

Investment activities

The Company's Investment Program is one of the most large-scale, ambitious programs in the industry. Key provisions of the UNEG development plan and the general scheme of power industry facilities with planned generation inputs form its basis. Investing in the UNEG development is of great national importance, so part of the program is paid for with federal budgetary funds. Other funding sources for the program include: the Company's own funds, proceeds from additional shares, proceeds from payments for technological connections, bond issues and loans.

The 2012 Investment Program

In 2012, as part of the Investment Program, we completed numerous major projects of great importance for the socio-economic development of Russia's regions. The energy infrastructure facilities of the

Primorsky Region, the first phase of the ESPO pipeline (Stage I – Expansion and Stage II) and power provision facilities for the 4th power unit of the Kalininskaya NPP were commissioned in a timely manner.

↑ 26%

over-fulfillment of
commissioning plans for
substations

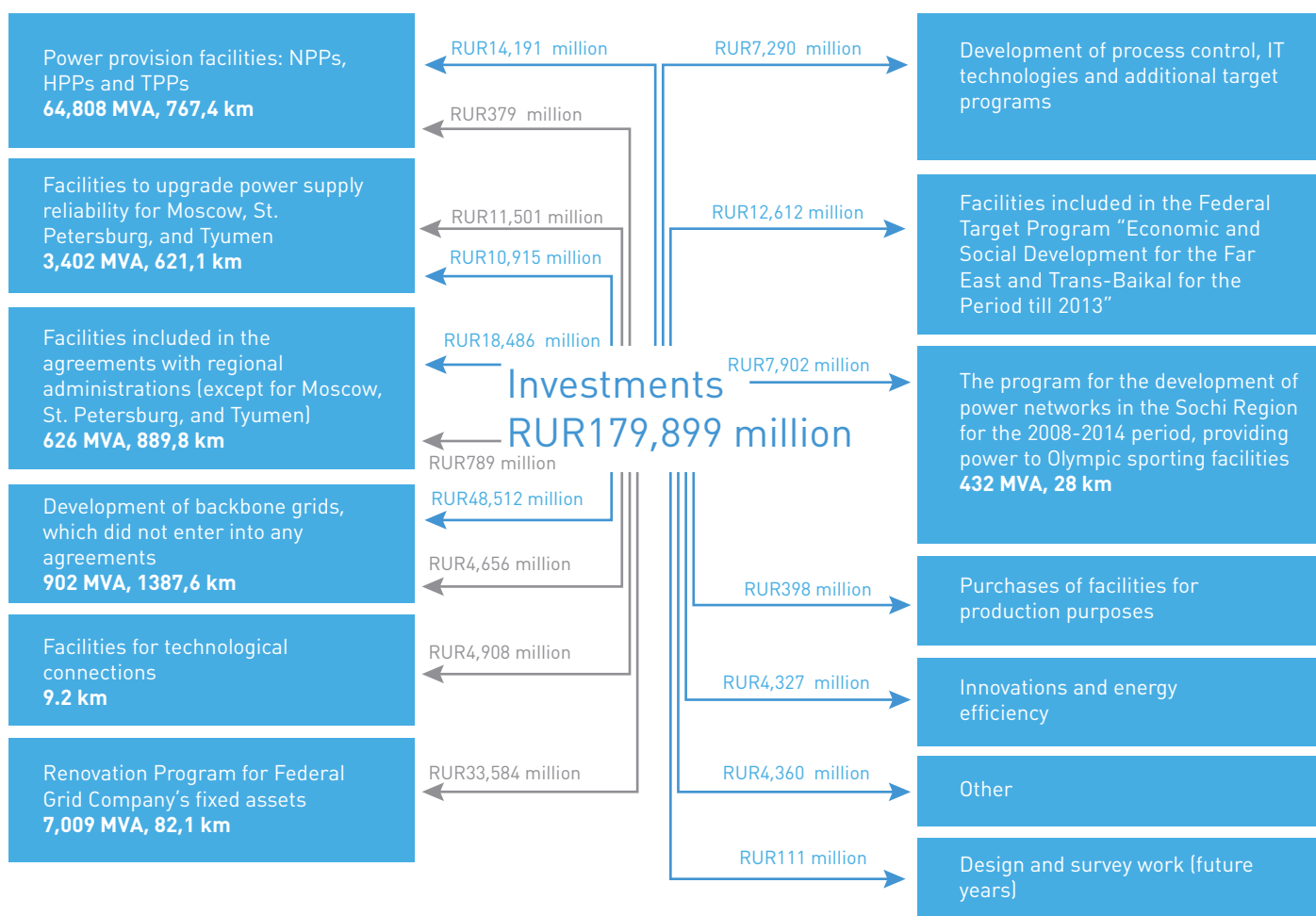
Our investment plans in 2012 were almost completed. Plans for commissioning overhead transmission lines were 91% realized (3,6543 km against the planned 4,023 km), and plans for commissioning substations were exceeded by 26% (17,827 MVA against the planned 14,152 MVA). Capital investments were implemented at 103% (RUR192,684).

