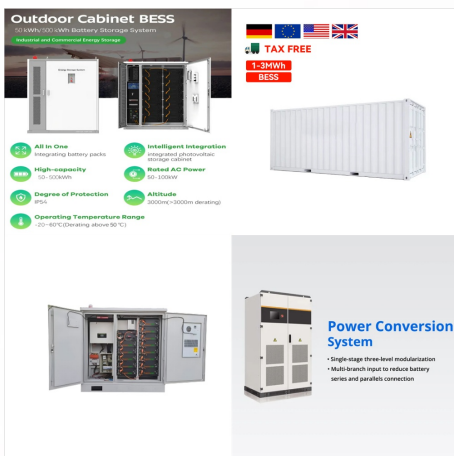




The plan, known as RePowerEU, seeks to have 45 percent of the bloc's energy come from renewable sources by 2030, up from 22 percent in 2020. The EU foresees investing more than \$210 billion in



RENEWABLE ENERGY RESOURCES AND POTENTIAL Russia has substantial and diverse renewable energy resources ??? wind, geothermal, hydro, biomass and solar. Practically all regions have at least one or two forms of renewable energy that are commercially exploitable, while some regions are rich in all forms of renewable energy resources.



facilities operating on the basis of renewable energy sources" became the legal basis for large-scale development of renewable energy sector in Russia Federal Law No. 35-FZ on the Electric Power Industry RF Government Decree ??? 1472-r dated July 28, 2015 States: The obligation of grid companies to buy power generated by RES to cover

RENEWABLE ENERGY SOURCES IN RUSSIA



Russia is rich not only in oil, gas and coal, but also in wind, hydro, geothermal, biomass and solar energy ??? the resources of renewable energy. However, fossil fuels dominate Russia's current energy mix, while its abundant and diverse renewable energy resources play little role. This report demonstrates that renewable energy can offer



The objective of the energy strategy of Russia is to maximize the effective use of natural energy resources and the potential of the energy sector in order to sustain economic growth, improve quality of life, and strengthen Russia's foreign economic positions. The Strategy determines objectives and goals of the Russian energy sector's long-term development, its priorities and ???



Wind energy is one of the leading forms of non-hydro renewable energy sources in the world. Russia ranks among the top countries with vast wind energy resources and among the top CO₂ producers as well. Simultaneously, the utilization of wind energy is extremely low compared to other CO₂ emitting states. This paper aims to describe the ongoing situation for ???

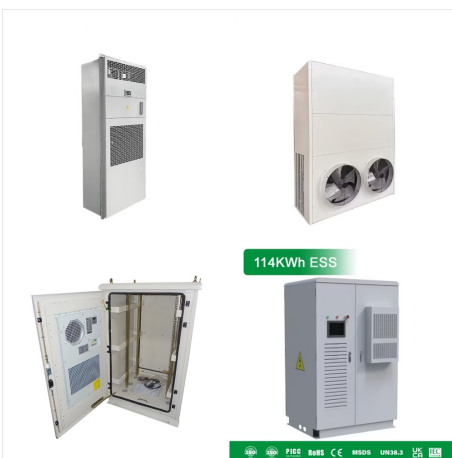
RENEWABLE ENERGY SOURCES IN RUSSIA



It remains an important source in lower-income settings today. However, high-quality estimates of energy consumption from these sources are difficult to find. The Energy Institute Statistical Review of World Energy ??? our main data source on energy ??? only publishes data on commercially traded energy, so traditional biomass is not included.

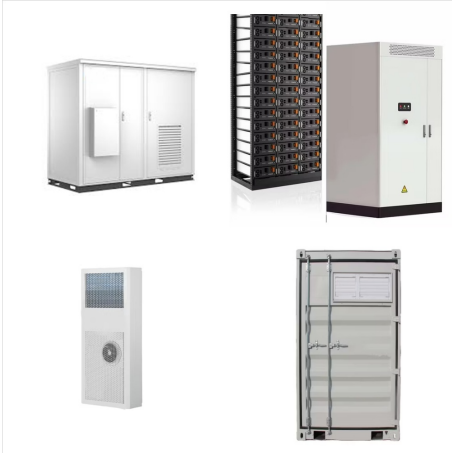


Geothermal energy is the second most used form of renewable energy in Russia but represents less than 1% of the total energy production. The first geothermal power plant in Russia was built at Pauzhetka, Kamchatka, in 1966, with a capacity of 5 MW. The total geothermal installed capacity in 2005 was 79 MW, with 50 MW coming from a plant at Verkhne-Mutnovsky.

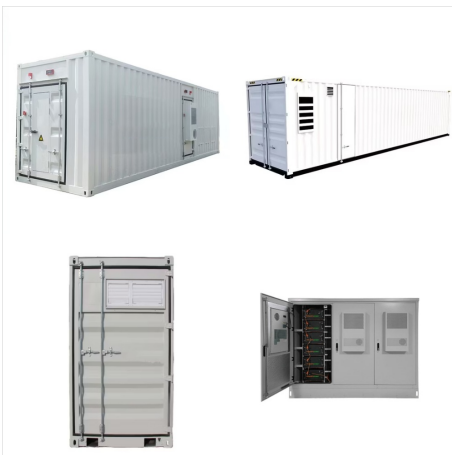


Renewable energy sources (RES) constitute a very promising, yet quite novel and risky asset within the global electricity system. Thence, the state support is often required for stimulating the development of the renewable energy on the new markets, especially in the countries that do not seek to implement alternative energy resources (Smeets, 2018).

