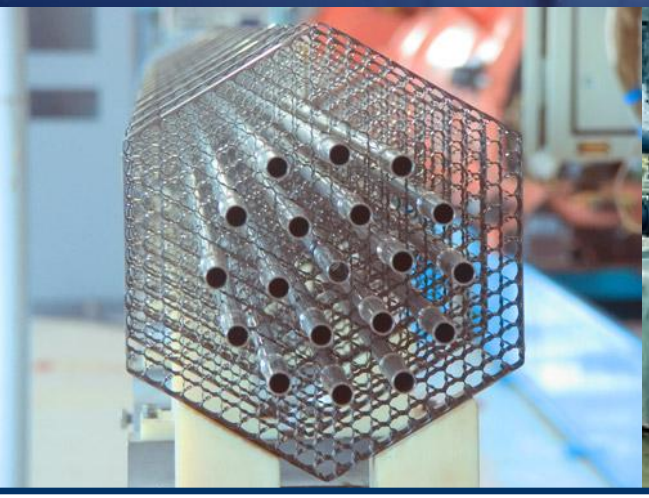
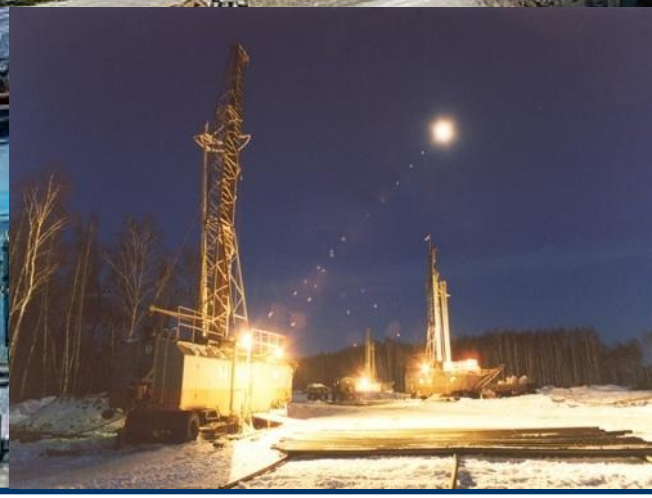
Credit rating: BBB-/Stable/A-3

National scale rating: ruAAA/--/--





ATOMIC ENERGY POWER CORPORATION
JSC ATOMENERGOPROM

ATOM
ENERGO
PROM

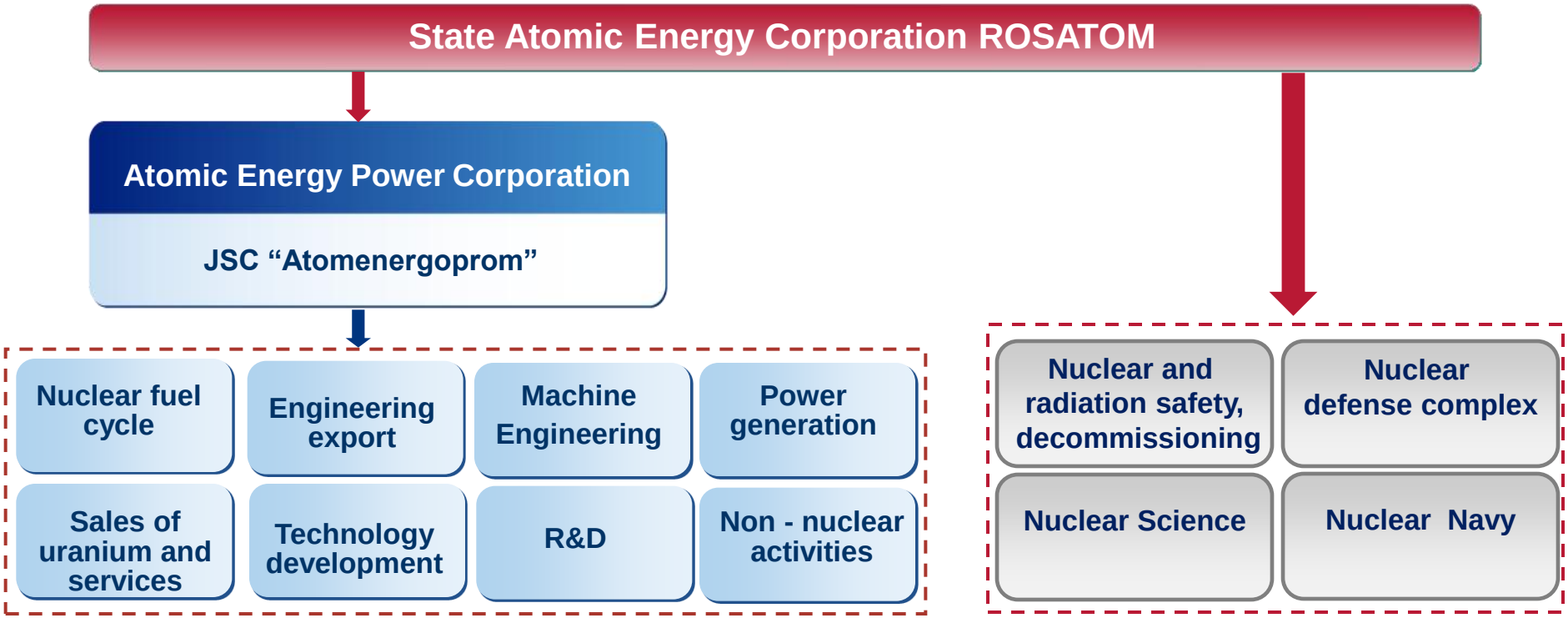
PRESENTATION

www.atomenergoprom.ru

Presentation contents

- ATOMENERGOPROM in brief
- Nuclear energy industry development forecast
- Affiliates of ATOMENERGOPROM

Restructuring of the atomic industry



Goals of the establishment of JSC "Atomenergoprom":

- To consolidate the civil part of nuclear industry into an integrated full-cycle worldwide company and to increase its efficiency and to enhance its competitiveness
- To split commercial and defense sectors of nuclear industry
- To provide conditions to meet requirements of international integration processes
- To realize effectively a large-scale program of NPP construction in Russia

General Company Information

- **JSC Atomenergoprom** was established in **2007** according to Russian Federation Presidential Decree № 556 dated 27.04.2007.
- The State Atomic Energy Corporation Rosatom owns 100% shares of JSC Atomenergoprom (Federal law N 317-FL of 01.12.2007)
- According to Government Decree N 319 “On Measures for Creation of Joint Stock Company “Atomic Energy Power Corporation” dated May 26, 2007 shares of Russian nuclear industry enterprises were contributed into the equity of JSC Atomenergoprom.
- The staff total is approximately 177,000 employees.
- **JSC Atomenergoprom** imbibes a unique experience, which has been accumulated through all sectors of nuclear fuel cycle and NPP construction during last 60 years.
- In 2008 consolidated proceeds of JSC Atomenergoprom constituted **290 billion RUR**.
- Government Support: the State Nuclear Energy Corporation Rosatom’s activity program for long-term period (2009-2015) envisions financing totaling **2,08 trillion RUR**
- **JSC Atomenergoprom** is 45% of the world market of uranium enrichment services, 17% of the world nuclear fuel market, the 1st in the world in terms of nuclear power plants construction, the 2nd in the world in terms of uranium reserves and electric power generation at nuclear power plants

ATOM ENERGO PROM

Mission

- **Atomenergoprom's mission is to provide safe and effective economic development, life quality growth and preservation of the environment.**
- Atomenergoprom contributes to economic growth, social stability, prosperity and progress, provides protection of environment and rational usage of natural resources. The company aims at being a responsible member of the business community, known and respected all over the world.
- Core strategic principle – **technological leadership in the global nuclear industry.**
- Company's strategy is to advance to both to unification and technological improvement of product and to diversification of sources of revenue and the geographic expansion.