3,643

KM TRANSMISSION LINES
PUT INTO OPERATION IN 2012

Principal areas of investments in 2012

(Factual data as of 31 December 2012)



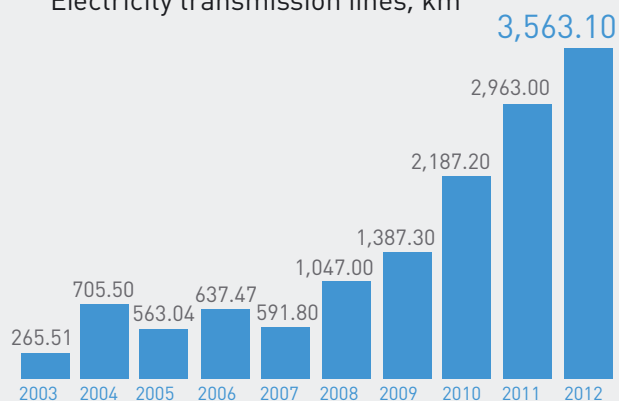
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RUBLES
Capital investments
implemented in 2012

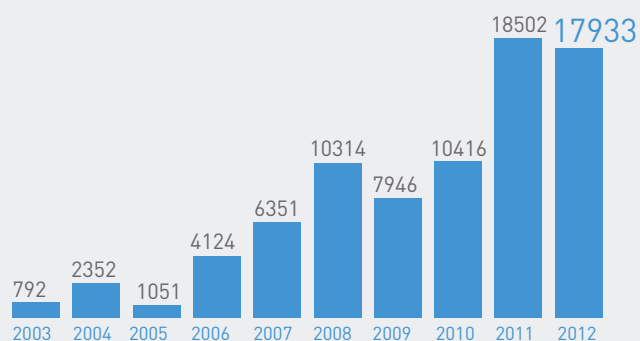
Investment dynamics for 10 years

For the most recent ten years, our Company has put into operation 13,990.82 km overhead electricity transmission lines and 79,765 MVA of transformer capacity:

Electricity transmission lines, km



Transformer capacity, MVA



KM OVER 10 YEARS

13,911

MVA OVER 10 YEARS

79,780

Our gradual approach to investment program implementation generates clear positive results: in respect to all operating facilities of the backbone

grids, the length of transmission lines grows approximately 3% per annum, and the annual increase in transformer capacity stands at 6%.

The 2013-2017 Investment Program

On 31 October 2012, the Russian Ministry of Energy approved the investment program for our Company for the period from 2013 to 2017. Total financing for the Company's Investment Program for the 2013-2017 period will amount to more than RUR775.5 billion.

As part of the Investment Program, we plan to spend RUR194.7 billion for the renovation of fixed assets of the electric grid complex, and RUR22.21 billion - for technological connections. To develop the grids which did not conclude any agreements with the regions, the Company will spend RUR256.8 billion. To upgrade the reliability of power supply to Moscow, St. Petersburg and Tyumen, the Company will spend RUR48.8 billion. The Company will invest RUR112.61 billion in innovations, upgrading energy

efficiency and developing process control, design and survey work for future years, and the protection of electric power facilities and other projects. Investments to implement the governmental programs will comprise RUR64.2 billion. Investments to provide power from the NPPs, HPPs and TPPs will amount to RUR57.65 billion. To fulfill agreements with regional administrations (except for Moscow, St. Petersburg and Tyumen), the Company plans to spend RUR20.36 billion.

