

The implementation of national projects and the development of the construction industry

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Abstract

Russia's "national projects", intend to provide large-scale investments in human development and improving the well-being of the country's citizens. The Russian government has published information on its website about all the 12 National Projects, which are going to be implemented up until late 2024.

He work on these projects is aimed at providing breakthrough scientific-technological and socio-economic development for Russia, increasing the standard of living, creating conditions and opportunities for personal fulfillment and unlocking every person's talent.

The largest number of goals, or almost 20%, constitutes measures on infrastructure development, particularly regional road networks.

To boost the construction sector, the government planned to extend the use of bank loans, not specifying the source of infrastructure mortgages.

Solving large-scale economic problems, the construction industry forms an order for the search for optimal technical, technological and organizational solutions that have a multiplier effect for the entire economy. However, the continuing technological backwardness, energy consumption, high consumption of materials, lack of comfort and poor quality of housing are constraints to the development of the industry and the economy. The construction industry requires quantitative and qualitative changes that contribute to a more effective solution to the problems of increasing the volume of housing construction, the implementation of large-scale infrastructure projects, opening up opportunities for the development of industrial and economic potential of the Russian Federation as a whole. In October 2018, the President of the Russian Federation approved a number of priority national projects aimed at improving the quality of life of the population [1]. National projects require a concentration of resources on a limited number of clearly defined priority areas and an increase in the responsibility of performers in the implementation of national tasks.

Priority national projects have become an important phenomenon in the life of the Russian Federation. In 2006, not only the institutions of federal, regional and local authorities, but also a significant part of society were involved in their implementation. The scale and diversity of national projects allow us to say that their idea goes far beyond individual, even very large state programs. We are talking about changes that affect and will affect the socio-economic, psychological, social and, ultimately, political development of the country.

Today, Russia is in the active phase of implementation of national projects. Basically, the development of national projects is based on the strategic objectives of the country until 2024, which include:

1. Ensuring sustainable natural growth of the Russian population.
2. Increase in life expectancy to 78 years (up to 80 years by 2030).
3. Ensuring sustainable growth of real incomes of citizens, as well as the growth of pensions above inflation.
4. Halving poverty in the Russian Federation.
5. Improvement of housing conditions for at least 5 million families annually.
6. Acceleration of technological development of Russia, increase in the number of organizations engaged in technological innovation, up to 50 percent of the total.
7. Ensuring accelerated implementation of digital technologies in the economy and social sphere.
8. Russia is among the 5 largest economies in the world, ensuring economic growth above the world, while maintaining macroeconomic stability, including inflation at a level not exceeding 4 %.

9. Creation of a high-performance export-oriented sector in the basic sectors of the economy, primarily in the manufacturing industry and agro-industrial complex, developing on the basis of modern technologies and provided with highly qualified personnel [2].

It is obvious that the implementation of these national goals depends more on the availability of modern, efficient infrastructure of the construction industry, since the work of all enterprises of the real sector of the economy depends on the availability and quality of infrastructure, such as roads, power plants, telecommunications networks, etc.

In general, the implementation of national projects related to the construction industry should be correlated with the trends in the development of this industry, as the construction industry is developing cyclically, in close relationship with the General trends of the world and national economy. As follows from the federal projects (Pic.1) , the main trends of the construction industry for the next 5 years are [3]:

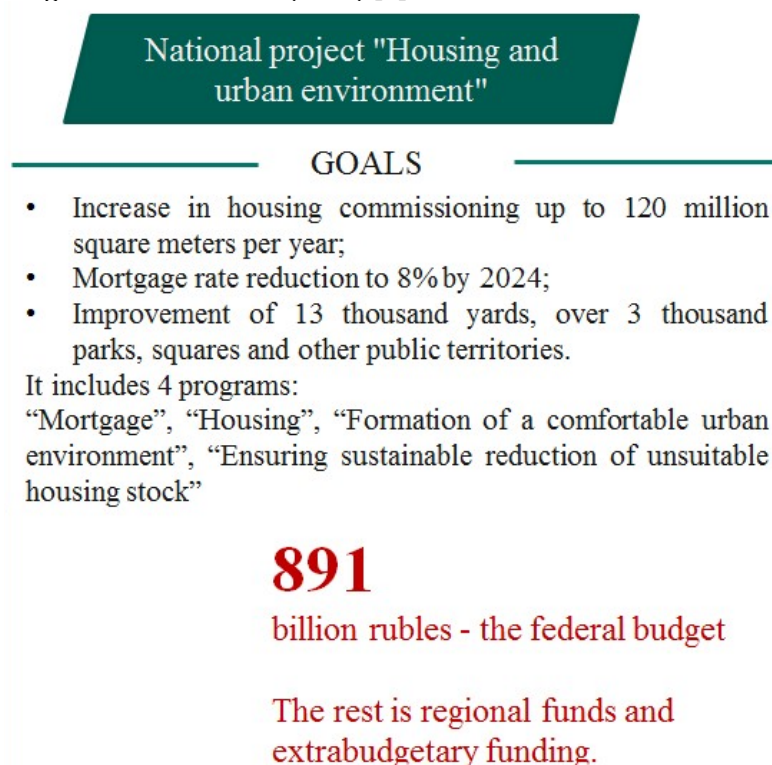
1. Modernization of the construction industry and improving the quality of industrial construction, through the introduction of innovative technologies;
2. Implementation of information modeling technologies in spatial, territorial planning, settlement planning and for all stages of the life cycle of buildings and structures(Bim-technologies);
3. Reduction of the share of dilapidated and dilapidated housing;
4. Implementation by states of harmonized international standards of "sustainable development" in construction, including standards:
 - «green» building
 - efficient construction
 - accessible environment
 - quality of life
 - smart cities, houses
5. Development of international cooperation and joint development of construction technologies and materials.



Pic.1. scheme of national projects of Russia.

In the coming years, it is planned to allocate 25.7 trillion rubles for the implementation of national projects. About 50% of these funds will go to the implementation of two large-scale national projects "Safe and high-quality roads" and "Housing and urban environment" [4]. Consider in detail the targets of these projects and their impact on the achievement of strategic objectives of the construction industry.

The national project "Safe and high-quality roads" will be implemented from 2018 to 2024 inclusive. The scale of the national project "Safe and high-quality roads" covers almost the entire country, 83 constituent entities of the Russian Federation take part in it. The summary tables of the project collected a huge array of figures and indicators (Pic.2) [5].



Pic. 2. Indicators of the national project "Safe and quality roads».

But the most important thing is that the program under consideration contains a large number of activities aimed at significantly improving the infrastructure of the transport network [6]. The document focuses not so much on the repair as on the reconstruction of the road network both within the city limits of regional and regional centers and their suburban part in the area of urban agglomeration.

In general, during the project implementation period, one of the main results of the complex of measures should be bringing 85% of the road network of agglomerations to the normative state, as well as 50 % reduction in the number of places of concentration of road accidents [7]

Within the framework of the project it is extremely important to transform not only the approach to work, but also the attitude of people to the roads. This will be achieved through two key factors: optimization of financing mechanisms and regulation of road construction companies and full immersion of the public in the processes of planning, control and post-control of road repairs. Residents of the regions should become full participants in the development of road infrastructure, because the main goal of the national project is to improve the quality of life of the population [8]. In addition, the coordinated work of the Federal center and regional project groups is important, which will ensure the effectiveness of the national project "Safe and high-quality roads".

Another national project "Housing and urban environment" aims to radically improve the living conditions of citizens of the Novosibirsk region. This national project includes four Federal projects: "Mortgage", "Housing", "Formation of a comfortable urban environment", "Ensuring sustainable reduction of the housing stock unsuitable for living" (Pic.3.) [9].

