



MIRRICO
GROUP OF COMPANIES

Focus on the result.
Mirrigo — chemistry of your business

MIRRICO Group of Companies

2019

Philosophy

Mirrico Group of Companies specializes in development, manufacture, supply and service maintenance of chemical solutions.

Mission

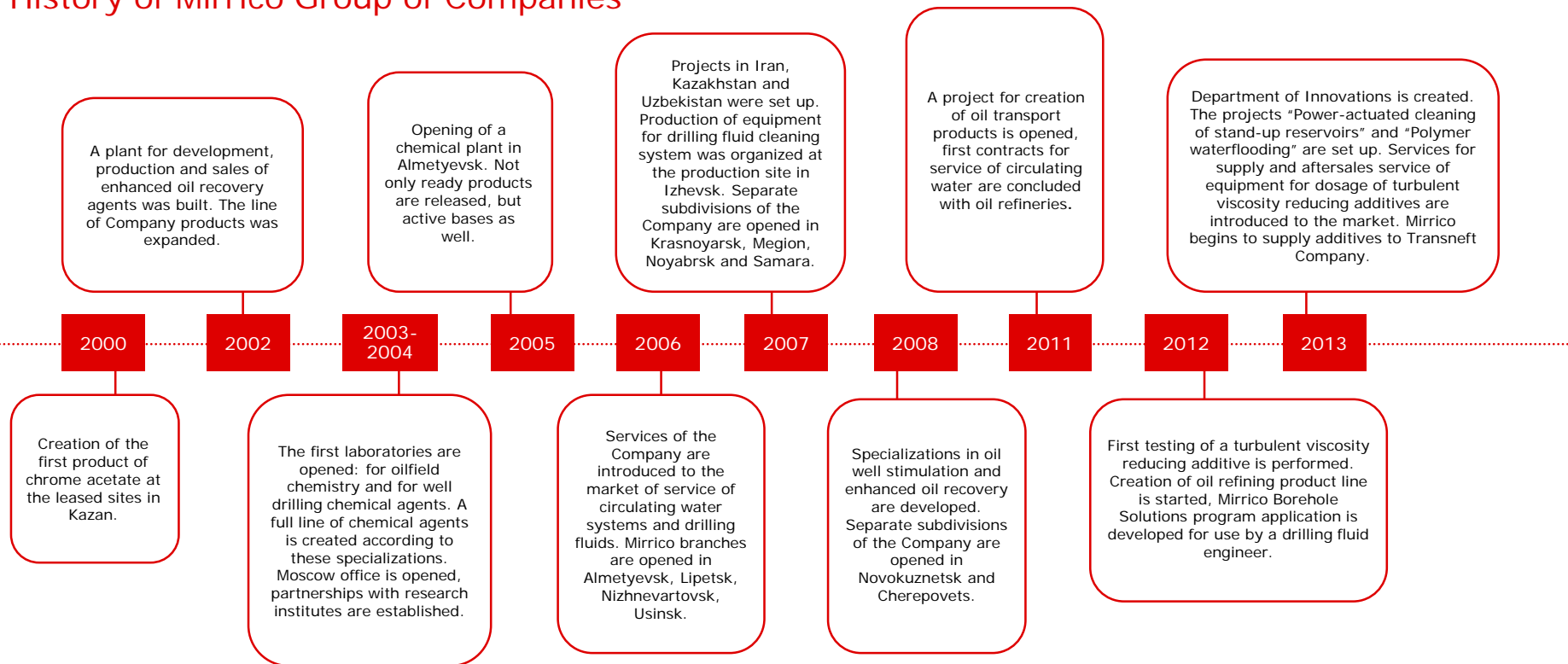
To improve efficiency of our partners (customers and suppliers) by developing and applying innovative technologies, experience and knowledge, and thereby, to contribute to sustainable development of economy, society and the environment.