- **ATOMENERGORPOM is responsible to:**

The world community

- Atomenergoprom produces and supplies products that meet and even exceed the most advanced ecological standards

The customers

- Atomenergoprom delivers its customers high-quality products that are really value for money and supports the products during the whole life cycle

The employees

- The company is focused on creating favorable conditions for professional and personal growth. Atomenergoprom aims at maintaining a reasonable balance of work load and private life

The shareholders and investors

- The company is focused on efficient use of the available resources and seeks to maximize the profit

Board Of Directors

Chairman of the Board of Directors:

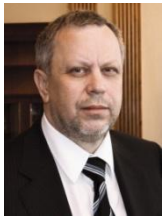
Sergey V. Kirienko *– Director General of the State Atomic Energy Corporation Rosatom*

Members of the Board :

Evgeniy V. Evstratov *- Deputy Director General of the State Atomic Energy Corporation Rosatom*

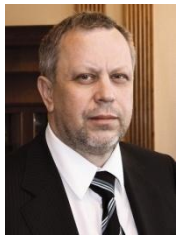
Tatjana L. Elfimova *- Deputy Director General of the State Atomic Energy Corporation Rosatom*

Alexander M. Lokshin *- Deputy Director General of the State Atomic Energy Corporation Rosatom*



Vladimir V. Travin - *Director of JSC "Atomenergoprom"*

Management Board



Chairman of the Management Board:

Vladimir V. Travin - *Director of JSC "Atomenergoprom"*

Members of the Management Board:

Kirill B. Komarov - *Executive Director of JSC "Atomenergoprom"*

Vladislav I. Korogodin - *Deputy Director of JSC "Atomenergoprom"*

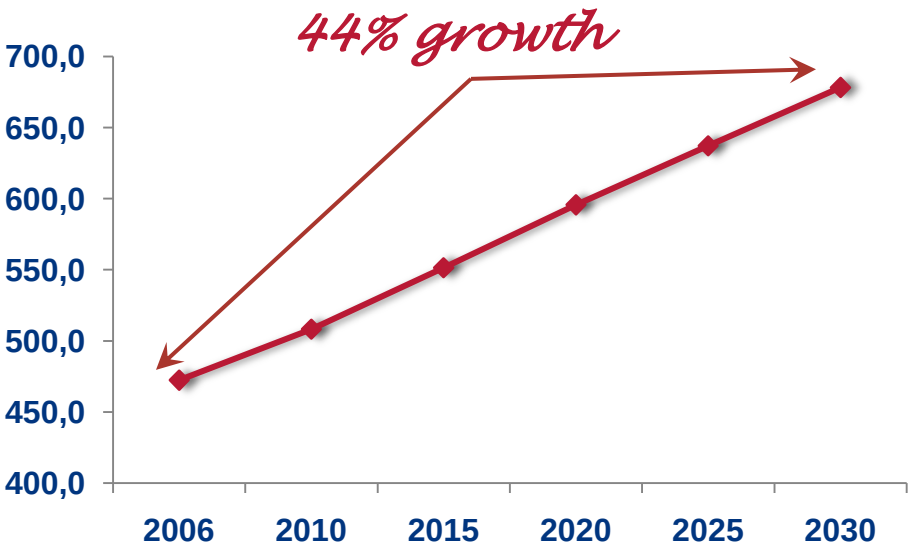
Alexander K. Polushkin – *Deputy Director of JSC "Atomenergoprom"*

Vladimir V. Sinicin - *Deputy Director of JSC "Atomenergoprom"*

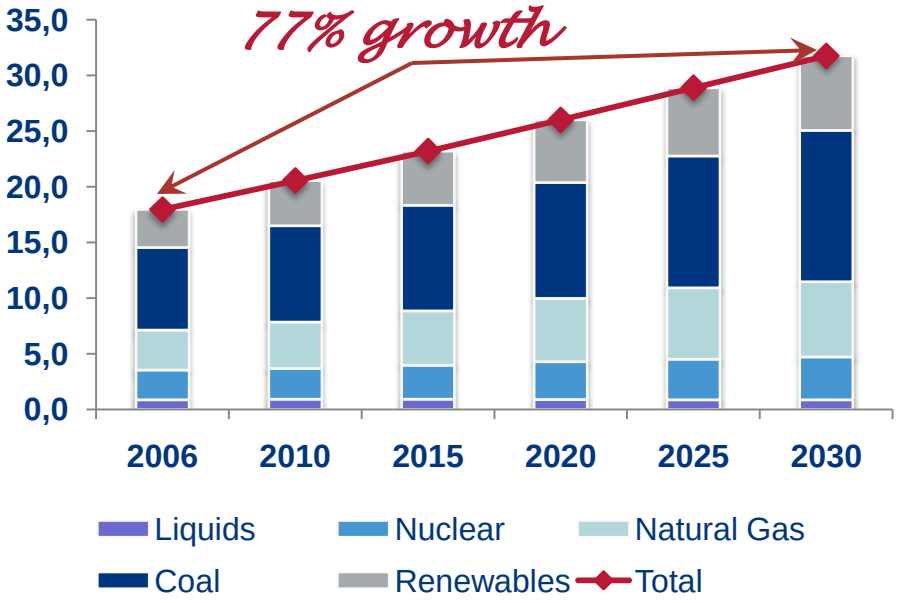
- ATOMENERGOPROM in brief
- **Nuclear energy development forecast**
- Affiliates of ATOMENERGOPROM

World Energy Forecast Till 2030

World Energy Consumption, Quadrillion Btu



World Electricity Generation by Fuel, trillion kWh



Due to limitation of fossil fuel and growth of its negative effect on climate, the problem of world energy demand can be solved by providing the increase of nuclear electricity generation

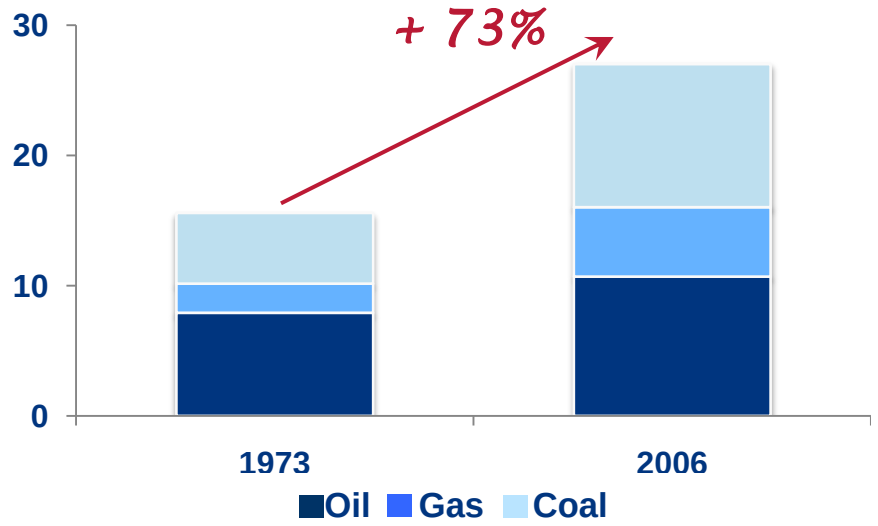
Forecasts of International Agencies :