AGGREGATE AMOUNT
2013-2017 ГГ:

BILLION RUBLES
OF PLANNED INVESTMENTS

775.5

OF FACILITY COMMISSIONING

66,869.86

MVA

16,984.65

KM

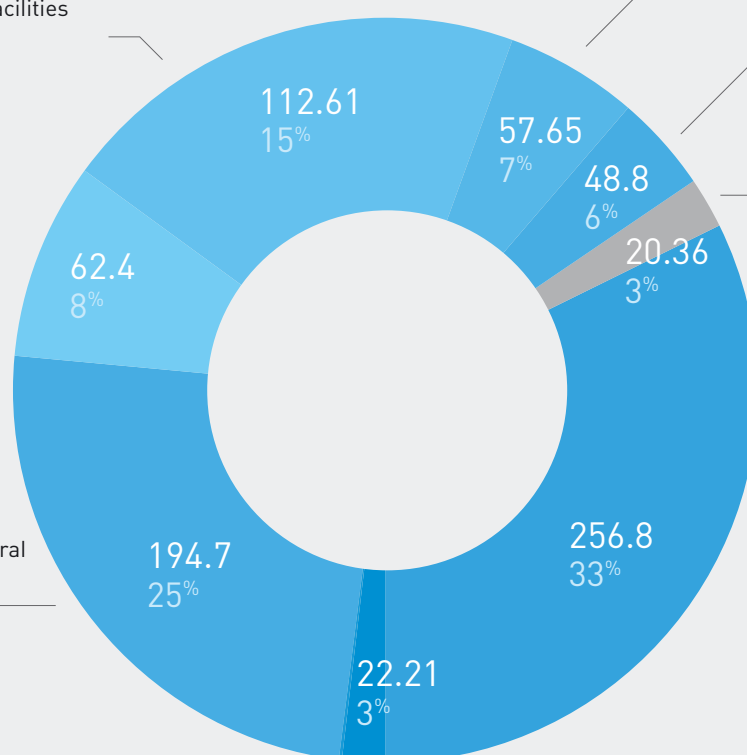
Federal Grid Company's 2013-2017 Investment Program, RUR billion

Developing process control, innovations and energy efficiency, design and survey work for future years, protection of electric power facilities and other projects.

Governmental programs included in the Federal Target Program "Economic and Social Development of the Far East and Trans-Baikal for the Period till 2013", Sochi Olympic games
2,554.6 km; 2,007 MVA

Renovation Program for Federal Grid Company's fixed assets
1,231.37 km; 31,357.6 MVA

Technological connections
373.4 km; 1,382.26 MVA



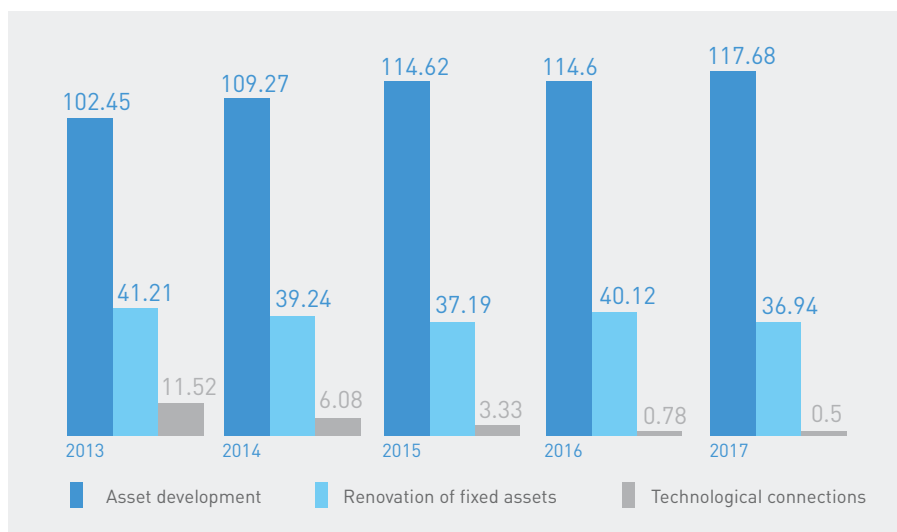
Provision of power from NPPs, HPPs and TPPs
1,798.19 km; 1,527 MVA