Vision

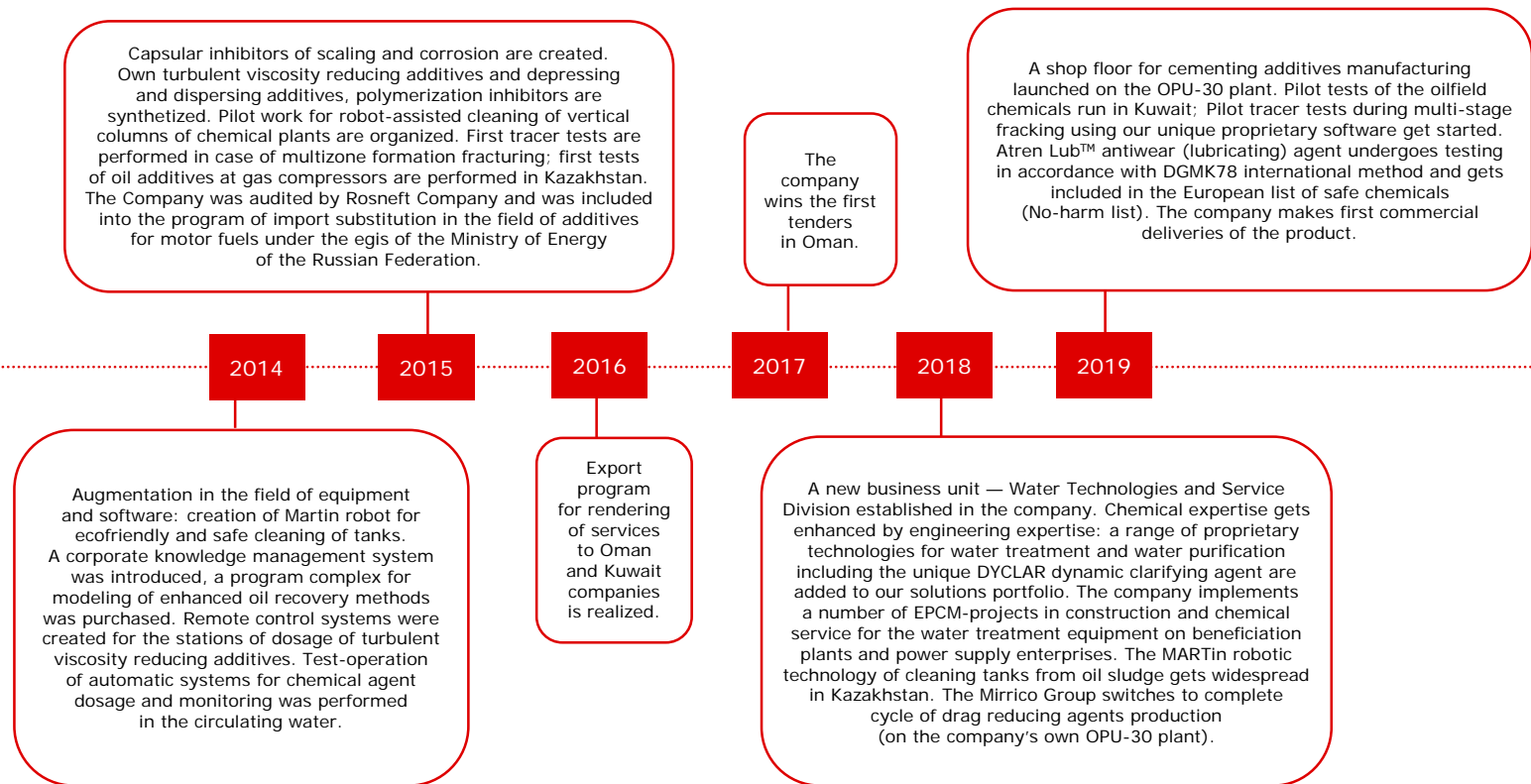
To become a leading company in the sphere of development, supply and service maintenance of chemical solutions in EurAsEC countries and in the Middle East.



