

A new electricity grid for Piedmont

Investments of around €1.2 billion: increased safety, quality and efficiency for the electricity system in one of the country's most important industrial powerhouses. 460 km of old lines dismantled

For the modernization of the electricity grid in Piedmont, Terna - with over 4,500 km of high and extra-high voltage power lines, 43 stations and about 300 personnel in the region - has planned around €1.2 billion worth of projects, over 15% of the entire 2013-2022 Development Plan, which is providing €7.9 billion of investments throughout the country. Projects which will together produce **savings of €250 million a year** for consumers and businesses. The infrastructural development plan will also have a positive effect on jobs, with **around 100 companies, many of which are local, and over 500 workers involved**.

All in a sustainable way: **200 km of new power lines, against 460 km of overhead lines to be decommissioned**, with a ratio between the old to be dismantled and the new to be installed of over 2 to 1.

The main interventions are:

ITALY-FRANCE INTERCONNECTION

- **Investment:** A total investment of €1.4 billion (of which €800 million for the Italian section)
- **Economic benefits:** costs reduced (on the Italian side, limited to the public part) by over €150 million a year for consumers and companies¹
- **Electricity benefits:** a significant increase in capacity for importing electricity to Italy from abroad, increased operational safety within the electricity system due to increased trading capacity and mutual assistance between Italy and France
- **Length of the line:** 190 km, all underground, 95 km of which is in Italy, involving 25 municipalities, from the existing power station in Piossasco (Province of Turin) to the projected Frejus safety tunnel
- **Status of the project:** under construction

NEW 380-KV TRINO-LACCHIARELLA POWER LINE (Piedmont-Lombardy)

- **Investment:** €350 million
- **Economic benefits:** costs reduced by over €50 million per year for consumers and companies¹
- **Electricity benefits:** elimination of bottlenecks between Piedmont and Lombardy, reduction of grid losses, use of more efficient production, increased electricity system reliability and reduced risk of energy supply shortfalls, and savings for the electricity system thanks to the increase in safety of the electricity service and to the resulting reduced need to procure resources on the electricity market
- **Length of the line:** 95 km overall, of which 30 km in Piedmont
- **Environmental benefits:** decommissioning of over 200 km of old power lines, of which 110 km are in Piedmont, reduction in CO² of 150,000 tons per year; 150,000 tons of CO² emissions averted
- **Status of the project:** under construction

¹ Average annual discounted value.

GRID REALIGNMENT TO 220 kV IN THE CITY OF TURIN

- **Investment:** €220 million
- **Economic and electricity benefits:** costs reduced by more than €45 million per year thanks to the improved quality and safety of the electricity service in one of the most important areas of Piedmont; improved efficiency of the Turin electricity grid
- **Environmental benefits:** decommissioning of 58 km of old power lines and under-grounding of around 60 km, compared with 7 km of new electricity lines
- **Status of the project:** under construction

In addition to those in progress, in recent years Terna has already completed important works in Piedmont, among which:

The rationalization of the 132-kV grid in the Val d'Ossola, Italy

- Total investment: €70 million
- Economic benefits: savings of over €5 million per year for consumers and companies
- Environmental benefits: dismantling of 186 km of old overhead lines, compared with 98 new lines built

The 132-kV "Cerreto-Biella Est" power line

- Investment: €6 million
- Construction time: 6 months
- Environmental benefits: it will allow the demolition of the old overhead line dating back to the 1930s; it is the first power line built entirely with single pole pylons for reduced environmental impact