- Suggest the sustainable growth of world energy consumption till 2030
- Suggest growth of world electricity generation (electricity generation from nuclear power increases by 10% from 2.7 trillion kWh in 2006 to 3.0 trillion kWh in 2015)

Source: Energy Information Administration (USA) 2009

World CO_2 Emission Growth

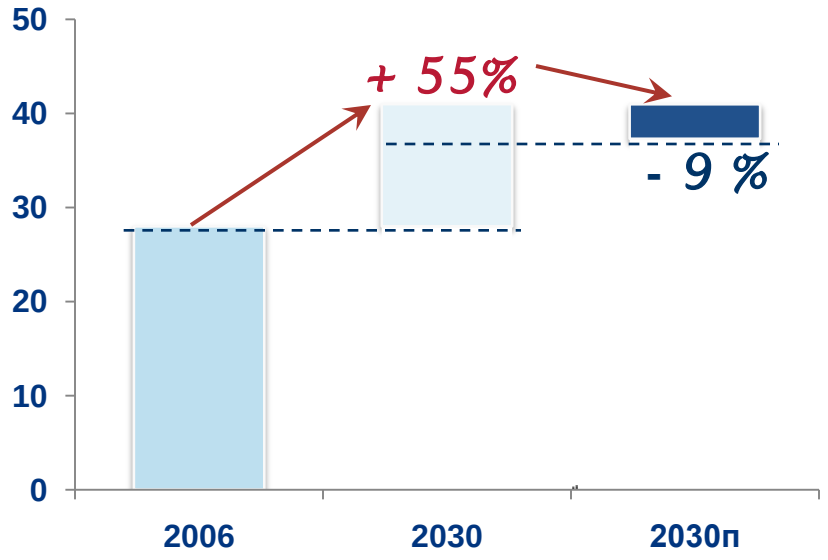
CO_2 Emission by Fuel (Gt of CO_2)



- 73% emission growth over 33 years
- Today NPPs save CO_2 emission by 2,5 Gt* world wide
- Russia prevents 210 mln. tonns of CO_2 emission annually by using nuclear energy

*Source: WNA, IAE Outlook&Key World Energy Statistic 2008

CO_2 Emission Growth (Gt of CO_2)

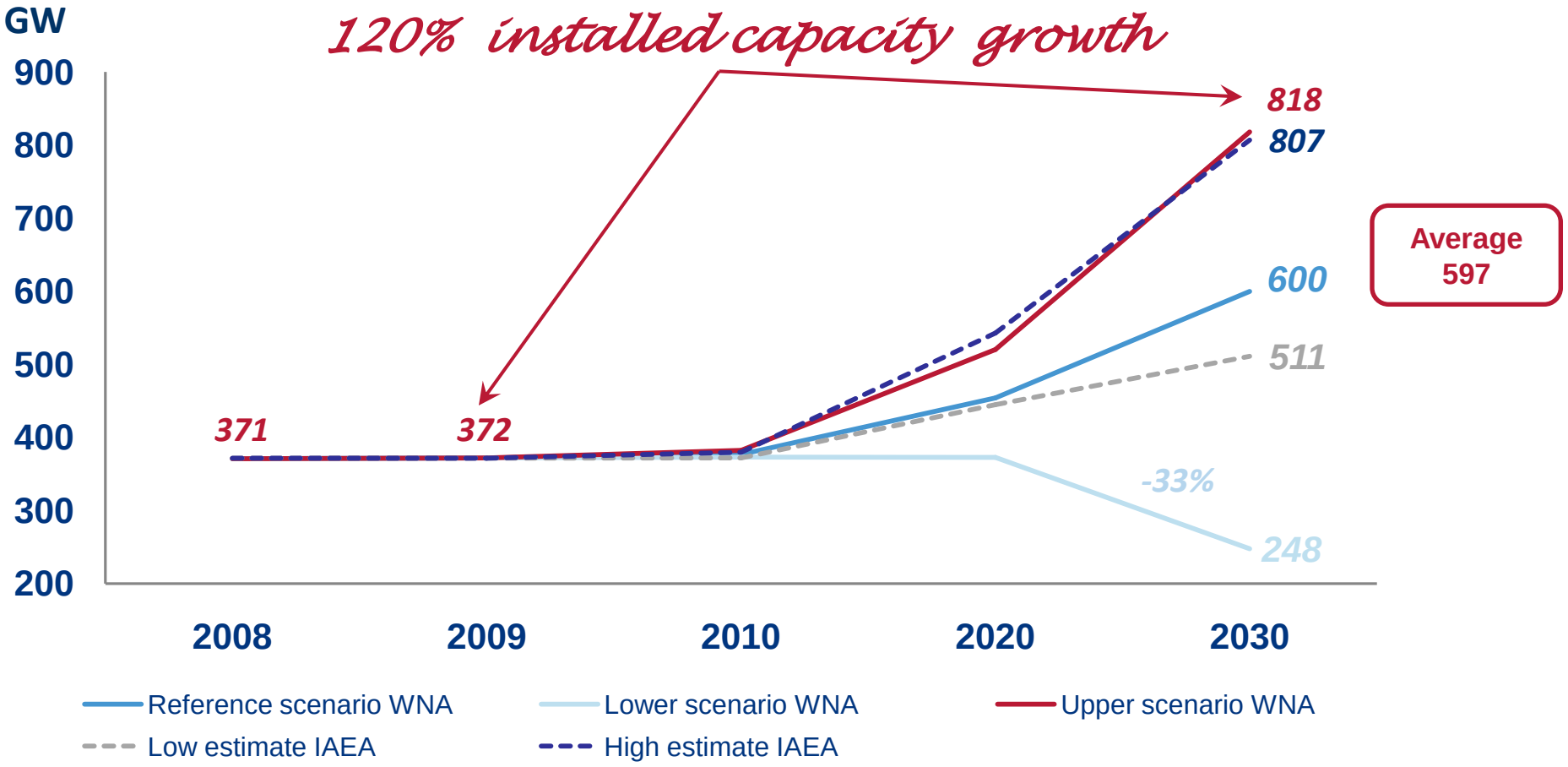


- CO_2 emission reaches 41 Gt** till 2030
- CO_2 emission decreases by 3,7 Gt thanks to putting into operation of new NPPs

