

Gas and Petrochemical Complex of the Republic of Tatarstan in figures

2023





Contents

Characteristics of Gas and Petrochemical Complex of the Republic of Tatarstan

Development potential of small and medium-sized businesses

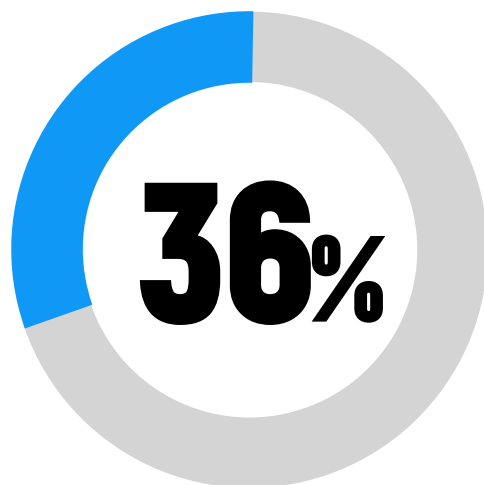
Innovative potential

Program development

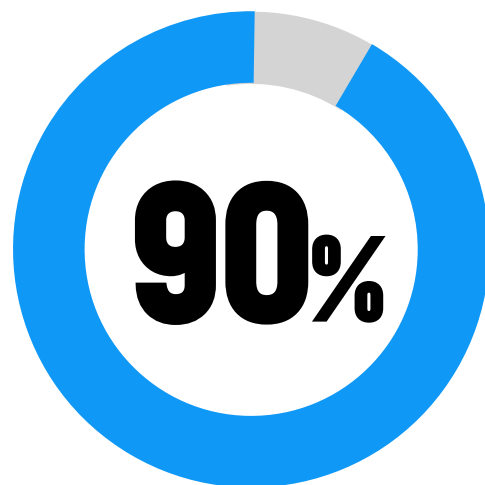


Characteristics of Gas and Petrochemical Complex of the Republic of Tatarstan

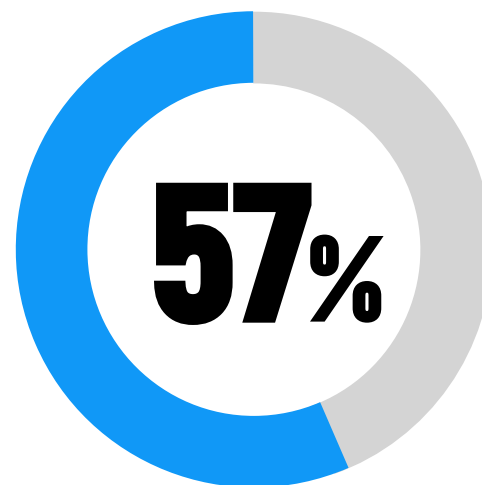
The petrochemical complex is one of the key sectors in the economy of the Republic of Tatarstan



