



# CORPORATE PRESENTATION

# The Italian National Electricity System

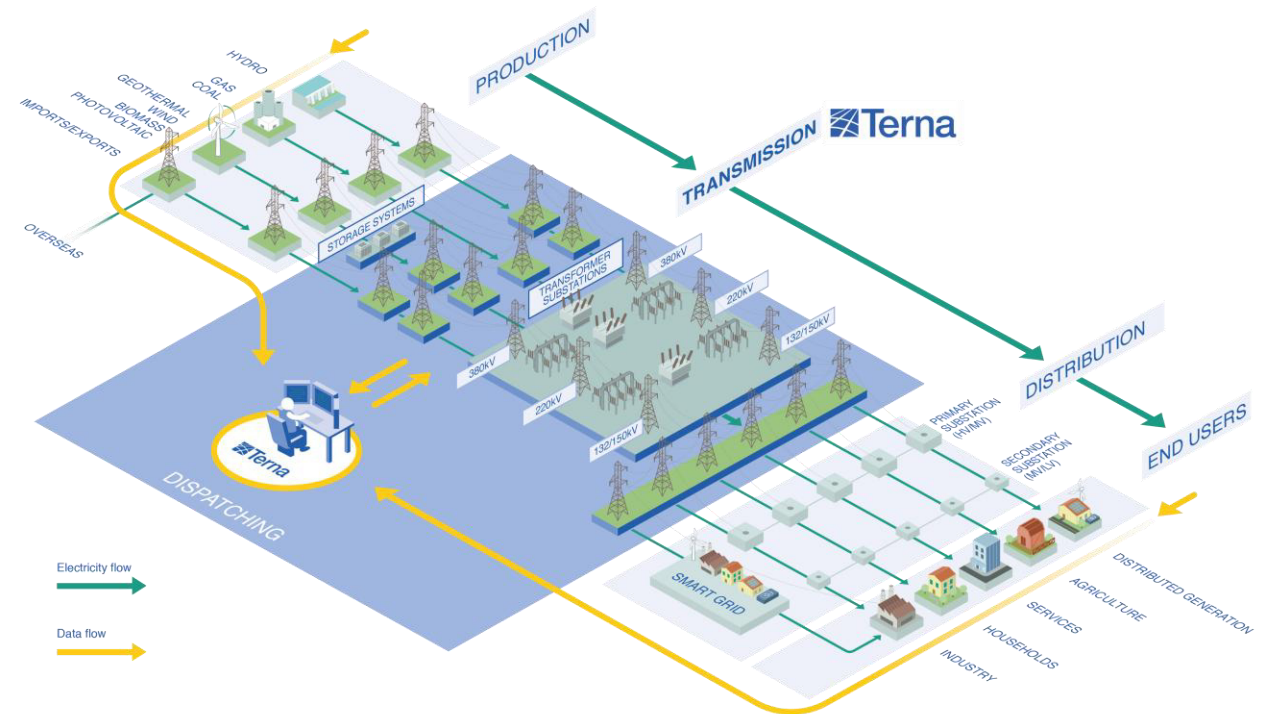
## Terna's role: National Transmission Grid (NTG) operator

The National Electricity System consists of the following segments:

- Production;
- **Transmission > managed by Terna;**
- Distribution and Users.

### Terna is the Italian Transmission System Operator

- is responsible for the electricity transmission along the high and very high voltage grid.
- It is also in charge for ensuring the safe balance between the supply of and demand for electricity on the grid (dispatching activities).