**Source: IEA, World Energy Outlook 2008

ATOM ENERGO PROM

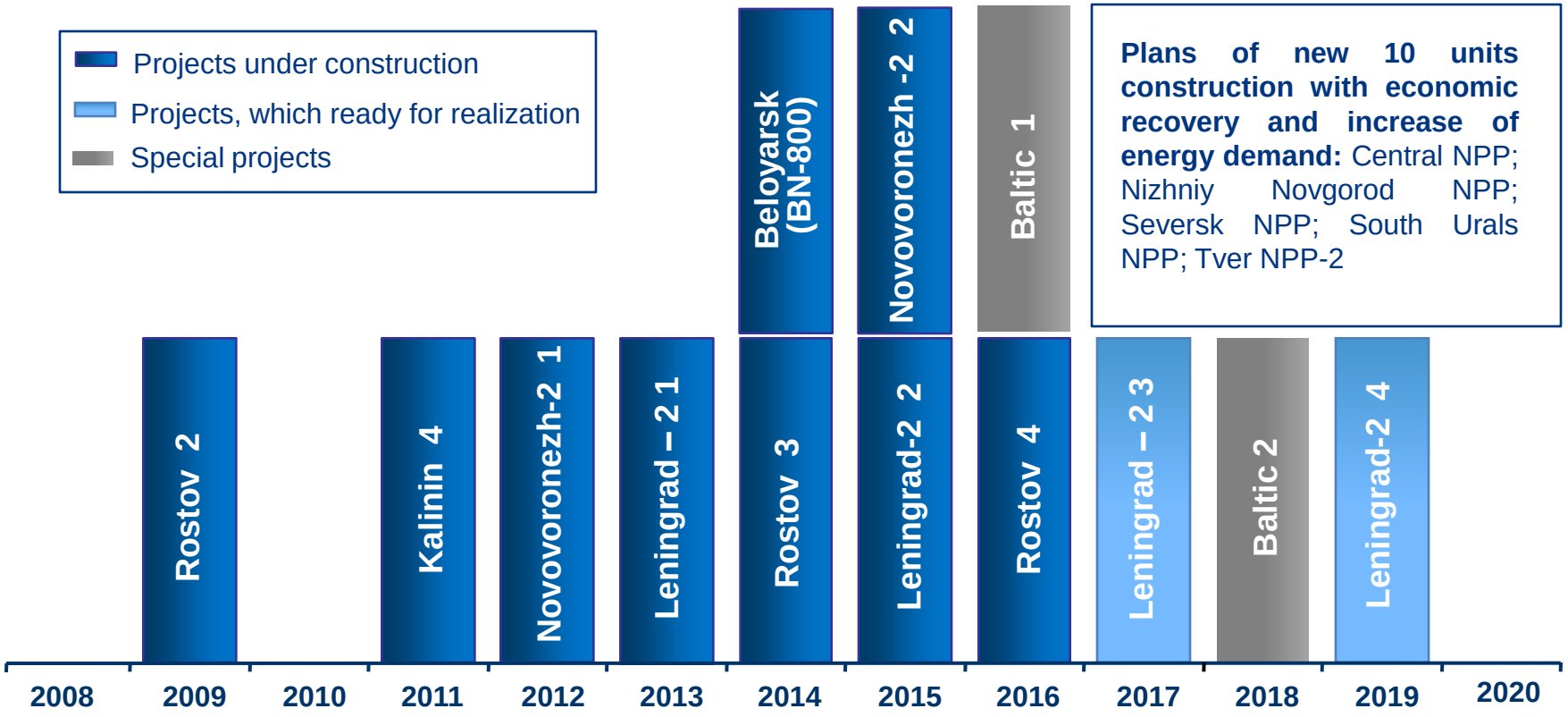
The Worldwide Nuclear Installed Capacity Forecast Till 2030



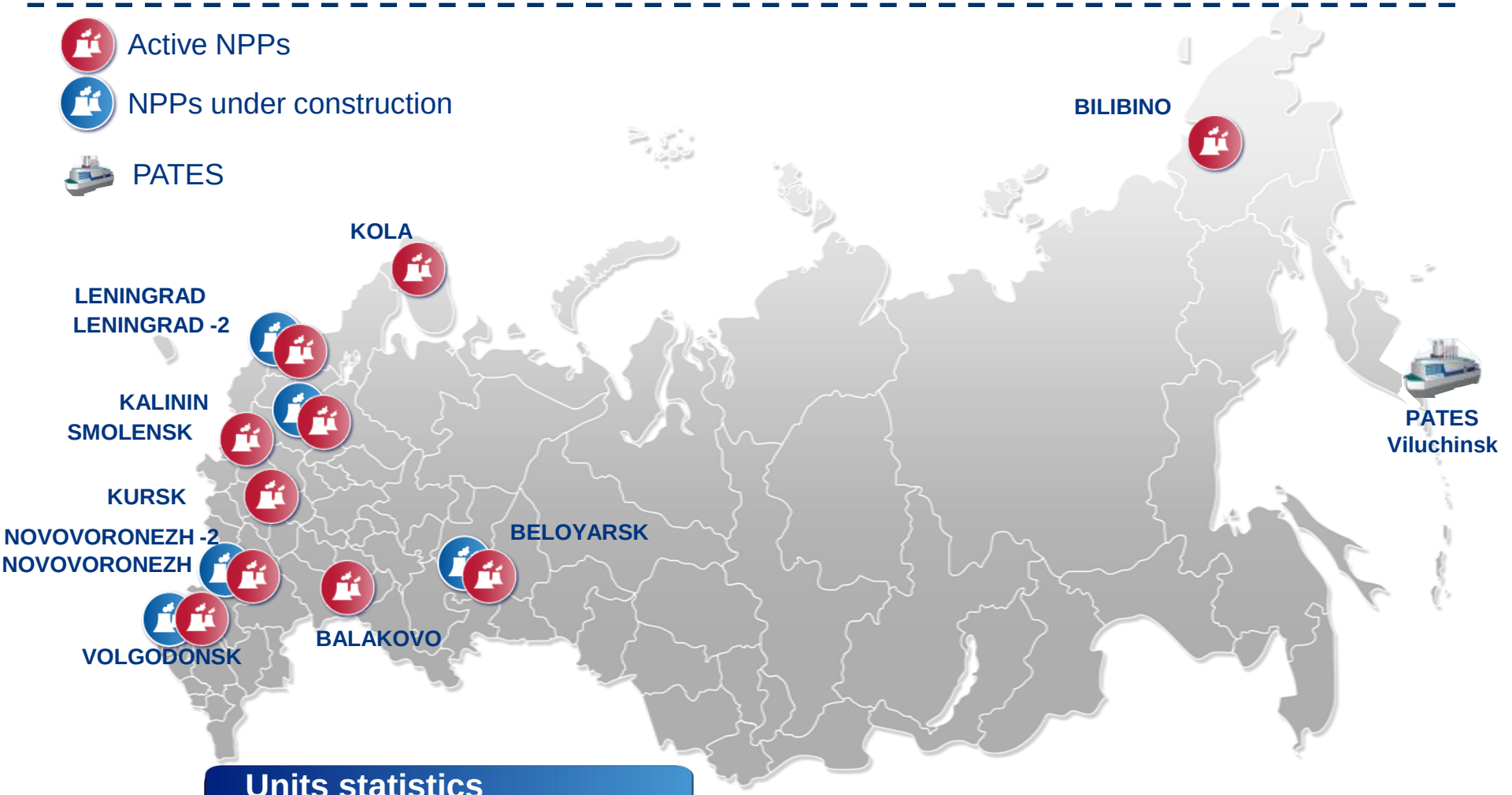
WNA 2008 reference and upper scenarios are higher than in 2007, reflecting the emergence of India and China as major nuclear nations