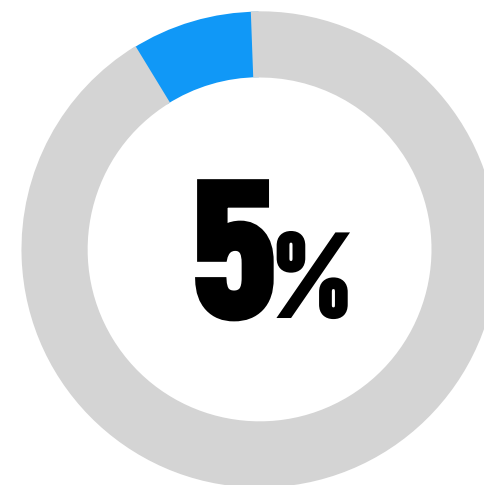
gross
regional product



export*



sales profit



employed

Average for 2018-2022

*Average for 2017-2021

Tatneft
Small oil production
companies

Crude Oil and
natural gas
production

Oil Processing

TANECO
TAIF-NK

Key Companies of Gas and Petrochemical Complex of Tatarstan

Nizhnekamskneftekhim

Kazanorgsintez

Ammoni

Nizhnekamsktechuglerod

Nefis Cosmetics

Tatchempharmpreparaty

Chemical Plant named after
L. Karpov

Egida +

Tathimplast

August- Alabuga

Agruskhim-Alabuga

Transneft-Synthesis

Manufacture of
chemical products
and medicines

Manufacture of
rubber and plastic
products

Nizhnekamskshina

Nizhnekamsk All-Steel Tyre
Plant

Danaflex

I-Plast

KVART

NOVAROLL separate subdivision
in Kamskiy Polyany

Tehstroy

SafPlast

Kamsky Plant of Polymeric
Materials

Tatneft-Presskompozit

Polymatiz

Zaryad

Main results for 2023

Crude oil and natural gas production

Oil production volume	256,7 mln. bbl
Revenue	18,4 bln.USD
Sales profit*	4,1 bln.USD

Manufacture of chemical products (excluding medicines)

Growth rate, in % to 2022	95%
The volume of shipped products	5,6 bln.USD
Sales profit*	1,3 bln.USD

Oil processing

Growth rate, in % to 2022	102,4%
The volume of shipped products	11,7 bln.USD

Manufacture of rubber and plastic products

Growth rate, in % to 2022	102,4%
The volume of shipped products	2,7 bln.USD
Sales profit*	0,34 bln.USD

*By large and medium-sized enterprises

Production of main products of Gas and Petrochemical Complex in Tatarstan

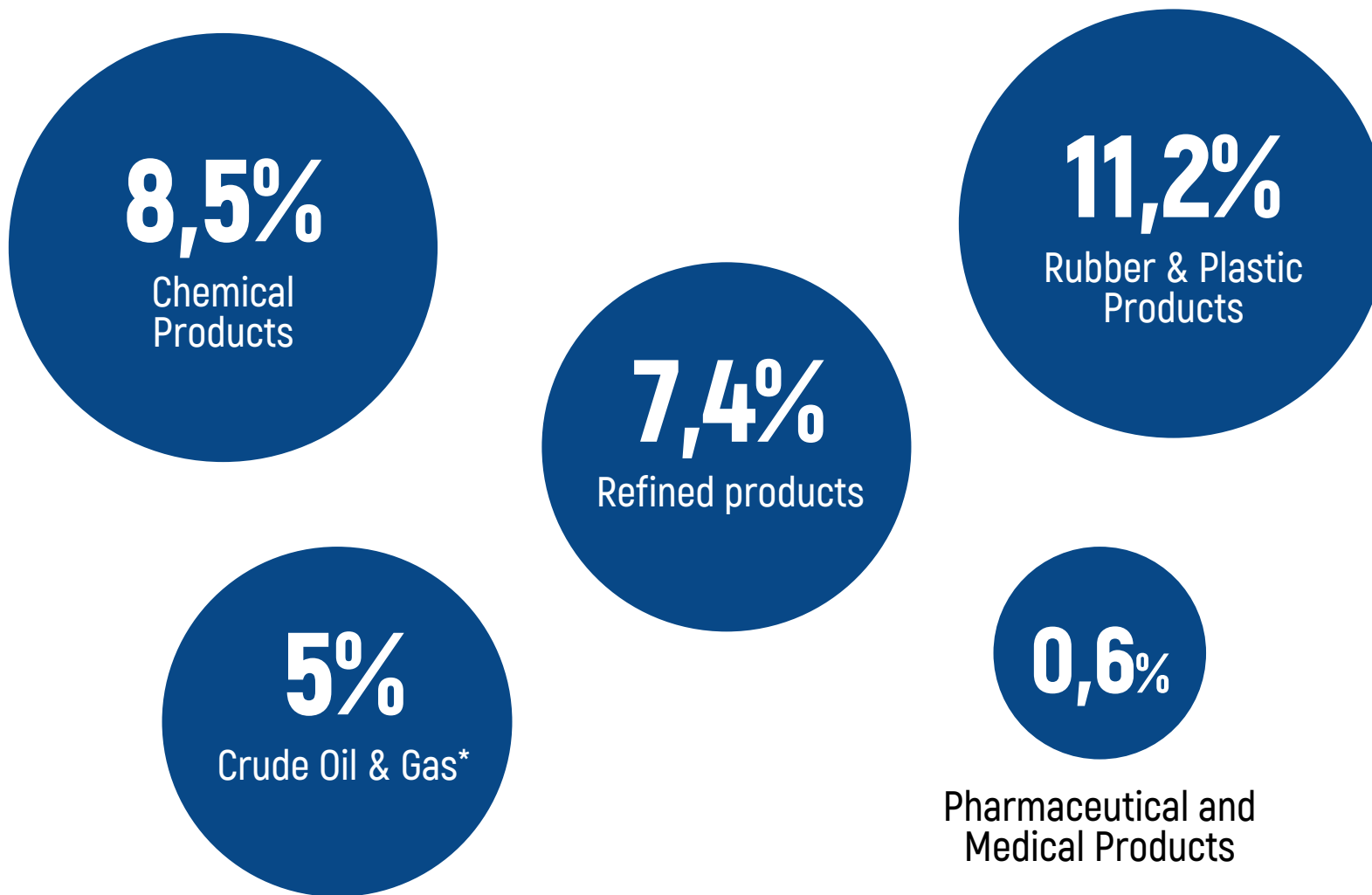
	2023		% by 2022	% by 2013
Produced oil	256,7*	mln. bbl	99%	107%
Diesel fuel	11 508,3	k t	101%	growth by 5,4 times
Motor gasoline	3 203,2	k t	111%	growth by 4,9 times
Plastics in primary forms	1 615,6	k t	94%	103%
<i>incl. ethylene polymers in primary forms</i>	820,2	k t	88%	92%
Paints and varnishes	33,2	k t	109%	93%
Industrial sulphur	277,4	k t	97%	growth by 6,2 times
Detergents	192,3	k t	83%	113%

