

## The post-crisis economic development and prospects of innovation activity in the Tomsk region

*Completion of the critical phase of the global financial crisis is the need for economic analysis of its possible consequences. The article presents an analysis of key aspects of economic activities of Tomsk region as an example of assessment of the prospects for the region's innovative development. It contains the data on the dynamics of post-crisis economic development and the proposals for innovative orientation of the region.*

*Innovative economy, economic analysis, innovation technique, development institution, investment, priority national project, special economic zone.*



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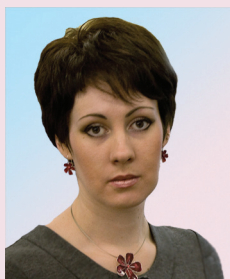
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## Introduction

The key industry of Tomsk region is oil and gas complex, which accounts for about 20% of budget revenues and 40% of fixed asset investments. In the period of 2000 – 2004 the volume of industrial production by economic activity in Tomsk region has increased by 1.6 times (in Russia – by 1.25 times), but in 2005 there was a sharp decline in production. The situation in the industry of the region observed in 2006 – 2009 can be described as stagnation. According to the results of 2010, the situation in the oil-production enterprises of the region is estimated by experts as a relatively stable – JSC “Tomskneft” produced 10.3 million tons of oil. However, in connection with the repair of Luginetskaya compressor station the gas production decreased: natural gas and casing-head gas – by 9.9%, fuel natural gas - by 4%. In order to improve the situation in the oil and gas industry we have developed a program till 2020 on geological exploration and licensing of the right bank of the Ob River at the cost of 4.7 billion rubles and carry out the work to improve the efficiency of utilization of associated petroleum gas when developing the field. The index of industrial production in 2010 was 106.1% (in Russia – 108.2%). The share of extractive industries in the structure of industrial production in total amounted to 50.7%, the share of processing industries – 38.4%. There are six universities and about a hundred scientific and technical organizations, including 38 research institutes, 46 industrial research institutes and dozens of high-tech research and production associations of nuclear, defense and other industries in Tomsk.

### Completion of the global financial crisis and regional economy

*Investment in the Tomsk region.* Tomsk region pays special attention to the issues connecting with improving the investment climate. It should be noted that the quality of life, education, culture and health in the region

depends on it. For 2000 – 2007 the index of fixed capital investment increased by 2.7 times (in Russia – in 2.3 times). In 2010 the fixed capital investments amounted to 86 billion rubles and reached the pre-crisis level. In the years of 2007 – 2010 there were implemented several large investment projects worth over 15 billion rubles. So, there was put into operation one of the nation’s largest plant for the production of wood-based panels, closed corporation “Timber processing complex “Partner-Tomsk” with capacity of 264 thousand cubic meters of MDF boards per year, the plant producing large-size porous block and facing brick with designed capacity of 60 million conventional bricks per year. There is the East Transport Node opened in the city of Tomsk, it is a part of infrastructure of the Tomsk economic zone, a new ice palace as well as the indoor track and field arena, it is the largest one in the Urals, it was built with the support of OJSC “Gazprom” and OJSC “Gazprom-transgaz-Tomsk”. Annually for 13 years the innovative forums take place in Tomsk with direct participation of the largest Russian and foreign companies, public corporations and development institutions: Stock Financial Corporation “Sistema”, company group “Renova”, OJSC “Sibur-Holding”, OJSC “Russian Venture Company”, public corporation “Rosnanotekh”, the Fund for promotion of small enterprises in scientific and technical sphere, OJSC “Information Satellite Systems named after M. Reshetnev”, the British auditing company Ernst & Young, Venture Fund “Almaz Capital Partners”, Nokia Siemens Networks, the world’s largest consulting and auditor network “PricewaterhouseCoopers”, the American trans-national company “Cisco Systems Inc”.

*The regional budget.* Since 2007 to 2009 the consolidated budget of the Tomsk region was performed with a deficit. During the crisis a significant factor in reducing the revenue side (it was reduced by 3.7 billion rubles in

comparison with the planned one in 2009) was the decrease in the profitability of enterprises. To eliminate the budget deficit there were reduced not priority costs, in particular, for budget investment, regional and municipal target programs, expenditures to support agriculture and to maintain the executive powers. As a result of 2010 the budget revenues increased by 7.3% and amounted to 34.137 billion rubles. All expenditure commitments budgeted in 2010 were fully implemented (33.985 billion rubles). The core group of expenses (25.1%) was education expenditures. The regional budget has developed a surplus of 152 million rubles. The national debt of the region is 6.962 billion rubles. Self-sufficiency of the consolidated budget in January–November, 2010 was 78.88% (in Russia – 82.28%).

