Elia Group

Who?

One of Europe’s top 5 TSOs

Elia Group is active in electricity transmission. With its two TSOs - Elia in Belgium and 50Hertz in Germany - we operate 18,990 km of high-voltage connections that secure the power supply of 30 million end users. With a reliability level of 99.999 percent, we provide society with a robust electricity grid.

Elia operates an electricity transmission system with voltage levels between 30 and 400 kilovolt (kV), and 50Hertz transports electricity over high-voltage levels of 150, 220 and 380 kilovolts (kV).

We lead the way in a successful energy transition ensuring a reliable, sustainable and affordable energy system for the future.

How?

Through cooperation and innovation

We operate and develop our grid infrastructure in close collaboration with all stakeholders. We are highly focused on safety and our goal is zero accidents. We are committed to innovation and continuously improve our operational systems.

In Germany, we are already integrating over 56.5 percent renewable energy safely into the grid. This is how we make the energy transition happen.

What?

Our core tasks

Grid ownership – We prepare to deliver the infrastructure of the future

We develop, build and maintain our transmission grid according to long term needs. We heavily invest in the integration of renewable energy, the development of an offshore high-voltage grid and the construction of interconnectors to facilitate the integration of the European energy market. By doing so, Elia Group drives the transition to tomorrow’s energy system.

System control – we maintain the balance

Operating the electricity system is an increasingly complex task due to the sharp rise in renewable generation sources, the continuous arrival of new players and technologies and the development of supranational coordination. To ensure a reliable supply and efficient operational management of our grids, Elia Group monitors the electricity system in real time. This requires specialist knowledge as well as sophisticated tools and processes.

Market facilitation – We are part of the European integrated market

Elia Group makes its infrastructure available to all market players in a transparent, non-discriminatory way. Digitalisation and the latest technologies offer market players new opportunities to optimise their electricity management by selling their surplus energy or temporarily reducing consumption. We develop services and mechanisms allowing the market to trade on different platforms, which promotes economic competitiveness and the well-being of society.

Trusteeship* – We transparently integrate renewable energies into the market

The German legislator has transferred the responsibility for coordinating and processing legal levy systems to promote environmentally friendly technologies to the transmission system operators. 50Hertz collects these levies as a trustee, administers these and coordinates their distribution to the recipients. If the electricity from renewables is not marketed directly, we sell this electricity on the power exchange.

In the interest of society

The electricity grid is a key pillar of the energy policy that supports our socio-economic prosperity. Elia Group aspires to be a catalyst for a successful energy transition and consequently, a reliable, sustainable and affordable energy system. By building interconnectors and integrating renewable energy generation, Elia Group promotes both the integration of the European energy market and the decarbonisation of our society.

* Only for 50Hertz