



**OPEN INTERNATIONAL ARCHITECTURAL
AND URBAN PLANNING COMPETITION
FOR THE DEVELOPMENT OF A MASTER
PLAN FOR THE TERRITORY ADJACENT
TO THE ALMETYEVSK RESERVOIR ON
THE STEPNOY ZAY RIVER,
Almetyevsk, Republic of Tatarstan**

**INVITATION TO
PARTICIPATE**

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ABOUT THE COMPETITION

Initiated by

Public joint stock company TATNEFT

www.tatneft.ru/?lang=en



TATNEFT is one of the largest Russian oil companies today. The industrial complex of the Company includes steadily developing enterprises of crude oil and gas production, petroleum refining, petrochemicals production, the tire-manufacturing complex, network of filling stations and services. TATNEFT also has a stake in the financial sector companies (banking and insurance).

Organizer

Agency for Strategic Development CENTER

www.centeragency.org/en



Analytical and consulting organization specializing in development and urban planning. Operator of various architecture, urban planning, and design competitions, and an advocate for openness and transparency in all competitive procedures. The Agency deals with matters related to comprehensive land and real estate development and to improving the quality of the urban environment. It generates new ideas for cities and regions and develops new models of land development in Russia, thus allowing each community to unleash its full potential through the growth of new cultural, economic, and social hubs.

ABOUT THE COMPETITION

Competition Format

- International
- Two-stage
- Open

Competition Project

A territory in the north of the city of Almet'yevsk, Republic of Tatarstan, occupying an area of more than 1700 ha (including about 270 ha of forested land outside the city limits) adjacent to the Almet'yevsk reservoir on the Stepnoy Zay river.

1707 HA

Area of the competition territory

Competition Aim

Development of a master plan for the territory of the Stepnoy Zay river valley in the city of Almet'yevsk, Republic of Tatarstan by means of holding an Open International Professional Competition.

Participants

Professional organizations in the field of the integrated development of territories and urban planning, architecture, design, and elaboration of concepts for the development of public spaces, operating in Russia, and capable of attracting specialists in the field of economics, finances, and content programming to the team.

Jury

Representatives of the state authorities of the Republic of Tatarstan and the municipal establishment of Almet'yevsk city, experts in integrated land development, ecology and specially protected natural areas, economics and spatial planning, marketing and communications, technologies and innovations, as well as representatives of the initiator of the competition.

Finalists

The Jury will select 3 Finalists after the first stage of the Competition, based on the portfolios they have submitted.

Winner

The creator of the best Competition Proposal (as ruled by a Jury representing various industries) will be named the Winner of the Competition.

Prize Fund

The three finalists who develop the final bids will be paid a fee totaling 2,500,000 rubles, including all taxes and fees.

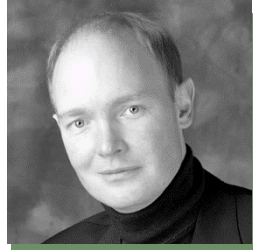
Following a meeting of the Jury, the finalists will also receive an additional payment in accordance with prize distribution, including all taxes and fees, in the following amounts:

- 1st place – 4,000,000 rubles.
- 2nd place – 2,000,000 rubles.
- 3rd place – 1,000,000 rubles.

JURY*



Nail Maganov
General Director,
PJSC TATNEFT,
chairman of the
jury



Guy Eames
Founder, Green
Building Council
in Russia
(RuGBC),
international
competition
curator



**Timur
Nagumanov**
Head of the
Almetyevsk region
of the Republic of
Tatarstan



**Natalia Fishman-
Bekmambetova**
Assistant to the
President of the
Republic of
Tatarstan



**Anna
Ashmarova**
Consulting
Director
RussiaDiscovery



**Tatyana
Guk**
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Moscow



**Sergey
Ivanov**
Chairman, State
Committee on
Tourism of the
Republic of
Tatarstan



**Ravil
Kuzyurov**
Minister of
Forestry of the
Republic of
Tatarstan



**Tatyana
Polydi**
Executive Director
of the Institute for
Urban Economics



**Ekaterina
Samukhina**
Deputy General
Director, Institute
of Environmental
Survey, Planning
and Assessment



**Anton
Sevastyanov**
Chief Architect
of Almetyevsk



**Irek
Fayzullin**
Minister of
Construction,
Architecture and
Housing of the
Republic of
Tatarstan



**Alexander
Shadrikov**
Minister of Ecology
and Natural
Resources of the
Republic of
Tatarstan



**Daniyar
Yusupov**
Lecturer, Department of
Architectural Design, St. Petersburg
State University of Architecture and
Civil Engineering

*The composition of invited
members of the Jury may be
changed



EXPERT COUNCIL*



Marat Girfanov
Head, Executive
Committee of the
Almetyevsk
Municipal District
of the Republic of
Tatarstan



**Fagim khazrat
Akhmetzyanov**
Imam-mukhtasib,
Almetyevsk
district and the
city of
Almetyevsk



**Dmitry
Bakaldin**
Head of
Department
for physical
education, sports
and tourism,
Almetyevsk
municipal district



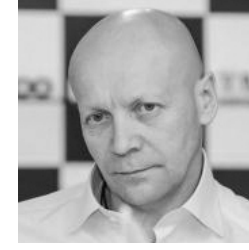
**Aleksandr
Veriya**
Deputy Head,
NGDU
Almetyevneft for
General Issues



**Flun
Galimov**
Head, SPI
Almetyevsk
Forestry



**Ainur
Iskhakov**
Director, MBI
Department of
Ecology
and Nature
Management,
AID



**Vyacheslav
Kolotovkin**
General Director,
Snezhinka sports
complex



**Petr
Kubarev**
Head of the
Department for
Environmental
Safety in the
Development of Oil
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R&D Institute,
PJSC Tatneft



**Svetlana
Lapteva**
Deputy Head,
Executive
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for Social Issues



**Airat
Mukhametzyanov**
Deputy Head,
Executive Committee
of the Almetyevsk
Municipal District for
Construction



**Renat
Nugajbekov**
Head, NGDU
Almetyevneft



**Andrey
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Executive
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Almetyevsk
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**Ilсур
Salimgaraev**
Head, Department of
Construction,
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Communications and
Road Management
of the Executive
Committee of the
Almetyevsk District



**Zyavdat
Sulaymanov**
Director, MAA
Department of
Housing Policy and
Housing and Public
Utilities of the
Almetyevsk
Municipal District



**Reshat
Khisamiev**
Head, MAA RC
Sports School for
Equestrian Sports

* The composition of invited
members of the Expert Council
may be changed



COMPETITION SCHEDULE

NOVEMBER 27, 2019

Press conference,
dedicated to the start of
the competition

JANUARY 21, 2020

Competition
applications deadline

FEBRUARY 19, 2020

Orientation seminar
for finalists

APRIL 23, 2020

Jury meeting.
Selection of winner

DECEMBER 13, 16, 2019

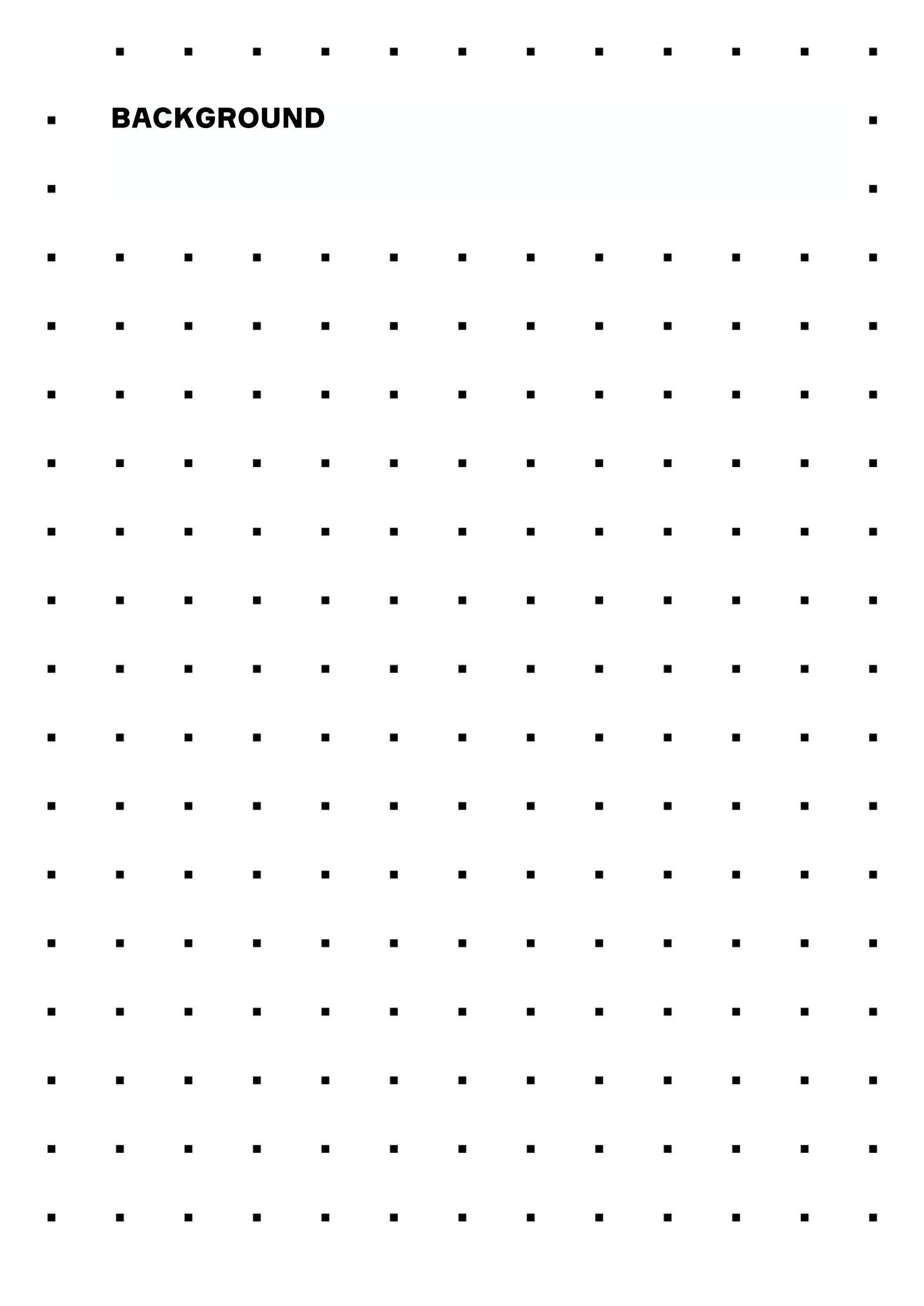
Orientation webinars
for competition
participants

JANUARY 30, 2020

Jury meeting.
Selection of finalists

APRIL 6, 2020

Submission of competition
proposals by
finalists



REPUBLIC OF TATARSTAN

The Republic of Tatarstan is located in the east of the East European plain, at the confluence of two large rivers, the Volga and the Kama, in the center of the European part of the Russian Federation.

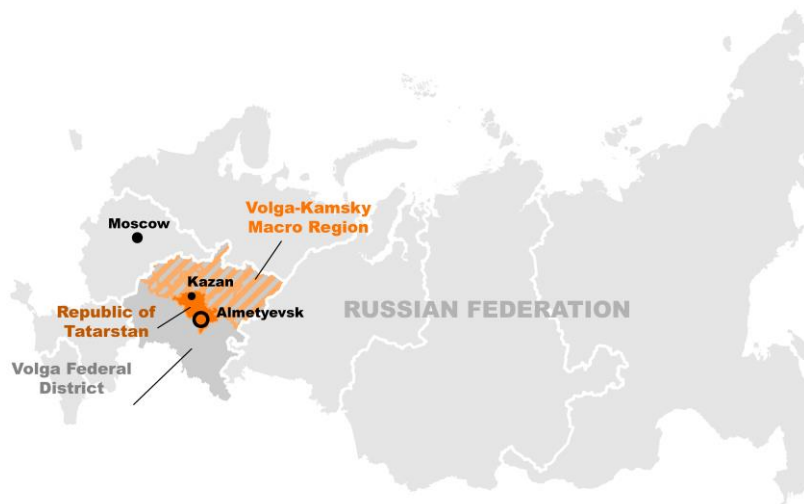
The Republic is located in the center of an important industrial region of the Russian Federation, at the intersection of the main routes uniting the east, west, north, and south of the country.

The Republic of Tatarstan is distinguished by the following characteristics:

- The Republic of Tatarstan is one of the most economically developed regions of Russia.
- The Republic has rich natural resources, robust and diversified industry, high intellectual potential, and a qualified workforce.
- Using 2.2% of Russia's farmland, the Republic produces about 4.5% of the country's agricultural output.

In the structure of the gross regional product of Tatarstan, industry has a 43.2% share, construction 9.0%, transport and communications 6.5%, and agriculture 7.5%¹.

Position of the Republic of Tatarstan in the European part of Russia



In agreement with the Strategy for spacial development of the Russian Federation for the period to 2025², the municipal establishments of the Republic of Tatarstan are considered promising mineral resource centers, specializing in oil and natural gas extraction, and promising agricultural centers specializing in farming.

3,898.6

Population in 2019, thousand people

67,847

Area of the Republic of Tatarstan

34,250

Average per capita income, rubles

1 PLACE

in potential for educational tourism (RAEX Analytics) in 2019³

2 PLACE

in the National Regional Investment Climate Ranking (ASI) in 2019⁴

4 PLACE

in quality of life in 2018 (RIA rating)⁵

5 PLACE

in industrial potential (RAEX Analytics) in 2019

¹ <http://tatarstan.ru/about/economy.htm>

² Approved by order of the Government of the Russian Federation No. 207-p, of February 13, 2019

By 2030, the Republic of Tatarstan will be a globally competitive, sustainably developing region, the driver of the Volga-Kama growth hub, and a leader in the development of human capital, institutions, infrastructure, economics, outer integration (axial Eurasian region of Russia), and inner space, a region with a rapid pace of development and high inclusion in the international division of labor⁷.

The Republic of Tatarstan is in the Top 5 subjects of the Volga Federal District by socio-economic indicators. For comparison, the most successful regions of the Volga Federal District were chosen, among which the Republic holds leading positions in gross regional product, per capita gross regional product, and nominal wages for employees of organizations. Annual growth in all three indicators speaks to the fact that the Republic is one of the most attractive regions for life.

33

Share of small and medium business in added value, %

80

Life expectancy in the Republic of Tatarstan, %

336

Length of fast and high-speed railway lines, km

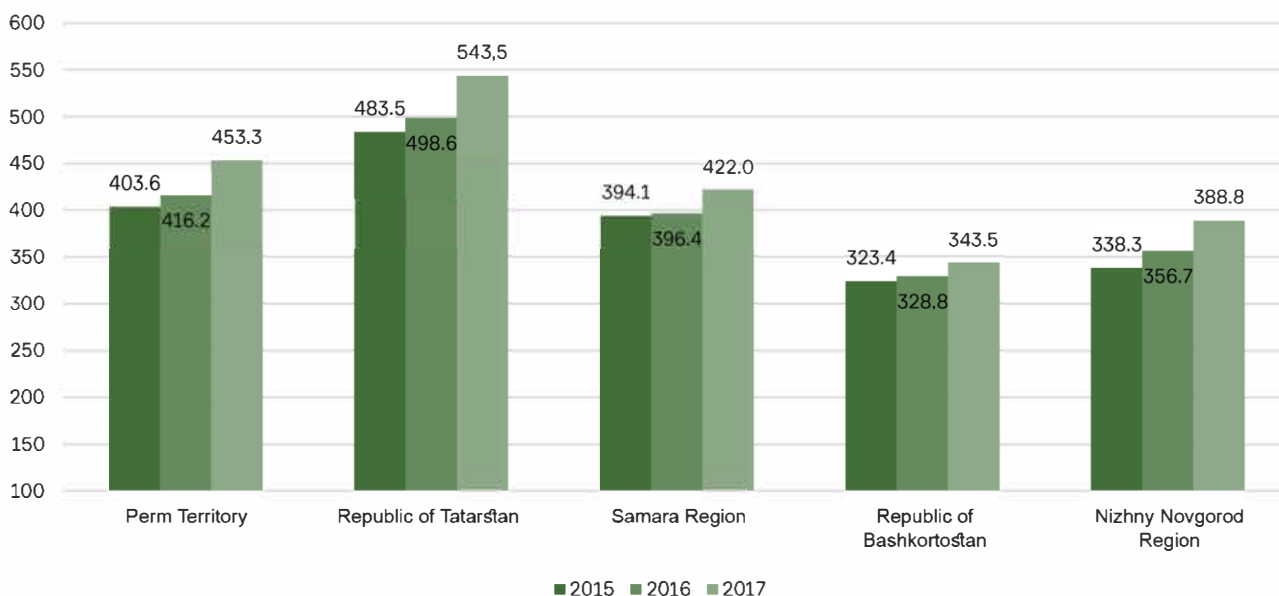


Fig. 1. Comparison of per capita gross regional products of the subjects of the Volga Federal District, thousand rubles

³ https://raex-rr.com/country/region_potential/rating_of_regions_by_educational_tourism

⁴ <https://asi.ru/investclimate/rating/>

⁵ <https://riarating.ru/infografika/20190219/630117422.html>

⁶ https://raex-rr.com/country/region_potential/rating_of_regions_by_industrial_potential

⁷ Strategy for the Socio-Economic Development of the Republic of Tatarstan to 2030, approved by Law of the Republic of Tatarstan No. 40-3RT of June 17, 2015

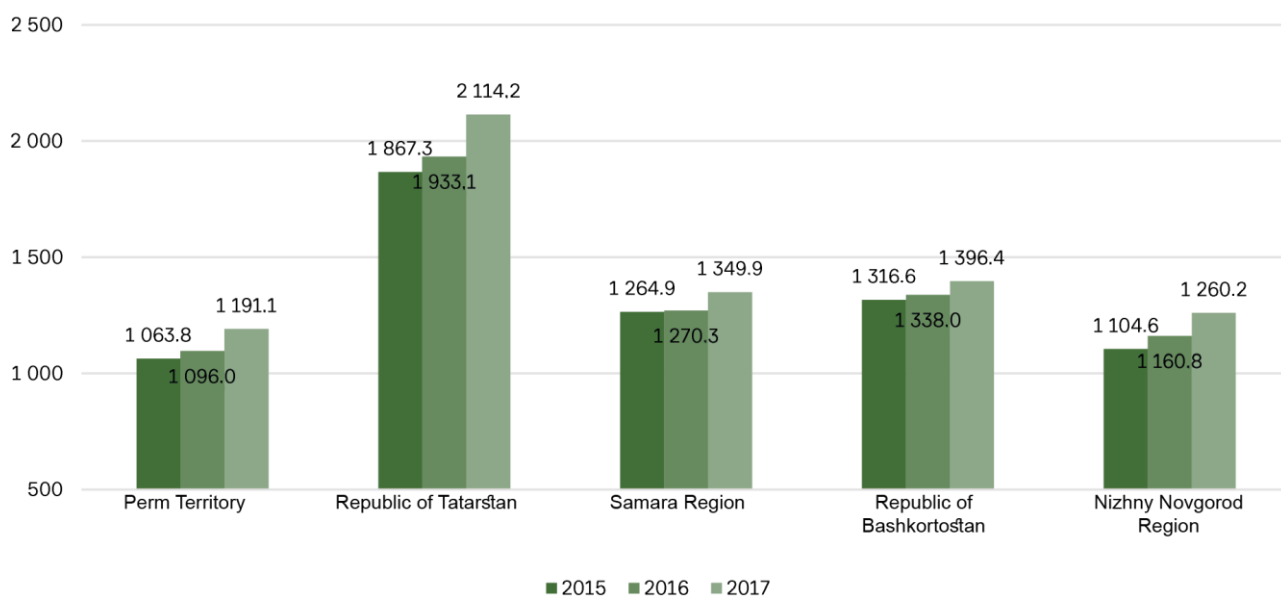


Fig. 2. Comparison of gross regional products of the subjects of the Volga Federal District, thousand rubles

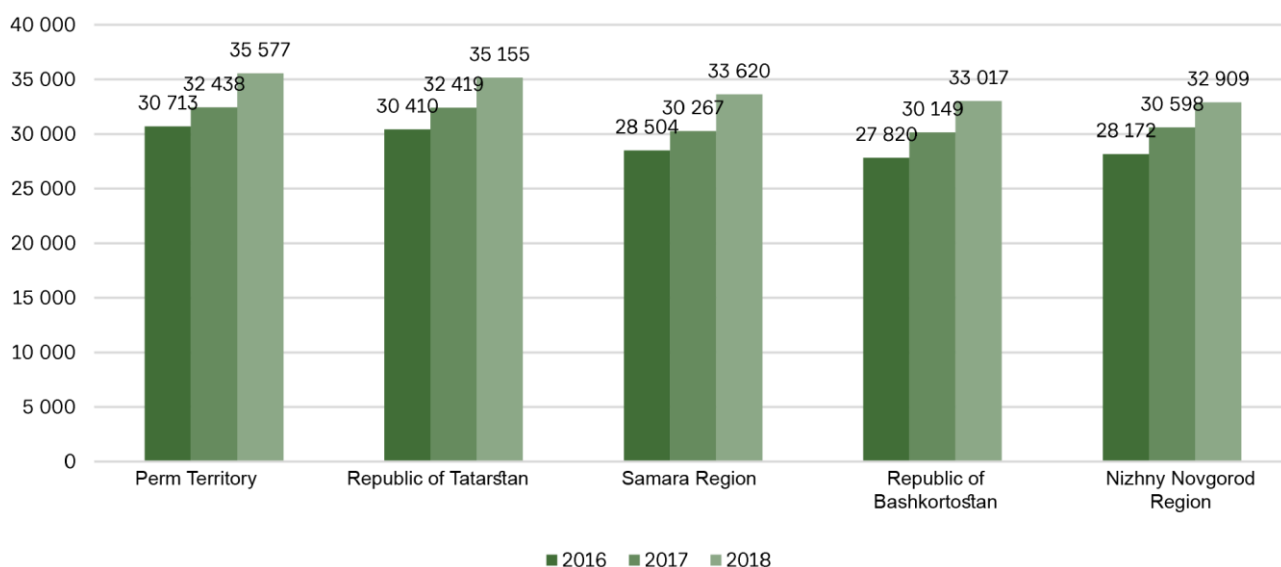


Fig. 3. Comparison of nominal wages of the subjects of the Volga Federal District

One of the key tasks in supporting the quality of life of the inhabitants of the Republic of Tatarstan is the "ecologization" of the urban environment on the basis of sustainable, dynamic economic development, the creation of an advantageous surrounding environment, and efficient use of natural resources.