*Implementation of the priority national projects in the Tomsk region.* Implementation of the priority national projects (PNP) is successful as a whole. As a part of the PNP “Health” there was put into commission a perinatal center with 110 seats (project costs – 1.9 billion rubles) and 4 health centers including children’s one working in the region. The issue of building the Regional Oncologic Dispensary equipped with the necessary equipment is still urgent. The implementation of the PNP has improved many health and demographic indicators.

During the implementation of the PNP “Education” 314 general educational establishments of the region have access to educational resources via the Internet, 95% of institutions have broadband access. A significant achievement is the victory of the Tomsk State University and the Tomsk Polytechnic University in the competition for the status of a national research university. The factors of success of Tomsk region are 10 universities, including 3 innovative universities, 2 National Research (TPU and TSU), as well as branch of NRNU MEPI in Seversk (STI). In

2010 – 2014 they will receive a federal subsidy of 1.8 billion rubles. According to the experts’ opinion, one of the main obstacles to the implementation of the PNP is the need for open competitive bidding in accordance with federal law, it leads to delays in deliveries of goods and time delays in the use of government finance.

Within the framework of PNP “Affordable and comfortable housing – to Russian citizens” the regional authorities managed to stabilize the housing construction. In 2010 there were 437.068 sq m of housing commissioned. The program “Housing for young families” the region received 112.5 million rubles from the federal budget in order to improve the living conditions of more than 400 families (2.5 times more than in 2009). The commitments connecting with improving the living conditions of the Great Patriotic War veterans who were registered before March 1, 2005 are fully implemented. In 2008 – 2010 the region received some financial support from the Assistance Fund for Housing Reform in the amount of 1.856 billion rubles. 907 apartment buildings were overhauled completely (more than 126 thousand people have improved their living conditions) and the inhabitants from 120 houses under the threat of collapse were shifted to another places.

The implementation of the PNP “*The development of agro-industrial complex*” made it possible to stabilize production volumes: in 2010 the agricultural output in comparable prices made up 100.3%, the government support for agricultural enterprises increased by 8% (the regional budget support increased by 24%, the federal budget support decreased by 6%). More than 300 million rubles were directed to the purchase of machinery and equipment. The programs on development of cattle breeding has resulted the production growth in 2010 by 6.5%. By 20% increasing in the acreage planted and improving the technology of flax growing the gross yield of

flax was 1.97 thousand tons. But at the same time under a significant tightening of lending and reduce in credit resources, there were suspended large-scale investment projects on construction of dairy farms Ltd. “Rus”, Ltd. “Ovoschevod”, agricultural holding “Tomsk milk”.

*Implementation of the major federal and regional programs.* The investment projects of Tomsk region in the raw-materials sector of the economy are represented by two major programs – a project on development of oil and gas fields in the right bank of the Ob River and a project on development of one of Russia’s largest iron ore Bakchar site. Today the Russian company “Metropol”, which has the license to develop iron ore deposit, limits itself to exploration work. According to the experts’ estimate, innovative sector has proved to be more resistant to the global crisis than the raw-materials sector. The region has 30% of enterprises engaged in innovation activity (in Russia – 10%). Tomsk special economic zone (SEZ) of technology-innovative type is one of the most successful developing one in the country, thanks to the university and the scientific environment in the region as well as the active position of the governor, who became a chairman of the Association of Innovative Regions in Russia. Currently 57 resident companies are recorded in SEZ, including 7 residents with foreign capital participation.

As a whole the innovation infrastructure of Tomsk region includes 39 acting elements: the commercialization offices, business incubators (including in each university), innovation and technology centers, technology transfer centers and more than 400 innovative companies.

For 2006 – 2010 the investments in the development of Tomsk SEZ infrastructure amounted to 10 billion rubles, among them 4 billion rubles are the means of private business. The authorities have defined a project on construction of nuclear power plant in the

closed administrative and territorial unit (CATU) of the town of Seversk as a priority direction. The main arguments in favor of the construction are the following: the region will be transformed from energy deficient one into energy sufficient one, the direct investment in the region’s economy will be more than 170 billion rubles, it is planned to create about 11 thousand jobs. The first block of Seversk NPP is scheduled to be operational until 2020, the second unit – up to 2025. In 2010 the state corporation “Rosatom” partially funded the design work in the amount of 500 million rubles. The promising sector of the economy is the timber industry. In December, 2010 there was open Russia’s largest factory for the production and lamination of MDF (CJSC “Timber processing complex “Partner-Tomsk”) with an annual processing capacity of 650 thousand cubic meters of low-grade wood. Since 2006 the total volume of investments was 8 billion rubles.

