

The introduction of the use of renewable energy sources (RES) as the main factor in the formation of a new stage of industrial development (on the example of Primorsky Krai)

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Resume: The article examines the stages of the historical development and formation of the economic model of the Russian Federation. The assessment of the prospects for the transformation of this model for the formation of a new stage of industrial development and innovative modernization of production. On the example of the remote territories of Primorsky Krai, areas of residence of the indigenous peoples of the Far East, the possibility of creating enterprises operating in the field of renewable (alternative) energy, with a collective form of ownership and involving the indigenous population of the municipalities of the Primorsky Territory, is analyzed.

Key words: transformation of the Russian model of the economy, collective ownership, renewable energy sources (RES), alternative energy, Primorsky Krai, indigenous peoples of the North, Siberia and the Far East of the Russian Federation, the formation of a new stage of industrial development, industry, innovative modernization, "economy for man", energy, wind power plants (WPP).

The capitalist social system in its classical form, subject to cyclical economic crises, ceased to exist at the beginning of the 20th century, since the market economy based on the extraction of super-profits no longer corresponded to the needs that were formed by the new world development agenda [6].

This predetermined the transformation of the economic system in most of the developed countries of the modern world. Mixed, socially-oriented models of economies have evolved. Instead of the concept of "man for the economy", the concept of "economy for man" appeared. It is possible to highlight the established Indian, Scandinavian, Chinese models, etc. [4]

The collapse of the system of world socialism in the 90s of the last century gave rise to a new wave of the theory that the role of the state in regulating the economy should be minimized. This theory is used by the International Monetary Fund (IMF) and has become the basis for economic reforms in most transition countries.

The Russian economic model, formed in a revolutionary way, having a declared socially oriented orientation, is in fact a special type of system with a predominant monopoly competition of transnational corporations.

This model, built in the Russian Federation of the post-Soviet period at the request of developed Western countries, implements a neoliberal monetary economic policy based on private property, a free market and low inflation by limiting the money supply [6].

According to many economists, the main goal of this policy is the appropriation of natural resources, finances, intellectual property of the Russian Federation by the Western economic system. At the same time, the constructed management mechanism excludes the possibility of modernization and innovative development of the donor economy.

All this necessitates the transformation of the existing economic model of the Russian Federation for the modernization of production on the basis of innovations through the formation of new organizational and economic forms and transformation of property [5].

Modernization provides for the renewal of old technologies and equipment in all sectors of the economy and the creation of new high-tech industries.

The basic branch of industrial production in the Russian Federation in need of modernization is the electric power industry. The presence of a large number of generating capacities that have exhausted their resource indicates the urgent need to decommission them and replace them with new ones.

The development of global energy as one of the constituent parts of a new stage of industrial development in most developed countries of the world

predetermined the choice in favor of renewable energy sources (RES) as the main new innovative type of energy (see Figure 1).

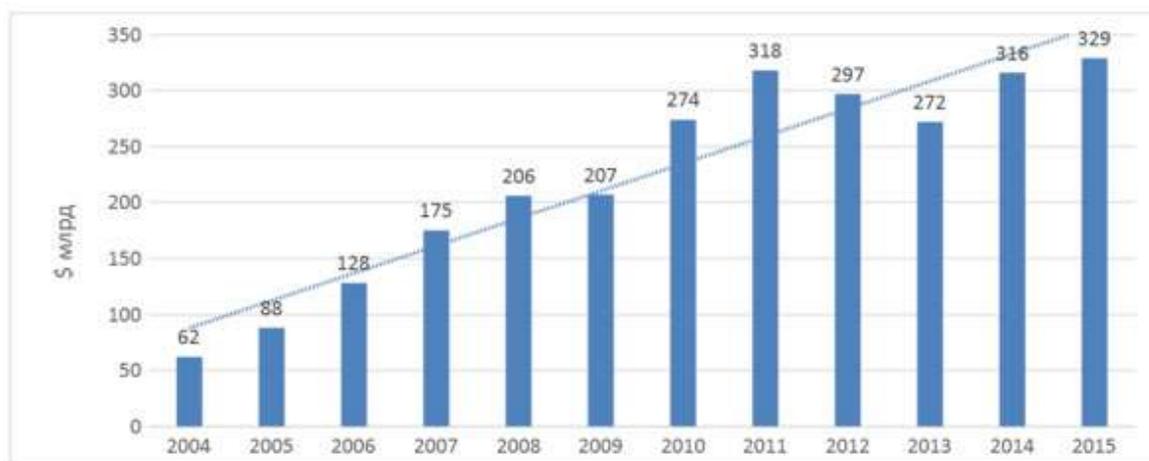


Figure 1 - Growth of investments in renewable energy sources in the world, billions of dollars [10]

