



PRESS RELEASE | Berlin, 5. March 2021

50Hertz presents its balance sheet for 2020

Speeding up progress on the energy transition: 50Hertz increases investments in infrastructure

- €860 million planned for grids and substations in 2021 alone; grid expansion is progressing
- Fewer wind turbines were curtailed in 2020; costs of congestion management dropped even further
- Solar PV generation is booming; annual increase in onshore wind power facilities needs to be doubled.

For transmission system operator 50Hertz, a decisive decade in terms of the energy transition is beginning. By 2025, the company wants to invest almost twice as much in its grid infrastructure than it has over the past five years. Investments worth €860 million have been planned for 2021 alone, which is around €160 million more than last year. The objective is to make transmission lines and substations capable of safely and reliably integrating increasing amounts of power from renewable energy sources into the overall system. In 2020, the share that renewables occupied in total electricity consumption across the 50Hertz grid area increased to 62%. At the same time, fewer wind turbines had to be curtailed, meaning that the total cost of congestion management dropped to €33 million.

‘We need to speed up our progress.’ This is how **Stefan Kapferer, Chairperson of the 50Hertz Executive Committee**, summed up the challenges faced by 50Hertz with regard to implementing the energy transition during last Friday’s press conference. Progress needs to be made in terms of renewable energy expansion and infrastructure building and an appropriate political and regulatory framework needs to be created for necessary investments to be made in the grid.

Significant progress is being made on grid expansion

In 2020, 62% of the annual electricity demand across the 50Hertz grid area (i.e. the eastern German states as well as the city states of Hamburg and Berlin) was met by PV, wind and biomass power: a new record. The installed capacity of renewable energy sources increased from around 34 gigawatts (GW) in 2019 to approximately 36 GW in 2020. Furthermore, the number of necessary generation unit maintenance interventions decreased. With regard to congestion management (which involves managing the feed-in of renewable

energy and redispatch from conventional power stations), 50Hertz was able to lower the volumes from around 2.5 terawatt-hours (TWh) in 2019 to only 1.5 TWh in 2020. The costs for these measures dropped from €84 million in 2019 to €33 million in 2020. In 2015, these costs surpassed €350 million.

Good progress was made on infrastructure development in the 50Hertz grid area in 2020. In addition to the commissioning of the Combined Grid Solution, the world's first hybrid offshore interconnector between Germany and Denmark, another extra-high-voltage line was added to the grid: the 380 kV line between Wolmirstedt and Stendal/West.

Additional progress was made on other key projects throughout 2020, including on the SuedOstLink, which runs from Wolmirstedt (near Magdeburg) to Bavaria. This project involves the laying of a 525 kV high-voltage direct current (HVDC) underground cable. The project was submitted for planning approval in 2020 and an extension to the cable which would lead up to the Klein-Rogahn substation in Mecklenburg-Western Pomerania is currently being incorporated into the new Federal Requirements Plan Act (*Bundesbedarfsplangesetz*).

With regard to offshore projects, in 2020 50Hertz began laying the cables which will connect two wind farms (Baltic Eagle and Arcadis Ost 1, which are off the coast of Rügen island). Back on land, construction on overhead lines continued to the north of Berlin (*Nordring Berlin*); between northern Brandenburg and Berlin (Uckermark Line); between Saxony and Thuringia (Pulgar near Leipzig to Vieselbach near Erfurt); and on the diagonal power link which runs under Berlin.

During Friday's press conference, Stefan Kapferer summed up the work being carried out by 50Hertz as follows: 'Over the past few years, we have expanded our grid. This expansion has translated into lower intervention costs for power stations and renewable generation units. 50Hertz will continue along this successful path. Nevertheless, there are many legal steps for us to complete in order to get from the planning stage, through the approval and construction stages, to the actual commissioning of a project. All parties involved must therefore consider ways to speed up the approval process without compromising on public participation, which is essential. By launching our new goal, "From 60 to 100 by 2032: new energy for a strong economy", we are now focused on becoming even faster and more efficient, which is why we have begun liaising with political and economic decision-makers to improve the regulatory landscape and make progress on specific projects. It is also necessary for us to leverage additional efficiency potentials at 50Hertz.'

Onshore wind power capacity needs to be doubled



Contact details

50Hertz Transmission GmbH | Heidestraße 2 | 10557 Berlin | Germany
Press Officer | Volker Kamm | T +49 30 5150 3417 | M +49 172 32 32 759 | volker.kamm@50hertz.com

According to Kapferer, renewable energy growth is not clear-cut. Wind turbine capacity across the 50Hertz grid area only increased slightly in 2020 (to 427 megawatts, or MG) compared with the previous year. The increase in 2020 was also lower than annual increases achieved over the past few years. As Kapferer explained, 'To be clear: the annual increase in onshore wind turbines across our grid area needs to be doubled if we want to reach our goal of 100% renewable energy by 2032'.

