УДК 338.242.4

# Long-Term Strategy for Socio-Economic Development of the City of Krasnoyarsk

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Received 19.08.2016, received in revised form 21.09.2016, accepted 30.10.2016

The purpose of this research is to develop methodical approaches to the long-term strategy of socioeconomic development of the city. The article considers the main approaches to working out the strategy of Krasnoyarsk development until 2030 and analyzes possible scenarios of its development. The most realistic scenario of Krasnoyarsk development until 2030 is elaborated. The article determines the strategic purpose, mission and priorities of socio-economic development of the city. The image of future Krasnoyarsk is developed on the basis of the "SmartCity" concept. The article suggests the main actions for realization of the long-term strategy.

Keywords: Krasnoyarsk, strategy, scenario, priorities, the image of the future city.

DOI: 10.17516/1997-1370-2016-9-11-2786-2791.

#### Research area: economics.

The main objective of developing a longterm strategy is to define priorities and objectives of the socio-economic development of the city for the long period (in our case until 2030). Choosing a scenario of the socio-economic development of the city gives the answer to the question of the key priorities and policy trends for the middle (up to 2020) and long (up to 2030) terms. Basing on the developed scenario, the proposals on the main trends, priorities, objectives and mechanisms of the city development are elaborated.

Currently, the sustainable development of Krasnoyarsk as the territory (regional) capital isensuredby the following competitive advantages: 1. The city of Krasnoyarsk has a convenient and strategic geopolitical location.

2. Krasnoyarsk has developed the industrial potential with the great economic value.

3. Krasnoyarsk is a major scientific and educational centre.

4. Krasnoyarsk is the centreof highly efficient medical services.

5. Krasnoyarsk is a significant cultural and historical centre.

6. Krasnoyarsk is one of the leading sport centres in Siberia and Russia.

7. Krasnoyarsk is the "heart" of the Krasnoyarsk agglomeration.

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However, in the changing economic conditions it is not enough. A scenario of a more active development of the city should be suggested basing on the change of priorities of the socioeconomic development; a scenario enhancing the competitive advantages of the city as compared to other regional capitals.

Basing on the analysis of external and internal factors, we have considered three possible scenarios of the citydevelopment, for each of which the forecast of the socio-economic development has been proposed until 2030.

*The "business-as-usual" scenario.* The basic characteristics of the business-as-usual scenario is to keep the main trends thathad been developed in the past decades with partial modernization of some mechanisms ensuring the existing competitive advantages of Krasnoyarsk.

This scenario does not imply radical changes in the structure of the city economy. We believe that Krasnoyarsk traditional industrieswill develop: manufacturing, construction, wholesale and retail trade, real estate transactions and services in transport and communications. As a result, the scope of shipped goods of own production in the field of industry, utilities and construction for the period 2014-2030 will increase by 24%, the real wage growth will recover only after 2020, tax revenue will increase by 48% and will not be able to provide the deficit-free city budget. Extensive expansion of the economy at the expense of traditional sectors will increase the demand for only low-skilled labour.

According to this data, the "business-asusual" scenario does not lead to a qualitative change in the city environment, better quality of life and enhancement of the competitive position of the city. At the same time, the poor quality of the city environment will continue to impede the improvement of professional and qualification structure of employment. There will be a strong differentiation in incomes and quality of life. Unreasonably high levels of inequality will contribute to the increasing social tension and will complicate the formation of the middle class. The low efficiency of the territory use, the lack of investment in the infrastructure will lead to the further increase of the load on the city environment, increasing the risk of man-made disasters, the growth of transport and logistics costs of enterprises and, ultimately, poor business and investment climate in Krasnoyarsk.

If the current trends in the development of the Krasnoyarsk economy until 2030 continue, there will be no significant increase in living standards, business conditions and the overall economic situation will worsen, which will lead to the loss of the main competitive advantages of the city of Krasnoyarsk. This means that this scenario cannot be considered as aversion of Krasnoyarsk long-term development strategy until 2030.

*The baseline scenario.* This scenario assumes that changes should be made to improve the quality of the city environment, and the economic policy of the city will focus on sectors and clusters which can become "engines of development" for the entire municipal economy, there will be significant improvement in the business climate of the city.