In particular, key areas of the Strategy for the ecological security of the Republic of Tatarstan and the development of the natural resource base of the Republic of Tatarstan for the years 2017-2021 and for the future to 2030⁸ are:

- the development of new technological solutions and innovative technologies in the fields of production which are traditionally unsafe for

⁸ Approved by order of the Ministry of Ecology and Natural Resources of the Republic of Tatarstan No. 861-p of July 26, 2017

the environment (petroleum extraction, chemical industry, automobile transport, energy, machine production, agricultural complexes);

- the implementation of measures directed at increasing the share of reclaimed land;
- ensuring the maintenance and development of the system of specially protected natural territories of the Republic of Tatarstan.

As a solution to the problem of soils contaminated as a result of oil extraction, the use of the method of bioremediation (biooxidation) is proposed, for which the production of several microbial biodegraders and biosorbents developed in Russia is beginning on the territory of the Republic of Tatarstan in Almet'yevsk⁹, which will allow a reduction in the share of land not in use in connection with contamination from oil field waste water and will restore soil fertility.

⁹ Project 5.1. "Bioremediation," area 5. "Bioeconomics of the Surrounding Environment" of decree of the Cabinet of Ministers of the Republic of Tatarstan No. 180 "On the Approval of the Target Program 'Development of Biotechnology in the Republic of Tatarstan in the years 2010-2020'" of March 24, 2010

ALMETYEVSK AGGLOMERATION

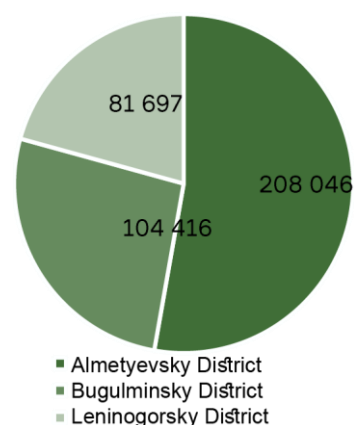
In the Republic of Tatarstan, there are three centers which form comprehensive agglomeration systems around themselves: Kazan, Naberezhnye Chelny, and Almetьевsk.

The Southeastern economic zone¹⁰ (Almetьевsk) is one of the extractive territorial-industrial zones of the Republic of Tatarstan. The economic zone is one of the three leaders in the Republic by level of production and the development of market and transport infrastructure.

The polycentric Almetьевsk-Bugulma-Leninogorsk urban agglomeration is the foundation of the Almetьевsk economic zone, with a population of 577,660 persons and an area of 12,613.7 km².

The prospective vision of the Almetьевsk economic zone is of a territory with a diversified economy, an oil and gas complex modernized on the basis of the development of high technologies in the field of petroleum extraction and a transition to its advanced processing, and the industrialization of agricultural activities.

Population of Almetьевsk agglomeration by district at the start of 2019, persons



Population



Fig. 4. Economic zones of the Republic of Tatarstan

¹⁰ Conception of the territorial economic policy of the Republic of Tatarstan, Kazan, 2009

The agglomeration processes included the inhabited areas of the eponymous municipal districts of Almet'yevsk, Bugulma, and Leninogorsk, which are located within an hour's travel time of one another. The total population of the agglomeration on January 1, 2019 was 394 thousand people¹¹.

The spatial model of the Almet'yevsk agglomeration has a linear-nodal character. Taking into account the planned "Eastern Gates of Tatarstan" strategic project with the development of the Europe-Western China international highway, the Almet'yevsk agglomeration will be actively developed as a transport and logistical hub at the international level.

Another promising area in the economy of the agglomeration is the "Tourist infrastructure of the Southeastern zone of the Republic of Tatarstan" strategic project. Demand for corresponding infrastructure will be generated by the promising recreational, sporting, historical, ethnographic, ecological, industrial, and agricultural types of tourism.

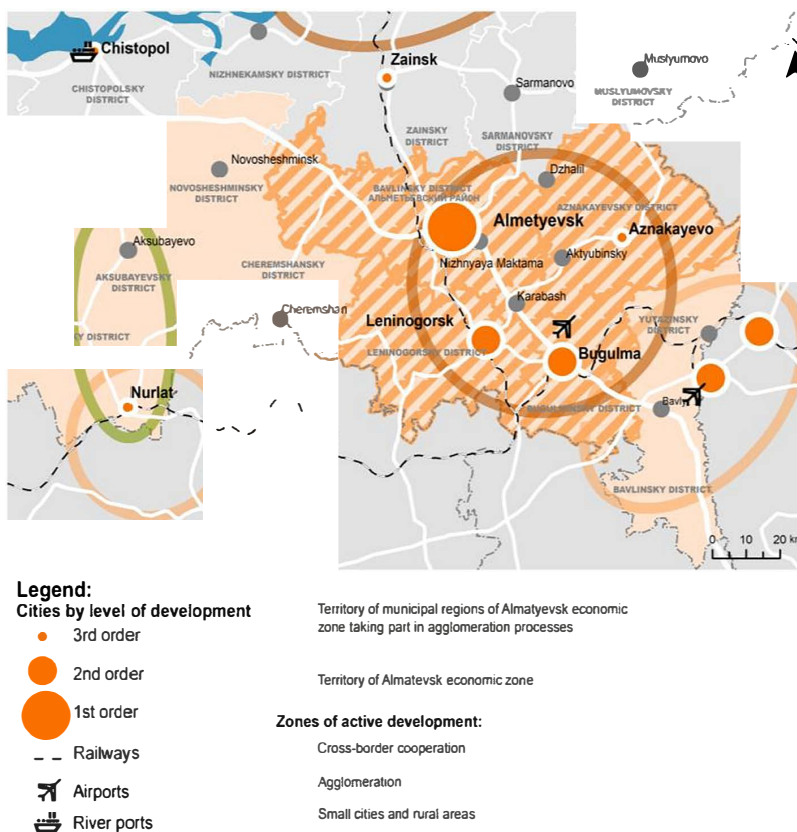


Fig. 5. Location of Almet'yevsk agglomeration

¹¹ <https://www.gasr.ru>

EXAMPLES OF IMPROVEMENTS TO NATURAL-RECREATIONAL TERRITORIES IN THE REPUBLIC OF TATARSTAN

In the Republic of Tatarstan, particular attention is being paid to the problem of the creation and development of public spaces in the territories of settlements of different sizes. The successes of the Republic in the field of the improvement of natural-recreational territories have received high praise on both the Russian and international levels. Thus, in 2019, the Public Spaces Development Program of the Republic of Tatarstan received the prestigious Aga Khan Award for Architecture. Today, 328 projects have been implemented as part of the program.

Characteristic examples of the improvement of natural-recreational spaces realized as part of the republican program are presented below.

Lebyazhye specially protected natural area, Gorkinsko-Ometevsky forest park, Kazan



The Gorkinsko-Ometevsky forest is a specially protected natural area and is administratively part of the Lebyazhye specially protected natural territory. The territory is located in the south east of Kazan and is made up of two forests, Gorkinsky and Ometevsky, and also the uncultivated lands between them. As part of the program for the development of public spaces of the Republic of Tatarstan, large-scale reconstruction of the territory was conducted, with the active participation of local residents: public opinion surveys were conducted, and desires for the functional composition of the future park were unveiled with the help of interviews, focus groups with the principal users of the forest, and design workshops. Residents named criminality, poor lighting, and general neglect and dirtiness the main problems of the territory. It lacked even minimal infrastructure for walking. Desires identified were the creation of walking, skiing, and cycling paths, the improvement of the territory, and the cancellation of the construction of the highway which was planned to be built between the two forest zones.

In the process of reconstruction of the park, pedestrian paths and lighting were installed, new entrances were constructed, the skiing and



2016–2018

project implementation period

66.45 HA

area of the park

629

cost of reconstruction, million rubles

8.8 KM

of ski paths

cycling paths improved, nature trails created, and ecological, recreational, sporting, family, and leisure zones were functionally delineated.

Main infrastructural facilities:

- Main entrance of a 7-meter arched structure;
- Winding pedestrian bridge across the gorge
- Sports facilities;
- Wooden stage;
- Kapli Rosy fountain;
- Skazoch'naya Les multi-level natural children's playground;
- Eco-center in the shape of a spiral shell with an observation area;
- Container blocks with infrastructure;
- Zerkalniye Zhivotniye, Vetryaki, Oduvanchiki, and Tsvetniye Yolochki art objects;
- Multi-use meadow: a place for picnics, yoga, events, and relaxation;
- Pump track, obstacle course, workout equipment;
- Sky park.

Kaban lake system embankment development, Kazan¹²



The work of the Russian-Chinese Turenscape + Map "Elastichnaya Lenta" consortium was the creation of a "blue-green belt" along the lakes, uniting natural and cultural facilities and joining the Lower, Middle, and Upper Kaban lakes into a single recreational system.

The banks of Lower Kaban lake were reconstructed first. The embankment from the Kamal theater to Planet Fitness became the first part of the pedestrian trail, with opportunities to access the water. Walking paths just above the surface of the water were constructed there, along with an upper promenade along the shore and bike path. The system of lighting was changed on the entire territory of the embankment, and accent lighting and small architectural elements were added.

More than thirty new types of grass, plants (rushes, cattails, calamus, loosestrife, lilies, and others), bushes, and trees (willow, bird cherry, apple, maple, shadberry, and others) were planted. On the eastern bank, not far from the crosswalk from Aydinova Street, a cascade of water plants was planted, which clean the water. This is a demonstration model of technology for the self-purification of a body of water (Turenscape is

1.9 KM

of nature trails

1.5 MILLION

visitors in 2017



2015–2018

project implementation period

186 HA

total area of the lakes

12.5 M

maximum depth

11.8

million m³, total volume of water

¹² <http://www.kazanlakes.com/news/22-obnovlennuyu-naberezhnuyu-ozera-nizhniy-kaban-otkryli-dlya-posetiteley>

a world leader in the design of such solutions). A system of differently-sized reservoirs, in each of which aquatic plants are planted, steadily cleans the water of Kaban lake. The water gardens are open to residents, where they may not only admire the flowering plants, but also learn how the self-purification of the body of water takes place. A playground was opened, where children can control the water, change its course, create dams, and create their own flows. By playing, children can become acquainted with modern types of hydroengineering devices and learn the important role that water plays in the lives of people. Above (on the square in front of the theater), the paving was replaced, and a large-scale reconstruction of the whole style of the embankment is planned for the future.

Bolghar state historical-architectural museum and nature reserve, improvement of the Volga embankment, Bolghar ¹³

The territory is located on the bank of the Volga in the Spassky District of the Republic of Tatarstan. It borders on the Bolghar state historical-architectural museum and nature reserve, which a UNESCO World Heritage Site, and the Spassky nature reserve. The improvement of the embankment was divided into three stages, the first of which began in 2014 in consultation with UNESCO and with support from the Vozrozhdeniye charity fund. The second stage of improvement was conducted as part of the program for the development of public spaces and the year of water conservation zones (2016) in the Republic of Tatarstan, and was completed in May 2017.

The main goal of the project was the creation of a unified cycling and walking space. As part of the improvement, the embankment was planted with trees, bushes, and flowering perennials, which created an attractive landscape and strengthened the slope on the bank. Access to the water was also provided with tasteful pedestrian bridges.

2014

start of the implementation of the project



Main functional areas:

- Play area: an area with games popular in the territory of Volga Bulgaria: Alquerque, Nine men's morris, and chess;

¹³ <http://park.tatar/projects>

- Walking area: a pedestrian bridge, one part of which is dedicated to the nature of Bolgar, and with two observation areas with views of the Volga;
- Landscape improvement area: a labyrinth; trails, which loop inside the labyrinth square, lead to 16 decorative architectural compositions associated with the history of the ancient Bolgars.

River Ik specially protected natural territory, Solnechniy Ik embankment, Muslyumovo¹⁴



The embankment was improved as part of the year of water conservation zones in the Republic of Tatarstan (2016). The area along the riverbanks is rich in different types of landscape, unique wetland flora and fauna, a picturesque chain of oxbow lakes of the Ik River, and unique archaeological finds of ancient animals, fish, and household items. The connection of different times lay at the heart of the concept for the landscape park, and the natural particularities of the place are reflected in the stylistic and planning decisions.

Main problems of the territory:

- Lack of access to the banks of the Ik River;
- Neglected and polluted oxbow lakes;
- Lack of direct connection with the main street of the village;
- Lack of popularity among local residents.

The main task that stood before the architects in the first phase was the restoration of the natural balance of the floodplain of the Ik River. The oxbow lake was cleared of litter and a small stream flowing into it was created. Walking and cycling paths with a length of 1.5 km were created on the embankment, which connect two entrance areas, observation areas with swing sets, a beach area with a shady canopy and deck chairs, the parking lot and multi-functional pavilion with toilets, and also a nature walk area in the area of a dry swamp decorated in the style of the ancient era. An amphitheater and children's playground in the form of a woolly rhinoceros were built on the festival meadow.



1.25 KM

embankment length

2016

opening of the embankment

2.74 HA

area of the improved territory

1.25 KM

embankment length

30.37

cost of the project, million rubles

¹⁴ <http://park.tatar/projects>

ALMETYEVSK

Almetyevsk is city in the Republic of Tatarstan founded around 1719¹⁵. Until 1952, it was the village of Almetyevo, when it became the working township of Almetyevsk. In connection with the discovery and development of oil deposits, Almetyevsk became a city in 1953¹⁶.

The city is located in the southeast of the Republic and is the center of the Almetyevsk Municipal District and the Almetyevsk agglomeration.

Almetyevsk is a major center of the petroleum industry in the Republic of Tatarstan (Romashkino oil and gas field). The large Druzhba oil pipeline originates in the city, and there are also pipelines to Nizhny Novgorod, Perm, and Samara.

1719

founding year

157,310

population of the city at the start of 2019

<https://www.gks.ru/>

118 km²

area of Almetyevsk



Fig. 6. Location of Almetyevsk

Physiographic characteristics of the territory of the city

Almetyevsk is located in the Kama region, on the slopes of the Bugulma-Belebeyevsk hills, on the left bank of the Stepnoy Zay River. The topography of the area is slightly hilly, with absolute elevations ranging from 90 m on the floodplain of the Stepnoy Zay river to 170 m at the height of land. The floodplain sits 2-3 m above the level of the river. The majority of the cities lies in the floodplain, and on the first and third terraces above the floodplain.

Within the territory under consideration, geomorphological processes have had an effect on the development of the urban territory: karst, suffosion, gully erosion, and bogginess.

¹⁵ According to historical evidence

¹⁶ <http://almetyevsk.tatar.ru/rus/o-gorode.htm>

Almetyevsk is located in a sub-boreal northern semiarid landscape zone, in a typical southern forest-steppe subzone. The territory of the city belongs to the Almetyevsk upland zone (200-260 m), with the combined lime and lime-oak forests typical of the Volga and Kama regions.

The natural potential of the landscapes of Almetyevsk District, within which the city of Almetyevsk is located, can be characterised as very high. However, the landscapes of Almetyevsk region are subject to intense technogenic loads, which lead to a reduction in natural potential and the loss of the resilience of the landscape.

Within the city, there are plant communities of the forest-steppe zone: deciduous forests and meadow steppes. The species composition of public plantings is mainly composed of birch, lime, elm, and aspen.

The climate of the region is continental with long, cold winters, relatively short springs, summers which last from early June till early September, and cloudy, rainy autumns¹⁷.

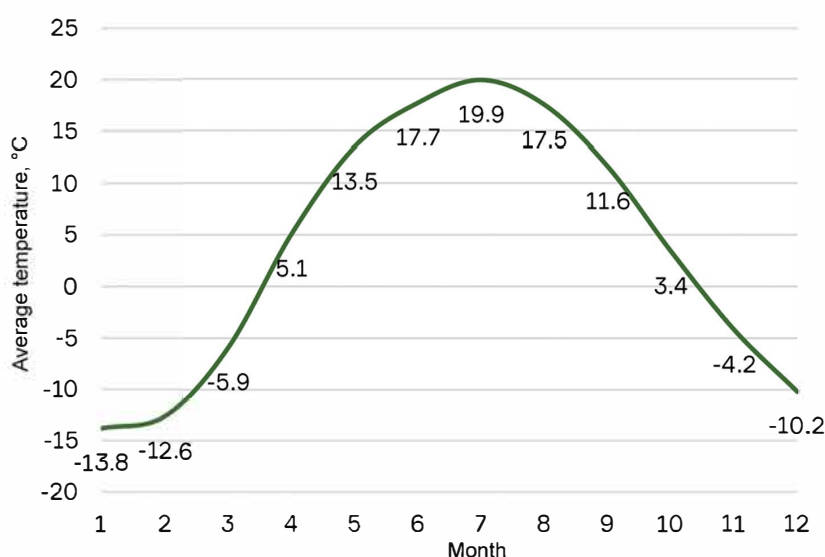


Fig. 7. Almetyevsk climatograph¹⁸

17/ Materials on the base underpinning of the draft master plan. Eksplozory note. 2016

18 <https://ru.climate-data.org/азия/средиземная-редеация/татарстан/альметьевск-764745/>

Transport accessibility

The city has an advantageous location for transport, due to:

- relative equi-distance from the main cities of the southeastern agglomeration;
- the crossing of the territory of Almetyevsk district by the Kazan-Orenburg R239 federal highway and 5 highways of regional significance;
- location within one hour's transport accessibility to the Bugulma and Begishevo airports;
- the passage, 10 km from the city, of the Bugulma-Naberezhnye Chelny-Agryz railway and easy transport access to the Bugulma and Almetyevskaya railway stations.

A network of bus routes (inter-city and suburban) traverses the local roads, which connects city with Kazan, Naberezhnye Chelny, Nizhnekamsk, Yelabuga, Bugulma, Chistopol, Leninogorsk, Zainsk, and other cities of the Republic of Tatarstan and the Russian Federation.

There is a bus station located on Lenina Street for the service of inter-city and suburban passenger transport.