*Activities of large industrial enterprises and financial-and-industrial groups.* The leading place in the branch structure of industry in the region is oil and gas complex, which accounts for 50.7% of total production. The largest companies involved in extraction and transportation of hydrocarbon resources in the region include: OJSC “Tomskneft” VNC (a subsidiary of OJSC “NC “Rosneft” and OJSC “Gazpromneft”), OJSC “Tzentsibnefteprovod” (a subsidiary of OJSC “Transneft”), OJSC “Vostokgazprom” and Ltd. “Gazprom-transgaz-Tomsk” (subsidiaries of OJSC “Gazprom”). Despite the curtailment of the investment program, the main oil producer in the region OJSC “Tomskneft” VNC extracted 10.3 million tons of oil up to 2010. Over 100 oil wells were drilled instead of 73 planned. Net income of OJSC “Vostokgazprom” was by 30% more than in 2009 and amounted to 3 billion rubles. The company has the right to develop eight oil and gas license areas. At the end of 2009 – 2010 Ltd.

“Gazprom-transgaz-Tomsk” could improve its production performance. In accordance with the program of reconstruction, until 2012 the company upgrades the six electric drive compressor stations, which will make it possible to go to the automatic control system of gas pipelines. One of the largest enterprise of manufacturing industry in the region CJSC “Sibkabel” in January – September, 2010 achieved net profit of 148283 million rubles against 37112 million rubles of net loss for the same period in 2009. The company issued a marketable product for the 4.114 billion rubles. (by 1.9 times more than in 2009) and reached a production level as it was before the crisis in 2007. There are 91 organizations in the company register of the regional significance, they are supported by the regional administration.

#### **The role of regional leadership in enhancing the innovative orientation of economic development.**

The governor of the Tomsk region V.M. Cress has been heading the region since 1991. In March, 2007 on the proposal of the President of the Russian Federation the Tomsk State Duma deputies vested V. Kress with the authority of governor for the fourth term, the end of authority is March, 2012. The economic experts note the actual innovation focus of V.M. Kress’s activity and mobilization of all resources to upgrade the socio-political and socio-economic situation in the region. The actions of the governor are supported by the Legislative Duma of Tomsk oblast and the mayor of Tomsk N. Nikolaychuk. According to the experts, the region has a significant industrial, economic and investment potential. The investment growth in 2007 was 265.8% compared to the year of 2000, by this indicator per capita the region passed ahead of the average Russian value and took the lead in the NWD.

However, during the global financial crisis the region management could not keep the

upward trend in industrial production. In 2009 the gross regional product (GRP) was 140.5% compared to the year of 2000, with respect to the year of 2008 it fell by 6.3% and amounted to 256 billion rubles. In 2010 there was a growth in industrial production – 106.1% compared to the year of 2009 (in monetary terms – 121.1%), the indicators of housing stabilized (100.8%), the budget revenues increased by 7.3%. In the project “Strategy of Innovative Development of the Russian Federation until 2020” the region is one of the “successful innovation-active subjects”.

#### **Problems and dynamics of the economic development of the Tomsk region.**

There are a number of the region’s development problems that are not associated with the current crises and the measures to overcome them:

*Electricity shortage.* Currently in Tomsk region 46.2% of electric energy input is produced here. 41 settlements of the region are not connected to a general power grid, 42 diesel power plants with total capacity of 44.075 MW are working there. To solve the problem of energy shortage the construction of nuclear power plant in the CATU of the town of Seversk is actively discussed. Until 2013 it is planned to build the Bakcharsky thermal power station with capacity of 660 MW and 2 power generating units at Tomsk Heat and Power Plant-3 with total capacity of 450 MW.

Among the problems of agro-industrial complex at present are: the difficult financial state of most enterprises of the complex due to the low procurement prices for agricultural products, rising prices for fuel and lubricants, wear and tear of fixed assets (68%) and unavailability of credit resources - halted construction of 5 dairy complexes, as well as production reconstruction and modernization of JSC “Tomskmoloko”. Only 64% out of 622 thousand hectares of arable land in the region are used, among them 45 thousand hectares are lost and require remediation.