National project "Safe and high-quality roads"

GOALS

- An increase in the share of regional roads, in their total length, by at least 50%;
- Decrease in the share of congested roads of federal and regional significance in their total length by 10%;
- Reduction in mortality in road accidents by 3.5 times compared to 2017.

It includes 4 programs:

"Road network"; "System-wide measures for the development of the road economy"; "Road safety"; "Roads of the Ministry of Defense of Russia."

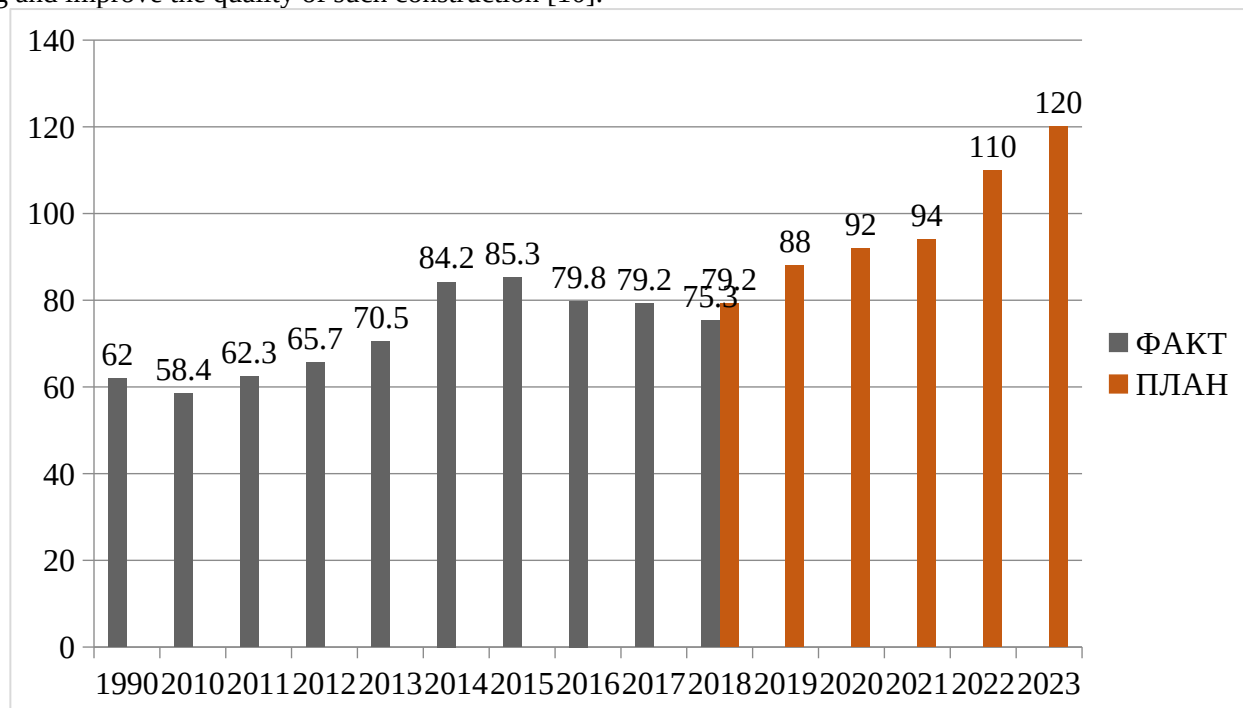
**3,1 trillion rubles -
regional budgets**

**1,5 trillion rubles -
the federal budget**

Pic. 3. Indicators of the national project "Housing and urban environment».

Within the framework of the national project, the tasks of providing the population with affordable housing, effective use of land for mass housing construction, reducing the administrative burden on developers, improving the regulatory framework and regulation of activities in the field of housing construction, modernization of the construction industry and improving the quality of industrial housing construction, creating conditions for comfortable living of citizens within the boundaries of territories providing for housing construction will be solved.