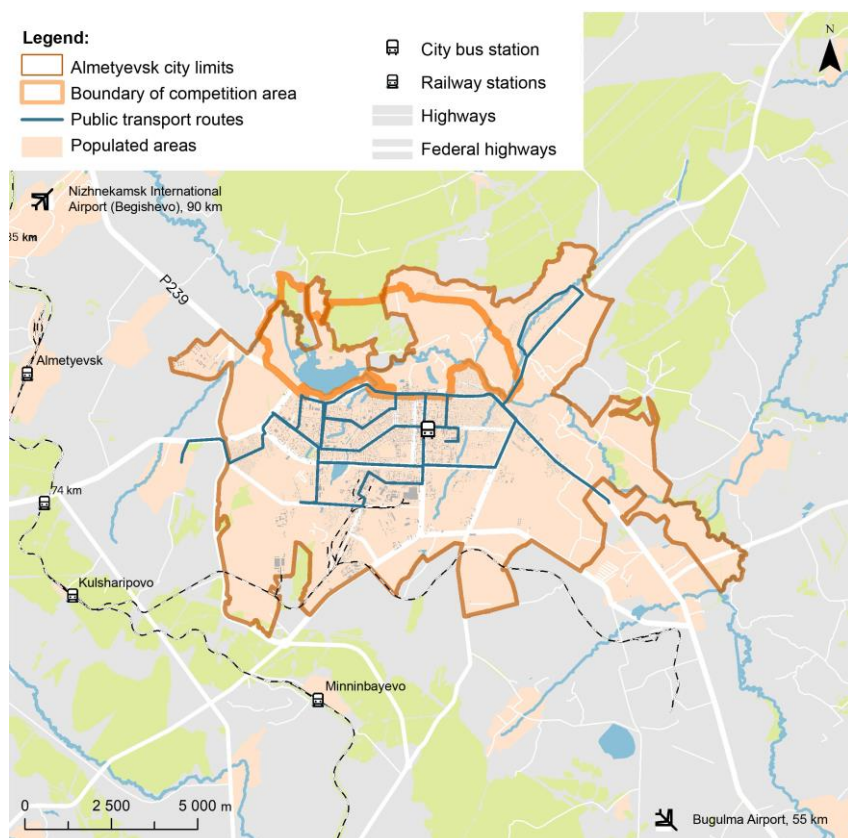


Fig. 8. Transport accessibility

Demographic characteristics

A reference group was formed in order to make an objective assessment of the demographic situation. It included cities of similar population and economic structure (with oil extraction and/or processing being the principal economic sector).

Population

Almetyevsk is the fourth city by population in the Republic of Tatarstan, characterized by steady population growth over the last ten years. In comparison with the cities of the reference group, Almetyevsk is distinguished by the highest indicators of population growth.

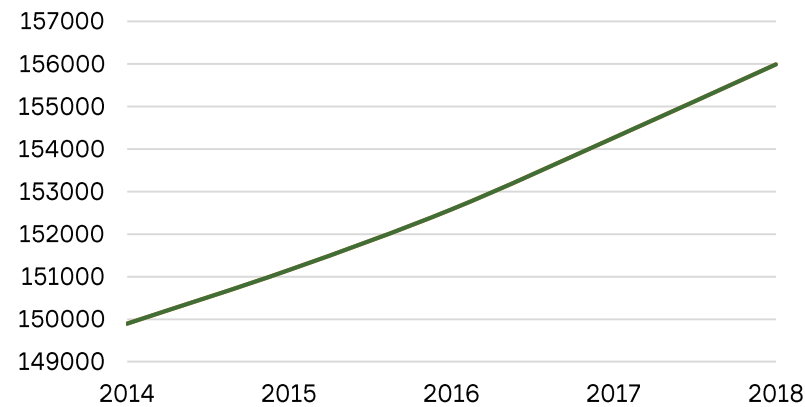


Fig. 9. Population of Almetyevsk

Age and sex structure of the population of Almetyevsk

The average life expectancy in Almetyevsk is longer than the average in Russia: 74.14 in Almetyevsk, compared with 72.2¹⁹ for Russia. Moreover, the average life expectancy in Almetyevsk is increasing more quickly than the average for the country. In Almetyevsk, the figure has increased by 3 years since 2015, while the average increase in Russia over the same period was 0.8 years²⁰.

The population pyramid shows the demographic waves typical of the countries of Eastern Europe. The ratio of men to women is 1151 women to 1000 men, which is close to the level for Russia as a whole (1156 women to 1000 men²¹).

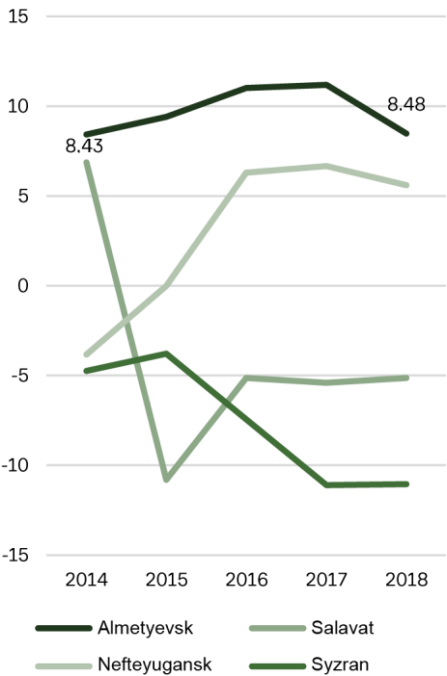


Fig. 10. Population growth, per thousand inhabitants

19 Source: <http://www.demoscope.ru/weekly/2018/0761/barom02.php>
20 Source: <http://www.demoscope.ru/weekly/2018/0761/barom02.php>
21 Source: https://www.gks.ru/free_doc/doc_2018/wo-man18.pdf

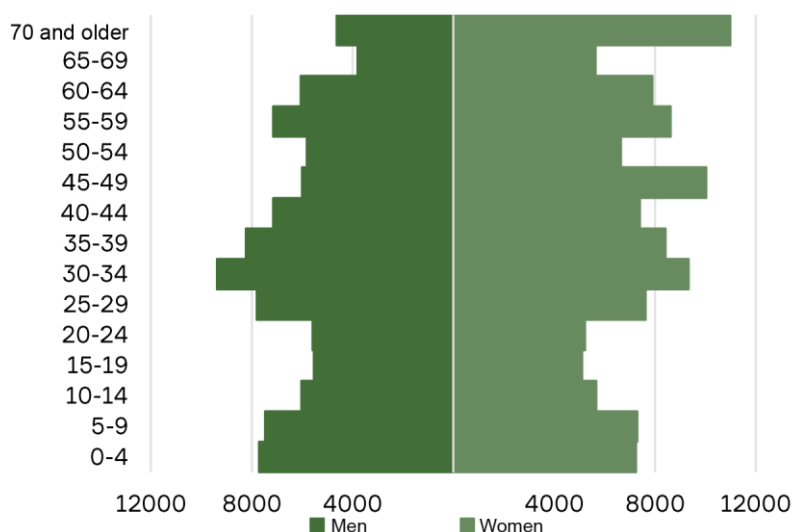


Fig. 11. Population pyramid

Migration

In comparing Almeteyevsk with the cities of the reference group, it possible to note that, as of 2018, Almeteyevsk is distinguished by the highest rate of migration-driven population growth, with a large share of total population growth resulting from migration (61.7%).

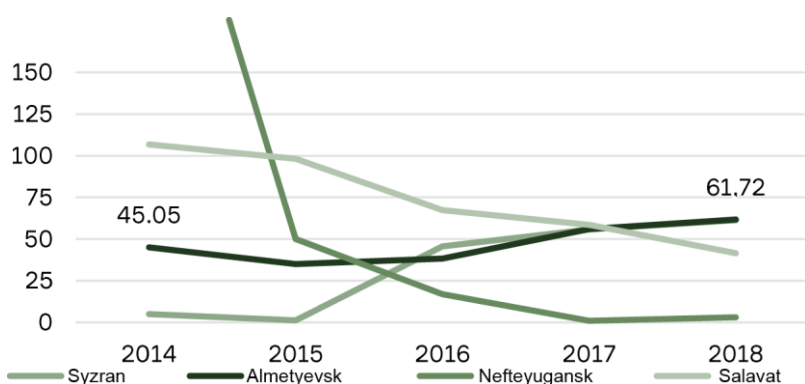


Fig. 12. Share of migration in total population growth, %

Outflows of population are observed only in two age groups, which have the highest mobility in cities of Almeteyevsk's type. The outflow of youth (15-19 years old) is connected with school leaving and entry to institutes of tertiary education. The next age group of people leaving, 45-49 years old, corresponds to the age at which those employed in the oil extraction industry begin receiving pensions, 45 years for women and 50 years for men, which constitutes a significant factor in migration outflow from Almeteyevsk, since, as of 2017, oil and gas extraction constituted 81% of the total economic structure of Almeteyevsk Municipal District. A similar situation is observed in other cities in regions of oil extraction, such as Nefteyugansk.

Migration inflows to Almeteyevsk are made up of people aged from 20 to 44, which advantageously distinguishes the city from many others.

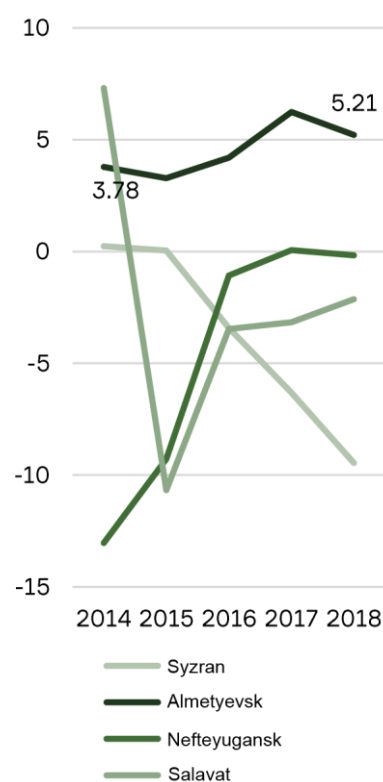
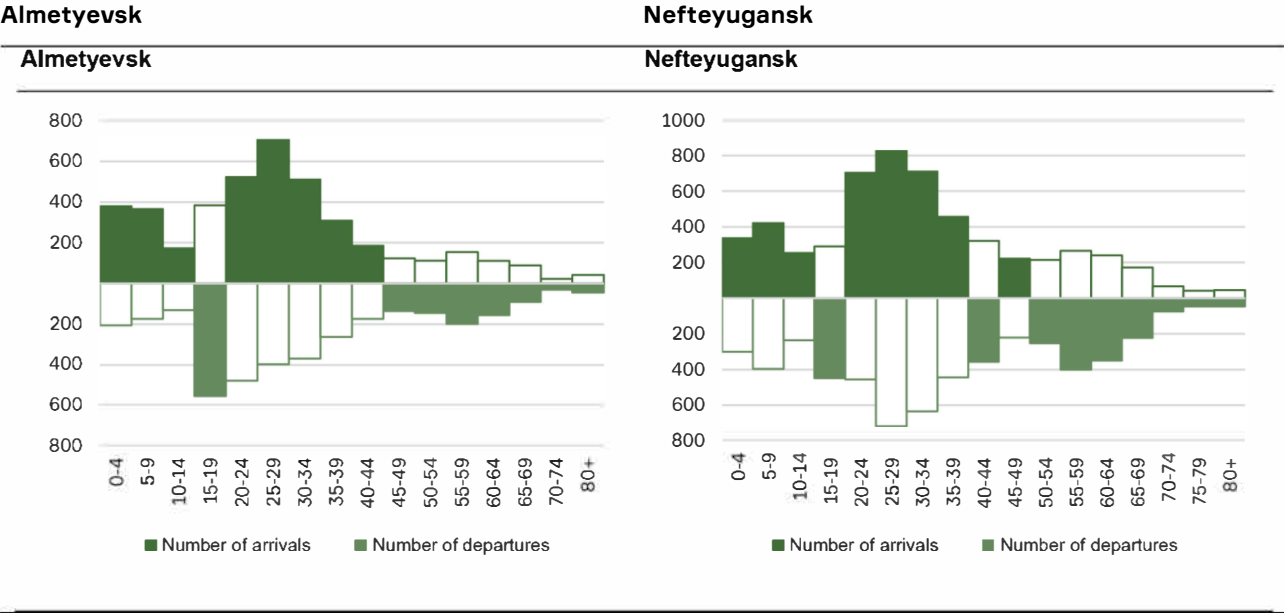


Fig. 13. Migration growth rate, per thousand people

Table 1. Average age structure of migration



Economic indicators of the city and region

The principal share of the total economic structure of the city and region is taken up by oil extraction, at 81.4%. The remaining share is made up of: the provision of public and social services (5.3%), wholesale and retail trade from the manufacturing industry (3.5%), transport and communication (2.25%), construction (1.3%), agriculture (0.15%), and other things (1.2%).

82%

Share of the oil extraction sector in the economy

Population income level and investment in Almetyevsk District

Since 2013, the trend of increasing monthly incomes has not decreased. The volume of investment in fixed assets hit a peak in 2015, reaching the minimum level for the past 5 years in 2017, but following the decline, a positive trend of growth has been observed.

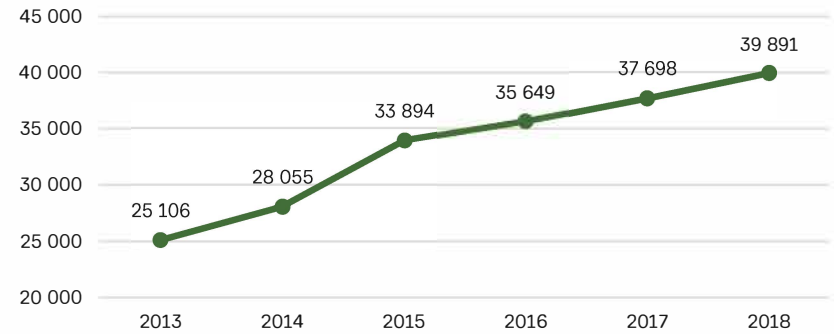


Fig. 14. Trends in average monthly nominal wages for employees of organizations, rubles/month²²

22 <http://almetyevsk.tatar.ru/rus/ekonomika-i-pokazateli-rayona.htm>

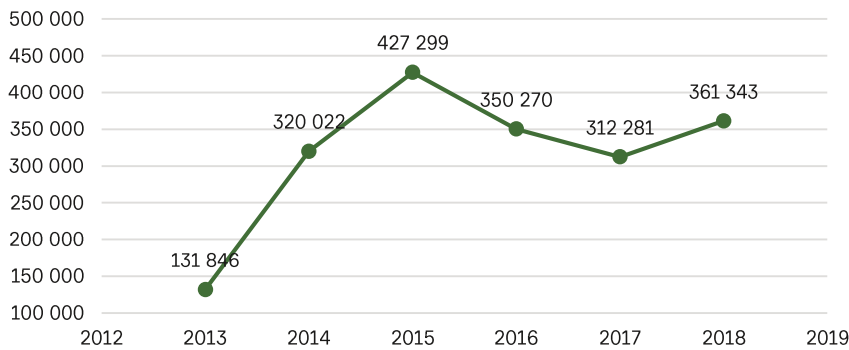


Fig. 15 Trends in the volume of investment in fixed assets, per capita, from 2013 to 2019, rubles²³



Fig. 16. Headquarters of Tatneft

In accordance with the Strategy for the socio-economic development of the Almetyevsk Municipal District of the Republic of Tatarstan over the years 2016-2021 and the planned period to 2030²⁴, one of the flagship projects in the field of the development of human capital is the following aspect:

Almetyevsk as a center of population attraction in the Southeast of the Republic of Tatarstan²⁵

There are 8 large industrial enterprises operating on the territory of the city, including Tatneft. There are unique projects, such as:

- the Ashale grocery technopark, a unique project without analogues in scale or specialization in Russia;
- Tatneft-Aktiv industrial park, offering space and equipment rental in all areas of the Republic, including in the territory of the city.

Almetyevsk is a modern, dynamically developing city where attention is paid to the needs of residents and to raising their quality of life.

The cultural life of the city is supported by 2 museums, 4 cultural centers, an amusement park, the Tatar dramatic theater, and the Almetyevsk art gallery.

The center of the city is the main point of concentration of infrastructural facilities, with the greatest density of facilities on Lenina street from Ispolkom to the bus station, which reduces the accessibility of residents of other regions to the facilities.

Density of municipal infrastructural facilities

Analysis of the existing infrastructure in the city shows that there is a large number of educational institutions, especially institutions of further education. At the same time, there is a small number of sports facilities, including: a hockey arena, a karting facility, a riding school with a hippodrome, a karate dojo, and a tennis center. The sporting facilities are located mainly in the center of the city, while a large number of private fitness clubs can be found in the eastern part of the city.

²³ <http://almetyevsk.tatar.ru/rus/ekonomika-i-pokazateli-rayona.htm>

²⁴ <http://almetyevsk.tatar.ru/file/File/StrategiyaAMR2030.pdf>

²⁵ Priority area 4.1.8. of "Flagship projects in the field of the accumulation of human capital"

A shortage of recreation and entertainment facilities for teens and youth, cinemas or food courts, for example, has been identified (Appendix 1).

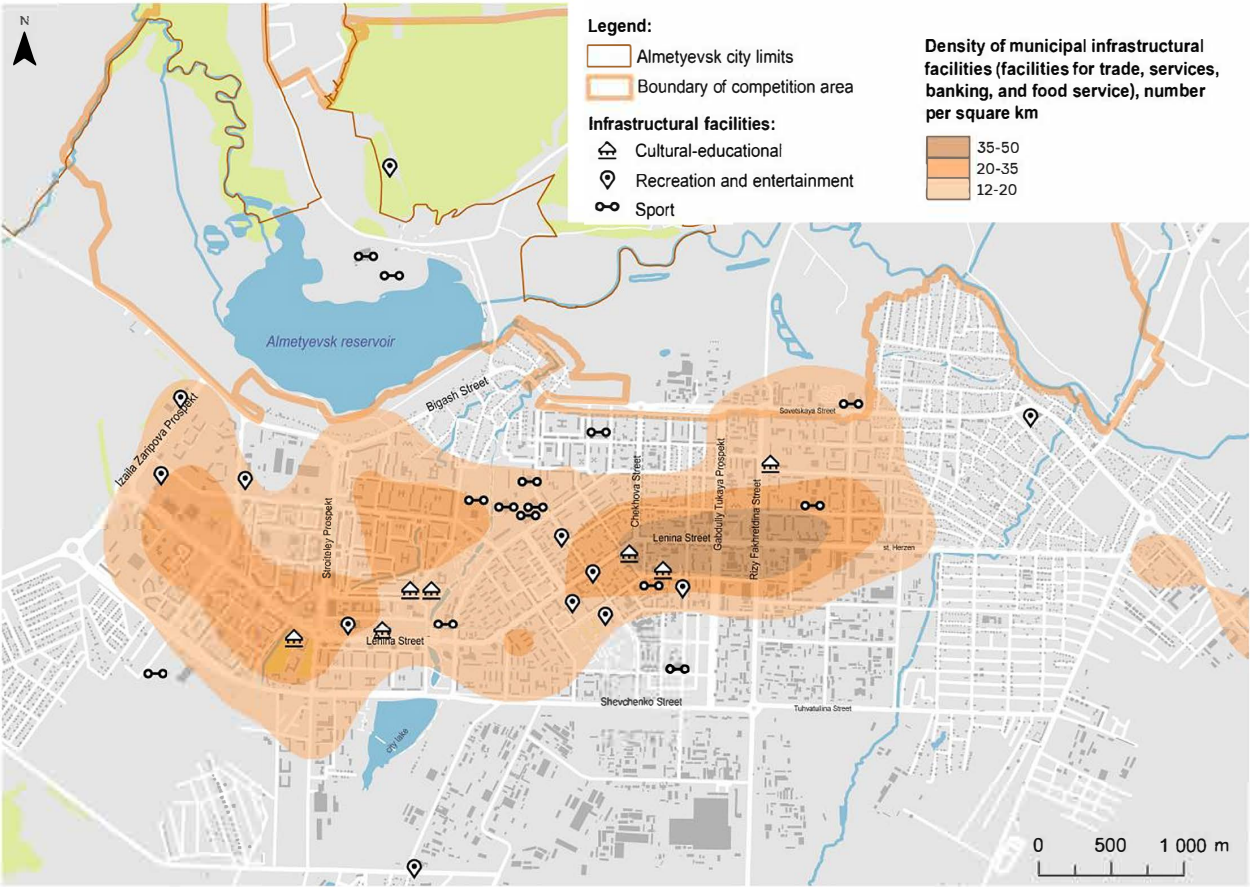


Fig. 17. Density of municipal infrastructural facilities

Characteristics of construction activities

According to the analysis conducted, there are various offers for the primary and secondary sale of residential real estate in the city. There are two residential complexes under construction in the city, the Alsu microregion and the Novikov Sad complex (Appendix 2). The social mortgage program is available in the entire Alsu microregion, and the complex itself is a standard economy class development, without internal infrastructure. In the same region, the Novikov Sad complex is being constructed, a comfort-class complex, which provides internal infrastructure and a closed yard.