Despite the slow growth in terms of onshore wind turbines, the number of photovoltaic installations on rooftops and in open spaces increased significantly: the installed capacity grew by around 45%, from 761 MW in 2019 to 1,348 MW in 2020. In order to complete the energy transition successfully and meet climate protection targets, it is 50Hertz's view that offshore wind power must be focused on. In the German part of the Baltic Sea, projects exceeding 3 GW – which are not currently covered in the area development plan (*Flächenentwicklungsplan*) – should be considered. 'If nothing changes,' Kapferer explained on Friday, 'the expansion of offshore wind power in the German part of the Baltic Sea will come to a standstill after 2026, even though last year, Germany and other coastal states of the Baltic Sea committed themselves to exploiting the entire offshore wind potential, which stands at around 90 GW.'

Stable regulatory framework essential for investment programme

Also on Friday, **50Hertz Chief Financial Officer Marco Nix** asked for a cautious development of the regulatory framework over the coming years: 'The positive ratings we received in terms of our finances and approach to sustainability confirm that the work we did last year is paying off. The stable financial rating we received illustrates that there is trust in our investment programme, despite the uncertain market environment. This trust was demonstrated through the issuing of our first green bond (of €750 million) in May, followed by another placement of €200 million in November. The solid ratings we were awarded are the result of many years of sustainable and reliable performance and are linked to several factors, including a stable regulatory framework.'

50Hertz is financially capable of managing its upcoming projects. With a profit of €193 million according to IFRS and a grid turnover of around €1.45 billion, 2020 was a good economic year (its profit in 2019 was €178 million). From 2021 to 2025, 50Hertz plans to invest a total of €4.7 billion in grid infrastructure. From 2016 to 2020, 50Hertz invested €2.9 billion in its grid infrastructure; those funds were mainly used for the expansion of new lines and the reinforcement of existing ones, as well as for the construction of new substations and the retrofitting of existing ones.

Thinking on a European scale: 50Hertz, as part of Elia Group, is in a good position



Contact details

50Hertz Transmission GmbH | Heidestraße 2 | 10557 Berlin | Germany
Press Officer | Volker Kamm | T +49 30 5150 3417 | M +49 172 32 32 759 | volker.kamm@50hertz.com

With the launch of the European Green Deal, Europe has set itself ambitious goals in terms of climate and energy policy. As part of Elia Group – which is very much a European company – 50Hertz wants to contribute to the achievement of these goals. Connecting offshore wind farms to the grid has a key role to play. Both 50Hertz and Elia Transmission are hoping to cooperate with Danish system operator Energinet in building energy islands in the Baltic Sea and the North Sea. Over the past few weeks, the three companies have signed Letters of Intent in line with these goals. As **Elia Group CEO Chris Peeters** has noted, ‘Energy islands and hybrid interconnectors are the first components needed for the establishment of an offshore power grid. They will enable us to access large volumes of renewable energy, which is extremely important for the fulfilment of climate targets and the decarbonisation of industry and society more widely.’ As Peeters has pointed out, Elia Group plays an important role in this, particularly in terms of offshore expansion: ‘Our strategy anticipates and plans for social developments such as decentralisation, sustainability, European integration and digitalisation.’

About 50Hertz

As 50Hertz, we operate the electricity transmission system in the north and east of Germany, which we are expanding to support a successful energy transition. Our extra-high-voltage grid is about 10,490 kilometres long, which equates to the distance between Berlin and Rio de Janeiro. Our control area covers the Länder of Brandenburg, Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt, and Thuringia, as well as the city states of Berlin and Hamburg. Across these regions, we and our 1,300 employees ensure that 18 million people are supplied with electricity around the clock. We are a leading player in terms of the secure integration of renewable energy into grid networks: across our grid area, more than 60% of consumed electricity is generated from renewable sources; moreover, it is our goal to securely integrate increasing amounts of renewable energy into our system, so that by 2032, 100% of energy consumed across our network comes from renewable sources. Our shareholders are the Belgian holding Elia Group (80%), which is listed on the stock exchange, and the KfW bank group (20%). As a European TSO, we are a member of the European Network of Transmission System Operators for Electricity (ENTSO-E).

More information:

Live data on our network is available via the 50Hertz app on Apple, Android and Windows devices. For further information, please visit [50hertz.com/app](https://www.50hertz.com/app).



Contact details

50Hertz Transmission GmbH | Heidestraße 2 | 10557 Berlin | Germany
Press Officer | Volker Kamm | T +49 30 5150 3417 | M +49 172 32 32 759 | volker.kamm@50hertz.com