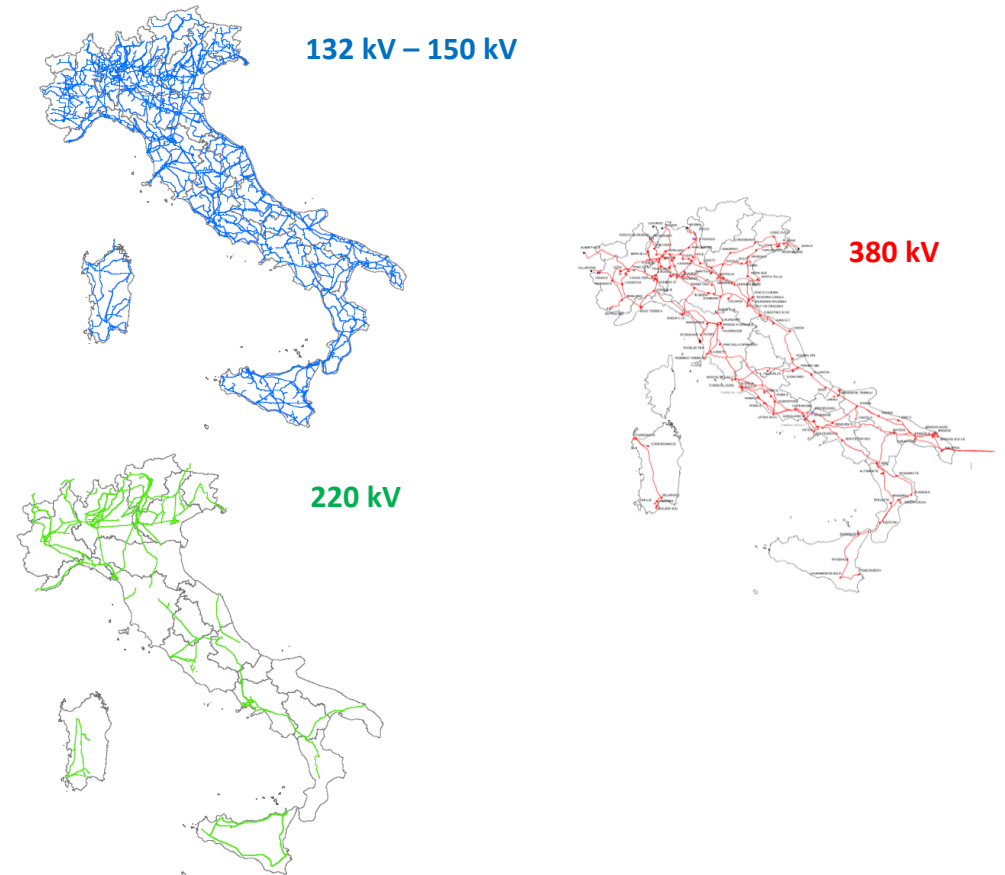
## Terna: the National Transmission Grid (NTG) operator

- Terna is **the Italian transmission grid operator of the high and extra-high voltage electricity grid**.
- One of the **leading grid operators in Europe and in the world** with over 75,000 km of power lines under management.
- It manages the **transmission** of electricity in Italy and **the electricity flows** 365 days a year, 24 hours a day (electricity dispatching).
- It plays a leading role in the **country's energy transition**.
- Listed since 2004, it is **one of the top industrial companies** of the FTSE-MIB.
- A centre of excellence made up of over 6,800 **professionals**.
- **Innovation, sustainability and quality of service** are the drivers of Terna Group's activities and business.



## An essential infrastructure for Italy

- **Over 75,000 km of power lines**  
at High and Extra High Voltage (132/150 kV, 220 kV, 380 kV)
- **915 electrical substations**
- Large submarine cable infrastructure such as the **Tyrrhenian Link** and the **Adriatic Link** are currently under way
- **30** cross-border **interconnections**
- **1 National Control Centre**
- **4 Regional Control Centres**



## Operation and development of the National Transmission Grid (NTG)

- Respecting the territory and the communities, Terna **develops and expands the NTG** adjusting it constantly to the most advanced technological standards.
- Instant by instant, 24 hours a day, 365 days a year, Terna ensures **the balance of the electricity flows** within the NTG.
- Terna guarantees the **security of the National Transmission Grid** through excellent operational standards and innovative models for the integrated risk management.
- The business is managed with a **sustainable approach** which includes all corporate activities.



### Terna's mission

We guarantee energy security and balance electricity supply and demand 24 hours a day, ensuring that the system is reliable, efficient and accessible to all. We invest and innovate every day in the development of an electricity grid capable of integrating the energy produced from renewable sources, improving links between the different areas of the country and strengthening cross-border interconnections, applying a sustainable approach that takes into account the needs of the communities and people we work with.



