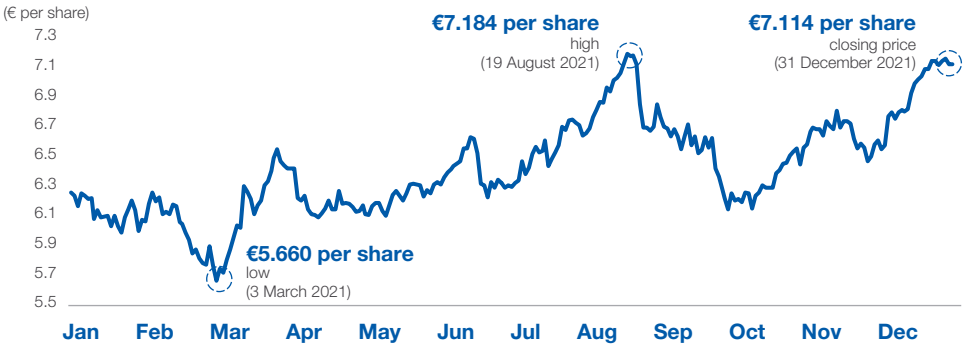
* *The total number of shares representing the share capital. The number of shares in circulation amount to 2,007 million, following the buyback of own shares to service the Performance Share Plan 2020-2023 in 2020 and the Performance Share Plan 2021-2025 in 2021.*
** *Based on the average price for 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.*

WEIGHTING OF TERNA'S SHARES	2021	2020
> on the FTSE MIB index	2.18%	2.44%

Source: Borsa italiana.

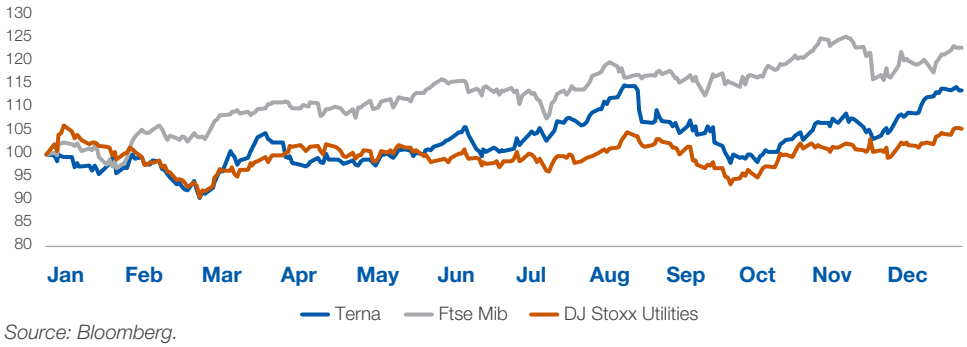
[40] Total Shareholder Return (TSR): total return on an equity investment, calculated as the sum of:
I. capital gain: the change in the share price (difference between the price at the end and at the beginning of the relevant period) as a percentage of the price at the beginning of the period;
II. reinvested 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.

PERFORMANCE OF TERNA'S SHARES *(Price from 1 January to 31 December 2021)*



Source: Bloomberg.

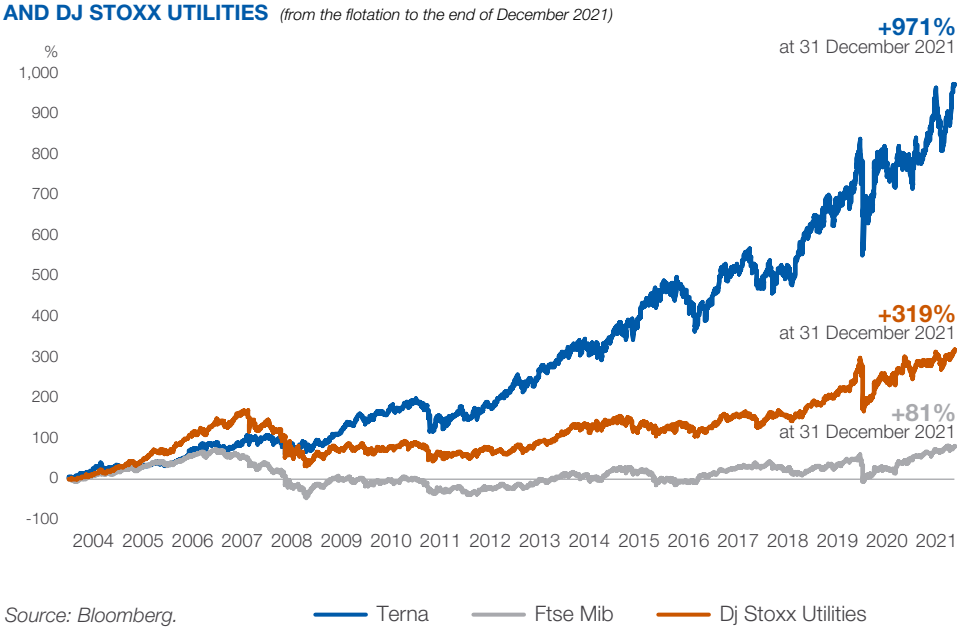
TERNA'S SHARES, THE FTSE MIB AND THE DJ STOXX UTILITIES *(Price between 1 January and 31 December 2021)*



Source: Bloomberg.

Terna's share price rose 13.82% in 2021, outperforming the the relevant European sector index (DJ Stoxx Utilities), which rose 5.43%. The FTSE MIB closed the year having risen 23.0%.

TOTAL SHAREHOLDER RETURN ON TERNA'S SHARES AND THE FTSE MIB AND DJ STOXX UTILITIES *(from the flotation to the end of December 2021)*



Source: Bloomberg.

Inclusion in international stock exchange sustainability indices

Terna's commitment to measuring and improving its sustainability performance is reflected positively in our ESG (Environmental, Social and Governance) ratings and, as a result, in our presence in international stock exchange sustainability indices.

Terna's inclusion in all the leading indices was confirmed in 2021. We were included for the thirteenth year running in the Dow Jones Sustainability World Index and, in February 2021, during the SEAL (Sustainability, Environmental Achievement & Leadership) Sustainability Business Awards 2020 we were ranked among the 50 most sustainable companies in the world, thanks to our overall sustainability performance in terms of leadership, transparency and sustainable business practices (in the 2020 Seal Organizational Impact Award category).

ESG RATINGS

AGENCY	DESCRIPTION
S&P Global	Its Corporate Sustainability Assessment ("CSA") is a periodic evaluation of companies' sustainability practices. The highest ranked companies are included in the Dow Jones Sustainability Index (DJSI). The CSA conducted in 2021 gave Terna a score of 89/100 (announced on 12 November 2021).
CDP (Carbon Disclosure Project)	Its periodically produced Climate Change questionnaire focuses on issues linked to climate change. The questionnaire results in a rating expressed in letters on a scale from D to A. In 2021, Terna received a score of "A-".
Sustainalytics	It periodically publishes an ESG Risk Rating Report on the Company. In 2021, Terna was rated as "Low Risk".
MSCI	It periodically publishes an ESG Ratings Report in which is analyses and assesses companies on a scale from "AAA" (the highest rating) to "CCC". Terna has been assigned a rating of "AA".
Vigeo Eiris	It periodically measures the ESG performances of companies. Its final opinion is based on four different levels of performance (Weak; Limited; Robust; Advanced). In September 2021, Terna was rated "Advanced" with a score of 69/100.
BLOOMBERG	Its Gender Reporting Framework is an international standardized reporting and disclosure method for workplace gender data. The highest ranked companies, such as Terna, are included in the Gender Equality Index (GEI).
IIS ESG	It assesses the sustainability performances of companies based on approximately a hundred criteria. The highest ranked companies, such as Terna, are awarded Prime status.
FTSE Russell	Its ESG ratings reflect the company's exposure to – and management of – ESG issues and constitute the main input for inclusion in the FTSE4Good indices.
Standard Ethics	Standard Ethics issues an opinion on companies' degree of compliance with regard to sustainability and corporate governance based on documents and guidelines published by international bodies. In December 2021, Terna was adjudged to have a positive outlook.
GRESB	GRESB (Global Real Estate Sustainability Benchmark) conducts assessments of the level of disclosure. In November 2021, Terna received the highest possible rating of "A".

ESG INDICES

INDEX	TERNA
DOW JONES SUSTAINABILITY	The DJSI indices select the companies with the best sustainability performances from among those with the highest capitalisation. Has been included in the DJSI World and DJSI Europe indices since 2009.
STOXX® GLOBAL ESG LEADERS	Launched in 2011, these indices are based on assessments made by the Sustainalytics rating agency and select the best shares based on ESG performance. Admission to the Global ESG Leaders Index, requires inclusion in at least one of the three specialist indices (Global Environmental Leaders, Global Social Leaders and Global Governance Leaders). Terna has been a member of all three indices since 2011.
EURONEXT VIGEO EIRIS	Developed by the Vigeo Eiris rating agency, these indices are based on a population of companies listed on international markets. Terna has been a member of the World 120, Eurozone 120 and Europe 120 indices since 2012.
FTSE4GOOD	The FTSE4Good indices are based on assessments carried out by FTSE Russel. Terna has been included in the index since 2005.
MSCI	Terna is a member of over a hundred of MSCI's general and sectoral ESG indices and has been included in the "Global Sustainability" index since 2007.
ECPI	ECPI has created sustainability indices and carries out research so as to provide additional non-financial information. Terna is, among others, one of the ECPI ESG Best in Class. Terna has been included since 2007.
SOLACTIVE EUROPE CORPORATE SOCIAL RESPONSIBILITY	This index has replaced the previous Ethibel Sustainability Index. It includes a basket of European shares – selected by the Ethibel Forum based on ESG performance. Terna has been included since 2009 (taking into account our earlier membership of the Ethibel Sustainability Index).
BLOOMBERG GENDER EQUALITY	This index measures companies' performance regarding gender equality issues. Terna has been included since 2019.
S&P	Terna is a member of numerous S&P ESG indices (in addition to the above Dow Jones Sustainability index). These indices reward companies with the best ESG performances in general and include indices focusing on the energy transition, in addition to the new S&P Gender Equality & Inclusion Index.
MIB ESG	Launched in 2021, this is Italy's first blue-chip index focusing on ESG best practices. The index is based on the outcome of the periodic assessment conducted by the agency, Vigeo Eiris.
GLIO/GRESG ESG	Launched in 2021, this is the first index to specialise in an assessment of the best ESG practices adopted by companies that manage strategic infrastructure. Terna has been a member of the index since its inception.
UNITED NATIONS GLOBAL COMPACT ("GC100")	Terna has been a member since 2013.

Other information

NFS ST4 201-1 >

Economic value directly created and distributed

Value added measures the value created by an enterprise, but also by an entire economy, over a certain period, usually a year.

The following figures have been computed taking into account all the requirements established by Standard GRI 201-1 for reclassification of the Group's consolidated income statement.

DETERMINATION AND REDISTRIBUTION OF VALUE ADDED [1]

	UNIT	2021[2]	2020[2]	2019	CHANGE 21-20	% CHANGE 21-20
A - Revenue (including financial income)	€	2,653,020,254	2,528,924,236	2,383,691,817	124,096,018	5
1 – ECONOMIC VALUE GENERATED (A)	**€**	**2,653,020,254**	**2,528,924,236**	**2,383,691,817**	**124,096,018**	**5**
B – Operating costs	€	1,104,334,170	1,014,886,066	938,286,449	89,448,104	9
C – Remuneration of employees	€	295,308,668	287,276,003	257,523,131	8,032,665	3
D – Payments to credit providers	€	89,806,289	94,425,807	86,149,234	(4,619,518)	(5)
E – Payments to providers of risk capital [3]	€	585,108,671	541,692,844	501,493,004	43,415,827	8
F - Payments to the government	€	359,779,495	338,577,792	337,429,627	21,201,703	6
G – Investments in the community [4]	€	209,000	588,685	361,970	(379,685)	(64)
2 – ECONOMIC VALUE DISTRIBUTED (B+C+D+E+F+G)	**€**	**2,434,546,293**	**2,277,447,197**	**2,121,243,415**	**157,099,096**	**7**
3 – PROFIT/(LOSS) FOR THE YEAR FROM ASSETS HELD FOR SALE	**€**	**(12,844,006)**	**2,092,819**	**-**	**(14,936,825)**	**(714)**
4 – ECONOMIC VALUE RETAINED (1-2+3) [5]	**€**	**205,629,955**	**253,569,858**	**262,448,402**	**(47,939,903)**	**(19)**

[1] Amounts relating to the creation and distribution of economic value have been taken from the consolidated income statement prepared in accordance with IFRS/IAS. The Group has used IFRS/IAS since 2005.
[2] Given that the requirements of IFRS 5 have been met, amounts for 2020 have been restated as the total results for 2021 and 2020 attributable to the South American subsidiaries included in the planned sale of assets have been classified in the item "Profit/(Loss) from assets held for sale" in economic value retained.
[3] Payments to the providers of risk capital in 2021 correspond with the interim dividend for 2021 (€197.4 million) payable from 24 November 2021 to the holders of each ordinary shares outstanding (net of treasury shares held at the record date of 23 November 2021, the amount for which was taken to "retained earnings") and the final dividend to be proposed to the AGM, as decided by the meeting of Terna S.p.A.'s Board of Directors held on 17 March 2022 (€387.7 million).
[4] Only donations are considered (for more information on "Investment in the community", see page 222).
[5] Corresponds with consolidated net profit for the year (including the share attributable to non-controlling interests) after payments to the providers of risk capital.

There was a 5% increase in the economic value generated by the Terna Group in 2021 compared with 2020, due primarily to the tariff adjustment resulting from the increase in the RAB, increased revenue resulting from recognition of the efficiency bonus linked to the investment costs incurred on the expansion of transmission capacity for 2020, partly offset by reduced revenue in the form of the bonus receivable under the RENS (Regulated Energy Not Supplied) incentive mechanism (due essentially to the form in which revenue was recognised in the regulatory periods) and other non-recurring items.

Compared with 2020, economic value distributed is up 7%. This mainly reflects operating costs (up 9%), broadly relating to the Brugg Group and the Tamini Group and the contribution from the LT Group and payments to the providers of risk capital (up 8%, in line with the growth targeted in the Industrial Plan), after a reduction in payments to credit providers (down 5%).

Economic value retained also includes the net result for the year from assets held for sale, marking a deterioration of €14.9 million compared to the previous year, mainly due to the adjustment of the value of net assets held for sale, recognised in accordance with IFRS 5.

It should also be noted that, in 2021, Terna received the sum of €22,902,683 from the Ministry for Economic Development as an advance on government grants for projects to be funded under the National Operational Programme (NOP) and the sum of €13,261,517 from public organisations in the form of grants for projects funded by the Regional Operational Programme (ROP). Other grants regard requests for the re-routing of infrastructure.

< 201-4

GRANTS

€	2021	2020	2019
Grants related to assets from public organisations (*)	13,261,517	4,386,484	5,272,640
For projects funded by the Ministry for Economic Development (*)	22,902,683	-	7,342,518

** These grants are recognised as a direct reduction in the carrying amount of assets.*

Taxation

< 207-1 EG2

In line with the principles of transparency and legality set forth in the Code of Ethics, the Terna Group's approach to taxation is governed by full compliance with tax legislation in the countries where the various Group companies operate. This approach meets our obligation to make an economic contribution to the territories in which we operate. In these countries, overall tax revenue represents an essential contribution to public expenditure and, thus, to economic development and the social welfare of citizens.

In Italy, the conduct of the Group's Regulated Activities (the transmission and dispatching of electricity) under a government concession requires compliance with the criteria of transparency and legality, also from the standpoint of tax policies.

Overseas instead, the Group's activities are primarily focused on the construction and/or management of power lines. Our activities are not, therefore, in any way influenced by tax planning concerns, but rather by the real prospect of achieving economic development, with a view to diversifying and exploiting business opportunities in our sector of operation. This is borne out by the fact that even in counties where the corporate tax rate is higher than in Italy (Latin America).

Moreover, such activities are generally carried out on the basis of concessions, with the revenues determined by local regulatory authorities. Thus, there is an underlying assumption that Group companies are wholly committed to respecting local tax regulations.

The Group's Tax Unit, with support from external consultants, is responsible for assessments and keeping up with regulatory changes. Any controversial aspects are addressed and discussed with associations to which the Group belongs (e.g., ASSONIME) and, in some instances, brought directly to the attention of tax authorities, via requests for rulings.

Tax governance, control and risk management

< 207-2

The Group's tax governance is inspired by the principles of correct and prompt determination and payment of the taxes owed by law, implementation of the related controls and minimisation of any tax risk.

Tax risk is understood to comprise not only risks deriving from the possible violation of precise mandatory rules and regulations – for example the failure to comply with new disclosure requirements – but also those linked to the principles and/or aims of the legal systems in the various jurisdictions

where the Group operates. Such risks derive from external factors such as, by way of example, uncertain interpretation attributable to ambiguity or the lack of clarity of tax codes and regulations.

The main processes governing taxation and the related obligations are constantly monitored on the basis of procedure 262.

In 2020, the Group bolstered its own internal control system by updating its organisational model in accordance with the 231 Organisational Model. An external consultant was also appointed in 2020 to conduct a risk assessment regarding tax violations and offenses under Law 231/01. The assessment, which was completed in the first half of 2021, did not find evidence of any organizational issues relating to management of tax risk within the Group.

Definition of the Group's "Transfer pricing policy" was also completed in 2021. This aimed to ensure correct determination of the arm's-length price of intercompany transactions carried out on a transnational basis, with the drafting of the specific documentation ("Master File" and "Local File") called for by Italian legislation. The adoption of a "Transfer pricing policy" was specifically noted in the tax returns for 2021 submitted by the Group companies that engage in overseas transactions.

207-3 >

Stakeholder engagement

In the case of especially significant tax issues or when there is a high level of uncertainty, the Company relies on options provided for by tax provisions, such as requests for rulings or advance tax agreements with the tax authorities.

207-4 >

To complete the disclosure presented on pages 48-49, the following table shows key data on taxation relating to Terna and its subsidiaries (in €m).

(€m)

COMPANY	PRE-TAX PROFIT/LOSS	PROPERTY, PLANT AND EQUIPMENT	INCOME TAX EXPENSE FOR THE YEAR	INCOME TAX PAID DURING THE YEAR	REVENUE FROM INTRAGROUP TRANSACTIONS
Terna S.p.A.	1,042.6	13,447.4	297.7	285.5	53.1
Terna Rete Italia S.p.A.	22.3	26.4	7.6	14.9	421.6
Rete S.r.l.	78.7	1,057.6	20.5	21.7	134.0
Terna Crna Gora d.o.o.	8.8	201.0	0.5	-	15.9
Terna Energy Solutions S.r.l.	4.1	7.2	0.9	0.8	8.1
Gruppo Tamini	2.4	35.1	0.9	-	35.4
Avvenia The Energy Innovator S.r.l.	(0.3)	0.3	(0.1)	-	0.1
Terna Interconnector S.r.l.	1.4	-	-	4.1	1.1
Terna Plus S.r.l.	(26.8)	0.7	(1.3)	0.2	0.6
Terna Chile S.p.A.	(1.0)	-	-	-	-
SPE Santa Maria Transmissora de Energia S.A.	3.7	0.1	0.3	-	-
SPE Santa Lucia Transmissora de Energia S.A.	12.8	0.8	2.9	-	-
Terna Perù S.A.C.	(6.1)	-	0.1	-	-
Difebal S.A.	1.8	-	(0.2)	-	-
Terna 4 Chacas S.A.C.	(0.2)	-	-	-	-
Linha Verde I S.A.	3	-	0.2	-	-
Linha Verde II S.A.	(14.1)	-	0.6	-	-
Gruppo Brugg	0.3	41.0	0.7	-	61.9
Gruppo LT	1.2	0.3	0.3	-	1.1

The difference between income tax due on companies' net profit or loss and tax payable reflects payments on account made by the Terna Group during the year. Reconciliation of the statutory and effective tax rates, presented in the notes to the consolidated financial statements, is primarily linked to the combined effect on taxation of income and expenses that do not affect determination of the tax base, as provided for in the related legislation.

TAXES PAID OVERSEAS

With regard to taxes paid overseas by the Group's subsidiaries in 2021, the following should be noted

Terna

For activities relating to the Italy–Greece interconnector[41], income taxes totalling €1,209,645 were paid on income earned in Greece.

Terna Crna Gora

In 2021, the Company invested a total of €6,847,852 in Montenegro, linked primarily to supplies and work on the laying of fibre and access roads. Specifically, 2021 saw completion of the installation of a fibre system linking Italy and Montenegro that will enable the converter substations included in the MONITOR project to communicate directly. In addition, outstanding civil engineering works and the access road (including pavements, asphalt and lighting) were also completed. As regards consents, the provisional operating licence was renewed in accordance with Montenegrin regulations (expiring in March 2022).

In terms of operating performance in 2021, the company generated revenue of €15,920,359 and posted a net profit of €8,283,532. Income tax totalling €519,984 was recognised, of which €411,650 regarded deferred taxes due to tax depreciation rates exceeding statutory rates and deferred tax assets totalling €108,334 based on tax losses posted in the last 2 years and estimated taxable income in future periods. Consequently, the company does not report any current income taxes paid to the Montenegrin government in Montenegro.

As regards other forms of taxation, in 2021 the company paid property taxes totalling €29,329 (including €26,201 on land it owns in the municipality of Kotor and the remainder on the property used as its registered office, located in the municipality of Podgorica).

Provisions of €78,623 were made in 2021 to cover future tax liabilities (potential taxation of the converter substation).

Tamini Group

Approximately €63,360 was paid, primarily regarding taxes on services and withholding tax.

Terna Chile

The Group's Chilean subsidiary paid municipal tax of 4,611,088 Chilean pesos and personal income tax of 22,084,459 Chilean pesos.

Difebal S.A.

The company paid 37,214,300 Uruguayan pesos, primarily in the form of value added tax of 32,429,066 Uruguayan pesos, income tax on non-residents of 3,506,777 Uruguayan pesos and personal income tax of 159,701 Uruguayan pesos.

Peru

The Peruvian subsidiaries, Terna Perù S.A.C. and Terna 4 Chacas S.A.C., paid value added tax totalling US$204,642.

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

Brazil

In 2021, the Brazilian subsidiaries, Santa Maria Transmissora de Energia (SMTE), in the state of Rio Grande do Sul, Santa Lucia Transmissora de Energia (SLTE), in the state of Mato Grosso, Transmissora de Energia Linha Verde I S.A. and Transmissora de Energia Linha Vrde II S.A., in the state of Minas Gerais, paid total income tax of 21,373,668 Brazilian reals.

Brugg Group

The Brugg Group, through its subsidiaries operating in China, India and Germany, paid income taxes totalling 220,686 Swiss francs and taxes on goods and services totalling 55,952 Swiss francs in 2021.

Outlook

With the pandemic expected to ease with respect to the earlier part of the year, 2022 will see the Group continue to focus on delivering on our 2021-2025 Industrial Plan, which aims to confirm and strengthen Terna's central role in driving the Italian energy system and enabling the ecological transition. Unfortunately, there is a risk that the recent conflict between Russia and Ukraine and the resulting pressures on commodity prices will have a negative impact on the pace of economic recovery. With specific regard to the total of €10 billion to be invested in the next five years, approximately €1.7 billion is due to be invested in 2022.

In line with the 2021 National Transmission Grid Development Plan presented in July, which targets investment of €18.1 billion over the next ten years (up 25% on the previous plan), expenditure on **Regulated Activities** will be stepped up. Investment will focus on enabling the energy transition and facilitating the development and integration of renewable sources, making a major contribution to achieving the ambitious goals set out in the Green Deal and helping to drive the country's economic recovery.

The principal electricity infrastructure under construction includes the Tyrrhenian Link project, with the consents process for the West Link section expected to begin during the year, following the launch of the process for the East Link section in November 2021. The consents process for the Adriatic Link project, the new submarine cable that will connect the Abruzzo and Marche regions, is also expected to begin during the year. The principal electricity infrastructure under construction includes the interconnection with France, expected to enter service in 2022. In addition, the main projects designed to increase exchange capacity between the various areas of the Italian electricity market include the Colunga-Calenzano and Paternò-Pantano-Priolo power lines, with work due to begin in the first case and to continue in the latter case during the year.

In terms of the Security Plan, the planned installation of synchronous compensators will continue, with the aim of supporting 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.

Work on the reorganisation of electricity grids in metropolitan areas will also continue during the year, primarily involving the renewal of existing infrastructure with new technologically advanced connections meeting the highest standards in terms of environmental sustainability (e.g., Florence, Rome and Turin).

With regard to **Non-regulated Activities**, Terna will continue to consolidate our role as a provider of both connectivity, pursuing opportunities based on exploiting the Group's own fibre infrastructure, and energy solutions, developing high value-added services for corporate customers and exploiting market opportunities for traditional and renewable customers. This will include openings resulting from the acquisition of the LT Group.

In the industrial segment, the aim is to build on Tamini's performance and, with regard to Brugg, take full advantage of its distinctive expertise in terrestrial cables and of synergies with the Terna Group's other businesses. The new corporate structure put in place in the first half of 2021 is also expected to be beneficial in this regard.

International Activities will focus on completing the due diligence process relating to the sale of our South American assets by the end of the year. Within the scope of the assets being sold, work on the construction of the two Linha Verde I and Linha Verde II power lines in Brazil will continue, with the lines due to enter service in 2023 and 2022, respectively.

The strategic assessment of 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.

In line with our approach in 2021, the Group will focus on stepping up investment in innovation and digital solutions in order to continue the transformation that will enable us to manage the growing complexity of the electricity system. In addition, increasingly central roles will be played by people development and the insourcing of strategic competencies, to the strengthening of departments, and to optimising the working environment for our people through delivery of the **NexTerna** project, which has already achieved the first important milestones in the seven areas into which it is divided. The Group's commitment to development and renewal of the assets that make up the grid, together with operation of the infrastructure built, have had an impact on the overall level of debt. For the first time since the demerger from Enel, this has led the Group to strengthen its balance sheet via the issue of hybrid bonds worth €1 billion. The issue, aimed at institutional investors, saw extremely high demand, with applications topping €4 billion and the issue being four times oversubscribed.

Management of Terna's business will continue to be based on a sustainable approach and respect for the ESGs, ensuring that we are able to minimise our environmental impact, involve local stakeholders and meet the need for integrity, responsibility and transparency.

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

« Our form of innovation isn't limited to technology but starts with people. Our corporate entrepreneurship programme, "Terna Ideas", gives our colleagues the opportunity to put forward innovative proposals, leveraging their expertise and offering new solutions for the energy transition. In just a short time, we have gathered proposals from over 10% of the workforce: a great success in terms of engaging people and spreading a culture of innovation. »

Marco Pietrucci
Innovation - Innovation & Market Solutions

#Ternapeople #DrivingEnergy

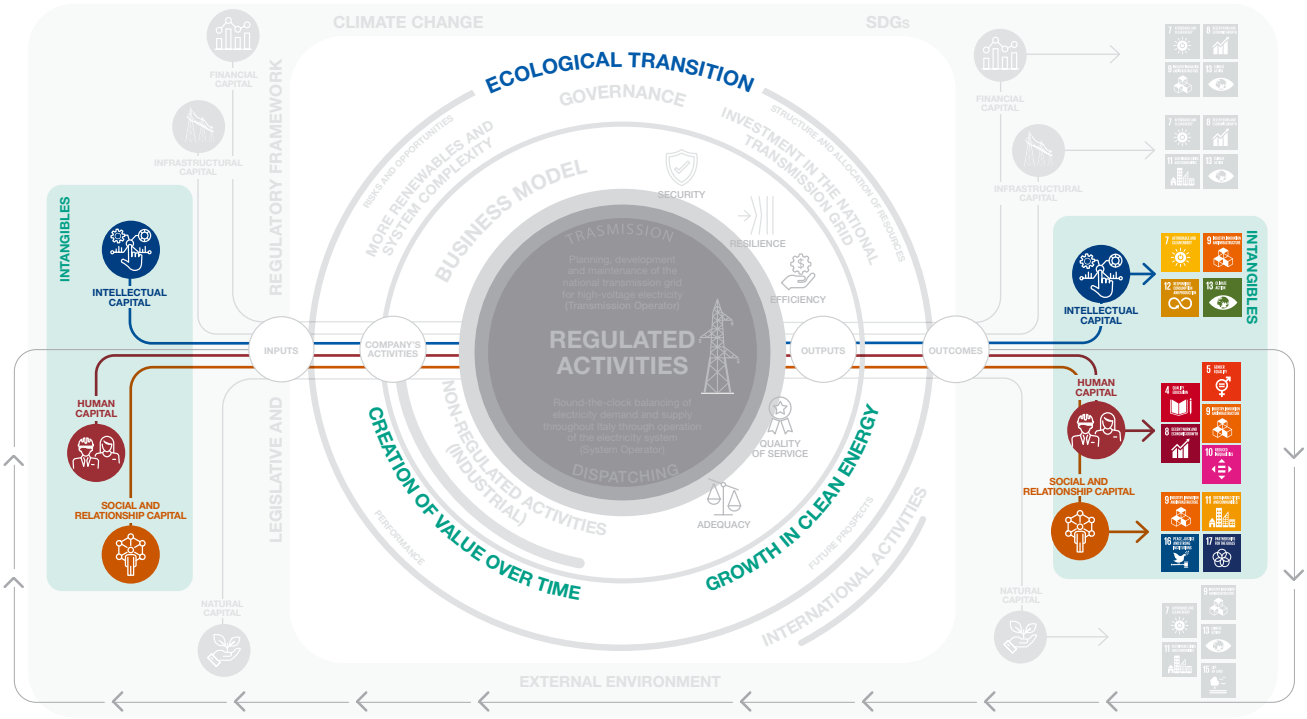
4

Intangible capitals

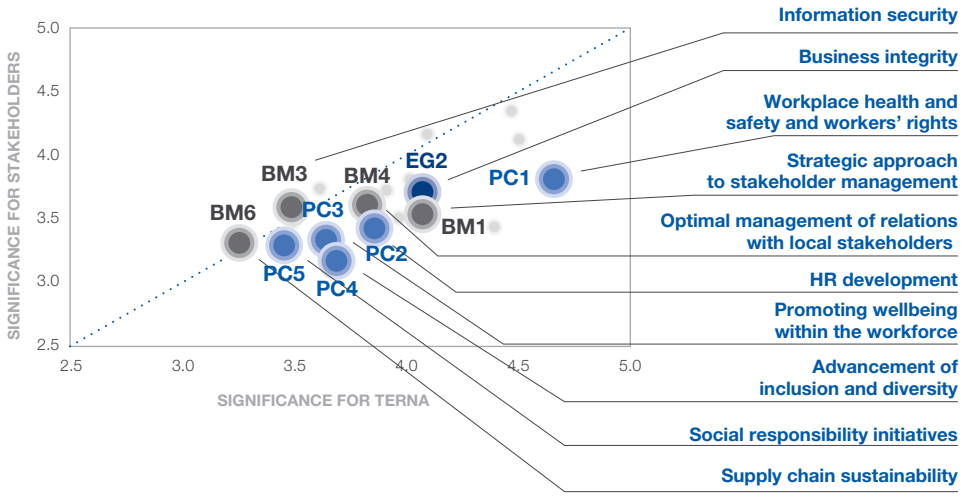
In this section

The contribution made by sustainability to the resilience of the business model and, as a result, to the creation of value over time, finds its expression in the management and measurement of intangible capitals. Our role in enabling and driving the ecological transition means having access to intellectual capital consisting of data and innovation capabilities, to competent and motivated human capital, and to solid social and relationship capital to ensure that we are in the best possible position to manage stakeholder relations. The common denominator here is our Code of Ethics, which establishes the values to be applied by all Terna's people as they go about their daily work and which is the basis for all our policies and guidelines.

VALUE CREATION



MATERIALITY



These infographics highlight the topics dealt with in this section with the aim of **facilitating information connectivity**: in this way, the section offers an overall view showing the links between all the factors that influence Terna's ability to create value over time and how they are dependent on each other. Material topics are indicated with a cross-reference in blue, showing the relevant code.

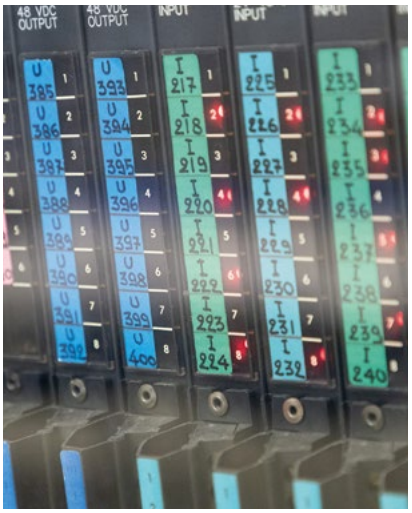
The importance of the intangible capitals

In an economic environment undergoing major change, giving rise to significant risks and uncertainties, businesses are faced with the need to boost their flexibility and adaptability by continuously updating the knowledge and skills of their human resources. In other words, the creation of value over time no longer only depends on having access to sufficient financial capital and infrastructure assets (tangible capital), but also – and above all – on the ability to manage and increase potentially critical factors such as know-how, innovation and the quality of relationships, all linked to elements included within the scope of "**intangible capital**".

Very briefly put, intangible capital brings together elements that, by interacting with each other, enable a business model to function properly: these elements are **intellectual capital** (know-how, brands, licences, policies, guidelines, certifications, etc.), **human capital** (skills, to be continuously updated through suitable training programs, and management expertise, but also the ability to motivate and foster the loyalty of personnel), including organisational capital (the ability to manage the business), and **social and relationship capital** (the ability to establish effective relations with all the entity's stakeholders). In this sense, **sustainability** – as we have seen during the two years of the pandemic – is a cross-cutting element that helps to boost business model **resilience**, thanks to an approach that takes into account both medium and long-term impacts.

The key factor, cutting cross all these forms of capital, is **innovation** because it both enables and increases them, thereby adding the value that makes the difference – always decisive – between a business's simple book value and its much more realistic market value.

The role of intangible capital in achieving Terna's strategic goal of delivering the energy transition consists in the part it plays in shifting our role from enabling to **driving the transition**. The shift from a traditional energy system, based on the use of fossil fuels, to the complexities of a new energy paradigm based on renewables depends on the contribution provided by these forms of capital, described in Section 3, "The Group's business", to which reference should be made.



Intellectual capital

Of all the above forms of intangible capital, intellectual capital has the biggest overall impact, whilst at the same time being the most difficult to unambiguously define.

Its quality, and as a result its ability to create value, is in fact influenced by both **human capital**, in its widest sense that includes the strength of an organisation's values and those of its individual people in terms of skills, sense of loyalty and creativity, and **social and relationship capital**, which it helps to boost in terms of the quality of stakeholder relations and reinforcement of the entity's reputation.

A key role in developing the intellectual capital needed to respond to market challenges and uncertainties is played by **innovation**, which acts as an enabling factor providing solutions with a direct impact on the organisation's people (see the paragraph on "NexTerna" on page 53 and key results on pages 173-176) and assets.

The main contribution this form of capital makes to Terna's business relates to the rapid consolidation of our role as a System Operator ("SO"), or in **driving the energy transition**. This role is carried out alongside and amplifies the traditional role of TSO, which depends on a growing ability to analyse and properly manage big data relating to the performance of renewable sources to guarantee a constant supply of new flexible resources, essential to ensuring that the electricity system is **fit for purpose**.

The impact of intellectual capital and innovation on assets and the electricity system is dealt with at the beginning of this section of the Report that shows the results for 2021, presenting developments in the values forming the basis of the **Code of Ethics**[42] and, as such, the cornerstone of intellectual capital. In effect, this relates to compliance with the law, an essential element in ensuring ethical conduct of the business, the growth of management systems and the oversight of aspects relating to human rights and the supply chain. The constant monitoring of all these areas is a key aspect of risk management.

Management of the electricity system

Electricity **data** is without doubt Terna's most important content asset, one of the cornerstones of our intellectual capital.

This is the data that the TSO gathers and processes for the purposes of **managing the electricity system** (the information used by Dispatching, the nerve centre of the System Operator) and as the basis for on which it bases its **statistics, scenarios and analysis**, but also **processes, maintenance activities and the strategic development of assets**, indispensable within the context of the energy transition.

[42] The Code of Ethics, approved by Terna's Board of Directors on 21 December 2006, defines the principles and rules of conduct voluntarily adopted to ensure that the Company operates with integrity. By setting out guiding principles forming the basis for internal policies and regulations, it effectively represents the Group's "constitutional charter". It is available on Terna's website (https://download.terna.it/terna/0000/0063/62.pdf).

System data and the "intelligent" network

Data on demand – meaning demand for electricity that the system is required to meet or the primary sources with which this demand is met (thermal, hydro, etc.) is just one example of the **most significant data linked to management** of the system: originally of a provisional nature, as they are processed in real time on the basis of measurements and estimates, this data is then finalised in the **Annual Report on Operational data** and confirmed in the document on **statistical data on electricity in Italy**, partly thanks to the contributions from producers.

This data forms the basis for strategic documents and assessments, such as those relating to **future energy scenarios**. They are processed with the aim of evaluating the benefits of transmission grid development projects, as well as for the purpose of contributing to achievement of national policy goals. Instead, in the **Adequacy Report for Italy**, based on the same sources, Terna provides an assessment of the generation and storage resources needed to ensure the adequacy of the electricity system in the scenarios considered over a ten-year period. In this way, it is possible to establish the available capacity that will be sufficient to meet the country's decarbonisation targets within the set deadlines and, as a result, size the quantities of energy to be procured via capacity market auctions.

Another key area is the data on grid infrastructure gathered and used in combination with Terna's expertise and experience to produce analyses for use in planning, development and maintenance of the national transmission grid (NTG). The most common high-voltage lines, the electricity cables that connect them and substations have over the years become a key network for collecting data necessary for the TSO's activities and increasingly useful to other members of our ecosystem, such as research centres or government institutions. This represents nothing less than an **intelligence network**, consisting of physical and virtual assets, engineering technologies and digital software, advanced sensors, processors and models. The quantity of data processed in this way helps to produce the reports that play a key role in management and development of the grid, such as the **Resilience Plan**, enabling assessment of the interventions needed to ensure that the electricity system is able to withstand the **extreme weather events that have become increasingly frequent** in recent years due to climate change.

NFS

BM3

Innovation

In line with the strategic goal of ecological transition, Terna has mapped out the evolution of the technological scenario – which is needed to support its implementation - and identified emerging issues for the development of Italy's energy system.

Based on their potential impact on business, the technologies identified have been grouped into four clusters that relate to the initiatives, which in turn are organised in an **Innovation Portfolio**, ranging from the initial design stage through to project development. Terna's four innovation clusters are:

- **Digital**: intelligent energy management and power solutions;
- **Energy Tech**: solutions developed through more efficient and green technologies;
- **Advanced Materials**: research into and solutions for eco-friendly materials, with a view to reducing environmental impact;
- **Robotics**: automation of field and administrative processes.

