

Austria increased renewable energy penetration

Austria increased renewable energy penetration

By the end of 2016 Austria already fulfilled their EU Renewables Directive goal for the year 2020. By 2016 renewable energies accounted for 33.5% of the final energy consumption^{1,2}; in all sectors (heat, electricity, mobility). The renewable energy sector is also accountable for hosting 41,591 jobs (full-time equivalent) and creating a revenue of 7,219 million euros in 2016.

87% of Austria's electricity generation was produced by renewable sources in 2023, the second highest in the EU.³

Decarbonization means a drastic reduction of carbon emissions and the replacement of fossil fuels by renewable energy sources. This will only be economically and technically possible through linking power, heat and mobility into an integrated energy system (sector coupling). It is not only in the field of electricity, but also to find appropriate measures in the other sectors to achieve the ambitious goals.⁴⁵

The former coalition government consisting of ⁶VP and FP⁷ have given environment and energy an important role in the new government program 2017-2022. According to both parties an ambitious climate and energy strategy is needed to ensure that the target of 100% renewable electricity by 2030 will be reached.⁶⁷

Related to renewable energies there is a law called the Green Electricity Act. The Green Electricity Act regulates the promotion of power generation from wind power, photovoltaics (from 5 kWp), solid, liquid or gaseous biomass, landfill or sewage gas and geothermal energy with feed-in tariffs and hydropower (up to 20 MW) with investment support. Each year, a fixed quota is available for new contracted renewable energy plants; the level of feed-in tariffs is set by ordinance. Financing is provided by a pay-as-you-go system through end consumers.⁸

In the field of energy and climate policy, Austria has committed itself to achieving various objectives. The most important and relevant to the ENERGY2050 strategy process are:

With regard to innovative energy-related technologies Austria has the following strategic documents and plans:

The use of hydropower in Austria has a long tradition. At the beginning of the 20th century, hydropower was mostly used for sawmills, mills and forging hammers. Today it is used to generate hydroelectricity.

Because of its mountainous terrain from being situated in the Alps, Austria has a large share of hydropower

Austria increased renewable energy penetration

resources. The range of hydropower plants installed in Austria goes from small hydro plants with a few kilowatts up to big plants with several hundred megawatts. While the definition of small hydropower may differ by country, in the states of the European Union, small hydropower is up to 10 MW of installed power.

The share of hydropower generation in the Austrian electricity mix in 2017 was 43% from run-of-the-river hydropower plants and 21% from pumped-storage hydropower plants. Together, these two sources deliver 64% of Austria's electricity needs.

The field of green electricity has experienced a sustained upturn since 2003 thanks to the eco-electricity promotion system. This development will continue in 2017 and a gradual expansion of sustainable power generation will be realized. The share of electricity generated from hydropower increased thanks to this system. 148 large hydro power plants (>10 MW) were built from 2003 until 2016.

Over the next few years, growth will be dominated by the repowering of small hydropower plants of up to 10 MW. There are high potentials above all in the western Alpine federal states and along the Danube in Upper and Lower Austria. The potential of large hydropower plants has been largely exhausted. In the Austrian hydropower industry, there were 6784 employees in 2016. The Austrian hydropower industry generated 2 billion euros in 2016.

Contact us for free full report

Web: <https://kary.com.pl/contact-us/>

Email: energystorage2000@gmail.com

WhatsApp: 8613816583346

