



Review of 2020.

Investments in the electricity network of the future

Major interest in green bond

Ellevio issued its first green bond during the year, earmarked for investments in smart electricity meters that enable Ellevio's customers to consume electricity in a more climate-smart manner. There was major interest in the bond, which led to the issuance being extended. The new part of the issuance was earmarked for investments linked to the continued expansion of wind power in Sweden and the opportunity to connect more renewable electricity to the electricity network.

Smart charging streets in Stockholm

Together with the City of Stockholm, Ellevio is expanding the city's public charging infrastructure, which by 2022 will include 4,000 charging stations for electric vehicles. Thanks to a close collaboration with the city and a smarter charging model, the new charging streets will be able to manage critical periods with the highest loads. This also benefits customers, as they will be offered cheaper charging rates during less critical periods.

Innovation competition: Startup4Climate

In collaboration with electricity supplier GodEl and start-up hub Things, we were able last year to crown the first two winners

of our joint innovation competition Startup4Climate – Enjoy and Peafowl Solar Power. The prize-winners will share SEK 2 million to go towards innovations that accelerate the energy transition and thus contribute to the goal of limiting global warming.

Focus on customer experience

One million smart electricity meters

Over the coming three years we will install the new generation of smart electricity meters for almost one million customers. In summer 2020 a pilot project was carried out in the Stockholm suburb of Älvsjö, which gave us valuable insights into how the new system works in practice. The smart electricity meters are a vital component of the smart networks of the future, and will help improve security of supply. At the same time, customers will get both a clearer breakdown of and influence over their electricity consumption, as well as improved conditions to smoothly start producing, consuming and selling their own electricity. Installations in other parts of Stockholm continued throughout the autumn, and in 2021 work will begin in other parts of our network areas.

New offering to solar panel customers

Together with our partner Cell Solar, we introduced a comprehensive solution for installing solar panels in autumn 2020 – from

the permit stage to connection. At the end of 2020, we had a total of 8,146 micro-producing customers with a total connected power of 128 MW.

New offering: Charging box for electric vehicles

During the year, Ellevio played an active part in simplifying the process for switching to electric cars for private individuals, housing associations and companies. Together with our collaboration partner OneCo, we are offering our customers a comprehensive solution that includes a preparatory home visit, charging wallbox with load balancing function and installation. This initiative together with the previously offered solution for charging streets in collaboration with the City of Stockholm represent our contribution to accelerating the transition to an electrified fleet of vehicles.

Operating environment and regulations

Bill concerning special scope for investment

In September, the Government presented a bill that would give electricity network companies the opportunity to use unexploited revenue frameworks to make investments in new power lines. Following a debate in the Swedish parliament on the formulation of the

bill, the Government withdrew it. In December, the government returned with a memorandum in which some changes were made. In the spring of 2021, a new bill was presented and in April it was approved by the Swedish Parliament. This was an important decision to create the conditions for the investments required to meet growth and increased electrification. The new law will enter into force on 1 June 2021.

No to large scale wind power in Värmland

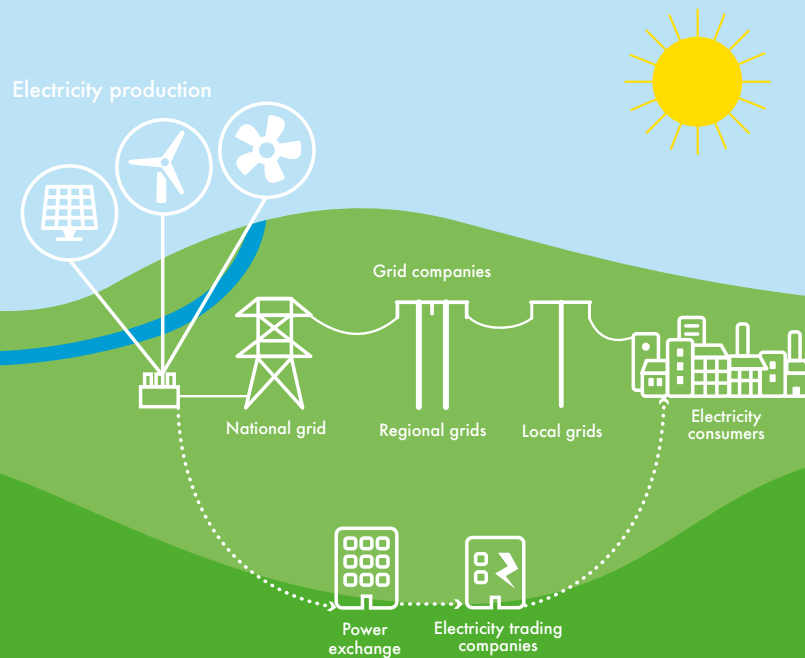
In October, it became clear that any expansion of new, major electricity production in Värmland was to be halted. The announcement came after the national grid owner, Svenska kraftnät, reported that the national grid in Värmland had reached its maximum capacity. This halting demonstrates the major and acute investment needs of both the national grid and of regional and local electricity networks. The projects under construction at the time were not affected by the decision.