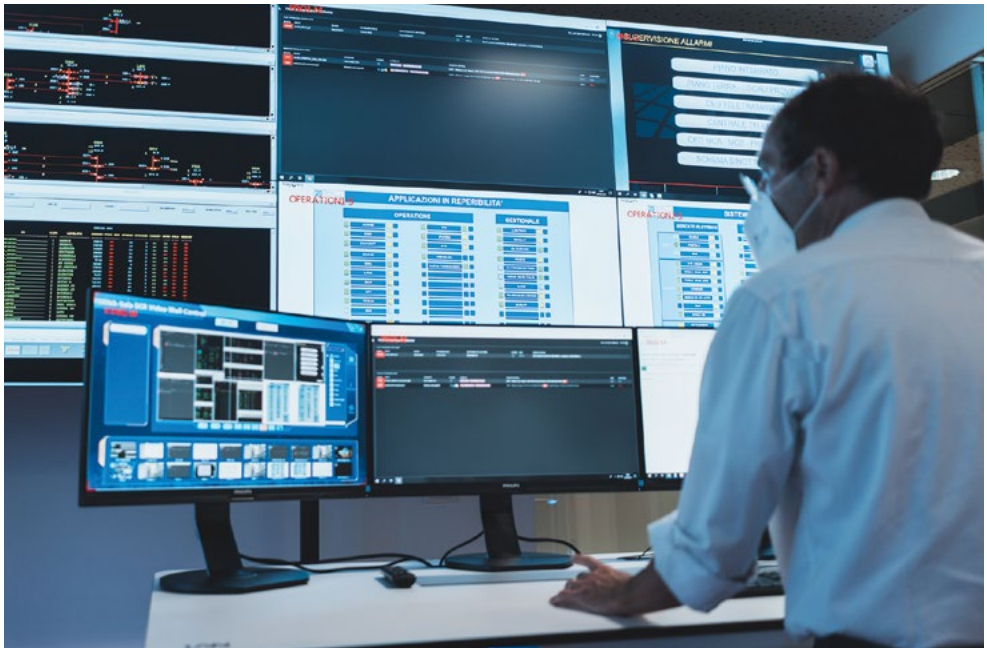
Innovation projects

In 2021, 69 high-value-added projects were mapped in the innovation portfolio, including:

- **Drones for specialised activities**
  The aim of the project is to build a prototype drone to carry out surveying and maintenance tasks, especially the measurement of electric fields (with POSITRON sensors) and electrical resistance (with OHMSTIK sensors), which reduces the risk of live-line inspection and working and introduces new specialised measurements. This project is part of a programme of innovation initiatives regarding the development of occupational safety solutions and technologies.
- **Equigy**
  The project regards the development of a "Crowd Balancing Platform" for the standardisation of processes and protocols relating to the mass enabling of distributed resources for flexible supply, promoting cooperation at European level among the various actors in the electricity sector value chain and taking advantage of blockchain technology. The aim is to facilitate the enabling of distributed resources in flexibility markets.
- **Phonograms 2.0**
  This solution involves the digitalisation of communications between operations rooms and workers in the field during safety manoeuvres on high-voltage installations, which until now have been carried out by telephone, via the exchange of phonograms. The project is being developed in collaboration with Messagenius, a company that provides a smart, secure corporate messaging system which can be integrated with existing IT systems.

Enhancement of intellectual property

To protect its innovation projects, Terna has developed a process aimed at safeguarding intellectual property ("IP") in its various forms, creating a competitive advantage as well as new business opportunities. Therefore, all Company departments are supported and involved in the design and use of intellectual property, the most appropriate protection measures are evaluated in the preliminary phase, all the necessary checks are prepared, and the patent is filed with the competent office. To date, Terna has a **portfolio of 19 filed patent applications, of which 8 were filed in 2021**.



Idea generation and scouting

Terna's approach is based on **Open Innovation**, which encourages opening up to new development fronts within and beyond the Company, via dynamic interactions with the innovation ecosystem. The main Open Innovation initiatives carried out in collaboration with large companies, Italian start-ups, SMEs and innovation facilitators are described below.

Terna Ideas

The Terna Ideas programme is aimed at spreading and boosting **entrepreneurial culture** within the Company and encouraging a **shift in the mindset** of people at Terna. This idea generation and incubation initiative addresses all the Company's staff, with the aim of creating and developing new projects that have the potential to make a positive impact on Terna's business.

As well as enabling the gathering of innovative ideas (and subsequent development of some of them), Terna Ideas has also allowed an unparalleled snapshot to be taken of innovation requirements across all the different areas of the Company.

Of the 143 ideas, submitted by around 400 employees organised in teams from across all areas of the Company, 14 were selected and an initial incubation phase was launched. Following the incubation phase and during the "Process Pitch" in October, the seven best ideas were selected and presented to senior management at the final "Pitch Day" in December. At this event, senior management announced the three winning ideas, which will be turned into actual innovation projects led by their respective teams.

Next Energy 5

This initiative is promoted by Terna in collaboration with the Cariplo Foundation and Cariplo Factory, to develop young talent and support the growth of start-ups and companies with innovative projects.

Calls for proposals for Next Energy 5, focused on **NexTerna** solutions, were published in September. These calls are aimed at further boosting the **culture of innovation** as an enabling factor for change and shifting mindsets, as well as consolidating the "**New Normal**", by identifying and developing new solutions to capitalise on the acceleration of the digitalisation of work activities and enhancing individuals.

Open Italy

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 via concrete innovation projects. Terna has identified four priority areas of innovation (Operational Improvements, Privacy & Cybersecurity, Urban Intelligence & Connections, Change Management for New Ways of Working and Digital HR).

The programme has given rise to three new projects: two projects in the field of Digital HR and New Ways of Working, called "NexTSkill" and "JumpInTerna", in collaboration with the start-ups Skillgym and Another Brick respectively, and a project in the field of Cybertech, called "Terna CyberPalace", in collaboration with the start-up, Another Brick.

International Innovation

In collaboration with Mind The Bridge, Terna has launched a programme aimed at extending the Company's innovation initiatives to the most important international ecosystems in order to identify new solutions and develop internal skills through cross-fertilisation, capturing new business opportunities and expanding Terna's brand. In 2021, Terna took part in four Scaleup Summits and 22 challenges, which gave rise to five projects for development.

Start-up Intelligence programme

The seventh edition of the innovative Start-up Intelligence programme run by the Polytechnic University of Milan, focusing on research, scouting and community activities, ended in September. Aimed at innovation managers and people who deal with digital innovation within the Company, the programme offers an annual calendar of research, scouting, discussion and cultural awareness activities with the direct involvement of participating organisations. In view of the Company's reconfirmation of its commitment to the programme's objectives, Terna took part the new edition in October 2021.

Luiss Data Girls

This programme was set up to support Luiss Business School students in grasping the skills and employment opportunities offered by data management and the digital world. The fifth edition of the programme ended in April with the Terna team winning the challenge regarding sustainable materials to reduce emissions and improve energy efficiency, which was proposed in collaboration with Avvenia.

At the sixth edition of the programme, launched in November 2021, in collaboration with TES, Terna participated with a challenge regarding emissions and environmental and social externalities avoided by using a photovoltaic system incorporated with a storage system.

Maker Faire 2021

In October, Terna participated as a Gold Partner in Maker Faire, Europe's largest innovation event, where we had the opportunity to create a concrete and tangible link between makers, researchers, innovators, professionals and industry. **IoT4theGrid, VR and 3D printing** projects (in the physical and digital stand) and the **E-Mobility** project (in the digital stand) were presented during the event.

SMAU 2021

SMAU Milan is Italy's main information and communication technology trade fair, which provides an opportunity to interact and discuss with other companies and start-ups and be involved in an innovative format based on new ways of meeting up, including innovation supply and demand, guided tours and speed pitching. In October, Terna took part as a sponsor, and we also received the **"Smau Innovation Award" for the Terna Ideas programme**.

Innovation processes and tools

Development of the projects in the portfolio and the quest for ideas and solutions in the innovation ecosystem is also supported by the progressive adaptation and optimisation of certain business processes to facilitate interaction, dialogue and collaboration with the innovation ecosystem that regards Terna.

In 2021, the following new tools were defined to enable Terna's positioning in the innovation ecosystem.

Start-up Procurement

Aim: innovare il processo di procurement – qualificazione e acquisti – e generare valore per l'ecosistema dell'innovazione consentendo alle startup e alle PMI innovative di accedere al mercato a condizioni che tengano conto della loro peculiarità.

Outcome: During 2021, four **new product categories for innovative start-ups and SMEs** were identified, and contract awarding procedures and the standard innovation contract format were defined.

Communicate Innovation

Aim: Draw up a new targeted communication strategy, by using innovative tools and stakeholder engagement, to position Terna in the innovation ecosystem.

Outcome: During 2021, projects and initiatives were communicated externally via the main innovation sector publications (e.g. Wired, StartupItalia!, Ninja, etc.).

Ethics and intellectual capital

The issues dealt with below share the fact that they all make close reference to the values contained in the Code of Ethics, which forms the basis of a part of Terna's intellectual capital, in terms of the structured organisation of policies, guidelines and operating instructions designed to create value. Adherence to the general principles of legality, integrity and responsibility, allied with those specific to Terna, relating to good governance, respect, fairness and transparency, provides the ethical basis for the company's day-to-day conduct of its business.

NFS

EG2

SASB

Compliance, integrity and combatting corruption

The Code of Ethics calls for compliance with the principles contained in the United Nations Global Compact. This approach was confirmed in 2009 with Terna's formal membership of this international initiative, thus consolidating our commitment to adhering to the ten principles covering human rights, labour, the environment and the prevention of corruption and, subsequently, to achieving the sustainable development goals (the 17 "SDGs") set out in the United Nations 2030 Agenda.

Legality and honesty are thus two of the general principles on which Terna's Code of Ethics and the conduct of its business are based.

Compliance with legislation

< 419-1

Compliance with the law is the necessary starting point for any voluntary improvement initiative. A summary of administrative or judicial sanctions and any significant court judgements regarding Terna is provided below. Also taking into account the indicators contained in the GRI Standards, Terna's compliance performance is illustrated below:

- No significant procedures of an administrative or judicial nature resulting in final judgements or in fines or court injunctions (e.g., prohibitions), were registered in 2021 or in the previous two years, nor did any of its employees receive criminal convictions (full compliance with regard to both environmental and socio-economic matters).
- In particular, the accounting records for 2021 do not show any pecuniary sanction of an administrative nature, with a fine or penalty in excess of €10,000 relating to environmental matters[43]. < 307-1
- There were no legal proceedings pending against Terna in relation to corruption, antitrust or monopoly practices, nor were any court judgements handed down against Terna regarding these matters in 2021 or in the previous two-year period. < 205-3 < 206-1
- There were no pending criminal proceedings for injuries caused to third parties by any of Terna's assets. There was 1 accident in 2021 (4 in 2020 and 2 in 2019). < EU25
- No accidents affecting contractors' employees whilst carrying out work commissioned by Terna were registered, where such accidents gave rise to final court judgements ordering Terna to pay damages or resulted in criminal convictions for Terna's employees.
- There is no record of charges brought, in 2021 or in the previous two-year period, in relation to harassment or occupational injuries affecting employees or former employees, in which Terna's liability was definitively established.

Data protection compliance

In 2021, Terna adopted a new **Privacy Management Model**, issued via publication of the new **LG039 Guidelines - "Terna's privacy regulations"**. The Model aims to ensure compliance with the applicable[44] [45] personal data protection legislation. Under this Model, the Parent Company, Terna S.p.A., assumes responsibility for providing guidance to both Terna Rete Italia S.p.A., Terna Energy Solutions S.r.l. and Terna Plus S.r.l. and to the Group's other subsidiaries, and commits to issuing directives and making recommendations regarding the handling of personal data, whilst leaving each subsidiary to fulfil the role of data controller, with responsibility for determining the purposes for which data is held and the manner in which it is processed.

In addition to the regular process of keeping pace with existing legislation, the main activities during the year consisted in the preparation of new policies (10) and privacy notices (more than 20), including with regard to specific pilot projects, with the aim of enhancing privacy compliance.

Two compliance assessments (and the related follow-up activities) were carried out with regard to the transfer of personal data outside the EEA and the processing of judicial data. The most at-risk data processing activities were also identified and specific audit activities conducted.

[43] With reference to the previous two years, the accounting records do not show any pecuniary sanction of an administrative nature, with a fine or penalty in excess of €10,000 relating to environmental matters. However, it should be noted that in 2018 Terna Rete Italia S.p.A. registered a payment of €12,091. This amount is connected with the penalty issued by the Municipality of Pegognaga (MN) for violation of the municipal regulations regarding the protection of urban and suburban green spaces.

[44] The EU General Data Protection Regulation 2016/679, better known as GDPR, is a European Union regulation regarding the processing of personal data and privacy. It was adopted on 27 April 2016, published in the EU Official Gazette on 4 May 2016, came into force on 24 May of the same year and has been in operation since 25 May 2018.

[45] Legislative Decree no. 101/2018 "Privacy Code".

Moreover, a campaign to renew all appointments of System Administrators working at Terna was completed, as well as a survey of all the internet and intranet sites used by the Company, in order to ensure compliance with the regulator's June 2021 guidelines on cookies.

Also during the year, pursuant art. 35 of the GDPR, the Data Protection Officer gave advice on carrying out data protection impact assessments of specific projects, in order to mitigate potential risks to data subjects' rights and freedoms.

Finally, five remote training workshops were held for the Data Protection Focal Points, identified in each company department, as well as for System Administrators and employees of Terna and its subsidiaries Tamini and Avvenia.

418-1 >

As in previous years, no complaints have been received regarding data protection violations, or improper use or unauthorised processing of personal data entrusted to Group companies, neither via the dedicated mailbox (privacy@terna.it) nor through other reporting or communication channels.

205-1 >

Preventing corruption

The Group's commitment to fighting corruption, which includes the supply chain and is set out in the "Suppliers' Code of Conduct", is inspired by the Code of Ethics and the tenth principle[46] of the Global Compact.

In January 2017, Terna was the first Italian company to obtain **ISO 37001 certification for its anti-corruption management system**, which covers the Parent Company as well as Terna Rete Italia, Terna Plus and Terna Energy Solutions for all the Italian operations. As part of this system, ten business processes, equivalent to 48% of the total, were subject to Risk Assessment followed by implementation of 17 Risk Assessment forms in 2021; the cumulative figure for 2018/2021 is more than 81%.

205-2 >

In addition, **1,480 hours of training** were provided on anti-corruption issues, including the lectures given as part of the course on "Business ethics and compliance with Legislative Decree 231/01", aimed at new hires, during which the main topics relating to the ISO 37001 anti-corruption management system (anti-corruption policy, risk analysis, anti-corruption due diligence), the Code of Ethics, whistleblowing and the 231 Organisational Model were presented. Activities continued during the year to raise the awareness of the relevant people with the publication of 12 anti-corruption management system newsletters, including contributions on anti-corruption and whistleblowing.

In November 2017, the Board of Directors approved the **Global Compliance Program**[47] and the Anti-corruption Guidelines, which are applicable to all the Group's Italian and overseas companies subject to prior approval from their respective Boards of Directors, in line with international best practices that promote a "top-down" approach.

In 2016, Terna adopted a **Whistleblowing Policy**[48] to manage reports, by employees, of violations of the Terna Group's internal control and risk management system, which covers all aspects of security, above all regarding protection of the anonymity of the whistleblower, but also that of the accused. Terna has put in place specific communication channels, including

[46] "Businesses should work against corruption in all its forms, including extortion and bribery."

[47] The Global Compliance Program ("GCP") is a monitoring tool for the Group's overseas companies aimed at preventing the commission of crimes under foreign law (accounting offences, terrorist financing, money laundering, copyright infringement offences, workplace health and safety offences), and to protect the individual subsidiaries and the holding company from the possible attribution of liability for criminal conduct perpetrated by employees or persons acting in their name and/or on their behalf. The GCP was last updated in December 2019, in order to enable the introduction of more monitoring tools at overseas subsidiaries.

[48] The policy was subsequently updated, in line with the provisions of Law 179 of 30 November 2017.

the web portal, "The whistleblowing procedure", which may be used by all Group companies, and also enables management of anonymous reports and/or reports received from other offline channels. No reports were received in 2021 regarding events relating to corruption.

Since 2015, Terna has published **"Transparent and Open Construction Sites"**[49], a web space that can be accessed from any device. The space contains information on the contracts, contractors and subcontractors involved in the construction of Italy's major electricity infrastructure projects, as well as the state of progress of the major infrastructure works, the number of companies that took part in the tender, and the company name of the contractors who won the contract. This complex IT tool, which has obtained anti-corruption certification 37001, was created thanks to the contribution of Terna technicians working nationwide.

Since 2019, Terna has been included in the **Business Index on Transparency (BIT)**. Pomoted by Transparency International Italy, this index assesses the level of transparency of Italy's largest companies with regard to anti-corruption issues, integrity and the influence of the private sector on politics. This recognition highlights the attention Terna pays to this issue and confirms the Company's commitment to sustainability and to maintaining ISO 37001 certification (anti-corruption management system).

Overall, the Terna Group has adopted four approaches to preventing corruption: its 231 Organisational Model, Fraud Management, monitoring of the trustworthiness of Terna's counterparties and awareness-raising.

231 Organisational Model

The 231 Organisational Model[50] (hereinafter the Model) defines rules of conduct and of internal organisation designed to ensure that the Company conducts its business and activities in a fair and transparent manner, with the aim of protecting the Company's position and image and meeting its stakeholders' expectations. In particular, the Model sets out rules to prevent various types of offence from being committed, some related to corruption and some to other concerns such as the environment and human rights.

In its current form, the Model (latest revision: 30 November 2021) breaks down into two sections: a general section and a special section, subdivided by business process. This change from a system based on categories of offence to one based on business processes leads to greater efficiency for second and third level checks carried out on behalf of Supervisory Boards by the Group's organisational departments. This approach also facilitates understanding of the 231 Model by the Company's workforce who are used to reasoning in terms of processes rather than categories of offence.

As provided for in the Model itself, responsibility for ensuring compliance with the Model's provisions and its effectiveness, reporting any deficiencies, anomalies and breaches and, when necessary, its revision, lies with the Supervisory Board, whose members are appointed by the Board of Directors.

Reports of any infringements of the 231 Model may be sent to the email address OdV_Terna@terna.it, or by ordinary mail. During 2021, no infringements of the 231 Model were reported.

[49] https://www.terna.it/it/cantieri-aperti-e-trasparenti
[50] From Legislative Decree no. 231 of June 8, 2001, which was adopted by Terna in 2002.

Fraud management

The Fraud Management unit guarantees protection of the Company's reputation and image, as well as tangible and intangible resources, through continuous monitoring of the prevention and management of fraud events that might negatively affect the Organisation, exposing it to risks of a financial and reputational nature, and at the same time jeopardising the pursuit of business objectives.

The fraud management process is inspired by industry models and best practices, as defined by the Association of Certified Fraud Examiners ("ACFE"), the Institute of Internal Auditors ("IIA") and the American Institute of Certified Public Accountants ("AICPA"), which envisage the organisation of an effective fraud risk management system in the successive phases of assessment, prevention, detection and investigation.

In 2021, following a corporate restructuring, fraud management[51] was refocused on the core activities of **fraud prevention and management**, with the activities relating to counterparty risk management and trade compliance transferred to a new department.

In 2021, the fraud management unit carried out:

- **checks on 15 sensitive support processes** relating to **20 corporate units** with the aim of testing existing control measures/good practices and identifying others to strengthen the anti-fraud control system. The checks, involving a total of 28 people, focused specifically on such issues as compliance with the principles of segregation of roles, traceability of actions carried out and the plurality of the persons involved. No major shortcomings were found, and in general a high degree of commitment and sensitivity to ethical and integrity issues was noted;
- a process of **continuous monitoring of "sensitive" events** that may also indirectly give rise to critical issues for Terna and/or identify new fraudulent schemes that could potentially be implemented to the detriment of the Terna Group. This activity, involving constant monitoring of news and data relating to police and media actions and investigations, regarded 40 **investigations**, which led to the checking of **4,112** physical and legal persons. No elements with a negative financial or reputational impact on the Terna Group emerged;
- **detection activities** to identify *red flags* and potential signs of fraudulent behaviour, through analysis and correlation of data and information. This area of activity includes **the Covid-Impact Monitoring project** *to prevent the risk of organised crime being involved in contract bids* - which is one of the most significant risks in this time of economic and health emergency - by implementing a *predictive analysis model based on early warnings* (approximately 80 corporate and performance indicators) to assess the state of health of companies that interact with Terna and their level of exposure to the potential risk of infiltration. The monitoring regarded **4,709 suppliers** who have had direct dealings with Terna over the last five years, **400 suppliers in the Terna Qualification Register and 1,057 sub-suppliers and subcontractors**;
- **investigation activities**, which did not reveal any significant vulnerabilities or critical issues for the internal anti-fraud control system.

[51] In line with the restructuring, the revised Fraud Management Guidelines ("LG012") were published on 20 September 2021.

Trustworthiness monitoring of Terna's counterparties

As a further guarantee of reducing reputational risk and also maintaining high ethical standards among third parties, Terna carries out thorough due diligence on counterparties that enter into relations with Group companies, including during extraordinary transactions, paying particular attention to anti-corruption and anti-money laundering "red flags" as well as to transactions in countries/with counterparties potentially at risk of restrictive measures issued by EU and international authorities, which entail restrictions on the free movement of goods (sanctions), or with countries with preferential tax treatment (tax havens). Approximately **3,378 counterparty checks were carried out in 2021**.

Raising awareness among personnel

< 205-2

All new hires attend training courses which, among other things, aim to ensure **awareness and dissemination of the rules of conduct and procedures** (for example, the Code of Ethics) established to prevent unlawful behaviour, and to train and inform staff about areas of risk and potential crimes associated with the Company's activities. From January 2021, 117 participants (new hires in 2020-21) were involved in approximately 467 hours of training.

A new training plan regarding the 231 Organisational Model and anti-corruption was also launched in 2021, which will continue in 2022 to continue awareness-raising and training in these areas. In 2021, **1,480 hours** of training were provided on the 231 Organisational Model and anti-corruption to a total of **337 participants**.

Clarifications regarding the Code of Ethics and the reporting of violations

Regarding to compliance with the Code of Ethics, in addition to the Whistleblowing portal, Terna staff who seek clarifications or wish to report an issue may also contact the Ethics Committee or the Audit department.

The Ethics Committee was established to provide internal and external stakeholders with a specific communication channel for matters dealt with in the Code of Ethics. The members of this Committee, who are appointed by the Chief Executive Officer, are tasked with replying to requests for clarification regarding the Code of Ethics, receiving and examining reports of any violations and, finally, deciding whether or not to instigate an investigation following a report, and providing an appropriate answer.

The Audit department, which is Terna's internal audit unit, is responsible for investigating any reports of violations of the Code of Ethics. The reports gathered by the Ethics Committee and the Audit department are published in the "Key indicator Tables", published in the "Sustainability" section of the website at www.terna.it.

NFS

Integrated Management System

The Integrated Management System is the tool that – via certified management systems – optimises coordination of all the units responsible for overseeing business processes. It is also an important risk management tool because it ensures the effectiveness and efficiency of systems and highlights potential risks in the areas under observation.

The Integrated Management System covers all the Italian and international activities of Terna S.p.A., and its subsidiaries, Terna Plus S.r.l., Terna Rete Italia S.p.A., Terna Energy Solutions S.r.l. and Terna Crna Gora d.o.o. It does not include Tamini Group companies, which have their own quality, environmental and safety certifications, and the companies operating in South America. Despite the situation brought about by the Covid-19 pandemic, the "Management Systems" unit continued to operate smoothly in 2021, as activities were adapted to enable internal and external audits to be carried out digitally. The use of online platforms facilitated an integrated approach, by bringing together auditors from up to six different systems.

In 2021, the Terna Group renewed its ISO 50001:2018 (Energy Management System) and ISO 55001:2014 (Asset Management System) certifications; it extended the scope of certification of ISO/IEC 27001:2013 (Information Security Management System - TIMM area) to the via Galbani 55 site and acquired Biosafety Trust certification for the "Infection Prevention Management System" for the via Galbani 68/70 and 55 sites, as described in the box below.

< 403-1

Terna is the only TSO in Europe to certify the "Infection Prevention Management System" in accordance with the Biosafety Trust scheme

In July 2021, Terna was the first and only TSO in Europe to implement and certify the **Prevention and Control of Infections Management System** for its Galbani Hub headquarters in Rome in accordance with the RINA Biosafety Trust Certification scheme (*).

The new certification (which is already widespread in seven European countries) enhances a key set of best practices regarding minimising the risks of spreading epidemics in public and private gathering places, and is based on the systemic approach of ISO standards to management systems.

This certification enhances the measures taken to *"prevent and mitigate the spread of infections to protect people's health from biological agents"*, including those implemented during the Covid-19 health emergency, by comparing them with key best practices. The process of obtaining certification coincided with **intense stakeholder engagement activities** that involved Terna Group employees at the Galbani hub, the physician in charge, INAIL (National Workplace Accident Insurance Institute), the trade unions, the RM2 local health centre and all the employees of the suppliers who regularly work in the buildings (canteen, facility, wellness area, maintenance, surveillance, hospitality and security staff).

The main benefits of adopting this Management System include:

- prevention and mitigation of the spread of infections to protect people's health from biological agents;
- improved risk management;
- strengthening and increasing internal and external stakeholders' trust, as well as strengthening and improving the Company's image and reputation.

The main results achieved are:

- the implementation of risk analysis for the assessment and management of transmitted infections;
- the Covid-19 prevention campaign (monthly and weekly control tests);
- a survey of employees (at the Galbani hub) to assess individual perception of infection prevention and control;
- the definition of specific KPIs to monitor the maintenance and effectiveness of the System.

In February 2022, following the positive outcome of the first surveillance audit, certification was confirmed.

(*) The certification body RINA has developed the Biosafety Trust Certification scheme based on the systemic approach of the ISO standards to Management Systems whose requirements can be integrated with those of the most commonly used ones, such as, for example, Occupational Health and Safety (ISO 45001).

TERNA GROUP CERTIFICATIONS AND ACCREDITATION

TYPE	SCOPE	YEAR OF 1ST ISSUE	YEAR OF RELEASE	YEAR OF EXPIRY
ISO 9001:2015	Terna Group (*) (**)	2001	2019	2022
ISO 14001:2015	Terna Group (*) (**)	2007	2019	2022
ISO 45001:2018	Terna Group (*) (**)	2019	2019	2022
UNI CEI EN ISO 50001:2018	Terna Group (*) (**)	2015	2021	2024
ISO 37001:2016	Terna Group (*)	2017	2020	2023
ISO 55001:2015	Terna S.p.A., Terna Rete Italia S.p.A.	2018	2021	2024
ISO 27001:2013	Terna S.p.A. only for Market Monitoring Code applications	2011	2020	2023
Biosafety Trust Certification	Terna (Rome offices, Viale E. Galbani, 55, 68 and 70)	2021	2021	2024
ISO/IEC 17025:2018	Terna Rete Italia S.p.A. for multi-site test laboratories in Viverone (BI), Civitavecchia (RM) and Frattamaggiore (NA)	2014	2021	2026
ISO/IEC 17025:2018	Terna Rete Italia S.p.A. for calibration laboratories in Florence, Turin and Cagliari	2017	2021	2025
ISO 9001:2015	Tamini Group	1993	2021	2023
ISO 14001:2015	Tamini Group	2015	2021	2023
ISO 45001:2018	Tamini Group	2015	2021	2023
ISO 9001:2015	Brugg Group (premises in Switzerland) Production plant and commercial office	1995	2019	2022
ISO 14001:2015	Brugg Group (premises in Switzerland) Production plant and commercial office	1998	2019	2022
ISO 45001:2018	Brugg Switzerland	2021	2019	2022
ISO 9001:2015	Brugg Group (premises in China) Suzhou plant and commercial office in Shanghai	2015	2020	2023
ISO 14001:2015	Brugg Group (premises in China) Suzhou plant and commercial office in Shanghai	2015	2020	2023
ISO 45001:2018	Brugg Group (premises in China) Suzhou plant and commercial office in Shanghai	2020	2020	2023

(*) Applies to the companies Terna S.p.A., Terna Plus, Terna Rete Italia and Terna Energy Solutions.
(**) Also applies to Terna Crna Gora.

Terna Rete Italia S.p.A. has also implemented a "Management System for the Prevention of Major Accidents" in accordance with the provisions of Legislative Decree 105/15 (the "Seveso Directive").

412-1 > 409-1 > 408-1 >
PC1 EG2 412-3 >

NFS

Respect for human rights

The Terna Group operates mainly in Italy, where the regulatory framework and the level of civil development largely guarantee respect for human rights, freedom of association and collective bargaining. However, Terna pays constant attention to respect for human rights and is committed to adopting minimum protection standards where such standards are not guaranteed by local laws.

Terna's approach to the cause of human rights has been gradually updated over time, following the evolution of international reference standards. This led to the adoption in 2017 of the **"Respect for Human Rights within the Terna Group Guidelines"**, which are organised in line with the "Protect, Respect and Remedy Framework" drawn up by Prof. John Ruggie, the author of the "Guiding Principles on Business and Human Rights" approved in 2011 by the United Nations Human Rights Council. These Guidelines provide for:

- regarding the first element of the framework **"Protect"**, a periodic due diligence process relating to the Group's respect for human rights, taking into account its interaction with all its stakeholders. Particular attention is paid to vulnerable groups and the human rights most pertinent to Terna's activities, such as labour rights (e.g., discrimination, forced and child labour, freedom of labour union association, health, and safety);
- regarding the second element **"Respect"**, the drawing up of a due diligence process, divided into four phases: (1) identification of the areas of the Group's activities that are potentially exposed to the risk of violating stakeholders' human rights; (2) identification of existing risk mitigation measures in these areas; (3) preparation of action plans if such measures are found to be lacking or inadequate; and (4) monitoring of the implementation of action plans;
- regarding the third element **"Remedy"**, ensuring that the procedures for reporting violations provided for in the Code of Ethics have the same validity as reports regarding alleged human rights, including appeals to the Ethics Committee[52].

As provided for in the 2021/2022 Audit Plan, an assessment of the Internal Audit System was carried out during the year to verify the adequacy and compliance of the measures to mitigate the risk of human rights violations, which had a positive outcome.

In December 2021, in line with the activities provided for in the 2021 Audit Plan, and as envisaged by LG057 "Respect for Human Rights within the Terna Group", an audit was carried out in order to:

1. support the "REAIS-IR-ESG" department in updating the map of Terna Group activities exposed to the risk of human rights violations and the related internal audit system as a result of the audit activities carried out up to 30 November 2021;
2. verify compliance with the measures to mitigate the risk of human rights violations adopted in 2021 using the results of the audit activities carried out up to 30 November 2021. The results of the audit were satisfactory.

In July 2021, a survey involving a sample of around 20% of the Company's workforce was also carried out to verify compliance with the principles of the Global Compact at Terna.

Finally, it should be noted that Terna's monitoring of human rights has been further strengthened thanks to the activities developed by the NexTerna programme topic area 4, on "Sustainability and communication" (see page 52), which drew up and formalised guidelines on "Diversity and inclusion".

[52] For more information see "Clarifications regarding the Code of Ethics and the reporting of violations" on page 181.

308-2 > 308-1 > 204-1 > BM6 414-2 > 414-1 > NFS 8 DECENT WORK AND ECONOMIC GROWTH

Supply chain sustainability

Terna requires suppliers to conduct themselves in a lawful and ethical manner, protecting human and labour rights, health and safety, information security and the environment.

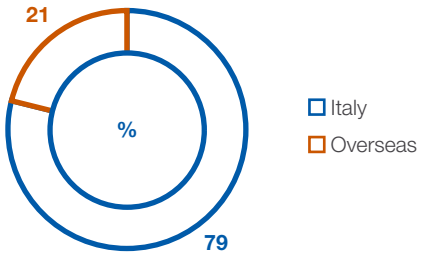
These behaviours have been formalised in the **"Supplier Code of Conduct"**[53] in which each principle is linked to the requirements contained in the qualification process and in Terna's tender and contract documentation. All suppliers are required to contractually commit themselves to comply with the provisions of Terna's Code of Ethics and 231 Model; any non-compliance encountered will result in penalties. Terna's tender procedures include several requirements relating to social (human rights, working conditions) and environmental matters which, for some categories relevant for ESG purposes, must be met from the qualification phase on.

403-7 >

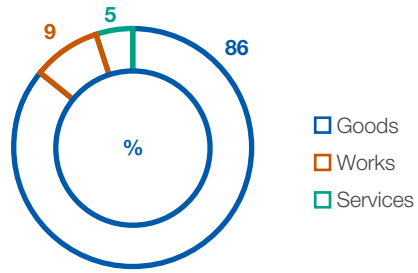
In line with the Company's policies, in view of the Covid-19 emergency, meetings with suppliers were conducted remotely using the means already at Terna's disposal, which enabled continuity of periodic relations with suppliers.

In 2021, total expenditure on the procurement of services, supplies and works amounted to over €3,810 million[54], spread across 2,265 suppliers contracted during the year. In this regard, it should be pointed out that as well as ensuring quality and continuity of service in the general interest, the total annual expenditure on procurement helps **to generate downstream supply chain activity, thereby creating significant economic value and social benefits**.

PROCUREMENT BY ORIGIN*



PROCUREMENT BY CATEGORY*



* *The breakdown of purchases by category and origin differs from previous years due to the supply of submarine cables for the Tyrrhenian project (€2.4bn). Excluding this procurement, the breakdowns would have been in line with those previously recorded (Goods: 61%, Works 25%, Services 14%; from Italy: 90%, from overseas: 10%).*

The prevalence of national and local suppliers is determined by the specific nature of the business, especially by the need to carry out maintenance operations very swiftly to ensure the utmost safety of the system and greater competitiveness in terms of transport costs for heavy and bulky supplies. This also helps to cut the related environmental impacts.

Procurement, which regards activities carried out in relation to Terna's core business – so-called **"key supplies"** – and which mainly includes supplies of materials and electrical equipment, contracts for the provision of works and services in the electricity transmission, telecommunications and IT sectors, is governed by the new Procurement Code. This has introduced aspects relating to sustainability in tenders drawn up in accordance with the most economically advantageous tender criterion.

The following table shows the suppliers active during year, broken down by type of environmental and social requirements, according to their characteristics. The table illustrates the coverage guaranteed by the various initiatives, in terms of percentage of procurement, for significant groups of suppliers active in 2021.

[53] The document is available for download at: http://download.terna.it/terna/0000/0930/50.PDF

[54] The figure refers to the amount ordered during the year. This means the sum of the amounts allocated for all contracts (works, goods and services) signed during the year, net of options (amounting to approximately €427 million). An option is a provision added to supply contracts, clearly, precisely and unequivocally granting the contracting entity the right to increase the value of the contract in return for an increase in the contracted quantity or volume, subject to the same terms and conditions. Once introduced into the contract, such an option, though not constituting the assumption of an obligation on the part of the contracting entity, is included in the calculation of the overall amount.

Coverage is 100% or just under for the majority of the social and environmental requirements. Regarding the most stringent social and environmental qualification requirements, the coverage is higher for suppliers included in categories that are relevant for ESG purposes. Such suppliers are periodically identified on the basis of the product categories whose relevance to the business is assessed (the amount supplied, problems for the core business), as well as social aspects (health and safety and working conditions) and environmental aspects (significant environmental impacts in the production chain, relating to use by Terna, at the end of the asset's useful life). Inclusion in this category leads to particular attention being paid during the qualification phase and in the development of technical specifications, as well as a commitment to adopt special precautions regarding categories not subject to qualification. Finally, additional health and safety measures have been introduced for works contracts (see the section "Safety, the environment and human rights at contractors' construction sites" on page 208).

SUPPLIERS ACTIVE IN 2021 AND APPLICATION OF ENVIRONMENTAL AND SOCIAL REQUIREMENTS

	SUPPLIERS ACTIVE IN 2021				AMOUNT PROCURED FROM SUPPLIERS SUBJECT TO SPECIFIC REQUIREMENTS (% OF RESPECTIVE TOTAL AMOUNT PROCURED)			
	NUMBER	% OF TOTAL	AMOUNT PROCURED (€M)	% OF TOTAL	BASIC REQUIREMENTS [1]	ADDITIONAL SOCIAL AND ENVIRONMENTAL REQUIREMENTS [2]	SOCIAL[3] AND ENVIRONMENTAL QUALIFICATION REQUIREMENTS[4] [*]	COUNTRY RISK ASSESSMENT [5]
Total active suppliers	2,265	100	3,810.1	100	100	98.8	11.2	100
Key suppliers	1,873	82.7	3,765.7	98.8	100	100	11.3	100
Suppliers in categories relevant for ESG purposes	109	4.8	2,979.5	78.2	100	99.9	12.7	100

[1] *Compliance with the principles and behaviours provided for in Terna's Code of Ethics and 231 Model.*

[2] *Integrity pact (text verified by Transparency Italy), anti-mafia certification, which checks: the application of collective labour agreements, payment of tax and social security contributions, the absence of environmental offences, the absence of serious breaches of labour safety regulations, regularity of employment of legally protected categories, certificate of medical fitness for specific roles issued by the relevant doctor (for works contracts), and the absence of any impediment to the award of public contracts.*

[3] *OHSAS 18001 certified occupational safety management system or similar (required only from the suppliers of specific product categories at the time of qualification).*

[4] *ISO 14001 certified environmental management system or similar (required only from the suppliers of specific product categories at the time of qualification).*

[5] *Assessment of the risks of corruption and respect for human rights in connection with a supplier's premises.*

[*] *2021 saw an increase in the amount procured (€1,384.6bn in 2020) due to the supply of submarine cables for the Tyrrhenian project (€2.4bn), which led to a reduction in the percentages relating to environmental and social qualification requirements. If the two contracts regarding marine cables are excluded, the percentages are in line with the values registered last year (11.2% vs 30.0%; 11.3% vs 38.8%; 12.7% vs 63.5%).*

NEWLY CONTRACTED SUPPLIERS

	2021
% of new suppliers - checked for basic requirements [1]	100
% of new suppliers - checked for additional social and environmental requirements [2]	76

[1] *Compliance with the principles and behaviours provided for in Terna's Code of Ethics and 231 Model.*

[2] *Integrity pact (text verified by Transparency Italy), anti-mafia certification, which checks: application of collective labour agreement, payment of tax and social security contributions, absence of environmental offences, absence of serious breaches of labour safety regulations, regularity of employment of legally protected categories, and absence of impediment for undertaking public contracts.*

"SUPPLY CHAIN SUSTAINABILITY" TARGET

KPIS AND TARGETS IN THE 2021-2025 INDUSTRIAL PLAN

KPI	2021	
ESG CRITERIA IN TENDERS	TARGET	RESULT
Use of ESG criteria in "vegetation management" tenders > €1 million (% of tenders)	100%	100%
Use of ESG criteria in hardware procurement tenders[*] (% of tenders)	75%	=

[*] *The failure to achieve this target is due to the fact that in 2021 tenders were not conducted for this category of good.*

409-1 > 408-1 > 407-1 >

Qualification of suppliers and checking activities

The most relevant product groups for the core business are subject to a **qualification procedure**[55]. Only business operators who have met the regulatory compliance requirements, are in possession of the necessary high-quality technical and organisational expertise, are financially sound, and enjoy a solid reputation are included in Terna's approved list of suppliers. The entire process is managed via the **"Supplier Qualification Portal"**, thus ensuring an efficient, traceable and transparent process.

In the sectors at greatest risk in terms of sustainability (primarily works and certain services), an adequate level of environmental management and the ability to protect workers' health and safety are also required, both represented by corporate procedures focused on key elements of the international UNI EN ISO14001 and BS OHSAS 18001 (UNI EN 45001) standards.

Sectors gradually adopt these certifications within set timeframes, so that operators may grow sustainably and reach technical and organisational maturity. In 2020, the obligation to obtain certification for "Vegetation management", "Pylon painting", "HV glass insulators", "150/380kV overhead lines" and the "Laying of 150/380kV cable" was introduced. In 2021, this obligation was extended to all global service areas: "Maintenance of technological systems", "Maintenance of green areas" and "Cleaning".

Among qualified suppliers, 80% already possess and 5% are obtaining Safety BS OHSAS 18001 (UNI EN 45001) certification. With regard to ISO 14001 environmental certification, 89% of qualified suppliers possess it and 2% are obtaining it.