*Growth of indebtedness for utility services.*

The rates growth outpacing consumer inflation and population incomes has led to an increase in arrears for utility services. So, the total backlog for electricity to OJSC “Tomsk Energy Retail Company” as of October 1, 2010 amounted to 317.9 million rubles. 80% of the fixed assets of the municipal enterprise “Tomsk Power Complex” are worn, their reconstruction requires 1.4 billion rubles.

*The problem of dilapidated and dangerous housing.* The housing stock of the region is 21.5 million sq m, among them 1053 million sq m is the share of tumbledown housing (by 1.5 times higher than the average Russian level). It includes 7.7 thousand houses, including 5.4 thousand apartment houses.

*Health care problems.* The region has a high incidence of malignant neoplasms – 372.2 cases per 100 thousand population (by 7.7% more than the national average) and the mortality rate – 218.9 cases per 100 thousand people (by 7.6%). The issue of building the Regional Oncology Center equipped with the necessary equipment is still urgent. Among the key issues the experts note a lack of support of federal health care standards, staffing shortage of young health workers, insufficient prevention efforts and inadequate medical technologies.

*Post-crisis dynamics in the region's economy.* The financial crisis in the region had the greatest impact on industrial production, construction, investment in fixed assets and balance of the regional budget. So, in 2009 there was negative oil production performance by the major oil producing companies OJSC “Tomskneft” VNK and OJSC “Tomskaya nef”. Machinery manufacturing declined by more than 5 times, the growth rate of housing construction fell by 17.3%. The share of unprofitable enterprises in 2009 increased to 36.7%. According to the experts' opinion, the region has sufficiently diversified economy, which reduces the fall risk of the gross regional product (GRP).

One of the factors of stability to the crisis is a powerful scientific and educational complex, which occupies the third position among the major sectors and has a positive impact on the regional economy as a whole. In 2010 the production volumes of 400 Tomsk innovation enterprises grew by 17%. The innovative breakthrough in the region in 2011, according to experts, will be the largest investment project – the creation of the Federal Center for Education Research and Development (INNO Tomsk-2020).

Now the region's economy actively recovers and goes to the post-crisis phase of sustainable development. According to the Federal State Statistics Service, industrial production index by the main economic activities in 2010 amounted to 106.1% (in Russia – 108.2%), including those in manufacturing industries – 109%. Compared with the year of 2009 we can observe a rapid increase in mechanical engineering (242.5%), wood processing and production (123.6%), manufacturing of petroleum products (120%), nuclear materials (106.8%), metal manufacturing (117.4%) and food industry (107%). One of the development factors in the regional economy is the small and medium businesses. Over 40% of the working population of the region, 17.3 thousand small firms as well as 31 thousand entrepreneurs are engaged in this area.

*The economic situation in the one-company towns of the Tomsk region.* There are two one-company towns in the Tomsk region – the town of Strezhevoy (OJSC “Tomskneft” VNK) and the CATU of the town of Seversk (OJSC “Siberian Chemical Complex”, a structure of state corporation “Rosatom”). In Strezhevoy there is a main oil-producing company working in the region. It is a budget-producing enterprise – OJSC “Tomskneft” VNK, providing 67% of oil production in the region. The industrial and technological support for the company is done by 20 companies of Strezhevoy.

The town's budget, which is subsidized, is characterized by financial and economic dependence on the regional budget. In 2010 the budget revenues amounted to 1.258 billion rubles, the items of expense – 1.238 billion rubles. The experts note the absence of housing deficit in the town housing market as well as effective economic ties with the city of Nizhnevartovsk of Khanty-Mansi Autonomous Area. A comprehensive investment plan of modernization of the one-company town includes such major projects as construction of a bridge over the Vakh River on the highway Nizhnevartovsk – Strezhevoy (project costs – 10.11 billion rubles) and modernization of the Strezhevskoy petroleum refinery (1.436 billion rubles).

Another one-company town is the CATU of Seversk. The main enterprise is OJSC “Siberian Chemical Complex”. In 2010 the Seversk's budget received 2.842 billion rubles, the expenditures amounted to 2.835 billion rubles. A comprehensive investment plan to upgrade the company town is being developed. Among the housing problems the first place is taken by high tariffs, health problems – a shortage of qualified medical personnel and high prices of medicines, education problems – low pay of teachers. In the experts' opinion, the opening of Seversk may exacerbate a difficult unemployment situation by releasing 1.2 thousand workers from controlled-access enterprises and by eliminating the federal subsidies of more than 1 billion rubles.