Source: Tatarstanstat

*According to the press service of the Rais of the Republic of Tatarstan

The share of the Republic of Tatarstan in the sectors of the Gas and Petrochemical Complex of Russia

share in the shipping in 2023



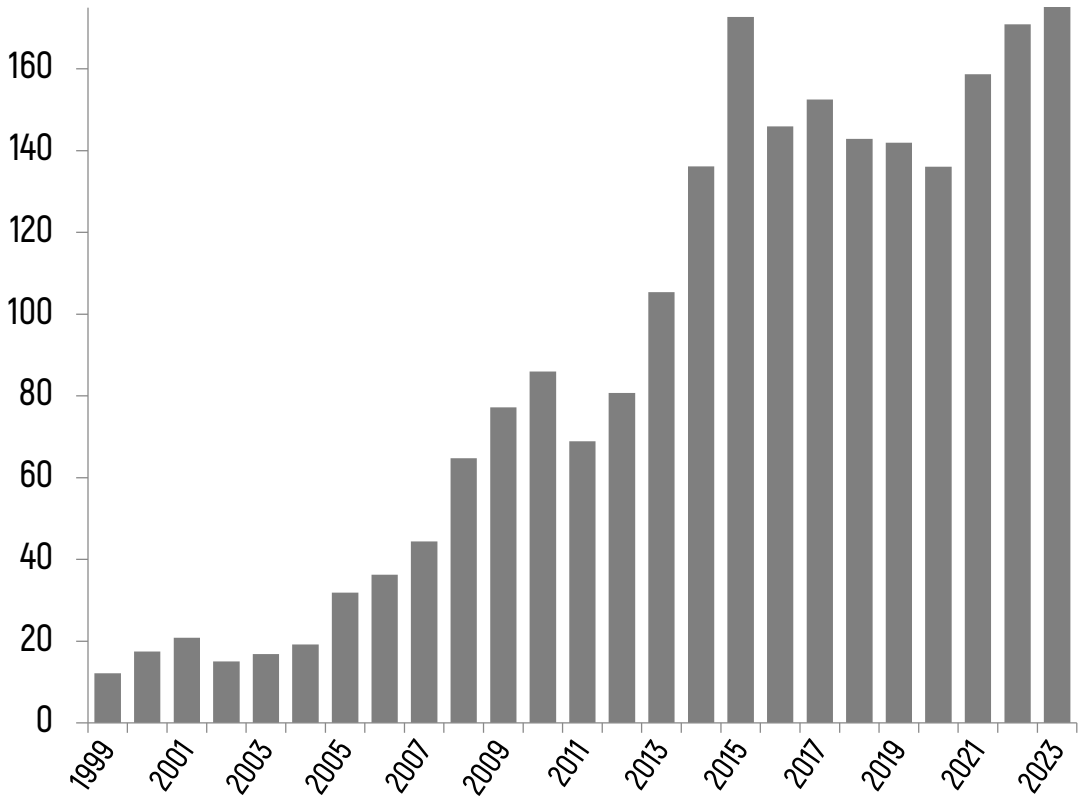
*Average for 2022

More than 2 trillion rubles of investments have been invested in the Gas and Petrochemical Complex of the Republic of Tatarstan for 25 years

Investments
into equity

> 2,3 trln rub. 1999-2023 period

large and medium-sized enterprises, bln rub.