History of Mirrico Group of Companies



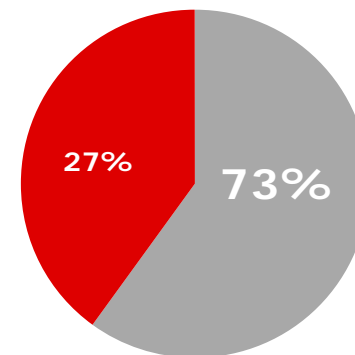
History of Mirrico Group of Companies





Key facts about Mirrico Group of Companies



Amount for 2017 - 5,7 bln. RUB



Revenue according to types of products

-  Services
-  Supply of chemical agents

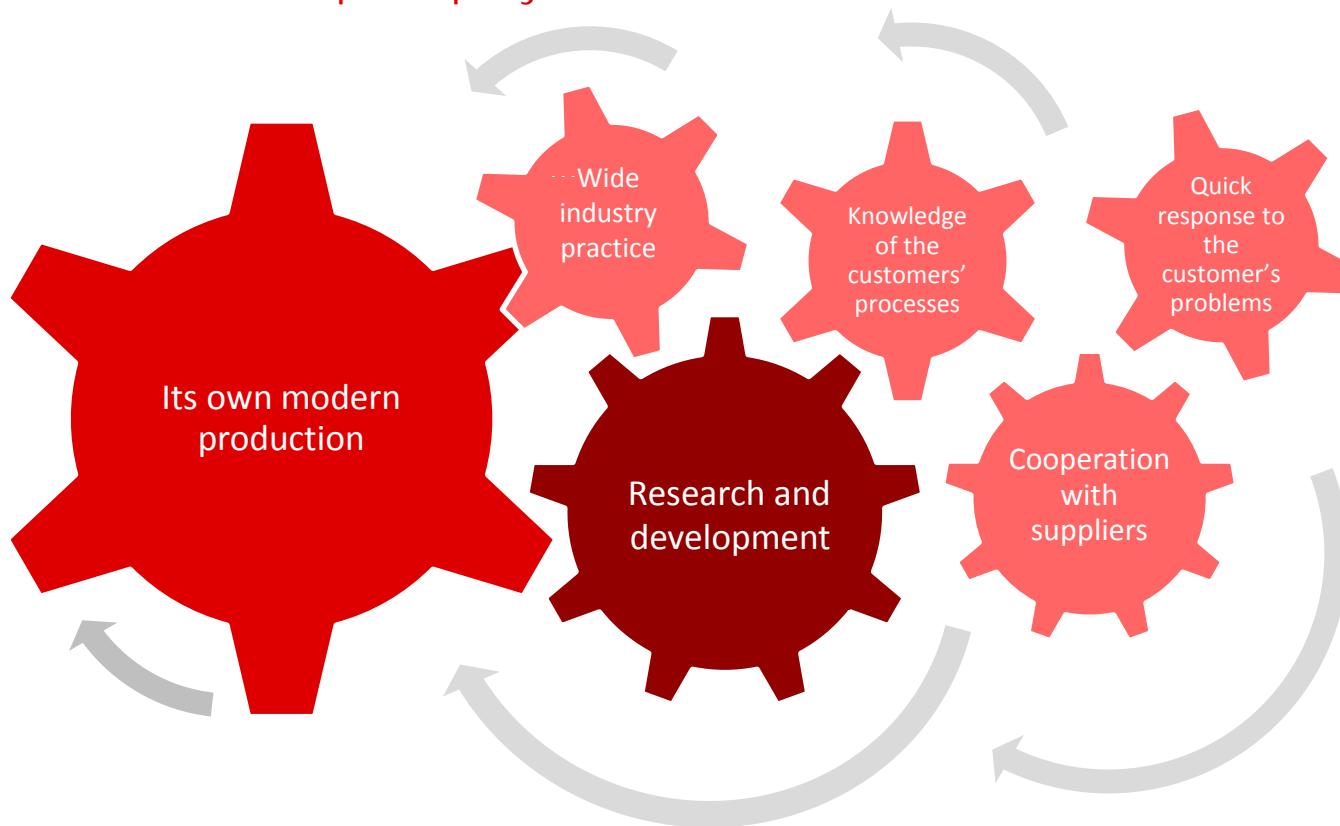
Key facts about Mirrico Group of Companies

