

There are 4 stages in the construction process: 1) preparation of construction (technical and economic. 1 researches of the reasonability of the construction of the object, design, engineering and technical preparation for construction); 2) the actual construction (connection of all technological elements of the construction process, as a result of the functioning of which construction products are created); 3) sale of construction products (commissioning of the finished construction object); 4) operation of construction object. The economics of construction considers the problems of planning and forecasting, the economic efficiency of design solutions, innovative solutions in construction production, as well as issues of pricing, logistics, financing and lending, accounting, reporting, analysis and diagnostics of production and economic activities, technical and production rationing, management organization, etc. The products of construction are completed and put into operation objects, railways and highways, power plants, irrigation and shipping channels, ports, apartment buildings and other objects forming the fixed assets of the economic complex of the state. In the process of design and construction of buildings are regularly involved such participants as: – investor; – operation manager; – company of engineering surveys; – designer; – construction companies and so on. In addition to these direct participants in the construction process, suppliers (such as manufacturers of machinery and equipment, building materials, etc.) are also involved in the creation of construction products. On the one hand, the economics of construction is closely related to scientific disciplines that study the economic laws of social production, distribution, exchange and consumption of material goods at various stages of its development, and on the other hand, it is based on the achievements of special scientific disciplines (Technology and organization of construction production, Building structures, Architecture, etc.). The complexity of studying the economic aspects of capital construction lies in the variety of organizational and economic forms of the construction production process, a large number of participants with different functional goals and objectives, a significant dependence of the construction production process on nature conditions. Construction conditions are largely determined by seismic conditions, terrain, geological structure of the soil, the presence of groundwater, the method of delivery of structures and materials to the construction site. The technology of construction production requires strict consistency in the execution of its individual processes – the end of one workflow precedes the beginning of another. In this regard, along with the construction of these objects, roads, water supply systems, energy supply, heating networks, schools, markets, culture and consumer services facilities should be built too. In construction, workplaces and construction machines, mechanisms, equipment, technical and technological equipment of staff are mobile, and products are stationary. 3) The instability of the proportion of construction and installation works according to their complexity and types during a certain period, which makes it difficult to calculate the number and professionally qualified composition of the staff. The increase in the speed of construction depends on the development of industries that provide its technical equipment: machinery, materials, structures, electricity, etc. In spite of the elimination of seasonality in construction, negative temperatures require the implementation of measures to ensure the construction of objects in winter conditions. The construction of industrial objects is characterized by their concentration on the reserved territory and the complexity of the objects being constructed.

THE ROLE AND PLACE OF CONSTRUCTION IN ECONOMY OF THE STATE

The economics of industrial and civil construction is a

branch of science that explores the forms of demonstration of general economic laws in construction. The main goal of construction as an industry is the timely provision of basic production funds for all branches of the economic complex with minimal costs and appropriate quality. In Russia, there is an All-Russian classifier of economic activities for this purpose, which contains certain codes. Construction is a separate independent branch of economy of the state, which is intended for the building of new, as well as reconstruction, expansion, repair and technical re-equipment of existing production and non-production objects. The excessive duration of construction and further improvement of technological progress lead to a revision of previously made decisions on the progress of construction, taking into account the use of new equipment and technology of work. In industrial production, with any degree of cooperation, the final products are produced by one manufacturer, which sells these products. Several construction and installation organizations (general contracting and subcontracting organizations) participate in the construction of objects at the same time. At general, engineering, technical or organizational solution is considered first of all from the point of view of its economic reasonability. Subcontractors transmit the completed works to the general contracting organization, and then the general contracting organization transmit the constructed object to the customer. In this regard, correction coefficients are introduced for the main construction, installation and repair and construction works, which allow taking into account the conditions of work. Mistakes with the requirements of the construction of these objects leads to a violation of sanitary and urban planning standards. In terms of the volume of products produced and the number of human resources employed, the construction industry accounts for about 10% of the country's economy. Optimization of design, organizational, management processes and financial decisions is the core of the construction economy. For example, such a need presents when solving tasks of transportation and storage of construction materials. In industry, as usual, products are mobile, and workplaces are spatially fixed. 2) Technological interconnection of all operations included in the construction process. Organizations engaged in the construction of relatively long-term objects are less affected by the relocation of tools of production. The construction of civil objects is characterized by strict keeping of the sequence and order of complex development. Each of them, participating in the construction process, strives to maximize its own profit. 4) Involvement of a large number of organizations in the construction of objects. The general contracting organization, on the one hand, contracting with the customer for the construction of the object, and on the other hand, attracts subcontractors to perform certain works with which it contracting too. Construction is closely connected with all sectors of the economy, especially industry. The part of material costs in the estimated cost of construction projects, depending on their type and purpose, is 50–70%. Construction workers are more exposed to climatic conditions than workers in other industries. 5) Construction is a material-need .industry