

APG: August with peak export values

The APG Factbox in August indicates 100% coverage of electricity consumption by renewable energies and the highest monthly export values in over 20 years.

The weeks of August (calendar weeks 31-35) were characterized by an extraordinarily good production from renewables (5.584 GWh). Austria was able to cover its own demand (4.977 GWh) in August with electricity from renewable sources (on the balance sheet). The main reason for this was the continuously high production from run-of-river plants due to the heavy rainfalls. With 4.532 GWh (gigawatt hours) hydropower accounted for a share of approximately 82 percent of the renewable production in August, while wind power contributed 552 GWh, i.e. around 10 percent of the renewable production.

Production increases of renewables account for peak export values

"Due to the good production from renewable energy sources Austria was able to achieve an electricity surplus, which resulted in an export balance of 520 GWh in August, which is the highest export balance in August in over 20 years", emphasizes Gerhard Christiner, APG's CTO. "The main reason was the above-average production from run-of-rover plants as well as the dynamic development and increasing production from PV facilities".

Positive momentum of installed PV systems highlights necessity of grid expansion

"Regarding the energy transition and the increasing share of renewables in the energy mix the rapid expansion of PV systems is a development that we explicitly welcome. With the expected expansion of PV systems by almost 2000 MW by the end of this year, a capacity equivalent to all hydropower plants along the Danube will be connected to the grid," explains Christiner.

At the same time this dynamic leads to massive backfeeding of regional electricity surpluses from the distribution grids into the trans-regional APG grid. The hitherto usual peak consumption at noon does no longer occur on sunny days, on the contrary, the flow of electricity is completely reversed and the regional electricity surpluses have to be transported via the transmission grid to storage power plants or abroad. This also significantly changes the electricity price curve and even leads to negative market prices at noon on weekends with low demand when there are no more electricity consumers of electricity or when distribution over longer distances is not possible due to grid bottlenecks. We will have to increasingly shift our electricity consumption to the hours where we can expect surplus production from renewables in the future.

"These developments show that it is absolutely urgent to change our consumption behavior and to strengthen and digitalize our grids to improve the flexibility in the electricity system in the interaction with the customers. However, we can only achieve this with even faster approval procedures and a new law governing the electricity industry (Elektrizitätswirtschaftsgesetz, ELWG), which creates the framework for a modern, customer-centered energy system. The 'good will' for this on the part of the government and political parties is there, however, what we still need is courageous and fast legal measures so that we can quickly follow with the implementation of our projects," states Christiner.



According to Thomas Karall, CFO at APG, it is fundamentally important, despite the operational challenges, to still act responsibly when it comes to electricity consumption: "Saving electricity reduces CO_2 and overall systemic costs, thus making a significant contribution to ensuring system security. The trend of reducing CO_2 has to be pushed further. Of course, this also includes electricity from private PV units to cover the consumption of households. In addition, the sustainable expansion of power grids, renewable production, and storage facilities is still the order of the day."

Tips for saving electricity can be found at <u>www.apg.at/stromspartipps</u> or on the Climate Ministry's mission11.at page. With the APG Powermonitor, it is possible for the Austrian population to see the most effective electricity saving hours and thus make an active contribution to CO₂ reduction and system security. The APG Powermonitor can be found at: <u>www.apg.at/powermonitor</u>.

No energy transition without a strong power grid

To avoid grid overloads and to ensure the security of supply so-called redispatch measures are carried out to manage electricity flows. This means a targeted and controlled intervention in the operation of thermal and hydraulic power plants.

"In 2023 such measures had to be carried out on 149 days until the end of August, with 19 days in August alone", says Thomas Karall. This is a fact that gives you food for thought and also costs a lot of money. "The redispatch measures, which are indispensable for ensuring the security of electricity supply, generated costs of around 24.9 million euros in August alone. Overall the costs of redispatch measures in 2023 to date amount to 109.6 million euros, which is already 15.6 million euros more than the total costs of 2022. We are talking about costs that at the end of the day have to be borne by the electricity customers. An efficient grid with sufficient capacities would considerably reduce the need of redispatch measures and thus cut the associated costs. Therefore the immediate expansion of the grid infrastructure as well as electricity storage facilities have top priority," explains Thomas Karall.

High grid feed-in by Austria's water strongholds

The trans-regional electricity grid of APG also enables the exchange of energy within the country. Electricity surpluses in individual provinces can thus be distributed throughout Austria to compensate deficits.

Due to the weather conditions in August and the associated good production from hydropower plants the provinces of Upper Austria, Carinthia and Tyrol were able to produce a high electricity surplus which was made available all over Austria via the APG grid. Upper Austria was able to feed 311 GWh in the trans-regional grid, while Carinthia contributed 229 GWh and Tyrol 279 GWh. Vienna (387 GWh) and Lower Austria (132 GWh) were the provinces that had to withdraw the most from the grid.

APG continually keeps track of the development of the domestic electricity industry and regularly publishes diagrams at <u>https://www.apg.at/infografiken</u> regarding the topics: energy exchange, energy consumption in Austria, energy consumption in Europe, import/export, electricity prices, etc.



About Austrian Power Grid (APG)

As independent transmission system operator Austrian Power Grid (APG) is in charge of ensuring the **security of electricity supply** in Austria. With our high-performance and digital electricity infrastructure and the use of **state-of-the-art technologies** we integrate renewable energies, we are the platform for the electricity market, and we provide access to reasonably priced electricity for Austria's consumers and thus create the basis for Austria as supply-secure industrial and business location and place to live. The APG grid totals a length of about 3,400 km and is operated, maintained and continuously adapted to the increasing challenges of the **electrification** of businesses, industry and society by a team of approximately 733 specialists. Thanks to our committed employees Austria had a security of supply of 99.99 percent also in 2022 and thus ranks among the top countries worldwide. Our investments of 490 million euros in 2023 (2022: 370 million euros) are a **motor for the Austrian economy** and a crucial factor in reaching Austria's climate and energy targets. Until 2032 APG will invest a total of approximately 3.5 billion euros in grid expansion and renovation projects, which amounts to approximately 19 percent of the total of 18 billion euros which the energy industry will invest in the grid infrastructure over the next ten years.

Should you have any questions, please contact:

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