During the three-year qualification period, Terna ensures that suppliers meet the qualification requirements, including the various ESG aspects, via document audits and on-site checks. In 2021, **218 document audits** were carried out, and around 70% of on-site checks regarded suppliers belonging to categories that are relevant for ESG purposes.

17 PARTNERSHIPS FOR THE GOALS | 13 CLIMATE ACTION | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

"SUPPLY CHAIN SUSTAINABILITY" TARGET

KPIS AND TARGETS IN THE 2021-2025 INDUSTRIAL PLAN

	2021		TARGET			
	TARGET	RESULT	2022	2023	2024	2025
Product categories ("PG") falling within the type of work requiring obligatory certifications ISO:14001 and OHSAS:18001/45001 (*)	100%	100%	100%	100%	100%	100%

(*) *The KPI has been renamed (from "Suppliers" to "Product category") following a reclassification of the product categories.*

As far as overseas suppliers are concerned, Terna assesses the country risk, namely the possibility of incurring damages if incidents or events occur that may be linked to the economic, social and political environment of the country in which the supplier normally operates. This risk is, for the time being, very limited, given the prevalence of domestic and EU suppliers. However, it could become more significant in view of the possible expansion of procurement markets overseas.

Objective elements are used in the analysis and assessment of the most relevant risk factors, which relate to economic and political governance issues in the various countries, and with respect to internationally agreed human rights protocols, including the ratification of UN and ILO conventions, together with the assessments made by the main international non-governmental organisations and the leading rating agencies actively concerned with these issues. As these assessments are regularly updated, they enable the Company to constantly monitor developments in the related environment. In addition to these assessments, restrictive measures are also issued by Italian and European authorities,

[55] Pursuant to the current Public Procurement Code (Legislative Decree 50/16 and subsequent amendments).

entailing limitations on the free movement of goods (trade embargoes) or rules of conduct in the case of transactions with countries that have preferential tax treatment (tax havens).

ACTIVE QUALIFICATIONS

	2021
Number of active qualifications	556
- of which new qualifications during the year	84
Number of qualifications requiring an Environmental and Safety management system	17

With a view to increasing the Company's intellectual capital, and also in terms of social responsibility, Terna supports the world of SMEs, especially companies that contribute to innovation, which are typically start-ups. These companies have peculiarities that require simplified ad hoc approaches, which facilitate specific streamlined procurement processes for accessing innovative solutions and technologies that affect the company's business.

In 2021, four product categories were established exclusively for innovative start-ups and SMEs, with these aims:

- to have an up-to-date list of innovative start-ups and SMEs in the Innovation Plan product categories that are of interest to Terna;
- to enable start-ups to benefit from a free and simplified qualification process.

The product categories regard specific areas of innovation that are of interest to Terna, namely Advanced Materials, Robotics, Energy Tech and Digital.

AUDITS AND MONITORING

	2021
Qualification document checks	218
On-site qualification checks	10
- including categories relevant for ESG purposes	7

If conduct no longer meets the requirements for qualification, the supplier may receive a warning or be temporarily suspended from the list; in the most serious cases, offenders will be revoked off the list.

MEASURES TAKEN

	2021	2020	2019
Number of suppliers revoked off the list	0	1	0
Number of suppliers suspended	4	5	8
Number of suppliers warned	4	6	3

Equal opportunities in accessing calls for tenders

Access to tender procedures is guaranteed for all eligible companies in accordance with the principle of equal opportunity and is governed by the **"Procurement Regulations"**. These Regulations, which have set guidelines for Terna's procurement activities, were drawn up on the basis of the Procurement Code, which in turn implements the relevant EU legislation.

CONTRACTED SUPPLIERS

	UNIT	2021	2020	2019
Number of contracted suppliers	no.	2,265	2,204	2,251
Contract award procedures adopted (% of amounts awarded)				
EU calls for tender	%	91	74	78
Non-EU calls for tender	%	4	12	13
Previously qualified suppliers [1]	%	4	12	8
One-off contracts [2]	%	1	3	2

[1] *Directly assigned professional appointments and/or consulting services.*
[2] *The "One-off contracts" category includes: sponsorship and donations, fees paid to public entities, trade bodies and contracts awarded to previously qualified suppliers by Terna Plus S.r.l..*

Finally, Terna is keen to reach settlements in the event of litigation with suppliers.

DISPUTES WITH SUPPLIERS

	2021	2020	2019
Pending	35	30	23
In progress	6	9	2
Settled	1	2	8

Human capital

NFS

The quality of human capital is pivotal to a company's growth and thus to creating value over time. With their motivation, educational backgrounds, managerial abilities, sense of engagement and enhanced and consolidated skills, people are a crucial element in all the Company's activities and, at the same time, human beings who are to be appreciated and whose rights are to be respected.

In line with those values enshrined in the Code of Ethics, Terna's commitment to its people centres on **attention to safety and accident prevention** (see page 204) and **training**, whereby specific competencies needed to successfully reach the objectives set forth in the Industrial Plan (see page 199) are updated. These focused activities are coupled with management and development systems designed to **improve performance and enhance growth opportunities** (see page 202).

Dialogue between Terna and its employees takes place via a consolidated system of **industrial relations based on the engagement of trade unions** (see page 209) as well as regular **opportunities for employees to communicate directly** by means of both online opinion surveys and focus groups (see the paragraph below entitled "NexTerna: main results 2021").

The attention paid by the Company to its people is concretely reflected in Terna's **welfare policy**, aimed at providing staff with a better work-life balance and, more generally, greater well-being (see page 210).

In 2021, many of these aspects were encompassed in Terna's change management programme, **NexTerna**, the strategic guidelines and main results of which are indicated on page 52 and in the box below, respectively[56].

[56] When the data presented in this chapter refers to "Terna" it refers to 82% of employees, whilst the data referring to "Terna, Tamini and Brugg Switzerland" covers 95% of the Group's total workforce. In terms of the Group's revenue, these percentages are 90% when referring to "Terna" and 99% when the data refers to "Terna, Tamini and Brugg Switzerland".

NexTerna

The seven "topic areas" for the NexTerna programme were launched in 2021, with the following key results:

- Definition of the new process for **assessing engagement of the Group's people**, which replaces the previous Engagement Survey and enables, through an internally developed tool called the Employee Net Promoter System ("e-NPS®"), more frequent monitoring of employees' sense of belonging. In 2021, three quarterly surveys of the Company's entire workforce were carried out, with average participation exceeding **70%**. People's level of work satisfaction inside their respective organisational structures was surveyed and measured, with aspects such as collaboration, mutual trust and sense of engagement analysed;
- Definition, adoption, and progressive cascading of the new **leadership model** (see page 212) and of the challenges faced by all Group personnel, regardless of role (performance, motivation and well-being);
- Definition of a **new "hybrid" model of workspaces** based on the concept of modules that can be adapted depending on the type of activity to be carried out. Specifically, the initial phase of **desk-sharing**, moving in the direction of shared rather than pre-assigned workstations, was completed. At 31 December 2021, there were 600 people belonging to different company departments involved in the desk-sharing initiative. The same year also saw the inauguration in Rome of two new **co-working offices**, earmarked for use exclusively by Terna personnel. Moreover, an agreement was concluded with the company, Copernico, for the utilisation of co-working spaces located throughout Italy, thus entailing space sharing between Terna personnel and staff from companies other than Terna. This model is backed by the development of **apps and digital instruments** that facilitate flexible working. For example, these tools allow for the daily booking of workstations and/or co-working spaces both inside Terna's offices and at third-party partners' offices;
- Introduction of an **Enterprise Service Management** platform, which digitalises key corporate processes and ensures a single access point for all services available to employees, and **digital solutions** in line with the new work anyware paradigm. The latter includes, by way of example, the new process of On-boarding, the Virtual Desktop Interface for remote management of complex planning activities (including related document logging), the new Surface Table to visualise charts and designs for large-scale infrastructural works and the digitalised reporting of operational events via the development of specific apps. As regards procurement, the Company has introduced a new network-based platform to manage suppliers (**Vendor Management**) so as to boost collaboration between suppliers and company departments and developed a new digitalised means of carrying out remote checks (supplementing those effected in person) on the quality of supplies to be procured from external suppliers;
- **Sustainability and Communication** initiatives aimed at consolidating the company's sustainability culture and promoting communication as a best practice model, leading to the formalisation of two new guidelines on **Diversity & Inclusion** and **Sustainability**;
- The adoption of a **People Care and Skills** model focused on people's wellbeing and taking shape in the project entitled **Wellbeing in Action**, the key achievements of which were the inauguration of both the "MiniWatt" crèche and a company gym along with the publication of a new guide to loans and advances on staff severance indemnities and solutions for sustainable mobility, e.g., car sharing.

Workforce trends

The Group's workforce rose by 401 in 2021, with Terna accounting for most of the increase[57] (up 289 on 2020), and 69 people were added following the acquisition of the LT Group by Terna Energy Solutions.

THE GROUP'S WORKFORCE

	2021	2020	2019	2021 VS 2020	% 2021 VS 2020
Senior managers	92	80	72	12	15
Middle managers	765	672	617	93	14
Office staff	2,815	2,587	2,382	228	9
Blue-collar workers	1,464	1,396	1,219	68	5
Total	**5,136**	**4,735**	**4,290**	**401**	**8**

The Group employs a total of 5,136 people; this figure includes 435 Brugg Group personnel (including 299 employed by Brugg Switzerland and 136 individuals in China, India, the United Arab Emirates, Germany and Italy), 342 Tamini Group staff (of which 338 in Italy, 2 in the United States and 2 in India) and 48 individuals employed under local contracts by overseas subsidiaries (29 in Brazil, 11 in Montenegro, 6 in Peru, 2 in Uruguay), 18 people employed by Avvenia, a company acquired in 2018, and 69 people employed by the LT Group, acquired in 2021.

The total turnover rate for incoming staff (10.6% Terna; 10.8% including Tamini and Brugg Switzerland) continues to reflect the generational turnover policy and the growth outlook in the Industrial Plan.

In 2021, 416 people (492 including Tamini and Brugg Switzerland) **joined the Group, including 204 under the age of 30** (223 including Tamini and Brugg Switzerland). The generational turnover underway has also produced a steady increase in the level of education among the Group's workforce. In 2021, 96.9% of Terna's employees had a university degree or high-school diploma. The average length of service is 13.5 years.

The **turnover rate for outgoing staff is 3.2%**. This figure is primarily linked to retirement and, to a lesser extent, to voluntary resignations (52 in 2021 in Terna, representing a rate of 1.3%; 65 including Tamini and Brugg Switzerland).

At 31 December 2021, there were 37 active agency contracts (compared with 6 in 2020 and 11 in 2019); 53 including Tamini and Brugg Switzerland.

The tables below present data for Terna for the three-year period 2019-2021 and for Terna, Tamini and Brugg Switzerland for the two-year period 2020-2021.

[57] Terna includes the following companies: the Parent Company Terna, Terna Rete Italia, Terna Plus and Terna Energy Solutions.

COMPOSITION OF THE WORKFORCE

< 405-1

	TERNA, TAMINI, BRUGG SWITZERLAND		TERNA		
	2021	2020	2021	2020	2019
Total	**4,861**	**4,551**	**4,224**	**3,935**	**3,872**
of whom men	4,129	3,919	3,567	3,376	3,334
of whom women	732	632	657	559	538
By category					
Senior managers	86	75	74	63	61
Middle managers	745	658	706	620	597
Office staff	2,663	2,475	2,400	2,221	2,200
Blue-collar workers	1,367	1,343	1,044	1,031	1,014
By type of contract					
- permanent[1]	4,844	4,524	4,223	3,934	3,869
- of whom men	4,117	3,903	3,566	3,376	3,332
- of whom women	727	621	657	558	537
- fixed-term	17	27	1	1	3
- of whom men	12	16	1	0	2
- of whom women	5	11	0	1	1
By type of employment					
- full-time	4,812	4,504	4,210	3,920	3,854
- of whom men	4,116	3,905	3,563	3,371	3,329
-of whom women	696	599	647	549	525
- part-time	49	47	14	15	18
- of whom men	13	14	4	5	5
- of whom women	36	33	10	10	13
By age					
- below the age of 30	1,168	1,158	1,116	1,106	987
- between the ages of 30 and 50	2,255	1,980	1,925	1,660	1,733
- over the age of 50	1,438	1,413	1,183	1,169	1,152
Average age (years)					
Average age	41.4	41.6	40.7	40.9	40.8

[1] *Permanent contracts also include apprenticeships.*

401-1 >

WORKFORCE TRENDS

	TERNA, TAMINI, BRUGG SWITZERLAND		TERNA		
	2021	2020(*)	2021	2020	2019
Total employees	**4,861**	**4,551**	**4,224**	**3,935**	**3,872**
Employees recruited during the year	**492**	**225**	**416**	**175**	**287**
- men	368	188	305	146	240
- women	124	37	111	29	47
- below the age of 30	223	153	204	140	208
- between the ages of 30 and 50	235	52	193	27	73
- over the age of 50	34	20	19	8	6
Rate of recruitment in % (1)					
Total	**10.8**	**5.0**	**10.6**	**4.5**	**7.5**
- men	8.1	4.2	7.8	3.8	6.2
- women	2.7	0.8	2.8	0.7	1.2
- below the age of 30	4.9	3.4	5.2	3.6	5.4
- between the ages of 30 and 50	5.2	1.2	4.9	0.7	1.9
- over the age of 50	0.7	0.4	0.5	0.2	0.2
Employees leaving during the year	**182**	**134**	**127**	**112**	**258**
- men	157	123	113	104	233
- women	25	11	14	8	25
- below the age of 30	43	28	29	22	21
- between the ages of 30 and 50	46	22	25	13	24
- over the age of 50	93	84	73	77	213
Turnover rate in % (2)					
Total	**4.0**	**3.0**	**3.2**	**2.9**	**6.7**
- men	3.4	2.8	2.9	2.7	6.1
- women	0.5	0.2	0.4	0.2	0.7
- below the age of 30	0.9	0.6	0.7	0.6	0.5
- between the ages of 30 and 50	1.0	0.5	0.6	0.3	0.6
- over the age of 50	2.0	1.9	1.9	2.0	5.5

(*) The data for employees of Brugg Switzerland leaving during the year by age range have been estimated on the basis of the figures reported for 2021.
(1) The rate of recruitment shows the ratio of employees joining to the number of employees at 31 December of the previous year.
(2) The turnover rate shows the ratio of employees leaving to the number of employees at 31 December of the previous year.

FOCUS

Staff turnover: comparative data

Terna's "staff turnover" is defined as the ratio of employees leaving during the year to the number of employees at 31 December of the previous year.
As the staff turnover rate is an indirect indicator of the internal company climate affecting all divisions, the figures for transmission companies (TSO peer group) and those of large companies listed on the Italian stock exchange (FTSE-MIB) were taken into account, as were those for companies in the Electric Utilities sector included in the Dow Jones Sustainability Index.
In 2021, Terna's turnover rate was 3.2%. In 2020, the year for which comparative data is available, Terna's turnover rate was 2.8%, below all three peer group averages.

	TURNOVER RATE (%) – 2020		
Peer groups	TSO	FTSE-MIB	DJSI- ELECTRIC UTILITIES
Figures available	17	36	11
Min.	1.5	1.0	2.9
Average	5.1	8.9	6.6
Max.	18.0	21.7	12.9
Terna		**2.8**	

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

Generational turnover

< EU15

Terna allocates a host of initiatives to generational turnover which, since 2015, have been bolstered considerably due to the combination of a voluntary early retirement scheme for staff approaching retirement age and stepped-up recruitment. In the period between **2016 and 2021, incoming staff totalled 1,727 compared with 836 outgoing staff**.

Below is an overview of personnel who could potentially qualify for retirement in the next 5 to 10 years (estimated on the basis of available data regarding ages and pension contributions):

A. at 31 December 2021, **7.1**% of the workforce in the next 5 years, of which:

- Senior managers **0.0%**
- Middle managers **1.8%**
- Office staff **3.7%**
- Blue collar workers **1.6%**

B. at 31 December 2021, **18.1**% of the workforce in the next 10 years, of which:

- Senior managers **0.2%**
- Middle managers **4.6%**
- Office staff **9.6%**
- Blue collar workers **3.7%**

IMPACT OF GENERATIONAL TURNOVER IN THE PERIOD 2014-2021 (*)

INDICATOR	UNIT	2021	2014
Average age	y	40.7	46.6
Average length of service	y	13.5	21.2
Percentage by composition of age: >50	%	28.0	45.3

(*) The period considered starts from 2014. The first generational turnover plan, involving the recruitment of 300 young people, took place in 2015 (see the 2015 Sustainability Report, page 126).

Recruitment and selection

Terna's Industrial Plan 2021-2025 sets ambitious objectives. In the first year alone, scheduled investments and plans for the various company departments call for new competencies, in turn requiring over **400 hires**.

The process of cultural transformation enabled by the current **NexTerna programme** and completion of the generational turnover programme have also required the continued insertion of young university and high school graduates. Recruitment thus centres on the search for new university graduates, primarily those with a STEM[58] background, and individuals with diplomas from vocational institutes, prevalently specialising in the electricity field.

To sustain a virtuous exchange between the Company and its external community and support the search for new resources, a new **Employer Branding** strategy has been introduced in which the "People Organisation & Change" department has developed ongoing relations with schools, universities and job centres in order to inform students and new graduates about Terna's professional development opportunities.

From amongst the numerous initiatives that continued during the year, mention should be made of the **Work-School Project**, designed for students at vocational technical institutes. Terna has maintained this commitment for five years running and constantly increased the number of all participants: from 2016 to date this initiative has involved around 2,000 students from 55 vocational Institutes spread throughout Italy. The project has also allowed Terna to meet and attract new graduates from around the country, in line with recruitment needs. Students in their 5th year had the opportunity to take part in one-to-one meetings with Terna recruiters. The training programme 2020/2021 – completed in May – was enriched with digital contents and innovative teaching methods and involved 4th and 5th year students from ten Italian vocational institutes. The sixth edition planned for 2022 will involve an additional 10 vocational institutes and around 400 4th and 5th year students.

Numerous activities have been devoted to young university graduates in the form of special events such as **Career Days and Job Fairs**, theme-based events centring on transversal competencies designed to help students draft effective CVs, prepare for job interviews and better understand the assessment criteria employed in a selection test.

Next Energy, an excellence programme designed to attract new university graduates with an interest in innovation, reached its fifth edition in September 2021. A total of 153 applications were received, of which 99 were in line with the requisites set forth in the call for applicants. Those selected took part in an innovative online recruitment day. At the end of January 2022, the new winners were awarded six-month apprenticeships at company departments and in working groups involved in innovative projects.

In partnership with universities, Terna paid especially close attention to the advancement of women students by supporting the **Master Degree in Data Science & Management** offered by LUISS Guido Carli University, via a two-year scholarship awarded to a female student in the STEM field. Terna also took part in theme-based events and webinars devoted to female STEM students, in order to promote employment opportunities in Terna by means of testimonies given by five women role models working in the Company.

Finally, 2021 also saw the launch of a project to redesign the recruitment and selection process via the implementation of new support systems. The project is scheduled for completion in 2022 and is aimed at increasing the efficacy of the exchange with Terna and candidates' level of satisfaction with the experience.

[58] Acronym for Science, Technology, Engineering and Mathematics; the term is used to indicate scientific and technological fields and the related courses of study.

Training

PC2

Training is ongoing and provided at Terna throughout employees' working lives. The aim is to ensure constant development of human capital by continuously expanding and diversifying each individual's skills ("employability) in line with the Company's mission and business strategy as set out in the Industrial Plan 2021-2025.

In line with previous years, training was provided to new hires in order to facilitate their insertion, boost their professional, technical and operational skills, transmit highly specialised knowhow and ensure compliance with guidelines pertaining to health and safety, privacy and the 231 Organisational Model.

The Covid-19 health emergency failed to halt training activities, which were offered in digital format whenever possible.

In 2021:

- **145,528 hours of training were provided in Terna** (148,698 including Tamini and Brugg Switzerland), of which 57% led by in-house trainers;
- **100% of staff members attended at least one training course** (99% including Tamini and Brugg Switzerland);
- **35 hours of training were provided per capita in Terna**, in line with 2020, largely due to the limitations imposed by the pandemic;

In 2021, the average per capita cost of training at Terna was €285 and the average per capita cost of training within the Group (Terna, Tamini, Brugg Switzerland) was €296.

< 404-1 < 412-2

TRAINING[59]

	TERNA, TAMINI, BRUGG SWITZERLAND		TERNA		
	2021	2020(*)	2021	2020	2019
Average hours of training					
- per employee (1)	31	30	35	34	47
By category (2)					
- senior managers	12	17	13	19	40
- middle managers	25	25	26	25	28
- office staff	28	29	30	31	43
- blue-collar workers	43	36	54	47	66
By gender (3)					
- men	33	31	37	34	47
- women	18	22	19	24	30
Hours of training in human rights	1,584	996	1,584	996	1,132
Participants in the course on human rights (%) (4)	34.5	5.5	39.8	6.4	7.2

(*) The data for Brugg Switzerland have been estimated on the basis of the figures reported for 2021.
(1) Ratio of total hours of training to the average number of employees.
(2) Ratio of total hours of training by category to the average number of employees by category.
(3) Ratio of total hours of training by gender to the total number of employees at 31 December (including those working for the Company for less than a year) by gender.
(4) Percentage of employees who have followed at least one training course on human rights during the year.

[59] Further information regarding training indicators are published in the "Key indicator tables", published in the "Sustainability" section of the website at www.terna.it.

New projects

First-time initiatives carried out in 2021 included:

First-time initiatives carried out in 2021 included

- **Innovation Bootcamp:** bespoke training programme (face-to-face lectures, workshops, external testimonies and fieldwork) for 46 Team Innovation staff in order to shore up competencies regarding principles, methodologies and reference frameworks in the field of innovation;
- **NexTerna:** 83 colleagues took part in training regarding methods by which to support construction sites entitled "Flexible solutions applied to processes";
- **Meet-Up RUO:** programme to facilitate the move towards a more centralised Human Resources and Organisation Department (now People, Organisation & Change) in managing the transition to new ways of working;
- **Evoluzione 365:** three webinars were carried out to develop the ability to use Office 365 tools (Planner, Outlook and OneDrive);
- **Future skills:** a programme carried out in collaboration with Talent Garden to design the training offer for digital and innovation skills, involving 60 colleagues.

Technical-specialist field

- Real-time **Continuous training** for control room operating staff (CNC, CCT and EME) regarding the new MSD incentive programme. Off-duty personnel received training via additional initiatives;
- **Realization of underground cable systems for construction site supervisors** carried out in collaboration with the subsidiary, Brugg Cables, to hone knowledge about the laying of high-voltage underground cables;
- Update on **procurement regulations** provided to 318 people directly involved in procurement and the issuance of purchase orders;
- **Digic Project – Systems for monitoring high-voltage cables**, which involved 124 people and was aimed at developing knowledge and skills pertaining to the installation and maintenance of monitoring equipment installed on high-voltage cables.

Consolidated projects

Initiatives launched in past years that continued in 2021 included:

- **Live line working**, the latest edition of this course was carried out at the training centre in Viverone (BI) and involved six foremen and two contact people. Training also got underway for nine level A workers;
- **Multi-skill:** there were three editions of "Station training for specialised power line workers" and four editions of "Power line training for specialist substation workers";
- **Training project "Work methods in de-energised conditions"**, at the end of 2021 two pilot editions were carried out;
- **Climbing techniques.** The activity was developed at national level with support from infrastructure and unit personnel who are specialised in climbing techniques and certified to teach the subject. The initiative involved 630 colleagues;
- **Electromagnetic fields:** training project for exposed professional figures, with the first phase focusing on the training of tutors and the second targeting all exposed workers. More than 1,600 people have been trained.

Compliance and HSE (Health, Safety and Environment)

HSE (Health, Safety & Environment) activities included courses to ensure compliance with Consolidated Law 81/08 involving more than 1,200 staff members.

Steps to ensure compliance also regarded an activity to raise awareness about **GDPR** (General Data Protection Regulation) topics with particular attention being paid to Terna's new Privacy Model, the Group's **Code of Ethics** and the **Whistleblowing** system (1,415 participants) along with a course for new hires on **business ethics and compliance with Legislative Decree 231**, with the teaching staff comprising colleagues from Compliance, Sustainability, Audit and Management Systems.

"DEVELOPING COMPETENCIES"

KPI AND TARGETS IN THE 2021-2025 INDUSTRIAL PLAN

KPI	TARGET	
	2021	
Digital skills	TARGET	RESULT
Number of people trained in digital skills (cumulative).	1,300	1,291
Safety culture training via the "Zero Accidents" project (since 2019) Infrastructure and unit personnel who have received safety training (%).	100%	91%

FOCUS

Staff training: comparative data

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

Terna provided 35 hours of training for each employee in 2021, representing a slight increase on 2020 when Terna provided 34 hours of training per capita, thus placing it above the average reported for all three peer groups. Finally, it should be noted that the figure for Terna does not include on-the-job training.

HOURS OF TRAINING PER CAPITA – 2020			
Peer group	TSO	FTSE-MIB	DJSI- ELECTRIC UTILITIES
Data available	11	39	11
Min.	2	5	9
Average	28	28	32
Max.	67	81	67
Terna		**34**	

More information on how the "personnel training" benchmark is determined may be found in the "Sustainability" section of the website www.terna.it.

PC2

Development

The process of profound transformation, which Terna has undertaken with the NexTerna programme, also impacts on the management of competencies and abilities. The former continue to have a central role in the Professional System – i.e. the main tool for managing roles, skills and development paths – the assessment and development of professional technical competencies.

2021 saw completion of the staff **Skill Mapping**, allowing for a complete mapping of the technical and professional knowhow of Terna's entire organisation, with a particular emphasis on distinctive and core skills needed to implement the Industrial Plan. The outcomes of the Skill Mapping process, launched in 2020 in the core business areas, will be used to guide the training programme and the management of knowledge sharing involving technical skills.

As in previous year, 2021 saw continued utilisation of the performance assessment system, **People for Performance ("P4P")**, designed to reinforce the link between the organisation's strategic objectives and those of individuals and to encourage dialogue between heads and collaborators via meetings held during every phase of the process. Performance assessment makes it possible to assign a value to the overall contribution made by an employee and rendered evident by the results achieved and the organisational behaviours adopted. The process ends with a feedback session during which the head and the collaborator are asked to draw up a shared action plan of improvement.

Following the introduction in 2021 of **Leading Next**, a new leadership model forming part of NexTerna, the plan to develop a Talent Management process also got underway. The aim is to define, by means of an engagement and co-design process involving all line managers, a new description of talent and the process by which to bring about the development and growth of talented individuals, both managerial and technical. The project will continue in 2022 via implementation of a pilot project prior to whole-scale adoption by the entire organisation.

8 DECENT WORK AND ECONOMIC GROWTH

"APPLICATION OF PERFORMANCE EVALUATION"

KPI AND TARGETS IN THE 2021-2025 INDUSTRIAL PLAN

KPI	2021		TARGET			
	TARGET	RESULT	2022	2023	2024	2025
Employees taking part in performance appraisals (%)	95%	94%	95%	95%	95%	=

Health, safety and correct working practices

PC1

Working safely, without putting their health at risk, is a fundamental **human right** of employees and Terna invests a great deal in order to guarantee this right for its people via a process of constant attention and improvement that involves supply chain actors who play a decisive role in operations.

< 403-4

The involvement of employees in matters relating to health, safety and the environment is currently regulated by law and collective bargaining, which provide for the election by all employees of **Staff Representatives for Safety and the Environment**. Specifically, as required by existing legislation[60], meetings regarding safety are held by employers at least once a year and whenever there are significant changes in exposure to risks. In addition to the employer or a representative thereof, participants include the Prevention and Protection Service Manager, a competent physician and Representatives for Safety and the Environment.

The National Collective Labour Contract also provides for the establishment of a bilateral body (**"Commission"**) – at electricity sector level – on **"Health, safety and the environment"** tasked with making proposals relating to the monitoring and coordination of training on environmental and safety issues which Terna and the secretariats of national trade unions (FILCTEM, FLAEI and UILTEC) set up in 2018. The Committee[61] usually meets every six months with its members comprising three representatives from the three national trade unions.

< 403-1

Terna has also voluntarily adopted the UNI EN ISO 45001:2018 certified system to manage **"Occupational Health and Safety"**, which covers 100% of the Company's activities and is incorporated within the Group's other certified management systems. This system is based on an accurate risk assessment, with a particular focus on activities entailing electrical risk (Provisions for the Prevention of Electrical Risk) and falls from a height. Moreover, it provides the Company with assurance that it is always in compliance with applicable legislation and regulatory requirements (Legislative Decree 81/2008 and Legislative Decree 231/2001).

In 2021, Terna also obtained certification for its "Management System for the Prevention and Control of Infections" for its Galbani Hub headquarters in Rome (Viale E. Galbani 55 and 68/70) based on the Biosafety Trust Certification standards (see the specific box on page 183).

[60] Art. 35 of Legislative Decree 81/08.

[61] Terna and the national labour union's secretariats have also established that the Committee's tasks and responsibilities provided for by art. 13 of the "Shared protocol regulating measures to combat and contain the spread of the Covid-19 virus at the workplace" of 14 March 2020 were taken on by Terna's Bilateral "Health, Safety and the Environment" Committee, in that said Committee has already been entrusted with tasks and assignments relating to these topics. Moreover, in the current state of a national emergency, said Committee can ensure its full and prompt participation to all necessary components, given its visibility throughout the Group.

Protecting employees' safety

Italian safety legislation[62] is among the most stringent of any such laws in Europe and requires companies to carry out an analytical assessment of risks to employees' health and safety. Terna extends this requirement to include analysing the risks deriving from interference caused by works being carried out by contractors and subcontractors, covering all the activities involved in work at a construction site.

Terna's approach to occupational safety hinges on a system of tools that are applied to all corporate processes. This system calls for **clear safety policy guidelines**, starting with the Code of Ethics, and an **organisational structure responsible for safety** with operating units throughout Italy for each of which a **health and safety officer and competent physician** have been designated. This organisation is assisted by a central unit that sets policies and guidelines, carries out inspections at workplaces and construction sites and also constantly analyses and monitors risks arising from the Company's activities.

403-3 >

One of the most important activities an employer is required to carry out by law is **health surveillance**, the objective of which is prevention as well as verification over time, carried out in collaboration with the worker and the physician, of the adequate relationship between workers' health conditions and the specific duties assigned to them.

The correct and complete application of procedures is subject to inspections by Employers, internal compliance checks for all Terna Group companies and the external audits required for certification. As regards activities carried out by contractors, Terna conducts inspections of its own construction sites to verify the correct application of accident prevention regulations by the responsible health and safety officers and contractors.

403-2 >

Should an employee of Terna or a contractor be injured or suffer a **near miss**, the local Environmental and Safety Protection unit, in collaboration with the worker or department involved, completes an injury/near miss form detailing the causes and dynamics of the event as well as any measures to be taken to reduce the possibility of a repeat occurrence. In the case of a serious or fatal injury, or when a more in-depth investigation is called for, an internal commission comprised of Terna safety experts and specialists is set up and entrusted with drafting a detailed report containing the measures to be adopted throughout the Company.

The protection of workers' health and safety is subject to **research** conducted by a standing committee that involves various company departments. The aim is to identify and experiment with new personal protective equipment (Smart PPE) able to aid workers as they carry out their activities by encouraging good practices and responsible behaviour both individually and collectively.

403-5 >

All staff have access to key information regarding health and safety and innovations through various channels, including the Companies intranet ("HSE-Health, Safety and Environment" Section of the Document System), informative meetings and specific **training** centring on the topics of health and safety. In 2021, around 52,300 hours of training were provided, of which 54% was aimed at blue-collar workers (additional data on training may be found on page 200).

Finally, the **occupational safety indicator**, comprising the injury rate and the lost day rate and including injuries involving contractors' personnel, contributes to defining the remuneration variable of personnel in the departments concerned.

[62] Legislative Decree 81/2008 "Consolidated law on the protection of health and safety at the workplace" dated 9 April 2008.

Occupational injuries

< 403-9

As in previous years, there were no fatal workplace accidents among the Group's employees in 2021. Moreover, there were no serious injuries resulting in an initial prognosis of more than 40 days. The total number of injuries amounts to 20 (27 in 2020), including 4 with a prognosis of less than 3 days.

In Terna, the injury rate fell significantly compared with the previous year, down from 0.77 in 2020 to 0.53 in 2021 (further information regarding safety figures and injury rates by gender is provided in the "Key indicator tables" published in the "Sustainability" section of the website at www.terna.it).

OCCUPATIONAL INJURIES, TERNA EMPLOYEES GRI-ILO DEFINITIONS (*)

	TERNA, TAMINI, BRUGG SWITZERLAND		TERNA		
	2021	2020	2021	2020	2019 (**)
Injury rate	0.87	1.22	0.53	0.77	0.95
Fatality rate	0	0	0	0	0
Serious injury rate where the initial prognosis is more than 40 days	0.00	0.02	0.00	0.03	0
Number of injuries	38	50	20	27	33
- of which serious, where the initial prognosis is more than 40 days	0	1	0	1	0
- of which fatal	0	0	0	0	0
Number of hours worked (***)	8,777,239	8,212,981	7,551,183	7,038,326	6,938,961
TYPE OF OCCUPATIONAL INJURY					
Falling from height	0	1	0	1	0
Traffic accident injury	5	3	5	2	9
Electrocution	0	2	0	2	0
Impact, crushing, cut	15	17	5	7	10
Falling on level ground, slipping	14	18	8	11	10
Manual handling of loads	1	5	1	2	0
Projection of solid fragments and/or other liquid substances	1	3	0	2	2
Other	2	1	1	0	2

(*) *As required by GRI protocols, the definitions adopted are those provided for by the International Labour Organisation (ILO). To aid comparison with other sources, the following notes show the figures for the same indicators calculated using alternative formulae.*
(**) *Compared with that reported in the 2019 Sustainability Report, the number of injuries dropped from 34 to 33 in that INAIL recognised one injury as an illness, with a consequent restatement also of the 2019 injury rate.*
(***) *From 2020, the figure for the number of hours worked includes the hours worked by senior management and hours of training.*

Injury rate. The number of injuries registered and reported to the competent social security office, divided by the number of hours worked during the year, multiplied by 200,000 (corresponding to 50 working weeks x 40 hours x 100 employees).
To aid comparison with other sources, the injury rate is also calculated in accordance with the UNI 7249:2007 Standard. This indicator has been calculated using a multiplication factor of 1,000,000 rather than 200,000 (thereby obtaining a rate that is 5 times the corresponding ILO rate). Based on this method of calculation, the injury rate, in 2021, is **4.3 including Terna, Tamini and Brugg Switzerland; 2.6 for Terna. In 2020, the rate was 3.8 for Terna and 4.8 in 2019** (figure restated following the reduction in the number of injuries from 34 to 33).

Fatality rate. The number of fatalities registered and reported to the competent social security office, divided by the number of hours worked during the year, multiplied by 200,000 (corresponding to 50 working weeks x 40 hours x 100 employees).

Serious injury rate. The number of injuries where the initial prognosis is more than 40 days registered and reported to the competent social security office, divided by the number of hours worked during the year, multiplied by 200,000 (corresponding to 50 working weeks x 40 hours x 100 employees).
To aid comparison with other sources, the lost day rate is also calculated in accordance with the UNI 7249:2007 Standard. This indicator has been calculated using a multiplication factor of 1,000,000 rather than 200,000 (thereby obtaining a rate that is 5 times the corresponding ILO rate). Based on this method of calculation, the serious injury rate, in 2021, is **0 for Terna, Tamini and Brugg Switzerland, whilst the figure was 0.1 in 2020. The serious injury rate for Terna based on this method of calculation, in 2021, is 0; 0.1 in 2020 and 0 in 2019.**

As regards Tamini, injuries in 2021 are primarily due to uncoordinated movements and inattentive use of work equipment. A specific training course designed to improve workers' levels of concentration during the use of carpentry tools was held during the year.

For the purposes of comparison with previous reports, the table below shows the lost day rate, the occupational disease rate and the absenteeism rate.

THER INDICATORS - OCCUPATIONAL INJURIES SUFFERED BY TERNA EMPLOYEES - GRI-ILO DEFINITIONS (*)

	TERNA, TAMINI, BRUGG SWITZERLAND		TERNA		
	2021	2020	2021	2020	2019
Lost Day Rate (**)	25.90	47.90	16.85	40.07	35.77
Occupational Diseases Rate	0	0.02	0	0.03	0
Absenteeism Rate	4,447.1	5,950.9	3,718.6	5,246.5	6,378.6

(*) *As required by GRI protocols, the definitions adopted are those provided for by the International Labour Organisation (ILO). To aid comparison with other sources, the following notes show the figures for the same indicators calculated using alternative formulae.*

(**) *Compared with the information published in the 2019 Sustainability Report, the lost day rate for 2019 has declined as INAIL has classified one injury as a disease.*

Lost Day Rate. The ratio of days lost due to injury to the number of hours worked during the year, multiplied by 200,000. The days lost are calendar days and are counted from the day on which the injury occurs.

To aid comparison with other sources, the lost day rate is also calculated in accordance with the UNI 7249:2007 Standard. This indicator has been calculated using a multiplication factor of 1,000 rather than 200,000. Based on this method of calculation, the lost day rate, in 2021, is **0.13 for Terna, Tamini and Brugg Switzerland. For Terna, the lost day rate, in 2021, is 0.08; 0.20 in 2020 and 0.18 in 2019**.

Occupational Diseases Rate. The total number of cases of occupational disease divided by the number of hours worked during the year, multiplied by 200,000. In 2020, one case of occupational disease was reported by Terna.

Absenteeism Rate. The number of days of absence due to illness, strikes, injuries and leave out of the number of days worked in the same period, multiplied by 200,000. To aid comparison with other sources, this indicator has been calculated as a percentage of the days worked. Based on this method of calculation, the absenteeism rate, in 2021, is **2.2 for Terna, Tamini and Brugg Switzerland. For Terna, in 2021, it is 1.9; 2.6 in 2020 and 3.1 in 2019.**

The figures for workers employed by contractors are shown below, whilst additional information contractors' health and protection safety measures is provided on page 200.

OCCUPATIONAL INJURIES SUFFERED BY CONTRACTORS AND SUB-CONTRACTORS - GRI-ILO DEFINITIONS (*) (**)

	2021	2020	2019(***)
Injury rate	0.87	1.13	1.57
Fatality rate	0	0.06	0.04
Serious injury rate where the initial prognosis is more than 40 days	0.09	0.09	0.07
Number of injuries	29	38	44
- of which serious, where the initial prognosis is more than 40 days	3	3	2
- of which fatal	0	2	1
Number of hours worked	6,687,917	6,721,754	5,599,272
TYPE OF OCCUPATIONAL INJURIES			
Falling from height	0	1	3
Traffic accident injury	1	2	1
Electrocution	0	1	0
Impact, crushing cuts	15	20	22
Falling on level ground, slipping	10	7	9
Burns	0	1	1
Manual handling of loads	3	5	4
Projection of solid fragments and/or liquid substances	0	0	1
Other	0	1	3

(*) *As required by GRI protocols, the definitions adopted are those provided for by the International Labour Organization (ILO). To aid comparison with other sources, the following notes show the figures for the same indicators calculated using alternative formulae.*

(**) *This table does not include data regarding Tamini as the nature of the company's business does not involve the major use of contractors or subcontractors. As a result, the table does not show hours worked by the employees of contractors or subcontractors. There were no injuries in 2021. Moreover, data for Brugg Switzerland has not been included as it is not available.*

(***) *It should be noted that the figures for 2019 differ from those published in previous reports as the criteria used to calculate the hours worked by contractors' employees have been revised.*

Injury Rate. The number reported corresponds to injuries entailing at least one day's absence from work, divided by the number of hours worked during the year, multiplied by 200,000 (corresponding to 50 working weeks x 40 hours x 100 employees).