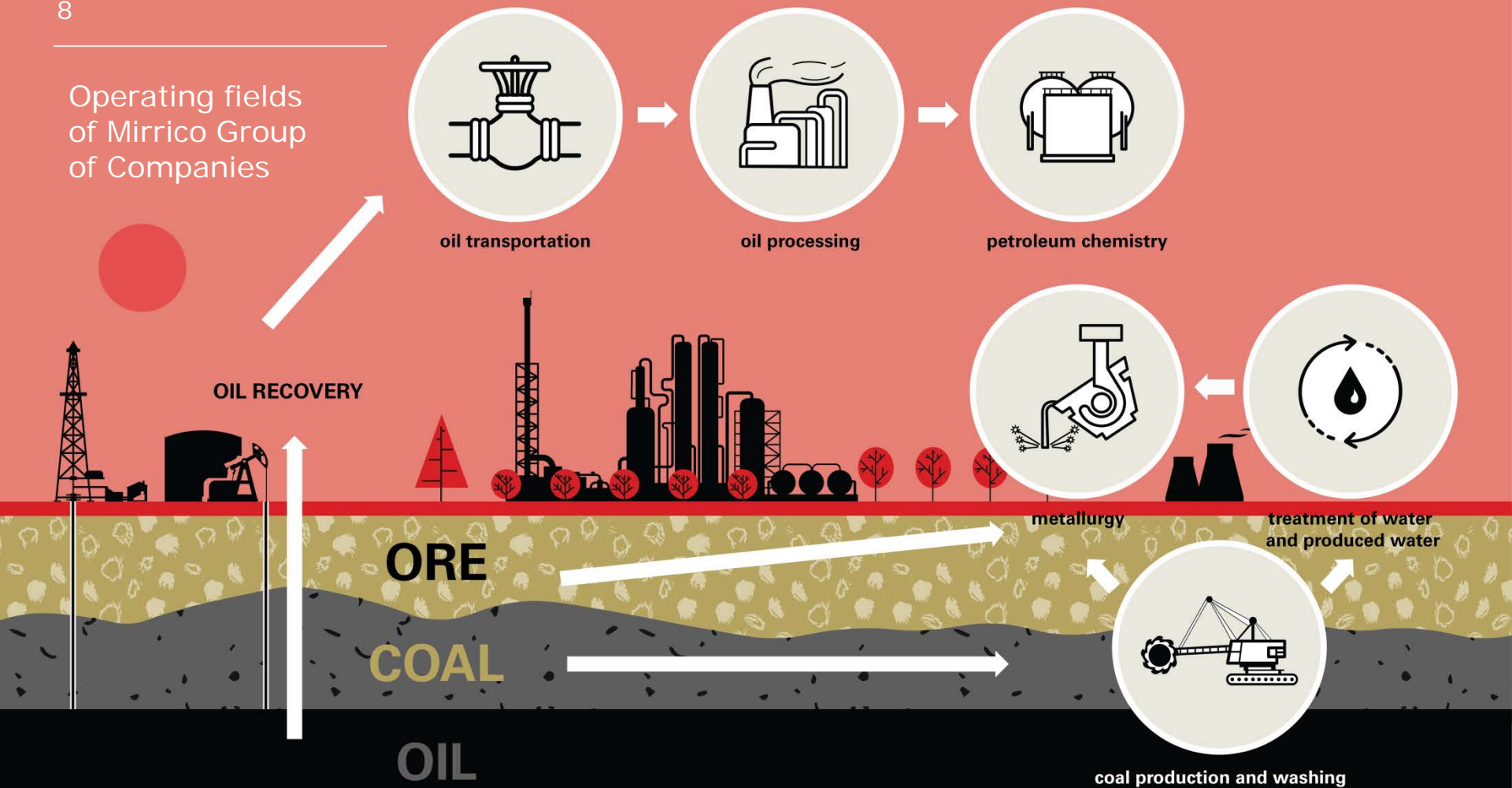
Indicator	2010	2011	2012	2013	2014	2015	2016	2017	2018 (plan)
Revenue of Mirrico Group of Companies, mln. \$	69,16	95,27	106,5	119,3	113,6	76,6	95,2	99,4	102,4
EBITDA, mln. \$	9,8	6,8	6,4	9,4	5,2	6,5	17,8	14,2	13,2

Competitive position of Mirrico Group of Companies

- Better competences and developed research base in chemical solutions
- Company's own manufacture of chemical agents in accordance with unique technologies
- The largest share of high-technology solutions in the portfolio among other Russian companies
- Wide range of products and technologies to solve each particular task including standard, high-technology, and also individual solutions
- High operating efficiency
- Experience in working far abroad and at the great amount of different facilities
- Broad coverage of markets and operating fields

What makes Mirrico GC a top company





Areas of business of Mirrico Group of Companies



Oil prospecting and recovery:

- Well construction:
- Chemistry and service of drilling fluids;
- Service connected with lost-circulation control during drilling;
- Rental of equipment for drilling fluids cleaning;
- Chemical agents for well casing
- **Work with subsurface storage tanks:**
- Investigations of oil fields with the help of indicators;
- Chemical agents and service for enhanced oil recovery
- **Work with ground infrastructure:**
- Chemical agents and service for protection of pumps, pipelines and for oil treatment;
- Cleaning of tanks and processing equipment;



Pipeline transportation of hydrocarbons:

- Chemical agents and service for pipeline transportation of oil and oil products



Oil and gas processing:

- Chemical agents and additives for oil recovery and petroleum chemistry
- Water treatment in oil processing and petroleum chemistry



Ferrous and non-ferrous metallurgy:

- Water treatment in metallurgy



Beneficiation of coal, ore and minerals:

- Chemical agents for flotation, water treatment and sludge decantation







Chemical and petrochemical industry:

- Struggle against undesired secondary processes
- Water treatment at the enterprises of petrochemical industry