Facilities to upgrade power supply reliability for Moscow, St. Petersburg, and Tyumen
203.3 km; 10,125 MVA

Agreements with regional administrations, except those for power supply to Moscow, St. Petersburg, and Tyumen
610.3 km; 1,000 MVA

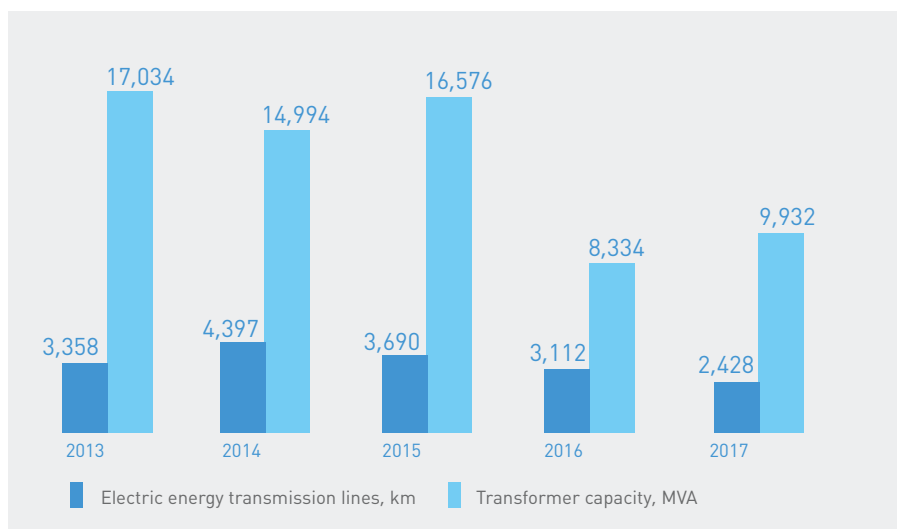
Development of backbone grids which did not enter into any agreements
10,210.99 km; 19,471 MVA

Federal Grid Company's 2013-2017 investment volumes and priorities (planned), RUR billion



Realization of the Company's 2013-2017 Investment Program will result in putting into operation 66,869.86 MVA of transformer capacity and 16,984.65 km of electric energy transmission lines.

Electric Grid Facilities to Be Put in Operation in 2013-2017



Key investment projects

Our Company is actively involved in the construction and reconstruction of energy infrastructure for major Russian projects, including: international forums and major sporting events, oil transportation projects, and development programs in Russian regions. We understand the importance of these projects and are doing our best to build and reconstruct grid facilities on time and in accordance with the highest standards.



Sochi-2014



The Kalininskaya NPP



Power supply to the Skolkovo
Innovations Center



Power supply to the
APEC Summit



The 330 kV Electric Energy
Ring in St. Petersburg



The ESPO Pipeline

Federal Grid Company's Key Investment Projects Map

Construction of the 330 kV Electric
Energy Ring in St. Petersburg
Commissioning period – 2012

Construction of power supply facilities
in the Zapolyarie-Purpe pipeline
Commissioning period – 2016

Provision of power (1,000MW)
generated by Power Unit #4
of the Kalininskaya NPP
Commissioning period – 2012