To aid comparison with other sources, this indicator has been calculated using a multiplication factor of 1,000,000 rather than 200,000 (thereby obtaining a rate that is 5 times the ILO rate). Based on this method of calculation, the injury rate, in 2021, is **4.3; 5.7 in 2020 and 7.9 in 2019**.

2021 saw continuation of the monitoring of construction sites and injuries to people employed by contractors to ensure the correct application of existing safety regulations and technical procedures. Only one serious injury was reported during the year involving personnel employed by a contractor carrying out work for Terna's overseas companies.

"HEALTH AND SAFETY" TARGET

KPIS AND TARGETS IN THE 2021-2025 INDUSTRIAL PLAN

KPI	2021 TARGET	2021 RESULT	TARGET 2022	2023	2024	2025
Safety indicator	≤ 1	0.49	≤ 1	≤ 1	≤ 1	≤ 1

Safety, the environment and human rights at contractors' construction sites

The figure for the number of staff employed by contractors and subcontractors in 2021 is in line with the figure for 2020. These figures are especially significant as they reflect Terna's ability to maintain employment levels in the downstream supply chain during the period of the pandemic.

EU17 >

EMPLOYEES OF CONTRACTORS AND SUBCONTRACTORS (*) (**)

	2021	2020	2019
Number of days worked	879,989	884,441	736,746
Full Time Equivalent	4,000	4,020	3,349

(*) *The figures take into account the duration of contracts and the variable nature of the related workforce and pertain to the different types of contracts awarded by Terna, ranging from major works to those for cutting back vegetation located under power lines. The number of working days and FTEs are estimated on the basis of average daily attendances at the largest sites and the value of the works contracted out at smaller sites. Further information about the types of contract used by contractors is not available. Finally, it should be noted that the figures for 2019 differ from those published in previous reports as the criteria used to calculate the hours worked by contractors' employees have been revised.*

(**) *This table does not include data regarding Tamini as the nature of the company's business does not involve the major use of contractors and/or subcontractors. As a result, the table does not show hours worked by the employees of contractors and/or subcontractors. Moreover, data for Brugg Switzerland has not been included as it is not available.*

EU18 >

Given the substantial use of external labour at Terna's construction sites, works contracts are subject to stricter rules, not only in terms of qualification, but also regarding management, with particular reference to occupational safety, the requirements of which are excluded from any lowest price concerns during the award process.

During the qualification process, Terna requires evidence of documented procedures to protect workers' health and safety. For companies from sectors deemed most significant from an environmental and safety point of view, an in-depth analysis of management practices is required.

Terna requires additional qualification from contractors, specifically regarding:

- their personnel's knowledge of Italian;
- adequate specific training for all construction site workers on the use of personal protective gear, on the risks set out in the Safety and Coordination Plan and in the Operational Safety Plan and on the operating procedures and the environmental protection measures set forth in the specific operating procedure "Management of environmental aspects during construction" appended to each individual contract;
- attendance at training courses for certain specific roles (e.g., workers involved in the assembly and maintenance of overhead power lines, PES (expert person) and PAV (warned person) in compliance with the CEI 11-27 Standard, workers assigned to cutting back vegetation, site managers, foremen and safety officers;
- appointment of a Prevention and Protection Service Manager, a construction site safety representative, a crisis manager and deputy and an appointed physician;
- a requirement that the contracts entered into with contractors include the need to keep records of injuries occurring during the year.

The actual implementation of training is verified via the "Qualified Company Personnel" online platform. In order to minimise the risk of violation of human and labour rights to the detriment of contractors' employees, in addition to specific information on key contracts, Terna requires a copy of an insurance policy taken out to cover third-party liability and damage to persons and property, including assets owned by the contractor, for the entire duration of the works and for an amount commensurate with the nature of the works. A copy of the contractor's records of social security and pension contribution payments is also required.

From 2019, all works and supply contracts involving work onsite contain a requirement to provide the information needed to, on the one hand, closely monitor and assess injuries to contractors' personnel and, on the other, acquire the data necessary to compute contractors' injury rates.

Terna has drawn up a preventative safety and environmental protection monitoring system for construction sites, broken down into two levels:

- First level: the contracting entity is entrusted with monitoring, via checks, the work carried out by the Construction Safety Manager and the contractors. 44 checks were carried out in 2021;
- Second level: Terna (Health & Safety Environment Department) is responsible for spot checks designed to monitor the entire management and control process at construction sites.

Regarding the environmental checks provided for in the second level, 20 construction sites were monitored in 2021 in connection with the following aspects:

- Organisation of sites and traffic;
- Site documentation;
- PPE, equipment and machinery;
- Phases of the project and operational risk;
- Checks on the work of safety coordinators;
- Waste management;
- Excavated soil and rocks;
- Site equipment storage management;
- Hazardous substances and accidental spills;
- Rainwater and supplies;
- Dust and sediment emissions;
- Noise;
- Site-specific characteristics and planning consent regulations.

None of the checks produced evidence of any critical issues. Finally, together with companies that are members of ANIE (National Federation of Electro-technical and Electronic Businesses) and leading Italian operators of networks and infrastructure, Terna sets up and takes part in technical committees. The aim is to share experiences and regulatory interpretations in order to ensure ongoing improvements with regard to health and safety at the workplace.

Industrial relations[63]

< 402-1

Staff engagement is also achieved via structured dialogue with labour union representatives. **All Terna's employees are covered by collective bargaining agreements, the national collective labour agreement adopted by companies in the electricity sector**[64].

In 2021, the unionisation rate of Terna's workforce was 43.7%, with membership concentrated among the largest trade unions.

[63] The data reported in this section do not include Tamini Trasformatori S.r.l. or Avvenia.
[64] All Terna's employees are covered by the national collective labour agreement for the electricity sector. Tamini Group employees are covered by the national collective labour agreement for the engineering sector; Avvenia's employees by the national collective labour agreement for trading companies.

Relations between Terna and the trade unions are regulated, at Group level, by the "Industrial relations system protocol", which sets out the terms of bargaining, dialogue, consultation and prior and/or specific reporting. In line with current regulations, relations between trade unions the entire Group's workforce are facilitated via provision of dedicated space and notice boards at each workplace.

The involvement of trade union organisations in the event of organisational changes, a central pillar of industrial relations, is governed by legislation, industry contracts and company agreements. In accordance with trade union agreements in force at Terna, in the event of significant organisational changes, preliminary discussions are held with trade unions.

In the three-year period 2019-2021, negotiations with trade unions led to the signing of **41 agreements**. Finally, in 2021, meetings were held by both the Bilateral Training Committee (2 meetings) and the Bilateral Health, Safety and Environment Committee (2 meetings), in order to boost dialogue, discussion and participation in these areas.

Regulation of industrial action in the electricity service sector

In the event of industrial action, the essential services needed to ensure continuity of service are regulated by the National Labour Union Agreement signed in February 2013. As far as Terna is concerned, some shift workers who work in dispatching (real-time monitoring of the national electricity system; the remote operation of transmission plants; checks on production plans and the procurement of production resources; the monitoring coordination and operation of IT system; ancillary services and infrastructures used in dispatching) and staff from the Security Operations Centre are prohibited from taking part in industrial action.

Whilst entitled to suspend their normal duties during a strike, staff on call are obliged to ensure that they are contactable, even during the hours scheduled for the strike.

PC3

Company welfare

Employment conditions at Terna rank well above the Italian average. Company welfare comprises a host of initiatives, opportunities and services that the Company offers its employees, including those on part-time contracts and apprenticeships, in order to enhance their well-being and work-life balance.

401-2 >

The pandemic has transformed many aspects of our daily lives, including ways of working. For this reason, Terna is redefining them through "NexTerna", a cultural transformation programme designed for the entire workforce (see pages 52 and 193).

In line with the NexTerna programme's aims, all of the welfare services provided by Terna have been mapped out so as to increase awareness and use of such services throughout the Company. At the same time, they have been classified in the following seven categories, so as to make it easier to identify the areas of greatest interest:

PC1 201-3 > 403-6 >

Pensions and Health, refers to a supplementary pension scheme, designed to supplement the state pension provided by INPS, and prevention campaigns promoted by the Company for its people. Details are also given on the healthcare plan that provides services not only to Terna employees but also to their dependents.

Loans and insurance focuses on currently available forms of financial aid and insurance. Terna offers its employees a range of insurance policies that cover numerous events, both occupational and non-occupational, and the chance to obtain loans or request an advance on their severance indemnities under certain circumstances.

Family comprises welfare initiatives pertaining to employees and their loved ones. It provides information on the favourable conditions, compared with those set out in the National Collective Labour Agreement, adopted by the Company and the in-house projects devoted to infants and small children, such as the crèche set up at our offices in Rome.

Work-life balance comprises initiatives that make it easier for employees to balance their work and private lives. The Company offers ever more varied options such as, by way of example, flexible hours, the conversion of accumulated overtime hours worked into leave and recourse to structured remote working.

Performance-linked bonus refers to the management and use of company incentives relating to the performance bonus. In 2021, Terna consolidated an initiative begun in 2018 that enables Group employees to use a part of their performance-linked bonus to purchase goods and services or to make supplementary pension contributions. In 2021, the offer was updated to be in line with the reference market, adding the possibility to convert the bonus into vouchers that can be used on leading e-commerce platforms. The vouchers are completely tax exempt thanks to favourable legislation on fringe benefits.

Culture, Sport and Leisure contains special offers in the realm of entertainment and well-being. Through the ARCA association, Terna promotes and realises leisure activities at favourable conditions and activities for children, young people, families and the elderly. In 2021, the company gym located at Via Galbani 55 was opened.

Special agreements, with agreements and offers in various sectors and product categories, agreed by the Company with local businesses and organisations.

Care for children and other family members

< 401-3

Italian law regulates maternity leave and parental leave and provides general coverage. In comparison, Terna offers more favourable conditions, in application of the National Labour Contract for the industry and company agreements.

The most important measures include:

- Five months paid maternity leave, provided to the mother before and after birth. Terna guarantees full pay compared with the 80% provided for by law;
- An additional six months of parental leave may be taken on 30% pay. Terna has raised this amount to 45% and 40%, respectively, in the first and then in the second and third months of the period. Paternity leave may also be taken, up to a maximum of eleven months of total leave taken by both parents. If not used in the first six years of a child's life, the leave may be taken later up to when the child turns twelve, but in the form of unpaid leave;
- Unpaid leave, with no restrictions on use, in the event of illness of children under the age of 3;
- Three days per month, also in the form of hours, of paid leave to look after children or other family members with serious disabilities;
- Special leave for two years in the event of a child or other close relation having a serious disability;
- More flexible work hours for parents with children attending junior high school.

Under a specific union agreement signed in 2017, Terna has also introduced additional measures to improve work-life balance and further support parenthood. This agreement grants half a day's leave to accompany one's children on their first day of primary school and an additional five days of paid leave, including that set by regulatory provisions.

401-3 >

Finally, the "MiniWatt" crèche for infants, toddlers and pre-schoolers ranging in age from 6 months to 3 years set up at the Company's Rome offices at Via Galbani 55 was opened.

The table below shows the number of employees who have taken at least 29 days' parental leave.

	TERNA, TAMINI, BRUGG SWITZERLAND		TERNA		
	2021	2020	2021	2020	2019
Total	**30**	**31**	**29**	**30**	**18**
- women	28	26	27	25	15
- men	2	5	2	5	3

With the exception of one Tamini staff member, employees taking parental leave in the three-year periods shown subsequently returned to work. In 2021, 22 of Terna's personnel and 1 person employed by Tamini took compulsory maternity leave.

406-1 > 405-2 > 405-1 > PC4

Diversity and equal opportunities

Terna uses staff selection, development and compensation systems that recognise and reward merit. All forms of discrimination, starting with the selection and recruitment process, are explicitly prohibited by the Group's Code of Ethics and Guidelines (e.g., its Human Rights Policy). The Board of Directors approved the **Diversity & Inclusion Policy** in 2021. This formalises Terna's commitment to promoting and protecting diversity and to preventing and punishing any form of discrimination and harassment[65].

Women in leadership: the EmpowHer project

Within the scope of the "Inclusive leadership" topic area of the NexTerna programme, we are implementing our EmpowHer project. This aims to promote talented women within the Company as part of a female leadership model based on inclusion, dialogue, engagement and relationships.

EmpowHer has four distinct threads, all sharing the same goal of encouraging people to think about the contribution made by gender diversity in helping to create a more inclusive working environment. These threads are:

- **Voice Out**, an ideas competition to encourage the emergence of structured proposals for enabling women within the Company to contribute and participate more;
- **Role Model Talks**, five meetings during which the Sky Tg24 journalist, Monica Peruzzi, conducted live interviews with five women – the first with the Chairwoman, Valentina Bosetti – whose personal development stories can inspire others;
- **Scholarships**, four overseas scholarships offered by the Company and organised with the support of the Intercultura Foundation for the daughters of Terna personnel, who are offered the opportunity to have a multicultural educational experience;
- **Job Shadowing**, providing the chance to work alongside men and women in senior or middle management roles for a period of two working days, offered to young female graduates under 30 years of age.

[65] Reports of any conduct that breaches the principles contained in the Policy, including harassment or any form of physical and/or psychological abuse, are to be made through the Whistleblowing channel. It should be noted that in 2021 there were no episodes of discrimination and harassment.

The vast majority of employees are men, due to a traditional shortage of female labour for more technical and operational roles. Nonetheless, the presence of women is increasing, partly reflecting general labour market trends, which show that female participation is on the rise.

The percentage of women in the total workforce in Italy was 9.0% at the end of 2005 (the year in which Terna became an independent company). This figure has grown steadily since then, registering 15.6% at the end of 2021. In the same year, 30.2% of hires, not taking into account blue-collar workers, were women (24.4% in 2020; 30.2 including Tamini and Brugg Switzerland).

The main indicators chosen by Terna to monitor the equal treatment of men and women show that the management and development systems adopted do not disadvantage women. Notably, in 2021, **the percentage of female managers out of the total of managers (20.9%) was once again higher than the percentage in relation to the total number of employees, without taking into account blue-collar workers (20.7%)**. Remuneration data also show moderate pay gaps for office staff and middle managers, with wider gaps for senior managers, although the number of people considered is smaller and pay gaps are consequently more influenced by the nature of the related roles and the fact that there are few incoming and outgoing staff.

EQUAL OPPORTUNITIES FOR MEN AND WOMEN

	TERNA, TAMINI, BRUGG SWITZERLAND		TERNA		
PERCENTAGES	2021*	2020	2021	2020	2019
Pay gap between men and women as a % [1]					
Senior managers	86.3	83.5	85.1	83.1	83.0
Middle managers	95.0	94.3	95.7	95.3	94.6
Office staff	96.7	97.8	99.5	100	99.4
Remuneration gap between men and women as a % [2]					
Senior managers	79.8	86.8	77.9	87.7	81.4
Middle managers	95.6	94.7	96.3	95.8	95.1
Office staff	92.2	93.5	94.7	95.3	96.4

(*) *Terna and Tamini do not employ women among their blue-collar personnel. If the scope is extended to include Brugg, there are 2 women in the blue-collar category. At Brugg Switzerland, the only company for which there is any sense in computing the pay gap, the figure is 101.9 and 101.7, based on overall remuneration.*

(1) *This figure is based on the annual basis pay of women in the different categories as a percentage of the annual basic pay of men in the same category. This figure has not been calculated for blue-collar workers as there are no women in this category.*

(2) *This figure is based on the total annual remuneration of women in the different categories as a percentage of the total annual remuneration of men in the same categories. In addition to basic pay, total pay also includes productivity bonuses, various forms of incentive and the value of benefits received during the year.*

Almost all employees are Italian citizens (only 36 employees have foreign citizenship).

< 202-2

At 31 December 2021, Terna employed 151 people from legally protected categories (144 in 2020 and 142 in 2019), in line with the regulations applicable to the Company. Additional indicators regarding equal opportunities are provided in the "Key indicator tables" (published in the "Sustainability" section of the website at www.terna.it).

Social and relationship capital BM1

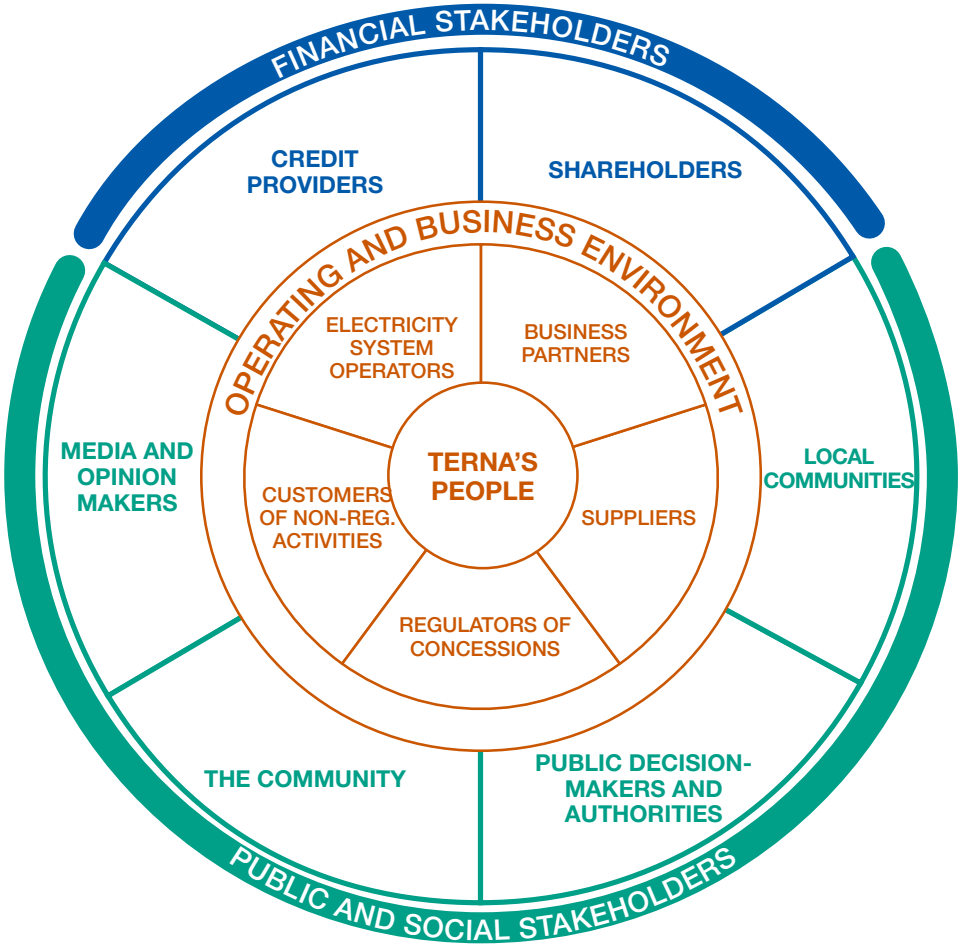
The quality of Terna's social and relationship capital is determined by the ability to listen to groups who, for various reasons, have relations with the Company ("stakeholders"[66]), taking their interests into account and analysing their compatibility with the specific interests of the Company and the obligations established by the concession, so as to be able to adopt a coherent and transparent course of conduct. This is in line with the principles set out in the new "Corporate Governance Code"[67], which assigns the Board of Directors, among others, responsibility for fostering *"dialogue with shareholders and the Company's other key stakeholders in the forms considered most appropriate"*.

With this awareness, Terna has drawn up a stakeholder map and built **specific engagement programmes** to identify actions to be undertaken to optimise current engagement methods and listen to the most influential stakeholders on a periodic basis, thus avoiding the risk of failing to promptly identify any problems.

The tools developed by the Company to manage its social and relationship capital include two specific sets of guidelines. The first defines the **stakeholder management model**, while the second focuses on **the engagement of local stakeholders in Terna's grid planning activities**.

[66] Stakeholders are persons and/or organisations that can influence or be influenced by the Company's activities.
[67] The new "Corporate Governance Code" was approved by Borsa Italiana's Corporate Governance Committee in January 2020. Companies adopting the Code must apply it from the first financial year beginning after 31 December 2020, announcing this to the market in the corporate governance report to be published in 2022. The Code is available at the following link: https://www.borsaitaliana.it/comitato-corporate-governance/codice/2020.pdf

STAKEHOLDER MAP



To be able to offer greater accessibility, but also to provide information on the electricity system and, more generally, to develop an energy culture, Terna has put in place **a number of dialogue and communication channels**. These are diversified by type of audience, language and purpose (e.g., requests for information, suggestions, observations and complaints).

The easiest way to contact Terna is by using one of the various e-mail addresses provided on the website at www.terna.it. E-mails from employees are sent via the intranet[68]. A list of "Contacts" is provided in the menu on the homepage of the website, which provides guidance to anyone wanting to communicate with the Company. This page also lists the certified e-mail addresses to use for communications that must meet this requirement. The website homepage also provides access to Terna's **social channels**, which, each in its own characteristic and specific way, increasingly offer an opportunity for integrated interaction with stakeholders, ranging from authorities to local communities, and from Terna professionals to the world of universities and research. In 2021, the community that follows Terna on its main profiles (Facebook, Twitter, Linkedin, Instagram) grew by 27%. Content views (up 180%) and user engagement (up 22%) via published posts also increased compared to 2020.

For electricity operators and suppliers, Terna has **four separate company portals** (GAUDI, MyTerna, the Procurement Portal and the Supplier Qualification Portal), as well as a dedicated call centre, which may be reached via a toll-free number (800-999333).

[68] For example: sostenibilita@terna.it, investor.relations@terna.it, azionisti.retail@terna.it, ufficio.stampa@terna.it, etc.

The GAUDI portal

The GAUDI portal, which may be accessed by producers, distributors, dispatching users, ARERA and Italy's Energy Services Company (GSE), was created by Terna[69] to manage the Consolidated Power Generation Plant Register and the relative production units at national level, and to streamline communications between the various actors in the power generation sector.

Via a unique CENSIMP code[70], the platform records all the generation plants and the individual units that comprise them, of any size (from the databases of non-significant UPN6 and significant RUP production units) or source (conventional, renewable, cogeneration and storage systems), covering a total of **over 1,000,000 units** at 31 December 2021.

Via a dedicated control panel, the portal enables the status of each plant to be monitored - from authorisation to connection, and the market qualification process – as well as all the changes to the plant and to commercial aspects that occur during a plant's operation, with a view to ensuring full interoperability with distributors and the GSE.

DATA RECORDED ON THE GAUDI PLATFORM AT 31 DECEMBER 2021

SOURCE	NO. OF PLANTS	INSTALLED POWER	POWER INPUT
Solar	1,015,239	22,566 MW	=
Hydroelectric	4,648	26,023 MW	=
Wind	5,777	11,322 MW	=
Thermoelectric	6,922	=	57,360 MW

MyTerna portal

My Terna is the portal for electricity operators, consisting of an advanced platform developed with a view to optimising commercial relations through the introduction of a **Customer Relationship Management (CRM)** system providing a single, integrated platform for interacting with Terna.

Among other things, the CRM system allows users to: manage and update their data, request connections to the NTG, manage contracts, contact Terna and view information.

Procurement and supplier qualification portal

The initial encounter between Terna and suppliers (potential or otherwise) takes place in specific sections of the **Procurement** and **Supplier Qualification Portal** at www.terna.it, where it is possible to find information about calls for tenders, participate in online tenders and complete the qualification procedure in order to be included in the list of approved suppliers.

In 2021, approximately **1,700** requests for assistance were received via the Supplier Qualification mailbox, which were dealt with within the deadlines set out in the Company's procedures.

In 2021, **1,316** requests for online assistance with the Procurement Portal were received from suppliers, all of which were dealt with within the deadlines set out in the Company's procedures.

Communication

In 2021, the Group's communication generated coverage via the release of a total of 27,321 items (up 16% on 2020), including traditional (newspapers, periodicals, radio and TV) and online media. In detail, 4,561 press articles appeared (in line with 2020), including 2,204 in the local press (up 10% on 2020). The Company featured 522 times in broadcasts by leading TV and radio channels (up 27% on 2020), whilst 22,238 articles were posted on leading websites (up 21% on 2020).

[69] In compliance with Resolution ARG/elt 124/10.
[70] Already established in a special database by Resolution ARG/elt 205/08.

In 2021, in order to promote the spread of a well-informed energy culture and facilitate broad awareness of the electricity sector, in which Terna plays the role of driver and enabler of the ecological transition towards a sustainable, low-emission system, the Company developed a new Development Plan application and an integrated platform regarding the decarbonisation of Italy. Via these two new initiatives, Terna continues and strengthens our commitment to ever greater transparency and the spread of information and data, specific expertise and in-depth knowledge of the national electricity system.

For the first time, Terna has dedicated an app to the 2021 Development Plan, which illustrates key infrastructure projects and works. Available since July 2021, the **Grid Development** app enables all citizens to learn about the key works planned for the ecological transition and, with augmented reality, to explore additional content such as the local context, the planning process, the development works and the benefits for the system.

At the COP26 meeting held in Glasgow (31 October - 12 November 2021), Terna launched the **Terna4Green** project to monitor Italy's progress towards decarbonisation, in line with the targets set out in the National Energy and Climate Plan (PNIEC) and international sustainable development goals. This digital platform, the first and only one of its kind, enables real-time comparison and correlation of thousands of data points and estimates regarding Italian electricity production with data regarding carbon dioxide emissions into the atmosphere.

In 2021, Terna obtained **BIC - Best in Media Communication** certification from Fortune Italy, in collaboration with Eikon Strategic Consulting. The experts praised Terna's *"excellent reputational positioning, journalists' appreciation of the clarity of information provided, and highly effective communication of the image of a sound and growing company, which is a leading player in the energy transition and an innovation partner capable of generating value for local communities"*. This prestigious award confirms the effectiveness of Terna's revamped communication strategy, as demonstrated by the corporate television campaign. In 2021, the Company produced a 30-second video to present its role in driving the Italian electricity system and the ecological transition. The highlight of the commercial was the corporate payoff "Driving Energy", adopted by Terna to coincide with the presentation of our 2021-2025 Industrial Plan.

At the end of 2021, Terna realized a book of photographs entitled **Driving Energy 2021**, including over 80 snapshots, focusing on the faces, values and unique and distinctive skills of the people involved in the daily management of the national electricity grid. The artistic images, photographed in the Company's eight departments/districts, illustrate the variety of work that specialist technicians carry out on electricity infrastructure.

For the second consecutive year, Terna leads the way in Italy and Europe in terms of the quality of our digital communication

The Webranking by Comprend 2021-2022 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 for the second consecutive year**. Ranked first among the 111 biggest Italian blue chips and among the 500 largest companies in Europe by market capitalisation, with a record score of 95.9 out of 100, the study acknowledged Terna's excellence in terms of the credibility, transparency and accessibility of information presented on the corporate website and on the main financial and ESG-related social channels, also to reinforce the Terna's role in energy transition. According to the study, Terna stood out among the best companies for its presentation of our commitment to sustainability, the information provided on governance, and its ability to attract young talent and job seekers. The Company was also deemed to be a best practice benchmark for communication addressed to investors and financial analysts.

DIALOGUE WITH STAKEHOLDERS

FINANCIAL SPHERE

Shareholders *Controlling shareholders, institutional equity investors, retail shareholders, financial analysts, proxy advisors, SRI investors, ESG analysts and rating agencies.*

RELATIONAL AND MONITORING PROCEDURES
Road shows, conference calls, presentations, dedicated meetings, website ("Investors" section of www.terna.it); telephone numbers (for institutional investors: +39 06 8313.8282; for the generality of shareholders: + 39 06 8313.8136) and dedicated e-mail addresses (for institutional investors: investor.relations@terna.it; for the generality of shareholders: azionisti.retail@terna.it). ESG ratings.

ACTIVITIES IN 2021
Five email enquiries were received from non-institutional shareholders (6 in 2020 and 11 in 2019), which concerned information on the Company's business and dividend payments.
At the Shareholders' Meeting held on 30 April 2021, 1,713 shareholders were duly represented, solely through the Appointed Representative , accounting for 1,341,018,898 ordinary shares, or 66.7% of the share capital.

LENDERS *Banks, rating agencies, debt investors, international financial institutions, national and international public lenders.*

RELATIONAL AND MONITORING PROCEDURES
Incontri periodici; Documentazione informativa dedicata; Rating.

ACTIVITIES IN 2021
Terna maintains ongoing relations with all potential lenders. Numerous meetings are scheduled during the year, including conference calls and in-person meetings, with a view to encouraging information sharing with banks and institutional investors. Every year the Company meets the rating agencies at management meetings. The agencies that currently assess Terna's creditworthiness are S&P's, Moody's and Scope. Finally, conference calls are organised to explain the Group's financial strategies, to carry out the reconciliation and reclassification of the financial statements in accordance with the agencies' criteria, and to provide details of the financial rationale that the rating agencies take into account when assigning a rating.

OPERATIONAL AND BUSINESS SPHERE

REGULATORS OF CONCESSION ACTIVITIES *ARERA, Ministry for Economic Development, European regulators.*

RELATIONAL AND MONITORING PROCEDURES
Formal reports and communications within regulated processes; transmission of information and assessments in response to specific requests or at Terna's initiative.

ACTIVITIES IN 2021
Ongoing activities with ARERA's offices and Board, and with the Ministry for Economic Development.

ELECTRICITY SYSTEM OPERATORS *Distributors, producers, applicants for connection to the NTG, wholesalers, associations representing industry operators, other organisations in the electricity supply chain, interruptible customers, other network operators (TSOs), industry bodies, other owners of the NTG.*

RELATIONAL AND MONITORING PROCEDURES
Grid Code Consultation Committee; relations envisaged and regulated by the Grid Code; "operator consultation" box on Terna's website; "My Terna" portal for dispatching users, including a dedicated call centre; the GAUDI portal for integrated management of plants and production units; specific meetings and participation in organised working groups.

ACTIVITIES IN 2021
The Consultation Committee is a technical body chaired by Terna in which the various categories of users are represented through the participation of ARERA and the Ministry for the Ecological Transition as observers. In 2021, the Committee was involved in the preparation of the 2021 Development Plan. Over the year, Terna organised a number of discussion initiatives with operators to share knowledge about the specific context and to illustrate the changes taking place in the regulatory framework. These included:
- webinar for the 2021 Development Plan consultation;
- webinar to explain the assessment methodology used for the resilience indicator of the NTG;
- in collaboration with the GME, a webinar to explain the process of integrating the electricity market within the European Single Intra-Day Coupling and the new rules for coordinating the Intra-Day Market and the Dispatching Services Market, which serve the operational launch of the XBID project and the complementary Intra-Day auctions within the national electricity market;
- in collaboration with the Greek TSO, a webinar to illustrate the methodology for calculating the interzonal capacity to be allocated in the day-ahead and intraday markets on the Italian market zone borders and on the Italy-Greece border.

PEOPLE WITHIN THE ORGANISATION *Employees, governance bodies, collaborators, labour unions, the training system, workers' representatives..*

RELATIONAL AND MONITORING PROCEDURES
Direct, sample-based surveys; internal communication initiatives; focus groups on specific topics; consultations, discussions and negotiations with trade unions.

ACTIVITIES IN 2021
See the section on "Human capital" on page 192.

SUPPLIERS *Core, non-core and potential suppliers, trade associations..*

RELATIONAL AND MONITORING PROCEDURES
Procurement portal; supplier qualification portal; face-to-face meetings; post-tender feedback; discussion round tables with associations.

ACTIVITIES IN 2021
SSee the paragraph "Supply chain sustainability" on page 186.

OPERATIONAL AND BUSINESS SPHERE *(continued)*

BUSINESS PARTNERS *Business partners, subsidiary companies, interconnector line customers, public safety organisations, applied research institutes, business developers.*

RELATIONAL AND MONITORING PROCEDURES
Partnership agreements; protocols; meetings for specific projects; structured partnerships.

ACTIVITIES IN 2021
Over the years, Terna has signed partnership agreements with institutional bodies (for example, Guardia di Finanza - Finance Police; Fire Brigade, etc.), comprising forms of collaboration that support the Group's activities.

CUSTOMERS (Non-regulated Activities) *Non-regulated business customers, potential customers.*

RELATIONAL AND MONITORING PROCEDURES
Dedicated meetings.

PUBLIC AND SOCIAL SPHERE

PUBLIC DECISION MAKERS AND AUTHORITIES *Ministries with relevant competences regarding the electricity sector, other government bodies, regions and their bodies, Parliament and Commissions, EU institutions; other regulatory and supervisory institutions, the judiciary, Strike Guarantee Commission, national institutions of other countries of interest, international institutions..*

RELATIONAL AND MONITORING PROCEDURES
Regular meetings; formal reporting and communication within regulated processes.
Since 2016, Terna has been on the Transparency Register, established by the Ministry for Economic Development to guarantee transparency and the traceability of meetings with the Ministry's top officials.

ACTIVITIES IN 2021
On 2 February 2021, Terna took part in a hearing before the Senate Industry Committee as part of an investigation regarding the rationalisation, transparency, and cost structure of the electricity market and the effects on users' bills.
On 8 February 2021, Terna sent a memorandum on the proposed National Recovery and Resilience Plan to the Productive Activities Committee of the Chamber of Deputies, which was later sent to the EU Policies Committee and the Senate Budget Committee on 5 March 2021.
On 28 April 2021, the Senate Industry Committee heard testimony on Terna's opinion on the revision of Regulation (EU) no. 347/2013 on trans-European energy infrastructure.
On 17 June 2021, Terna took part in a hearing before the Chamber of Deputies' Constitutional Affairs and Environment Committees regarding Draft 3146 of Law Decree 77/2021, on "Governance of the National Recovery and Resilience Plan and initial measures to strengthen administrative structures and accelerate and streamline procedures".
On 21 September 2021, Terna took part in a hearing before the Joint Committees of the Senate Industry Committee and Territorial Committee regarding the Legislative Decree implementing EU Directive 944/2019 on common rules for the internal electricity market (no. 294), and the Legislative Decree implementing Directive 2018/2001 on the promotion of the use of energy from renewable sources (no. 292).
On 23 September 2021, Terna took part in a hearing before the Productive Activities Committee of the Chamber of Deputies with regard to the Legislative Decree implementing EU Directive 944/2019 on common rules for the internal electricity market (no. 294). On the same day, Terna took part in a hearing organised by the "Finance for Sustainable Infrastructure and Mobility" (FIMS) Research Committee, set up at the Ministry of Infrastructure and Sustainable Mobility regarding issues relating to sustainable finance and the infrastructure sector.
On 19 October 2021, Terna took part in a hearing before the Senate Industry Committee with regard to Law Decree 130/2021 "Urgent measures to reduce the effects of price increases in the electricity and natural gas sectors".
On 16 November 2021, the Productive Activities Committee of the Chamber of Deputies held a hearing as part of a fact-finding investigation regarding energy product price trends.
On 18 November2021, Terna reported to COPASIR as part of the fact-finding investigation regarding energy security in the ecological transition phase.
On 13 December 2021, Terna took part in a hearing before the bicameral Simplification Committee within the scope of a fact-finding investigation regarding simplification of administrative procedures connected with the start-up and operation of business activities.

MEDIA AND OPINION MAKERS *National and international media, national and international opinion groups, web users, universities, other scientific and research organisations, national and international study and steering groups.*

RELATIONAL AND MONITORING PROCEDURES
Presentation of the 2021-2025 Industrial Plan and the 2021 Development Plan; organisation of seminars, workshops and targeted surveys; collaboration and partnership initiatives; participation in organised working groups; e-mail boxes and profiles on social networks.

ACTIVITIES IN 2021
See the paragraph on "Communication" on page 216.

THE WIDER COMMUNITY *Current and future end users of the electricity service.*

RELATIONAL AND MONITORING PROCEDURES
Website at www.terna.it, social networks, dedicated e-mail addresses (info@terna.it). Periodic sample surveys of the population.

ACTIVITIES IN 2021
See the paragraph on "Community initiatives" on page 222.

LOCAL COMMUNITIES *Landowners affected by grid development, associations representing local interests, media outlets, administrators, local suppliers and sub-suppliers, owners of buildings and land in the vicinity of existing lines, territorial committees, local politicians and opinion makers, infrastructure sector operators, other citizens affected by grid development, other local authorities, other citizens affected by the passage of existing lines..*

RELATIONAL AND MONITORING PROCEDURES
Grid planning consultation process; formal reports and communications within regulated processes; population engagement initiatives ("Terna Incontra" meetings).

ACTIVITIES IN 2021
See the paragraph on "Dialogue with local communities" on page 220.

NFS

BM4

Dialogue with local communities

In line with the guidelines in the 2021-2025 Industrial Plan, focusing on the ecological transition and Terna's role in driving and enabling the process, and with the resulting need to invest in the electricity infrastructure provided for in the Development Plan, the Company makes a major effort to engage with the local communities whose areas are directly impacted.

It is essential to ensure that these stakeholders are correctly informed about the reasons for identifying the work to be carried out and the systemic benefits that local communities will gain as a result. Currently, 87% of investment in electricity infrastructure is covered by engagement initiatives involving local communities.

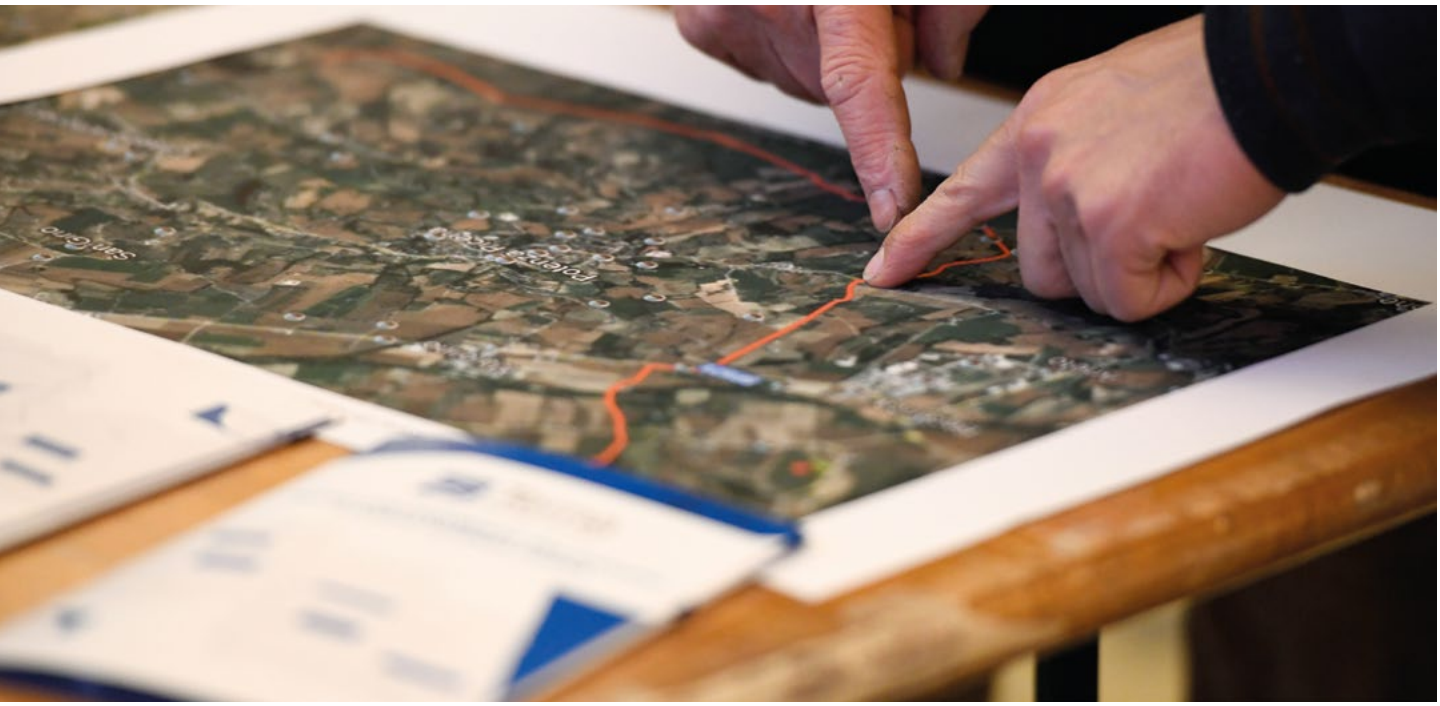
Terna voluntarily consults on the need for grid development with local authorities and listens to public opinion in order to identify the best possible location for new projects, based on the classification of land according to so-called "ERPA criteria": (Exclusion, Repulsion, Problems and Attraction), and with the support of GIS (Geographic Information System) technology, which includes all information relating to different types of land use and the related protection constraints (regional, naturalistic, cultural, landscape, etc.).