Geography of Mirrico GC's activity

Oil prospecting and recovery

-  Service of drilling fluids and chemical agents for construction
-  Service and chemical agents for enhanced oil recovery and oil production stimulation
-  Field indicator researches
-  Petroleum chemistry and integrated chemisation of oil fields
-  Cleaning of tanks and processing equipment
-  Chemical agents and service for pipeline transportation of oil and oil products


Oil and gas processing

-  Chemical agents and additives for oil processing and petroleum chemistry
-  Water treatment in oil processing and petroleum chemistry

Ferrous and non-ferrous metallurgy

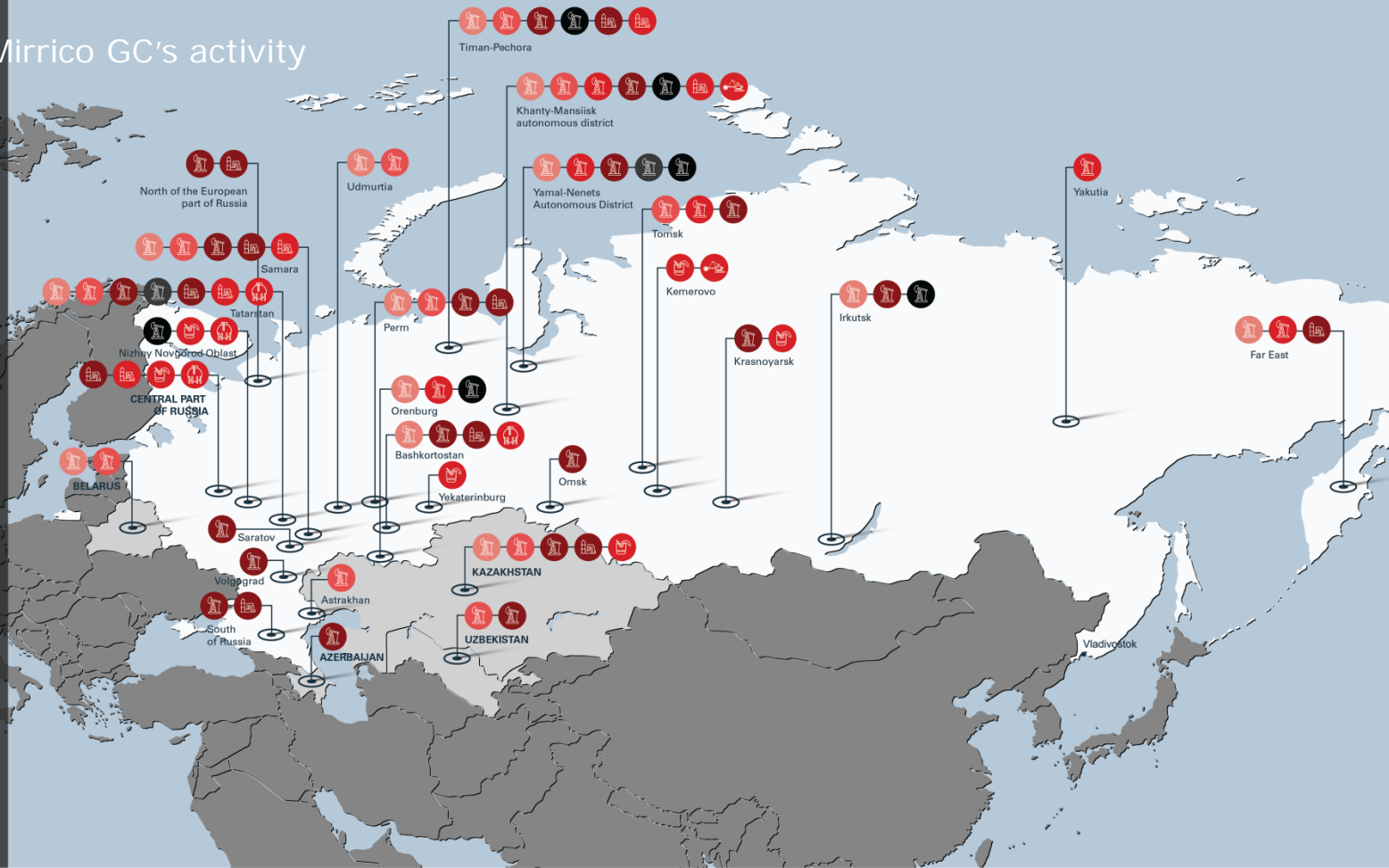
-  Water treatment in metallurgy

Beneficiation of coal, ore and minerals

-  Chemical agents for flotation, water treatment and sludge decantation

Chemical industry

-  Water treatment at the enterprises of petrochemical industry



Innovations in Mirrico Group of Companies

More than
10%

of employees of Mirrico Group of Companies are involved in innovation activity

5%

of the company's **turnover** is a volume of annual investments in researches and development