**The examples of possible directions of innovative development of the technological complex of the Tomsk region.**

In 2002 there was created a regional innovation strategy in the Tomsk region, it's the first such strategy in the Russian Federation. The law “On innovation activity in Tomsk region” has already edited twice (the first time - in 1998, the second one – in 2008). Mechanisms for implementing the innovation strategy of Tomsk region:

- inter-agency program “Design and implementation of innovative development of the territory by the example of Tomsk region” (since 2002).

- the Regional Target program (RTP) “Development of small and medium entrepreneurship in Tomsk region” (since 1996).

- the RTP “Development of innovation activity in the Tomsk region” (since 1998) and others.

The Russian President Dmitry Medvedev has supported the proposal to put Tomsk region into the status of the Federal Center for education, research and development. The creation of SEZ, integration of science and education, all these measures should lead to a substantial development of innovative activity in the region. However, the experience of international innovation programs shows that such development is mainly based on small and medium business. At the same time both large enterprises and financial-an-industrial groups should be also involved in innovative development. Below you can see the preliminary estimates of technology areas that enable the innovative development of the regional technological complex.

*Producing Complex of the Tomsk region.*

The largest companies involved in extraction and transportation of hydrocarbon resources in the region include: OJSC “Tomskneft” VNC (NC “Rosneft”), Ltd “Gazpromneft-Vostok” (a subsidiary of OJSC “Gazpromneft”), OJSC “Tzentsibnefteprovod” (a subsidiary of OJSC “Transneft”), OJSC “Vostokgazprom” and Ltd. “Gazprom-transgaz-Tomsk” (subsidiaries of OJSC “Gazprom”).

OJSC “Tomskneft” VNK (owned OJSC NC “Rosneft” – 50% and “Gazprom Neft” – 50%) is the main oil-producing and budget-producing enterprise in the region, it owns 24 licenses for oil and gas production, including 17 licenses for the deposits in Tomsk region,

7 – in the Khanty-Mansi Autonomous District. In addition, the company owns 9 license blocks for exploration and oil production, and it is also an agent for the right to develop 4 licensed areas of other subsoil users. Following 2010, the company produced 10.3 million tons of oil and put into commission more than 100 wells.

OJSC “Tomskaya neft” (owned holding company OJSC “Russneft”). In 2009 the company cut its oil production by 12% compared to the year of 2008. The investment performance of the company for 2009 was reduced by 6 times. In 2010 there was some positive dynamics of oil production at all plants NC “RussNeft” (CJSC “Tomskaya neft”, CJSC “Sobolinoe”, Lcd. “Grushevoe”, Lcd. “Fedyushkinskoe”, Lcd. “Stolbovoe”, Lcd. “Duklinskoe”) – 0.31 million tons of oil.

OJSC “Vostokgazprom” is a subsidiary of OJSC “Gazprom”, whose share in the company’s share capital amounts to 99.98%, the region’s largest gas production company providing a full production cycle from the deposit development, extraction of hydrocarbon raw material to the preparation, making of marketable products and deep processing. Currently the company owns the right of using the subsoil of 8 license areas located in Tomsk region. During its existence the company has produced 34 billion cubic meters of gas, 3.3 million tons of condensate and about 400 thousand tons of oil. The structure of OJSC “Vostokgazprom” includes subsidiaries and affiliated companies: OJSC “Tomskgazprom”, Lcd. “Sibmetahim”, Lcd. “Gaztransservis”, Lcd. “Tomskneftegazpererabotka”, Lcd. “Service Center “Vostok”.

OJSC “Tomskgazprom” (a subsidiary of OJSC “Vostokgazprom”). It is among the top three of the oil and gas enterprises of the Siberian Federal District. The main activities are geological survey, exploration, extraction and processing of hydrocarbon raw materials; capital construction, development and

arrangement of hydrocarbon deposits; sale of gas, condensate, crude oil and refined products. By the end of 2010 OJSC “Tomskgazprom” produced 2.83 billion meters of gas and 0.59 million tons of oil. As the representatives of the company say, the stabilization of the volume of gas production is connected with the effective use of associated gas of the South Group deposit, with the development of gas condensate reservoirs of the deposits of Ostaninski block and with drilling-out the Myldzhinskoye and the North Vasyuganskoye deposits up to the end. The plans of the company are to transport oil from the customs territory of Russia through the Far Eastern terminal Kozmino, which is a part of pipeline system Eastern Siberia – the Pacific Ocean.