Strategy for the next generation of electrification

The Government has launched an initiative to draw up a national strategy for electrification. The strategy is to contribute to a rapid, smart and socioeconomically efficient process of



The Swedish electricity market – how it works.



Electricity producers

The companies that produce electricity through hydroelectric power, nuclear power, wind power, bio power, wave power and solar power, for example, and sell a large part of it via the power exchange NordPool. In Sweden, hydro, wind and nuclear power account for more than 90 percent of electricity production. There are both larger and smaller electricity producers in Sweden.

Electricity network companies

The companies that own, manage and develop the regional and local grids and transport the electricity from the production site to the customers. Electricity networks are known as natural monopolies because it is not socioeconomically

feasible to build parallel networks. Customers are connected to the grid where they live and thus become customers of the local electricity network company. There are around 160 electricity network companies in Sweden.

Electricity sales companies

The companies that purchase electricity from the Nordpool power exchange and sell it on to end customers. There is free competition between electricity sales companies in Sweden, meaning customers can choose their own company. There are over 100 electricity sales companies in Sweden.

The Swedish Energy Markets Inspectorate is responsible for monitoring, reviewing and establishing rules for the energy market.

National network

“The trunk of the electricity tree” – the lines that transport electricity from the power stations to the regional networks. The national network is owned and managed by the state via Svenska kraftnät.

Regional grids

“The branches of the electricity tree” – the lines that hold the national network and local grids together. The regional grids are owned by network companies such as Ellevio.

Local grids

“The leaves of the electricity tree” – the lines that distribute electricity at the last stage to customers, i.e. companies and households, etc. The local grids are owned by network companies such as Ellevio.

electrification. Ellevio welcomes the initiative and hopes it will help ensure a long-term, sustainable regulation of the electricity network and faster permit processes that promote investment.

The Covid-19 pandemic

Collaboration with public authorities and crisis preparedness

During the Covid-19 pandemic, Ellevio has had a closer dialogue than usual with among others Svenska kraftnät and the Swedish Civil Contingencies Agency to safeguard a maintained supply of electricity to society, in particular to socially critical operations. Since February, Ellevio has been working in accordance with our crisis scenario for pandemics. The entire organisation placed special restrictions on employees and ensured greater preparedness for any cases of sickness, with the rules at the operations centre being particularly strict.

As a whole, the impact of the pandemic on Ellevio's operations has so far been limited.

A safe workplace during the pandemic

Shortly after the pandemic reached Sweden, Ellevio established a crisis management team which has since met each week to take continuous decisions and implement our own pandemic crisis plan and the authorities' recommendations throughout our operations. To help reduce the spread of infection and protect our employees, we recommended and enabled home-working, arranged joint digital activities, and trained managers in digital leadership and the importance of checking in with employees to see how they are managing home-working over a sustained period.



We are building an electricity motorway – in the middle of Stockholm



Ellevio is currently implementing one of its largest electricity network projects ever, which will serve as a vital part of the platform for Stockholm's continued sustainable development.

An important task for Ellevio is to guarantee the electricity supply in the Swedish capital of Stockholm. The capital region is growing as digitalisation and electrification continue to expand. Demand for electricity is increasing in line with this.

"This project is a vital piece of the puzzle in terms of Stockholm's continued development, electrification process and achievement of its climate targets," says Jenny Nilander, project manager at Ellevio.

The electricity network project is one of Ellevio's largest ever. For the first time in Sweden, cables are being laid with a voltage level of 400 kilovolts in an urban environment. A 10 kilometre-long overhead line between Beckomberga and Bredäng is being replaced with 12 kilometres of cables, partly buried in the ground and partly placed on the bottom of Lake Mälaren, a challenging project that affects many stakeholders along the way.

There are nine cables as thick as tree trunks being buried, which is why they are buried deep down and wide apart. Furthermore, the work is being undertaken in places where space is limited due to other types of pipes and lines – for example for

water, fibre and district heating. This work in a densely populated and busy area can be trying for residents and for those who typically use the streets now being dug up.

"We have a close dialogue with the City of Stockholm, among others, to find solutions relating to noise and route closures and compromises to meet different needs," explains Nilander. "However, it will not be possible to avoid disturbing some people in this project, which is why we are making big efforts to inform those who live and work in the affected areas. The aim is to try and help people understand why this work is needed. We are building a new motorway for the city's electricity."

The project planning began as far back as 2013, and aims to ensure a long-term and robust electricity network for an expanding Stockholm. Ellevio's work on the area began in 2019 and is our largest cable project ever, involving investments of more than SEK 1 billion.

When the work is complete, the lines will form part of the Swedish national grid. With their voltage level of 400 kilovolts, they will make a considerable difference compared to the current overhead line of 220 kilovolts. In addition to greater capacity, the buried power lines will also free up valuable land for housing, offices, parks and green areas, for example.

