# Irkutsk Region Economy

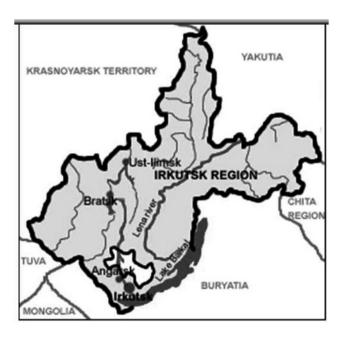
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## Main information

Irkutsk region (oblast) is located in the Southern part of Eastern Siberia. It has a total area 775 thousand sq/km (6th line in the Siberian regions chart; 4.6% of the Russia; 2 times more than Japan) and extends 1500 km from west to east and 1400 km from north to south. It is situated in the very center of the Eurasian continent at crossroads of trade route to Asian –Pacific countries.

Unique lake Baikal is located in the southeastern part of the region. It has a volume of 23000 km³ or 22% of the world's freshwater reserves, a surface area of 31500 km², and a maximum depth of 1637 m.

Population is about 2,5 million people, 80% of them are urban population. Capital: Irkutsk (population 600 thousand), 5000 km from Moscow. Other major cities: Bratsk (260



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thou), Angarsk (250 thou), Ust-Ilimsk (100 thou).

Irkutsk region is one of the most economically developed areas in the eastern part of the country. Gross regional product in 2008 was almost US\$12 billion. Foreign trade turnover was US\$8,0 billion, including export—6,5 billion, import—1,5 billion. In general, region's enterprises are cooperating with almost 90 countries. External economic activity is mainly oriented on the countries of the Asian-Pacific region-over 50% of foreign trade turnover falls to share of these countries.

Irkutsk region is developing also mutually profitable interregional cooperation in science, culture, education, public health, ecology, sport and tourism. Our region is also rich in cultural traditions and well-developed research infrastructure. There are over 1500 units of excursion-educational importance in it, among them the Round Baikal Railway— a unique engineering complex of the world's importance.

All of the above makes it a region of key significance for Russia. Today it is recognized as one of the most investment-attractive regions. In accordance with Strategy of Irkutsk region till 2020, its strategic development goal is increase standard of living through improvement of competitiveness on the basis of reforming the structure of regional economy. In order to reach this goal, a number of key tasks need to be accomplished to create conditions for innovative development, implementation of potential for raw material industries and "new industrialization" projects.

#### Labor potential

Employment of the population in the local economy, based on evaluations, amounted to 1130 thou. persons in 2008, while unemployment rate was 2%. The level of wages in the region surpasses the Russia's average by 5%. The average salary in 2008 amounted to 17700 rubles (\$550), while its growth versus 2007 was 124%.

The quality of labor potential is determined by a well-developed scientific and education complex. The region has one the country's largest Irkutsk science center of Siberian branch of Russian academy of science, which is the second biggest in Siberia after the Novosibirsk one. It includes nine academic institutions, five medical institutions, three research organizations of the agricultural direction, over 20 applied R&D and project institutes.

The region is a recognized educational center of East Siberia. It has 39 institutions, including 12 state universities, which train diploma specialists in higher education curriculums. Specialists are trained in over 200 professions in of technical, economic, natural science and humanitarian domains. Total number of students in all forms of education in 2008 amounted to over 135 thousand persons.

# Innovative potential

Forming a competitive economy in the region given the current conditions means that it has to be highly innovative. At present, about 30 large enterprises and organizations are engaged in development and implementation of innovations. Also, over 60 innovational small and medium businesses are operating.

Annual value of technical research works was estimated at 2.3 billion rubles in 2007 (about 1% of Gross Regional Product), 85% of which are performed using local resources. The bulk of studies and development (92%) have been performed by organizations of academic and industrial science, as well as by research departments of universities. About half of works falls within fundamental studies.

An innovational infrastructure is currently being developed in Irkutsk. It includes 14 elements, which are mainly located on the basis of research centers of universities. Of key importance of these are the following: innovational business-incubator, which comprises 34 objects of small business; Technical park of Irkutsk state technical university, which includes 30 enterprises and production laboratories; Regional center for development of innovational operations, which promotes transfer of technologies.

Recently the Baikal center of nanotechnologies was formed on the basis of Irkutsk state technical university. The purpose of creating such center is a technological breakthrough in a number of key industries of the economy: construction industry, metallurgy, machinery building, chemical industry etc. Development the center may become a point of reference in building new high-tech economy of the region.

In mid-term perspective, forming a new-industrial center will grant the opportunity to concentrate control of the region's key projects, to create prerequisites for development of innovation cluster, which generates and translates knowledge-intensive technologies and solutions for the region's economic and social domain.