The creation of a new science-intensive industry in the Russian Federation, by modernizing old generation capacities and replacing them with generating facilities operating on the basis of renewable energy sources, can become the main pivotal step at the beginning of a new innovative way of developing our country (see Table 1).

Table 1 - Economic medium-term potential of RES in the Russian Federation [10]

Name	Achieved potential 2005, billion kWh	Realized potential 2020, billion kWh	Additional medium-term potential, billion kWh
Small hydroelectric power plants	172.50	387.80	215.30
Wind farm on land	0.10	23,60	23.5

Offshore wind farm	-	2.10	2.10
Solar PV	-	0.70	0.70
Biomass	5.20	155.40	155.20
Biogas	-	27.30	27.30
Total	177.80	596.90	419.10

It should be noted that the energy produced with the help of renewable energy sources reduces the share of fossil fuels, which can be more efficiently used in other sectors of the economy [11].

In modern capitalist countries, the most famous sources of investment in generating capacities operating on the basis of renewable energy sources are:

- budget investments directly or indirectly through taxes;
- private investment, including funds from foreign investors;
- population by increasing the final tariff of consumers.

All of the above sources of financing for renewable energy sources are of little use in the current socio-economic situation of the Russian Federation. This is due to a lack of budgetary funds, low investment activity of domestic business, sanctions of Western countries and insufficiently high paying capacity of the population.

Despite this, in the modern world there are examples of alternative sources of financing for investment projects, including in the field of renewable energy.

So, for example, in China, the leader in recent years in terms of investments in renewable energy sources, settlements have been created - joint-stock companies, where the residents of these settlements are the shareholders. That is, the residents themselves at the meeting of shareholders decide where the profits of the enterprises will go. Taking into account the rate of socio-economic growth of this country, in the overwhelming majority of cases, profit comes in the form of investments in innovative modernization of production [12].

Considering the low efficiency of existing Russian enterprises and, consequently, the absence of a stable growth of industrial production adequate to

global trends, the transformation of private property into collective property, in our opinion, is an integral evolutionary component of the entry of the Russian Federation into a new stage of industrial development.

It should be noted that in Russia there are positive practices for the functioning of enterprises of this form of ownership. For example, in Lipetsk, Sverdlovsk, Volgograd, Ryazan regions, the republics of Kabardino-Balkaria, Tatarstan, Udmurtia, etc., enterprises with shared ownership of collective members are successfully operating in various sectors of the economy, that is, such joint-stock companies whose shares belong to their employees. In ordinary joint-stock companies, most of the profits are disposed of by the founder - the owner at his own discretion. And in collective joint-stock companies, profits are used to stimulate workers and modernize production, which is why they got the name - people's enterprises. People's enterprises have a higher social responsibility in contrast to ordinary enterprises [3].

The existing regional imbalances and differentiations in the Russian Federation hinder the socio-economic development of the country.

The presence of a competent scientifically grounded concept for the development of the domestic economy at the federal level and the strategies and programs for the development of regions and sectors of the economy, developed on its basis, coordinated among themselves in terms of goals and objectives, including for the sustainable development of problem areas, can bring the development of the Russian economy closer to world level [5,7,8].

Noting the priorities of the development of the Far Eastern regions declared by the Russian government and the search for optimal models and directions for the advanced socio-economic development of their territories, it will be interesting to consider, using the example of the Primorsky Territory, the most demanded in the world and the most socially and economically effective promising directions for the formation of a new stage of industrial development.

In the Far East, in particular in the Primorsky Territory, there is a huge potential for the use of natural wind resources in remote areas without central power supply, where it is economically unprofitable and unreliable [9].

These areas are inhabited by special groups of the population - the indigenous peoples of the Far East.

The Government of the Russian Federation is taking some measures to support the indigenous peoples of the Far East, aimed at improving their national, cultural and socio-economic development.