11

unique technologies and products are protected by patents for invention

7

scientific research laboratories and a scientific and engineering center are a part of the laboratory complex

More than
40

highly experienced employees of scientific research laboratories and a scientific and engineering center, including **9** PhDs in chemical sciences

2,2

thous. sq. m is the area of the laboratory complex equipped with the latest special-purpose equipment

Own laboratory synthesis of organic substances, scaling and modelling of manufacturing procedures.

Cooperation with 7 universities,

4 sectoral research institutes of customers and **6** research centres of suppliers

Innovative business priorities

Area of business	Business priorities for development
Well drilling	Loss circulation control
	Complication control upon drilling
Oil production	Enhanced oil recovery
	Production stimulation, incl. hard-to-recover reserves
	Formation fracturing
Complication control	Protection of surface and downhole equipment against corrosion, asphalt, resin, and paraffin deposits and salts
	Increase of quality of oil treatment
Pipeline transportation of hydrocarbons	Reduction of energy costs associated with pumping
	Increase in volume
	Provision of safe operation
Complex chemization of deposits	Full service maintenance of oil production processes
	Increase of oil extraction efficiency
Industrial water supply	Water treatment
	Produced water conditioning
	Circulating water treatment
	Water management
Oil and gas processing	Oil product additives (diesel fuel, vacuum gas oil, oil fuel)
	Catalytic processes
Petroleum chemistry	Struggle against negative secondary processes
Small-tonnage chemistry	Polymer production

Unique products and technologies of Mirrico Group of Companies



Turbulent viscosity
reducing additive
production technology



Polymer corrosion
inhibitor production
technology



Enhanced oil recovery
technology based on
biopolymers



Station of dosage of a turbulent
viscosity reducing additive with
remote monitoring and control



Technology of production of granulated
products: scale inhibitors, inhibitors of corrosion
and paraffin deposits



Circulation-loss control
technologies



Robotic technology of cleaning
tanks and equipment cleaning
from deposits

Production of Chemical Agents by Mirrico Group of Companies

Company's own production is
30 thousand tons per year

Production at partners' facilities is
20 thousand tons per year

Company's own production:

- OPU-30 LLC, a chemical process plant of Mirrico Group of Companies, is situated near Almetyevsk, Republic of Tatarstan.
- Total production space makes 7,8 ha.
- Number of employees exceeds 80 people.
- Quality management system of the company complies with ISO 9001:2008 international standard.
- The plant produces a full range of:
 - petrochemicals,
 - chemical agents for water treatment,
 - chemical agents for oil processing, petroleum chemistry, turbulent viscosity reducing additives, chemical agents for well drilling, enhanced oil recovery and oil production stimulation.

Advanced projects on production:

