Some aspects of construction industry development in 2018

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Abstract. The construction industry, despite the economic difficulties, has long been one of the most stable and dynamic sectors in the Russian economy. Being one of the main sectors of the economy of each country, the construction industry performs the main task - the introduction of new, reconstruction of old objects, both residential and commercial purpose. The development of the construction industry is among the most important tasks of the government of all countries. Analysis of the economic situation in the construction industry can identify problems and identify areas of development of the construction industry. The article describes the indicators reflecting the efficiency of the industry in Russia and in the Irkutsk region. The construction industry is suffering from a skills shortage, slim margins and low productivity, but help is at hand in the form of new technologies and innovative materials. Measures aimed at supporting the development of the construction industry by minimizing the existing problem areas are proposed. The author think the construction industry should not be overlooked in this day and age. It is necessary to develop a "road map" for the development of the construction industry in the coming years, which will determine the priorities and main directions of the state regional policy in the construction sector, tasks, activities and development targets.

1. Introduction
The construction industry in Russia is a complex mechanism, on the integrity and efficiency of which depends the economic well-being and the level of development of the country as a whole, the quality and well-being of every citizen. A quarter of all state investments are directed to this sphere, so it is important to assess the state of the construction complex of Russia as a whole and separately in each region. Based on the generalized opinions of the heads of construction organizations and official quantitative data of Russian Statistics Committee, the construction industry is the most problematic and unpredictable among all eight basic sectors of the economy. Today, the industry is going through one of the most difficult periods in its history [1]. In order to understand the reasons why the construction industry is again experiencing a decline and how deep it will be, it is necessary to conduct a comprehensive study of the industry, affecting all its segments.

2. Analysis of main indicators
For the construction industry, 2018 marked the beginning of a period of global change. Resolutions adopted at the legislative level led to the restructuring of the industry, reducing the number of participants in the market and improving the quality of services, which affected the dynamics of statistical indicators (Table 1). In 2018, the country introduced 75.33 million square meters of total housing area, which is 95.1% of the same period in 2017 [2].
Table 1. The structure of the volume of construction works in Russia on FD, %.

| Federal district               | Of housing commissioned in 2018, mln sq m | In % relative to 2017 | Of these, individual housing, mln sq m |
|-------------------------------|------------------------------------------|----------------------|---------------------------------------|
| Central Federal district      | 23,33                                    | 96,1                 | 9,96                                  |
| North-Western Federal district| 9,45                                     | 105,4                | 2,33                                  |
| Southern Federal district     | 8,97                                     | 93,3                 | 4,09                                  |
| North-Caucasus Federal district| 3,42                                     | 67,3                 | 2,16                                  |
| Volga Federal district        | 15,15                                    | 96,9                 | 7,7                                   |
| Urals Federal district        | 5,9                                      | 93,9                 | 2,27                                  |
| Siberian Federal district     | 6,6                                      | 97,4                 | 2,8                                   |
| Far Eastern Federal district  | 2,23                                     | 89                   | 0,96                                  |
| Moscow                        | 3,54                                     | 103,6                | 0,22                                  |
| St. Petersburg                | 3,95                                     | 111,7                | 0,31                                  |

The leading position in terms of the volume of construction works in 2018 is maintained by the Moscow region. In turn, the decline in housing construction was recorded in most Federal districts.

Let us consider in more detail the indicators of the construction industry in SFD (Figure 1).

Figure 1. The volumes of construction work in the SFD in 2018, thds sq m.

Krasnoyarsk region in 2018 was more successful in terms of construction work ahead of other regions of the SFD, which is caused by the preparation for the Universiade 2018. In turn, in comparison with 2017, the most significant and successful construction industry is developing in the Republic of Altai — an increase of 33% [3]. In all other regions, there was a decrease in the volume of construction. The worst result was recorded in the Irkutsk region — a decrease of 29.8%.
Due to the observed maximum volume of construction work due to the seasonality factor, the fourth quarter of 2018 had the greatest impact on the overall annual performance [4]. Nevertheless, the analysis showed that the volume of construction works performed decreased by almost a third compared to the previous year (Figure 3).