In 2021, Terna held a total of 476 meetings with local authorities, involving around 265 bodies, including authorising bodies, local authorities, civil engineering entities, ministries, regional authorities and other economic operators.

413-1 >

MEETINGS WITH LOCAL AUTHORITIES - 2021

AREA	MEETINGS	BODIES INVOLVED
North-west	113	90
North-east	114	91
Centre-South Adriatic Link	117	32
Centre-South Tyrrhenian Link	132	52
Total	**476**	**265**



Landowners affected by NTG development

< EU22

The construction of new power lines involves the use of between approximately 30 and 250 square metres of land – usually agricultural – for each pylon.

Although legally authorised to use an expropriation procedure[71] to obtain the use of land, Terna prefers solutions based on mutual consent, involving payment of one-off compensation for easement on private property. Attempts to reach a consensual solution do not always succeed, making enforcement measures necessary. In the case of construction of an electricity substation, which occupies a much larger area, Terna usually buys the necessary land.

POWER LINE EASEMENTS

< 413-2

LANDOWNERS* AFFECTED BY THE CONSTRUCTION OF NEW POWER LINES (NO.)	2021	2020	2019**
Total easements	1,579	1,131	834
of which consensual	1,011	648	737
of which enforced	568	483	97

(*) "Landowner" means the registered owner or group of owners of a parcel of land in a given municipality; the number of landowners thus coincides with the number of easements.
(**) The figures for 2019 have been recalculated on the basis of the number of landowners, rather than the number of individual parcels of land.

The performance of easements is influenced by the type of work that Terna is required to carry out. Easements due to maintenance activity tend to be more equally distributed over the years, whilst major works require a far higher number of easements in the initial stages of the project, before a gradual reduction as the infrastructure is built.

The number of easements rose in 2021, primarily due to construction of the new 120 kV Cappuccini - Pietrafitta, 120 kV Preci - Cappuccini, 132 kV Candia - Camerata Picena and 132 kV Camerata Picena - San Lazzaro lines. The rise in the number of enforced easement orders in 2021 is primarily due to re-routing of the "SE Villavalle - SE Pietrafitta" power line, authorised by Interministerial Decree no. 239/EL-314/293/2019 of 12 September 2019.

[71] Law 1775 of 1933; Presidential Decree 327/2001 "Consolidated Law on Expropriations".

PC5 203-1 >

NFS

Community initiatives

Terna's contribution to Italy's civic growth goes beyond its role as a provider of strategic infrastructure for the country, as expressed through the Company's support for social, cultural and environmental initiatives.

Terna's corporate giving activities primarily consist of financial support for projects with social goals and – preferably – the Company's own organisation of initiatives to benefit the community. In addition, assets no longer of use in operations are donated free of charge, and Terna's employees provide support by spending their working hours on various initiatives, especially paid hours for voluntary work or hours spent on social projects organised directly by Terna, as was the case in 2021 with the fifth edition of the Next Energy programme.

All external requests are managed in line with the Group's corporate giving policy and assessed by a special committee comprising the heads of Corporate Affairs; External Relations, Corporate Affairs and Sustainability; People Organization and Change and the head of the department responsible for "Relations with stakeholders and the academic world, events and sponsorship".

415-1 >

In any event, in line with Terna's Code of Ethics, donations are never made to political parties or their representatives.

Terna has adopted the **B4SI ("Business for Societal Impact")**[72] model – developing its own customised version – for defining, classifying and accounting for companies' charitable initiatives. The model is geared towards accounting for what companies do via "community initiatives" that generate actual external benefits. Such initiatives may include cash contributions (donations, portions of sponsorships that generate an actual benefit and membership of associations that promote sustainability), in-kind contributions (the donation of assets at the end of their useful lives) or be in the form of working hours and operating expenses. In some cases, the valuation of contributions thus requires the use of non-accounting criteria and is therefore influenced by interpretative factors. However, it has the advantage of consistently linking the costs and benefits of social initiatives, thus enabling strategic planning and effective management of the related activities. Indeed, an important part of the model regards the measurement of benefits, with the aim of assessing the effective impact on end beneficiaries. In the most important projects, Terna appoints specialist external providers to assess the impact. The community initiatives implemented by Terna in 2021, classified in accordance with the B4SI model, are broken down in the following table.

COMMUNITY INITIATIVES

€	2021	2020	2019
Total value of contributions (excluding internal operating costs)	1,818,375	1,929,368	2,027,598
By type of contribution			
In cash	1,587,732	1,789,419	1,789,727
In kind (the donation of assets)	34,277	25,100	25,770
Working hours	196,367	114,849	212,101
Management costs	13,580	12,495	16,333
By type of initiative (*)			
Donations	274,200	525,780	179,770
Investment in the community	883,296	956,140	1,407,583
Commercial initiatives	660,879	447,448	440,245
By purpose			
Education and youth	606,758	914,013	1,299,624
Healthcare	56,000	398,880	9,000
Economic development	97,900	132,240	125,000
Environment	67,367	95,846	22,550
Art and culture	251,300	201,300	273,535
Social wellbeing	45,000	21,500	10,000
Emergency aid	312,461	25,000	166,489
Other	381,589	140,589	121,400

(*) ***Donations:*** *sporadic contributions, typically in response to requests for funds from charitable organisations deemed to be of merit.*
Investment in the community: *expenditure on initiatives coordinated/organised by the Company in accordance with a medium- to long-term programme, often in partnership with non-profit organisations.*
Commercial initiatives: *marketing initiatives with beneficial effects (only the portion of expenditure that constitutes a charitable contribution is accounted for).*

[72] Rebranding of the London Benchmarking Group ("LBG").

Terna's Corporate Giving Policy gives preference to initiatives projects relating to **SDGs 4 ("Quality education"), 7 ("Affordable and clean energy"), 9 ("Industry, Innovation and Infrastructure") and 11 ("Sustainable cities and communities")**.

In 2021, spending on initiatives aligned with priority SDGs 3, 4, 7, 9 and 11 accounted for 66% of Terna's expenditure on community initiatives.

For the purposes of full disclosure, it should also be noted that, in 2021, expenditure accounted for as donations and sponsorships amounted to €209,000 and €2,103,800.

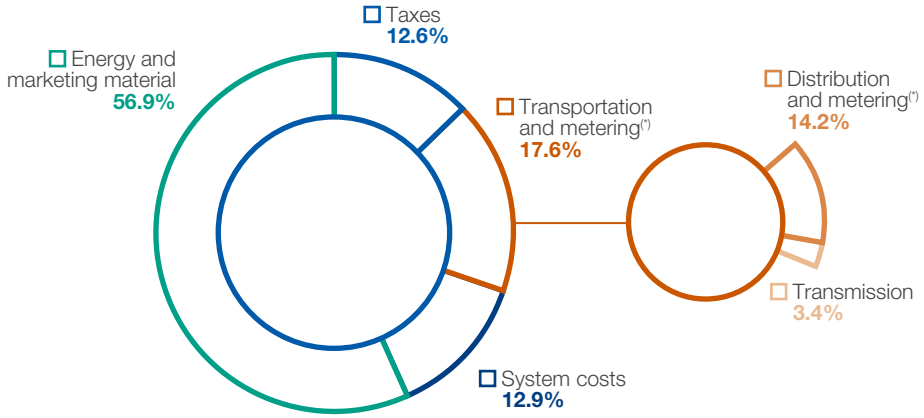
Finally, support for environmental causes has not been included in the above table, as it is usually linked to the construction of new lines and has therefore been classified under environmental expenditure (see "Environmental costs" on page 252).

Impact of the transmission service cost on end users' electricity bills

Based on data released by ARERA, it may be estimated that in 2021 the average cost of the transmission service accounts for approximately 3.4% of a typical domestic user's electricity bill.

Therefore, compared to the overall average annual expenditure of a typical domestic user, estimated to be approximately €630 in 2021, the cost of the transmission service per household is approximately €21 per year.

BREAKDOWN OF A TYPICAL DOMESTIC USER'S ELECTRICITY BILL – AVERAGE PERCENTAGES - 2021



(*) Including equalisation and quality components.

Source: terna based on ARERA data.

Participation in European and international associations and networking

A further opportunity for engagement and dialogue is provided by Terna's membership of the principal national and international trade associations.

EUROPEAN ASSOCIATIONS

ENTSO-E (European Network of Transmission System Operators for Energy)

The European Network of 39 Transmission System Operators for Electricity from 35 countries, as of 1 January 2022, 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 the relative EU legislation (Third Energy Package, CEP-Clean Energy Package and Fit for 55).

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 (the Ten-year Network Development Plan, or 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. This has been further strengthened with the "Fit for 55" climate package, which proposes legislative guidelines to achieve the Green Deal targets by 2030 (in particular, the reduction of greenhouse gas emissions by 55% compared to 1990 levels, in order to achieve carbon neutrality by 2050).

EASE (European Association for Storage of Energy)

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. EASE is working on the development of a European platform for sharing information in the field of energy storage.

RGI (Renewables Grid Initiative)

An association consisting of 12 European TSOs and 12 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.

INTERNATIONAL ASSOCIATIONS

CIGRE (Conseil International des Grands Réseaux Electriques)

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.

GO15 (Reliable and Sustainable Power Grids)

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 2021, Terna was the Association's Vice Chair, in addition to being on the Steering Board and the Governing Board and co-chairing the Strategic Working Groups on "Pathways to a Low Emission Power Grid" (SWG1) and "Resilience, infrastructure development and interconnections" (SWG2). In November 2021, with effect from 1 January 2022, Terna's CEO, Stefano Antonio Donnarumma, was elected as Chairman of the association.

Med-TSO (Mediterranean Transmission System Operators)

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 registered office and operational headquarters in Rome and appoints its Secretary General.

RES4Africa Foundation (Renewable Energy Solutions for Africa)

This non-profit foundation was established on 7 June 2019, following the transformation of the association with the same name. The association aims to promote the use of renewable energy and the dissemination of energy efficiency measures, as well as supporting the creation of a favourable environment for renewable energy investment in countries in the southern and eastern Mediterranean area and in sub-Saharan Africa. The association has its headquarters in Rome.

WEC Italia (World Energy Council - Italian committee)

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.

The main initiatives developed by Terna in 2021 include the following:

- Continuation of the joint venture with the TSOs, TenneT (Netherlands/Germany) and Swissgrid (Switzerland), which was set up to manage **Equigy**, a new platform based on blockchain technology that aims to facilitate the participation of distributed demand in the electricity grid balancing process. The main roles in this "Energy of Things" are to be played by domestic or industrial electrical devices such as, for example, home air conditioning systems, photovoltaic plants with batteries and e-cars, which will be interconnected with each other and capable of regulating the energy exchanged with the grid through an innovative digital platform. This will provide services to support the grid operated by Terna and thus the ecological transition;
- Participation in **TERRE** (the "Trans European Replacement Reserves Exchange"). The 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. Italy is connected to "Region 1", which also includes France, Switzerland, Spain and Portugal. As well as Italy, the Czech Republic, the UK, Poland, Switzerland, France, Spain and Portugal are also taking part in the project;
- The initiative launched by Terna together with nine European TSOs with the aim of assessing their role in **decarbonising the energy system** has been completed;
- The launch of a new research initiative with other European TSOs to assess the various grid planning criteria adopted in Europe to facilitate the **integration of RES** and the **electrification of production sectors** currently using fossil fuels.

With a view to building and better managing relations with European institutions, since 1 July 2018 Terna has had a Brussels office located in the same building as other leading Italian organisations such as Cassa Depositi e Prestiti and SNAM.

The aim is to establish ongoing dialogue with the European Parliament, the Commission and the Permanent Representation in order to take advantage of Terna's experience and expertise.

The main projects that Terna followed during the year include those identified as forming part of the Green Deal, especially the Fit for 55 Package, and those relating to European programmes providing financing under the next financial framework 2021-2027.

Priority projects of most interest include revision of the TEN-E Regulation and of the Circular Economy Package to reflect new climate targets, Sustainable Finance, sectoral integration, revision of the Guidelines for State Aid regarding the Environment and Energy, and amendment of the Renewable Energy and Energy Efficiency Directives. Programmes of interest include Next Generation EU, the Connecting Europe Facility, the Innovation Fund, Horizon Europe and Digital Europe, and the European Regional Development Fund and the Cohesion Fund.

ASSOCIATIONS THAT DEAL WITH SUSTAINABILITY ISSUES

Anima per il sociale nei valori dell'impresa

A non-profit association that brings together managers and companies who share the desire to spread an entrepreneurial culture in their local areas, combining profit with the creation of wellbeing for the community. Terna has been a member of the association since 2010.

Ecosystems Foundation

Focused on improving the environmental and social quality of the economy and local areas, this organisation specialises in strategies, programmes, actions and tools for sustainable development, and is a key player in GPP (green public procurement) and green procurement. Terna has been a member of the organisation since 2021.

Sustainable Development Foundation

An organisation whose primary activity is investigating sustainable development issues – from a cultural and technical point of view – via research, seminars and meetings. Terna has been a member of the organisation since 2011.

GEO – The Green Economy Observatory

The Observatory set up by IEFE - Bocconi University which, via research and study, aims to explore key topics for debate in relation to the green economy through dialogue, discussion and collaboration with institutions and businesses.

Global Compact

Terna's membership of the Global Compact involves a presence at both international and local level. Terna has had a place on the Italian network's Steering Committee since 2011 and is a founding member of the Global Compact Network Italy, which was established in 2013.

Kyoto Club

A non-profit organisation made up of companies, bodies, associations and local government authorities that are committed to achieving the targets for reducing greenhouse gas emissions set by the Kyoto Protocol and to promoting awareness-raising, information and training initiatives in the fields of energy efficiency, use of renewables, and sustainable mobility.

Sustainability Makers

A rebranding of the CSR Manager Network, this is a key association for professionals who deal with sustainability and corporate social responsibility issues, including company managers, consultants and researchers.

Transparency International Italy

The Italian branch of the international organisation, whose aim is to combat corruption (also see page 176), which promotes the **Business Integrity Forum ("BIF")**, an initiative for large Italian companies aimed at increasing the transparency, integrity and accountability of Italy's business sector via their collaboration.

Investigations by ARERA

With regard to the investigations initiated by the Regulatory Authority for Energy, Networks and Environment (ARERA) which are of potential interest to Terna, it should be noted that, based on the information in the Company's possession, no proceedings are in progress.

Litigation

The main commitments and risks not disclosed in the financial statements at and for the year ended 31 December 2021, relating to the Parent Company, Terna, and its subsidiary, Terna Rete Italia S.p.A. are reported in the Consolidated Financial Statements under the heading "Commitments and risks". There are no significant commitments or risks for the other subsidiaries at that date.

« The pink flamingo, the white egret and the avocet are just a small number of the migratory and resident birds to be found in the Trapani and Paceco salt flats nature reserve. To protect local birdlife, in agreement with Trapani City Council and the WWF, we have installed 300 deterrents that enable us to make it safer for birds in flight. This is a great result, which has engaged our engineers in a project that is key to protecting biodiversity. »

Maria Antonietta Sidoni
Sicily Transmission District
National Transmission Grid

#Ternapeople #DrivingEnergy

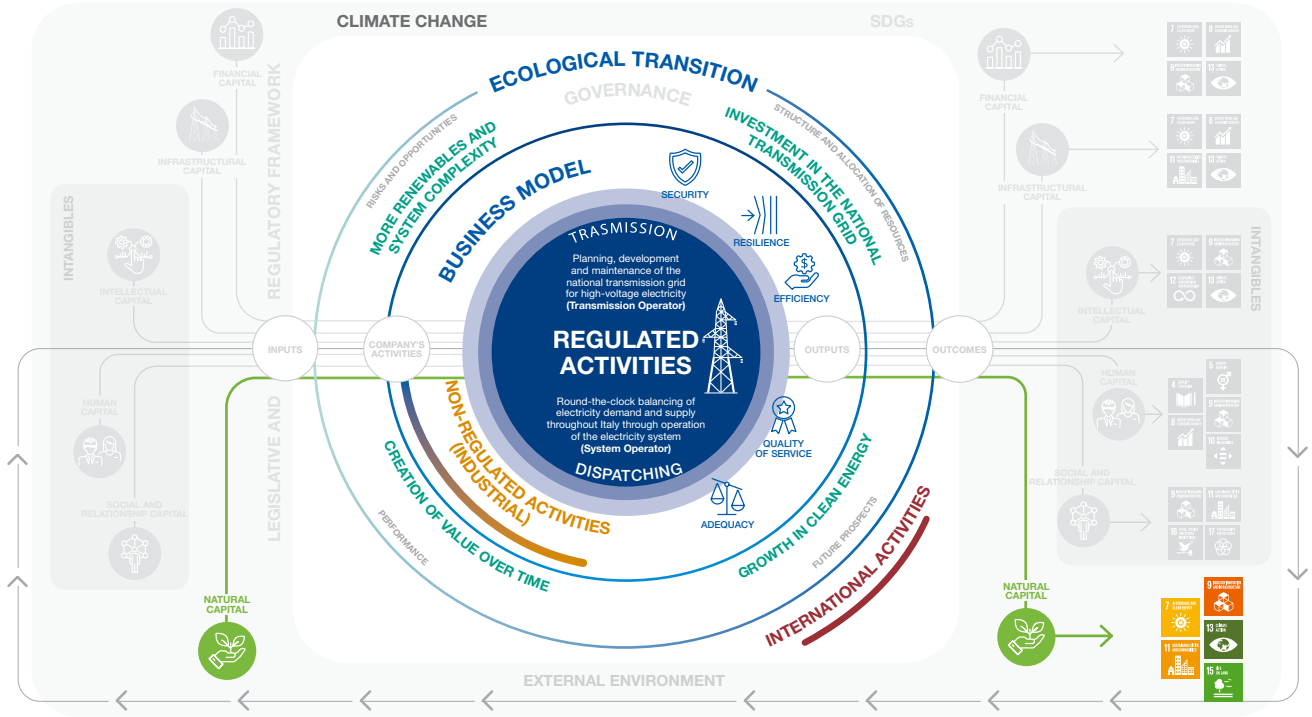
5

Natural capital

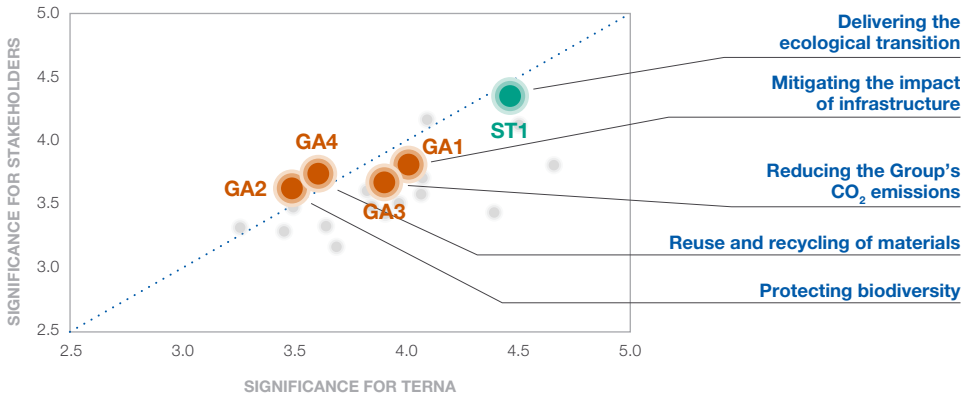
In this section

Natural capital is the only capital that Terna, in common with every other business or person, does not have at its disposal but has an obligation to preserve for the benefit of future generations. In keeping with the periodic materiality analysis, Terna's operations focus on: managing the impact of electricity infrastructure on the areas in which it is located, a circular approach to waste management, protecting biodiversity, containing CO_2 emissions and energy efficiency.

VALUE CREATION



MATERIALITY



These infographics highlight the topics dealt with in this section with the aim of **facilitating information connectivity**: in this way, the section offers an overall view showing the links between all the factors that influence Terna's ability to create value over time and how they are dependent on each other. Material topics are indicated with a cross-reference in blue, showing the relevant code.

Terna's approach to the environment

NFS

Terna's main contribution to achievement of the climate change reduction targets is its commitment to carrying out the investment provided for in the Development Plan, building a grid capable of enabling the ecological transition towards a carbon-free system based on renewable energy.

In terms of environmental impact, Terna's activities regard less the use of natural resources and the emission of pollutants, and rather more **the physical presence of power lines and electricity substations** and their interaction with the surrounding natural and manmade environment. To minimise this, we adopt solutions such as the use of pylons with a reduced visual impact and, when possible, the use of underground sections of line or the use of green engineering. The most important contribution is the physical removal of obsolete power lines following rationalisation initiatives. Activities involved in the construction, maintenance and removal of electricity infrastructure are linked to the production of waste, a high proportion of which is recovered.

In terms of greenhouse gas emissions, Terna has for years focused on several voluntary programmes, primarily regarding the achievement of reductions in SF6 gas leakage, making buildings energy efficient and saving energy at substations. At the start of 2021, Terna's commitment to tackling climate change was furthered bolstered with the formal definition of its **Science Based Target ("SBT")** initiative for 2030.

Terna has adopted an **Environmental Policy** that sets out its commitment to containing and reducing its environmental impact, in some cases going beyond legal requirements when this does not compromise the protection of other general interests provided for under the connection. This Policy is fully implemented through the **Integrated Management System**, which also covers efforts to reduce greenhouse gas emissions, the implementation of energy efficiency initiatives, and the adoption of measures designed to protect birdlife. Terna extends the issue of environmental protection to both its supply chain and local stakeholders directly affected by NTG development projects[73].

[73] When the data presented in this chapter refers to "Terna" it refers to 82% of employees, whilst the data referring to "Terna, Tamini and Brugg Switzerland" covers 96% of the Group's total workforce. In terms of the Group's revenue, these percentages are 90% when referring to "Terna" and 99.5% when the data refers to "Terna, Tamini and Brugg Switzerland".

Managing the environmental impact of the electricity grid

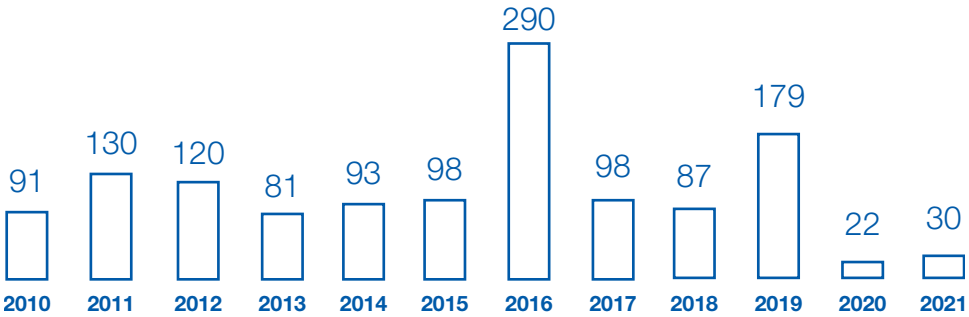
< 413-2 GA1

NFS

Physical removal of existing lines is one of the most radical ways Terna reduces environmental impacts, also in terms of land use. Demolitions form part of upgrade initiatives, often resulting from agreements signed with local authorities during the consultation phase prior to the construction of new infrastructure.

In 2021, 30 km of lines were demolished, freeing up an area equal to 87 hectares. In the period 2010-2021, a total of 1,320 km of lines were demolished. Demolition is defined as the physical removal of overhead lines and does not include declassified or upgraded lines.

LINES DEMOLISHED (KM) (*)



(*) The figure for 2016 is exceptional due to the demolition of over 200 km of obsolete power lines in Valtellina, which had been in preparation in previous years. After adjusting for this removal, demolitions amounted to approximately 80 km, in line with previous years (around 100 km per year). The exceptional performance in 2019 was due to a speedier execution of programmes that year, with a consequent reduction in the targets for 2020 and 2021.

"TRANSMISSION IMPACTS" TARGET

KPIS AND TARGETS IN THE 2021-2025 INDUSTRIAL PLAN

VISUAL IMPACT	2021 TARGET	2021 RESULT	2022	2023	2024	2025
Km of overhead lines demolished during the year.	16	30	73	140	45	154
Km of new underground lines during the year(*).	138	32	158	202	114	802

(*) Failure to achieve this target is due to the postponement to 2022 of the entry into operation of the "Italy-France", equal to approximately 95 km.

An approach based on sustainability guides all of Terna's activities, especially those regarding grid development. In terms of NTG development requirements, the interventions with the least environmental impact are rationalisation[74] and reclassification[75].

< EU13

When grid development necessitates the construction of new infrastructure, environmental sustainability considerations are taken into account in all phases (Planning and consultation; Design, Site operations, Mitigation and offsetting). Specifically, during the execution phase at sites, great attention is paid to identifying the areas and access roads of sites which, if compatible with technical and design requirements, are located in areas of reduced natural importance. Upon completion of the construction work, Terna restores the areas concerned to their natural state.

[74] This comprises 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. This takes place following the installation of new infrastructure or the addition of new elements to the grid to avoid the need to upgrade power lines that have reached saturation point.

[75] This involves the conversion of existing power lines to a higher voltage through the installation of new conductors and pylons to replace existing ones, which may be larger in size and therefore take up more space. Unlike the construction of a new line, this type of intervention usually has the advantage of using existing infrastructure corridors, thus avoiding the occupation of additional land.

If these areas regard natural or semi-natural habitats, in addition to the normal restoration works, specific interventions are implemented. Based on natural engineering techniques, they involve, by way of example, the creation of habitats suitable for animal and/or plant species communities, the replanting of live native plants, which do not require irrigation, special fertilisation or the use of materials (even if only inert), in order to recreate favourable living conditions for animal species (https://www.aipin.it/).

EU13 >

In 2021, the completion of numerous field surveys allowed for a significant update of the methodologies used in the **Incremental Ecological Indicator ("IEI")**[76], via integration and statistical analysis of the data that has been collected since 2018. The IEI is used to make a qualitative and quantitative assessment of the ecological status of new ecosystems resulting from initiatives such as vegetation restoration, camouflaging and offsets. The mathematical structure of the indicator allows for both an evaluation of individual sites and an evaluation targeting specific ecological markers, combining established biodiversity measurements with classic measurements of abundance and richness. This indicator will allow the ongoing monitoring of mitigation work and offsets regarding vegetation, showing the various stages of progress and health (biodiversity) and the assessment of changes in the quality of the ecosystem.

GA4

Use of resources and waste management

Development and maintenance of the NTG requires a substantial amount of capital goods, such as power lines (pylons, conductors, insulators), transformer substations (transformers, circuit breakers, other equipment) and control systems.

301-1 >

Terna does not use raw materials, but does purchase finished products (electrical equipment, conductors, tools and other components). An estimate of the materials contained in the main products purchased is shown in the table below. Amounts have been estimated taking into account the average material content of the various products purchased in the years referred to. The bulk of the materials used are steel (pylons) and aluminium and copper (conductors and cables).

Resources

MAIN MATERIALS PROVIDED BY SUPPLIERS - TONNES

	2021	2020	2019
Steel	20,793	18,264	12,694
Copper	9,475	4,967	5,415
Aluminium	8,988	11,526	12,590
Glass	4,324	4,339	3,393
Dielectric oil	1,656	591	1,535
Of which vegetable oil	491	243	448
Porcelain	518	891	822
Polymers	508	492	402

Specifically, the increase in copper was due primarily to the purchase of transformers and cables during the year under review.

306-2 >

Moreover, in 2021, the Group began conducting gap analyses supported by targeted interviews with the aim of drawing up and implementing a new strategy based on circular economy principles. This started from a roadmap of activities through to 2030, covering the procurement of materials, their correct use, the management of waste and secondary raw materials, and the sustainable use of resources. Further measures will be adopted later for specific areas of the business considered to be priority and to drive circular economy innovation and investment at Group level.

[76] See the 2020 Sustainability Report on page 211.

Waste

< 306-1

At the end of their normal life cycle, the materials used in electricity infrastructure are recovered for reuse in operations. Only a residual portion is sent to landfill, thereby impacting on the environment.

The percentage of waste recovered amounted to 86% in in 2021 (95% in 2020 and 94% in 2019), to **84% if Brugg and Tamini are also included**.

Whilst the overall amount of waste produced reflects the timing of equipment replacements, effectual recovery depends on the materials contained in the waste: some of them are easy to separate out and thus reuse (for example, iron parts of pylons). In other cases, it is either too costly or not possible to separate the various parts, above all when dealing with the most obsolete equipment. For these reasons, annual changes in the amount of waste generated and the percentage of waste recycles should not be interpreted as indicating a trend.

Specifically, total waste produced in 2021 and trends in the percentage of waste recycled are impacted by cleaning operations – carried out in various areas throughout Italy – regarding the collection vats for oil, a material that cannot always be recycled.

Monitoring of the waste generated and the means of waste management employed are audited both internally and externally as per ISO 14001 certification requirements, as are the methods of waste disposal, to ensure compliance with existing legislation.

< 306-3

WASTE BY TYPE - TONNES

	TERNA, TAMINI AND BRUGG SWITZERLAND		TERNA		
	2021	2020	2021	2020	2019
Waste produced [1]	**11,768.8**	**10,808.6**	**8,524.7**	**6,142.2**	**5,912.8**
of which hazardous	5,801.3	4,151.8	5,451.4	3,882.0	3,285.8
of which non-hazardous	5,967.4	6,656.9	3,073.3	2,260.2	2,630.3
Waste sent for recovery	**9,927.8**	**9,929.9**	**7,302.4**	**5,854.1**	**5,558.1**
of which hazardous	4,815.3	3,846.5	4,535.1	3,604.9	3,181.7
of which non-hazardous [2]	5,112.5	6,083.4	2,767.3	2,249.2	2,376.3
Waste sent for disposal [3]	**1,828.8**	**905.5**	**1,210.1**	**314.8**	**266.0**
of which hazardous	980.3	265.4	910.6	237.2	48.9
of which non-hazardous	848.4	640.0	299.5	77.5	220.3

*[1] Only special waste produced during the production processes is included, not waste produced by services (urban waste). Excavated earth and rocks, effluents and waste from septic tanks, produced by substations not connected to the sewer network, are not included; the quantity for this waste was **618 tonnes in 2021**, 495 tonnes in 2020 and 578 tonnes in 2019.*

[2] This comprises uncontaminated metal waste deriving from the decommissioning of transformers, electrical equipment and machinery (e.g. generators) with an average recovery rate of 100%.

[3] Waste sent for disposal may differ from the mere disparity between waste generated and recovered due to temporary waste storage.

The main special hazardous waste generated by the operation of Terna's power lines and substations consists of:

Metal waste

This derives from the decommissioning of transformers, electrical equipment and machinery no longer in use and contaminated by hazardous substances; they have an average recovery rate – after treatment by third parties – of over 95%.

Batteries (lead and nickel)

In the event of a blackout, batteries enable emergency generators to be switched on in order to keep the energy transformation and transportation service up and running during emergencies; they have an average recovery rate of 100%.

Dielectric oils

These are used for insulating transformers replaced after periodic maintenance checks. They constitute hazardous waste and have a recovery rate in the three-year period of over 90%.

The waste sent for disposal mainly consists of materials deriving from infrastructure maintenance and cleaning activities (oily emulsions and rags containing solvent oils) and insulating materials containing asbestos, for which no form of recovery is envisaged.

As in the previous two-year period, no significant spills of polluting liquids were reported in 2021.

303-1 >

Regarding water consumption, environmental and materiality analyses indicate that the subject is not material. This is because water does not usually form part of the production cycle for electricity transmission and dispatching. This is except for a few items of equipment, mostly used in the installation phase, that, in any event, require overall consumption of a marginal volume of water compared with the volumes generally recorded in the electric utilities sector. Indeed, water is used for hygiene purposes, office cleaning and cooling systems and derives from connection to water systems for civil use.

Moreover, in recent years, Terna has introduced compensation systems (Synchronous Compensation Units or SCUs) as one way of responding to evolutions in the electricity system in terms of the integration of production plants fuelled by renewables and new connections to the DC grid. These plants play a key role in regulating voltage in the portion of the grid where they are installed.

In order to ensure the correct use of water, Terna has installed intelligent systems that, by recording internal and external temperatures and the electrical readings from the SCUs, regulate the flow of water, thus minimising consumption. Partly due to these interventions, the amount of water used to cool the synchronous compensators accounts for only 4.1% of Terna's total water consumption.

Monitoring and supervision of electromagnetic fields

Protection of the population from exposure to electromagnetic fields is precisely defined by law (Cabinet Office Decree of 8 July 2003). This legislation provides for:

- **Exposure limits**: in the event of exposure to electric and magnetic fields generated by power lines at a frequency of 50 Hz, the limit is 100 microteslas for magnetic induction and 5 kV/m for the electric field, considered as effective values;
- **Safety thresholds**: as a precautionary measure to protect against long-term effects, which may be linked to exposure to magnetic fields generated by the network frequency (50 Hz), in children's play areas, schools and places where people spend not less than four hours a day, a threshold of 10 microteslas has been set for magnetic induction, based on the average of measurements taken over 24 hours under normal operating conditions;
- **Quality targets**: in the design of new power lines at the above-mentioned sensitive locations and in the design of new settlements and new areas close to lines and electricity installations already present in the vicinity, in order to gradually minimise exposure to electrical and magnetic fields generated by power lines operating at a frequency of 50 Hz, a quality target of 3 microteslas has been set for magnetic induction, based on the average of measurements taken over 24 hours under normal operating conditions.

The values of the three parameters, especially the threshold value (10 microteslas) and the quality target (3 microteslas), demonstrate that Italian legislation has adopted the prudential approach described in art. 15 of the Rio Principles. These parameters are amongst the strictest at European level. Terna's compliance with the law in its activities implicitly shows that it has adopted the same principle.

Terna carries out inspections and checks on its own lines to ensure compliance with the existing regulatory limits and seeks innovative technical solutions in order to mitigate the impact of magnetic fields. If any complaints or requests are received from competent administrative bodies and authorities, the Company provides the data needed to assess the actual exposure to electric and magnetic fields generated by its infrastructure.

Finally, with a view to providing accurate, easily understandable information on the subject, Terna has prepared an in-depth study on electromagnetic fields ("EMF"), which may be found in the "Sustainability" section of the Company's website www.terna.it.

Reports and complaints regarding environmental concerns

In line with the ISO 14001 Environmental Management System, Terna monitors and classifies complaints received regarding significant environmental matters.

Any written communication from stakeholders reporting that an activity carried out by Terna causes or has caused damage may be submitted to one of the Group's offices or organisational units, where it will be filed and handled by the competent operating unit.

Complaints received are classified in terms of environmental aspects as defined by environmental analysis: waste, noise, biodiversity, landscape, electrical and magnetic fields, lighting, the management of vegetation and others.

This year, the number of complaints received has dropped slightly compared with 2020 (down 3 for a total of 35) and primarily regarded power lines (71%) relating to **the noise emitted by the infrastructure (31.4%) and the need to cut back vegetation along power line corridors (25.7%).**

Terna replies as soon as possible, and, in any event, within 30 days from receipt of the request or within 60 days if the scope and complexity of a request are such that it cannot be handled within the first 30 days.

In this case, Terna promptly notifies the person making the request of the extension and explains why it is necessary. Details of the concerns reported and dealt with over the past three years are provided in the "Key indicator tables" published in the "Sustainability" section of the website at www.terna.it.

GA2 EU13 >

Electricity power lines, biodiversity and birdlife

The impact of Terna's grid on biodiversity may take different forms.

During grid construction, the impact on biodiversity is linked to construction site activities (e.g., the opening of access routes to build pylons, soil excavation and the removal of residual materials) and is temporary and reversible.

During the operational phase, the potential impact of lines on biodiversity are twofold. On the one hand, the route of the line may be a factor in increasing biodiversity and protecting certain species as pylons, with their bases, make it impossible for land to be used for intensive agriculture and constitute "islands" where biodiversity can flourish. On the other, the presence of lines has potentially negative effects on biodiversity, in particular on birds, due to the risk of collision, and on protected areas or areas of natural interest.

The main tool for identifying critical line sections is a fully comprehensive land use database, containing data provided by regional authorities and ministries. This GIS (Geographic Information System) enables integrated analysis of all the layers of information on the various types of land use and protections (local, natural, cultural, landscape, etc.). Using this tool, Terna has compiled an inventory of the lines that may interfere with protected or highly biodiverse areas, as shown in the table below.

304-1 >

POWER LINES IN PROTECTED AREAS [1]

	UNIT	2021	2020	2019
Lines impacting on protected areas	km	7,110	6,951	6,746
Lines with an impact as a percentage of total lines operated by Terna	%	10.5	10.6	10.5

[1] To calculate the percentage of lines impacting on protected areas, the Company has used "ATLARETE" data, which may differ from data on the number of lines provided in the "Key indicator tables" (published in the Sustainability section of the website at www.terna.it). The data take account of overhead power lines and underground and submarine cables having an impact.

For the sake of completeness, it should be noted that out of the nearly 900 substations managed by the Terna Group, only 39 are in protected areas.

304-4 >

Based on GIS data, potential threats from the risk of collision for bird species included in the IUNC Red List have been assessed.

The presence of power lines may have negative effects on birdlife. While the risk of electrocution regards Low Voltage and Medium Voltage lines and therefore does not concern Terna's infrastructure, High Voltage lines are associated with the risk of collision.

Over the years, Terna has promoted research and scientific studies to further investigate this issue and identify increasingly effective solutions. The first Italian study devoted to collisions, based on the results of **an agreement between Terna and the LIPU (Italian League for the Protection of Birds)**, highlights a low risk of collision (see the 2010 Sustainability Report, page 116 "Terna-LIPU agreement: a study of the interaction between birdlife and the National Transmission Grid").

To minimise the risk of collision, in addition to careful analysis and planning of the lines to be installed, for some time now Terna has been installing special devices consisting of plastic spirals called "deterrents" which, with their visual impact and the noise they generate when blown by the wind, make it easier to see for birds in flight.

BIRD DETERRENTS ON THE NTG

	UNITÀ	2021	2020	2019
Lines involved	no.	81	77	72
Total deterrents installed	no.	16,977	16,299	15,552

In collaboration with the CESI research centre and Rome's "La Sapienza" University (the Charles Darwin Department of Biology and Biotechnologies), Terna has developed a **risk assessment model** that evaluates the feasibility of installing a power line in a selected location. This tool (AVIVAL) uses information about the area and data on the distribution of birdlife to assign a risk level in terms of potential collision to every single span of the line to be built and adopt adequate mitigation measures. In 2021, the eight-month experiment – coinciding with two migrations – tested the reliability of the deterrents and subsequent monitoring has confirmed the absence of collisions.

In line with specific EU Directives, Terna has enshrined the objectives to protect and conserve birdlife in its own **Commitment to Biodiversity** document. Accordingly, since 2020 Terna has carried out a training campaign to protect birdlife designed specifically for operating personnel involved in managing the national electricity system, in order to raise awareness on the part of staff and to collect additional scientific data concerning the system's impact on birdlife.