Sources: Electricity and Nuclear Power Estimates for the period up to 2030 (IAEA,Edition 2009)
The Global nuclear fuel market. Supply and demand 2007-2030 (WNA 2009)

Construction of new NPPs



Geography of Russian NPPs

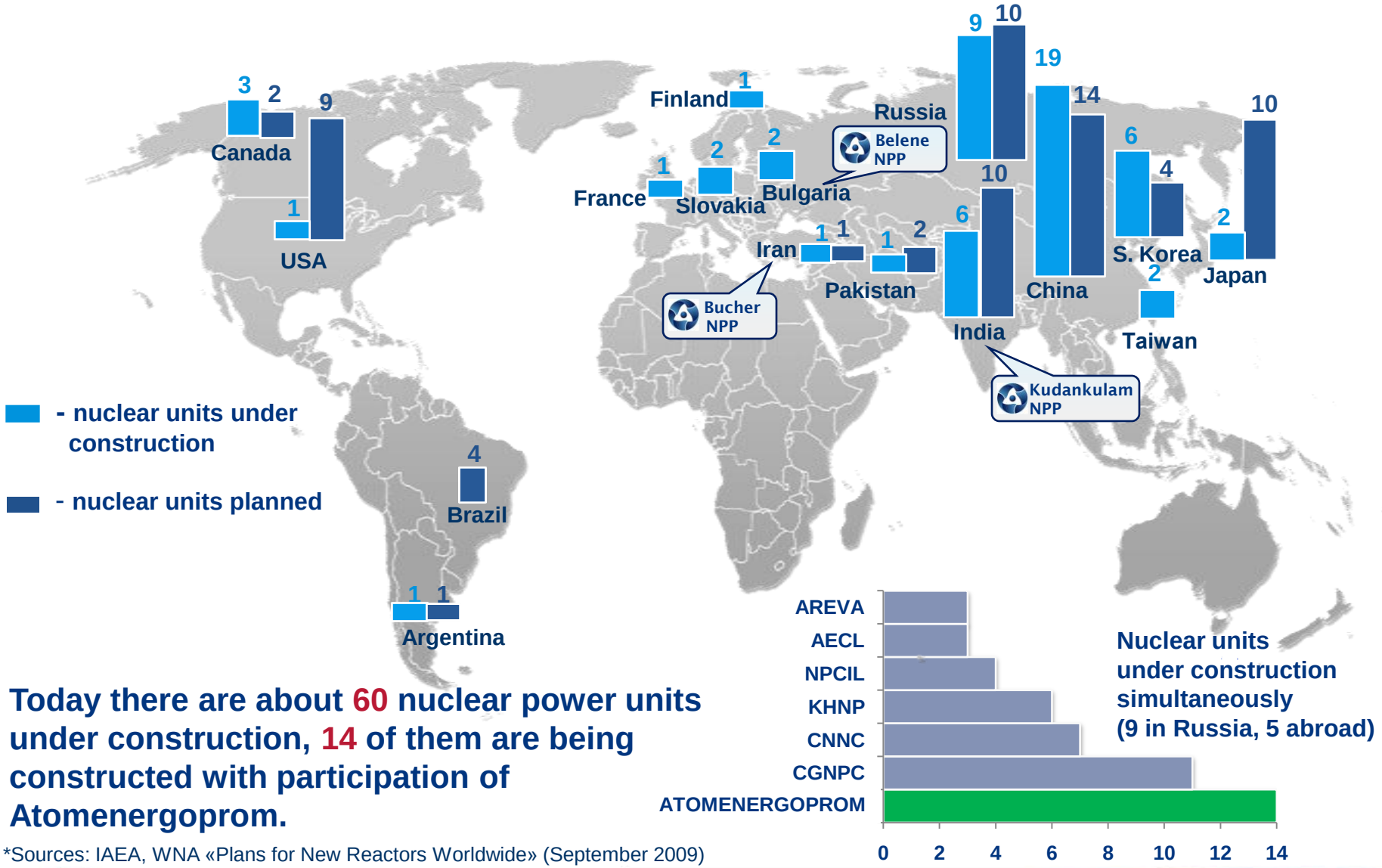


Units statistics

10 NPP
31 units
Installed capacity – **23,2** GW

ATOM ENERGO PROM

World nuclear power units under construction (2009)*



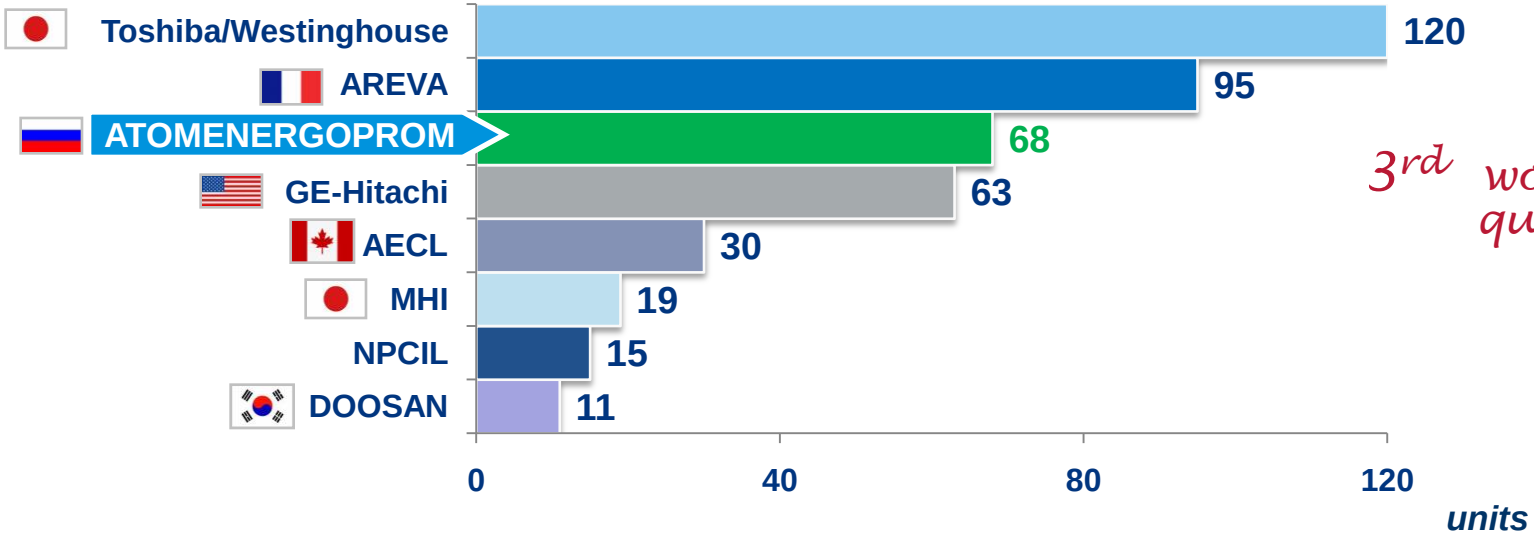
Nuclear units under construction simultaneously (9 in Russia, 5 abroad)

Today there are about 60 nuclear power units under construction, 14 of them are being constructed with participation of Atomenergoprom.

