



THE MAIN NATURAL ENERGY RESOURCES OF THE WORLD AND ITS MAIN REGIONS. CHARACTERISTICS OF THEIR USE DIRECTIONS

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Abstract: In this article, the main natural energy resources of the world, their geographical distribution and modern directions of their use are analyzed in detail. Currently, global problems in the field of energy, in particular, limited resources, environmental security, and the importance of renewable energy sources are covered.

The article examines the prospects for the development of renewable energy sources such as solar, wind, hydropower and biomass, along with traditional energy sources such as hydrocarbon resources (oil, gas, coal). Also, on the example of the regions where the main deposits of energy resources are located - the Middle East, Russia, North America, Asia and Africa, their influence on the economy and their role in global trade are considered.

Proposals for effective use of energy resources, introduction of new technologies and ensuring energy stability have also been put forward. This study provides fundamental information on the topic and is aimed at developing effective strategies for managing energy resources.

Keywords: Natural Energy Resources, Hydrocarbon Resources, Renewable Energy, Energy Geography, Oil and Gas Resources, Wind and Solar Energy, Hydropower, Biomass, Energy Security, Middle East Energy Resources, Russian Energy, Global Energy Trade, Environmental Sustainability, Energy Strategies, Resources effective use

To illuminate this topic, it is important to analyze the main natural energy resources of the world and their main regions, and analyze the directions of use of each. We will try to dwell on this in more detail below:

The main natural energy resources of the world:

Natural energy resources are mainly divided into the following categories:

Fossil fuels:

Oil: Main source of energy in transport, industry and energy sectors.



Natural gas: Thermal energy is used in various fields of production, electricity and industry.

Coal: It is widely used in the production of electricity, but it causes environmental problems.

Renewable energy sources:

Solar energy: Electricity is generated using solar panels.

Wind energy: Obtaining electricity using wind turbines.

Hydropower: Obtaining energy using water currents. Hydroelectric plants are the most common method.

Geothermal energy: Extracting energy from heat in the Earth's crust.

Biomass: Obtaining energy from organic materials, such as plant and animal waste.

Nuclear energy:

Large amounts of energy are produced using nuclear fission with equipment.

Regions of the main natural energy resources:

Natural energy resources are collected in different regions of the world and their use has its own characteristics:

Fossil fuels:

Oil: The main producing countries are Saudi Arabia, Russia, USA, Nigeria, Venezuela and Iran. These countries have a great influence on the world energy market through oil exports.

Natural gas: Russia, Qatar, the United States of America and Turkey are leaders in this regard. Large natural gas fields are located in Russia and Qatar.

Coal: China, India, USA, Indonesia and Australia are leading countries in coal production. China and India use coal as their main source of energy.

Renewable energy sources:

Solar energy: The regions with the largest resources for solar energy production are Southeast Asia, the Middle East, South America, and Australia. For example, in Egypt, Saudi Arabia, and the United States, solar energy production has developed significantly.

Wind energy: The leading regions in the field of wind energy use are Europe (especially Denmark, Germany, Spain), USA (especially Texas), China. Wind energy is most efficiently produced in northern regions and areas near the ocean.

Hydropower: Hydroelectric plants are mainly located in South America (Brazil and Canada), Russia, China and North America. Brazil, for example, supplies most of it with hydropower.



Geothermal energy: The main regions of geothermal energy production are Iceland, New Zealand, USA (California), Italy and Turkey.

Biomass: The use of biomass is more developed in South America (Brazil, Argentina), India and the USA. Brazil is the leading country in ethanol production.

Nuclear energy:

The leading countries in the production of nuclear energy are the USA, France, Russia, China, and South Korea. France gets almost all of its electricity from nuclear power plants.

Features of directions of use:

Fossil fuels:

Economic efficiency: Fossil fuels may be easy and economically cheap to use, but in the long run they have negative effects on the environment and climate change.

Environmental impact: Increases the risk of carbon emissions, air pollution and climate change.

Renewable energy sources:

Sustainability: Renewable energy sources are naturally renewable and environmentally safe.

Development of renewable resources: Although the cost of their production is currently quite high, efficiency is increasing by improving technologies and increasing production.

Nuclear energy:

High production capacity: Nuclear energy produces large amounts of energy and does not affect emission sources. But there are risks to security, waste management, and nuclear proliferation.

Summary:

For efficient and sustainable use of natural energy resources around the world, it is necessary to develop technologies, ensure environmental safety and switch to renewable energy sources. Each region has its own characteristics and conditions for the use of natural resources, and their effective use is of great economic, social and ecological importance.

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