

Russia increased renewable energy penetration

Russia increased renewable energy penetration

Copy citation Copied

Copy url Copied

The Russian Federation has set out to increase and diversify its use of renewables, particularly for power generation. Under current plans and policies, renewables would reach nearly 5% of total final energy consumption by 2030. Accelerated deployment, however, could boost Russia's renewable energy share to more than 11% in the same timeframe, according to this REmap working paper from the International Renewable Energy Agency (IRENA).

Achieving this potential calls for cumulative investments of USD300billion in renewable energy up to 2030, or on average USD 15 billion per year between 2010 and 2030. When externalities related to human health and climate change are taken into account, these investments in renewables could ultimately save up to USD 11 billion per year.

Yet certain areas require further attention. These include long-term planning, integration of renewables with existing plans, opening the way for solar PV and wind development, and ensuring reliable and affordable bioenergy supplies.

Hydropower – representing about a fifth of Russian power generation capacity – is currently the most prominent renewable source, along with bioenergy for heating in buildings and industry. By end of 2015, total installed renewable power generation capacity reached 53.5 gigawatts (GW) of which 51.5 GW came from hydropower, and the remainder 2 GW from bioenergy, wind, solar PV and geothermal.

The country analysis forms part of REmap, IRENA's global roadmap to double renewables in the global energy mix.

See theworking paperon Russia's renewable energy prospects

Review thekey findingsinEnglishandRussian (russkij)

Find out more aboutREmap.

Russia ranks fourth in the world for primary energy consumption and carbon dioxide emissions and maintains its focus on fossil fuels despite enormous renewables potential. Russia is following a "business as usual" strategy, relying on conventional fuels exports which are critical for the state budget, for the key energy



Russia increased renewable energy penetration

companies and for many regions in the country which rely heavily on hydrocarbon revenues. But the changing global environment, Sustainable Development Goals agreed upon in the UN institutions in 2015 and the decarbonization agenda, as well as the wellbeing of the whole economic system in the country, challenge this energy mix.

Despite the fact that Russia signed the Paris Agreement in September 2019, decarbonization of the domestic energy sector was not the agenda until recently, when in the end of 2021 President Putin has announced net zero target to be achieved before 2060. GDP energy intensity remains high, constrained by relatively low energy prices and high capital costs. The share of solar and wind energy in the Russian energy balance is insignificant and, according to official forecasts, is not expected to exceed 1% by 2035.

Contact us for free full report

Web: https://www.kary.com.pl/contact-us/ Email: energystorage2000@gmail.com WhatsApp: 8613816583346