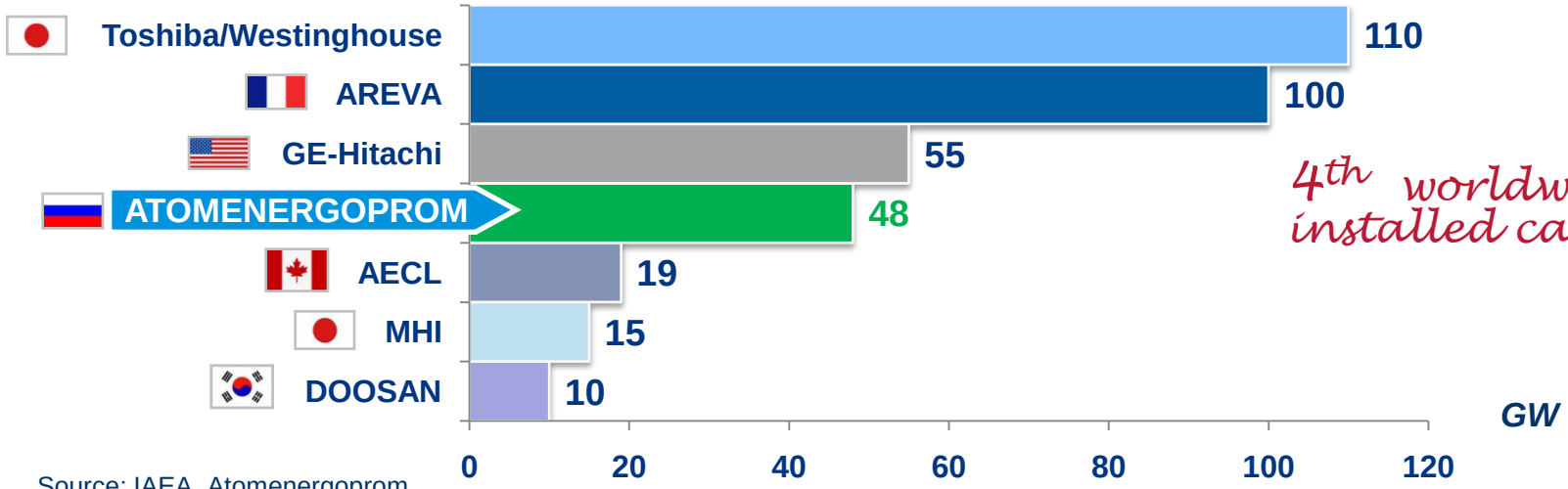
*Sources: IAEA, WNA «Plans for New Reactors Worldwide» (September 2009)

ATOM ENERGO PROM

Active Units Worldwide



3rd worldwide by quantity



4th worldwide by installed capacity

Source: IAEA, Atomenergoprom

ATOM ENERGO PROM

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- **Affiliates of ATOMENERGOPROM**

Main Enterprises

JSC “ATOMENERGOPROM”

MINING

JSC “Atomredmetzoloto”
JSC “PIMCU”, JSC “Khiagda”, CJSC “Dalur”, JV “Zarechnoye”, JV “Akbastau”, JV with Cameco

CONVERSION, ENRICHMENT AND EXPORT OF URANIUM PRODUCTS & SERVICES

JSC “TENEX”,
JSC “United Company Enrichment Sublimation Complex”: JSC “AECC”, JSC “SCC”, JSC“UECC”, JSC “PO ECP”

FABRICATION

JSC “TVEL”, JSC “MSZ”, JSC “NCCP”, JSC “ChMP”, JSC “CMP”

TECHNOLOGY R&D

JSC “Engineering Centre “Russian Gas Centrifuge”, JSC “NPK Khimprominginiring”

GENERATION

JSC “ROSENERGOATOM CONCERN”

MACHINEBUILDING

JSC “Atomenergomash”, JV “Alstom Atomenergomash”, JSC “ZiO - Podolsk”, JSC “CDBMB”

ENGINEERING

JSC “Atomenergoproekt”, JSC “SPAEP”, JSC “NIAEP”, JSC “Design-bureau Hydropress”, JSC “OKBM”, JSC “NIKIET”, JSC “Atomtechenergo”, JSC “Leading institute “VNIPIET”, JSC “GSPI”, JSC “VNIIAM”

PROCUREMENT OF EQUIPMENT FOR NPPs

Integrated Procurement Department (branch)

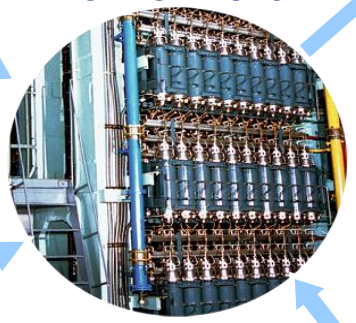
RESEARCH AND DEVELOPMENT

JSC “VNIINM”, JSC “NIIAR”, JSC “IRM”, JSC “SNIIP”, JSC “Research-and-production association “CNIITMASH”, JSC “ARRICT”

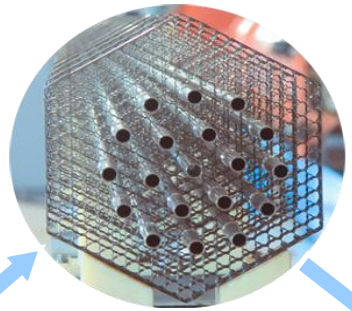
Technology Chain

Uranium mining

Conversion and enrichment



Fuel fabrication



NPP construction

Research and development

Machine engineering

Generation

Spent nuclear fuel management

Manufacturing of gas centrifuge

Global Presence of JSC “Atomenergoprom”

ATOM ENERGO PROM

Uranium mining

ATOMENERGOPROM

Atomredmetzoloto (ARMZ)

PIMCU	Dalur	Khiagda
UDK Gornoye	Olovskaya MCU	Elkonskiy Mining

Foreign assets of ARMZ

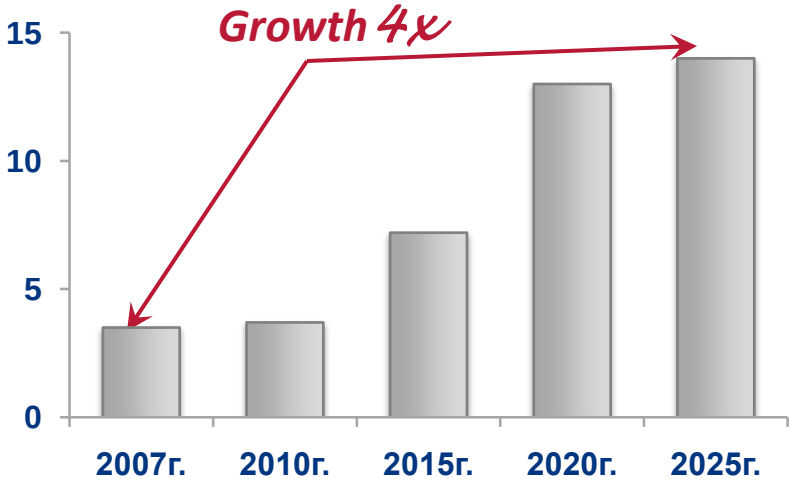
- JVs in Kazakhstan: Zarechnoye, Akbastau
- JV in Canada (Cameco)
- JV in Armenia
- stake in Uranium One Inc.
- New JV: Canada, Ukraine Mongolia, Namibia

Main Business Activities:

Supply the increased demand for natural uranium in Russian nuclear industry and building a global player of uranium market by:

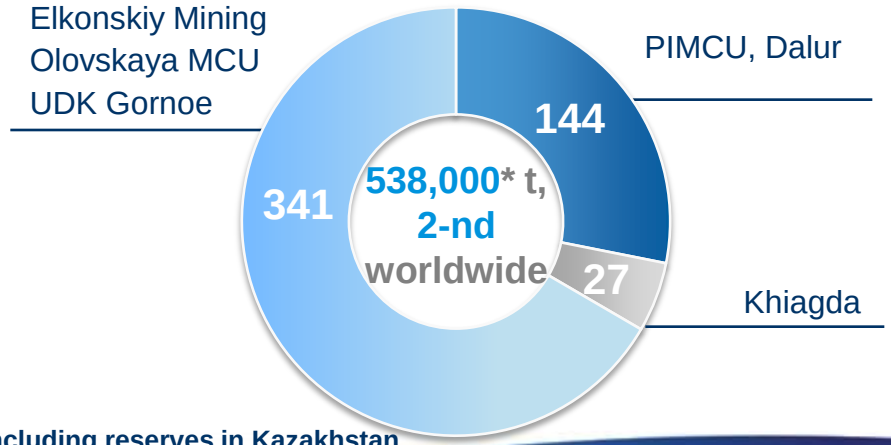
- development and diversification of uranium raw material base of company;
- establishment of JVs on the territory of the CIS and abroad;
- establishment of new mining companies on reserve mines (Jakutia, Transbaikalia);
- development of production on operating and new enterprises.

Uranium Mining Forecast, '000 t



Source: ARMZ

Recoverable Reserves of Uranium, '000 t



*Including reserves in Kazakhstan

ATOM ENERGO PROM

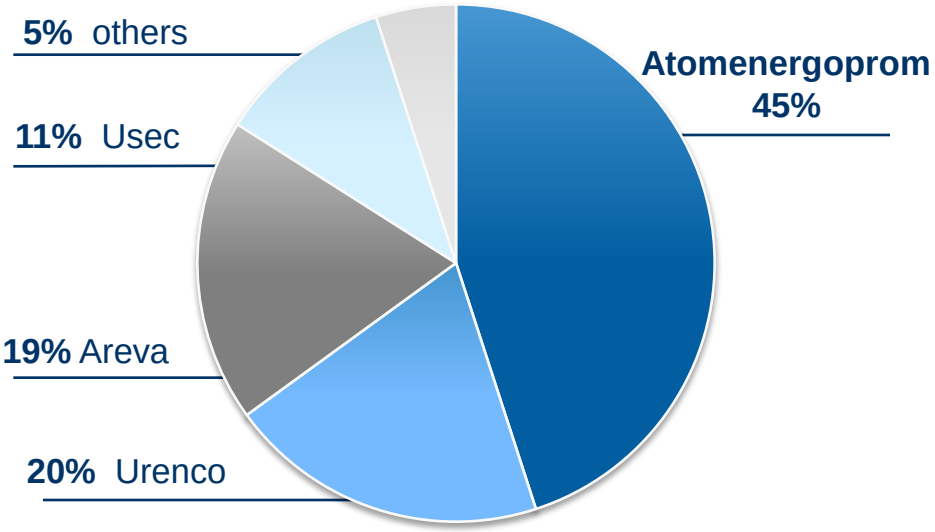
Enrichment / Conversion

ATOMENERGOPROM

Enrichment / Conversion Division

- **TENEX**
  - **UEC**
  - **IUEC**
- **United Company Enrichment sublimation complex**
  - **UEIP**
  - **AECC**
  - **SCC**
  - **ECP**
- **Engineering center "Russian Gaseous Centrifuge"**
- **Research and production complex Khimpromengineering**

SWU World Market*



* Taking into account Russian market

Source:TENEX, 2009

Main Business Activities :

- Secured supply of enriched uranium and enrichment / conversion services to domestic NPPs and export supply to NPP operators
- Development of enrichment technologies

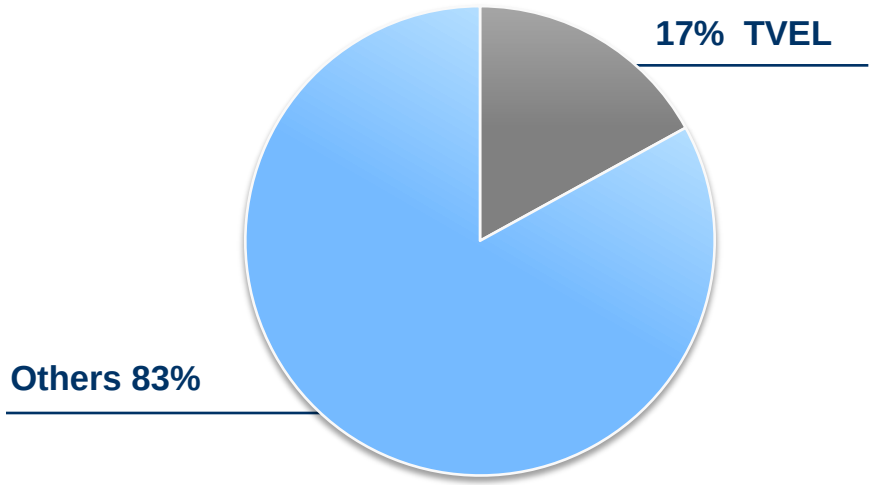
Fuel Fabrication

ATOMENERGOPROM

TVEL

- Mashinostroitelny Zavod (Electrostal)
- Novosibirsk Chemical Concentrates Plant
- Chepetsky Mechanical Plant
- Chemical and Metallurgical Plant
- TVEL representative office: Slovakia, Ukraine

Nuclear Fuel World Market (Fuel Assembly)



Source: TVEL data, **2009**

Main Business Activities

- Increased Domestic and Export Fuel Market Demands Secured Supply
- Nuclear Fuel Development and Optimization;
- Fuel assembly “TVS-Kvadrat” project development ;
- Participation in MOX project development;
- Participation in ITER project development ;
- Expanding international cooperation

TVEL-labeled fuel keeps running

- 76 commercial reactors – 15 countries
- 30 research reactors – 17 countries
- In cooperation with AREVA NP supplies fuel for PWR/BWR (7 reactors in 2009)
- Continuation of Czech fuel supply projects (in 2010)