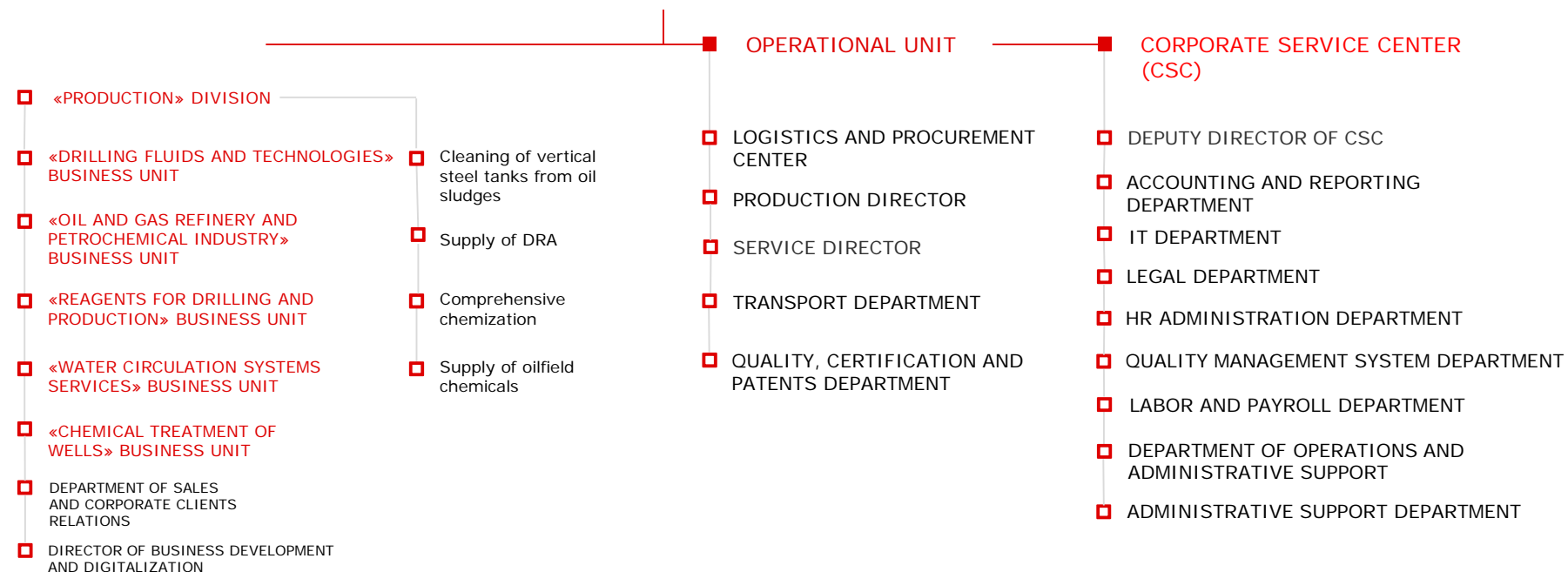
- Construction of a plant producing turbulent viscosity reducing additives according to its own technology;
- Construction of facilities for production of polymer corrosion inhibitors;
- Setting of facilities for production of a depressant for oil processing.

Structure of Mirrico Group of Companies

MIRRICO GROUP OWNER AND CEO

CORPORATE CENTER

- BUSINESS SECURITY DEPARTMENT
- HR MANAGEMENT DEPARTMENT
- IT SYSTEMS MANAGEMENT DEPARTMENT
- CORPORATE AND LEGAL DEPARTMENT
- FINANCE DEPARTMENT
- STRATEGIC PLANNING AND MARKETING DEPARTMENT
- INNOVATIONS DEPARTMENT
- INTERNAL AUDIT SERVICE

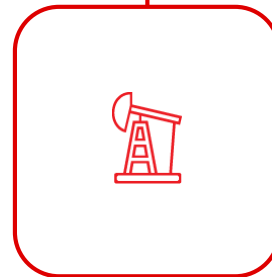




Business unit

Chemicals for Drilling and Production

Development, customized selection and supply of a wide range of complex chemicals with high engineering component for well construction and oil production.



Main types of services:

- Trading: selection and supply of our proprietary chemicals, as well as chemicals of third-party vendors for drilling, cementing and oil production customized for the client's specific geotechnical issues and with consideration of specific drilling conditions in Russia and the CIS countries;
- Engineering: design and testing of drilling mud systems, engineering support of the developed chemical solution implementation by qualified process engineers during the well drilling operations.

Advantages of cooperating with the Mirrico Group's CDP BU:

- 80 kinds of supplied chemicals (20 of them are manufactured by our company);
- 1/3 of products supplied by the Mirrico Group (in terms of value) is produced on our own production facilities;
- 16 years on the market;
- Optimal value-for-money ratio of the supplied products;
- Competent technological support service;
- Equipped quality control lab.

Business unit

Water Treatment Services

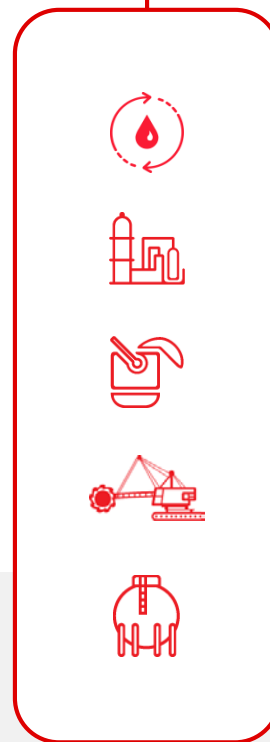
Chemical solutions and services in the field of water quality assurance for enterprises of ferrous and non-ferrous industries, pipe production, chemical, ore dressing industries, oil and gas refineries, agricultural and utilities sectors.

Main types of services:

- Supply of chemicals and rendering dosing services for water treatment systems, circulating water supply systems and waste water treatment;
- Supply of photochemicals, flocculants and coagulants for flotation, thickening and dewatering of mineral raw materials;
- Development of chemical treatment programs for boiler feed and cooling water.