It is expected that the development of the economy in terms of this scenario will occur in the following areas:

• there will be new businesses in such fields as machine engineering, food and consumer goods industry, construction materials, oil and gas service. This will occur mainly due to activization of small and medium-size businesses, which will occupy new niches of business;

• due to the growth in domestic demand, textile and clothing industry, manufacture of leather and leather products, wood processing and manufacture of wood products will be the most rapidly developing industries (production volumes will grow by 4.5 - 6 times); • the growth rate in the construction industry will increase;

• the development of education and healthcare will increase.

This scenario will be possible only if the city policy will be strengthened in the following areas:

• reorientation of economic and industrial policy on the high-tech clusters.

• support such activities (sectors), which have a significant direct and indirect impact on the quality of human capital, namely: general and vocational education, healthcare, culture, cultural and business tourism, sport.

• implementation of a comprehensive set of measures aimed at improving the quality of the city infrastructure and improvement of the spatial organization of the city.

Moreover, thenewcitypolicyshouldbeimple mentedstep-by-step.

At the first stage (until 2025) the priorities for the city policy should be: improving the quality of municipal services of the city; the solution of the transport problems; the increase of personal safety of the population. The second stage (up to 2030) includes the set of measures aimed at changing the spatial and territorial organization (creation of the business City, development the agglomeration, implementation of the "Smart City" concept).

The baseline scenario assumes that the technocratic relation to the city as a place for income generation will be rejected, and hopes will be put on the improvement of the environmentquality, the level of the city population living and increasing of the share of technologically advanced sectors in the economy of the city.

The implementation of the baseline scenario meets the basic requirements of the long-term development strategy for the period up to 2030.

However, this scenario does not use the full potential of economic development of the city of

Krasnoyarsk. Therefore, let us consider a scenario of maximum utilization of production, labour, investment, scientific and educational potential of the city of Krasnoyarsk.

The optimistic scenario is based on the maximum possible use of the city's development potential by means of effective involvement of scientific, educational, innovation and investment resources, as well as its balanced production and territorial development. According to this scenario, the city of Krasnovarsk will maintain high competitiveness and investment attractiveness. As a result, even after the Universiade in 2019 the significant investment growth rateswill be maintainedincluding the renewal of the fixed capital (not less than 3.5% per year). As a result, already by 2025 the proportion of out-of-date basic production assets in major industries will not exceed 40% and reach 36.5 percent by the end of 2030.

According to the optimistic scenario, the structure of the gross municipal product will change. Thus, if before 2020 mainly"traditional" sectors of industry and services sector (manufacturing, construction, trade) will contribute to its formation, the share of services sector will grow considerably after 2020. At the same time, along with the expansion of activities in the field of education and healthcare, such sectors as tourism, sports, oil and gas services will develop actively. This will lead to the fact that, while maintaining the proportion of the average number of employees almost at the level of 2014, the share of the services field in the creation of the gross value added will increase.

Investment attractiveness and high competitiveness of the city economy will lead to an increase in the activity of small and mediumsize businesses, including the manufacture of high added valueproducts. The share of small and medium-size businesses in the production of high-tech products will be 34.8 percent in 2030. The implementation of both baseline and optimistic scenarios requires about 3 trillion RUB, and large-scale organization arrangements.

Therefore, in order to transfer from the business-as-usual scenario of Krasnoyarsk development to the baseline scenario the following measures should be taken:

1. Restructuring of the economy through the development of enterprises focused on the development of products with high added value. For these purposesit is necessary to restore the production of food, consumer goods industry and mechanical engineering sector, to establish enterprises forproviding services to the petrochemical and gas industry, to increase the production of construction materials, chemical and petrochemical products.

2. Creation offavourable conditions for the development of small and medium-size businesses. Development of a set of measures providing infrastructure, financial and legal assistance to small and medium-size businesses.

3. Development of a programme to improve the investment climate. The increase of investments forjoint projects implemented by private investors and funds of municipal, regional and federal budgets. Creation of a pledge fund providing guarantees for domestic and foreign investors.

4. Enhancement of agglomeration processes which will create a common transport, energy and infrastructure systems and therefore, creation of the synergetic effect of Krasnoyarsk development.

In order to transfer from the baseline scenario to the optimistic scenario of Krasnoyarsk development until 2030 it is necessary:

1. To introduce the new criteria of the quality of life based on the "Smart City" concept.

2. To provide conditions for the development of small and medium-size businesses in the fields

focused on the development of human capital (education, healthcare, culture, sports, tourism, etc.).

3. To develop a programme for the development of the city of Krasnoyarsk as an interregional industrial, scientific, business and sports centre of Siberia.