The secondary market is more diverse, with apartments in different locations offered for sale. According to the site CIAN²⁶, there are 348 apartments for sale in Almeteyevsk, most of which are two- and three-room apartments.

Comparing Almeteyevsk to the group of reference cities, it can be concluded that there is a positive situation in the primary real estate market, though it is not diverse (Appendix 3). All housing projects under construction in the reference group cities are standard projects which do not offer buyers individual choices. Moreover, in the city of Nefteyugansk, all

26 <https://www.cian.ru>

houses under construction have been declared problematic, and in Salavat three out of six have been declared problematic.

The absence of problematic construction projects and their completion on schedule is one of the factors forming the investment value of Almet'yevsk.

Some of the best socio-economic indicators in Almet'yevsk show that the city is prosperous and attractive to investments in new residential construction. However, the high availability of residential space to the city's residents may reduce demand, and therefore the city needs unique offerings.

Tourism

Almet'yevsk District offers various destinations for regional tourism. In the territory of the district, apart from cultural destinations, other forms of tourism have been developed, such as medical, sports, industrial, and recreational tourism.

There are two objects located not far from Almet'yevsk, the historic Kichuysky fortification of the Novo-Zakamsky defensive line and the lake of the Aktashy depression, which could become regional attractions, but currently they lack infrastructure and development.

For the full development of tourism infrastructure in the territory of the district, qualitative and quantitative improvements to the organizations engaged in the tourism-related service sector (food service, hotels, retail, etc.) are necessary. A strategically important goal in the field of tourism is entry to the national and international market as a tourist destination, and in the field of service, the meeting of internationally-accepted standards for service quality²⁷.

²⁷ Strategy for the socio-economic development of the Almet'yevsk Municipal District of the Republic of Tatarstan over the years 2016-2021 and the planned period to 2030⁸

Urban planning characteristics

The key documents for territorial planning and urban zoning are:

- the General plan for Almetyevsk, Almetyevsk Municipal District, Republic of Tatarstan²⁸ (with the changes made in 2017 to the boundaries of the settlement taking into account the oil pipelines in operation)²⁹;
- the Laws for land use and construction of the City of Almetyevsk, Almetyevsk Municipal District, Republic of Tatarstan³⁰.

The General Plan defines as main areas for the spatial development of Almetyevsk:

- the northwestern and western areas in the direction of Kalykino station, which in the future may become a large railway center, for the location of residential regions of sectional and detached developments;
- the southwestern area along the Almetyevsk-Chistopol highway and the boundaries of the Yashlek and Zapadniye Vorota microregions;
- the northeast of the region of the Ursala settlement;
- the south along the road in the area of the collective gardens for detached house construction.

These points of growth are linked by the key planning and compositional axes: Lenina, Sovetskaya, Shevchenko, Fakhretdina, Chekhova, Tukaya, and Shosseynaya streets and Stroiteley Prospekt.

Spatial development zones

According to the General Plan for the territory, residential and public-commercial developments take up 11.0% of the area of the city. Industrial and warehousing facilities take up 8.7% of the territory of the city. Engineering and transport infrastructure facilities occupy 12.3% of the territory of the city.

Public-commercial and residential territories are compactly laid out along the linearly-developing, city-wide streets with meridional directions (Lenina and Sovetskaya streets). In the central part, stone residential 2-, 3-, and 4-floor buildings predominate. The central part is characterized by a rectangular network of streets forming urban neighborhoods.

The social center of Almetyevsk is developing along Lenina Street, which has city-wide significance, and the streets that cross it in meridional direction: Stroiteley Prospekt, Radishcheva Street, Chekhova Street, Tukaya Street, Fakhretdina Street, and Shosseynaya Street. The core of the city center is located at the intersections of Lenina Street, Radishcheva Street, and Musy Dzhaliya Streets, and is formed around the main square of the city with the city administration building, the Almetyevneft oil extraction company, and the Dramatic theater. There is a pedestrian zone created along Gagarina and Chekhova streets in the direction of the Stepnoy Zay River.

²⁸ Approved by Decision of Almetyevsk City Council, Almetyevsk Municipal District, Republic of Tatarstan No. 42, dated 23.11.2006

²⁹ Decision of Almetyevsk City Council, Republic of Tatarstan No. 80, dated 31.05.2017

³⁰ Approved by Decision of the Council of Almetyevsk Municipal District No. 366, dated 25.12.2009

Natural and recreational framework of the city

Almetyevsk is located on the left bank of the Stepnoy Zay River. The majority of the cities lies in the floodplain, and on the first and third terraces above the floodplain.



Fig. 18. Natural and recreational framework

The natural and recreational framework of the city is formed of natural components (forests, swamps, bodies of water (reservoirs and the Big-ash, Narimanka, and Stepnoy Zay Rivers)) and of natural-manmade components (squares, boulevards, city parks, collective gardens, kitchen gardens, and landscaped sanitary protection zones).

Notwithstanding the fact that a significant portion of the territory potentially attractive for recreational use or residential construction is located within the sanitary protection zones of enterprises, infrastructural connections, oil and gas pipelines, and so on, the city has a sufficiently diverse system of public spaces.

Although it has sufficiently high natural potential, the natural landscape of Almetyevsk has lost much of it as a result of intensive anthropogenic loads.

The following green territories exist within the existing urban development:

- in the center of Almetyevsk: city park (Lermontova and Lenina Streets);
- the boulevard on R. Fakhretkina Street;
- the boulevards on 8 Marta and Telmana Streets;
- the boulevard on Tukaya Prospekt;
- the boulevard on Gafiatullina Street
- the boulevard on Gagarina and Chekhova Streets.

Residents' favorites are Shamsinur park, which won the Public Space category in the Nationwide Signs of Cities competition (2016), the cascade of ponds with the lovers' bridge and dam (opened in 2003), Komso-molsky park, 60-letiya Nefti Tatarstana city park (reconstructed in the 2000s), Zdorovye park, the square in front of the Neftchye cultural center, the city maidan, the pedestrian promenade on Gagarina Street, Gabduly Tukaya Prospekt, the Plyazh tourist-recreational zone, Literaturniy Dvorik square, and Yashlek square.

In accordance with the "Formation of a Comfortable Urban Environment on the Territory of Almetyevsk District in 2018-2022,"³¹ the city beach and the cascade of ponds on Beloglazova street have currently seen the first step of their improvement. The following public spaces are also included in the target list of activities:

- Almetyevsk reservoir;
- park on Zify Balakinoy Street (area behind the Central Regional Hospital);
- banks of the River Narimenki along Promyshlennaya and Gertsena Streets;
- park on Geofizicheskaya Street;
- 60-letiya Almetyevsk square;
- lake on Vakhitova Street (Old Almetyevsk);
- 2nd step of improvement to the cascade of ponds;
- 2nd step of improvements to the city lake (from Shevchenko Street to Obyezdnaya Street);
- banks of the Stepnoy Zay.

The current comprehensive project is the reconstruction of the central street (Lenina), and the continuation of the project is the development of the cycling infrastructure of Almetyevsk.

All of the listed public spaces are located in Old Almetyevsk and do not allow for the balanced functional use of the territory of the whole city. The absence of planned connectivity of the northern and southern parts creates a break in the landscape framework, the basis of which is the Stepnoy Zay River and the reservoir.

Conceptual potential of the territory

To determine the general character of Almetyevsk, content analysis of all names and meaningful elements connected with the city was carried out, including of the history of the city, its external image, the traditions of the local community, key events, and image resources.

- Almetyevsk is a "second Baku," the oil capital of Tatarstan.
- Most improved city in Russia (2017). Additionally, Almetyevsk's Shamsinur park won the Public Spaces category in the Nationwide Signs of Cities competition (2016).
- Almetyevsk is a capital of street art (5-year "Stories of Golden Apples" program).
- Almetyevsk is the bicycle capital of Russia, the "Russian Copenhagen" (bicycle parade "Almetyevsk chooses bicycles!", design of cycling infrastructure from the Danish Copenhagenize Design Company).

1 PLACE

Almetyevsk in the implementation of innovative projects in the improvement of territory (2017)

>20

Public art objects

³¹ Approved by decision of the executive committee of Almetyevsk Municipal District No. 04, dated January 9, 2018

- #ЛюбимыйАлматыевск (#FavoriteAlmetyevsk) (2015 brand).
- Almetyevsk: Chess country (Republican Chess Championship).
- Almetyevsk: Federal innovation space in supplementary education (Kvantorium children's technopark, Station for young technicians³²).
- Almetyevsk: startup capital of Russia, 2017;
- Ecological culture of city-forming enterprises (solution of environmental protection problems, technology for monitoring the condition of the air and water, methods of bioremediation, Republican ECOLeader contest).
- Almetyevsk is an all-Russian sporting center (first in the Republic "Tour de Tatarstan" cycle race, hippodrome, rugby, football, hockey, aeronautics, ski racing).
- Almetyevsk museum of local history was a finalist in the prestigious Russian event awards for event tourism ("Museum Crossroads" project).
- Most popular communities: Almetyevsk Street Theater, Bike City - Bicycles of Almetyevsk³³, Snowboards³⁴, Paintball³⁵, Good Game Arena Computer Club³⁶, Greenbox game zone³⁷, Young mums' club³⁸, Mozgo-boynya trivia.³⁹

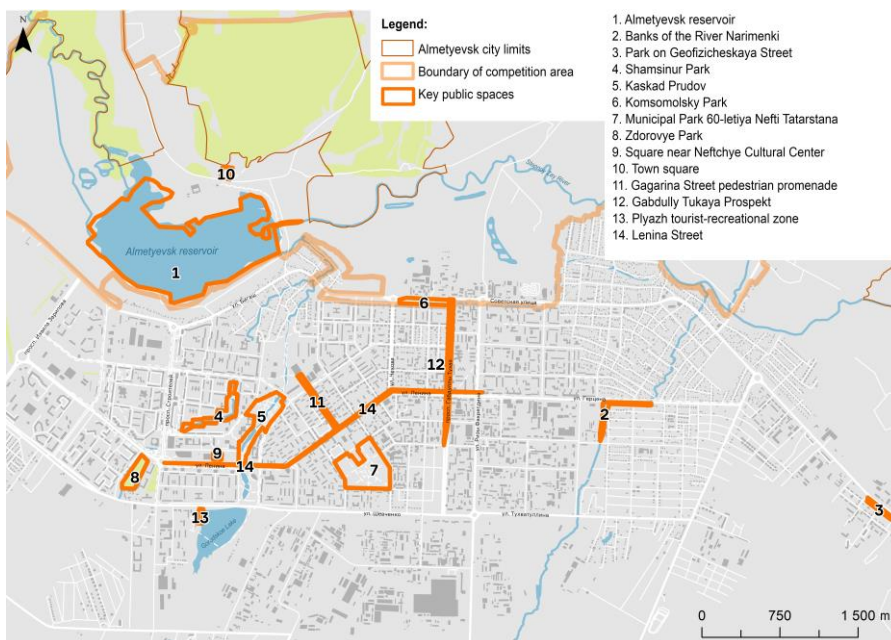


Fig. 19. Key public spaces

³² According to Order No. 1563 of the Ministry of Education and Science of the Russian Federation dated December 31, 2015

³³ <https://vk.com/bikecenter16>

³⁴ <https://vk.com/tramplinprokat>

³⁵ <https://vk.com/fenix116ru>

³⁶ https://vk.com/gga_alm

³⁷ https://vk.com/xbox_club_greenbox

³⁸ https://vk.com/topic-18202048_32872923

³⁹ https://vk.com/mzgb_almet

Key attractions

The most significant conceptual reference point in the space of the city is the Dramatic Theater, uniting the key attractions in the core of the city: religious sites, the museum of local history, and public spaces.

Almetyevsk is distinguished from the other cities of Tatarstan by the choice of a flagship trend in the sphere of culture: "Creative Industries" with the street art project program "Tales of Golden Apples," which is being implemented together with the Street Art Institute of Saint Petersburg. All the stories illustrated by the artists were collected in Almetyevsk district or represent fragments of the common cultural and historical heritage of Tatarstan. The first stage of the project tells the history of Almetyevsk region, the Tatar language, and the traditions of the village house, coupled with local images of the nature of the region.

The current long-term project for the development of public spaces and local urban communities represents a potential resource for the implementation of municipal initiatives in the creation of a comfortable urban environment, and the development of innovations and inter-institutional dialogue.



Fig. 20. Key attractions

In this way, the conceptual potential of Almet'yevsk is composed of three blocks:



COMPETITION AREA

The competition territory is located in the north of the city of Almet'yevsk and occupies an area of more than 1700 ha, including about 270 ha of forested land outside the city limits.

A large portion of the territory is confined to the valley of the Stepnoy Zay River, which crosses it from the southeast to the northwest. The Almet'yevsk reservoir, with an area of 125 ha, is located on the Stepnoy Zay River. The northern portion of the competition territory includes steep ridges up to 276 m in height, predominantly covered by pine, birch, and mixed forests and forest-steppe glades.

View of the competition territory from the point of view of Potashnaya Polyana district forestry

Within the valley of the Stepnoy Zay River, there are located a large number of facilities of the Tatneft oil extraction complex: oil wells and field pipelines, as a result of which the basic meadow and steppe landscape has been substantially transformed.

1,707 HA

Area of the competition territory



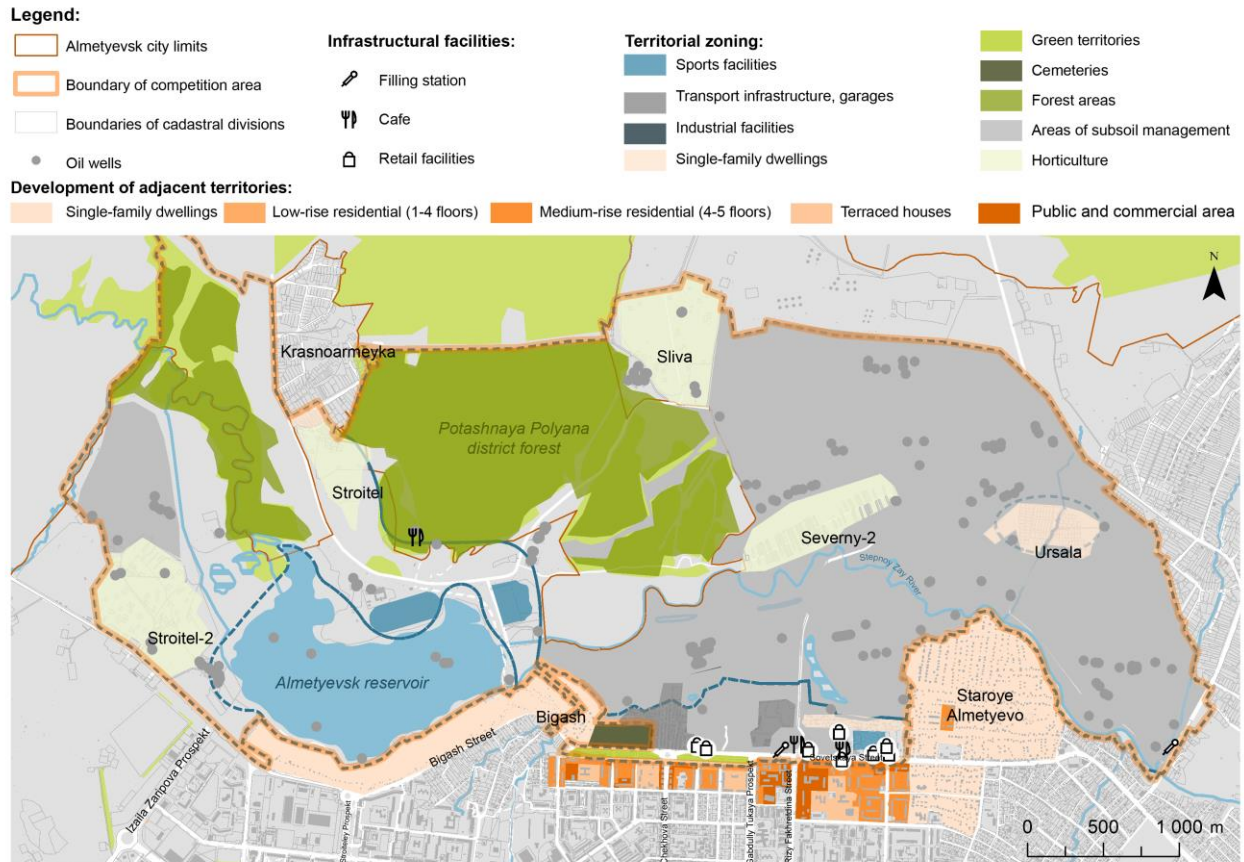


Fig. 21. Site plan

There are some recreational infrastructure facilities within the competition territory on the wooded slopes and around the Almetyevsk reservoir, many of which are physically and practically obsolete.

The following facilities are located on the territory:

- Snezhnika sport and recreation complex, including a center for ski sports, Sosnoviy Bor restaurant, and Fly Park adventure park;
- the city Maidan public space;
- old ski trails and system of ramps;
- the hippodrome and riding sports school;
- Extreme-Park extreme sports park and a park for technological types of sport (competitions in motocross, snowmobile races, Cyclo-cross and mountain bike trial, and buggy and ATV races).



City Maidan public space



Hippodrome

For several facilities, documentation is currently being drawn up for the reconstruction and development of the existing infrastructure. The reconstruction of the ski trails is planned, the system of ramps is included in the Tatneft program for the development of skiing sports for unification with the ski trails of the Snezhnika facility. The Extreme Park facility will be modernized with a training hall, storage spaces for equipment, and a trial-park. The concept for the development of the hippodrome includes the redevelopment of the territory with the installation of a riding sports arena, stables, spectator stands, and accompanying infrastructure. The Water Stadium project includes the improvement of the shore area and the installation of a runway for seaplanes on the Almetyevsk reservoir.

In the southern part of the competition territory along Sovetskaya Street there are areas with a low degree of urban development, for



Extreme-Park

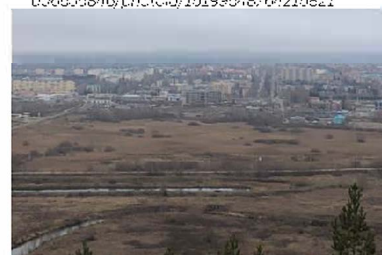


Old ski trails and system of ramps



Snezhnika sports and recreation complex

<https://2gis.ru/almetyevsk/gallery/area/70760701006646846/photoId/16199648/64216821>



View from the northern slope onto the campus under construction

which rezoning is planned, from industrial to multi-functional with the formation of a public and commercial area.

On this territory at the present time the campus of a Scientific Research and Learning Center is under construction, for a future Higher School of Oil, which is planned to be founded on the basis of the Almet'yevsk State Oil Institute.

The competition territory also hosts the horticultural, agricultural, and suburban non-profit partnerships Severniy-2, Sliva, and Stroitel. The horticultural non-profit partnerships are privately owned. The territory of the partnerships is used for growing vegetables, melons, root crops, tubers, mushrooms, and truffles⁴⁰. The Almet'yevsk gardeners' community is reviving the gardens⁴¹.

General plan for Almet'yevsk

The General plan was approved by decision No. 42 of the Almet'yevsk City Council of the Almet'yevsk Municipal District of the Republic of Tatarstan, dated 23.11.2006, in accordance with Article 25.1 of the Urban Planning Codex of the Russian Federation and approved by the cabinet of ministers of the Republic of Tatarstan.

Changes to the general plan for the city of Almet'yevsk (in terms of changes to the boundaries of the settlement owing to the large oil pipelines in active use) were approved in 2016.