## Activities



- **Regulated Activities**

We are responsible for the transmission and management of electricity flows on the high and extra-high voltage grid in Italy, guaranteeing a constant balance between energy supply and demand (dispatching). We operate under the system of a natural monopoly and as part of a market regulated by the Italian Regulatory Authority for Energy, Networks and Environment (ARERA). To ensure competition within the market, we do not operate in the electricity production, distribution or sales sectors.



- **Non-regulated activities**

Our non-regulated activities in Italy contribute to the generation of new business opportunities, thanks to the development of innovative and digital technological solutions in line with our institutional role in the energy transition. Terna Energy Solutions is the Terna Group company mainly responsible for developing new businesses in the Italian market. We use Terna's know-how for planning, engineering, operating and maintaining complex solutions, thanks partly to the integration of telecommunications networks and proprietary systems and to our expertise in the renewables sector and in the production of cables and transformers. Our objective is to place our skills and experience at the service of commercial and industrial clients, with a vast range of solutions and high value-added services.



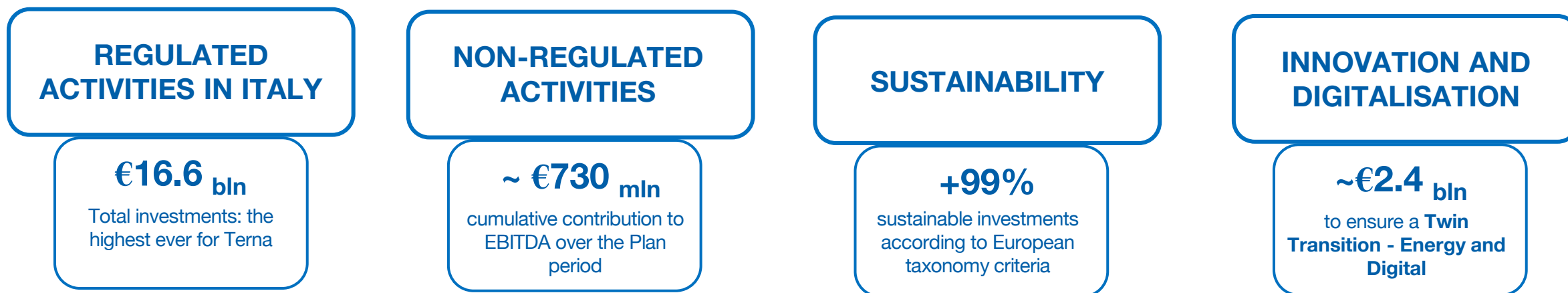
- **International activities**

International markets offer an opportunity to export the know-how we have developed in Italy as transmission system operator (TSO), including the integration of renewables and the development of electricity grids. Overseas scouting activities target countries with a stable political framework and a regulatory system which grants access to external operators. Overseas initiatives of interest to the Terna Group include those related to the development and management of transmission grids, regulated or non-regulated, acquired through participation in tenders for concessions or by means of collaborations with local operators.

# 1- Update to the 2024-2028 Industrial Plan



**€17.7 billion total investments, up 7% over the previous plan - a new record for Terna**



## 2- Update to the 2024-2028 Industrial Plan

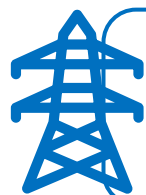


**€17.7 billion total investments, up 7% over the previous plan - a new record for Terna**



The update to the 2024-2028 Industrial Plan confirms the strategic objectives that Terna must pursue to fulfil its role as national Transmission System Operator, to be achieved by strengthening the **concept of Twin Transition - Energy and Digital** - necessary to guarantee a fair and inclusive Just Transition for all stakeholders

As part of the Plan, Terna will strengthen its role as **energy transition enabler** and significantly deepen its commitment to helping the country towards decarbonisation and reducing Italy's dependence on foreign supply sources