*Average for 2022

Production index

2023/1999

Crude oil and natural gas
production*

growth by **1,4** times

Coke and
refined products

growth by **4,9** times

Chemicals and chemical products
(incl. pharmaceuticals)

growth by **4,4** times

Manufacture of rubber
products

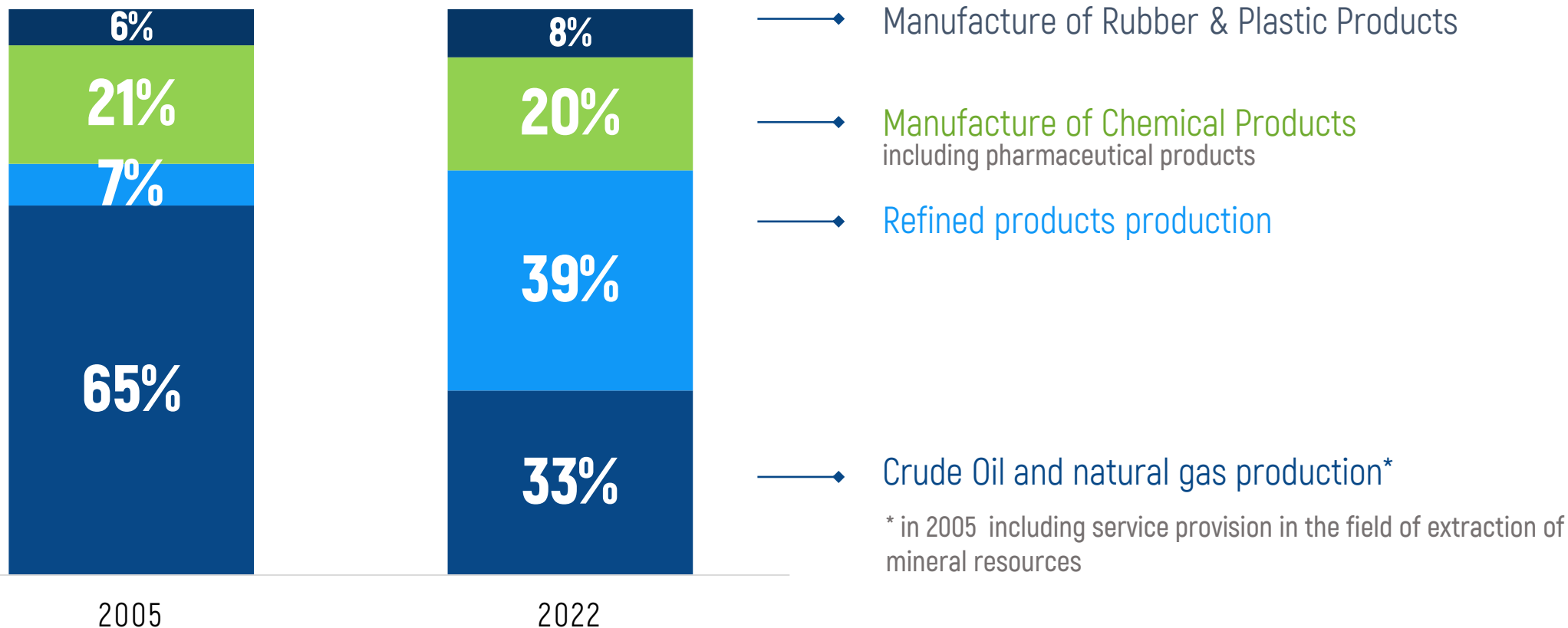
growth by **3,5** times

Manufacture of plastic
products

growth by **10,7** times

The share of oil refining, the production of rubber and plastic products in the structure of the petrochemical complex of the Republic of Tatarstan is increasing

