

2011-2015 Plan: a total of 5 billion euros to improve Italy's electricity grid
1 billion for the high voltage grid in the major cities

A broad renewal project for the electricity grid in the large urban centers: Rome, Milan, Turin, Naples and Palermo

“MAJOR CITIES” PROJECT

The high voltage electricity grid in Italy's major cities is changing face.

20% of the total investments, equal to 1 billion euros, foreseen in Terna's 2011-2015 Strategic Plan for the improvement of Italy's electricity grid will focus on the development of the grid in Italy's largest urban areas: Rome, Milan, Naples, Turin, Palermo and Genoa. The purpose of this impressive renewal project is to improve the security, quality and efficiency of the electricity infrastructures with an eye to sustainability.

These activities are currently in the planning stage. For some of them, the authorization requests were submitted to the Ministry for Economic Development in 2010 while for others the authorization process will be started in 2011. The works will involve a total of 80 companies, over 100 special equipment units and an average of 350 human resources.

THE GRID AS THE DRIVING FORCE OF ECONOMY

Work for 200 companies and 10,000 human resources. More efficiency and sustainability: over 700 km of new high tech lines and about 1,700 km of removed and buried lines.

Terna's acceleration of investments for the grid's improvement continues.

The 2010-2015 Strategic Plan foresees 15 major initiatives (see list at the bottom of the page) calling for the construction of over 700 km of new high tech and low environmental impact overhead lines while about 1,700 obsolete lines will be removed and/or buried. This means that the ratio between newly-built and removed or buried lines is approximately 1 to 2.5.

The environmental benefits are also remarkable: the removal of old pylons will allow freeing over 3,800 hectares of land, equal to 7.700 soccer fields.

With regard to the electricity system, Terna's planned activities will allow to achieve the following:

- lower costs for a total of over 550 million euros a year
- eliminating grid “bottlenecks” leading to 7,150 MW of more efficient production, equal to over three times the peak consumption of a big city such as Rome;
- reducing CO2 emissions for a total of 1 million and 600 tons a year, equal to the consumption of over 930 thousand vehicles;
- energy saving, that is lower energy losses, for a total of approximately 820 GWh a year, equal to the average yearly consumption of 220 thousand families.

The following are the above mentioned 15 strategic initiatives involving, in Northern Italy, the regions of Piedmont, Lombardy, Veneto and Friuli; in Central Italy, the regions of Tuscany, Emilia Romagna, Abruzzo and Sardinia; in Southern Italy, the regions of Campania, Apulia, Calabria and Sicily. The

most important works include: the Sorgente-Rizziconi connection; the “electricity bridge” between Sicily and Calabria, currently under construction, which is going to be the longest AC submarine electricity line in the world; the new energy highway between Pavia and Lodi; the 380 kV “Chignolo Po-Maleo” electricity line, which will use new tubular “single-pole” and low environmental impact pylons; and two new interconnections with foreign countries, France and Montenegro, for a total capacity of 2,000 MW; along with the 22 energy highways already connecting Italy’s electricity system with that of bordering countries.

Other initiatives include new power stations for the collection and input into the grid of renewable energy as well as power and voltage flow regulation systems. This represents an important, although sustainable, challenge for Terna as already demonstrated by the significant results obtained in the past few years.

Northern Area

- New Italy-France interconnection*
- Trino-Lacchiarella electricity line (Piedmont-Lombardy)
- Dolo-Camin-Fusina electricity line (Veneto)
- Chignolo Po – Maleo electricity line (Lombardia)
- Redipuglia-Udine West electricity line (Friuli)

Central Area

- Italy-Montenegro interconnection
- New Sardinia-Corsica-Italy connection (Sa.Co.I.)
- Colunga-Calenzano electricity line (Tuscany-Emilia)
- Elba-mainland connection

Southern Area

- Capri-mainland connection (Campania)
- Montecorvino-Avellino-Benevento electricity line (Campania)
- Foggia – Benevento electricity line (Apulia – Campania)
- Sorgente-Rizziconi connection (Sicilia – Calabria)*
- Paternò-Pantano-Priolo electricity line (Sicily)

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