4. To orient the industrial development on the establishment of high-tech clusters which have competitive advantages at both domestic and foreign markets.

5. To strengthen processes of the city ecologization by means of gasification of heating, tightening of the control over enterprises with harmful emissions, encouragement to use environmentally friendly innovative production technologies.

On the basis of the baseline and optimistic scenarios, the mission and strategic goal of the city of Krasnoyarsk have been developed for the long term.

Mission: the capital on the banks of the Yenisei river, the city for comfortable life with the developed innovative and industrial, scientific and educational, cultural and sporting potential. Krasnoyarsk is the city of the high quality of life and favourable business climate.

The strategic goal of the socio-economic development of the city of Krasnoyarsk is the development of the high quality of life through the development of industrial and technological base, human, innovative and educational potential.

Implementation of the strategic goal of the city development during the long termdetermines the image of the future city. As a new model of developmentit is proposed to implement the "Smart City" model, which, in our opinion, should include the following concepts:

1. A "comfortable" city with a developed healthcare system, transport, housing and communal services, trade and public catering; social infrastructure facilities are within a walking distance; there areno dense urban areas; there are conditions for recreation, sports and healthy lifestyle.

2. "A city of highly educated people" with a developed education system at all levels ensuring the high level of human capital; there are manyinstitutions of culture,art and creative human development.

3. A "safe" city where the environmental problems of enterprises polluting the air, soil and water are resolved; crime level is low; there are no conditions for the emergence of man-made disasters.

4. A "green" city with park recreation areas; the problem of recycling of household and industrial wastes is solved; there is no problem of "urban noise" for residential areas.

5. An "energy efficient" citywith a new system of energy and resources

preservation in the field of the urban complex of lifebasedoninnovativetechnologies and providing significant cost savings.

6. "A city of efficient management" aimed at creating favourable conditions for the population. This means the creation of a unified information centrefor themanagement of all city subsystems ensuring timely necessary decisions on the basis of innovative IT-technologies.

This determines the strategic priorities of Krasnoyarsk development for the period up to 2030 (see Fig. 1).

As a result of determining the methodological approaches to the formation of the long-term strategy of the socio-economic development of a large city (on an example of Krasnoyarsk), the following conclusions have been made:

1. The strategy of the socio-economic development of the city should be based on the

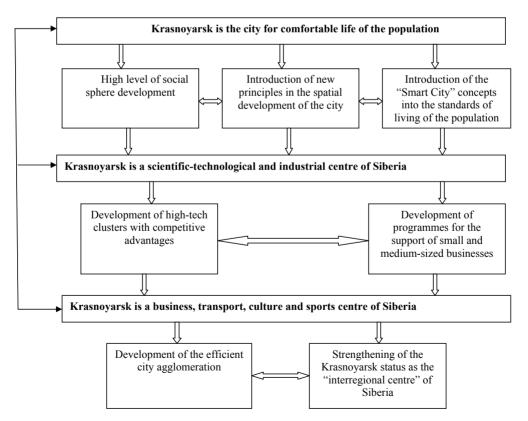


Fig. 1. Implementation of the priorities in the socio-economic development of the city of Krasnoyarsk until 2030

scenario approach considering various (including negative) factors and conditions of the external and internal environment.

2. The selection of the realistic scenario for the city development is determined basing on the resources necessary for its implementation and objectives of long-term development of the city.

3. The implementation of the long-term strategy of the socio-economic development

determines the new model of the city development. For the city of Krasnoyarsk, this model is its development as the "Smart City".

4. Elaboration of the new model of the city development is possible in case of implementing the priorities of the socio-economic development based on the gradual change of the city environment, spatial development, the transition of the economy to the high technology, changes in the quality of human capital.

## Долгосрочная стратегия социально-экономического развития города Красноярска

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Целью работы является разработка методических подходов к разработке долгосрочной стратегии социально-экономического развития города. В статье рассмотрены основные подходы к разработке стратегии развития города Красноярска на период до 2030 г. Проанализированы возможные сценарии его развития. Разработан наиболее реалистичный вариант развития города Красноярска на период до 2030 г. Определены: стратегическая цель, миссия и приоритеты социально-экономического развития города. Сформирован образ будущего города Красноярска на основе концепции «Умный город». Предложены основные мероприятия по реализации долгосрочной стратегии.

Ключевые слова: Красноярск, стратегия, сценарий, приоритеты, образ будущего города.

Научная специальность: 08.00.00 – экономические науки.