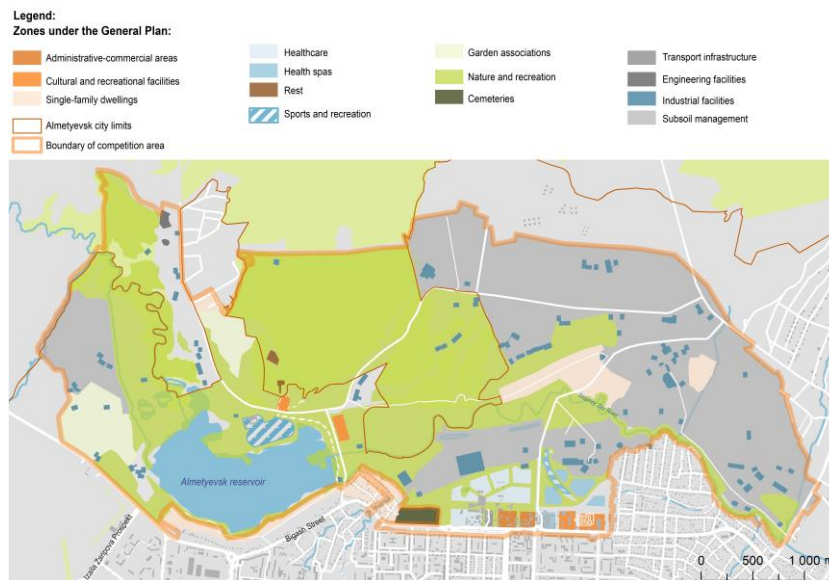


Fig. 22. Functional zoning

On the basis of the general plan, the competition territory is included in the natural-landscape framework making up the nature-conservation and recreational subsystem of the city, which is made up of the system of wetlands (the Stepnoy Zay River, Almet'yevsk reservoir, and cascade of ponds) and green areas (the existing boulevards, city parks, squares, and planned recreational territory along the Stepnoy Zay River).

⁴⁰ <https://reabiz.ru/organization/1131644002500-snt-stroitel>

⁴¹ <http://almet'yevsk.tatar.ru/almet'yevskoe-gorodskoe-obshchestvo-sadovodov.htm>

The landscaping of the shoreline territories of the Stepnoy Zay River and the city reservoir is planned, along with the formation on those territories of recreational zones and places for the mass recreation of the population, and the organization of structural planning access to the river and reservoir from the area of residential development and municipal service centers.

Connection to other public spaces

In the south, the competition territory directly abuts Komsomolsky Park, the boulevards along Chekhova Street, Rizy Fakhritdina Street, and Gabdully Tukaya Prospect, which unites the competition territory with the public and recreational spaces of the central regions of Almet'yevsk.

Restrictions on the use of the territory

A large part of the territory is subject to restrictions on use owing to the presence of technical, security, and sanitary protection zones from facilities of the oil extraction complex.

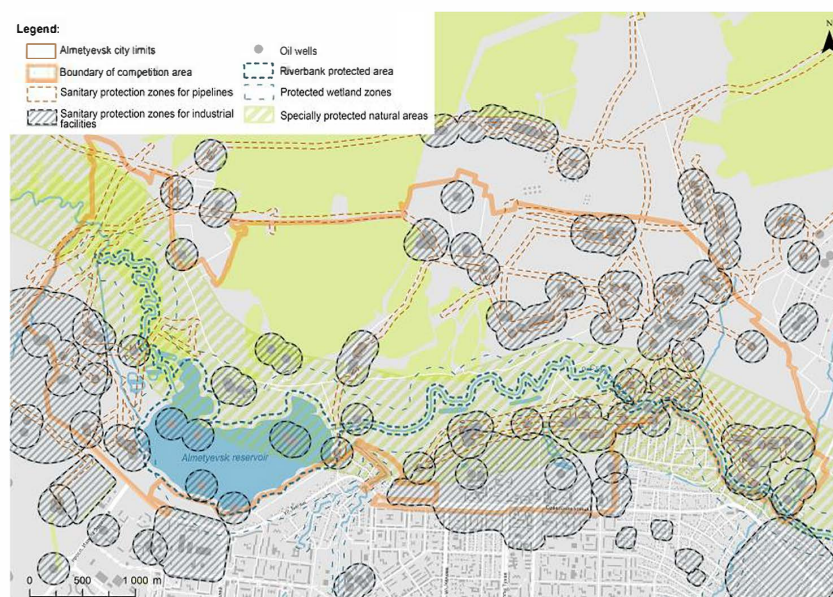


Fig. 23. Restrictions on the use of the territory

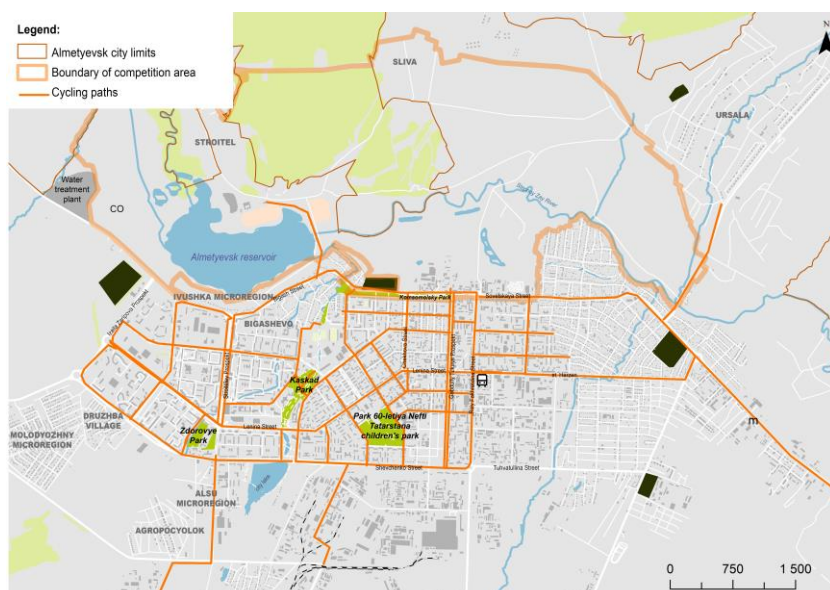


Fig. 25. Cycling infrastructure

Stepnoy Zay River

The river originates in the Bugulma-Belebeyevsk hills at an elevation of 300 m and flows in a generally north-western direction. The total length of the river is 238 km, and its basin has an area of 5020 km², including 2720 km² within the city itself.

The river is fed mainly by surface runoff. Groundwaters also feed the river during the winter and summer minima. The river follows a winding course, and the width of the channel in the middle reaches ranges from 10 to 25 km. The depth of the river is not significant, on the order of 1.0-1.5 m. There are large oilfields in the basin of the Stepnoy Zay River, and continuous oil extraction is undertaken in the Almet'yevsk, Bugulma, and Leninogorsk Districts of the Republic⁴².

From 1978 to 2019, the Steпноy Zay River valley was a natural landmark of regional significance.

The Stepnoy Zay is prone to flooding. In 2012, as a result of the spring flood, 202 houses were flooded⁴³, and 131 people were evacuated⁴⁴.



<https://energobar.livejournal.com/photo/album/282/?page=39>

42 Materials on the basic underpinning of the draft master plan. Explanatory note. <http://al-metyevsk.tatar.ru>

43 <https://kam.business-gazeta.ru/article/57742>

44 <https://kam.business-gazeta.ru/article/57775>

ANALYSIS OF GLOBAL EXPERIENCE

The selection of relevant examples from global experience was conducted according to the following factors:

- the natural particularities of the competition territory;
- the unique landscape of the Stepnoy Zay River valley;
- the presence of technogenic transformation of the landscape as a result of oil extraction;
- the strategic priorities of the Republic of Tatarstan, reflected in the Strategy for ecological protection of the Republic of Tatarstan and the development of the natural resource complex of the Republic of Tatarstan in the years 2017-2021 and for the future to 2030;
- the ecological policies of Tatneft in the area of sustainable development and the reduction of carbon emissions.

As a result, relevant examples were selected in the following areas:

- revitalization of brownfield lands;
- recreational use of wetlands;
- creation of educational-recreational parks with an eco-technological slant.

Global trends in the revitalization of brownfield lands

US Environmental Protection Agency program for the revitalization of brownfield lands⁴⁵

BROWNFIELD:

Real property, the redevelopment or continued use of which is complicated by the actual or potential presence of harmful substances or pollutants. The remediation of land and investment in such properties allows a reduction in harm to the environment and creates new possibilities for urban development and an alternative to development in suburban territories.

The US Environmental Protection Agency program is aimed at stimulating the cooperation of municipal administrations, local communities, and other stakeholders in the cleaning and re-use of brownfield lands. The main stimulating instrument of the program is the support of grants.

1995

start of the program

\$29.3B

bonds issued

\$16.88

profit from each dollar invested in the program

155,760

jobs created

1,921

areas reclaimed

354.42 KM²

area of land ready for renewed use

⁴⁵ <https://www.epa.gov/brownfields/overview-epas-brownfields-program>

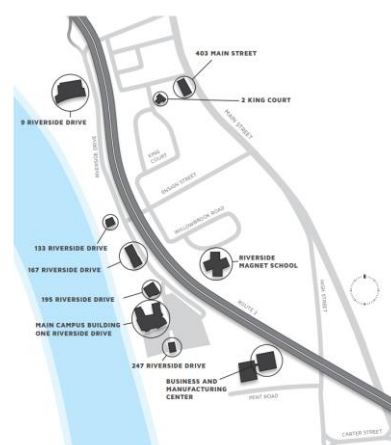
Types of grant:

- for cost estimates, ecological analysis of the state of the territory, and work with local communities;
- loans from a revolving credit fund;
- for carrying out clean-up works;
- multipurpose grants for the performance of cleanup or evaluative works on one or several territories;
- for the performance of research, planning, and the development of strategies for the cleanup and revitalization of one or more contaminated territories;
- for the training and preparation of personnel in the field of environmental protection;
- technical support, training, and research grants for organizations aiding local communities in work with brownfield lands.

Goodwin College, East Hartford, Connecticut, USA⁴⁶



Campus Map



12.14 HA

area of the campus

\$121,900

grant for evaluative works from the Environmental Protection Agency

\$115M

total cost of the cleanup and revitalization of the territory



One of the fastest-growing colleges in the state, Goodwin College acquired lands along the Connecticut River for the expansion of its campus. Those lands were seriously contaminated with lead and the products of oil processing. On a grant issued by the US Environmental Protection Agency, the college conducted an estimate of the cost of works for the cleanup and revitalization of the territory, and then implemented those works using its own funds and money from the municipal government.

⁴⁶ <https://www.epa.gov/sites/production/files/2014-03/documents/pbfoopportunities.pdf>

Trends recommended for application:

- Revitalization of contaminated territories for their transfer to educational institutions under construction to increase the value of real estate near the campus, and also to attract youth;
- Erasing of the negative connotations associated with brownfield lands and the formation of a new brand for a place based on educational opportunities.

Bee Branch Creek Greenway Park, Dubuque, Iowa, USA⁴⁷



1.6 KM

length of the park

\$400,000

grant for evaluative works from the Environmental Protection Agency

\$219M

total cost of the flood control project



Bee Branch Creek Greenway Park is part of the flood-control infrastructure, and, at the same time, serves as a linear park along the creek, which has a bicycle and pedestrian embankment, picturesque views, an open amphitheater, benches, lighting, rest areas, places for fishing, a limestone waterfall, flower and vegetable gardens, and bio-drainage channels. To create this park, old drainage channels which had hid the river underground were dug up and the rubbish from the surface was removed. The implementation of the project was possible thanks to the active community of local residents and the support of the authorities at all levels.

⁴⁷ https://www.epa.gov/sites/production/files/2019-06/documents/bf_booklet.pdf

Trends recommended for application:

- Ecological rehabilitation of contaminated shoreline areas and the creation of recreation zones for raising the quality of life of local residents and attracting tourists;
- Creation of a park on a brownfield site as a driver for the activation of local communities and the further redevelopment of the whole region.

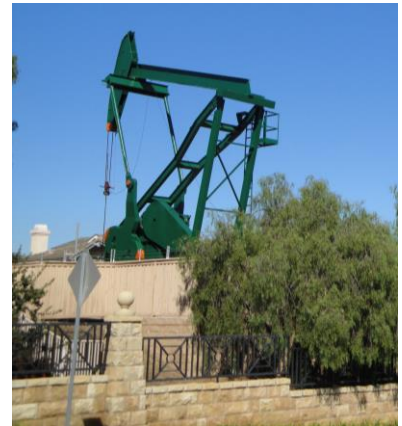
Las Brisas affordable housing community, Signal Hill, California, USA⁴⁸



Since the 1920s, the city of Signal Hill, California has been exposed to the oil industry. In 2000, the city developed a comprehensive revitalization project, which included solutions for various problems, including the shortage of affordable housing in the area of Las Brisas. In the first phase of construction in 2003, a residential complex with 92 apartments and a community center with children's facilities, computer classes, and a park were opened. The project was successful and in 2005 it was decided to construct a second phase on brownfield lands. For that, a grant was received from the Environmental Protection Agency for works on an ecological assessment of the territory. A small degree of contamination with oil, methane, and lead was revealed as a result of the assessment. For cleanup, a system of methane barriers was installed, after which a second assessment was conducted, which revealed no health hazards. After the completion of these procedures, construction of the second phase of 60 apartments began, and was completed in 2006. Thus, thanks to grant support in the conducting of the initial ecological analysis, even a small city like Signal Hill (11,000 residents) was able to attract additional funds from state and private investors and turn a frightening, crime-ridden neighborhood into a comfortable district full of life.

Trends recommended for application:

- Attraction of financing from governmental or private investors for the initial research of the territory for determining the level of contamination;
- Use of brownfield lands to solve the problem of inadequate affordable housing.



570 HA

area of the city

66 HA

area of brownfield lands

\$400,000

grant for evaluative works from the Environmental Protection Agency

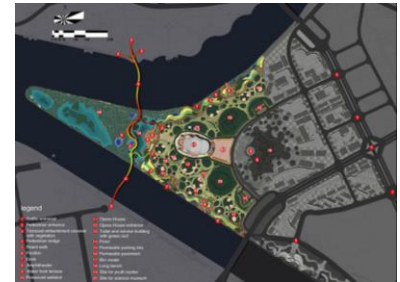
\$20M

total cost of the project

⁴⁸ <https://archive.epa.gov/socal/web/pdf/signal-hill-success-story.pdf>

Global trends in the recreational use of wetlands

Yanweizhou Park, Jinhua, China, Turenscape⁴⁹



Yanweizhou Park, which translates to "sparrow tail," is located between two rivers which flow into one. The project presents a sustainable and reproducible solution for territories which are subject to regular floods. Instead of dealing with them with the help of traditional concrete dams, the park "befriended" the floods thanks to the use of floodable pedestrian paths and multi-tiered terraces for plants. The floods bring fertile silt which is deposited on the terraces and enriches the soil for the tall grass native to this habitat, which allows savings on fertilizer and irrigation. Landscaping works were conducted with minimal disturbance to the existing particulars of the topography of the riverbanks, preserving the natural vegetation and biodiversity. The construction of the pedestrian bridge was inspired by traditional Chinese dragons curving in dance. The bridge creates not only a physical connection between the banks of the river, but also strengthens the cultural and local identity of Jinhua.

Trends recommended for application:

- Preservation of wetlands and their inclusion in the recreational framework of the city;
- Use of local plants and construction materials;
- Organic integration of existing buildings with the surrounding environment;
- Search for sustainable solutions for flood control;
- Work with the landscape as the main tool for the making of unique impressions in visitors;
- Solution of functional problems via the creation of new connections with the help of bridges taking into account the aesthetic-cultural and historical particularities of the territory.

26 HA

park complex

700 M

length of pedestrian bridge

2014

year of construction

40,000

visitors per day

49 Source: <http://landezine.com/index.php/2015/03/a-resilient-landscape-yanweizhou-park-in-jinhua-city-by-turenscape/>

Lammassaari Boardwalk, Helsinki, Finland, Nomaji⁵⁰



The trail is located in the largest wetland preservation zone in Helsinki, which is included in the Natura 2000 network and is protected by the Ramsar Convention. This territory is popular among local residents, in particular, for birdwatching, however the environment is very fragile, so leaving the trail is not permitted. As part of the reconstruction of the eco trail, a new boardwalk of Siberian larch was installed, 1.5 m wide and 860 m long, with two elevated platforms for birdwatching and culminating in an observation area with glass walls located at a height of 3 m. For the minimization of waste and economic cost, the foundation of the old boardwalk was integrated into the new design. In Finland, this project is one of the first examples of the use of modern design and construction solutions of high quality in the creation ecological trails.

Trends recommended for application:

- Inclusion of wetland territory in an urban recreation zone allows the promotion of active recreation and healthy lifestyles;
- Increase in the accessibility of natural lands to tourists and the elimination of physical and psychological barriers which make visiting more difficult;
- Creation of paths which are interesting both aesthetically and spatially, using all the possibilities of the topography for changing perspective.

860 M

length of the trail

2017-2018

years of construction

1000

visitors per day (2018 summer season)

⁵⁰ Source: <http://landezine.com/index.php/2019/02/lammassaari-boardwalk-by-nomaji/>

Global trends in the creation of educational-recreational parks with an eco-technological slant

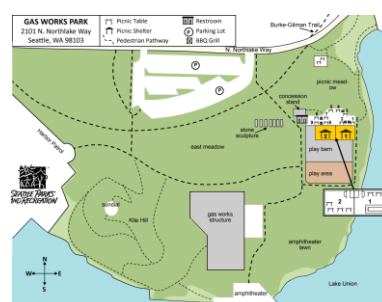
Gas Works Park, Seattle, USA⁵¹



The park is located on the shore of Lake Union, across from the central part of Seattle on the site of a former coal gasification plant. The city acquired the land under the park in 1965, and after 10 years of works on reconstruction, it opened to the public. From the soil removed in the course of works, a hill was created which is popular for holding various community events, flying kites, and walking. The hill offers an unsurpassed panoramic view of the lake and the city skyline. Richard Haag, the landscape architect of the park, has described his work in modifying a conglomeration of industrial towers, pipes, and sheds as being like "thinning a forest." The central part of the plant, the boiler, was turned into a place for picnics with tables and barbecue grates, while the ventilation and compressor building was turned into a play area under the open sky with a maze of brightly-painted plant mechanisms. This pioneering project received broad public support and changed public attitudes toward postindustrial landscapes. It is considered revolutionary thanks to its use of natural processes of bioremediation for the reclaiming of contaminated soil.

Trends recommended for application:

- Preservation of industrial heritage and the adaptive use of it in the landscape;
- Use of disguised construction debris for the formation of terrain and observation areas;
- Use of natural processes of bioremediation for the reclamation of contaminated soils.



1975

opening year

8.3 HA

area

2013

year of inclusion in the US National Register of Historic Places

BIOREMEDIATION

the use of living organisms — bacteria, yeasts, mushrooms, algae, and plants — for the detoxification of harmful substances (pollutants) or for lowering their concentration in the environment

⁵¹ Source: <https://tclf.org/landscapes/gas-works-park>

Ariel Sharon Park, Tel Aviv, Israel, Latz + Partner⁵²



An ecological park constructed on the former site of the Hiriya waste dump located southeast of Tel Aviv. By 1998, the dump had accumulated 25 million tonnes of waste, and the decision was taken to close it. An open international competition was held in 2004, the goal of which was to come up with solutions to reclaim the resulting mountain of garbage and turn it into a positive landmark, and not allow it to fall into the course of the Ayalon River. The winning design from the Latz + Partner bureau includes terraces to prevent the mass of waste from falling into the river, a water drainage system, and a membrane to prevent the emission of methane produced from the layer of "bioplastic," on top of which is gravel and a one meter thick layer of clean soil. However, the methane gas under the plastic is still used as a source of energy for the internal needs of the park, for example, for lighting, and for the textile factory nearby. Significant attention is paid in the park to the conversion of the waste. At the top of the hill there is a pavilion dedicated to recycling, where various events and celebrations are held. At the foot of the hill, there is a waste sorting center, an ecological waste processing plant which produces mulch, and a plant for processing construction materials, which also organizes excursions for children and adults in the form of an educational theme park, where anyone who wishes can learn how construction materials are reprocessed. The park attracts Israelis and tourists, which is a clear confirmation of the fact that the unconventional development of a park on a territory under harsh conditions has a great effect on its popularity.

Trends recommended for application:

- Creation in parks of ecological educational and recreational centers dedicated to the problems of contaminated soil, the processing of waste, climate change, decarbonization, and other modern challenges;
- Maximal use of biological sources of energy;
- Rational organization of systems of water control and flood prevention.

2004–2015

period of implementation

841 HA

area

\$250M

approximate cost

7,000,000 M³

contaminated soil removed

60 M

height of hill

⁵² Source: <http://landezine.com/index.php/2016/01/the-hiriya-landfill-by-latzpartner/>

Oil Tank Culture Park, Seoul, Korea, Seogoo Heo + RoA Architects ⁵³



This secret oil storage facility built in 1978 and composed of 5 tanks was closed in 2000 because it was too close to the stadium for the 2002 FIFA World Cup. The territory was used as a parking lot for a long time, until 2014, when an architectural contest was held for the creation of a recreational and cultural park. One important condition was the preservation of the oil tanks as valuable objects of the industrial heritage of Seoul, converting them to a cultural and recreational function. The winning design was implemented. It includes the transformation of the parking lot into a space for events and a community center in the shape of a glass oil tank with a cafeteria, conference room, and lecture space. The other tanks were converted into an exhibition hall, museum, event stage, and information center. One tank was left unchanged to preserve the memory of the place.