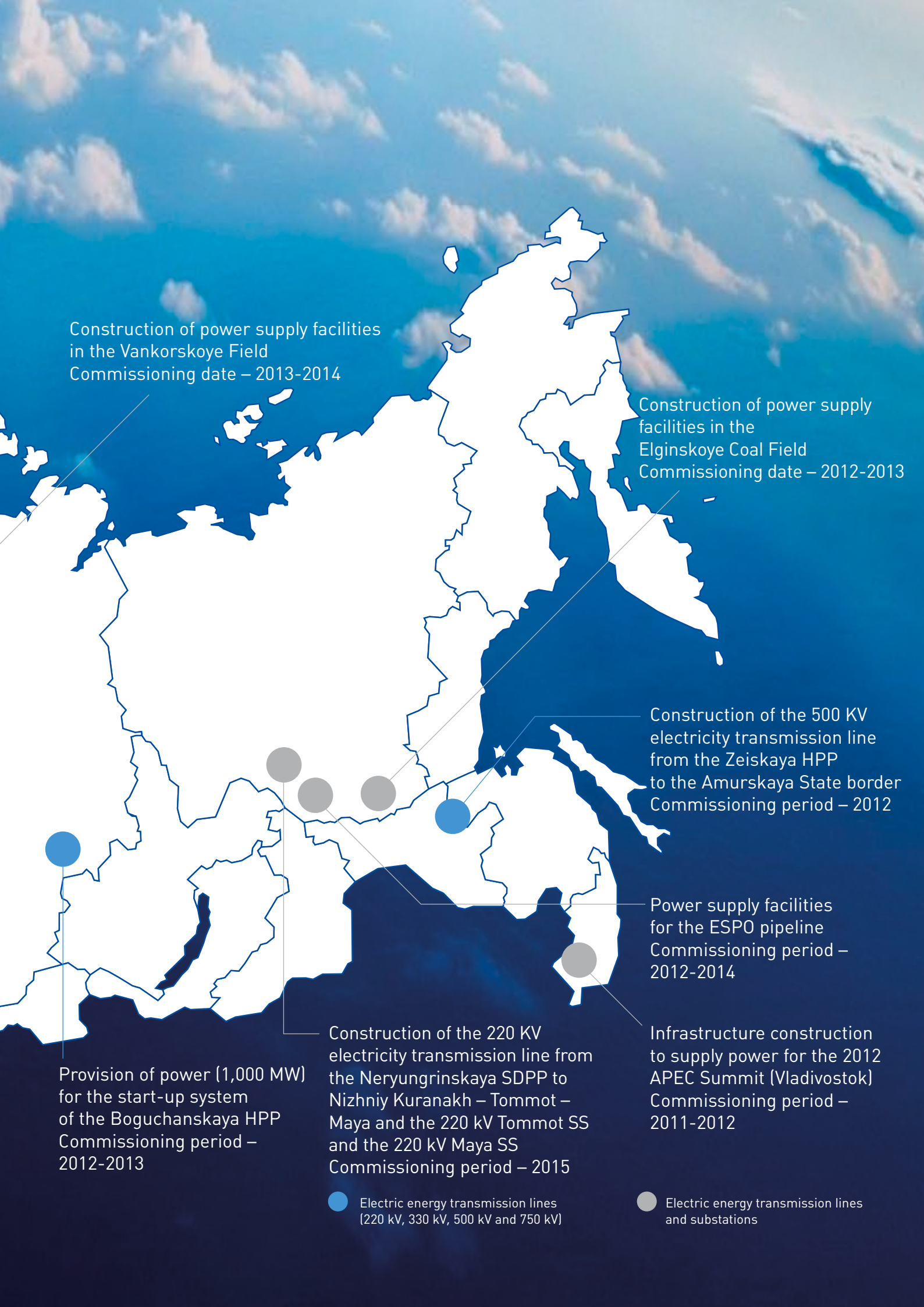
Provision of power (450 MW)
generated by the Urengoykaya SDPP
Commissioning period – 2012

Provision of power (1,170MW)
generated by Power Unit #1
of the Leningradskaya NPP-2
Commissioning period – 2014

Provision of power
(1,150MW)
generated by
Power Unit #1 of the
Novovoronezhskaya NPP-2
Commissioning period – 2012

Construction of infrastructure to supply power
for the 2014 Sochi Winter Olympics
Commissioning period – 2010-2013

Transfer of HVL to cable lines
and construction of the 220 kV
substation for the Skolkovo
Innovations Center
Commissioning period – 2012



Sochi-2014

Construction of infrastructure for the 2014 Sochi Winter Olympics is one of Russia's most important investment projects. Not only does our country's prestige during the Winter Olympics, but also the further development of the region, as well as Russia's sports and tourism industries, depend on uninterrupted power supply to sports facilities. Work on this ambitious project began in 2009 and includes: the construction, modernization and re-construction of 33 backbone electric grid facilities in the Sochi Region.

