

A new electricity grid for Campania

*Over 1 billion euros of investments: greater safety, efficiency and quality for the region's electricity system
With the new infrastructures, 260 km of pylons removed, 330 million €/year saved and 2 million tons of CO₂ less*

To modernize Campania's electricity grid, Terna – which is present in the region with over 2,200 km of HV and EHV lines, 9 power stations and more than 260 people – planned projects for over 1 billion euros, equal to 12% of the entire 2013-2022 Development Plan. The Plan includes 7.9 billion euros of investments throughout the national territory. Projects will bring about **savings equal to 330 million euros a year** for businesses and communities. The infrastructure development plan will have positive consequences also for employment, with **over 60 companies involved, among which international energy giants such as Prysmian (with a plant in Arco Felice), Getra, Salvati and Abb, as well as nearly 500 workers.**

Significant environmental advantages will also be achieved: the planned projects will allow **removing over 260 km of existing power lines** freeing nearly 43,000 sq. m. of territory, equal to 6 soccer fields.

Part of the infrastructures will be built with cables, as in Naples where all the lines will be buried, while overhead lines will use "single pole" low environmental impact pylons, as in the "Foggia-Benevento" power line. Lastly, building the infrastructure will allow **reducing CO₂ into the atmosphere by nearly 2 million tons a year**, equal to the emissions of over 250 thousand mid-size cars.

The current state of the NTG in Campania requires its being modernized and strengthened to adapt on one hand to the fast-growing energy production, particularly from renewables and on the other to the increasing consumption. In the next few years, Campania is expected to increase the power installed from non-programmable renewables by over 45% of the entire generation capacity from renewables currently in operation, reaching an installed value on the regional territory of over 2.500 MW. In order to meet this requirements, Terna has planned a series of measures along the grid with the objective of solving grid congestion and local criticalities – particularly connected to the limited energy transmission capacity in various segments – and of creating greater safety, efficiency and quality for the regional electricity system. This will all be implemented sustainably and coordinated with the local authorities for identifying locations for the infrastructures.

Principal projects include:

Interconnecting Campania's islands with the mainland

- **Investment:** 150 million euros
- **Electricity/economic advantages:** improving and creating greater reliability of the island's electricity supply for reducing risks of blackouts, particularly during the summer when tourism and consumption significantly increase. Overall savings for electricity system users equal to at least 17 million euros a year.
- **Environmental advantages:** estimated CO₂ reduction in the atmosphere by 150 thousand tons a year and protecting the marine eco-system thanks to the use of a low environmental impact, easy to operate cable for building the "Torre Annunziata-Capri" power line
- **Principal activities planned:** in addition to the Torre Annunziata-Capri interconnection, Terna is also strengthening the 150kV "Cuma-Lacco Ameno" and "Cuma-Patria" power lines.

Restructuring the 220 kV grid in Naples

- **Investment:** 150 million euros
- **Electricity/economic advantages:** improving the local grid's safety and reliability; reducing grid losses by 15 million kW/h a year; reducing the probability of non-supplied electricity; avoiding investments for strengthening the HV grid; overall savings for electricity system users equal to 11 million euros a year.
- **Environmental advantages:** estimated CO₂ reduction in the atmosphere by 6 thousand tons a year; removing 46 km and burying 10 km of currently existing overhead lines.
- **Principal activities planned:** new "Fratta-Starza Grande" buried cable power line (3.2 km built, 2.9 km of overhead lines removed); new "Fratta-Casoria" buried cable power line (6.4 km built, 3.9 km of overhead lines removed); new "Frattamaggiore-Gricignano" buried cable power line (8.7 km to be built, 7.6 km of overhead lines to be removed); new "Castelluccia-Napoli Direzionale", "Napoli Levante-Napoli Direzionale", "Acerra-Casalnuovo", "Poggioreale-Secondigliano" power lines (22 km in length); new 220 kV Fuorigrotta station and related connections
- **Project status:** partly completed; partly under authorization, partly being built