At present, work is being performed on specific projects, which provide development of transportation and engineering infrastructures. Construction of international airport "Irkutsk New" is of special importance for the development of new-industrial center and special economic zone of tourism and recreation type. This also presumes building new large business and large logistic centers.

#### Investments

Over the last years, Irkutsk region has been demonstrating high rates of investment activity. It is evident from amount of investments into fixed assets, which amounted to 130

bn rubles in 2008 (1.2 times greater than that of 2007, and 3 times greater than 2006). Among the regions of Siberian federal district Irkutsk region holds a leading position in total amount of investments in fixed assets.

The main source of financing new-industrial center development project, alongside with funds of private investors, is government's funds attracted within the framework of partnership between private sector and state. In 2008, economy of Irkutsk region received investments from 24 countries. Amount of foreign investments was about US\$ 400 million. Foreign capital is mainly invested into processing industries, operations with real estate, natural resources production, and agriculture, hunting and forestry. Region's government conducts active work to improve investments climate of the region. The result of work was approved investment and credit ratings of the region by international and Russian rating agencies.

# Industry and agriculture

Irkutsk region is a major industrial area whose production is very important for the economy of Eastern Siberia; certain sectors are of great importance to the whole Russian economy. The leading industrial sectors are mining, the power industry (6.5% of all power in Russia), aluminum smelting, petrochemicals, building materials, wood products and engineering products. At the same time, the region possesses a considerable share of Russia's natural resources: 11% of forests, 10% of gold, and 7% of coal, oil, and gas. A distinctive feature of the region is its abundant energy resources and low cost of produced electricity.

Use of modern technologies for processing and transmission of information has a decisive role for the development of economy and expansion of its capacities. Irkutsk region is in Russia's top ten list of leaders in digitalizing of communication networks.

The region belongs to the high-risk agricultural zone. Livestock farming, fur farming, fishing, and grain cultivation comprise the region's agricultural industry. Animal products account for about 46% of all agricultural production. But it is sufficient to meet only about half of regional demand for food; the rest is imported from other regions. The private sector accounts for 96% of all agricultural production.

#### Natural resources

Irkutsk region is one of a number of unique natural areas in Russia in terms of mineral reserves. It contains fields of oil and gas, deposits of coal, iron ore, gold ore, titanium, rare and non-ferrous metals, different salts, raw materials for construction industry, fresh and mineral waters. Proved geological diamond-bearing areas have been identified in the region. Therefore perspectives of development are related to the using of rich natural resources

Mineral	Reserves	of	Irkutsk	Region
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Mineral	Reserves
Oil	260.0 mln tons
Gas	900.0 bn m³
Iron ore	2.0 bn tons
Coal	15.0 bn tons
Zeolites	900.0 mln tons
Potassium salts	627.07 mln tons
Muscovite mica (% of RF reserves)	80%
Magnesite (% of RF reserves)	75%
Rare metals (% of RF reserves) NiobiumTantalumLithium	65, 45, 50%
Rock salt	20.0 bn tons

## potential.

In the long-term perspective, the region's growth potential is determined by the following:

- commercial production of oil and gas;
- significant growth of gold mining in connection with start of development in a number of large deposits;
- prospects of mining rare metals.

Enterprises of mineral raw material industry are capable of creating centers of economic growth in the country, given by natural resources potential and conditions of economic efficiency, which is higher compared to other industries, and being less dependent on labor resources. One of the key instruments for development of resource potential is partnership between private sector and the state.

One of the basic industries for the region is becoming commercial production of hydrocarbons. Up to the moment, 10 oil and gas fields have been discovered. The main objects are the largest Kovykta gas condensate and Verkhnechonskoye oil and gas condensate fields. Oil resources have only been discovered by 11%, which implies a great potential for their development. Construction of trunk oil and gas pipelines "Eastern Siberia—Pacific ocean" significantly increases importance of the region.

Recently monopoly "Gazprom" has developed and is currently implementing the program of region gasification. This resolves the problem of power supply to remote parts of the region and provides the impetus to further development of petrochemical industry.

A large incentive for development of raw material industry is the transportation structure.

Japan

of East Siberian Okhots oil & gas fields Baikal-Amur Mainline (BAM) Tvnda ayshet Kovykta Skovorodino. Vanino Lake Baikal Khabarovsk Angarsi Possible spur to China Nakhodka Daging Mongolia Vladivostok Sea of

Building pipelines "Eastern Siberia-Pacific Ocean"

### **Transportation**

The region has a relatively well developed system of air, water, rail, and motor vehicle transportation. Railways, represented by the Trans-Siberian and Baikal-Amur Railways, are the main form of transportation. Nearly 70 million tons of freight per year is transported by rail. The region also has a fairly extensive road system, with a total length of more than 10000 km. The large rivers have favored the development of water transport, which accounts for about 10% of all freight traffic. Air transport is carried out through the Irkutsk and Bratsk airports, which have international status. These airports handle flights to Japan, China, South Korea, Mongolia, and several European countries.