To implement the national project, it is necessary to ensure an annual increase in the volume of housing commissioning and by 2024 to reach the level of 120 million square meters per year (Pic.4.). The national project aims to increase the share of industrial housing construction in the total volume of housing and improve the quality of such construction [10].



Pic. 4. The volume of housing construction (million square meters).

It is worth noting that June 2019 Ministries of construction, it was decided to make adjustments in relation to the starting of the indicators, namely the volume of housing construction in 2018, which amounted to 75,3 million sq. m. at the plan in the national project at 79.2 million sq. m. the adjustment also turned up plans for new housing from 2019 to 2021, which to date are 72,26 million sq. m., million 75,53 million sq. m. and 79,89 million sq. m., respectively [11]. The overall decline is largely due to a decrease in effective demand for housing as a result of the high mortgage lending rate, which averages 10.25% in Russia. However, if you refer to the passport of the national project "Mortgage" rate should be 8.9%. In this regard, it is necessary to work out measures to stimulate mortgage lending, namely, to consider the provision of mortgage holidays for persons who purchase housing under construction using the new escrow account mechanism, to develop a mechanism of housing savings deposits, which would allow the population to form an initial contribution for a mortgage loan and to consider the expansion of preferential categories of citizens eligible for a mortgage with reduced rates.

Based on the indicators of the construction industry in 2018, it should be concluded that only the constant modernization of existing production facilities, improving the quality of industrial housing construction, optimization of price policy by manufacturers of construction materials will support the further successful development of the industry. In addition, the introduction of innovation as a driver for the development of the construction industry, the development of human resources for the development of high-performance jobs are necessary components of success.

The achievement of the goals and objectives of the national project can be achieved through the implementation of measures for the development of the mortgage market (attracting citizens' funds), attracting investors and increasing the investment attractiveness of the construction industry, in particular in creating favorable conditions for investors; the development of the construction industry, including meeting the needs of the market and providing quality construction materials; strengthening the social unit – ensuring a comfortable living environment.

The most important task of the national project "Housing and urban environment" is not just to increase the volume of housing construction, but also, first of all, to ensure safety, efficiency and improve the quality of housing construction, including through:

1. restrictions on the use of obsolete technologies;
2. stimulating the introduction of advanced technologies in design and construction, creation of a single industry information knowledge base, including the best available and promising technologies;
4. application of state support mechanisms both for the construction of standard multi-apartment housing and low-rise housing;
5. sustainable reduction in uninhabitable housing;
6. encouraging consumers to purchase high-quality, energy-efficient and comfortable housing;
7. digitalization of urban planning and construction industry;
8. training of specialists of the construction industry through the creation of independent assessment of qualification in the direction of training in the field of construction and outcome of the independent assessment of qualification for inclusion in the national register of experts in the field of construction.

In order to ensure the implementation of the targets of the national project "Housing and urban environment", it is necessary to supplement this national project with a number of programs:

1. "Low-rise housing construction»;
2. "Fold increase of the volumes of capital repairs of apartment buildings»;
3. "The safety and effectiveness of housing construction»;
4. "Involvement of young people in the processes of housing construction and the formation of a comfortable urban environment."

For each of the above programmes, appropriate targets, criteria and means of achieving the goals should be established, followed by approval road maps of their implementation and control by the relevant Federal Executive authorities and professional associations.

Another important issue is the synchronization of the national project "Housing and urban environment" with the implementation of the program "Digital economy of the Russian Federation" and other programs by setting targets that characterize the digitalization of the construction industry, bringing advanced technologies in the field of housing directly to citizens.

In order to effectively implement the national projects of the construction industry, it is proposed to divide the main areas that are directly involved in national projects and to determine the priority tasks for the selected areas [12] (table. 1).

Table 1. Priority tasks of the main directions of national projects.