Lcd. “Gazprom – transgaz – Tomsk” is a subsidiary of OJSC “Gazprom”. It was created in 1977 as a production and gas transportation company of the gas industry. It is engaged in transportation of natural gas in 12 regions of the country (the total length of gas-main pipelines is about 7 thousand km). Among the company’s consumers are the West Siberian and Novokuznetsk metallurgical plants, Kemerovo “Azot”, Lcd. “Tomskneftekhim”, OJSC “Siberian Chemical Combine”, Novosibirsk plant “Iskra”.

One of the most important areas of socio-economic and energy-efficient development of the region is the gasification of the region. An agreement was reached with Lcd. “Mezhregiongaz-gas Moscow” to start work on gasification of Ob project and Chainski area. In 2009 five gas distribution stations were put into commission. In accordance with the reconstruction program, until 2012 the company will have upgraded six electric drive compressor stations, and it will go to the automatic control system of gas-main pipelines. It is planned to use the resources of Lcd. “Gazprom-transgaz-Tomsk” to create a transportation system Yakutia – Khabarovsk – Vladivostok.



An innovative orientation of the producing complex of Tomsk region can be new geophysical methods of exploration and evaluation of deposits, they can increase the effectiveness of the extractive industries.

*Processing Complex of the Tomsk region.* OJSC “Siberian Chemical Plant” (OJSC “SCP”) is incorporated into the integrated company “Atomenergoprom”, and it is one of the leading enterprises of the nuclear industry and a large single set of nuclear technology cycle. The main activities of OJSC “SCP” are to provide services on an operating time of raw uranium hexafluoride and uranium enrichment under the international contracts and the contract with OJSC “TVEL”, to process highly enriched uranium (HEU) into low enriched uranium (LEU) under the American-Russian agreement HEU-LEU, to produce chemicals and stable isotopes. The basis of “SCP” is 7 plants, heat electropower station as well as the design office and a number of support units. Last two years the plant has certain orders for the nuclear weapons complex of the country (2.7% – the state defense order), but 38.8% of production is a contract under international treaties. Thus, the plant is one of the main exporters of Tomsk region. Since 2008 the company held events connected with shutdown of the industrial nuclear reactors and with corporatization of the enterprise and optimization of staff size. After stopping the reactor production OJSC “SCP” was guided by the “uranium triangle” (radiochemical preparation of natural uranium or uranium-generated, its transformation into uranium hexafluoride at the sublimation plant and enrichment at the isotope separation plant), which gives at present over 70% of the gross volume and more than 95% of the profits. In May 2010 at the sublimation plant of OJSC “SCP”, in the framework of optimization of technological schemes of the nuclear-fuel cycle enterprises, there was successfully put

into operation a new technological line for production of raw uranium hexafluoride, it is intended for processing natural uranium materials. During January–September 2010 the net profit of OJSC “SCP” increased by more than 3 times and amounted to 1411 billion rubles. The sales proceeds increased by 15.3% and amounted to 11772 billion rubles. Due to the introduction of new energy saving technologies we received an economic effect of about 3.5 million rubles. In 2010 “SCP” entered into a single fuel company “Rosatom” – OJSC “TVEL” producing nuclear fuel.

Basic petrochemical industry is Ltd. “Tomskneftekhim”, it is a part of OJSC “Sibur Holding”. OJSC “Zavod Benzol” owns shares of Ltd. “Tomskneftekhim” and Ltd. “SIBUR Finans”. Ltd. “Tomskneftekhim” takes one of the leading positions in Russia by production of polypropylene and low density polyethylene, and it is one of the major taxpayers in the budget of Tomsk region. The difficult economic situation has made adjustments to the plans of the company’s development. In 2009 the volume of investments amounted to 450 – 500 million rubles. Some expensive projects were suspended. At the same time at the end of 2009 Ltd. “Tomskneftekhim” increased the production of polymer products from 3 to 7% by various items.

The growth of the company’s indices is due to reduction in terms of stopping repairs and a number of measures to improve the technological process. In 2010 the company started production of polypropylene of new dedicated brands to produce nonwovens in the Kemerovo Orton (a structural unit of “Sibur”).

One of the largest processing enterprises of Tomsk region is CJSC “Sibkabel” (since 1999 it has been a part of the Urals Mining and Metallurgical Company”). It is the leading machine-building enterprise of Russia, its modern nomenclature has more than 60 brands of cables and over 2 thousand mark-size wires.