Identification and monitoring of bird species on the IUCN Red List

< 304-4

Terna has carried out a study aimed at identifying the protected species included in the IUCN Red List[77] that are potentially impacted by its infrastructure.

The IUCN Red List is the largest existing international database on the conservation status of thousands of plant and animal species, all catalogued according to their risk of extinction. In its analysis, Terna has specifically considered the presence of bird species on the IUCN Red List and at Natura 2000[78] sites, namely in protected areas with a high level of biodiversity (approximately 3,000 SPAs[79] and SCIs[80]).

The study selected the Natura 2000 areas affected by Terna power lines, then verified which protected species – among those included on the Red List and classified on the basis of 2020 data available, as Vulnerable, Endangered, Critically Endangered and Regionally Extinct – had chosen them as their habitat. These species are conservation priorities as without specific measures to neutralise the threats they face, and in some cases to increase their populations, their extinction is a real prospect. The analysis showed that Terna's electricity infrastructure could interfere with the habitats of eight species. After checking scientific publications and via targeted consultations, no specific critical issue emerged regarding bird species except for a potential risk of collision for the corncrake ("*Crex crex*"), a species categorised as "Vulnerable" present in the Alpine area between Friuli-Venezia Giulia and Lombardy. A specific study on the ecology of this species is in progress with a view to mitigating this risk.

[77] International Union for Conservation of Nature's Red List (https://www.iucnredlist.org).
[78] Natura 2000 is the main instrument of the European Union's biodiversity conservation policy. This ecological network, which covers the entire territory of the European Union, was set up under the Habitats Directive (Council Directive 92/$£/EEC) to ensure the long-term maintenance of natural habitats and of endangered or rare species of flora and fauna at EU level. The Natura 2000 network consists of Sites of Community Importance (SCIs), identified by Member States in accordance with the Habitats Directive, which are subsequently designated as Special Areas of Conservation (SACs), including Special Protection Areas (SPAs) established under Directive 2009/14/EC regarding the conservation of wild birds.
[79] Special Protection Areas.
[80] Sites of Community Importance.

Alternative uses for electricity power lines

In partnership with environmental associations, for some years Terna has been working on projects that aim to develop alternative uses for power lines. The most important, carried out in collaboration with the ornithological association, *Ornis italica*, is the **Nests among pylons** project. This involves the installation of nest boxes, followed by annual surveys of the species that occupy the nests and the results of the breeding season. The project regards many species, including the kestrel, peregrine falcon, scops owl, cuckoo, common roller, bat and stork. The contract awarded by Terna for installation of new nest boxes now includes responsibility for monitoring occupation of the new nests. This activity is completed with the **Birdcam Project**, involving the installation of cameras trained upon the artificial nests: the idea is to monitor the birds' reproductive period (online at www.birdcam.it and www.terna.it).

In 2021, Terna launched a nationwide monitoring campaign to monitor the conditions of the nest boxes installed in past years so as to extend its maintenance programme and include the insertion of artificial nests.

GEOREFERENCED NESTS AT 31 DECEMBER 2021

LOCATION	NESTS		SPECIES CONCERNED [81]
	NUMBER OF NESTS	OF WHICH IN PROTECTED AREAS	
Abruzzo	30	1	Kestrel
Calabria	30	23	Kestrel
Campania	31	0	
Emilia-Romagna	95	33	Kestrel; scops owl, cuckoo, common roller
Friuli-Venezia Giulia	20	0	
Lazio	47	14	Kestrel, scops owl, common roller
Lombardy	15	0	
Piedmont	54	25	Common roller
Puglia	72	0	
Sicily	30	10	
Trentino-Alto Adige	8	0	
Veneto	1	1	
Total	433	107	

[81] The species concerned are identified by the type of nest installed and by subsequent monitoring. At any rate, there is always the possibility that the nests may be used by other species not on the list.

Atmospheric emissions and energy efficiency

ST1 NFS

At international level, convergence on the action to be taken to combat climate change was best reflected in the agreement signed at the United Nations Climate Conference (COP21) in Paris in December 2015. SDG 13 (Climate action) was also included in the UN's 17 sustainable development goals in the same year.

The guidelines in Terna's 2021-2025 Industrial Plan are consistent with these positions and with the objective of facilitating transition to the production of energy from renewable sources and, more generally, the decarbonisation of production processes.

Regarding the reduction of CO_2 emissions into the atmosphere by the electricity system as a whole, Terna's main contribution is to carry out the investment provided for in the NTG Development Plan (see page 88). In this section, the focus is on emissions relating to Terna's operating activities.

Direct and indirect CO_2 emissions

< 305-1 < 305-2

Direct greenhouse gas emissions connected with Terna's activities **derive mainly from SF_6 gas leaks (89% of total direct emissions in 2021)**, which are up on the previous year due to losses from some equipment (see page 244).

With regard to indirect emissions, despite the fact that the figures associated with grid losses are not completely under Terna's control (see page 246), in line with the GHG Protocol standard[82] and the main international benchmarks, in order to simplify the comparison between Terna and other comapnies, from this edition of the Consolidated Non-financial Statememnt, CO_2 emissions linked to these losses are included in the figure for total indirect emissions (scope 2).

The remaining indirect emissions are due to the consumption of electricity. There was a 3% increase in these emissions, reflecting a rise in electricity consumption for substations and offices (see page 250). It should be borne in mind that, for technical reasons, Terna's energy consumption is not attributable to a supply contract. This makes it impossible to reduce indirect emissions by selecting supplies from renewable sources and accounts for the need to use an average conversion factor for Italian electricity consumption. For this reason, in line with GHG Protocol methodology, emissions linked to electricity consumption are classified only as location-based and not as market-based.

[82] The GHG Protocol has estabilished an internationally recognised framework for measuring and managing greenhouse gas ("GHG") emissions from private and public sector operations, value chains and mitigation actions.

TOTAL DIRECT AND INDIRECT GREENHOUSE GAS EMISSIONS – TONNES OF CO_2 EQUIVALENT

	TERNA, TAMINI AND BRUGG SWITZERLAND		TERNA		
	2021	2020	2021	2020	2019
Direct emissions(*)	73,203.7	63,544.1	68,942.0	56,202.6	68,404.4
Indirect emissions(**)	1,662,890.5	1,450,131.4	1,658,342.6	1,445,832.7	1,765,630.9
- Of which network leakages	1,597,110	1,386,342	1,597,110	1,386,342	1,700,384

(*) *The data for diesel consumption for vehicles and natural gas for heating the offices of Brugg Switzerland are based on estimates.*
(**) *In line with the GHG Protocol standard, from this edition of the Consolidated Non-financial Statememnt, CO_2 emissions linked to these losses are included in the figure for total indirect emissions (scope 2).*

Direct emissions produced by Tamini and Brugg Switzerland are primarily linked to natural gas consumption. The table below shows details of Terna's emissions, without taking into account Tamini and Brugg Switzerland, as their environmental impacts in terms of CO_2 are not fully comparable due to the specific nature of their businesses.

TOTAL DIRECT AND INDIRECT GREENHOUSE GAS EMISSIONS TONNES OF CO_2 EQUIVALENT (1)

	TERNA		
	2021	2020	2019
Direct emissions			
Leakages of SF_6	61,204.6	49,013.7	60,162.2
Leakages of refrigerant gases (R407C, R410A)(2)	260.3	501.4	178.2
Petrol for motor vehicles	95.7	54.2	61.6
Diesel for motor vehicles	6,453.4	5,418.9	6,767.0
Jet fuel for helicopters	452.0	488.0	502.4
Natural gas for heating	196.5	323.1	305.5
Fuel oil for heating and generators	279.5	403.3	427.5
Total direct emissions	**68,942.0**	**56,202.6**	**68,404.4**
Indirect emissions			
Electricity(3)	61,232.6	59,490.7	65,246.9
Grid losses(4)	1,597,110	1,386,342	1,700,384
Total indirect emissions	**1,658,342.6**	**1,445,832.7**	**1,765,630.9**

(1) *The conversion of direct energy consumption and leakages of SF_6 (sulphur hexafluoride) and refrigerant gases into equivalent CO_2 emissions has been carried out using the parameters indicated in the IPCC Fifth Assessment Report (AR5), the Greenhouse Gas Protocol (GHG) Initiative and the GRI - Global Reporting Initiative environmental protocols (Reference Indicators IP Protocols: EN).*
(2) *Leaks of R32 and R134 gases have been recorded. It was not possible to convert the leaks into equivalent CO_2 emissions. However, in 2021, leaks of refrigerant gases accounted for 0.4% of total emissions (scope 1).*
(3) *The conversion of indirect electricity consumption is carried out taking into account the share of total Italian electricity production represented by thermoelectric production in 2021. Allocation for the purposes of the production mix was based on the December 2021 issue of the "Monthly Report on the Electricity System" available on the website at www.terna.it. In addition, approximately 9% of Terna's electricity consumption is based on estimates.*
(4) *Figures for Terna's scope 2 emissions, including grid losses, are as follows: 1,658,342.6 tonnes of CO_2e in 2021; 1,445,832.7 tonnes of CO_2e in 2020; 1,765,630.9 tonnes of CO_2e in 2019 and 1,617,766.5 tonnes of CO_2e in 2018. The data for indirect emissions shown in the previous Sustainability Reports related to electricity consumption alone, as it did not include grid losses.*

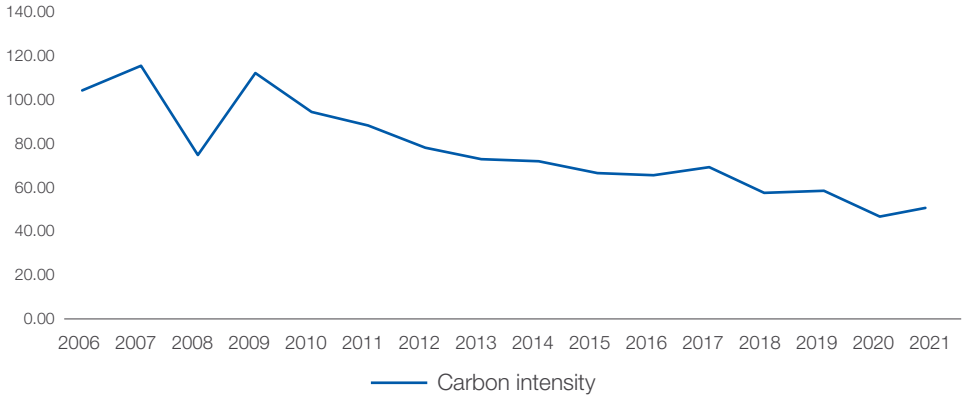
The overall decrease in total direct and indirect CO_2 emissions compared with 2019 (given that the figure for 2020 is influenced by the impact of the lockdown between March and April 2020) is reflected positively in the figure for carbon intensity, i.e., the ratio between Terna's direct and indirect emissions and revenue (excluding Tamini and Brugg Switzerland), within the context of a gradual downward trend.

305-4 >

CARBON INTENSITY – TONNES OF CO_2 EQUIVALENT/REVENUE (€M)

	2021	2020	2019
Emissions (scope 1 and electricity)	130,174.6	115,693.3	133,651.3
Emissions (scope 1 and electricity) in relation to revenues	50.0	46.5	58.2

CARBON INTENSITY



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

FOCUS

Carbon intensity: comparative data

Carbon density comparisons are carried out by comparing Terna's performance with those of three peer groups of companies: other TSOs, companies listed in the FTSE-MIB and companies from the Electric Utilities sector included in the Dow Jones Sustainability World Index.

Despite the absence of standardisation factors applicable to all sectors, it was nonetheless deemed relevant to present data on standardisation of emissions by revenue, which, net of the differences in the value chain between the various sectors, is an initial important standardisation factor for comparison purposes.

In 2021 the carbon intensity deriving from Terna's activities amounted to 50.0 tonnes of CO_2equivalent/revenue (€m). In 2020, a year for which comparative data with other companies are available, a carbon intensity of 46.5 tonnes of CO_2equivalent/revenue (€m) was registered. As may be noted from a comparison of all three peer groups, Terna ranks significantly below the average in 2020.

CARBON INTENSITY (TONNES OF CO_2EQUIVALENT/REVENUE (€M) - 2020			
	TSOs	FTSE-MIB	DJSI- ELECTRIC UTILITIES
Available data	16	39	11
Min.	2.2	0.1	10.7
Average	1,385.2	278.7	360.9
Max.	17,122.7	6,568.2	905.9
Terna		**46.5**	

More information on the development of the carbon intensity benchmark is available in the "Sustainability" section of the website www.terna.it.

In order to factor in network losses, over which Terna does not have complete control, into an emissions comparison (see page 246) with a comparable economic scale, it was decided to compare total emissions with the inclusion of pass-through items[83] in Terna's revenues. Taking these factors into account, the resulting ratio is 158.9 tonnes of CO_2 equivalent/revenue in 2021, 187.9 in 2020 and 240.8 in 2019.

[83] For the definition of pass-through items, reference should be made to the notes of the Consolidated Financial Statements under the heading "Revenues".

GA3 305-5 > 305-1 >

Containment of direct emissions: SF_6 leakage

SF_6 (sulphur hexafluoride) gas is used as insulation in certain electrical equipment (circuit breakers, current transformers and armoured equipment. Part of the gas in the equipment can leak into the atmosphere due to defective seals, when faults occur, and also sometimes during the re-pressuring process. SF_6 gas has a very powerful greenhouse effect, which is 23,500 times greater than CO_2: leakage into the atmosphere of 1 kg of SF_6 is equivalent to 23.5 tonnes of CO_2.

In 2021, the amount of SF_6 present in the Group's infrastructure remained essentially unchanged from the previous year. The growth reported in past years formed part of a trend – common to many transmission grid operators – linked to the better insulating performance of this gas and the smaller footprint of substations built with equipment containing SF_6 in comparison with more traditional solutions.

During the period from 2012 to 2017, the related target for the leakage rate was 0.60%, down 0.10% with respect to the average for previous years. In the light of the actual performance recorded until 2017, in the early months of 2018, the target was reformulated. For the period 2021-2025 the target has been lowered to 0.45%.

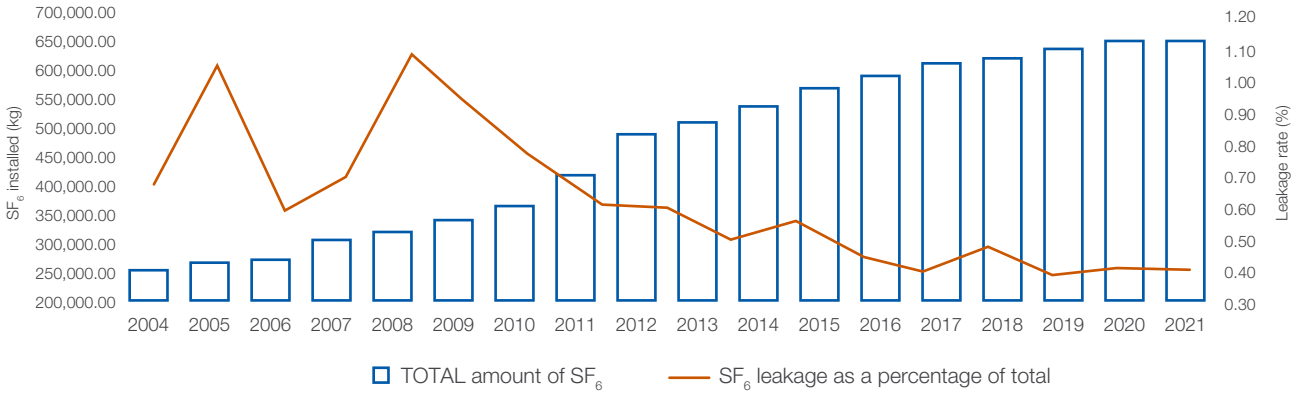
"TRANSMISSION IMPACTS" TARGET

KPIS AND TARGETS IN THE 2021-2025 INDUSTRIAL PLAN

KPI	2021		TARGET			
	TARGET	RESULT	2022	2023	2024	2025
SF_6 leakage rate	0.45	0.40	0.45	0.45	0.45	0.45

The target values should be qualified, bearing in mind the already substantial decrease recorded in the previous five-year period and the higher average leak rates of other leading European TSOs (see below).

SF_6 leakage rates



In 2021, the leakage rate regarding total equipment installed and cylinders was **0.40%**. Though up slightly from 2020, this figure is in line with the company target and more than 50% lower than the average benchmark of leading TSOs (see below).

FOCUS

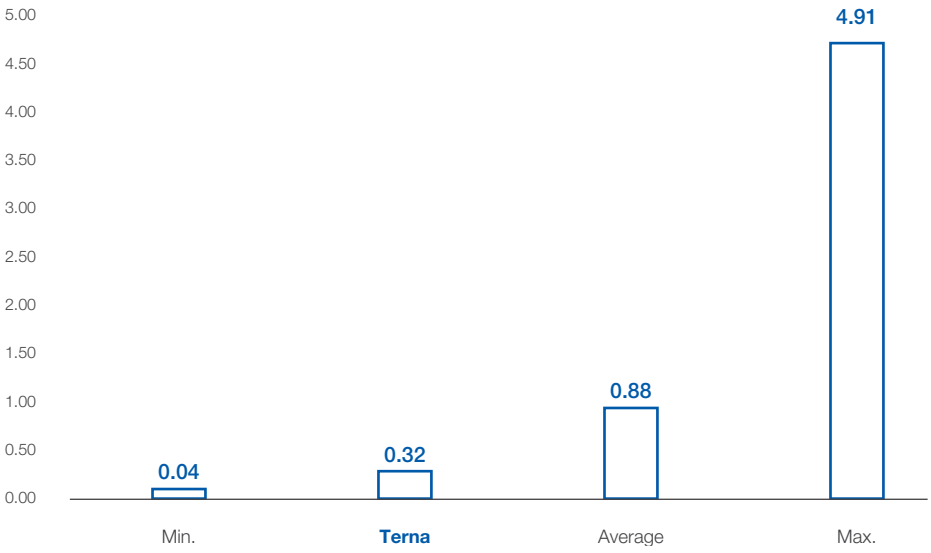
SF_6 leakage: comparative data

SF_6 gas is used by electricity transmission companies because of its excellent insulating properties.

Considering the specific nature of its use, comparison was only possible with the TSO peer group. The indicator being compared is the leakage rate, which is obtained by calculating the ratio between gas leaks during the year and the total amount of gas installed in equipment. In 2021, Terna registered a leakage rate of 0.40%, up from 2020, the year under comparison, in which the SF_6 leakage rate was 0.32%.

In comparison with the other transmission operators, for 2020, Terna reports an SF_6 leakage rate below the peer group average (calculated as the ratio between the sum of the total amounts installed by the TSOs).

SF_6 leakage rate (%) – 2020 figures



More information on the development of the SF_6 leakage benchmark is available in the "Sustainability" section of the website at www.terna.it.

EU12 >

Grid losses

Grid losses are defined as the difference between energy injected by producers (including imported energy) and final consumption; the losses for Terna are those associated with the transmission grid. The figures shown in the following table are based on direct measurement of the energy injected and withdrawn from the transmission system.

Terna became responsible for the direct measurements in 2017, whereas in previous years the Company had been responsible only for the measurement of energy injected into the NTG and not for the energy withdrawn, for which the distribution companies were responsible. Considering the margin of uncertainty regarding the accuracy of the readings made and in order to reduce the risk of interpreting the effect of the measurement errors and the related corrections as actual trends, in previous publications it was decided to use the arithmetic moving average of losses with a three-year window as annual data.

Terna has been responsible for direct measurements for four years now. This undertaking of responsibility has, in actual fact, eliminated the margin of uncertainty and, consequently, starting from this year, it was decided to scrap the use of the moving average with a three-year window and to report the values of the GWh lost on an annual basis.

GRID LOSSES[1]

	2021		2020		2019	
	% COMPARED WITH ENERGY DEMAND	GWH	% COMPARED WITH ENERGY DEMAND	GWH	% COMPARED WITH ENERGY DEMAND	GWH
VHV and HV grid	1.6	5,143	1.5	4,435	1.6	5,050

[1] The average annual loss in 2020 is lower compared with the averages in 2021 and 2019 as a result of the reduction in the volumes of energy transported due to the Covid-19 emergency, in turn bringing about a reduction in electricity consumption at national level following implementation of the restrictive measures adopted by the government. The values reported for 2020 and 2019 differ from those previously published due to the change in the method of reporting.

Grid losses are a physical effect of the electricity lost as it passes through conductors and during transformation. Losses are influenced by the level of voltage, the volume of electricity transported, the materials used and the distance between the points at which energy is produced and consumed. Terna can only determine the extent of the losses, which are not completely under its control. Grid development activities, given the same structure of production, would lead to greater efficiency and thus a reduction in losses. However, the actual impact of development initiatives on losses is unpredictable and not under the control of the transmission operator, as it depends on concomitant changes in production capacity and electricity supply and demand at local level.

Dispatching operations, needed to guarantee a constant balance between injections and withdrawals and to prevent the occurrence of grid security problems and disruptions, are carried out in accordance with regulatory criteria within the production set-up created by the energy market. They cannot be influenced by Terna with the aim of minimising losses.

CO_2 emissions associated with grid losses amounted to 1,597,110 tonnes in 2021, 1,386,342 tonnes in 2020 and 1,700,384 tonnes in 2019. The trend differs from the one regarding losses measured in GWh due to changes in the conversion factor used to convert energy into CO_2 equivalent emissions, which in turn is affected by changes in the production mix among Italian power generators.

As indicated above, Terna does not have complete control over grid losses and, for this reason, up to 2020 the related CO_2 emissions were not reported in the scope 2 indirect emissions. However, starting from this year, it was deemed opportune to align the reporting methodology with that set by the GHG Protocol, the leading international standard for reporting CO_2 emissions.

Terna adopts a Science Based Target ("SBT") to contribute to reducing greenhouse gas emissions

The Science Based Target ("SBT") is the most advanced international initiative in terms of promoting a low-carbon economic model. It takes the form of a GHG emission reduction target in line with the 2015 Paris Agreement, which, if adopted across the board, would ensure that temperature increases are kept below specific limits.

With its fundamental role in driving and enabling the current ecological transition phase, Terna has voluntarily opted to link the twofold task of maintaining the already excellent level of quality and continuity of the electricity transmission service and making all necessary investment in the NTG to incorporate the growing share of production from renewable sources, to the adoption of an SBT.

This additional contribution from Terna to combating climate change, in terms of systemic sustainability and in line with SDG 13 ("Climate action"), took full shape in May 2021 with the approval of Terna's SBT by the SBT Initiative.

With this SBT, Terna is committed to cutting its carbon dioxide equivalent emissions by 28% compared with 2019 levels (scope 1 and 2) by 2030.

The target adopted by Terna, consistent with the scenario defined as "well below 2°C", i.e., in accordance with the guidelines recommended by scientists to keep the increase in global temperatures below specific limits, will be monitored and reported on annually in the Group's Integrated Report.

302-3 > 302-1 >

Consumption and cuts in emissions: energy efficiency

The Terna Group's energy consumption, which also includes the consumption of Tamini and Brugg Switzerland, is shown below. Tamini's and Brugg Switzerland's energy consumption is mainly due to natural gas consumption.

DIRECT AND INDIRECT ENERGY CONSUMPTION FOR THE GROUP - GIGAJOULE

	TERNA, TAMINI E BRUGG SWITZERLAND		TERNA		
	2021	2020	2021	2020	2019
Direct consumption in GJ (*)	174,407.2	167,656.3	102,181.9	92,038.0	110,574.9
Indirect consumption in GJ	762,573.6	737,620.1	709,851.6	687,913.1	697,600.2
Total consumption in GJ	**936,980.8**	**905,276.4**	**812,033.5**	**779,951.1**	**808,175.1**

(*) The data for diesel consumption for vehicles and natural gas for heating the offices of Brugg Switzerland are based on estimates.

The table below shows details of the Terna's energy consumption without taking into account Tamini and Brugg Switzerland, as their environmental impacts in terms of CO_2 are not fully comparable due to the specific nature of their businesses.

DIRECT AND INDIRECT ENERGY CONSUMPTION BY PRIMARY SOURCE - GIGAJOULE [1]

	2021	2020	2019
Direct consumption in GJ			
Petrol for motor vehicles [2]	1,382.5	782.2	889.2
Diesel for motor vehicles [2]	87,196.7	73,219.0	91,433.4
Jet fuel for helicopters	6,321.7	6,825.4	7,027.2
Natural gas for heating	3,505.0	5,762.6	5,448.6
Fuel oil for heating and generators	3,776.1	5,448.8	5,776.5
Total direct consumption	**102,181.9**	**92,038.0**	**110,574.9**
Indirect consumption in GJ			
Electricity to power substations and offices [3]	709,851.6	687,913.1	697,600.2

[1] Direct consumption data in tonnes and thousands of m^3 is shown in detail in the "Key indicator tables" (published in the Sustainability section of the website at www.terna.it). To convert the volumes of the primary resources into gigajoules, the parameters set out in the Global Reporting Initiative (GRI) protocols were used.
[2] Only consumption of operating vehicles is taken into account and not the cars used by managers.
[3] Allocation for the purposes of the production mix was based on the December 2021 issue of the "Monthly Report on the Electricity System" available on the website at www.terna.it. In addition, approximately 9% of Terna's electricity consumption is based on estimates.

The transmission of electricity only requires direct energy consumption for certain support activities, including:

- fuel for the Company's operational vehicles, cars and helicopters used for line inspections, fault repair and other line and substation maintenance activities. The increase in petrol in 2021 compared with 2020 is in part due to the addition of new hybrid vehicles to the Company's fleet, as these are partly fuelled by petrol;
- fuel oil for emergency generators that only come into operation in the event of a power failure. It is estimated that, nationwide, generators were used for a total of 4,573 hours (consumption equal to 0.4 GJ per hour, in line with the previous year);
- fuel oil and natural gas for office heating.

Indirect energy consumption coincides with the electricity used to run substations and operating equipment (87% of the total in 2021) and for office and laboratory use. The figure relating to office consumption is 100,412 GJ (up from 96,805 GJ) which, compared to the total number of Terna employees (less blue-collar workers), corresponds to per capita consumption of 31.6 GJ. This last figure is the latest in a constant downward trend (33.3 GJ in 2020, 34.0 GJ in 2019), bearing out the effectiveness of the energy efficiency measures in offices and buildings described on page 250. Compared with 2020, the overall trend in direct and indirect consumptions is up 4.0%, reflecting an increase in the number of premises measured (22 new substations), the increase in construction work taking place at substations and the greater number of people working in the Company's offices following an improvement in the situation relating to the pandemic.

Energy Management System

The **online project to monitor electricity** consumed by the 24 transformer substations located across the country (the principal energy carriers are monitored, with measurements covering approximately 90% of total consumption) was consolidated in 2021. The substations are selected according to climatic location, size and type of activity. A further 70 transformer substations located across the country were included in the project in 2021, with overall consumption monitored quarter-hourly basis.

The sensors installed send data to the **"EciWeb"** information system for deferred and/or online monitoring of energy-intensive elements (in Terna's case, office buildings and substations) relating to the high-voltage electricity transmission service. EciWeb is used for detailed monitoring of electricity consumption at 10 major buildings and 91 transformer substations.

In line with the sustainability goals included in the 2021-2025 Industrial Plan regarding the **"Energy efficiency of offices"**, and as envisaged by the project implemented with support from the subsidiary, Avvenia, and coordinated by the Group's Energy Manager, 16 of the 35 energy audits of the Terna Group's buildings were carried out in 2021. Once all the audits have been completed, this activity will enable Terna to set an energy consumption reduction target for the Group's offices via targeted efficiency improvement projects.

The **autotransformer replacement plan** has led to the definition of another target for reducing electricity consumption, relating to ancillary services. Analysis was carried out regarding calculation of the electricity that will be saved over a five-year period via the replacement of 60 autotransformers across the country (by the end of 2025, 60 transformers will have been replaced with expected total savings of approximately 80 GWh).

Regarding support for the preparation of course content for in-house training programmes, the "Management Systems" department has prepared and, in certain cases, provided the following training/information activities:

- EciWeb application: energy consumption monitoring at major buildings and offices (carried out in March 2021);
- EciWeb application: energy consumption monitoring at the transformer substations monitored (carried out in March 2021);
- Online energy efficiency and monitoring course focusing on consumption CNI Training Programme (the course was held in February 2022);
- Online course on energy efficiency within the Terna Group (to be held in 2022).

Energy efficiency of substations and offices

At Terna, the development of energy efficiency programmes relating to the use of electricity in substations and offices is experimental, as the Company's electricity consumption falls within the category of "own transmission uses" which, according to the industry's regulator, are not to be included in operating costs.

With a view to improving energy performance, a number of Terna's offices have also been refurbished or are newly built under a long-term programme, which aims to upgrade the energy efficiency class of buildings owned by the Group. Proposed work at offices primarily regards improvements to the energy efficiency of lighting, air-conditioning and heating.

The proposed changes at substations primarily regard the replacement of lighting towers and perimeter lighting with LED technology.

Below is a description of initiatives completed in 2021 with a view to reducing energy consumption, of which the benefits are measurable:

- **Summary of previous years' initiatives:** at 31 December 2021, the energy efficiency initiatives launched in 2014 had led to an overall reduction of around 1,170 tonnes of CO_2 (including 141 tonnes in 2021 alone). Due to the ongoing health emergency, the scheduling of certain initiatives was delayed to 2022;
- **Improving the efficiency of air conditioning systems**: in 2021, the air treatment system at the Rome offices at Viale Galbani 68/70 was upgraded, with latest generation motors and enhanced capacity. The air-conditioning system for the Bari Infrastructure Unit was manually reset. These initiatives led to a reduction of approximately 22 tonnes in annual CO_2 emissions;
- **Improving the efficiency of lighting systems:** in 2021, the lighting systems at substations managed by the Cislago (VA), Fiuli-Venezia-Giulia, Parma, Lazio North, Vittorio Veneto and Codrongianos (SS) Infrastructure Units were replaced. Lighting was replaced or modernised at offices, in two cases with the installation of motion sensors at the Centre North area office and at the offices of Terna Crna Gora. These actions have led to an annual reduction of over 280,000 kWh, equivalent to approximately 95 tonnes of CO_2 a year;
- **Self-production of electricity from renewable sources:** existing renewable self-production plants continued to operate in 2021.

Vehicle fleet

The Company's operational vehicles are used nationwide to carry out power line inspections and, in general, to visit infrastructure and construction sites.

Terna's vehicle fleet consists of three operating helicopters, purchased in 2015, used to carry out scheduled and random inspections of power lines, and a fleet of cars that is frequently renewed, of which over 89% are equipped with Euro 6 and Euro 5 engines. At 31 December 2021, the fleet includes 53 electric vehicles. For further information on vehicles and the related impact of the fleet, see the "Key indicator Tables" (published in the "Sustainability" section of the website at www.terna.it).

Other indirect CO_2 emissions

< 305-3

In addition to emissions deriving from electricity consumption and network leakage, Terna reports the following indirect emissions (scope 3), in line with the GHG Protocol and the classification used for the CDP questionnaire (formerly the Carbon Disclosure Project).

OTHER INDIRECT EMISSIONS (SCOPE 3) – TONNES OF CO_2 EQUIVALENT

	2021	2020	2019
Capital goods	27,447.8	145,838.2	305,993.1
Purchased goods and services	1,308.7	9,376.2	18,605.3
Logistics	395	3,214.5	6,481.4
Waste generated	2,323.8	4,135	6,798.6
Business travel	918	626	4,297

As regards emissions linked to the categories "Purchased goods and services", "Capital goods", "Logistics" and "Waste generated", estimates were made using the PEF (Product Environmental Footprint) method, forming the basis of the LCA (Life Cycle Assessment) study, carried out by Terna in collaboration with Bocconi University. The figure for these emissions is directly influenced by the size (in km) and type (cable or overhead line, and voltage) of the new power lines built each year. The figure regarding business travel reflects total business travel by employees in 2021.

Environmental costs

Terna's commitment to the environment is reflected in the costs incurred for environmental reasons, in terms of both capital expenditure and operating costs. Separate representation of environmental costs is based on the definitions set out below, through aggregating information derived from the Company's general and management accounting. These definitions and the methodology described below are taken from the Terna Group's operating guidelines.

Accounting methodology

The identification of environmental costs is based primarily on available definitions, primarily those of ISTAT (Italy's Office for National Statistics), Eurostat and GRI, as well as the European Commission Recommendation on the recognition, measurement and disclosure of environmental data in annual accounts and annual reports (Recommendation 2001/453/CE). According to this Recommendation, **the term "environmental expenditure" includes the costs of initiatives undertaken by a company, directly or via third parties, in order to prevent, reduce or repair damage to the environment caused by its operating activities**.

Secondly, the relevant definitions have been cross-referenced with the environmental aspects evaluated as being significant (e.g., substation noise, electromagnetic fields, etc.) within the Company's ISO 14001 certified Environmental Management System, in order to identify Terna's environmentally relevant operating and capital expenditure activities within the main business processes.

Many of Terna's activities described in this Report entail environmental expenditure. However, certain limitations have been introduced in determining the scope of the reporting:

- the exclusion of integrated costs, namely those related to activities that have no exclusively environmental purpose (e.g., the use of pylons with innovative characteristics, also in terms of how well they blend into their surroundings) due to the subjective nature of accounting for environmental components only;
- the exclusion of additional costs linked to the consideration of environmental constraints and demands when planning and designing new lines (re-routings and sections of cable laid underground).

Additional conditions were also imposed if costs were significant, consistent with annual accounting requirements (a clear distinction between operating costs and capital expenditure) and directly measurable on the basis of the Company's existing accounting system. The latter condition meets the need to minimise the use of estimates based on non-accounting procedures.

Capital expenditure and operating costs

The table below provides the best possible view of Terna's capital expenditure and operating costs in relation to the environment.

It should be noted that these costs exclude expenses relating to internal sources and only take into account the cost of external supplies. An exception is the item "Environmental activities – Existing plant", which does include the cost of internal personnel.

Based on the methodology adopted and the footnotes to the table, it should be noted that the environmental costs shown represent a subset of the total environmental costs actually incurred, as defined above.

ENVIRONMENTAL COSTS - CAPITAL EXPENDITURE AND OPERATING COSTS (€m)

	2021	2020	2019
Capital expenditure			
Environmental offsets [1]	2.6	1.6	8.7
Environmental impact studies [2]	5.3	3.9	3.8
Environmental activities – new plant [3]	6.7	5.5	5.5
Environmental activities – existing plant [4]	7.2	6.0	3.4
Demolitions [5]	1.6	1.3	1.7
Total capital expenditure	**23.4**	**18.3**	**23.1**
Costs			
Cost of environmental activities [6]	25.2	26.8	24.2
Total operating costs	**25.2**	**26.8**	**24.2**

(1) ***Environmental offsets:*** *these are amounts allocated to offset the works provided for in the Grid Development Plan, as identified by specific agreements signed with local authorities. Compared with the information published in the 2020 Sustainability Report, the figure for 2020 has fallen from €5.5m to €1.6m following a final assessment of the scope of compensatory works.*

(2) ***Environmental impact studies:*** *these relate to plants provided for in the Grid Development Plan that are under construction or awaiting the necessary consents from the competent authorities.*

(3) ***Environmental activities – new plant:*** *the amount shown is an estimated figure. Based on an analysis of certain large investment projects, it has been found that at least 1% of total project costs correspond to environmental items, usually deriving from regulatory requirements (for example, tree screens, noise barriers, the installation of bird deterrents, environmental monitoring, testing of excavated soil and rocks). Therefore, a value of 1% of the capital expenditure costs for projects with similar characteristics has been taken into account.*

(4) ***Environmental activities – existing plant:*** *these are the costs of upgrading plants to comply with new legal requirements and regulations in the environmental field (e.g., noise and visual and landscape aspects).*

(5) ***Demolitions:*** *this is the cost of the final decommissioning of power lines as part of rationalisation programmes.*

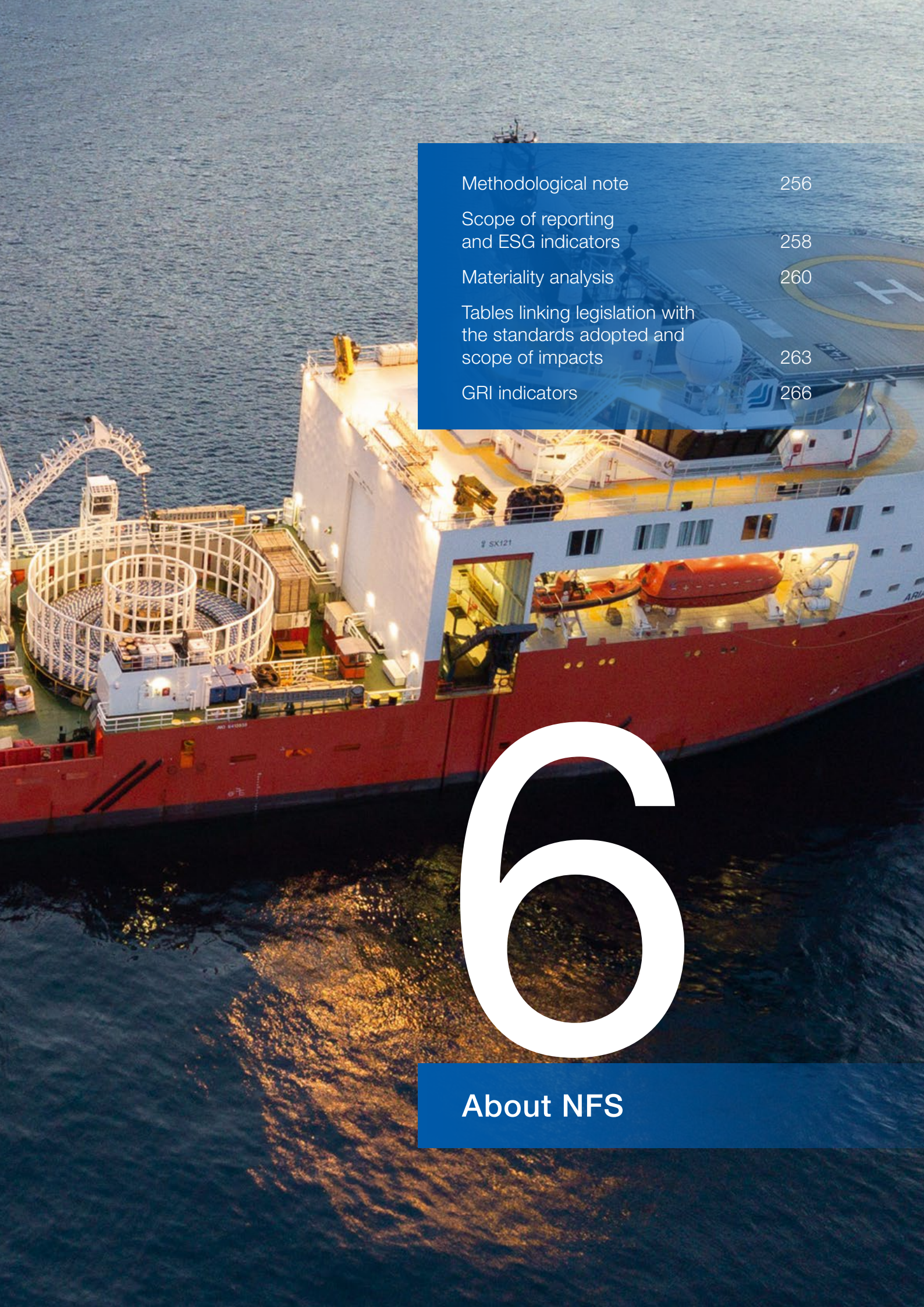
(6) ***Cost of environmental activities:*** *this regards vegetation management, grass cutting, waste management and demolition/decommissioning activities, which represent small amounts and are not included under investment. These cost items, which are directly identifiable within the management accounts, do not cover all operating costs, but do comprise the majority of such costs.*

« Interconnections lead to more efficient exchanges between market areas and, as a result, to lower energy prices. They will become ever more important in the future as they accompany the energy transition and decarbonisation process, with clear benefits for the entire electricity system. We have already taken this approach with the 2,000 km Tyrrhenian Link that will connect Campania, Sicily and Sardinia. »

Riccardo De Zan

Design and construction of HVDC and submarine power lines
Major projects and international development

#Ternapeople #DrivingEnergy



6

About NFS

Methodological note

The Terna Group's NFS has been prepared in compliance with the provisions of Legislative Decree 254/2016, as amended. It contains disclosures on the matters deemed material and provided for in art. 3 of the above Decree, to the extent necessary to enable readers to gain an understanding of the Group's activities, its performance, results and impacts. In the paragraph on the "The EU taxonomy", the NFS also includes the disclosures required by the taxonomy, as provided for in Regulation (EU) 852/20.