380 kV "Foggia-Benevento" Power line

- **Investment:** 186 million euros
- **Electricity/economic advantages:** greater reliability and safety of the area's electricity system; 30 million euros a year saved on electricity bills for businesses and citizens; 1,000 MW of "freed" energy of which 500 MW for increasing production from renewables and an additional 500 MW capacity from more efficient plants
- **Environmental advantages:** estimated CO₂ reduction in the atmosphere by 500 thousand tons a year; removing 105 km of power lines and burying 30 km of existing power lines
- **Principal activities planned:** new 380 kV "Foggia-Benevento" power line (90 km to be built) and related connections; new electricity station east of Benevento and related connections
- **Project status:** partly under authorization, partly being built.

Restructuring the grid in the Sorrento Peninsula

- **Investment:** 200 million euros
- **Electricity advantages:** reducing grid losses; increasing grid reliability, reducing the probability of non-supplied electricity.
- **Environmental advantages:** estimated CO₂ reduction in the atmosphere by 8 thousand tons a year
- **Principal activities planned:** "Sorrento-Lettere" buried cable power line (3.6 km to be built, 1.9 km to be removed); new 150 kV "Mercatello-Baronissi" power line (14.6 km in length); new submarine/land "Sorrento-Capri" and "Sorrento-Castellammare" power lines (18.5 km in length); new 150 kV buried/overhead "Scafati-Torre c.le"; "Sorrento-Vico Equense", "Vico Equense-Agerola" and "Agerola-Lettere" power lines (45 km in length); new cable/overhead power lines "Forino-Solofra" and "Mercato-San Severino-Baronissi" (15 km in length); new Sorrento, Forino e Scafati stations and related connections
- **Project status:** partly under authorization, partly being studied/coordinated with Local Bodies

Power stations for collecting renewable energy in the Foggia-Benevento area

- **Investment:** 155 million euros
- **Electricity advantages:** reducing grid losses, increasing production capacity from more efficient and renewable sources, investments avoided for strengthening the HV grid
- **Environmental advantages:** estimated CO₂ reduction in the atmosphere by 1,100.000 tons a year
- **Principal activities planned:** new 380 kV “*Bisaccia-Deliceto*” power line; 150 kV connections to the 380/150 kV power station in Troia for collecting production from renewables in Puglia and Campania.
- **Project status:** under authorization

380 kV “Montecorvino-Avellino Nord-Benevento” power line

- **Investment:** 240 million euros
- **Electricity/economic advantages:** reducing grid losses by 75 GW/h a year; increasing production capacity from more efficient production; increasing the grid’s reliability; reducing the probability of non-supplied electricity; overall savings for electricity system users equal to nearly 120 million euros a year.
- **Environmental advantages:** estimated CO₂ reduction in the atmosphere by 200,000 tons a year; removing nearly 70 km of old overhead lines
- **Principal activities planned:** new “*Montecorvino-Avellino Nord*” power line (48 km to be built, 67 km of overhead lines to be removed); new “*Avellino-Solofra*”, “*Mercato-Baroniss*”, “*Prata-Avellino*”, “*Prata-Novolegno*”, “*Solofra-Mercato*” buried cable power lines (37 km in length); new *Avellino Nord* station and related connections; new “*Avellino Nord-Benevento*” power line
- **Project status:** partly under authorization (the *Avellino Nord* station being built), partly being studied/coordinated with the Local Bodies.

380 kV Santa Sofia power station

- **Investment:** 10 million euros
- **Electricity advantages:** increasing the grid’s reliability, reducing the probability of non-supplied electricity
- **Principal activities planned:** new “*Saint Gobain-Caserta Sud*” buried cable power line (4 km to be built); new “*Saint Gobain-S.Sofia*” power line (11 km to be built).
- **Project status:** partly authorized and the procedure partly to be initiated.