The company collaborates with the Research Institute of cable “Niki” in Tomsk, which has a testing center and a well equipped pilot production. In 2009 because of the financial crisis CJSC “Sibkabel” suspended the construction project of workshop for production of rubber.

The factors which have influenced the change in the size of sales revenue, were falling of solvent demand for manufactured products, reduction of market value of the basic raw material for production of cable products in the metals market, lower average sales prices in the market of cables and wires. The achieved volumes make it possible to implement the investment programs, to continue the planned upgrade, construction and to carry out social obligations. The biggest investment in mainline production (about EUR 5 million) is planned for 2011, including the construction of a new workshop for production of rubber after the technology of UK Company Farrell.

*Energy Complex of the Tomsk region.* In the energy sector of the region one of the largest energy companies in Western Siberia is the OJSC “Territorial generating company № 11” (OJSC “TGC-11”). OJSC “TGC-11” is engaged in production and sale of heat and electric power. The company was established on the basis of generating capacity of OJSC “Omsk Electricity Generation Company” and OJSC “Tomskenergo”. There are 5 heat and power plants, State District Power Plant and 2 boilers under the management of “TGC-11”. The company operates in three regions of the Russian Federation – Omsk, Tomsk and Novosibirsk regions. The installed capacity of “TGC-11”: the electric one is 2051 MW, the heat one is 8181.79 Gcal/h. The authorized capital is 5.1 billion rubles. The investment program of OJSC “TGC-11” for 2006-2010 was formed in the volume of 12.5 billion rubles. Tomsk Branch of OJSC “TGC-11” was established in November, 2007 on the basis of “Tomskenergo”.

Now the branch operates on the basis of generating capacities of Tomsk GRES-2, Tomsk Heat and Power Plant-3 and peak backup boiler. The total installed capacity of the branch: electrical – 471 MW, heat – 2491 Gcal/h. The preparatory construction and installation works are going on in order to replace obsolete equipment with modern unit of the Italian firm “Sicme” and the Finnish company “Maillefer”. The structure of OJSC “TGC-11” and its branches has been optimized, duplication of functions is impossible. The outcome of the 2009 net profit of OJSC “TGC-11” was 326 million rubles. In general, the company has invested about 3 billion rubles into the energy of Tomsk region in 2009, including 2 billion rubles invested in the development of generation energy capacity – the installation and commissioning of new turbine T-50 at Tomsk GRES-2, which made it possible to increase the plant capacity by almost 20%. There was also launched a new boiler for Heat and Power Plant-3. In 2009 1 billion rubles was allocated to build two transformer substations and modernization of electric networks. The investment program of OJSC “TGC-11” for 2010 was formed in the amount of 1.7 billion rubles, among them about 306.2 million rubles will be invested in the reconstruction of the boiler of Tomsk GRES-2 and a heat plot № 4 of heat networks. For the lack of investors the question about the reconstruction of Heat and Power Plant-3 is still free-answer.

*Agro-industrial complex of the Tomsk region.* The largest company in the production of meat foods and meat is the Siberian Agrarian Group (CJSC “SAG”) – a vertically integrated agro-industrial holding company, operating in a closed production cycle. The company owns more than 30 thousand hectares of arable land in Tomsk and Sverdlovsk regions. By volume of production processing, it takes a major share of the regional market (70%). CJSC “SAG” includes a pig-breeding complex in the village

Svetly (Tomsk region), pig complex “Uralski” (Sverdlovsk region), two meat packing plants in Tomsk and another in the city of Kemerovo, Asinovo Feed Mill (Tomsk region), Asinovo City Dairy, CJSC “Sibirsk beer”. CJSC “SAG” owns retail chains in Tomsk (60 outlets) as well as opened branches in the cities of Novosibirsk, Kemerovo, Krasnoyarsk. Because of the financial crisis the company has suspended a number of projects. In December, 2010 the company opened two modernized enterprise – Seversky City Dairy and Tomsk combined meat packing Plant. The company plans to expand the pig farm “Uralski” and to build the pig farm “Eastern Siberian” in the Republic of Buryatia, worth over 2.5 billion rubles.

#### **An innovative trend in the development of the Tomsk region.**

Tomsk region is one of the leading scientific and educational centers in Russia. Since 2003 a program of innovation development has been implementing in its territory. The major universities having been received the status of national research universities are among the best ten universities in Russia. The research activities of universities and institutes located in Tomsk region are aimed at strategically promising directions, including new materials and nanotechnology, biotechnology, information technology, medical devices, telecommunications and precision engineering and petrochemicals.