Trends recommended for application:

- Transformation of industrial heritage sites with respect to their history;
- Work with the context and the semantic and event composition of the space;
- Consideration for the particularities of the landscape and topography and the proper, balanced blending of natural and industrial elements.



2014–2017

period of implementation

10.1 HA

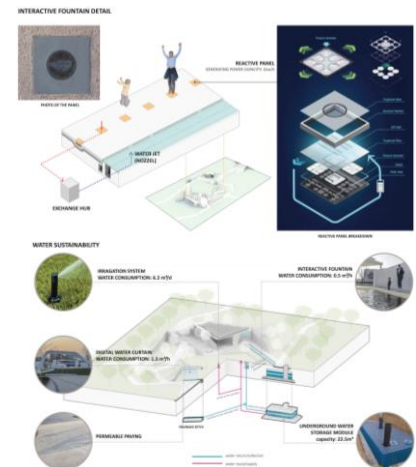
area of the territory

\$24M

approximate cost of reconstruction

⁵³ Source: https://worldarchitecture.org/architecture-projects/hccev/oil_tank_culture_park-project-pages.html

Longfor G-Park, Beijing, China, Instinct Fabrication⁵⁴



A landscaping experiment in the integration of the most advanced technologies into a recreational zone. The park is located in the northwest of Beijing, not far from the offices of world-famous IT companies like Huawei, Lenovo, and Baidu. The park is presented as a possible future model for an interactive landscape managed by modern technologies. These technologies are built into the park not openly, but covertly: they are not conspicuous, in accordance with the extremely minimalistic design of the space.

Main design decisions:

- Interactive energy exchange - the transformation of body movements into electricity with the help of reactive panels which gather energy from steps and jumps;
- Autonomous ecosystem - the park provides itself with water and energy with the help of thin-film solar cells and reservoirs for the storage and re-use of rain water;
- Open-air office - a mobile box for 5-10 people with glass walls which can be switched between transparency and opaqueness.

Thanks to the large number of visits and amount of interest from the IT companies, the local authorities have decided to finance the further expansion of the park. In addition, Baidu and other companies have begun to look for ways to connect their activities to the landscaping industry. This design presents a completely view of what a landscape may offer to individuals, the community, and even the economic development of an area.

Trends recommended for application:

- Introduction of visitors to recycling and alternative energy sources in a fun and entertaining way, with the help of modern technology;
- Park as an experimental space for high-tech companies.

2018

opening year

0.5 HA

area

⁵⁴ Source: <http://landezine.com/index.php/2019/05/longfor-g-park-by-instinct-fabrication/>

FUNDAMENTAL MODEL AND KEY IDEA FOR DEVELOPMENT

The key idea for development has been developed out of the existing problems of the competition territory, taking into account the strategic areas of development of the Republic of Tatarstan and the task of the socio-economic development of the city of Almet'yevsk, and also the corporate policies of Tatneft, the landmark enterprise in the city.

The "greening" of the urban environment on the basis of sustainable, dynamic economic development, the creation of a positive environment, and the efficient use of natural resources is one of the key priorities for the strategic development of the Republic of Tatarstan with a view to 2030.

In accordance with the corporate policies of Tatneft in the area of environmental protection and the safeguarding of environmental safety: *The company recognizes the global challenges, problems, and tendencies connected to the aspects of sustainable development, observes the provisions of the UN Global Compact, the UN initiative on the Principles of Responsible Investing (UNPRI), the UN's Sustainable Development Goals approved by Resolution of the General Assembly A/RES/70/1 on 25.09.2015, the UN Environmental Programme, and also the Fundamental Principles of Corporate Management and the Social Charter of Russian Business.*

Moreover, "the company recognizes the significance of demand from the community for a transition to cleaner energy and is taking into account the fundamental trend for a change in the energy balance toward less carbon intensive types of fuel, the development of new energy sources to reduce greenhouse gas emissions, and also in the long term the possibility of scenarios for the transition of the global energy system to decarbonization, an increase in the use of low-carbon technologies and energy carriers, and on the whole to a low-carbon global infrastructure."⁵⁵

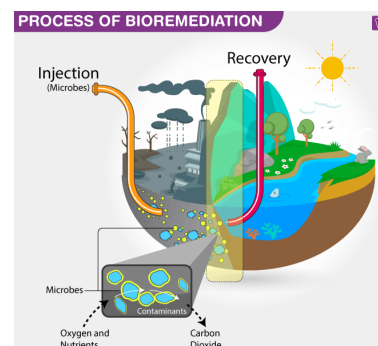
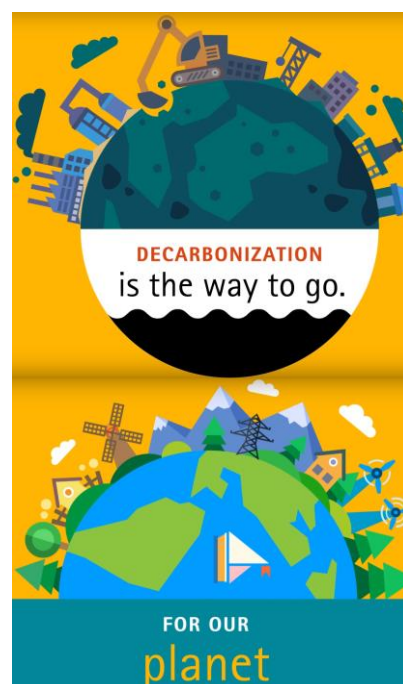
The company also "supports the making of management decisions for the development of a corporate system of accounting and management of greenhouse gas emissions, in order to reduce them and lower the company's carbon footprint."

The key idea for the development of the competition territory is based on the following principles

- Unification of all areas of development of the territory in the idea of decarbonization as one of the components of sustainable development.
- Revitalization of impacted areas, the restoration of landscapes, and the preservation of precious natural objects.
- Development of eco-oriented edutainment: propagation of the basics of ecological culture in an informative, entertaining form with the use of modern technology.
- Application of green technologies in the creation of infrastructural facilities and the installation of objects of various functional purposes.

DECARBONIZATION

reduction in the use of fossil fuels and transition to renewable energy sources



⁵⁵ <https://www.tatneft.ru/ekologiya/ohrana-okruzhayushchey-sredi-i-obespechenie-ekologicheskoy-bezopasnosti?lang=ru>

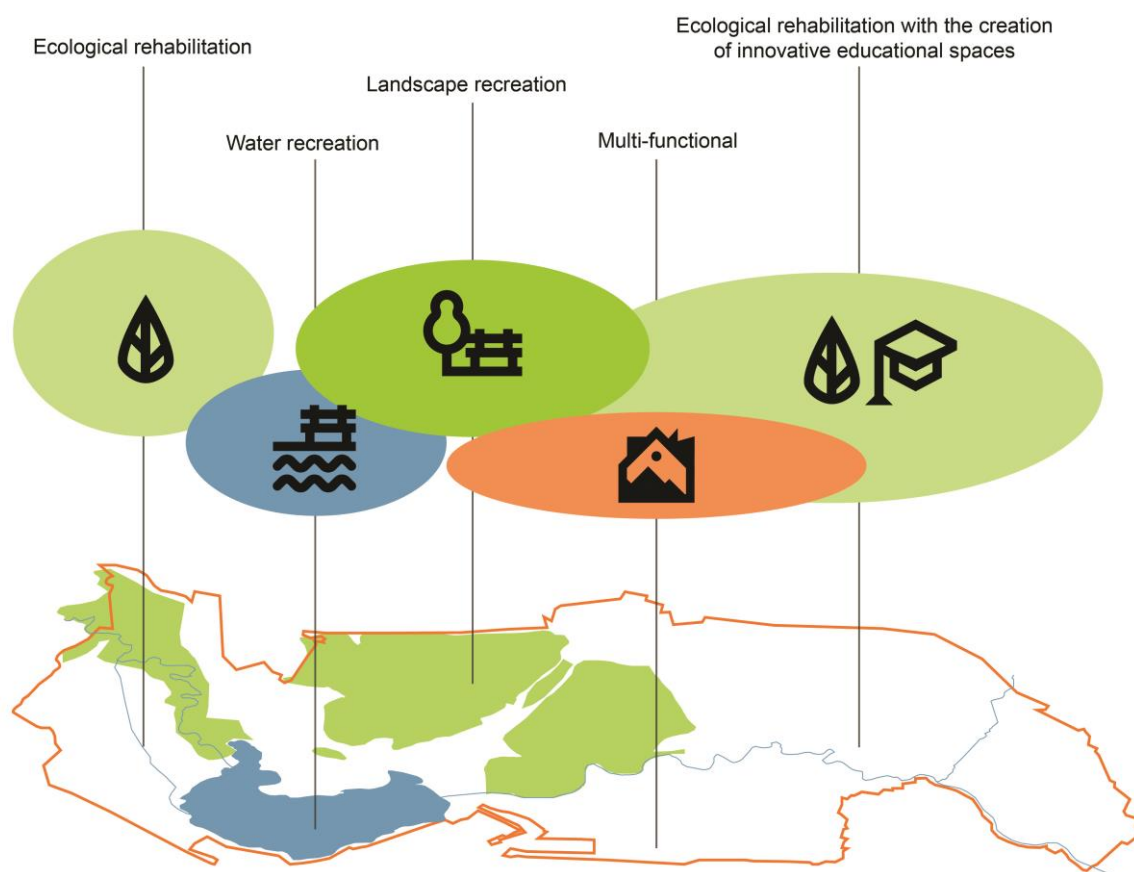
- Optimal use of the territory's potential, taking into account the desires of the residents of the city.

The particularities of the chosen idea for the development of the competition territory as a whole, with the specified prerequisites, imply a fundamental model for the development of the territory adjoining the Almet'yevsk reservoir and the Steпноy Zay river which responds to the internal and external risks.

On the basis of the system of the natural-recreational framework, the limitations on the use of the territory, the functional zoning and planning links, and the location of municipal infrastructural facilities, the competition territory is divided into the following five principal zones:

- ecological-rehabilitative in the western part of the Almet'yevsk reservoir;
- ecological-rehabilitative with the creation of innovative community educational spaces along the Steпноy Zay River valley;
- water-recreational around the shoreline zone of the Almet'yevsk reservoir;
- landscape-recreational, including the key recreational infrastructural facilities on the forested ridges;
- multi-functional, located in the southern part of the competition territory along Sovetskaya Street.

Fundamental model of development



PRINCIPLES FOR THE PREPARATION OF COMPETITION PROPOSALS

PRINCIPLES FOR THE PREPARATION OF COMPETITION PROPOSALS FOR THE DEVELOPMENT OF A MASTER PLAN FOR THE TERRITORY ADJOINING THE ALMETYEVSK RESERVOIR ON THE STEPNOY ZAY RIVER IN THE CITY OF ALMETYEVSK, REPUBLIC OF TATARSTAN

1. Correspondence of proposals to the key idea for developing the territory

Competition proposals must be based on the strategic idea of the decarbonization of the environment, ecological development, and also embody the identity of the city as the oil capital of the Republic of Tatarstan and enable the development of a landmark public space for residents of the city which will be known outside of Almetьевск and considered an "iconic" component of the city.

2. Eco-rehabilitation of the landscape

The implementation of competition proposals must provide for the eco-rehabilitation of the landscapes of the Stepnoy Zay River valley and the adjoining natural and recreational areas, and also enable the revitalization of technogenically transformed landscapes in the areas occupied by facilities of the oil extraction complex.

3. Comprehensive development

Comprehensiveness implies the drafting of a scenario of the balanced development of the various functional zones of the competition territory which integrates the planned infrastructural objects and takes into account the intentions for the redevelopment of the industrial and warehouse areas, and also the ongoing activities for the improvement of the city's public spaces.

The balanced development of the territory is ensured by the comprehensive consideration of the existing requirements for the development of the territory, including:

- the formation of a unified landscaping and planning framework for the territory based around the Stepnoy Zay River and the reservoir;
 - functional and planning organization of the territory providing internal connectedness among all areas, and also connectedness to the existing elements of the planning structure, public spaces, and infrastructural facilities of the adjacent areas of the city;
 - unification of all functional zones by a common infrastructure;
- realization of a scenario for territorial development which offers comfortable visits to the created public spaces to representatives of the various target audiences: residents of adjoining regions, residents of the city, and visitors to the city.

Optimal use of the landscaping and recreational potential of the territory

Competition proposals must include solutions for the recreational use of the territory taking into account the uniqueness of its landscape, and also address the desires of city residents and take into account the existing recreational infrastructure, including:

- meet all criteria of comfort, including the inclusiveness of the environment;
- offer modern infrastructural solutions adapted to the demands of the various target audiences;
- provide opportunities for the realization of recreation scenarios allow for healthy lifestyles, ecological education, creative potential, and personal growth.

4. Correspondence of proposals to global trends

Competition proposals must correspond to global trends in the creation of ecological recreation infrastructure and the revitalization of brown-field lands, the preservation of local identity in combination with the application of the latest technological solutions, and the creation of a new local brand based on educational opportunities and the activation of local communities.

5. Approach to master planning as a development tool for the territory

Competition proposals must be developed in the understanding that a master plan is a document that defines the architectural and urban-planning particularities of the development of a territory and includes a system of measures for implementation in social, economic, ecological, and other areas. In that, a master plan is developed on the basis of an analysis of the internal and external risks to the long-term development of the territory, taking into account the interests of various groups of inhabitants. This approach to spacial development in the implementation of a master plan demands the development not only of architectural, planning, and infrastructural solutions, but also institutional measures and proposals for mechanisms of implementation.

6. Phasing of implementation

Competition proposals must allow for the phased implementation of intentions for the development of the territory, with identification of the site of the first phase. The result of each phase of implementation must be a completed functional-planning unit: recreational complexes, public spaces, and development complexes, the operation of which must not be complicated by work on the implementation of the following phases.

7. Socio-economic effectiveness and investment attractiveness of the most important facilities

Competition proposals must optimise costs in the creation and subsequent operation of the territory and provide for long-term positive socio-economic effects for the residents of the city.

It is necessary to outline an effective structure of financing including governmental, institutional, and non-governmental sources, and also to propose mechanisms of management which enable the sustainable operation of the territory and its most important facilities.

GENERAL REQUIREMENTS FOR COMPETITION PROPOSALS

1. Compliance with the Terms of Reference.
2. Compliance with the documents for territorial planning⁵⁶ and zoning⁵⁷, with the development Laws⁵⁸ of the City of Almet'yevsk, Almet'yevsk Municipal District, Republic of Tatarstan, and also with the norms of urban planning design of the Republic of Tatarstan⁵⁹.
3. The master plan for the territory adjoining the Almet'yevsk reservoir on the Stepnoy Zay River must correspond with the idea of environmental decarbonization and with global trends in the revitalization of brownfield lands.
4. Comprehensiveness of approach and balance in the functional use of the territory. The master plan must include principles and actions directed at the eco-rehabilitation of the landscapes of the Stepnoy Zay River valley.
5. Development scenarios proposed by the master plan must provide for the optimization of landscape and recreational use of the territory and for diversity in recreational infrastructure, transport and pedestrian accessibility, and attractiveness to the various target audiences.
6. The architectural and landscaping solutions must shape a recognizable image and unique identity for the territory in observance of the principles of compositional and artistic unity, the consistency of architectural and landscaping decisions, and stylistic integration with the surrounding territories.
7. The suggestions posed in the master plan must be feasible, and the Competition Proposal must include specific measures and tools for executing the master plan.
8. Socio-economic efficiency of the solutions of the master plan in both the medium- and long-term perspectives.

⁵⁶ General Plan, approved by Decision of Almet'yevsk City Council, Almet'yevsk Municipal District, Republic of Tatarstan No. 42, dated 23.11.2006

⁵⁷ Laws for land use and development, approved by Decision of the Council of Almet'yevsk Municipal District No. 366, dated 25.12.2009

⁵⁸ Laws for development, approved by Decision of Almet'yevsk City Council No. 47, dated 06.10.2006

⁵⁹ Republican norms for urban planning design, approved by decree of the Cabinet of Ministers of the Republic of Tatarstan No. 1071, dated 27.12.2013

CONTENTS OF COMPETITION PROPOSALS

COMPOSITION OF MATERIALS FOR THE FIRST STAGE

1. APPLICATION

Applications can be filled in via the Internet at the official website of the competition: info@almetevsk.tatar

2. PORTFOLIO

May include up to 5 relevant examples in the field urban planning, architecture, design, and the creation and development of public spaces.

3. ESSAY

The essay must describe the key ideas and approaches to the development of a master plan for the territory of the Stepnoy Zay River valley. The essay must not exceed 5,000 characters (including spaces) in length.

4. ADDITIONAL VISUAL MATERIALS (PLANS, RENDERS, ETC.) AT THE DISCRETION OF THE CONTESTANT

CONTENTS OF MATERIALS FOR THE SECOND STAGE

In the second stage, contestants submit:

An architectural and urban planning concept for developing the territory of the Stepnaya Zay River Valley (scale of provided materials, 1:5000).

A detailed architectural and urban planning concept for developing the site of the first stage of master plan implementation.

Contents of materials for the second stage:

- project albums, including cover letter and visual materials for the proposed solutions;
- sketch boards;
- presentation;
- a video with 3D simulation elements;
- any other additional materials that the participants might need for presenting their concepts.

GENERAL TERMS OF REFERENCE FOR THE DEVELOPMENT OF A MASTER PLAN

1. Comprehensive evaluation of the development potential of the competition territory:

- 1.1 Ecological, urban planning, socio-economic, and other conditions that may drive or hinder the development of the competition territory.
- 1.2 Evaluation of the infrastructure of the city and competition territory, including utilities and transportation services.
- 1.3 The key issues of spatial development; internal and external risks.
- 1.4 Evaluation of demands of residents and landowners, and the existing plans for the use of the territory by local authorities and the business community.
- 1.5 Comprehensive evaluation of the prerequisites for the development of the territory taking into account the limitations on its use and existing plans for its development.

2. Key idea and Strategy for the development of the competition territory over the period from 2020-2030:

- 2.1. Goals and principles for the development of the competition territory tied to the strategic priorities for the development of the city of Almet'yevsk.
- 2.2. Priorities and perspectives for spatial development growing out of the uniqueness of the landscape and the natural values of the territory, and its ecological problems, resource potential, and the existing demands of residents.
- 2.3. Key principles for the revitalization of the territory, the eco-rehabilitation of disturbed lands, the creation of natural-recreational complexes, and the application of green technologies.
- 2.4. Fundamental model for the development of the competition territory based on a complex of prerequisites taking into account internal and external risks.
- 2.5. Fundamental functional zoning scheme with justification for the site of the first stage of implementation of the competition proposal.

3. Architectural and urban planning concept for development:

- 3.1 Functional-planning organization of the territory, including proposals for the infrastructural composition of the allocated functional zones.
- 3.2 Fundamental architectural, constructive, and dimensional planning solutions in relation to the facilities of each allocated zone.
- 3.3 Landscaping and architectural solutions for the key public spaces.
- 3.4 Basic plans of the transportation services and utility systems of the developed zones.
- 3.5 Projected technical and economic indicators for the development of the territory.
- 3.6 Spatial development procedures aimed at executing the proposed scenarios, including institutional events and events for strengthening public-private partnership.
- 3.7 Activities that will ensure that the project is executed in a phased manner.