As shown in the diagram (Figure 4), there was a significant reduction in the introduction of apartment building at the results of 2018 by 257.7 thds sq m, which is 39.6% compared with the introduction in 2017 [5].

In turn, there was a significant increase in the commissioning of individual housing facilities in 2018 – 589.2 thds sq m, which is 165% of the plan. In comparison with 2017, the growth was 182.3%. The growth of commissioning of individual housing units has been observed since 2016. Annually, the difference between the signed agreements of municipalities and the Ministry of construction of Russia at the end of the year is from 1.5 to 25-30 times [6]. Based on this, the Ministry of Construction of Russia together with municipalities in the shortest possible time it is necessary to systematically
develop a strategy and an appropriate program at the government level for the construction of individual housing. This kind of program should include the construction of houses of employees of the budgetary sphere of the region using the potential of the forest complex of the region.

![Plan and fact of individual and apartment buildings housing.](image)

**Figure 4.** Plan and fact of individual and apartment buildings housing.

Considering the planned indicators for the commissioning of new housing in the Irkutsk region for 2018, it was noted that in 2018 the commissioning of residential buildings was planned in 41 municipalities of the Irkutsk region. According to the results of 2018, in fact, the planned indicators were met in 24 municipalities. 17 municipalities of the Irkutsk region did not cope with the task, the largest of them: Irkutsk, Angarsk city municipalities, Bratsk, Sayansk, Shelekhov district [7].

3. **Reasoning**

If the state of housing construction in the Irkutsk region can be estimated as generally stable with slight decreasing indicators, the assessment of the commissioning of social and cultural facilities is significantly worse. In 2018, 27 social facilities were planned to be commissioned in the Irkutsk region [8]. The dynamics of indicators characterizing the state of construction of social and cultural facilities in the Irkutsk region in 2018 has a negative trend. So for the analyzed period the actual execution of the program was - 24%. Such socially significant objects as: children's polyclinic in Irkutsk; Special (correctional) school in Ust-Uda and 17 medical And obstetric points in municipalities of Irkutsk region are not put into operation. It is important to note that the role of the customer for all social facilities was performed by JSC "Capital Construction Management of the city of Irkutsk" (CCM) [9]. The main reason for failure to meet the targets is the lack of a proper level of
painsstaking support of the construction process. The Ministry of construction of the Irkutsk region and the management of CCM need to provide control and exactingness on the part of the customer on all construction projects, by means of monthly tracking of execution of plans.

4. Proposals to be made
The dynamics of indicators of the construction industry of the Irkutsk region is unstable, in order to prevent such a situation in 2019, it is necessary to analyze the unfulfilled plans.

The main reason for the failure of the planned indicators for the construction of apartment buildings is not stable financing of the construction process, caused by a number of factors, namely:
1. passing of the state ecological expertise of design documentation of practically all construction objects of the Irkutsk region [10];
2. application of FL-214, FL-175, FL-218 in the construction market in modern conditions;
3. adoption of the RF Government Resolution No. 570 of 15.05.2017, according to which General contractors who have concluded state Contracts for the construction of facilities are obliged to perform 25% of the contract value on their own [11];
4. significant unjustified increase in the cost of basic building materials;
5. unresolved fully land issues, problems of road, engineering and social infrastructure.

5. Conclusion
The activity of most of the large enterprises in preparation for the construction of new facilities in 2019 will decline, due to the lack of certainty in the structural, managerial and institutional processes [12]. It is important to note that the main drivers of the market in 2019 will continue to be housing renovation programs, housing construction, major sporting events and developing agriculture in the implementation of state support programs.

However, to ensure economic and social efficiency, it is necessary to combine the efforts of government and business for the preservation and long-term development of the construction complex. It is necessary to develop a "road map" for the development of the construction industry in the coming years, which will determine the priorities and main directions of the state regional policy in the construction sector, tasks, activities and development targets.

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