The increase in regulated investments focuses mainly on: **asset renewal and efficiency** (€3.6 billion compared to the approx. €2.9 billion envisaged by the previous Plan); **Defence Plan** (€2.3 billion compared to the approx. €1.7 billion envisaged by the previous Plan), also including investments dedicated to **grid resilience**

All activities of the **Sustainability Plan**, which is integrated within the Industrial Plan, have been confirmed, and a commitment was made to join a programme to achieve the **Net Zero Science Based target by 2050**





# 1 - 2025–2034 National Transmission Grid Development Plan

## Terna's commitment to sustainable Grid development

The **2025 Development Plan** contains **investments of more than €23 billion over 10 years, up 10%** compared to the previous 10-year plan, for the development and modernisation of the National Transmission Grid, in order to enable the energy transition, promote the full integration of renewables, increase the grid's transport capacity and develop interconnections with foreign countries.

The Development Plan includes strategic projects for the electricity system such as the: **Tyrrhenian Link, Adriatic Link, Central Link, Adriatic Backbone, Milan-Montalto**. The Plan has also confirmed cross-border interconnections such as **Elmed, Sa.Co.I 3** and **doubling of Italy-Greece**.

Terna adopts an **Efficient Territorial Planning** model to tackle the problem of the virtual grid saturation and respond to all connection requests through the portal **T.E.R.R.A. (an acronym for "Territory, Grids, Renewables and Storage")**, set up in accordance with article 9 of Italian Decree-Law 181/2023 (Energy Security Decree-Law).

### The Plan's figures



#### INVESTMENTS FOR MORE THAN €23 BILLION

In the 2025 - 2034 ten-year period



#### GREATER RES INTEGRATION

At least +65GW by 2030 +94GW by 2035<sup>1</sup>



#### REDUCED CO2 EMISSIONS

Up to 2,000 kt/year by 2030 and almost 12,100 kt/year by 2040



#### HIGHER TRANSPORT CAPACITY

From the current 16 GW to 39 GW



#### HIGHER CROSS-BORDER CAPACITY

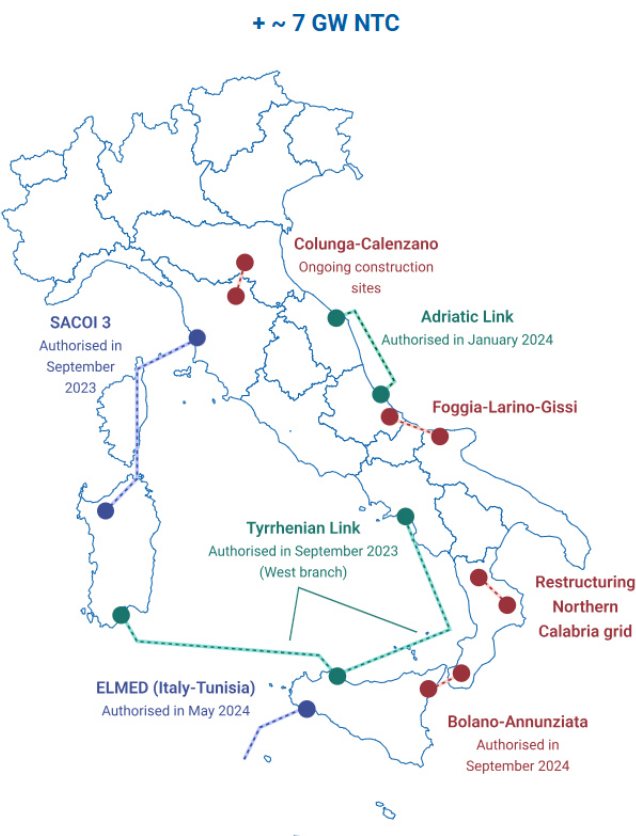
About 40% more than current values<sup>2</sup>

<sup>1</sup> Including +43 GW to be connected on the HV grid

<sup>2</sup> Considering all the projects included in the Development Plan, even after the 10-year deadline

# 2 - The Electricity Grid Development Plan 2025

## Grid architecture in 2030



## Grid architecture in 2034



## Grid architecture after 2034