4. A detailed architectural and urban planning concept for developing the site of the first stage of implementation.

5. Evaluation of the socio-economic effectiveness of the proposed scenario for the development of the territory and the investment attractiveness of the most important facilities:

- 5.1. Network plan for stage-by-stage master plan activities from 2020 to 2030, including potential funding sources.
- 5.2. Socio-economic effectiveness of the implementation of the proposed scenario for development.
- 5.3. Socio-economic effectiveness of the proposed first stage of implementation

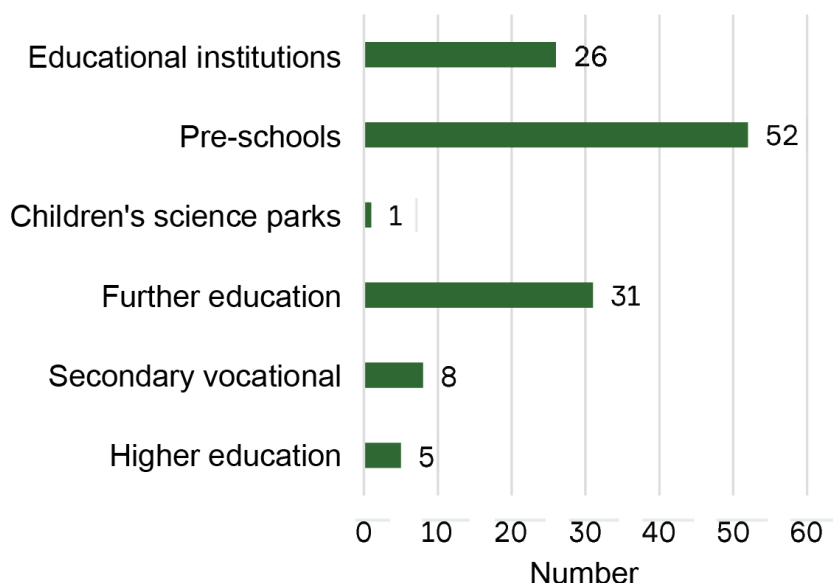
Appendices

APPENDIX 1

ANALYSIS OF THE INFRASTRUCTURE OF ALMETYEVSJK

There are 147 educational institutions in the city, including 5 tertiary institutions. The leading tertiary educational institution is the Almet'yevsk Oil Institute, which prepares specialists for the oil and gas industry. More than 5% of the students of the institute are foreigners from 7 CIS countries⁶⁰. There is a center for training Tatneft personnel (school of drilling personnel), which provides continuing education for Tatneft employees.

There are also 2 unique projects in the city for the additional education of children: the Kvantorium children's technopark and the Station for Young Technicians.



The cultural life of the city is supported by 2 museums, 4 cultural centers, an amusement park, the Tatar dramatic theater, and the Almet'yevsk art gallery. There are also popular outdoor areas in the city for holding events (more than 9).

On the site of the former Tatarstan department store, a community and cultural center⁶¹ will be built, which will include: A center for technical creativity for children and youth, a museum of Oil, exhibition halls and spaces for temporary exhibitions, and a cafe serving food. Construction is planned to be finished in 2020.

Large industrial enterprises operate on the territory of the city, such as:

- Tatneft
- Alnas
- Almet'yevsk Pipe Plant
- Tagras Holding
- SMP-Neftegaz
- Almet'yevsk Radiopribor Plant
- Baulyuks

1,300

learners at the Kvantorium children's technopark



Image. Render of the community and cultural center

102 KM

total length of bicycle paths in the city

⁶⁰ <https://www.agni-rt.ru/institut/ob-institute/vizitnaya-kartochka/>

⁶¹ <https://www.business-gazeta.ru/article/378720>

■ ALSU Hosiery Factory (Noskoff brand)

One of the most significant health institutions in the city is the healthcare division of Tatneft. The healthcare division provides high-tech medical services in the diagnosis, treatment, and rehabilitation of various patients.

Every year in its hospital alone, the institution provides medical care to more than 5,000 patients from outside the city. The geography of medical tourism to our city covers not only the regions of the Republic of Tatarstan, but extends even to Moscow, Saint Petersburg, Magadan, Izhevsk, Ulyanovsk, and even Ukraine, Kazakhstan, and Belarus.⁶²

Sporting infrastructure is represented by several large sports complexes, including various features, such as: Neftyanik, Alnas, Yubileyniy, and Tatneft.

Apart from them, the city also has a karting facility, karate dojo, chess club, tennis center, center for artistic gymnastics, and a large number of fitness clubs.

In the immediate vicinity of the city, the YAN sporting and health complex is located in the village of Potashnaya Polyana⁶³.

The complex includes⁶⁴:

- sanatorium;
- golf course (driving range);
- sports complex with a swimming pool and playing fields;
- ski slope (7 illuminated runs of various difficulty levels):
 - four ski runs: green - 907 m; blue - 710 m; two red - 817 m and 788 m;
 - one run for snowboards - 890 m;
 - one run for zorbing;
 - two 250 m runs for snowtubing;
 - illuminated trail for cross-country skiing;
 - skating rink.

According to the federal list of tourist facilities⁶⁵, the hotel at the YAN ski resort has 3 stars, and the sanatorium, 4 stars.

It can be seen that, in comparison to the other facilities in the Republic, the YAN ski resort is among the best, with some of the best attributes.

NEFTYANIK

local hockey team, founded in 1964



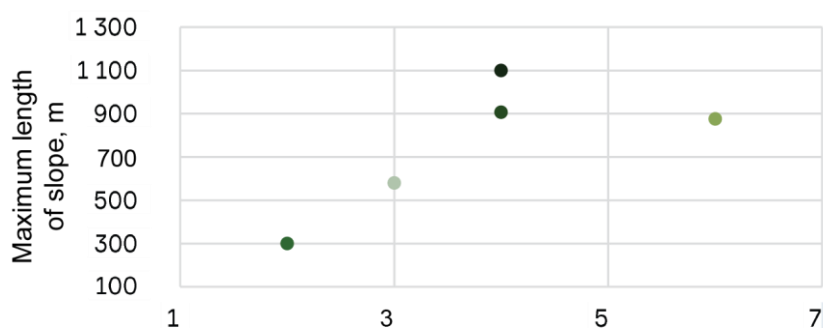
<http://yan.tatneft.ru/gornolizhniy-kompleks/fotoalbom/?lang=ru>

⁶² <http://msc.tatneft.ru/medical-tourism>

⁶³ <http://yan.tatneft.ru/gornolizhniy-kompleks/fotoalbom/?lang=ru>

⁶⁴ Strategy for the socio-economic development of the Almetyevsk Municipal District of the Republic of Tatarstan over the years 2016-2021 and the planned period to 2030

⁶⁵ <https://классификация-туризм.рф/displayAccommodation/search>



● Yan ● Fedotovo ● Kukmor ● Kaskad ● Sviyazhskiye Kholmy
Ski resorts in the Republic of Tatarstan

The Snezhnika sports and entertainment center and the riding sports school and hippodrome are located in the northwestern part of the city.

The Snezhnika⁶⁶ complex includes:

- sports equipment rental;
- skiing sports center;
- restaurant;
- karaoke bar;
- sauna complex;
- billiards hall;
- Fly Park adventure park;
- gazebo rental;
- service center for snowmobiles.

The forested area of the complex includes old ski trails. The Tatneft ski sports program includes a design for their reconstruction. According to the design, the ski trails will in the future be united with a complex of ramps installed on the slope in the vicinity of the city Maidan.

The riding sports school and hippodrome are located to the north of the Almet'yevsk reservoir. The riding school was opened in 2006, and its program includes training in the 3 Olympic disciplines: jumping, dressage, and eventing. In order to attract children and youth to equestrian, the riding school closely cooperates with public schools and preschools and operates tours. It holds charity events for handicapped children. The school also takes part in all city events with demonstration performances on horseback. Rental services and horses for wedding photo shoots are also offered⁶⁷.

The entertainment sector is not diverse. Games clubs, an entertainment center with sports sections, and children's sports clubs (teams) all operate. There is only one large shopping and entertainment center operating in the city, the Panorama center⁶⁸. It includes a cinema, food court, and shops of the middle price category.

There are more than 140 food service establishments in the city and a noteworthy presence of fast food chains, with the majority of establishments concentrated in the center of the city.



<https://yandex.ua/maps/org/snezhinka/>

8 HA

territory of the riding sports school and hippodrome

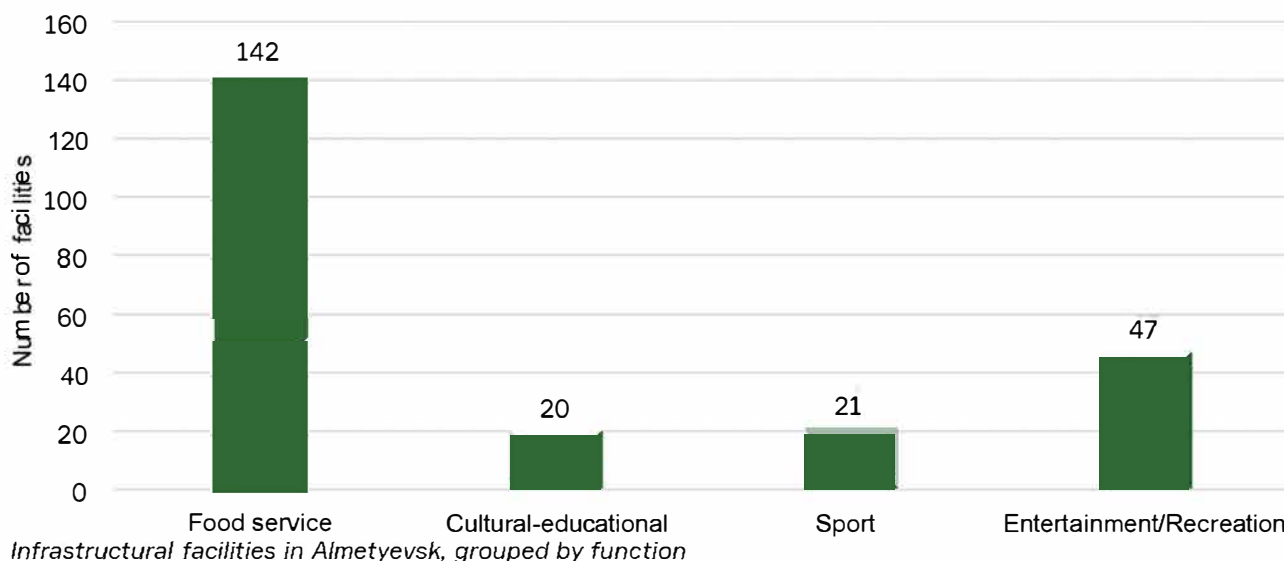


<http://almetievsk-ru.ru/news/goryachie-novosti/19897>

⁶⁶ according to the owner of the Snezhnika complex

⁶⁷ <https://vk.com/public131085733>

⁶⁸ <http://panorama-almet.ru>



There are also 23 hotels in the city, with more than 381 rooms. Only 8 of those are classified on the Federal list of tourist facilities⁶⁹, with a maximum rating of 3 stars.

Regional tourism

The city of Almet'yevsk and Almet'yevsk district offer various destinations for regional tourism. In the territory of the district, apart from cultural destinations, other forms of tourism have been developed, such as medical, sports, industrial, and recreational tourism.

Almet'yevsk is rightly considered one of the main sporting centers of the Republic of Tatarstan. In 2018, more than two hundred sporting events were held, in which almost 60 thousand people participated, and the Spartakiad movement is growing, with the number of participants increasing every year⁷⁰. The YAN sports and health complex has great potential, since there are only a small number of ski resorts in the Republic.

Medical tourism is offered by such institutions as the healthcare division of Tatneft and the Almet'yevsk branch of the Republican Clinical Oncology Dispensary.

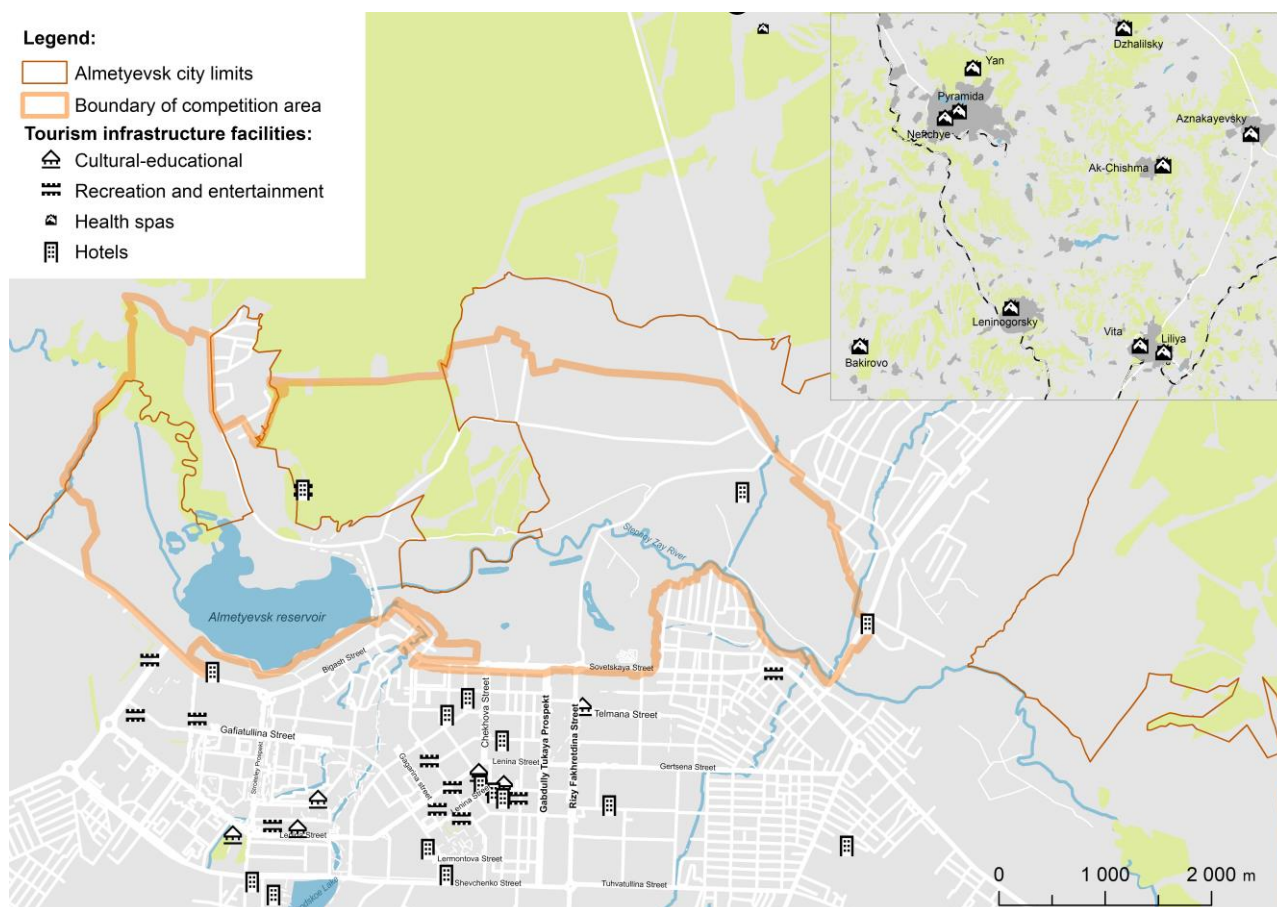
Recreational tourism facilities include various sanatoria and children's camps located in the region.



69 <https://k1.assolinka.ru/ru/tema/soleyAccommodation/search/>

70 <http://almet'yevsk.tatar.ru/rus/index.htm/news/1363969.htm>

Tourism infrastructure facilities:



As part of the implementation of the initiative of President of the Republic of Tatarstan Rustam Minnikhanov on the organization of industrial tourism in the republic, the Almeteyevsk hosiery factory Alsu, which produces goods under the brand name Nосkoff, invites anyone who wishes to visit its plant⁷¹.

Alnas, which specializes in pumping equipment, also accepts visitors.

ANO "Center for the development of tourism in the Almeteyevsk agglomeration" was founded in 2017. The center is the coordinator for the full-scale launch of the Project and promotes activities aimed at finding and restoring (preserving) facilities and territories in the municipalities of the Kama region⁷². In 2018, the organization's "Golden Horseshoe of Tatarstan" project was awarded a grant from the Presidential Grant Fund. Today, weekend tours of southeastern Tatarstan departing from Kazan are offered by the tourism agency IntourMed, while industrial tours are offered by Niagara Tour.

For the full development of tourism infrastructure in the territory of the district, qualitative and quantitative improvements to the organizations engaged in the tourism-related service sector (food service, hotels, retail, etc.) are necessary. A strategically important goal in the field of

71 BIZNES Online: <https://www.business-gazeta.ru/article/333341>

72 <https://президентскиегранты.рф/public/application/item?id=96e2529e-5d8c-4a25-9482-49a6ec0386fd>

tourism is entry to the national and international market as a tourist destination, and in the field of service, the meeting of internationally-accepted standards for service quality⁷³.

There are historical and natural sites in Almetyevsk District, which can include the landmarks of:

- The Kichuysky fortification of the Novo-Zakamskaya defensive line - the defensive line and historic ramparts were built at the beginning of the seventeenth century for the defense of the borders of the country;
- Aktashky Sinkhole lake - a natural landmark of regional significance. The sinkhole formed in 1939.

Neither landmark has been improved, which prevents the realization of their potential.



<https://wiizh.livejournal.com/33422.html>



<https://www.alt.kp.ru/daily/26391.5/3268171/>

⁷³ Strategy for the socio-economic development of the Almetyevsk Municipal District of the Republic of Tatarstan over the years 2016-2021 and the planned period to 2030

APPENDIX 2

COMPETITIVE ANALYSIS

Primary real estate market in the Republic of Tatarstan

Social mortgage program

Law of the Republic of Tatarstan No. 69-ZRT "On state support for residential construction in the Republic of Tatarstan" was passed on December 27, 2004, and the fund has implemented the Social Mortgage Program since 2005.

The main area of activity of the fund is the implementation of residential programs adopted by the Government of the Republic of Tatarstan, state authorities of the Republic of Tatarstan, and local governmental authorities, and also the sale of housing to the people of the Republic of Tatarstan on the principles of social mortgages and mortgage lending to individuals and legal entities⁷⁴.

In accordance with the General plan of the city of Almet'yevsk, measures have partially been taken for the development of areas of new residential construction (Zapadniye Vorota, Yashlek, Alsu). As part of the program, in 2018, several apartment buildings (17,790 m²) were completed and apartments were given to 69 families, who participated in the program as a result of a competition (sweepstakes)⁷⁵.

Another site allocated for residential development is also in the design stage (Parkoviy Microregion).

According to the administration of Almet'yevsk District⁷⁶, provision of housing for residents constituted 27.1 m²/person in December 2018, which is higher than the target value for the Republic for 2025 (26 m²/person)⁷⁷.

In order to assess trends in the residential real estate market, analysis was conducted of the total area constructed in the years from 2014-2018. Within the city, the trend of decline is insignificant, while at the republic level, the trend is positive. It is worth noting that the area constructed includes not only apartment buildings, but also detached houses.

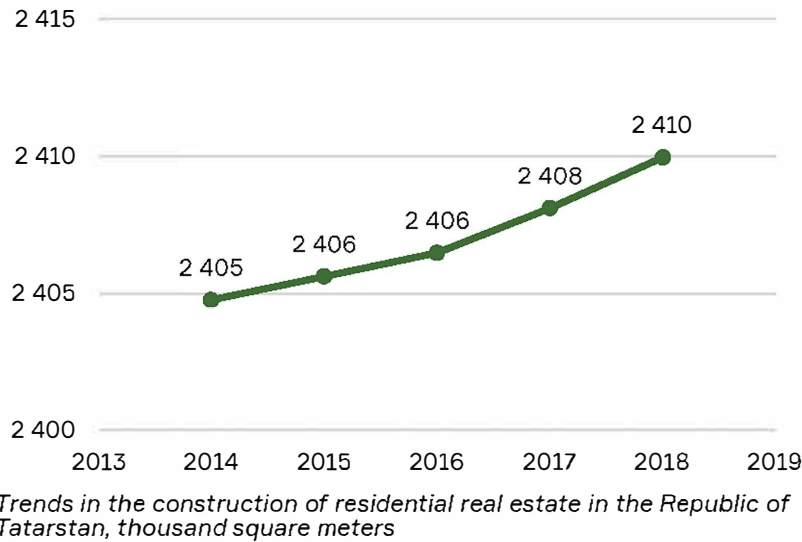
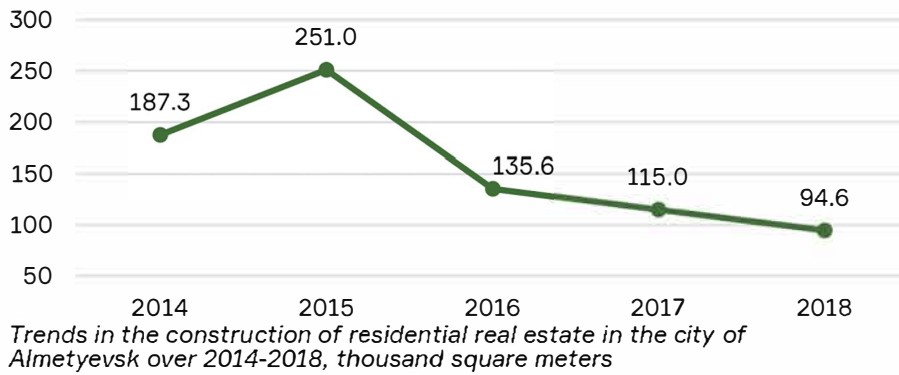
In total, 2,140,000 m² of residential space was constructed in the republic in 2018. The leader in construction was Kazan, where 916,000 m² were constructed and 1,646,000 m² are under construction in 2019.