Structure of Gas and Petrochemical Complex of the Republic of Tatarstan



Development potential of small and medium-sized businesses in Gas and Petrochemical Complex of the Republic of Tatarstan



>2,2 mln tons of a wide range of plastics and rubbers
are produced in Tatarstan

Polyethylene

Isoprene rubbers

Polypropylene

Butyl-rubber

Polystyrene

Butadiene rubber

Polycarbonates

Styrene-butadiene-rubber

Resource potential for the implementation of new petrochemical projects in the Republic of Tatarstan

RAW MATERIALS produced in Tatarstan in 2023	STAFF TRAINING	SUPPORT MEASURES	SCIENTIFIC BASE
257 million barrels of oil	2 state universities in the field of chemistry	2 special economic zones	>8 universities
936 million cubic meters of associated gas*	1 regional petroleum institute	5 priority development areas	>7 research and design organizations
2,2 million tons of plastics and rubbers	8 specialized colleges and technical schools	>100 investment sites	

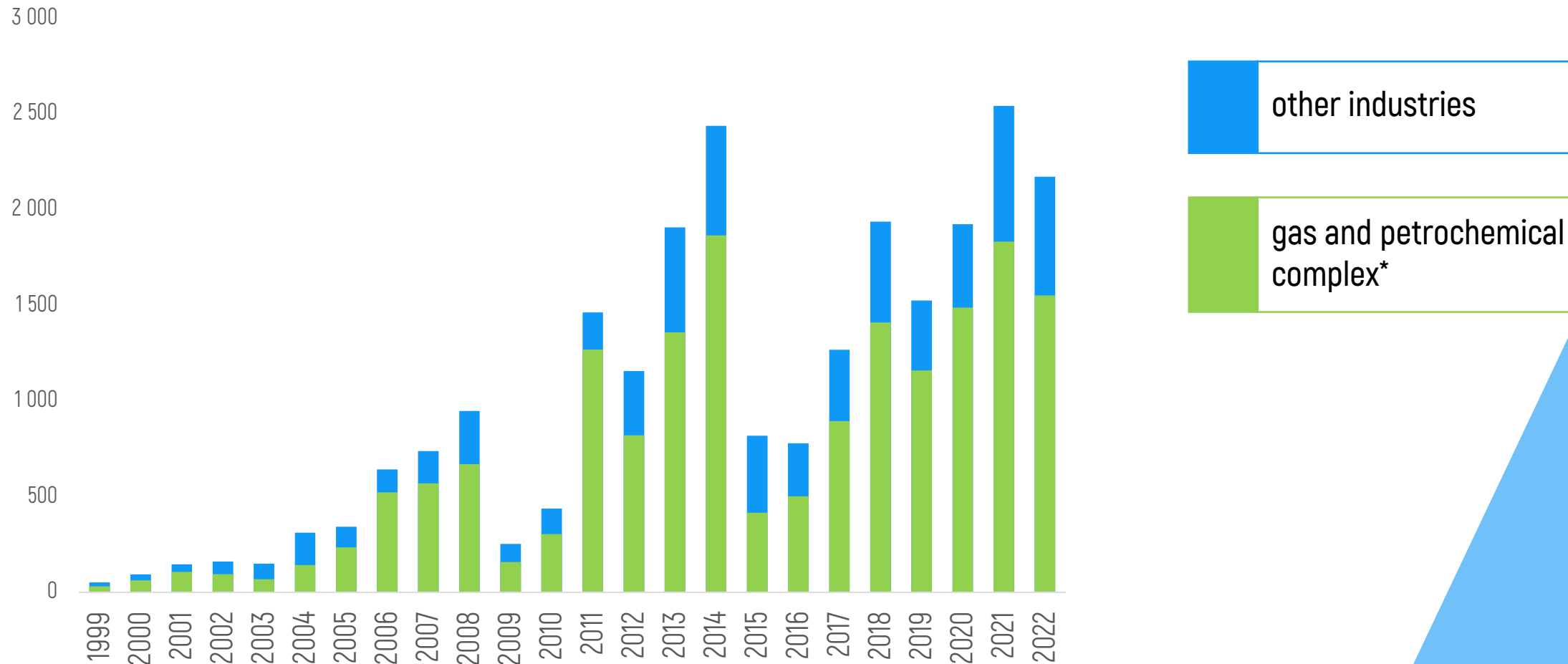
*Average for 2022



Innovative potential of the petrochemical complex of the Republic of Tatarstan

72% of industrial innovations in Tatarstan are created by enterprises of the gas and petrochemical complex