We are working quickly to meet the highest international standards and relevant deadlines. Work progress is controlled by the International Olympic Committee Commission. By the end of 2012, we had provided power supply to eight Olympic facilities, including: the Ledovy Sports Palace for figure skating and short-track speed skating, the Krytiy Skating Center, the bobsled track at Krasnaya Polyana, and a five-star hotel to accommodate representatives of the International Olympic Committee.

During the reporting year, as part of this project, we completed construction of two substations, the 110 kV Izumrudnaya substation with the 110 kV Psou – Izumrudnaya cable- overhead transmission line, which is 12.5 km in length, and the 110 kV Vremennaya substation with the 110 kV Ledovy Dvorets – Vremennaya cable transmission line with a length of 2.5 km. The total capacity of this power supply facility is 120 MVA.

In addition, we have put into operation the 110 kV 160 MVA Veseloye substation. In 2012, we also began construction of power facilities for the Olympics, including: the 220 kV Chernomorskiy distribution center and the new 500 kV Vardane substation, as well as the 220 kV overhead transmission lines to transmit power from the Dzhubginskaya TPP and 110 KV cable power lines that are 8.3 km long. They will connect the 110 kV Ledovy Dvorets, Imeretinskaya and Veseloye substations with the power generation facility of the Adlerskaya TPP.

33

FACILITIES TO BE RECONSTRUCTED,
MODERNIZED OR BUILT



The Kalininskaya NPP



The Kalininskaya NPP is a major energy producer in the central part of Russia. The Russian economy needs new power generating facilities. The Company's responsibility here is to provide for the transmission of electric energy from new power units. In 2012, our Company commissioned all facilities for power provision from the Kalininskaya NPP. This greatly increases the reliability of the power supply not only to consumers from western areas near Moscow and the Moscow Region, but to those throughout Central Russia. One of the

key facilities is the Gribovo substation, which is the largest one in Europe. Here we have used the most advanced domestic and foreign developments, which in the near future will allow us to integrate this facility into the unified smart grid system. Technical solutions introduced at the substation will be applied across the country.

Power supply to the Skolkovo Innovations Center



Switchgears for the secondary distribution systems in the Skolkovo substation



Gas insulated transformer in the Skolkovo substation



The Skolkovo substation

The Skolkovo Innovations Center, which is under construction, is designed to create favorable conditions for the modernization of the Russian economy. Leading scientists, designers, engineers and business people together with participants from educational projects will be working to integrate new technologies into the Russian economy and to create world-class competitive developments in five areas: energy efficiency and savings, nuclear technology, space technology and telecommunications, biomedical technology, and strategic computer technologies and software. Our Company is working on providing

power supply to the Center. In particular, we are constructing and re-constructing nine electric grid facilities.

The power supply project of the Skolkovo Innovations Center is unique in its complexity and technological density. In developing the project, it was decided to use technologies that would make it possible to compactly and safely fit power facilities into almost any area which is dense with residential or industrial buildings. The Company has decided to build underground substations and lay underground cables lines made of cross-linked polyethylene.

In 2012, we completed the conversion of seven sections of overhead lines that go on the territory of IC "Skolkovo" with a total length of 256 km for the cable- overhead lines. Furthermore, we put into operation 235 km of the 110-500 kV cable transmission lines. The overhead lines in the area of IC "Skolkovo" have been cut-off and dismantled.

We are in the construction of two power supply centers of IC "Skolkovo": Skolkovo and Soyuz substations. Their total installed capacity will be 252 MVA. The substations will be equipped with the latest electrical equipment that has a high operational reliability and complies with modern environmental requirements.

In particular, the 220/20 kV gas-insulated autotransformers that are specifically designed for underground urban substations, complete gas insulated switchgears, and new communication systems will be installed.