The trend in the construction	Task
housing construction	<ul style="list-style-type: none"> – ensuring further growth of volumes of housing construction, due to the increase in consumer qualities and availability of acquisition of housing for citizens; – demonopolization of financial intermediaries, through the formation of the institution of responsible owners, including, inter alia, closed funds of apartment houses; – expanding the practice of integrated development of the territory, including low-rise buildings; – improving energy efficiency of housing, transition to a new level of industrial housing construction and the use of standard projects; – the formation of a civilized market of rental housing, including municipal housing; – creating conditions for innovation and productivity[13].
city building	<p>formation of the state town-planning policy taking into account the territorial settlement of Russia, based on</p> <p>the interests of the state and the needs of the population as the main investor of housing construction, including through the development and improvement of urban legislation and regulatory support of urban development</p>
infrastructure and industrial construction	<ul style="list-style-type: none"> – use of cluster approach (industrial parks, sites, special economic zones); – renewal of transport communications and engineering systems, their intensive restoration and reproduction on the basis of the development and implementation of effective social, scientific and technical programs and projects at the Federal and regional levels; – reduction of material, energy and construction costs, including through the modernization of the construction industry in the direction of energy, resource saving and quality improvement
industry of building materials, products and structures, construction machines and mechanisms	<ul style="list-style-type: none"> – accelerated modernization of fixed assets of enterprises; – import substitution, reduction of the share of mineral raw materials and its replacement with industrial waste; – achievement of economically reasonable level of self-sufficiency of subjects of the Russian Federation in production of construction materials and designs; improvement of normative legal and normative technical base providing production and introduction of innovative materials and technologies[14]; – development and application of state enforcement measures for enterprises that do not meet the requirements of energy and resource consumption, environmental safety and measures of state economic incentives in the implementation of innovations in industry.
technical regulation	<p>improvement of the regulatory and technical base in the field of design, construction and</p> <p>standardization, providing for the unconditional preservation of the necessary level of safety in construction, the formation of a complete system of mutually agreed and harmonized with international (first turn European) regulatory and technical documents in the field of construction, ensuring the implementation of innovations</p>
public administration and self-regulation	<ul style="list-style-type: none"> – further reduction of administrative barriers and increase of information openness of public authorities and local self-government in the field of construction; – optimization of the process of providing public services; gradual transfer of a number of powers from the state to the professional community; – translation on self-regulation and construction supervision,

	<p>examination, organizations engaged in comprehensive low-rise buildings, building owners;</p> <p>– formation of a system of certification of specialists and their admission to the market within the Institute of self-regulation.</p>
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Thus, the implementation of national projects in the construction sector in the long term should ensure:

1. qualitative updating of the production apparatus of the national economy;
2. changes in the nature, types, structure, level of price characteristics of housing and objects of social and cultural sphere[15];
3. taking into account the differentiation of effective demand of the population, investment abilities of enterprises and organizations of various forms of ownership;
4. the possibility of developing and implementing new architectural and urban concepts, including reconstructive changes in historical and architectural centers, transport services, the formation of suburban areas, including cottage construction, etc.;
5. implementation of a qualitatively new concept of regional development taking into account their economic, social, foreign economic, scientific and technical aspects and interregional situation;
6. creation, development and dissemination of innovations in the technological basis and sectors of the national economy;
7. reduction of construction time, etc

In the process of transformation of investment and construction activities in Russia will need to qualitatively change the industry, product, technological and economic proportions and ratios, structure and quality of personnel, to create almost anew the construction science and develop the design sphere, improve inter-industry, interregional and interstate relations[16]. A special place in this process should be taken by the justification, development and final implementation of relevant and effective investment and innovation projects, on the basis of national programs aimed at consumers of their products, the development of targeted programs in the relevant segments of the contract market and its service industries and industries, designed to play the role of the leading links in the overall chain of restructuring of the national economy.

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