Development of transportation logistics in Irkutsk region is planned by Transportation strategy of Russian Federation, which includes creation of multimodal logistic transportation and distribution centers of federal level in Irkutsk, and a number of territorial centers in other towns. This allows building a transportation framework in mid-term and long-term perspectives for implementation of large investment projects of new-industrial and resources development, increasing scope of high-tech services.

#### Infrastructural projects

In the long-term perspective, implementation of the following key infrastructural pro-

jects is planned:

- in railway transportation, in accordance with Strategy of railway transport development of "Russian Railways" construction of new railways in the north of region;
- in ground transportation construction of roads to the north-east part of the region and development of roads network for wood harvesting operations (about 2300 km);
- in air transportation construction of the new international airport in Irkutsk and develop local airports.

The main target of **power generation** infrastructure development is preventing potential power shortage in the region, which may occur by 2012. Increasing power generation capacity is going on in two ways:

- by creation of a single power generation system with Sakha Republic (Yakutia);
- by gasification of Irkutsk region by "Gazprom", which create prerequisites for development of a large electric power generation hub utilizing gas of the northern fields.

In mid-term perspective, private business is planning a number of projects on production of natural resources.

One of the key priorities is deep **wood processing**. Governor's Investments Council is reviewing a number of projects on construction of wood processing plants. Some projects have already been started.

**Metallurgy**, which is mainly represented by aluminum smelting, provides over a quarter of industrial production in Irkutsk region being a leader in this indicator. Russia's largest aluminum producer—corporation "Russian aluminum" operates in Irkutsk region and realizes some projects of metallurgical production.

Development of **machinery building industry** of Irkutsk is primarily linked to development of aircraft construction industry, which is the main production site of corporation "Irkut". EADS corporation is outsourcing manufacturing parts for Airbus A350 and A380 to Irkutsk.

Another direction is manufacturing machinery and equipment for basic nature-use industries. In particular, this includes construction of equipment for rock-mining, refining, gold-mining industries, coal-mining industry, petrochemical industry and wood industry. This domain is supplemented by production of electro-technical goods. There is a potential for development in machinery building industry through attraction of businesses within the frame of techno-park concept.

Prospects of **petrochemical industry**, which accounts for about 12% of total industrial production in the area, associated with oil and gas production. One of the key projects in this industry is creation of solar power generation center by NITOL group. Also, upgrade of

production facilities is currently in progress in largest enterprises of the industry.

Increasing rate of **construction** caused by increasing demand for commercial real estate, implementation of national project "Affordable housing" entails the growth of demand for construction materials. At present, a significant lack of main construction materials is felt in Siberian market. Company KNAUF is building the largest plant on production of modern construction materials in Irkutsk region. Another enterprise is "Angarskcement" — one of Russia's largest cement producers. A number of projects on construction of brick plants, production of plastic pipes, production of foamed concrete, tiles, sandwich panels, corrugated steel sheet, decorative stone and many other materials have been claimed for creation in the region.

Due to implementation of the above projects, economy structure of the Irkutsk region is changing, and by 2020 it will be totally different from its present state (more diversified, among other things), which will help steady economic development of the region in the future.

#### **Tourism sector**

Tourist complex is one of the perspectives of the Irkutsk region's economy. Its development provides a privilege position of the region within the list of the most attractive tourists' places in Russia. During the last 4 years, the number of tourists visiting the region has increased by 3.5 times, and the number of people occupied in this sphere, by 2.5 times.

The region is well known both in Russia and abroad thanks to its unique tourism and recreational resources. The main resort tourist object and the region's gem is Lake Baikal, which was included in the list of the UNESCO world's heritage. Baikal is also the world's largest storage of drinkable water. Virginal natural landscapes, numerous medicinal and mineral waters resorts are also unique. In the region there are Baikal National Park and two nature reserves.

Great potential of the region is determined by two factors—its convenient geographical position, as well as rich history. The capital of East Siberia-Irkutsk-is one of few cities of Russia, which has made a significant impact into the country's history and has over 350 years of age.

In 2006 Irkutsk region won the contested right to create a special economic zone of tourism & recreation type in proximity of lake Baikal. For the region this is, primarily, a highly-effective point of economic growth, which will catalyze development of tourist business. Creation of a special economic zone will allow using the benefits of partnership between private sector and the state.

In order to accelerate development of the industry, the region's administration is working

to promote development of infrastructure, construction of roads and the new international class airport in Irkutsk.

## References:

- 2. Baikal economic forum http://en.baikalforum.ru/qa/baikal.html