RENEWABLE ENERGY SOURCES IN RUSSIA



Since mid-2013, the development of renewable energy in Russia is regulated by a decree entitled "On Procedure for Incitement of Use of Renewable Energy Sources at Wholesale Power Market." 14 The law establishes a system for which renewable energy developers of projects with an output between (at least) 5 MW and 25 MW can bid in annual

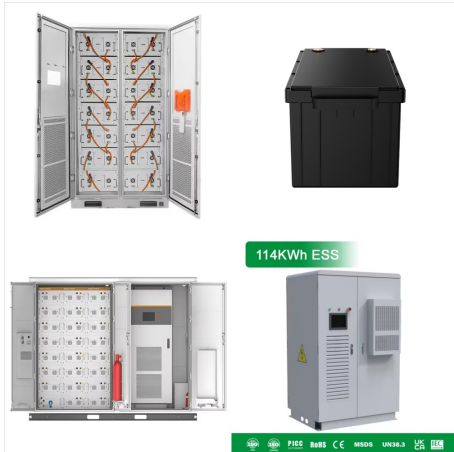


The problem of a legal regulation in the sphere of renewable energy sources is a very actual challenge in Russian Federation. According to the Energy Strategy of Russia, until 2030 an implementation of the alternative energy in all spheres of life aims to be widely applied.



Notwithstanding, renewable energy sources are the most outstanding alternative and the only solution to the growing challenges (Tiwari & Mishra, Citation 2011). In 2012, renewable energy sources supplied 22% of the total world energy generation (U.S. Energy Information Administration, Citation 2012) which was not possible a decade ago.

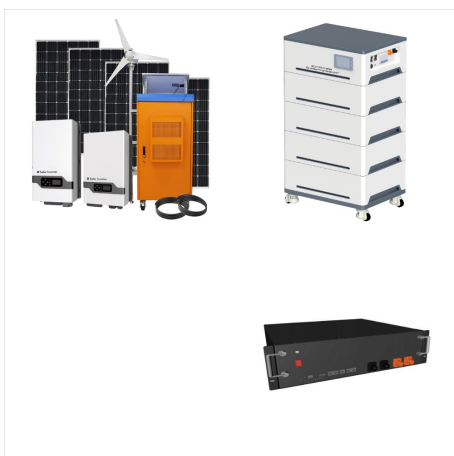
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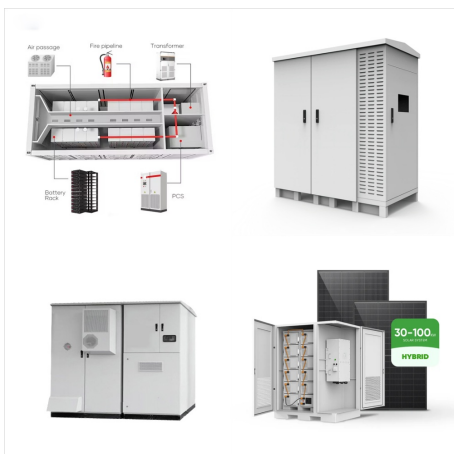


Abstract Climate policy is becoming an important component of the global economic dynamics. The set of climate change control measures is wide but is predominantly reduced to an increased share of electric vehicles (EVs) and renewable energy sources (RESs). For Russia, these measures are rational in terms of ?????2 reduction; however, they lead to ???

RENEWABLE ENERGY SOURCES IN RUSSIA



In the Energy Strategy of Russia (Ministry of Energy, 2009), the issue of climate change is mentioned directly only two times ??? as a risk with unpredictable impacts on the global energy market, and as a key driver of the development of renewable sources of energy, intended to reduce the rate of growth of anthropogenic load on the environment



Nowadays, the development of renewable energy source in Russia is almost completely supported by the state. Nevertheless, many researchers and policymakers alike agree that the country has enormous potential when it comes to the wind, solar (eprussia , 2020; in-power , 2020) and small hydro energy



As a result of this exercise, three renewable energy sources were identified for further analysis based on their high potential in Russia and worldwide during the selected time horizon: solar energy, wind energy, and biomass energy [36]. Accordingly, the research was focused on three research topics: the conversion of solar energy into

RENEWABLE ENERGY SOURCES IN RUSSIA



Types of Renewable Energy Sources Hydropower:
For centuries, people have harnessed the energy of river currents, using dams to control water flow. Hydropower is the world's biggest source of renewable energy by far, with China, Brazil, Canada, the U.S., and Russia being the leading hydropower producers.



So, by 2035, the share of renewable energy sources in the Russian electricity generation will be 5???6% which corresponds to the target indicated in the Resolution of the Russian Government of January 8, 2009, No.1-r. To further increase the competitiveness of Russia renewable energy projects and the energy sector at all, some reserves can



In some countries, renewable energy sources provide about 90% of all electricity generation. The government of the Russian Federation is beginning to change its energy policy. The article considers the indicators for renewable energy at the present time and assesses the prospects for development in the regions of Russia until 2024.

RENEWABLE ENERGY SOURCES IN RUSSIA



Total solar energy capacity in Russia 2010-2023;
Renewable energy generation in Russia 2020-2028,
by source; Hydroelectric power generation in Russia
2013-2022; Hydrogen production in Russia
2018-2022



and efficient alternative energy sources. Also,
until recently, the country lacked programs
supporting the renewable energy sector. In addition,
only a decade ago, the renewable energy
technologies were not profitable and efficient
enough for most Russia's regions. Therefore, the
goal of the study was to foresee and agree on the