Advantages of cooperating with the Mirrico Group's WTS BU:

- footprint in 10 industries;
- 4 areas of service for the client's water infrastructure;
- more than 30 cities in 4 countries;
- 12,000,000 m³ of treated water and purified effluent per year;
- Qualified technological support service.



Business unit

Oil and Gas Processing and Petrochemistry

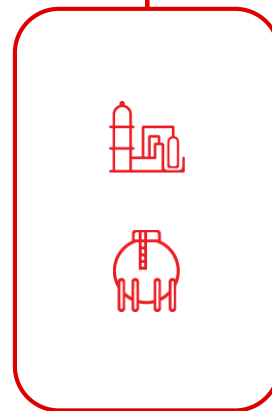
Design and implementation of advanced technologies and chemical solutions to ensure technological and economic efficiency of oil and gas refining processes, as well as petrochemical processes.

Main types of services:

- Supplying chemicals in order to improve the quality of light and heavy petroleum products, as well as to ensure continuous and failure-free functioning of the main technological processes of oil and gas processing and petrochemistry;
- Selection, implementation, supply, and regular monitoring of the chemicals efficiency for primary and secondary oil refining processes.

Advantages of cooperating with the Mirrico Group's OGP & PC BU:

- Domestic production;
- Full range of chemicals to ensure smooth operation of petrochemical enterprises producing monomers;
- High level of service support.





Production Division

Chemical and process solutions for oil and gas production.

Main types of services:

- Production of chemicals. OPU-30 LLC is a plant owned by Mirrico, located 14 km away from Almet'yevsk (Republic of Tatarstan).
- Chemical solutions: supply of chemicals, management of chemical solutions, integrated field service support.
- Process solutions: MARTin is a mobile autonomous robotic unit for cleaning tanks and oilfield equipment.

Advantages of cooperating with the Mirrico Group's Production Division:

- Extensive portfolio of high efficiency chemical solutions.
- Integrated chemical service: supply, service, monitoring, responsibility for the result.
- In-house R&D center and a network of regional laboratories.
- Experience of collaboration with the largest oil and gas production companies in Russia and abroad.
- Proprietary production of chemicals, providing consistent quality and optimal pricing of the applied products.



Business unit

Downhole Chemical Treatment (DCT BU)

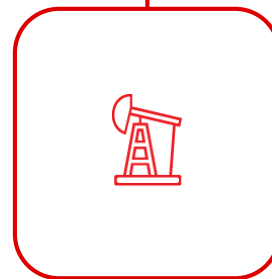
Development of technological solutions for oil recovery enhancement, oil production stimulation and squeeze cementing.

Main types of services:

- Consulting, development, laboratory selection and customization of enhanced oil recovery and oil production stimulation technologies.
- Mixing and injection of chemical compounds using proprietary specialized equipment.
- Monitoring of results of the works performed.

Advantages of cooperating with the Mirrico Group's DCT BU:

- Extensive portfolio of physical and chemical technologies for enhanced oil recovery and oil production stimulation.
- Qualified personnel.
- In-house chemical analysis laboratory.
- Extensive portfolio of chemicals used in oilfield operations sector that are produced by the Mirrico Group and its partners.





Business unit Drilling Fluids and Technologies (DFT BU)

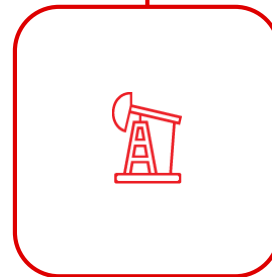
Service support for all types of drilling fluids.

Main types of services:

- Preparation of drilling mud programs for specific geologic conditions.
- Engineering support of the drilling mud mixing and treatment processes.
- Combating complications (disastrous circulation loss, consolidation).
- Casing leaks remedial solutions, well killing.
- Engineering support of drilling mud cleaning systems.
- Drilling mud and oil sludge disposal and reconditioning.

Advantages of cooperating with the Mirrico Group's DFT BU:

- Availability of unique technologies for prevention of disastrous circulation loss QUICK-STONE, CAVE-BLOCK.
- Drilling fluids product line for resolving all types of problems during drilling operations.
- Proprietary chemical production facility.
- The Mirrico Group's work experience in the main Russian drilling regions is 12 years.
- Experienced personnel: more than 80 drilling mud engineers, more than 30 operators for cleaning systems.



Thank you for your attention!

- 420107, Russia, Kazan, Ostrovskogo st., 84, k.402
- Phone: +7 843 537-23-93
- www.mirrico.ru