The contribution of scientific and educational complex in the GRP is over 7%. Among the Russian regions the Tomsk region has the highest proportion of workers with higher and secondary education out of the workforce. The development of innovation sector as a whole was characterized by a significant increase in the volume of shipped goods of own production, of done work and services of in-house innovation active enterprises – by 1.3 times, including the volume of shipped innovation goods of own manufacturing and done works and services of innovative nature has increased by 18%.

Under the new conditions the intellectual potential is considered as the main competitive advantage of Tomsk region and its primary strategic resource for the development of the region’s innovation economy based on the integration of education, science and industry. The confirmation of this potential was the Tomsk region victory in 2005 in a government tender for the right to establish the SEZ of technology-innovative type. The economic zone in Tomsk is located in two plots totaling 197 ha. The following things are planned to develop in the SEZ:

- information, communication and electronic technologies (development and prototypical (experimental) production of software and hardware of digital TV, development of power devices and high-current electronics, radio systems and communications; quantum electronics devices etc.);

- production of new materials and nanotechnology (the development of technologies for production of metal nanopowders, sub-micron flour grain of inorganic compounds, inorganic nano-fibers, structural ceramics based on zirconium dioxide; bio-composite materials based on nano-structured titanium, etc.);

- biotechnology and medical technology (the production of stem cells and the provision of services on the basis of cell therapy, production of recombinant proteins and a new generation of pharmaceuticals based on them; biotechnology mining and mineral processing, production of bio-energy in the utilization of biomass (raw waste lumber and bio-organic waste); biological instrument engineering (production of biosensors and biochips), and others).

In early March, 2011 the National Research Tomsk Polytechnic University on the basis of the Institute of Natural Resources opened Siberian Regional Academic Center for SAP. This is the first and only regional SAP Certification Center in the Siberian Federal District.

SAP is the world's leading provider of software solutions for business management. SAP software products meet all requirements of any scale of companies. There are more than fifty organizations using the system SAP in Tomsk.

The new center will provide an opportunity for companies and universities in Siberia to receive advisory support for the software company SAP in logistics, financial management, project management and other business processes.

Currently the efforts of Tomsk region are concentrated in the direction of giving the status of the Center for Science, Education, Research and Development to the whole region. It could be a logical continuation of the way already traversed by the region in order to create innovative developments by Tomsk enterprises, to construct an innovation infrastructure, to create a special economic zone of technical and innovation zone. The creation of both Innovation Centre "Skolkovo" and special tax treatment for the participants of this project will be sure to lead to a breakthrough in innovative development of the country, if it is extraterritorial project, which will be able to interact with other innovative advanced regions.

As to the part of innovative promotion it is important to have a systematical analysis of the relationships, to organize the integration, to take into account the specifics of each individual region, because science and innovation process can not be developed in some sort of administrative or territorial limits. An Interregional "Association of Innovative Regions in Russia" will serve this purpose. Memorandum of its creation was signed in May, 2010 in Tomsk during the XIIIth Innovation Forum "Innovus". In October the region signed the constitutive documents. The association includes eight subjects - Irkutsk, Kaluga, Novosibirsk, Tomsk, Krasnoyarsk

regions and Perm Krai, the Republic of Mordovia, Tatarstan, as well as "Rosnano", the Russian Venture Company and the Academy of National Economy.

The list of tasks that must be resolved in the near future in the region for the transition to the innovation-oriented economic development includes:

- formation of a full-fledged regional innovation system in accordance with regional characteristics;

- mobilization of the intellectual potential of educational and research institutions to develop innovative business that can be achieved by both economic and political measures;

- more active attraction of foreign investment in the development of regional economy, establishment of partnership with the world's largest innovative companies.

#### **Conclusion**

High-end technology is the most important in the economy based on knowledge. But it's no less important for the future of the region to have notice of another direction, which is associated with the extraction of minerals. When the state policy emphasizes the innovation-oriented economy, they often forget about the improvement of raw-materials industries. It is impossible to increase the productivity and the volume of mining without innovation and technological change in traditional industries.

Innovative type of development of the region requires mandatory support for basic industries (machine building, timber, oil and gas complexes, energy sector) as the basis for the technical reconstruction of the regional economy. The biggest technological advance is in geology and exploration, oil-and-gas production and petrochemistry, timber processing, machine building and instrument making. Transport, energy sector, housing and utilities and public services are provided with research and projects least of all.

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