⁷⁴ <https://mail.gilfondrt.ru/private/news.php>

⁷⁵ Explanatory note to the report of the head of Almet'yevsk Municipal District of the Republic of Tatarstan on the achieved values of the indicators of the effectiveness of the activities of the organs of the local government of Almet'yevsk Municipal District in 2018 and their target values for the following 3-year period

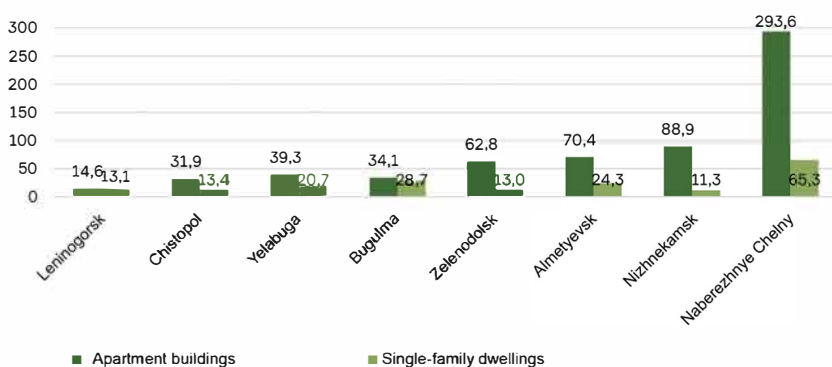
⁷⁶ Explanatory note to the report of the head of Almet'yevsk Municipal District of the Republic of Tatarstan on the achieved values of the indicators of the effectiveness of the activities of the organs of the local government of Almet'yevsk Municipal District in 2018 and their target values for the following 3-year period

⁷⁷ On the approval of Republican norms for urban design in the Republic of Tatarstan, resolution No. 1071, of December 27, 2013



For comparison, all cities of the republic with populations greater than 50 thousand were chosen, excluding Kazan, since the volume of construction in the capital is many times greater than in other cities.

The volume of apartment real estate constructed is significantly larger than the volume of detached house construction, and the greater the population of a city, the larger the discrepancy.



Volume of apartment construction and detached house construction in the Republic of Tatarstan in 2018, thousand square meters

The leaders in the Republic were the cities of Kazan and Naberezhniye Chelny. According to the Single Resource for Developers site⁷⁸, in November 2019, 1,645,500 m² and 636,900 m² of apartment space will be

⁷⁸ <https://crzrf.ru/?region=republik-a-tatarstan-tatarstan®ionKey=146201001&costType=1>

constructed in Kazan and Naberezhniye Chelny, respectively. In the cities with populations under 500,000, the volume of construction is not high. At present, the leader in area of residential construction is Almeteyevsk, with the smallest quantity in Nizhnekamsk.



Area of apartment construction in cities with populations under 500,000, thousand square meters

Kazan and Naberezhniye Chelny have the largest number of offers for first sale, as well as residential complexes under construction. Not only regional, but also federal developers are present in Kazan.

In total, there are, respectively, 52 and 26 residential complexes under construction in Kazan and Naberezhniye Chelny. Apartment complexes are also being built in Kazan.

According to the quality ratings of the Single Resource for Developers, the two highest-rated complexes are: Serdtse Goroda (Heart of the City) in Naberezhniye Chelny (1st place) and SAVIN HOUSE in Kazan (2nd place).



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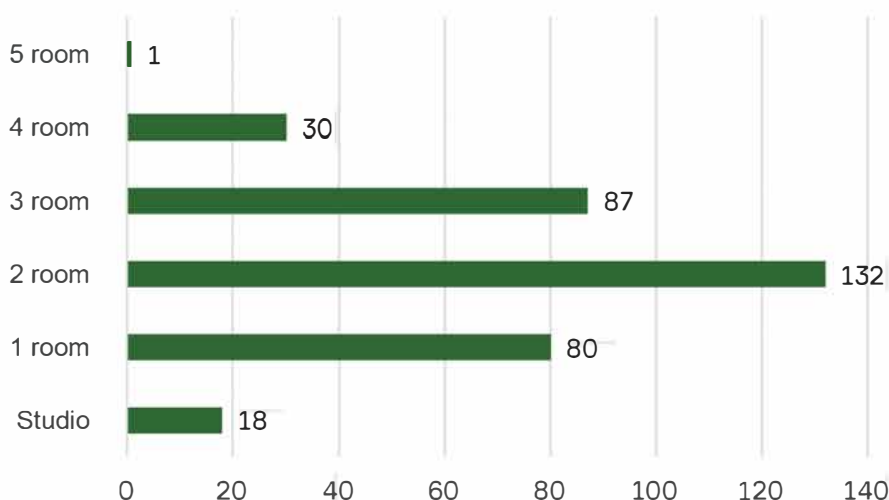
Secondary market in Almet'yevsk and the Republic of Tatarstan

According to the site CIAN⁸¹, there are 348 apartments for sale in Almet'yevsk, most of which are two- and three-room apartments.

There are offers for the sale of a particular type of apartment, "small families⁸²," which have the smallest area (18.0 m²) and are considered the most affordable option.

The price of a single square meter in the city varies from 25,424 to 88,462 rubles.

("Small-family" refers to an apartment building composed of a large number of one-room apartments of small area, and also to an apartment in such a building. It is a common type of housing in the countries of the former USSR built between 1960 and 1990.)



All the cities with populations under 100,000, excluding Zelenodolsk, have only a small number of apartments offered for sale.

Most offers in these cities are for two-room apartments, followed by one-room and three-room apartments, which are offered in the same

⁸⁰ <https://savinhouse.ru>

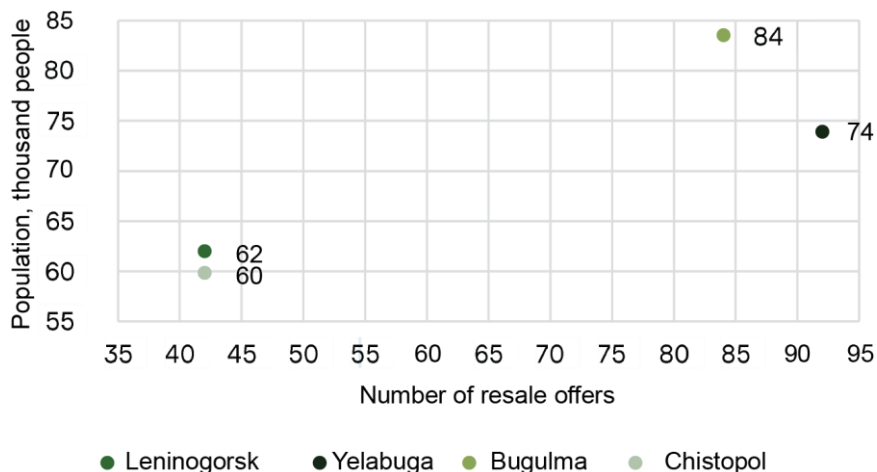
⁸¹ <https://www.cian.ru>

⁸² <https://domur.a.com/news/xvertina-malosemejka-chto-eto-173192.html>

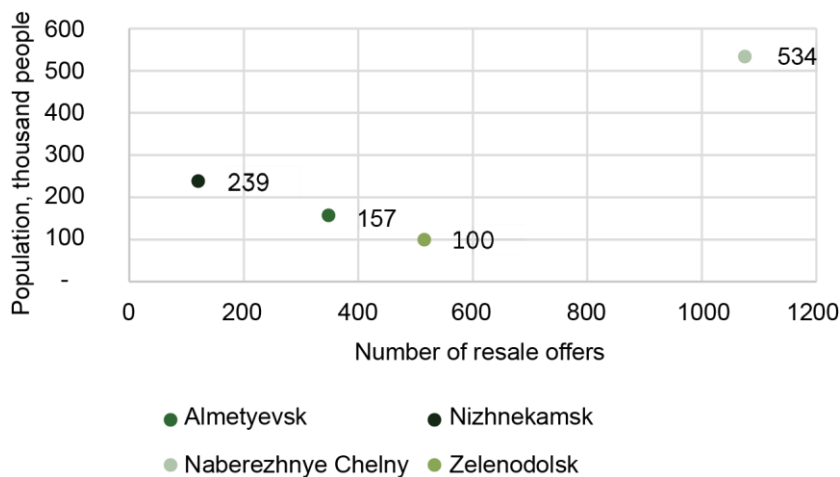
numbers. The average minimum price is 18,644 rubles/m² and the average maximum price is 48,319 rubles/m².

"Small families" are also for sale in Chistopol and Bugulma.

There is no new construction in the cities with the fewest offers for the secondary sale of apartments, with the exception of Bugulma. It has the largest number of secondary offers and also the largest volume of housing under construction.



In the cities with populations larger than 100,000, including Zelenodolsk, the secondary sales market is more developed, not counting Nizhnekamsk, which has the fewest offers, either for secondary or primary sale. The leader is Naberezhniye Chelny, with 534 offers, which speaks to a high level of turnover and market mobility, since the city has the largest number of residential complexes under construction within this group.

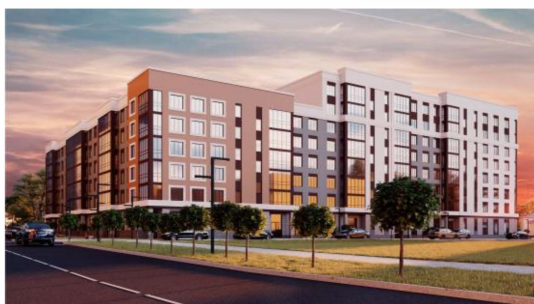


Comparative analysis of primary-market residential sites in Almet'yevsk

To determine the types of primary real estate offers in Almet'yevsk, the residential complexes under construction in the city were analyzed. In total, there are 2 residential complexes for sale, one of which is presented as unique project aimed at buyers who present greater demands for real estate, for example, for closed yards without cars, the opportunity to finish apartments individually, a low and varying number of floors, and larger size of apartment.

Comparison of the main parameters of the residential complexes under construction in Almet'yevsk

Residential complex	Novikov Sad	Alsu microregion	
Developer	Evrostroy Development	DOMKOR	
Commissioning	Q3 2020	Q4 2020	Q4 2019
Stage of construction works as of October 2019	facade works	installation works on the 3-5 floors	improvements
Number of floors	variable: 6-8-9	11	11
Number of apartments	212	365	207
Average area, m ²	63.9	47.3	49.2
Finishing	Partially-finished	Finished	Finished
Construction material	Brick	Panel/block	Panel/block
Average cost per square meter in rubles	57,431	50,277	54,167



Source: <https://eurostroy-develop.ru/realty/novikov-sad/>

Source: <http://www.domkor-dom.com/prodazha-kvartir-Novostroiki/kvartira-Almetevsk/dom->

APPENDIX 3

SOCIO-ECONOMIC CHARACTERISTICS OF THE CITY WITHIN THE CHOSEN REFERENCE GROUP

To understand the socio-economic situation, the characteristic indicators of the cities of the reference group were evaluated. The reference group included cities with populations approximately equivalent to Almet'yevsk's and with economies similarly based on a single resource. The list for comparison included the cities of Salavat, Syzran, and Nefteyugansk. The parameters of population, average salary, area of residential space per capita, commissioning of residential buildings, and investment in fixed assets were chosen for comparison.

Demographic characteristics

In comparison with the reference group of cities, Almet'yevsk is near the top in salary, total area of residential space, and the leader in the commissioning of residences and investment in fixed assets (table).

Comparison of the basic socio-economic indicators of the cities of the reference group and Almet'yevsk⁸³

City	Almet'yevsk	Salavat	Syzran	Nefteyugansk
Population as of 01.01.2019, persons	157,310	151,571	168,735	127,710
Average nominal monthly salary for employees of organizations, rubles	43,628.7	38,654.1	27,833.4	76,447.6
Total area of living space per urban resident on average (at year end), square meters	25.4	22.4	25.5	16.5
Residential real estate commissioned, thousand square meters of total residential space	95.6	37.9	47.3	15.7
Investment in fixed assets (in actual prices), million rubles	31,122.6	16,713.7	6,119.7	25,351.4

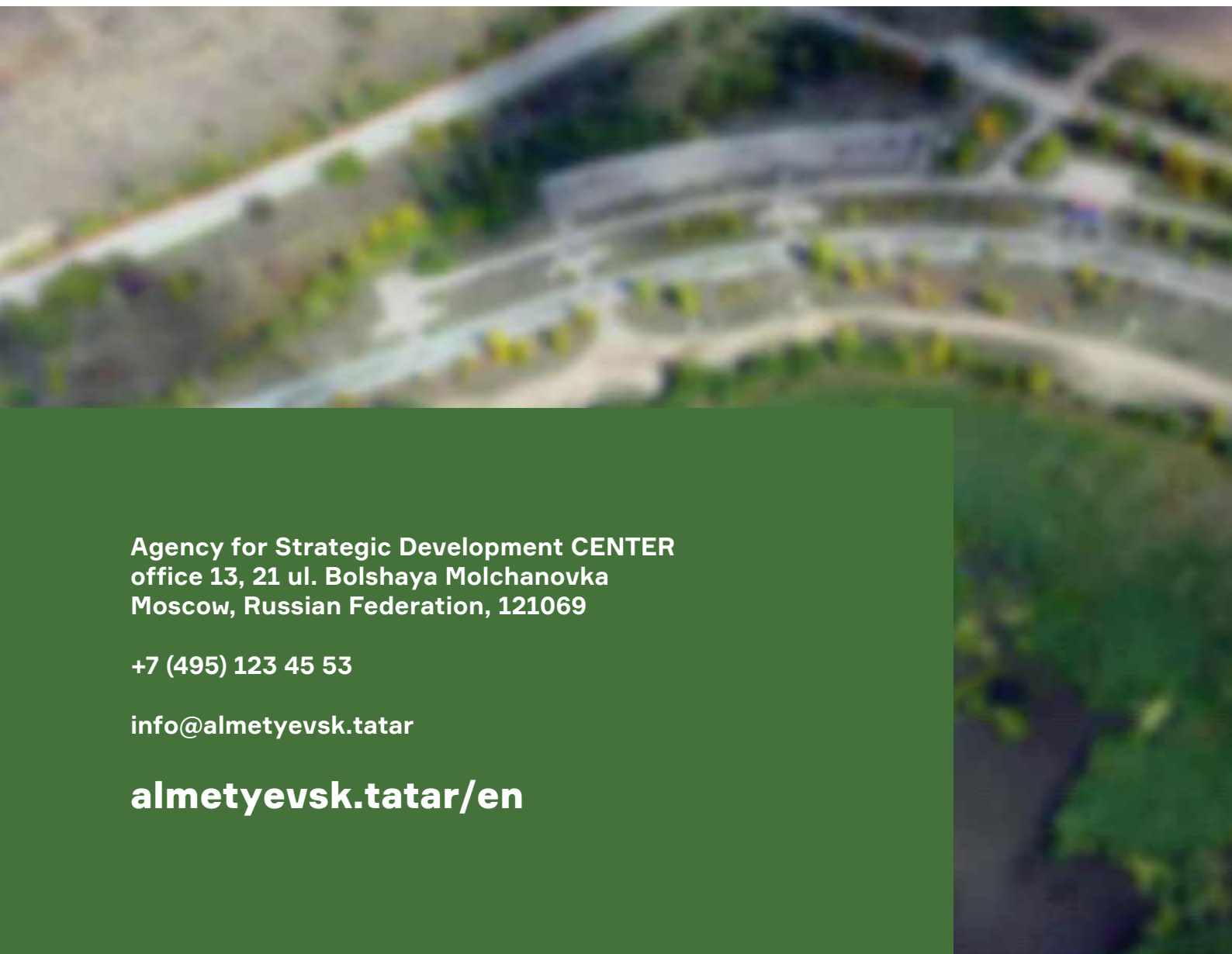
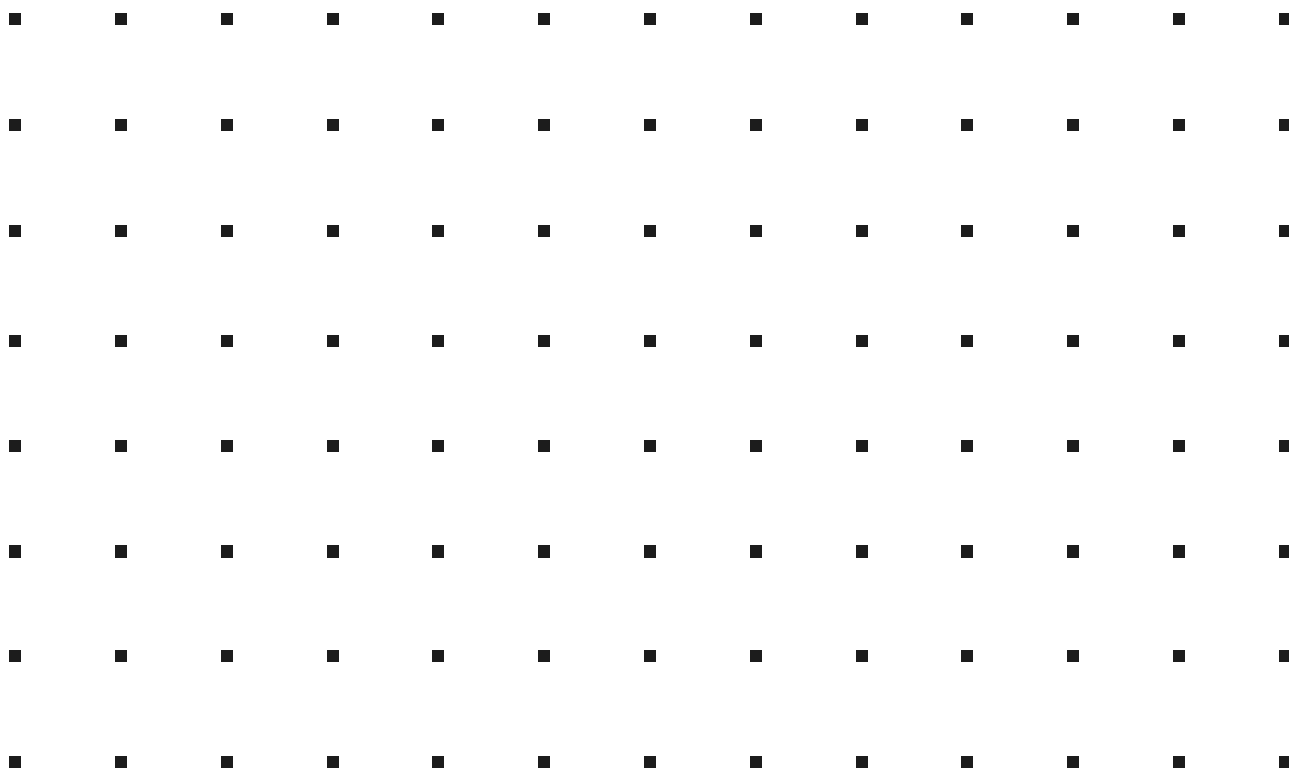
All new constructions in the reference cities were of the economy class: lacking their own internal infrastructure, without underground parking, typical layouts, furnishing of the yard corresponding to normative documents, no individual design. According to the ДОМ.РФ site⁸⁴, there are 3 problematic buildings in Salavat, and in Nefteyugansk all of the buildings under construction were named problematic.

Residential buildings/complexes under construction in the reference group cities in October 2019

⁸³ Data from the sourcebook *Regions of Russia. Basic socio-economic indicators of cities for 2017*

⁸⁴ <https://дом.рф>

City	Salavat	Salavat	Salavat	Syzran
Building/residential complex	Building at 108 Kalina Street	Tsvetok Kuraya	Building on Zaki Validi Prospekt	Moskovsky residential complex
Developer	Bashkortostan Residential Construction Development Fund	SPF Remstroy	SalavatZhilStroyServis	SSK LLC
State commission	Q4 2019	Q3 2020	Q4 2019	Q4 2019
Total area of complex, m²	8,170	14,316	2,396	6,749
Number of floors	5	10	5	10
Parking	None	None	None	None
Number of apartments	113	158	34	81
Average area of apartments, m²	60.2	67.9	62.2	52.0
Type of finishing:	Partially-finished	Partially-finished	Partially-finished	Finished
Material	Brick	Brick	Brick	Panel
Yard	Children's playground, housekeeping area	Children's playground, playing field, housekeeping area	Children's playground	None



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