Expenses involved in innovation, mln USD



*including medicines, data for 1999 - 2016, taking into account the provision of services in the field of mining

The Republic of Tatarstan has a wide scientific and educational infrastructure in the field of petrochemistry

Academy of Science of the Republic of Tatarstan

Coordination of scientific activity and international cooperation in Russia and in the world

Volzhsky Research Institute of Hydrocarbon Raw Materials

Scientific work in the field of production & consumption of hydrocarbons

A.E. Arbuzov Institute of organic and physical chemistry

Physical-chemical and chemical-biological research

TATNIPINEFT Institute

Scientific support of oil production sector of the Republic of Tatarstan

Soyuzkhimpromproject Design Institute

Project development of chemical production

Kazan Federal University

Scientific and educational activity in the field of oil production, chemistry and ecology

Kazan National Research Technological University

Scientific and educational activity in gas and petrochemical industry

Kazan National Research Technical University

Development of composite materials and structures of petrochemical feedstock

Kazan State Power Engineering University

Optimization of chemical and technological processes, novel material characterization

Kazan State University of Architecture and Engineering

Development of application technologies of chemical materials in construction industry

TATNEFTEKHIMINVEST-HOLDING

coordinates the development of the petrochemical complex of the Republic of Tatarstan

Support for companies

assistance in the implementation of investment
and innovation projects

Planning

development of strategic documents and
strategic decisions

Provision of raw materials

assistance in solving issues of raw materials supply

Attracting projects

search, evaluation and attraction of technologies
and companies for the implementation of projects
in the Republic of Tatarstan

Cooperation

development of cluster connections

Communications

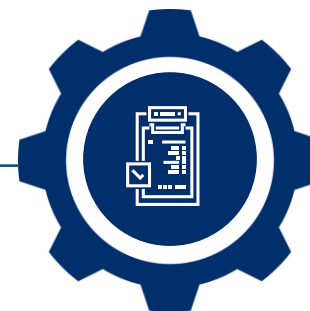
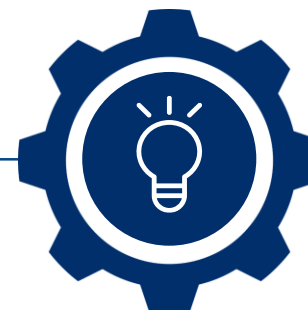
organization of conferences and round tables

Scientific and Technical Council of AO Tatneftekhiminvest-Holding promoting developments

informing the enterprises about new solutions in the field
of oil production, refining, petrochemistry

obtaining an expert opinion
from representatives of the state, science, and business








presentation of the most promising projects
to the Board of Directors of AO Tatneftekhiminvest-Holding



Program development of Gas and Petrochemical Complex of the Republic of Tatarstan



Integrated development of Gas and Petrochemical complex industries is provided within the framework of the program-targeted approach

1999-2003		1-st Program	Ensuring economic security and economic growth of the Republic by bringing a key sector of the economy to a competitive level
2004-2008		2-nd Program	Increasing the competitiveness of the Petrochemical Complex and ensuring, on this basis, the economic growth of the Republic
2010-2014		3-rd Program	The most efficient use of competitive advantages, a stable increase of value-added production on this basis , strengthening positions in the Russian and world markets
2015-2019		4-th Program	Growth of competitiveness of Gas and Petrochemical Complex, realization and expansion of competitive advantages
2020-2024		5-th Program	Formation of raw material base and scientific base for the development of production of functional materials and other types of products of medium and low-tonnage chemistry
2025-2029		6-th Program	Creation of the industry of functional materials, medium- and small-tonnage chemistry in Tatarstan
2030-2034		7-th Program	Ensuring the leadership of Tatarstan among the EAEU countries in terms of production volume and quality of functional materials, products of medium and low-tonnage chemistry

