Dmitri Mendeleev, who was born in Tobolsk, used to say:

“To burn crude oil is the same as to burn money in a stove.”
About ZapSibNeftekhim

ZapSibNeftekhim will become the largest state-of-the-art petrochemical complex in Russia. The project is subject to construction of an Ethylene Cracker Unit with capacity of 1.5 million tonnes of ethylene, about 500 thousand tonnes of propylene and 100 thousand tonnes of butane-butylene fraction (BBF) per annum, and units for production of various grades of polyethylene and polypropylene, to a total capacity of 2 MTA.

Implementation of the ZapSibNeftekhim project is focused on expansion of deep conversion of significant quantities of by-products from oil and gas production in Western Siberia, including associated petroleum gas, as well as import substitution for the polymers most in demand in the Russian market.

ZapSibNeftekhim will be part of the Tobolsk Industrial Site that already combines the operating plants, Tobolsk-Neftekhim and Tobolsk-Polymer. ZapSibNeftekhim is a logical stage in the development of Sibur in the Western Siberia region. In the recent 10 years, the gas fractionation capacity of Tobolsk-Neftekhim has been significantly expanded, a NGL line from Purovsky GCPP to Tobolsk-Neftekhim has been built, the throughput capacity of Denisovka unshared station of Sverdlovsk railway has doubled.

ZapSibNeftekhim Complex envisages employment of up-to-date advanced technologies in the field of raw hydrocarbons conversion and logistics which will make it possible to ensure reliability, safety and efficacy of the investment project.
By the beginning of the implementation of ZapSibNeftekhim project, a NGL line from Purovsky GCPP to Tobolsk-Neftekhim had been built, the gas fractionation capacity of Tobolsk-Neftekhim had been significantly expanded, and the throughput capacity of Denisovka unshared station of Sverdlovsk railway had doubled.
ZapSibNeftekhim: Project relevance

The amount of light hydrocarbons converted into petrochemical products with high added value becomes significantly greater. Cost for transportation of intermediate products reduces. Phasing out of imported polypropylene and polyethylene is ensured.

Tobolsk Industrial Site

2020
8 million tonnes of NGL 2.5 million tonnes of polymers

30% output of deep conversion product

2015
6.4 million tonnes of NGL

0.5 million tonnes of polymers

8% output of deep conversion product

10 km from the town

Denisovka station

CHP

Tobolsk-Polymer

ZAPSIBNEfteKhim

Central Gas Fractionation Unit 1, Central Gas Fractionating Unit 2

TOBOLSK-NEfteKhim

TOBOLSK-NEfteKhim

Denisovka station was expanded in 2015.
Up-to-date technologies guarantee the closed-loop utilization of resources, energy efficiency, minimum quantity of raw materials for maximum quantities of the product, and minimum waste generation.

**Basic Technologies**

<table>
<thead>
<tr>
<th>Technology</th>
<th>Location</th>
<th>Technology Owner</th>
<th>EP Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECU</td>
<td>Within the limits of Litvinov (Czech Republic)</td>
<td>LINDE, Germany</td>
<td>LINDE, Germany</td>
</tr>
<tr>
<td>PE UNITS</td>
<td>Within the limits of Cologne (Germany)</td>
<td>INEOS, Great Britain</td>
<td>TECHNIP, France</td>
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<tr>
<td>PP UNIT</td>
<td>Within the limits of Płock (Poland)</td>
<td>LyondellBasell, Netherlands</td>
<td>ThyssenKrupp, Germany</td>
</tr>
</tbody>
</table>

Technology: LINDE PE/UNITS Spheripol
Construction quantities

16,000 workforce on site during the peak period of construction

513,000 m$^3$ of concrete (including precast concrete ~ 67 thousand m$^3$)

9,831 km of cable

approx 1,300 km of piles (more than 99,000 pcs)

approx 1,400 km of overhead pipelines

102,000 tonnes of steel structures

The approximate distance between Moscow and Magadan.

This quantity would be enough to erect 50 radiotowers, 350 m high.
Areas of application of polymeric products

SIBUR
After ZapSibNeftekhim is put into operation

CONVERSION COMPANIES
Producers of polymeric products

FINISHED PRODUCTS
Areas of application of polymeric products

- Medical products
- Containers
- Film
- Parts for vehicles
- Construction materials
- Cable products
- Hygienic products

Field of Application:
Construction materials
Industrial Safety Policy

1. The maximum Industrial Safety solutions have been adopted in the plant’s design
   - HAZOP
   - Sealed equipment
   - 100% capacity redundancy
   - Production automation
   - Protected premises for workplaces
   - Soil protection
   - Automated control, interlocks

2. Personal responsibility of each employee
   - Emergency response plans developed
   - Multistage monitoring
   - Personal protection equipment
   - Process hazards analysis
   - Safely designed processes
   - Training and drills
   - Mechanical integrity management

3. It takes only one button to press to stop the plant

STOP
Environmental Protection

Lobaria pulmonaria is extremely sensitive to air purity – it is extremely sensitive to air pollution, to its hydrocarbons content, and grows only in ecologically clean forests. It is listed in the Red Data Books of the Tyumen region, Russia and the world.

Eco Path

1.47 km

The plant will use up-to-date gas treatment systems with 99.9% efficiency.

Lobaria pulmonaria is listed in the Red Data Book of the Tyumen Region, Russia and the world. It is an extremely sensitive organism to air purity, its hydrocarbons content, and grows only in ecologically clean forests.

Dactylorhiza maculata, Orchidaceae family, Orchids

Scarcity category II. Red Data Book of the Tyumen Region Listed in the Red Data Books of Ukraine, Latvia, Tatarstan, and Moscow Region. It grows on the Eco Path near the Tobolsk Industrial Site.
During the plant construction and operation phases, regular environmental audits are carried out involving an independent observing consultant.

The following are regularly performed under the Environmental Monitoring Program:

- Vegetation condition monitoring
- Quality of water supply and sewage
- Ambient air quality
- Wildlife monitoring
- Noise level
- Waste handling

During clearing of the site, a pine tree was kept intact by the construction contractors at its north-west end. Having checked against the construction plan that it was not an obstruction to anything, they decided to keep the full-grown beautiful tree.
During implementation of the ZapSibNeftekhim project, SIBUR re-registered itself in Tobolsk and pays taxes to the Tyumen Region’s budget.
SIBUR and Tobolsk: long-term partnership

SIBUR is building strong and trusted relationship with the administration of the region and the town. The company has recently agreed an extension for another 10 years (up to year 2024) of the tripartite investment agreement between the Government of the Tyumen Region, the Administration of Tobolsk, and SIBUR, under which the Holding being supported by the region’s and town’s authorities has performed a major modernization and extension of the Tobolsk Site.

The Tobolsk Industrial Site is the largest production complex of SIBUR. It accommodates Tobolsk-Neftekhim and Tobolsk-Polymer plants, a large railway hub Denisovka station that handles the bulk streams of raw materials and finished products of the Site. In 2014, SIBUR finished construction of the linear part of the product line from Purovsky GCPP to Tobolsk-Neftekhim. The ZapSibNeftekhim project under construction will strengthen the status of Tobolsk as the center of the Western Siberian Petrochemical Cluster and one of the largest industrial centers of the country.