For example, the subprogram "Indigenous small-numbered peoples of the Russian Federation" of the state program of the Russian Federation "Implementation of the state nationality policy", approved by the decree of the Government of the Russian Federation from December 29, 2016 № 1532. According to the passport of this subprogram, its purpose is to preserve and protect the original habitat and traditional way of life of the indigenous peoples of the North, Siberia and the Far East of the Russian Federation [1].

Also, an Action Plan was created for the implementation in 2016-2025 of the Concept of Sustainable Development of the Indigenous Peoples of the North, Siberia and the Far East of the Russian Federation, which includes a set of measures aimed at preserving the original habitat, traditional way of life, modernizing economic activities and the entire social sphere (including the system of education, health care, culture) in places of traditional residence of the indigenous peoples of the North, Siberia and the Far East of the Russian Federation, approved by the order of the Government of the Russian Federation dated August 25, 2016 No. 1792-r [2].

Despite this, there are unresolved problems of modernizing social infrastructure and the availability of energy resources in the territories of traditional residence and economic activity of the indigenous peoples of the North, Siberia and the Far East of the Russian Federation.

Taking into account the falling living standards of a significant part of the population of the remote territories of Primorsky Krai, the constant outflow of the

population to cities, other regions and countries of the far abroad, the aspect of consolidation of the indigenous population of the municipalities of Primorsky Krai in their native territories seems to be important [7].

The introduction of the use of wind power plants (WPPs) instead of generating systems running on diesel fuel or gasoline can become one of the competitive advantages of the Primorsky Territory to attract investments and establish a new stage of industrial development for creating new and modernizing old industries. This will also have a multiplier effect for the development of the electrical industry in the region [5].

This implementation, in our opinion, should be carried out through the creation of people's enterprises with a full production cycle, commissioning and operation of wind turbines with the organizational and legal form of closed joint-stock companies of workers (CJSCs), where employees-shareholders will be people from the indigenous population of municipalities Primorsky Territory [3].

At the same time, the state, represented by the executive and legislative authorities of the Primorsky Territory, regulating the formation of a new stage of industrial development, should provide affordable loans to such enterprises and develop support measures for them, including in the form of subsidies from budgets of all levels.

The success of the implementation of any breakthrough project in the Russian Federation and in the territories of Primorsky Krai in particular can be guaranteed only through coordinated actions of the state, business, science and the population, taking into account the needs of all participants in this process [7, 8].

LIST OF USED SOURCES

1. Decree of the Government of the Russian Federation of December 29, 2016 No. 1532 "On approval of the state program of the Russian Federation" Implementation of the state ethnic policy ".

2. Order of the Government of the Russian Federation of August 25, 2016 No. 1792-r "On approval of the action plan for the implementation in 2016 - 2025 of the Concept of sustainable development of the indigenous peoples of the North, Siberia and the Far East of the Russian Federation."
3. Voronina E.V., Kovalenko I.N. People's enterprises: foreign experience and Russian realities //Scientific almanac2015. No. 2 (4). S. 15-21.
4. Grinberg R.S., Buzgalin A.V., Babkin K.A. Economy for man: socially oriented development based on progress in the real sector. Materials of the Moscow Economic Forum: Cultural Revolution; M .; 2014.
5. Glazyev S.Yu. Economy of the future. Does Russia Have a Chance ?: Book World; M .; 2017.
6. Orlenko L.P. Economy of Russia in the XXI century. From capitalism to socialism. Algorithm; Moscow; 2014.
7. Ostanin V.A., Konik L.N. New regional policy. Monograph. Vladivostok, Publishing house of VF RTA, 2008.
8. Ostanin V.A., Vasiliev V.V. Innovation in regional development. Monograph. Vladivostok, VF RTA Publishing House, 2007.
9. Sonina E.A. Investments in Renewable Energy // Young Scientist. 2015. No. 10. C. 800-806.
10. Kopylov A.E. RES Economy. 2nd edition, revised and enlarged, 2017
11. Lyubimova N.G., Petrovsky E.S. Energy Economics and Management: Master's Textbook; M. Yurayt Publishing House, 2017.
12. Chinese Village of Millionaires Huaxi: What is Behind the Luxury of the Village No. 1 of the Celestial Empire [Electronic resource] Access mode: <https://kulturologia.ru/blogs/101018/40829/> / Date of treatment 12/21/2018.