Priority areas for the development of chemical technologies and products in the Republic of Tatarstan



Olefins
and their derivatives



Methylchlorosilanes
and their processing



new types of rubbers and rubber products:
ethylene propylene diene monomer (EPDM)
styrene-ethylene-butylene-styrene rubber (SEBS)
thermoplastic elastomers based on reactor olefins (r-TPO)
hydrogenated acrylonitrile-butadiene rubber (HABR)
silicone rubber (VMQ)
fluorosilicone rubber (FMVQ)
epichlorohydrin rubber (ECO)
chloroprene rubber (CR)



Products of fine chemical industry
including:

*products for the production and processing
of rubbers and plastics*
super engineering plastics
*chemical products production
by the process of extraction
and use of supercritical fluids;*
*ultra-high molecular weight polyethylene
and its composites*



maleic anhydride
processing products



Epoxy and other synthetic resins



Carbon fiber
and carbon fiber-based composites



Processing of natural gas
into chemical products,
including olefins,
aromatic products,
feed protein (haprin)



Linear alkylbenzenes



Biodegradable polymers
and composites



Polyurethanes and raw materials
for their production:
ethylene and propylene oxide
isocyanates



Deep grain processing

Projects that were implemented during the 5th GPCC Programme of 2020-2024

TANECO: heavy coker gasoil hydrotreating, middle distillate hydrotreating, extractive distillation with sulfolane
Kazanorgsintez: polycarbonate (extension, stage 1)
Nefis Cosmetics: liquid detergents, synthetic detergents, soap (extension)
TatkhimPlast: compounds (extension)
Danaflex: Recyclable Barrier Materials oriented polyolefin films
KNT-Plat: PVC plastic compounds and film
Agruskhim-Alabuga: plant protection agents
Tatneft Alabuga-Glass Fiber: fiberglass, glass mesh (extension)

TANECO: complex for obtaining aromatics (in the mode of complex testing), pilot installation of hydroconversion
Nizhnekamskneftekhim: polyalkylene glycol (experimental batch), steam generating plant - thermoelectric station (start of pilot operation)
Kazanorgsintez: polycarbonate (extension, stage 2)
Nefis Cosmetics: laundry gels, capsules for washing and dishwashers, soap (extension)
Tatplastik: household plastic products
STC Ahmadulliny: polyphenylene sulfide (pilot production)
Chemical Plant named after L. Karpov: waterless magnesium sulfate
Natural Health: wellness products
Polymatiz: composite nonwovens (extension)

2020

2021

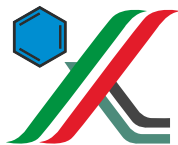
TANECO: catalytic cracking, hydrogen (3rd installation), diesel fuel isodewaxing, delayed coking-2, gas fractionation, chemical water treatment; lubricants
TAIF-NK: deep processing complex
Nizhnekamskneftekhim: styrene butadiene rubber
Nizhnekamskshina: tires «Viatti» (extension)
Alabuga-Fiber: PAN precursor
Nefis Cosmetics: laundry gels (extension), laundry capsules
Tathimplast: compounds (extension)
Danaflex: oriented polyolefin films
INCO-TEK Agro Alabuga: complex granular NPK fertilizers
Polyplast Kazan: concrete additives
Factory of soft containers: big bags

2022

2023

TANECO: amine treatment and acidic waste water dispatch unit, water block No. 4, nitrogen plant
Kazanorgsintez: ethylene (accretion), isopropylbenzene (modernization)
KAMATEK: details of the exterior of the KAMAZ cabin
Nizhnekamskneftekhim: combined cycle plant-500, halobutyl rubbers (extension)
Nefis Cosmetics: laundry detergent with gel granule properties
RemGazCommunications: three extrusion lines for the production of large-diameter pipes and multilayer pipes
RTI-component: production of rubber compounds, rubber blending and calendering lines
Tatneft-Presscomposite: composite pipes and shaped products, 4 production lines for fiberglass fittings

We invite you to cooperate!



TATNEFTEKHIMINVEST-HOLDING



Website: www.tnhi.ru

Tel.: 8 (843) 272-41-74, 272-53-07

E-mail: kanc1@tnhi.mi.ru

Legal address: 29 Ershov street, Kazan, RT, Russia, 420061