252

MVA
TOTAL INSTALLED CAPACITY OF
THE SUBSTATIONS

Power supply to the APEC Summit

The Asia-Pacific Economic Cooperation Forum (APEC) is an international economic organization, which was created to develop integrated links between Pacific countries. It unites 21 countries. In September 2012, Russia hosted the latest APEC Summit in Vladivostok. Preparations for such a large-scale event took a lot of time and required considerable investment. As part of the sub-program "Developing Vladivostok as a center for international cooperation in the Asia-Pacific Region" and the Federal Target Program "Economic and Social Development of Far East and the Trans-Baikal for the Period till 2013", the Company provided for the complete readiness of the electric grid complex for reliable power supply to the Summit and also for the high-quality and smooth operation of the electric grid during the international forum.

We have built and put into operation eight backbone electrical grid facilities: the 220 kV Aeroport, the Russkaya, the Zeleniy Ugol, and the Patrokl substations, and overhead and cable transmission lines with a total length of 150 km. On Russkiy Island, the main site of the APEC Summit, we continue to work on a territorial

cluster of the energy system with an active-adaptive network. Innovative technologies and modern equipment used for its development will be the basis for reliable power supply for the entire infrastructure of the Far Eastern Federal University and for residents of the island portion of Vladivostok.

150

KM
TOTAL LENGTH OF TRANSMISSION
LINES



The 330 kV Electric Energy Ring in St. Petersburg

Another project of national importance that we have been working on since 2007 is the construction of the 330 kV electric energy ring in St. Petersburg. Historically, the energy system of the Northern Capital has developed radially. Today's technology makes it possible to construct a new cable-overhead direct current line which will connect the southern and

northern parts of the city across the Gulf, thus creating an electric energy ring. Using a ring circuit allows a two-way feed to each of the electrical grid facilities of the ring, which will upgrade the reliability of the city's power supply, minimizing the probability of major emergencies and phased blackouts.

In early 2012, we completed re-construction of the 220 kV Vostochnaya – Volkhov-Severnaya double-circuit transmission line, which is 16.32 km long with a voltage of 330 kV. Now, the comprehensive re-construction of two substations: the 220 KV Zavod Ilyich substation with subsequent switching to the 330 kV class and the 330 kV Vostochnaya substation, which are being completed.

5

SUBSTATIONS TO BE PART
OF THE ELECTRIC
ENERGY RING
IN ST. PETERSBURG



In the electrical energy ring in St. Petersburg, there will be five 330 kV substations: the Vostochnaya, the Volkhov-Severnaya, the Zavod Ilyich, the Vasileostrovskaya and the Severnaya substations. In addition, two overhead transmission lines (the 330kV



Vostochnaya-Volkhov-Severnaya and the 330kV Severnaya-Vostochnaya) and three cable transmission lines (the 330 kV Volkhov-Severnaya – Zavod Ilyich, the 330 kV Zavod Ilyich- Vasileostrovskaya and the 330 kV Vasileostrovskaya-Severnaya) will be part of the ring.

The ESPO Pipeline

The East Siberian – Pacific Ocean (ESPO) pipeline system is the pipeline that connects oil fields in Western and Eastern Siberia with the Pacific port of Kozmino in Nakhodka Bay. It aims to provide a port for Russian oil to reach markets of the Asia-Pacific Region. The Russian State-owned company Transneft is the ESPO's operator.

Our Company is constructing and re-constructing the backbone power facilities to connect to the electrical grids the ESPO pipeline facilities on the territory of the Republic of Sakha (Yakutia), the Jewish Autonomous and Amur Regions, and the Khabarovsk and Primorsky Territories.

During the reporting year, we have energized six 220 KV transmission lines and four 220 KV substations in the Primorsky and Khabarovsk Territories for the external power supply to the second stage facilities of the pipeline "Eastern Siberia - Pacific Ocean" (ESPO-2) - pump stations 36, 38, 40 and 41. In addition, we have provided external power supply to the oil pumping station (OPS) -24 by building a new 220 kV substation with a transformer capacity of 50 MVA.