The NFS, prepared using the GRI reporting standards "in accordance core" version, was subject to a limited assurance by Deloitte & Touche S.p.A., resulting in a specific "Assurance report", as required by the provisions of articles 3 and 4 of Legislative Decree 254/16. The opinion of the auditing firm and the related assurance activities did not concern the disclosure relating to the "material performance indicators envisaged in the supplement for the Electric Utility sector (EUSS)", the "other published GRI performance indicators" reported on page 272-273, the "Key indicator tables", published in the "Sustainability" section of the website at www.terna.it or the "The EU taxonomy" disclosures.

The following table shows the content of the disclosures required by the Decree and their position in the Integrated Report. This content, together with the EU taxonomy disclosures and the references shown in the GRI Content Index, constitute the consolidated non-financial statement. To help the reader, content relating to the NFS is appropriately indicated within the Integrated Report using the abbreviation "**NFS**".

DECREE REQUIREMENT	SECTIONS/PARAGRAPHS OF THE INTEGRATED REPORT RELATING TO THE NFS	MATERIAL TOPIC LINKED TO THE DECREE REQUIREMENT	GRI STANDARDS LINKED TO THE DECREE REQUIREMENT
ENVIRONMENT			
Risks	**- Principal risks for the Company and how they are managed and the related opportunities.** **- Opportunities and risks connected with climate change.**	Mitigating the impact of infrastructure	304; 413
Management and organisational approach Policies adopted and risk management practices	**- Natural capital.** **- The Group's capital expenditure.** **- Electricity transmission.**	Reducing the Group's CO_2 emissions Delivering the ecological transition	302 305 201
SOCIAL			
Risks	**- Principal risks for the Company and how they are managed and the related opportunities.**		
Management and organisational approach Policies adopted and risk management practices	**- Electricity transmission.** **- Dispatching of electricity.** **- Continuity and quality of service.** **- Infrastructure maintenance.** **- Innovation.** **- Dialogue with local communities.** **- Managing the environmental impact of the electricity grid.**	Ensuring the quality, security and continuity of the electricity service Optimal management of relations with local stakeholders	203 413
WORKFORCE-RELATED			
Risks	**- Principal risks for the Company and how they are managed and the related opportunities.**	Workplace health and safety and workers' rights	403
Management and organisational approach Policies adopted and risk management practices	**- Human capital.**	HR development Advancement of inclusion and diversity	401 404 405
RESPECT FOR HUMAN RIGHTS			
Risks	**- Principal risks for the Company and how they are managed and the related opportunities.**		
Management and organisational approach Policies adopted and risk management practices	**- Safety, the environment and human rights at contractors.** **- Respect for human rights.** **- Sustainable supply chain.**	Supply chain sustainability	406 407 412 414
TACKLING CORRUPTION			
Risks	**- Principal risks for the Company and how they are managed and the related opportunities.**		
Management and organisational approach Policies adopted and risk management practices	**- Compliance, integrity and combatting corruption.**	Business integrity	205 206

Scope of reporting and ESG indicators

In keeping with the NFS in 2020 in which, in order to progressively shift towards a "One Company" approach to presentation, data regarding the Tamini Group was consolidated for the first time, data for Brugg Kabel AG Switzerland, in which a 90% stake was acquired on 29 February 2020 and which is a subsidiary of Terna Energy Solutions, has also been consolidated in this Report.

In any event, in order to ensure comparability of the 2021 data with the data for the previous two years, data for Terna alone used in the sustainability reports for 2020 and 2019 is also reported, whilst, for 2021 and 2020 alone, consolidated data for Terna, Tamini and Brugg Switzerland is also shown. The 2020 data for Brugg were not published in the NFS for 2020 as they were no available in time for inclusion.

Unless otherwise indicated, the following are excluded from the scope:

- Avvenia;
- the LT Group, acquired in October 2021;
- data referring to companies operating overseas.

Data regarding Avvenia, a subsidiary acquired in 2018 and controlled by Terna Energy Solutions, in turn a subsidiary of Terna, have not been consolidated (18 staff at 31 December 2021). Environmental impact analyses for Avvenia completed in 2019 were not material for reporting purposes.

Environmental data regarding subsidiaries operating overseas have been consolidated in a comparable manner based on the type of impact and management model. In contrast, it was deemed preferable to report data on social aspects (e.g. accidents) separately, given the importance of the related regulatory framework.

Finally, it should be noted that when the data reported in the section, "Human capital", refers to "Terna", it relates to 82% of the workforce, whilst when it refers to "Terna, Tamini and Brugg Switzerland" it relates to 95% of the Group's workforce. In terms of the Group's revenue, these percentages for "Terna" alone are 90% and when referring to "Terna, Tamini and Brugg Switzerland" 99%.

As regards the data reported in the section, "Natural capital", on the other hand, when this refers to "Terna" it relates to 82% of the workforce, whilst when it refers to "Terna, Tamini and Brugg Switzerland" it relates to 96% of the Group's workforce. In terms of the Group's revenue, these percentages for "Terna" alone are 90% and when referring to "Terna, Tamini and Brugg Switzerland" 99.5%.

Finally, any changes to the data published in previous editions are appropriately highlighted in the document.

In accordance with the materiality principle, data presented in the Report cover all companies having a significant impact on sustainability (e.g., in terms of size or personnel, potential impact on the environment and the community or the number of transactions/activities occurring during the year) and over which Terna directly or indirectly exercises control or has power to govern their financial and operating policies. There are no joint ventures, other subsidiaries or leased assets that might significantly influence the scope of compatibility of the environmental or social data.

In 2021, information on the 350 electricity substations formerly owned by RFI (342 at the end of 2020) was included in the scope of environmental data. All the substations that, by 31 December 2021, had been integrated into the Terna Group's scope of operations have therefore been consolidated. There are no further electricity substations formerly owned by RFI that are expected to be operated under an O&M (Operation & Maintenance) contract entered into with the previous owner.

Comparative analysis of ESG performances

In the belief that a comparison of environmental, social and governance performance should not only concern the Company but also its stakeholders, as in previous years, this Report also includes comparisons between Terna's results and those of other companies.

The comparative sustainability indicators regard the following topics: carbon intensity, the SF6 leakage rate, per capita hours of training and the staff turnover rate.

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

Three company peer groups were chosen:

- the first consists of the leading European and non-European Transmission System Operators in terms of the number of kilometres of line operated;
- the second covers a range of sectors and comprises large Italian companies (the 40 companies listed on the FTSE MIB on 3 January 2022);
- the third consists of the international best performers in the Electric Utilities – ELC sector (identified by the sustainability rating agency SAM – Standard & Poor's Global – and included in the Dow Jones Sustainability World Index in November 2021).

The purpose of the three peer groups – also in connection with the type of indicator examined – is to provide a comparison between companies with the same operating characteristics, including an Italian comparison and one with the top international performers from the same sector. From among companies in the three peer groups, consideration has been given to those that publish useful information for comparison on their websites via their Sustainability Report (even if not drawn up in accordance with the GRI guidelines) or via other documents (integrated reports, HSE reports, financial reports, etc.).

This led to a reduction in the sample compared with the number of companies in the peer group at the outset. The comparative analysis necessarily refers to data for 2020, as the comparisons were made whilst the 2021 reports were being prepared, as was also the case for Terna.

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

Materiality analysis

The choice of topics on which this Integrated Report is based reflects the updated materiality analysis conducted in December 2021, in accordance with the GRI Sustainability Reporting Standards, the principal international standards adopted by Terna since the annual reporting period for 2006.

In updating the **"significance for Terna"** aspect, in keeping with the form of engagement used in 2020, involving the conduct of formal interviews with Terna's senior management, an online questionnaire was distributed to second line managers. The results were weighted against the outcome of an assessment of internal documents and the interviews conducted in 2020.

With regard to the **"significance for stakeholders"** aspect, the results obtained via an online questionnaire (sent to investors, distributors, the media, opinion groups, non-regulated customers, suppliers and representatives of local business groups) were combined with an assessment of internal documents representing the stakeholder priorities and key sustainability trends.

In updating the materiality matrix for 2021 (see page 42), it was decided to bring forward compliance with the obligations provided for in the new GRI 3 standard. This involved an initial due diligence process regarding the impacts incurred or generated by Terna. The results were then integrated with the analyses of the significance for Terna and for stakeholders[84].

The analysis of the Terna Group's material topics was completed by linking them to the main Sustainable Development Goals (SDGs) and the relevant capitals.

A summary of the Company's and stakeholders' points of view is expressed in the **materiality matrix**, which makes it possible to identity the "material" topics, namely those deemed most important by Terna and stakeholders. It also highlights any differences in viewpoints on topics between stakeholders and the Company.

In the matrix, the most significant topics are those furthest from the origin; the most important topics in absolute terms are the ones furthest from the origin and, at the same time, closer to the bisector. For 2021, as shown in the matrix, the five most significant topics are: "Delivering the ecological transition"; "Quality, security and continuity of the electricity service"; "Workplace health and safety and workers' rights"; "Grid resilience" and "Delivering on financial and performance goals". The three topics that have grown in significance compared with the analysis conducted in 2020 are: "Reducing the Group's CO_2 emissions"; "Advancing inclusion and diversity" and "Reuse and recycling of materials".

[84] This assessment meets the requirements of the new sustainability standards in GRI 3: Material Topics 2021, which put forward a due diligence framework for analysing the impacts incurred or generated by a company's activities (the double-materiality principle), anticipating the proposed new legislation at EU level.

In determining significant topics for financial stakeholders alone, in keeping with previous years, it was decided to conduct a specific analysis to identify the priorities for this category. This differs from previous analyses in the following aspects:

- to assess the significance for **stakeholders**, again in line with IIRC principles, only the opinions of those **belonging to the financial category** (including financial analysts and institutional investors) and "credit providers" (e.g., banks), were taken into account;
- only the topics for which, in the set of sources analysed, it was possible to identify the information of significance to financial stakeholders were taken into account.

Based on this analysis, the topics considered of greatest significance are: "Delivering the ecological transition", "Workplace health and safety and workers' rights" and "Reducing the Group's CO2 emissions". These results, as shown in the matrix, do not differ significantly from the outcome of the materiality analysis conducted on the basis of the GRI standard.

To complete the analysis of prospective materiality, a comparison was made between the topics deemed significant for Terna and the categories established by the **Sustainability Accounting Standards Board ("SASB")**[85].

For the "**Electric utilities & Power generators**" sector[86], 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 apply8[87]. 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 (see the references in the following table). Finally, the key to the materiality matrix shows the links between the topics deemed significant for Terna and the categories used by the SASB.

[85] 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 as a tool for identifying sustainability-related issues that can influence the financial and operating performances of companies within a certain sector.

[86] Further details can be found at the following link: https://materiality.sasb.org/

[87] 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	**GHG emissions** 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_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3).	Reducing the Group's CO_2 emissions	Page 244
	Employee health and safety 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 203
	Business model resilience 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.	Information security Delivering the ecological transition	Page 88, 172
	Systematic risk management 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	Page 172 107, 134
Group 2	**Waste and hazardous materials management** 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 234
	Access and affordability 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 Information security	Page 214 158, 172
	Critical incident risk management 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	Page 68, 107 134, 214

Tables linking legislation with the standards adopted and scope of impacts

The significance of the various topics for Terna and its stakeholders is based on the impacts, both positive and negative, connected to them. In line with the requirement in Legislative Decree 254/2016, to explain *"the main risks, generated or incurred, in connection with"* the significant topics in terms of materiality, for each of the topics identified, the table below shows an example of the risk involved and the type of impact for Terna and for the specific categories of stakeholder affected. In the classification of impacts for Terna, the categories used in the Company's application of the Enterprise Risk Management ("ERM") model have been adopted, whilst the impacts for stakeholders are broken down into:

- Quality of service;
- Economic;
- Health and safety;
- Human rights;
- Quality of life, well-being.

TOPIC	GRI	EXAMPLE OF RISK MANIFESTATION	POTENTIAL IMPACT ON TERNA	STAKEHOLDERS POTENTIALLY IMPACTED	POTENTIAL IMPACT ON STAKEHOLDERS
Delivering the ecological transition	302; 305	Increased service disruption, grid inadequacy, growth in renewable energy production below expectations	- Operational - Reputational - Economic/financial	Community, electricity sector operators, public decision makers and regulators	Service quality, economic, decarbonisation targets
Ensuring the quality, security and continuity of the electricity service	NA	Increase in malfunctions, grid inadequacy	- Operational - Reputational - Economic/financial	Community	Service quality, economic
Workplace health and safety and workers' rights	403	Occupational injuries	- Reputational - Economic/financial - HSE (Health, Safety & Environment)	Personnel, suppliers	Health and safety, human rights
Grid resilience	NA	Increased service disruption, grid inadequacy	- Operational - Reputational - Economic/financial	Community, local communities affected by the presence of Terna's infrastructure	Quality and continuity of service, economic
Delivering on financial and performance goals	201	Economic and financial performance below expectations	- Operational - Economic/financial	Shareholders, credit providers, suppliers, business partners, personnel, community	Economic
Mitigating the impact of infrastructure	NA	Insufficient consideration given to and containment of negative externalities (excluding CO_2 emissions) resulting from Terna's operations	- Reputational	Local communities affected by the presence of Terna's infrastructure	Quality of life, wellbeing
Innovation and digitalisation	NA	Insufficient innovation capacity for the ecological transition and business growth	- Operational - Economic/financial in the medium-term - Reputational	Community, shareholders, suppliers	Community: service quality. Shareholders and suppliers: economic in the medium-long term

TOPIC	GRI	EXAMPLE OF RISK MANIFESTATION	POTENTIAL IMPACT ON TERNA	STAKEHOLDERS POTENTIALLY IMPACTED	POTENTIAL IMPACT ON STAKEHOLDERS
Business integrity	205; 206; 207; 307; 415; 419	Behaviours in breach of statutory requirements	- Reputational - Economic/financial	Shareholders, other stakeholders, who are damaged by Terna's conduct	Shareholders: economic.
Strategic approach to stakeholder management	NA	Failure to consider stakeholders' expectations	- Reputational - Operational	All	Quality of life, wellbeing
Reducing the Group's CO_2 emissions	302;305	Insufficient consideration given to and containment of greenhouse gas emissions resulting from Terna's operations	- Reputational	Community	Quality of life, wellbeing
Economic impacts on the community	201	Increased cost of the service (caused by Terna)	- Reputational - Economic/financial in the medium-term - Operational	Community	Economic
Optimal management of relations	413	Tensioni con le comunità locali interessate dallo sviluppo della rete	- Reputational - Economic/financial - Operational	Local communities	Quality of life, wellbeing
HR development	404	Inadequate human capital	- Operational - Reputational - Economic/financial	Shareholders, personnel	Personnel: quality of life, economic Shareholders: economic
Reuse and recycling of materials	306	Disposal of reusable or recyclable materials on completion of a project in violation of the standards adopted by the Company as part of efforts to develop the circular economy	- Reputational - HSE (Health, Safety & Environment)	Community	Quality of life, wellbeing, health and safety
Governance model effectiveness	NA	Below par governance	- Operational - Reputational	Shareholders, credit providers, suppliers, business partners, personnel	Economic (indirect)
Protecting biodiversity	304	Incidents during construction work that may have an impact on flora or fauna and/or contribute to the disappearance of animal or plant species	- Reputational - Economic/financial - HSE (Health, Safety & Environment)	Community	Quality of life, wellbeing, health and safety, economic (reflecting potential fines or remedial action)
Information security	418	Increased disruption to services, loss of confidential data, breach of privacy of grid users, grid inadequacy	- Operational - Reputational - Economic/financial	Community, electricity sector operators, personnel	Quality of service, economic, right to privacy
Promoting wellbeing within the workforce	401; 402; 407	Changes linked to alterations to the workplace environment resulting in physical, psychological and social dissatisfaction among the workforce	- Reputational - HSE (Health, Safety & Environment)	Personnel	Quality of life, wellbeing

TOPIC	GRI	EXAMPLE OF RISK MANIFESTATION	POTENTIAL IMPACT ON TERNA	STAKEHOLDERS POTENTIALLY IMPACTED	POTENTIAL IMPACT ON STAKEHOLDERS
Advancement of inclusion and diversity	405; 406; 412	Unjustified differences in treatment linked to aspects of diversity; inadequate human capital	- Reputational - Economic (productivity)	Personnel; potential candidates for employment	Human rights, economic
Social responsibility initiatives	413	Terna's social responsibility unclear and poorly perceived	- Reputational	Community, personnel	Quality of life, wellbeing Personnel: sense of pride
Supply chain sustainability	204; 308; 414	Conduct of suppliers not in line with Terna's sustainability policies	- Reputational - Economic/financial	Suppliers	Human rights, health and safety
Growing and diversifying the business	203	Lack of profitability and growth generated by the customer base/ orders linked to the non-regulated business	- Operational - Reputational - Economic/financial	Shareholders, credit providers	Economic

GRI indicators

The GRI content index for the GRI Standards used in the report. Each indicator, where provided for, is linked with the relevant Sustainable Development Goals (SDGs), the Global Compact principles and the capitals identified using the IIRC framework. Finally, references to the pages of the document where the relevant information can be found have also been provided, together with any limitations and notes for specific indicators.

The page references refer to the disclosures required by the standards. The standards used are those published in 2016. Any references to later standards are shown in the table.

GRI STANDARD		PAGE	LIMITATIONS AND NOTES
GRI 101 – FOUNDATION (2016)		42-43, 258-262	
GRI 102 – GENERAL DISCLOSURES (2016)			
ORGANISATIONAL PROFILE			
102-1	Name of the organisation.	74, 183	
102-2	Activities, brands, products, and services.	60-63, 84-85,109,119-124 128-129	
102-3	Location of headquarters.	74,183	
102-4	Location of operations.	60-63,84-85,109,119-130	
102-5	Ownership and legal form.	58-59	
102-6	Markets served.	84-85, 109, 119-123, 128-129	
102-7	Scale of the organisation.	60-63, 194-195	
102-8	Information on employees and other workers.	192-197	
102-9	Supply chain.	186-191, 208-209	
102-10	Significant changes to the organization and its supply chain.	60-63	
102-11	Precautionary principle.	232- 240	
102-12	External initiatives.	34-35, 47-48, 67,182-184 224-227, 235-236	
102-13	Membership of associations.	224-227	
STRATEGY			
102-14	Statement from senior decision maker.	2-3	
102-15	Key impacts, risks and opportunities.	47-49, 65, 67-77, 131-133 157, 182-184, 263-265	
ETHICS AND INTEGRITY			
102-16	Values, principles, standards and norms of behaviour.	47-48, 67 Report on Corporate Governance and Ownership Structures.	
102-17	Mechanisms for advice and concerns about ethics.	181, 222, 237-238 Code of Ethics: 44-45	

GRI STANDARD		PAGE	LIMITATIONS AND NOTES
GOVERNANCE			
102-18	Governance structure.	64-67 Report on Corporate Governance and Ownership Structures.	
102-19	Delegating authority.	64-67 Report on Corporate Governance and Ownership Structures.	
102-20	Executive-level responsibility for economic, environmental, and social topics.	64-67 Report on Corporate Governance and Ownership Structures.	
102-21	Consulting stakeholders on economic, environmental, and social topics.	Report on Corporate Governance and Ownership Structures.	
102-22	Composition of the highest governance body and its committees.	64-67	
102-23	Chair of the highest governance body.	Report on Corporate Governance and Ownership Structures.	
102-24	Nominating and selecting the highest governance body.	Report on Corporate Governance and Ownership Structures.	
102-25	Conflicts of interest.	Report on Corporate Governance and Ownership Structures.	
102-26	Role of highest governance body in setting purpose, values, and strategy.	64-67 Report on Corporate Governance and Ownership Structures.	
102-28	Evaluating the highest governance body's performance.	Report on Corporate Governance and Ownership Structures.	
102-29	Identifying and managing economic, environmental, and social impacts.	47-49, 64-77, 157- 162 182-184, 263-265 Report on Corporate Governance and Ownership Structures.	
102-30	Effectiveness of risk management processes.	Report on Corporate Governance and Ownership Structures.	
102-31	Review of economic, environmental, and social topics.	42-43, 260-262	
102-32	Highest governance body's role in sustainability reporting.	4-5, 42-43, 258-262	
102-35	Remuneration policies.	Report on Corporate Governance and Ownership Structures.	
102-36	Process for determining remuneration.	Report on Corporate Governance and Ownership Structures.	
102-37	Stakeholders' involvement in remuneration.	Report on Corporate Governance and Ownership Structures.	
STAKEHOLDER ENGAGEMENT			
102-40	List of stakeholder groups.	214-215	
102-41	Collective bargaining agreements.	209-210	
102-42	Identifying and selecting stakeholders.	214-215	
102-43	Approach to stakeholder engagement.	42-43, 214-215, 260-262	
102-44	Key topics and concerns raised.	209-210, 214-215, 218-223 260-265	
REPORTING PRACTICES			
102-45	Entities included in the consolidated financial statements.	60-63, 258	
102-46	Defining report content and topic boundaries.	4-5, 258-265	
102-47	List of material topics.	42-43, 260-265	
102-48	Restatements of information.	258	
102-49	Changes in reporting.	42-43, 260-261	
102-50	Reporting period.	258	
102-51	Date of most recent report.	4-5, 258	
102-52	Reporting cycle.	4-5, 258	
102-53	Contact point for questions regarding the report.	215	
102-54	Claims of reporting in accordance with the GRI Standards.	4-5	
102-55	GRI content index.	266	
102-56	External assurance.	4, 276	
GRI 103 MANAGEMENT APPROACH (2016)			
103-1		42-43, 258-265	
103-2		The following section on the GRI topic specific includes page references for the information on standards 103-2 and 103-3 for each material topic.	
103-3			

Topic Specific Standards – GRI 200: Economic Topics

GRI STANDARD	PAGE	LIMITATIONS AND NOTES	CAPITALS	GLOBAL COMPACT	SDGs
ECONOMIC PERFORMANCE	**74-77, 98 158-162**				
201-1 Direct economic value generated and distributed.	158-159				
201-2 Financial implications for the organisation's activities due to climate change.	74-77				
201-3 Coverage of the organisation's defined benefit plan obligations.	210				
201-4 Financial assistance received from government.	159				
INDIRECT ECONOMIC IMPACTS	**98, 158-162 222-223**				
203-1 Infrastructure investments and services supported.	98, 222-223				
PROCUREMENT PRACTICES	**186-191**				
204-1 Proportion of spending on local suppliers.	186				
ANTI-CORRUPTION	**178-181**				
205-1 Proportion of business units assessed for risks related to corruption and risks identified.	178				
205-2 Communication and training on anti-corruption policies and procedures.	178, 181	Information on suppliers is provided on page 186; for the members of the Board of Directors, see the "Report on Corporate Governance and Ownership Structures".		Principle 10	
205-3 Confirmed incidents of corruption and actions taken.	177			Principle 10	
ANTI-COMPETITIVE BEHAVIOUR	**68, 116, 176**				
206-1 Total legal actions for anti-competitive behaviours, anti-trust and monopoly practices and related judgments.	177				
TAX (2019)	**159-160**				
207-1 Approach to tax.	159				
207-2 Tax governance, control, and risk management.	159-160	For the reports, see page 181. For the assurance process, see the independent auditor's report on the financial statements.			
207-3 Stakeholder engagement and management of concerns related to tax.	160				
207-4 Country-by-country reporting.	62-63, 160				

Topic Specific Standards – GRI 300: Environmental Topics

GRI STANDARD	PAGE	LIMITATIONS AND NOTES	CAPITALS	GLOBAL COMPACT	SDGs
ENERGY	**232, 248-249**				
302-1 Energy consumption within the organisation.	248				
302-3 Energy intensity.	248			Principle 9	
BIODIVERSITY	**232-234, 238-240**				
304-1 Operational sites owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas.	238			Principle 8	
304-4 Total number of IUCN red list species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	238-239			Principle 8	
EMISSIONS	**232, 241-251**				
305-1 Direct greenhouse gas emissions by weight (scope I).	241-244			Principle 7	
305-2 Indirect greenhouse gas emissions by weight (scope II).	241-242			Principle 7	
305-3 Other indirect greenhouse gas emissions (scope III).	251			Principle 7	
305-4 Carbon intensity.	242-243			Principle 9	
305-5 Initiatives to reduce greenhouse gas emissions and results achieved.	244, 248-250			Principle 9	
EFFLUENTS AND WASTE (2020)	**232, 234-236**				
306-1 Waste generation and significant waste-related impacts.	235			Principle 8	
306-2 Management of significant waste-related impacts.	234			Principle 8	
306-3 Waste generated.	235			Principle 8	
ENVIRONMENTAL COMPLIANCE	**177, 232**				
307-1 Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	177			Principle 8	
SUPPLIER ENVIRONMENTAL ASSESSMENT	**186-191, 232**				
308-1 Percentage of new suppliers that were screened using environmental criteria.	186-187			Principle 8	
308-2 Significant negative environmental impacts identified in the supply chain and actions taken.	186, 190			Principle 8	

Topic Specific Standards – GRI 400: Social Topics

GRI STANDARD	PAGE	LIMITATIONS AND NOTES	CAPITALS	GLOBAL COMPACT	SDGs
EMPLOYMENT	**192,196, 210**				
401-1 Total number and rates of new employee hires and employee turnover.	196-197			Principle 6	
401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees.	210				
401-3 Parental leave.	211-212				
LABOUR/MANAGEMENT RELATIONS	**192, 209**				
402-1 Minimum notice periods regarding operational changes including whether these are specified in collective agreements.	209			Principle 3	
OCCUPATIONAL HEALTH AND SAFETY (2018)	**74, 183-184 192, 203- 209**				
403-1 Occupational health and safety management system.	203				
403-2 Hazard identification, risk assessment, and incident investigation.	204				
403-3 Occupational health services.	204				
403-4 Worker participation, consultation, and communication on occupational health and safety.	203				
403-5 Worker training on occupational health and safety.	204				
403-6 Promotion of worker health.	74, 210				
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships.	186				
403-9 Number of injuries, fatality rate, injury rate, rate of recordable work-related injuries, type of injury, number of hours worked.	205				
TRAINING AND EDUCATION	**192, 198-199**				
404-1 Average hours of training per year per employee by gender and employee category	199			Principle 6	
DIVERSITY AND EQUAL OPPORTUNITY	**192, 212**				
405-1 Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	212			Principle 6	
405-2 Ratio of basic salary and remuneration of women to men to employee category, by significant locations of operation.	212			Principle 6	
NON-DISCRIMINATION	**171, 184-185**				
406-1 Total incidents of discrimination and actions taken.	212			Principle 6	

GRI STANDARD	PAGE	LIMITATIONS AND NOTES	CAPITALS	GLOBAL COMPACT	SDGs
FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING	**184, 186, 203**				
407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk and actions taken.	120			Principle 3	
HUMAN RIGHTS ASSESSMENT	**184**				
412-1 Operations that have been subject to human rights reviews or impact assessments.	184			Principle 1	
412-2 Employee training on human rights policies or procedures.	199				
412-3 Total number and percentage of significant investment agreements and contracts that include human rights clauses.	184	All suppliers are required to give a contractual undertaking to comply with Terna's Code of Ethics. See page 186.		Principle 1 Principle 2 Principle 3	
LOCAL COMMUNITIES	**216, 220**				
413-1 Percentage of operations with implemented local community engagement, impact assessments, and development programmes.	220			Principle 1	
413-2 Operations with significant actual and potential negative impacts on local communities.	221, 233			Principle 1	
SUPPLIER SOCIAL ASSESSMENT	**186- 191 208-209**				
414-1 New suppliers that were screened using social criteria.	186			Principle 2 Principle 3	
414-2 Significant negative social impacts identified in the supply chain and actions taken.	186			Principle 2 Principle 3	
POLITICAL DONATIONS	**222**				
415-1 Total financial donations and benefits to parties, politicians and institutions by country and recipient/beneficiary.	222			Principle 10	
CUSTOMER PRIVACY	**177-178**				
418-1 Total number of complaints regarding breaches of customer privacy and losses of customer data.	178				
SOCIO-ECONOMIC COMPLIANCE	**177**				
419-1 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	177				

List of material performance indicators required to meet sector disclosure requirements for the electric utilities sector (EUSS)

EUSS INDICATOR		PAGE	LIMITATIONS AND NOTES	CAPITALS	SDGs
ORGANISATIONAL PROFILE					
EU3	Number of residential, commercial and industrial customers.	116			
EU4	Length of above and underground transmission and distribution lines by voltage.	85, 289			
SYSTEM EFFICIENCY					
EU12	Transmission and distribution losses as a percentage of total energy.	246			
BIODIVERSITY					
EU13	Biodiversity of offset habitats compared to the biodiversity of the affected areas.	233-234 238			
EMPLOYMENT					
EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category.	197			
EU17	Days worked by contractor and subcontractor employees involved in construction, operation and maintenance work.	208			
EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training.	208			
LOCAL COMMUNITIES					
EU22	Number of people physically or economically displaced due to new or expanded generation plants or transmission lines and compensation.	221			
CUSTOMER HEALTH AND SAFETY (COMMUNITIES)					
EU25	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases.	177			
ACCESS					
EU28	Power outage frequency.	107			
EU29	Average power outage duration.	107			

List of other GRI performance indicators published

In line with an approach based on voluntary disclosure, the Group has opted to publish certain indicators even if they are judged to fall below the materiality threshold and thus do not fall within the scope of the NFS (see the specific section on materiality on page 260). Finally, it should be noted that these indicators only partially refer to the requirements provided for in the GRI.

GRI STANDARD	PAGE	LIMITATIONS AND NOTES	CAPITALS	GLOBAL COMPACT	SDGs
202-2 Proportion of senior management hired from the local community	213			Principle 6	
301-1 Materials used by weight or volume	234			Principle 7 Principle 8	
303-1 Total water withdrawal by source	236			Principle 7 Principle 8	
408-1 Operations and suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the effective abolition of child labour	184, 188			Principle 5	
409-1 Operations and suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour	184,188			Principle 4	

« Terna Energy Solutions has for many years put our expertise to use to offer our customers innovative solutions designed to take advantage of the opportunities and the value made available by the current energy transition. We offer an extensive range of products and services in a highly competitive market: from design to advice on installation and maintenance, capitalising on the opportunities offered by the green economy. »

Nicola Di Pietro
Project Delivery
Energy Solutions & Connectivity

#Ternapeople #DrivingEnergy

7

Independent limited assurance report on the consolidated Non-Financial Statement for 2021

Deloitte & Touche S.p.A.
Via Tortona, 25
20144 Milano
Italia

Tel: +39 02 83322111
Fax: +39 02 83322112
www.deloitte.it

INDEPENDENT AUDITOR'S REPORT ON THE CONSOLIDATED NON-FINANCIAL STATEMENT PURSUANT TO ARTICLE 3, PARAGRAPH 10 OF LEGISLATIVE DECREE No. 254 OF DECEMBER 30, 2016 AND ART. 5 OF CONSOB REGULATION N. 20267/2018

To the Board of Directors of
Terna S.p.A.

Pursuant to article 3, paragraph 10, of the Legislative Decree no. 254 of December 30, 2016 (hereinafter also "Decree") and to article 5 of the CONSOB Regulation n. 20267/2018, we have carried out a limited assurance engagement on the Consolidated Non-Financial Statement of Terna S.p.A. and its subsidiaries (hereinafter "Terna Group" or "Group") as of December 31, 2021 prepared on the basis of art. 4 of the Decree, presented in the specific section of the Report on operations and integrated, through references, with information presented in other sections of the Report on operations, approved by the Board of Directors on March 17, 2022 (the "NFS").

Our limited assurance engagement does not extend to the information required by art. 8 of the European Regulation 2020/852 included in the paragraph "The EU taxonomy".

Responsibility of the Directors and the Board of Statutory Auditors for the NFS

The Directors are responsible for the preparation of the NFS in accordance with articles 3 and 4 of the Decree and *"Global Reporting Initiative Sustainability Reporting Standards"* established by GRI – *Global Reporting Initiative* (hereinafter also "GRI Standards"), which they have identified as reporting framework.

The Directors are also responsible, within the terms established by Law, for such internal control as they determine is necessary to enable the preparation of NFS that is free from material misstatement, whether due to fraud or error.

The Directors are moreover responsible for defining the contents of the NFS, within the topics specified in article 3, paragraph 1, of the Decree, taking into account the activities and characteristics of the Group, and to the extent necessary in order to ensure the understanding of the Group's activities, its trends, performance and the related impacts.

Finally, the Directors are responsible for defining the business management model and the organisation of the Group's activities as well as, with reference to the topics detected and reported in the NFS, for the policies pursued by the Group and for identifying and managing the risks generated or undertaken by the Group.

The Board of Statutory Auditors is responsible for overseeing, within the terms established by law, the compliance with the provisions set out in the Decree.

Auditor's Independence and quality control

We have complied with the independence and other ethical requirements of the *Code of Ethics for Professional Accountants* issued by the *International Ethics Standards Board for Accountants*, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Our auditing firm applies International Standard on Quality Control 1 (ISQC Italia 1) and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Auditor's responsibility

Our responsibility is to express our conclusion based on the procedures performed about the compliance of the NFS with the Decree and the GRI Standards. We conducted our work in accordance with the criteria established in the "*International Standard on Assurance Engagements ISAE 3000 (Revised) – Assurance Engagements Other than Audits or Reviews of Historical Financial Information*" (hereinafter also "*ISAE 3000 Revised*"), issued by the *International Auditing and Assurance Standards Board* (IAASB) for limited assurance engagements. The standard requires that we plan and perform the engagement to obtain limited assurance whether the NFS is free from material misstatement. Therefore, the procedures performed in a limited assurance engagement are less than those performed in a reasonable assurance engagement in accordance with ISAE 3000 Revised, and, therefore, do not enable us to obtain assurance that we would become aware of all significant matters and events that might be identified in a reasonable assurance engagement.

The procedures performed on NFS are based on our professional judgement and included inquiries, primarily with company personnel responsible for the preparation of information included in the NFS, analysis of documents, recalculations and other procedures aimed to obtain evidence as appropriate.

Specifically, we carried out the following procedures:

1. analysis of relevant topics with reference to the Group's activities and characteristics disclosed in the NFS, in order to assess the reasonableness of the selection process in place in light of the provisions of art. 3 of the Decree and taking into account the adopted reporting standard;

2. analysis and assessment of the identification criteria of the consolidation area, in order to assess its compliance with the Decree;

3. comparison between the financial data and information included in the NFS with those included in the consolidated financial statements of the Terna Group;

4. understanding of the following matters:

   - business management model of the Group's activities, with reference to the management of the topics specified by article 3 of the Decree;
   - policies adopted by the entity in connection with the topics specified by article 3 of the Decree, achieved results and related fundamental performance indicators;
   - main risks, generated or undertaken, in connection with the topics specified by article 3 of the Decree.

   Moreover, with reference to these matters, we carried out a comparison with the information contained in the NFS and the verifications described in the subsequent point 5, letter a) of this report;

5. understanding of the processes underlying the origination, recording and management of qualitative and quantitative material information included in the NFS.

   In particular, we carried out interviews and discussions with the management of Terna S.p.A., Terna Rete Italia S.p.A. and Tamini Trasformatori S.r.l., and we carried out limited documentary verifications, in order to gather information about the processes and procedures which support the collection, aggregation, elaboration and transmittal of non-financial data and information to the department responsible for the preparation of the NFS.

   In addition, for material information, taking into consideration the Group's activities and characteristics:

   - at the parent company and subsidiaries level:
     a) with regards to qualitative information included in the NFS, and specifically with reference to the business management model, policies applied and main risks, we carried out interviews and gathered supporting documentation in order to verify its consistency with the available evidence;
     b) with regards to quantitative information, we carried out both analytical procedures and limited verifications in order to ensure, on a sample basis, the correct aggregation of data.

   - for the Sicilia District and the Unità Impianti of Palermo and Catania – of Terna Rete Italia S.p.A., and for Tamini Trasformatori S.r.l., which we selected based on their activities, their contribution to the performance indicators at the consolidated level and their location, we carried out remote meetings, during which we have met their management and have gathered supporting documentation with reference to the correct application of procedures and calculation methods used for the indicators.

Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe that the NFS of the Terna Group as of December 31, 2021 is not prepared, in all material aspects, in accordance with articles 3 and 4 of the Decree and GRI Standards.

Our conclusion on the NFS does not extend to the information required by art. 8 of the European Regulation 2020/852 included in the paragraph "The EU taxonomy".

Other matters

The NFS for the year ended December 31, 2019, whose data are presented for comparative purposes, have been subject to a limited assurance engagement by another auditor that, on April 16, 2020, expressed an unmodified conclusion.

DELOITTE & TOUCHE S.p.A.

Signed by
Franco Amelio
Partner

Milan, Italy
April 7, 2022

This report has been translated into the English language solely for the convenience of international readers.

« We strive to make continuous improvements to the system that can then be reflected in the regulatory framework, with the aim of enhancing our ability to guarantee the efficiency and quality of our assets and of the delivery of new projects. The energy transition is what most influences our choice of infrastructure. The macro-objective is to enable decarbonisation through the construction of large infrastructure networks combining both development and sustainability. »

Francesca Pede

Converter System Design - Design and construction of HVDC and submarine power lines

#Ternapeople #DrivingEnergy

8

Annexes

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 2021 and, subsequently, up to the date of preparation of this Annual Report.

- **Law Decree 41 of 22 March 2021, containing "Urgent measures concerning support for businesses and economic operators, employment, health and local services connected with the Covid-19 emergency", converted into Law 69 of 21 May 2021 and published in Official Gazette no. 120 of 21 May 2021 (the Sostegni I Law Decree).**
  The Law Decree contains a number of provisions of interest relating to web tax and tax returns, cuts to electricity bills, employment and funding for businesses in temporary financial difficulty.

- **Law 53 of 22 April 2021, containing the "Delegation to the Government for the transposition of EU directives and implementation of European legislation – European Delegation Law 2019-2020", published in Official Gazette no. 97 of 23 April 2021.**
  The European Delegation Law contains a number of principles and criteria of interest relating to the implementation of EU directives on the internal electricity market and promoting the use of renewable energy.

- **Law Decree 59 of 6 May 2021, containing "Urgent measures concerning the Complementary Fund for the National Recovery and Resilience Plan and other urgent measures on investment", converted into Law 101 of 1 July 2021 and published in Official Gazette no. 160 of 6 July 2021 (the NRRP Fund).**
  The Law Decree has approved the National Plan for Complementary Investment with the aim of providing an additional €30,622.46 million in resources to finance the National Recovery and Resilience Plan ("NRRP") between 2021 and 2026. Measures relating to cold ironing and the development and cohesion fund are of interest.

- **Law Decree 73 of 25 May 2021, containing "Urgent measures connected with the Covid-19 emergency, for businesses, employment, the young, health and local services", converted into Law 106 of 23 July 2021 and published in the Official Gazette of 24 July 2021 (the *Sostegni bis* Law Decree).**
  The Law Decree contains provisions concerning revision of the prices of materials in public contracts, the extension of cuts to electricity bills and measures supporting the electricity industry.

- **Law Decree 77 of 31 May 2021, containing "Governance of the National Recovery and Resilience Plan and initial measures to strengthen administrative structures and accelerate and streamline procedures", converted into Law 108 of 29 July 2021 and published in the Official Gazette of 30 July 2021 (the *Semplificazioni* and NRRP Governance Law Decree).**
  The Law Decree contains provisions concerning changes to the Environmental Code in relation to projects to be carried out under the National Integrated Energy and Climate Plan ("PNIEC") and the NRRP, the involvement of regional authorities, the special technical committee, EIAs and SEAs, environmental impacts, applications for environmental permits, regulatory authorities and rules governing simplifications for storage and photovoltaic plants, hydroelectric production and pumping plants, charging infrastructure, general system costs and sundry norms relating to governance of the NRRP and tenders.

- **Law Decree 118 of 24 August 2021, containing "Urgent measures concerning businesses in crisis and company restructurings, and further urgent measures concerning justice", converted into Law 147 of 21 October 2021 and published in the Official Gazette of 23 October 2021 (the *Crisi Impresa e Giustizia* Law decree).**
  The Law Decree delayed the entry into force of the Corporate Crisis and Insolvency Code (Legislative Decree 14/2019) until 16 May 2022, with the exception of Title II on early warning and crisis resolution procedures, which will come into force on 31 December 2023. The legislation contains norms on the negotiated settlement in the event corporate crisis and further measures regarding justice.

- **Law Decree 130 of 27 September 2021, containing "Urgent measures to contain the impact of rises in electricity and natural gas prices", converted into Law 171 of 25 November 2021 and published in the Official Gazette of 26 November 2021 (the *Bollette* Law Decree).**
  The Law Decree introduced measures designed to contain the impact of rising electricity and natural gas prices.

- **Legislative Decree 199 of 8 November 2021 concerning "Implementation of Directive (EU) 2018/2001 of the European Parliament and Council, dated 11 December 2018, on promoting the use of renewable energy", published in the Official Gazette of 30 November 2021 (the *RED* II Decree).**
  The Decree includes measures concerning renewable sources, support schemes, implementation of the NRRP, the allocation of CO_2 auctions, joint projects and statistical transfers, consents procedures, self-consumption and energy communities, development of the NTG, incentives and charging infrastructure.

- **Legislative Decree 210 of 8 November 2021 concerning "Implementation of Directive (EU) 2019/944 of the European Parliament and Council, dated 5 June 2019, on common rules for the internal electricity market and amending Directive 2012/27/EU", and containing "provisions aligning Italian legislation with Regulation (EU) 943/2019 on the internal electricity market and Regulation (EU) 941/2019 on risk-preparedness in the electricity sector and repealing Directive 2005/89/EC", published in the Official Gazette of 11 December 2021 (the *Mercato Elettrico* Decree).**
  The Decree includes measures on developing storage capacity, storage systems forming part of distribution and transmission systems, the functions and responsibilities of the NTG Operator, security risks for the electricity system and energy communities.

- **Budget Law 234 of 30 December 2021, published in the Official Gazette of 31 December 2021 (Budget Law for 2022).**
  Regarding the energy sector, the Budget Law contains measures on containing rises in energy bills, funding for the upgrade of cybersecurity defences and national energy security capabilities, increasing resources for the preparation of EIAs for NRRP projects, funding for ISPRA to support the Ministry for the Ecological Transition in conducting EIAs and SEAs, simplification of hydroelectric energy procedures, grants for RES storage systems, the Euro Mediterranean – Black Sea observatory.

- **Law Decree 228 of 30 December 2021, containing "Urgent provisions on deadline for compliance with legislation", published in the Official Gazette of 30 December 2021 (the *Milleproroghe* Decree).**
  The Law Decree has extended the compliance deadlines relating to the ecological transition (virtual imports until 31 December 2026), the economy and finance (provisions governing the conduct of the general meetings of companies and other entities until 31 July 2022), and for the exercise of special powers in sectors of strategic importance.

- **Law Decree 146 of 21 October 2021, containing "Urgent economic and tax measures, employment protections and other urgent needs", converted into Law 215 of 17 December 2021 and published in the Official Gazette of 20 December 2021 (the *Fiscale* Law Decree).**
  The Law Decree contains legislation providing an authentic interpretation of the rules on the tax payable in return for the permanent occupation of public land with cables and pipes used in the

supply of public services, as well as legislation governing the patent box scheme, the refinancing of green mobility incentives, employment and occupational health and safety.

- **Law Decree 152 of 6 November 2021, containing "Urgent provisions implementing the National Recovery and Resilience Plan (NRRP) and for the prevention of infiltration by organized crime groups", converted into Law 233 of 29 December 2021 and published in the Official Gazette of 31 December 2021 (NRRP Implementation Law Decree).**
  The Law Decree contains legislation concerning the compensation payable to the advisory committees of contracting authorities, Italy's Recovery and Resilience Fund, the abolition of enhanced protections for domestic customers, the action plan for the regeneration of orphan sites, a shortening of the deadline for the preparation of the environmental reports required under the Environmental Code, SEAs, the revamping of photovoltaic plants, electrical and electronic waste from photovoltaics.

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

A list is provided below of the principal resolutions adopted by Italy's Regulatory Authority for Energy, Networks and the Environment (ARERA) during 2021 and, subsequently, up to the date of preparation of this Annual Report.

ARERA determinations on the remuneration of transmission and dispatching services

- **Resolution 271/2021/R/com** - Start of the procedure for the adoption of measures concerning a totex- and output-based approach to establishing the methods and criteria used in determining the allowed cost of regulated infrastructure services in the electricity and gas sectors.
- **Resolution 319/2021/R/eel** - Determination of the reward for unification of the national transmission grid following the purchase of a portion of the grid owned by Arvedi Trasmissione.
- **Resolution 395/2021/R/eel** - Determination of the reward for unification of the national transmission grid following the purchase of a portion of the grid owned by EL.IT.E. S.p.A..
- **Resolution 446/2021/R/eel** - Determination of the parameters and targets for the output incentive mechanism for the transmission service relating to the delivery of additional transmission capacity between market areas.
- **Resolution 538/2021/R/eel** - Determination of the quality-of-service bonus for electricity transmission for 2020.
- **Resolution 597/2021/R/eel** - Definition of an incentive scheme to reduce dispatching costs.
- **Resolution 601/2021/R/eel** - Recognition of the final costs for 2020 and the estimated costs for 2022 incurred by Terna S.p.A. in carrying out its market monitoring activities.
- **Resolution 614/2021/R/com** - The rate of return on invested capital for infrastructure services in the electricity and gas sectors for the 2022-2027 period: the criteria for determining and revising the rate.
- **Consultation document 615/2021/R/com** - Guidelines for the development of totex- and output-based regulation to be applied to all regulated infrastructure services in the electricity and gas sectors.
- **Resolution 622/2021/R/eel** - Revision of tariffs for provision of the electricity transmission service for 2022.
- **Resolution 629/2021/R/eel** - Revision of dispatching fees from 1 January 2022.
- **Resolution 23/2022/R/eel** - Determination of the reward for the delivery of additional transmission capacity between market areas in 2020.
- **Resolution 25/2022/R/eel** - Determination of the reward for unification of the national transmission grid following the purchase of a portion of the grid owned by Megareti.

ARERA determinations on the provision of transmission and dispatching services

- **Resolution 33/2021/R/eel** - The establishment of Regional Coordination Centres (RCCs) for the (SOR) Central Europe region, in accordance with 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 changes to Annex A.18 to the Code for Transmission, Dispatching and Grid Development and Security.
- **Resolution 44/2021/R/eel** (subsequently amended by Resolution 568/2021/R/eel) - Reward mechanism for the upgrade of production plants to meet the requirements regarding defence of the electricity system in accordance with Regulation (EU) 2017/2196.
- **Resolution 55/2021/R/eel** - Compliance review of the new version of the national black start plan, as revised following ARERA Resolution 324/2020/R/eel.
- **Resolution 64/2021/R/eel** - Measures concerning the resilience of the 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.
- **Resolution 109/2021/R/eel** - Provision of the transmission, distribution and dispatching service for electricity withdrawn designed to enable it to be fed back into the grid.
- **Resolution 215/2021/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 service regulating frequency and load using resources not previously enabled.
- **Resolutions 217/2021/E/eel and 419/2021/E/eel** - Start of the process of complying with the Council of State ruling on non-diligent planning strategies for electricity.
- **Resolution 218/2021/R/eel** - Measures implementing single coupling in the intraday electricity market.
- **Resolution 321/2021/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 the upgrade of "existing" plants pursuant to Regulation (EU) 2016/631, connected with the national grid, to enable them to provide voltage regulation services.
- **Resolution 323/2021/R/eel** - Start of the process of complying with the Council of State rulings 4346/2021, 4347/2021 and 4348/2021 on provision of the dispatching service to users connected to closed distribution systems.
- **Resolution 369/2021/R/eel** - Amendments to the regulation of resources essential to the security of the electricity system, in view of the start of the delivery period for the capacity market and of coupling in the intraday electricity market.
- **Resolution 398/2021/R/eel** - Approval of the proposed changes to chapter 4 and annexes A.22, A.31, A.26, A.40 and A.69 to the Code for Transmission, Dispatching, Development and Security for Terna's grid.
- **Resolution 399/2021/R/eel** - Financial criteria for capacity market auctions in delivery years 2024 and 2025.
- **Resolution 400/2021/R/eel** - Approval of the changes, drawn up by Terna S.p.A., to regulation of the procedures for enabling and for participation in the market for dispatching services for capacity market consumption units.
- **Resolutions 433/2021/R/eel e 563/2021/R/eel** - Determinations regarding essential plants. Amendments to the relevant regulations.

- **Resolution 439/2021/R/eel** - Assessment of the proposed changes to Annex A.2 to the Code for Transmission, Dispatching, Development and Security for Terna's grid.
- **Resolution 485/2021/R/eel** - Closure of the proceeding initiated with ARERA Resolution 130/2020/R/eel regarding the duration of the period of exemption granted to Eneco Valcanale S.r.l. for the 132kV alternating current Tarvisio (IT) – Arnoldstein (AT) interconnector.
- **Resolution 498/2021/R/eel** - Compliance review of Terna S.p.A.'s proposals for changes to the regulations governing the capacity market and the related technical operating arrangements. Amendments to ARERA Resolution ARG/elt 98/11.
- **Resolution 504/2021/R/eel** - Long-term transmission rights pursuant to article 30 of Regulation (EU) 2016/1719 (FCA) – four-yearly review.
- **Resolution 506/2021/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 2022.
- **Resolution 517/2021/R/eel** - Approval of the proposed changes to the Code for Transmission, Dispatching, Development and Security for Terna's grid to enable, under emergency situations, the procurement of replacement resources for the tertiary reserve preliminary to the Day-ahead Market.
- **Resolution 523/2021/R/eel** - Reform of the regulations on imbalances, in implementation of the European regulatory framework.
- **Resolution 540/2021/R/eel** - Regulation of data exchanges between Terna S.p.A., distributors and "Significant Grid Users" for the purposes of electricity system security.
- **Resolution 548/2021/E/eel** - Closure of the fact-finding survey, initiated by ARERA Resolution 158/2018/E/eel regarding the availability of transmission capacity between Italy and Greece.
- **Resolution 566/2021/R/eel** - Application of the fee covering the net costs of capacity procurement introduced by ARERA Resolution ARG/elt 98/11 and payable by final customers of last resort services and P.L.A.C.E.T. customers.
- **Resolution 570/2021/R/eel** - Revision of the provisions in the Consolidated Settlement Law regarding the profiling of withdrawals.
- **Resolution 576/2021/R/eel** - Definition of the regulations governing revenue and expenses relating to the electricity provided to landlocked states on Italian territory and to other states through interconnections for which there are no controls on programmed exchanges.
- **Resolution 606/2021/R/eel** - Approval of the method for allocating redispatching and countertrading costs for the Italy North region, pursuant to article 74 of Regulation (EU) 2015/1222 (CACM).
- **Resolution 607/2021/R/eel** - Approval of the application for an exemption from compliance with the minimum level of capacity to be made available for market area exchanges submitted by Terna S.p.A. with reference to the Italy North region for 2022.
- **Resolution 9/2022/R/eel** - Compliance review of the Code for Transmission, Dispatching, Grid Development and Security regarding an evaluation of the increase in resilience resulting from grid development projects.
- **Resolution 47/2022/R/eel** - Extension of the deadline for the entry into service of the new Piossasco (IT) – Grand'Ile (FR) interconnector in accordance with the European Commission decision C(2022) 389 Final.
- **Resolution 65/2022/R/com** - Deadline for 2022 for preparation of the documents describing the scenarios for electricity transmission and gas transport development plans.
- **Resolution 83/2022/R/eel** - Urgent amendments and additions to the method for setting the strike price on the capacity market, as referred to in the Regulator's Resolution 363/2019/R/eel.

Further details of the above resolutions, and information on further resolutions adopted by the Regulator (ARERA), can be found on the Regulator's website at www.arera.it.

Other information

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

Treasury shares

The Parent Company holds a total of 3,095,192 treasury shares (equal to 0.154% of the share capital). These shares were purchased in implementation of two separate buyback programmes to service (i) the Performance Share Plan 2020-2023, in the period between 29 June 2020 and 6 August 2020, and (ii) the Performance Share Plan 2021-2025, in the period between 31 May 2021 and 23 June 2021. The Company does not hold any additional treasury shares other than those purchased under the above programmes, including through subsidiaries[88].

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

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 2021 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.

Related party transactions in 2021 primarily regard services forming part of its ordinary activities and provided under normal market conditions, as described in greater detail in the consolidated and separate financial statements for the year ended 31 December 2021[89].

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[90].

No material transactions[91], were carried out in 2021, nor were any transactions subject to the reporting requirements applicable in the event of exemptions applied in accordance with the relevant regulations[92].

[88] In this regard, see the press release published on 10 August 2020 and 28 June 2021, available at the following links: https://download.terna.it/terna/2020.08.10_CS%20TERNA%20operazioni%20su%20azioni%20proprie%20CHIUSURA%20ITA__8d83d42cfd43cb6.pdf
https://download.terna.it/terna/Terna_operazioni_su_azioni_proprie_conclusione_programma_8d93a651f5f9ffb.pdf.

[99] 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.

[90] The Regulation containing provisions regarding related party transactions adopted in Consob Resolution 17221 of 12 March 2010, as amended.

[91] These are related party transactions classified in compliance with Annex 3 to the "Regulations on related party transactions".

[92] 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 2021, available on Terna S.p.A.'s website (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 to the dimensions of the NTG

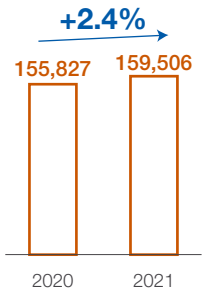
DETAILS OF ELECTRICITY SUBSTATIONS OWNED BY THE TERNA GROUP*

< EU4

	UNIT OF MEASUREMENT	AT 31 DECEMBER 2021	AT 31 DECEMBER 2020	CHANGE	% CHANGE
380kV					
Substations	no.	**167**	166	1	0.60%
Power transformed	MVA	**121,408**	119,458	1,950	1.63%
220kV					
Substations	no.	**150**	146	4	2.74%
Power transformed	MVA	**33,710**	32,397	1,313	4.05%
Lower voltages (≤ 150kV)					
Substations	no.	**579**	577	2	0.35%
Power transformed	MVA	**4,388**	3,972	416	10.47%
Total					
Substations	no.	**896**	889	7	0.79%
Power transformed	MVA	**159,506**	155,827	3,679	2.36%

** 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.*

POWER TRANSFORMED
MVA

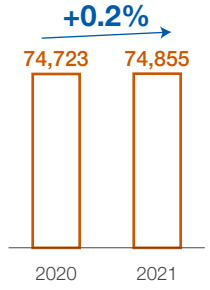


DETAILS OF POWER LINES OWNED BY THE TERNA GROUP*

	UNIT OF MEASUREMENT	AT 31 DECEMBER 2021	AT 31 DECEMBER 2020	CHANGE	% CHANGE
380kV					
Length of circuits	km	**12,873**	12,867	6	0.05%
Length of lines	km	**11,692**	11,686	6	0.05%
220kV					
Length of circuits	km	**11,852**	11,847	5	0.04%
Length of lines	km	**9,487**	9,477	10	0.10%
Lower voltages (≤ 150kV)					
Length of circuits	km	**50,130**	50,009	121	0.24%
Length of lines	km	**46,876**	46,790	86	0.18%
Total					
Length of circuits	km	**74,855**	74,723	132	0.18%
overhead	km	**70,849**	70,780	69	0.10%
underground cables	km	**2,244**	2,181	63	2.89%
submarine cables	km	**1,762**	1,762		0.02%
Length of lines	km	**68,054**	67,954	100	0.15%
overhead	km	**64,048**	64,010	38	0.06%
underground cables	km	**2,244**	2,181	63	2.89%
submarine cables	km	**1,762**	1,762		0.02%
Incidence of direct current connections (200 - 380 - 500kV)					
Circuits	km	**2,440**	2,435		
% of total	%	**3.26**	3.26		
Lines	km	**2,120**	2,115		
% of total	%	**3.12**	3.11		

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

LENGTH OF CIRCUITS
KM



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

Substations

New infrastructure:

The following substations have been **commissioned:**

- transformer substation at Scafati [SA] (6 220kV bays, 8 150kV bays);
- new switching substation at Porto Torres 2 [SS] (5 150kV bays);
- new switching substation at Tornolo [PR] (3 220kV bays);
- new switching substation at Lesegno [CN] (3 132kV bays);

and the following have been **purchased**:

- purchase from Arvedi Trasmissione s.r.l. of the switching substation at Arvedi ST [CR] (5 380kV bays);
- purchase from Megareti S.p.A. of the transformer substation at Verona Ricevitrice Ovest [VR] (3 220kV bays, 6 132kV bays);
- purchase from Megareti S.p.A. of the transformer substation at Verona Ricevitrice Sud [VR] (13 132kV bays);
- purchase of the switching substation at Partanna 2 [TP] (5 220kV bays);
- purchase of the switching substation at Serra del Vento [PA] (4 150kV bays);

In addition:

- **upgrade** of the infrastructure at Zuel Reattanza [BL], previously classified as non-standard infrastructure;
- **retirement** of substations at Pietra [BS] (3 132kV bays), Sud Ovest [TO] (132kV) and Diano Marina [IM] (2 66kV bays).

Existing infrastructure:

- **commissioning** of 12 new line bays for the substations at Presenzano (1 380kV bay), Fulgatore (1 220kV bay), Partanna, Castel di Lucio, Porto Torres 1 and Rumianca (1 150kV bay each), Saluzzo Nord (2 132kV bays), Populonia, Arquata RT and Massa RT (1 132kV bay each), Brennero (1 110kV bay); a further 6 bays, already available, were commissioned as line bays for the substations at Bisaccia 380 and Deliceto (1 380kV bay each), Pisticci (1 220kV bay), Castellaneta and Oppido (1 150kV bay each), whilst 1 132kV line bay was decommissioned and made available at the Lizzana substation;
- **commissioning** of 11 new machine bays for the substations at Belcastro and Matera (1 380kV bay and 1 150kV bay each), Brindisi Pignicelle (2 380kV bays), Candia, Fano and Garigliano (1 380kV bay each), Vicari (1 150kV bay), Brennero (1 110kV bay); a further 3 bays, already available, were commissioned as machine bays for the substations at Genzano (1 380kV bay and 1 150kV bay) and Brennero (1 132kV bay);
- **commissioning** of 2 new power factor corrector bays for the substations at Pianezza (1 220kV bay) and Grizzana (1 132kV bay);
- **commissioning** of 10 new parallel and/or connector bays for the substations at Belcastro (1 380kV bay and 1 150kV bay), Partinico (1 220kV bay), Rumianca (2 150kV bays), Pisticci (1 150kV bay), Saluzzo Nord, Chiusi RT and Massa RT (1 132kV bay each), Brennero (1 110kV bay);
- **purchase** from El.i.te. s.r.l. of 1 150kV machine bay associated with the non-standard Tirano substation;
- **construction** of 11 new available bays for the substations at Paternò (1 380kV bay), Belcastro (4 150kV bays), Matera and Rumianca (2 150kV bays each), Saluzzo Nord (1 132kV bay), Brennero (1 110kV bay);
- **demolition** of 1 132kV line bay at the Redipuglia RT substation.

>>

Transformers

The following transformers have been **commissioned**:

- 1 new 132kV 190 MVA phase shifting transformer for the Brennero substation;
- 2 new 220/150kV 250 MVA autotransformers for the new Scafati substation;
- 2 new 380/150kV 250 MVA autotransformers for the Genzano and Matera substations;
- 1 new 132/110kV 190 MVA transformer for the Brennero substation;
- 1 new 380/20kV 290 MVA transformer associated with the synchronous compensator at Foggia;
- 2 new 380/20kV 250 MVA transformers associated with the synchronous compensators at Brindisi Pignicelle;
- 2 new 380/20kV 230 MVA transformers associated with the synchronous compensators at Candia and Fano;
- 1 new 380/20kV 200 MVA transformer associated with the synchronous compensator at Garigliano;

and the following **further changes** occurred:

- purchase from El.i.te. s.r.l. of 1 220/150kV 160 MVA phase shifting transformer associated with the non-standard Tirano substation;
- purchase from Megareti S.p.A. of 2 220/132kV 60 MVA autotransformers associated with the Verona Ricevitrice Ovest substation;
- replacement of 1 380/132kV 250 MVA autotransformer with another of the same voltage at the Dolo substation;
- replacement of 1 220/150kV 160 MVA autotransformer with another 250 MVA autotransformer at the Taloro substation;
- replacement of 3 220/132kV 160 MVA autotransformers with other 250 MVA autotransformers at the Campochiesa, Novara Sud and Morigallo substations;
- replacement of 1 220/132kV 100 MVA autotransformer with another 250 MVA autotransformer at the Erzelli substation;
- replacement of 2 220/15kV 63 MVA transformers with others of the same voltage at the Novara Sud and Biella Est substations;
- replacement of 1 220/20kV 40 MVA transformer with another 63 MVA transformer at the Conegliano substation;
- replacement of 1 220/15kV 40 MVA transformer with another of the same voltage at the Ottana substation;
- replacement of 1 132/66kV 44 MVA transformer with another 50 MVA transformer at the Udine RT substation;
- replacement of 2 132/66kV 25 MVA transformers with others of the same voltage at the Arma di Taggia and San Colombano RT substations.

>>

Power lines

- **construction** of the new 220kV Astroni - Naples Centre line (11.0 km in cable);
- **construction** of the new 220kV Castelluccia - Napoli PS (3.9 km in cable);
- **construction** of the new 150kV Melilli - Priolo PS line (5.9 km in cable);
- **construction** of the new 150kV Aprilia 150 - Aprilia 380 line (0.6 km in cable);
- **construction** of the new 150kV Pisticci PS - Pisticci substation (0.1 km in cable);
- **construction** of the new 132kV Modena North – Modena East line (5.0 km in cable);
- **construction** of the new 132kV Rivoli - Paracca line (4.4 km in cable);
- **construction** of the new 132kV Pirelli - Figline line (3.9 km in cable);
- **construction** of the new 132kV Modena East - Crocetta line (0.9 km overhead);
- **construction** of the new 132kV Lodi PS - FS Lodi line (0.8 km in cable);
- **construction** of the new short 150kV connection from Porto Torres 2 to Nurra 2 PS (0.1 km overhead);
- **purchase from Megareti S.p.A.** of 10 lines amounting to 123.0 km of circuit, including: 1 line and 0.2 km overhead at 220kV; 9 lines and 121.5 km overhead and 1.3 km in cable at 132kV;
- **purchase from Arvedi Trasmissione s.r.l.** of the 132kV Padriciano - Elettra GLT line (10.3 km in cable);
- **purchase from El.It.E.** of the 150kV Tirano - Campocologno cross-border interconnector (4.3 km in cable);
- **construction** of 14 in-out derivations with an overall increase of the same number of circuits and 1.7 km of circuit, including: addition of 1 line and 0.2 km at 380kV, addition of 2 lines and removal of 0.1 km at 220kV, additions of 7 lines and 0.6 km at 150kV, and 4 lines and 1.0 km at 132kV;
- **construction of variants, rigid derivations, re-routings and/or changes to grid distribution** removing a total of 1 line and 29.3 km of circuit, including: the addition of 0.6 km at 380kV, 4 lines and 11.2 km at 220kV and of 15.8 km at 150kV, the removal of 5 lines and addition of 6.9 km at 132kV, addition of 1 line and 1.8 km at 110kV, removal of 1 line at 66kV and 7.1 km at 50kV;
- **demolition and/or retirement** of 12 lines amounting to 48.2 km of circuit: Astroni - Naples Centre 220kV (in fibre cable, equal to 9.3 km), Castelluccia - Napoli PS 220kV (in fibre cable, equal to 3.9 km), Arbatax - Cartiera Arbatax 150kV (overhead, equal to 2.7 km), Rivoli - Paracca 132kV (in fibre cable, equal to 4.5 km), Pirelli - Figline 132kV (overhead, equal to 3.4 km), Lucca Ronco - Ospedaletto 132kV (remaining overhead section, equal to 3.3 km), Lizzana - Pista 132kV (overhead, equal to 2.5 km), Lodi PS - FS Lodi 132kV (overhead, equal to 0.8 km), Casuzze - Cappuccini 70kV (overhead, equal to 3.6 km), Diano Marina - Albenga RT 66kV (remaining overhead section, equal to 2.4 km), Arma di Taggia RT - Diano Marina 66kV (remaining overhead section, equal to 2.4 km), Schio - Arsiero 50kV (remaining overhead section, equal to 9.4 km).

Alternative performance measures (APMs)

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

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

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	2,253.5	"Revenue from sales and services", totalling €2,534.5 million, "Other revenue and income", totalling €71.8 million, after the cost of International Activities, "Raw and consumable materials used", totalling €1.3 million, "Services", totalling €0.1 million, and "Personnel expenses" of €0.1 million
Non-regulated revenue	350.9	
Revenue from International Activities	0.4	
Personnel expenses	289.0	"Personnel expenses" after the cost of construction services performed under concession in Italy in accordance with IFRIC 12 (€6.2 million) and the cost of International Activities (€0.1 million)
Cost of services, leases and rentals	187.6	"Services" after the cost of construction services performed under concession in Italy in accordance with IFRIC 12 (30.6 million) and the cost of International Activities (€0.1 million)
Materials	195.5	"Raw and consumable materials used" after the cost of construction services performed under concession in Italy in accordance with IFRIC 12 (€9.6 million) and the cost of International Activities (€1.3 million)
Other costs	25.1	"Other operating costs" after the cost of construction services performed under concession in Italy in accordance with IFRIC 12 (€0.5 million)
Quality of service	5.9	
Cost of construction services performed under concession	6.2	"Personnel expenses"
	30.6	"Services"
	9.6	"Raw and consumable materials used"
	0.5	"Other operating costs "
Net financial income/ (expenses)	(78.9)	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	379.8	"Investment accounted for using the equity method", "Other non-current assets" and "Non-current financial assets", after the value of fair value hedges (€1.6 million)
Net energy-related pass-through payables	(209.1)	"Trade receivables" relating to the value of energy-related pass-through receivables (€2,129.2 million) and "Trade payables" relating to the value of energy-related pass-through payables (€2,338.3 million)
Net receivables resulting from Regulated Activities	448.4	"Trade receivables" relating to the value of receivables resulting from Regulated Activities (€463.6 million) and "Trade payables" relating to the value of payables resulting from Regulated Activities (€15.2 million)
Net trade payables	(737.5)	"Trade payables" after the value of energy-related pass-through payables (€2,338.3 million) and payables resulting from Regulated Activities (€15.2 million) and "Trade receivables" after the value of energy-related pass-through receivables (€2,129.2 million) and the value of receivables resulting from Regulated Activities (€463.6 million)
Net tax assets	(50.6)	"Tax assets", "Other current assets" relating to the value of other tax assets (€11.2 million), "Other current liabilities" relating to the value of other tax liabilities (€38.5 million) and "Tax liabilities"
Other liabilities net	(1,157.9)	"Other non-current liabilities", "Other current liabilities" after other tax liabilities (€38.5 million), "Inventories", "Other current assets" after other tax assets (€11.2 million)
Sundry provisions	(48.4)	"Employee benefits", "Provisions for risks and charges" and "Deferred tax assets"
Net assets held for sale	117.7	"Discontinued operations and assets held for sale" and "Liabilities related to discontinued operations and assets held for sale"
Net debt	10,002.5	"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 (€1.6 million)

THE GROUP'S ANALYSIS OF NET DEBT	€m	CONSOLIDATED STATEMENT OF FINANCIAL POSITION
"Bond issues" and "Borrowings"	10,475.0	Corresponds with "Long-term borrowings" and "Current portions of long-term borrowings"
"Derivative financial instruments" – short- and medium/long-term	82.2	Corresponds with "Non-current financial liabilities", "Current financial liabilities" relating to the value of cash flow hedges (€0.1 million) and "Non-current financial assets" relating to the value of fair value hedges (€1.6 million)
Other financial liabilities, net	23.6	Corresponds with "Current financial assets" relating to the value of accrued financial income (€22.1 million) and "Current financial liabilities" relating to the value of accrued financial expenses (€45.7 million)
Financial assets	(958.5)	Corresponds with "Current financial assets" relating to the value of government securities
Net debt attributable to assets held for sale	161.8	Corresponds with "Discontinued operations and assets held for sale" (€60.0 million) and "Liabilities related to discontinued operations and assets held for sale" (€221.8 million)

RECONCILIATION OF THE TERNA GROUP'S CASH FLOW

(€m)

	CASH FLOW 2021	RECONCILIATION WITH FINANCIAL STATEMENTS	CASH FLOW 2020	RECONCILIATION WITH FINANCIAL STATEMENTS
- Profit for the year	790.8		795.3	
- Amortisation, depreciation and impairment losses	654.4		643.8	
- Net change in provisions	(72.9)		(88.9)	
Employee benefits		*(0.9)*		*(2.2)*
Provisions for risks and charges		*(37.2)*		*(38.9)*
Deferred tax assets		*(34.8)*		*(47.8)*
- Net losses/(gains) on sale of assets [1]	(13.7)		(7.7)	
Operating cash flow	**1,358.6**		**1,342.5**	
- Change in net working capital:	(227.6)		(272.0)	
Inventories		*(3.5)*		*(15.5)*
Trade receivables		*(1,530.3)*		*45.1*
Income tax assets		*4.9*		*(4.5)*
Other current assets		*45.2*		*(65.6)*
Discontinued operations and assets held for sale		*1.3*		*(1.3)*
Trade payables		*1,058.3*		*(227.9)*
Tax liabilities		*28.1*		*(11.8)*
Other liabilities		*168.4*		*9.5*
- Other changes in non-current assets	171.1		(22.0)	
Goodwill		*(26.4)*		-
Intangible assets[2]		*9.8*		*(8.7)*
Property, plant and equipment[3]		*59.2*		*(6.6)*
Non-current financial assets		*127.5*		*(7.3)*
Other non-current assets		*1.4*		*(3.0)*
Investments accounted for using the equity method		*(0.4)*		*3.6*
Cash flow from operating activities	**1,302.1**		**1,048.5**	
Capital expenditure				
- Total Capital expenditure	(1,520.7)		(1,351.1)	
Property, plant and equipment[3]		*(1,391.9)*		*(1,249.5)*
Intangible assets[2]		*(128.8)*		*(101.6)*
Total cash flow from (for) investing activities	**(1,520.7)**		**(1,351.1)**	
Free cash flow	**(218.6)**		**(302.6)**	
Net assets held for sale	**(117.7)**		**-**	
- Cash flow hedge reserve after taxation and other movements in equity attributable to owners of the Parent[4]	79.1		(91.0)	
- Other movements in equity attributable to non-controlling interests	(16.3)		(5.4)	
- Dividends paid to Parent Company's shareholders[4]	(556.4)		(515.0)	
Change in net debt	**(829.9)**		**(914.0)**	
- Change in borrowings	**(292.3)**		**2,545.6**	
Non-current financial assets		*92.6*		*(49.2)*
Current financial assets		*(342.1)*		*(119.2)*
Non-current financial liabilities		*(170.1)*		*93.4*
Long-term borrowings		*(1,025.2)*		*379.5*
Short-term borrowings		*944.8*		*977.2*
Current portion of long-term borrowings		*252.0*		*1,261.5*
Current financial liabilities		*(44.3)*		*2.4*
Change in cash and cash equivalents	**(1,122.2)**		**1,631.6**	

[1] Included in "Other revenue and income" and "Other operating costs" in the consolidated financial statements.
[2] See note 15 to the financial statements.
[3] See note 13 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	2,006.2	"Revenue from sales and services"
Revenue from construction services performed under concession	46.9	"Revenue from sales and services"
Other operating income	171.0	"Revenue from sales and services", totalling €93.7 million, and "Other revenue and income"
Personnel expenses	75.8	"Personnel expenses" after the cost of construction services performed under concession in accordance with IFRIC 12 (€0.6 million)
Cost of services. leases and rentals	371.3	"Services" after the cost of construction services performed under concession in accordance with IFRIC 12 (€40.6 million)
Materials	0.8	"Raw and consumable materials used" after the cost of construction services performed under concession in accordance with IFRIC 12 (€5.2 million)
Other costs	16.6	"Other operating costs" after the cost of construction services performed under concession in accordance with IFRIC 12 (€0.5 million)
Quality of service	5.9	
Cost of construction services performed under concession	0.6	"Personnel expenses"
	40.6	"Services"
	5.2	"Raw and consumable materials used"
	0.5	"Other costs"
Net financial income/(expenses)	(78.4)	Point 1 of letter C - "Financial income and expenses"

TERNA'S RECLASSIFIED STATEMENT OF FINANCIAL POSITION	€m	STATEMENT OF FINANCIAL POSITION
Financial assets	1,418.5	"Non-current financial assets" after the value of fair value hedges (€1.6 million) and "Other non-current assets" after amounts due from subsidiaries in relation to staff incentive plans (€1.4 million)
Net energy-related pass-through payables	(234.3)	"Trade receivables" relating to the value of energy-related pass-through receivables (€2,129.2 million) and "Trade payables" relating to the value of energy-related pass-through payables (€2,363.5 million)
Net receivables resulting from Regulated Activities	448.4	"Trade receivables" relating to the value of receivables resulting from Regulated Activities (€463.6 million) and "Trade payables" relating to the value of payables resulting from Regulated Activities (€15.2 million)
Net trade payables	(671.7)	"Trade payables" after the value of energy-related pass-through payables (€2,363.5 million) and payables resulting from Regulated Activities (€15.2 million) and "Trade receivables" after the value of energy-related pass-through receivables (€2,129.2 million) and the value of receivables resulting from Regulated Activities (€463.6 million)
Net tax liabilities	(110.1)	"Tax assets", "Other current assets" relating to the value of other tax assets (€4.9 million), "Other current liabilities" relating to the value of other tax liabilities (€84.6 million) and "Tax liabilities"
Other liabilities, net	(634.1)	"Other non-current liabilities", "Other current liabilities" after other tax liabilities (€84.6 million), "Inventories", "Other current assets" after other tax assets (€4.9 million) and "Other non-current assets" relating to amounts due from subsidiaries in relation to staff incentive plans (€1.4 million)
Sundry provisions	(7.6)	"Employee benefits", "Provisions for risks and charges" and "Deferred tax assets"
Assets held for sale	23.0	"Assets held for sale"
Net debt	9,893.8	"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 (€1.6 million), "Current financial assets" and "Current financial liabilities"

TERNA'S ANALYSIS OF NET DEBT	€m	STATEMENT OF FINANCIAL POSITION
"Bond issues" and "Borrowings"	10,448.8	Corresponds with "Long-term borrowings" and "Current portions of long-term borrowings"
"Derivative financial instruments"	82.1	Corresponds with "Non-current financial liabilities" and "Non-current financial assets" relating to the value of fair value hedges (€1.6 million)
"Short-term borrowings" and "Other financial liabilities, net"	1,941.2	Corresponds, respectively, with "Short-term borrowings" and "Current financial liabilities" relating to the value of deferred liabilities (€45.7 million) and "Current financial assets" relating to the value of accrued income (€22.1 million)
Cash and cash equivalents (including the net balance on intercompany current accounts)	(1,619.8)	Corresponds with "Cash and cash equivalents"
Financial assets	(958.5)	Corresponds with "Current financial assets" relating to the value of government securities
Net debt attributable to assets held for sale	(24.6)	Included in "Assets held for sale"

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

(€m)

	CASH FLOW 2021	RECONCILIATION WITH FINANCIAL STATEMENTS	CASH FLOW 2020	RECONCILIATION WITH FINANCIAL STATEMENTS
- Profit for the year	735.2		687.6	
- Amortisation, depreciation and impairment losses	585.8		571.2	
- Net change in provisions	(37.9)		(75.6)	
Employee benefits		*(1.3)*		*1.9*
Provisions for risks and charges		*(37.0)*		*(37.3)*
Deferred tax assets		*0.4*		*(40.2)*
- Net losses/(gains) on sale of assets[1]	(12.6)		(5.5)	
Operating cash flow	**1,270.5**		**1,177.7**	
- Change in net working capital:	(162.0)		(152.1)	
Trade receivables		*(1,540.2)*		*68.7*
Income tax assets		*(0.3)*		*0.3*
Other current assets		*13.9*		*(8.6)*
Other non-current assets		*(1.1)*		*(0.3)*
Trade payables		*1,206.4*		*(146.5)*
Tax liabilities		*33.9*		*(17.4)*
Other liabilities		*125.4*		*(48.3)*
- Other changes in non-current assets	23.8		(81.8)	
Property, plant and equipment[2]		*41.2*		*40.1*
Intangible assets[3]		*0.1*		-
Non-current financial assets		*(17.1)*		*(121.4)*
Other non-current assets		*(0.4)*		*(0.5)*
Cash flow from operating activities	**1,132.3**		**943.8**	
Capital expenditure				
- Total Capital expenditure	(1,376.6)		(1,134.3)	
Property, plant and equipment[2]		*(1,248.3)*		*(1.041.9)*
Intangible assets[3]		*(128.3)*		*(92.4)*
Total cash flow from (for) investing activities	**(1,376.6)**		**(1,134.3)**	
Free cash flow	**(244.3)**		**(190.5)**	
Net assets held for sale	**(23.0)**		**-**	
- Dividends[4]	(556.4)		(515.0)	
- Cash flow hedge reserve after taxation and other movements in equity[4]	67.1		(70.1)	
Change in net debt	**(756.6)**		**(775.6)**	
- Change in borrowings	**(75.5)**		**2,508.3**	
Current financial assets		*(359.6)*		*(101.8)*
Non-current financial assets		*115.1*		*(47.6)*
Non-current financial liabilities		*(167.7)*		*92.4*
Long-term borrowings		*(816.9)*		*325.4*
Short-term borrowings		*940.5*		*977.1*
Current portion of long-term borrowings		*257.1*		*1,260.4*
Current financial liabilities		*(44.0)*		*2.4*
- Change in cash and cash equivalents	**(832.1)**		**1,732.7**	

[1] Included in "Other revenue" and "Other operating costs" in the financial statements.
[2] See note 11 to the financial statements.
[3] See note 13 to the financial statements.
[4] See the statement of changes in equity.