Nuclear Electric Generation

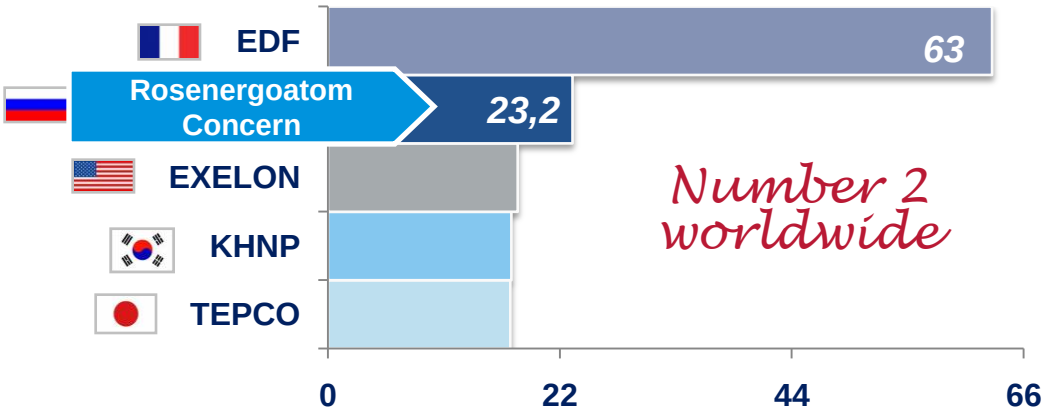
ATOMENERGOPROM

ROSENERGOATOM CONCERN

- Balakovo NPP (4xVVER 1000) 4000 MW
- Beloyarsk NPP (1xLWGR-600) 600 MW
- Bilibino NPP (4xLWGR-6 12)48MW
- Volgodonsk NPP (1xVVER 1000) 1000 MW
- Kalinin NPP (3xVVER 1000) 3000 MW
- Kola NPP (4xVVER 440) 1760 MW
- Kursk NPP (4xRBMK 1000) 4000 MW
- Leningrad NPP (4xRBMK 1000) 4000 MW
- Novovoronezh NPP (2xVVER 417, 1xVVER 1000) 1834 MW
- Smolensk NPP (3xRBMK 1000) 3000 MW

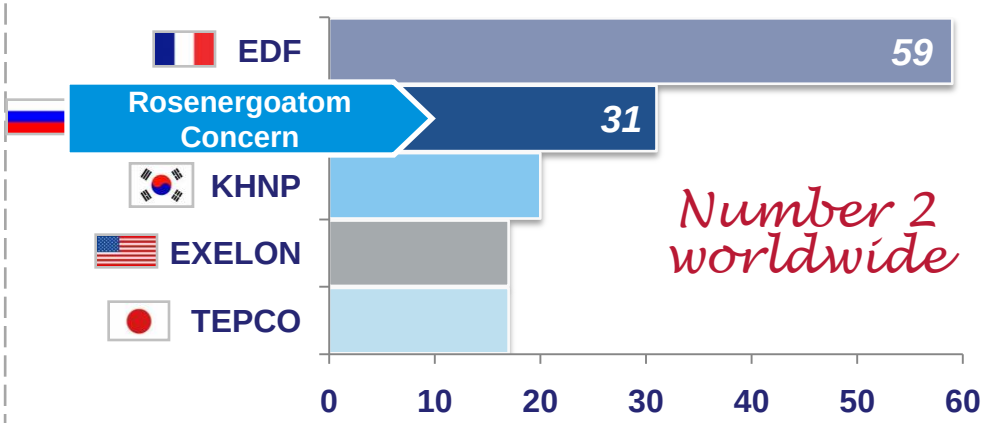
Total: **10** NPPs, **31** reactors with **23242 MW** capacity installed

Installed Capacity TOP-5 Operators, GW



Source: IAEA (NPP World Wide Report 2008), Rosnergoatom Concern

Reactor Number TOP-5 Operators

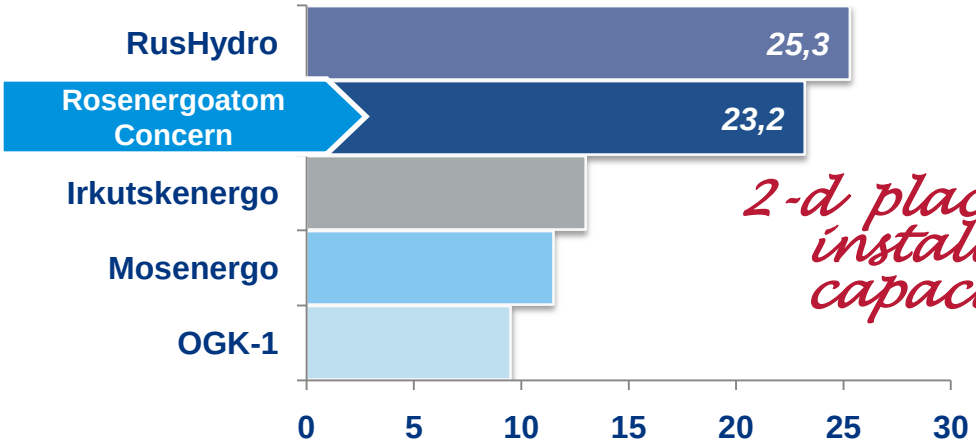


Source: IAEA (NPP World Wide Report 2008), Rosenergoatom Concern

ATOM ENERGO PROM

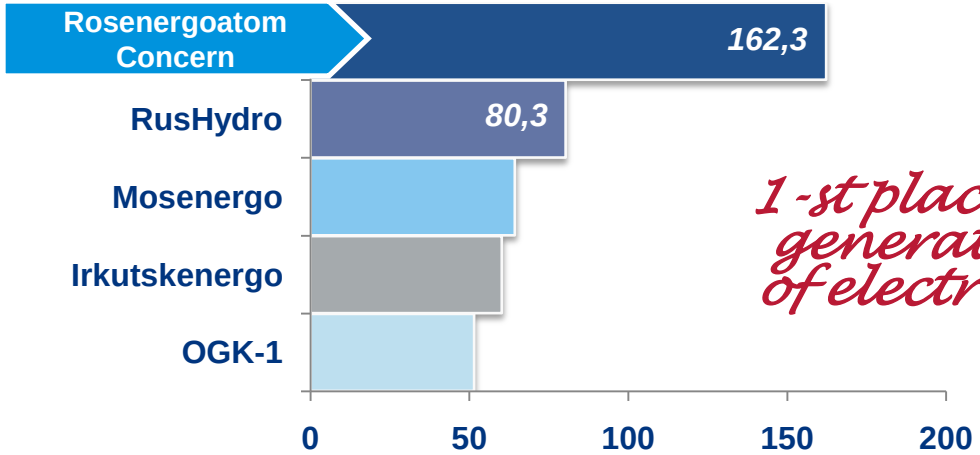
Position of Rosenergoatom Concern among Russian generation companies

TOP-5 Installed capacity, GW



2-d place in installed capacity

TOP-5 Generation of electricity 2008, bln. kWh



1-st place in generation of electricity

ATOM ENERGO PROM

Nuclear Machinebuilding Industry

JSC "ATOMENERGOPROM"

GROUP ATOMENERGOMASH
more than 30 enterprises

MAIN AND AUXILIARY POWER EQUIPMENT

TURBINE EQUIPMENT
Alstom-Atomenergomash Kaluga Turbine Plant

STEAM GENERATORS, BOILER EQUIPMENT, EQUIPMENT FOR GAS AND OIL STORAGE
ZIO Podolsk, ZIOMAR

TANK EQUIPMENT
AEM - technologies

ARMATURE/PUMPS
Arako (Czech Republic), Intelenergomash, CDBMB

PIPE LINES
Stalenergoproekt, Atomtruboprovodmontazh

NON-TYPICAL EQUIPMENT
SverdNIIKHimmash, Krasnaya Zvezda, OKTBIS, Experimental plant of Refractory Metals and Hard Alloys, Perlovsky Power Equipment Plant

TRANSPORT TECHNOLOGIC ENGINEERING
Ganz Energetika (Hungary)

AIR HANDLING EQUIPMENT
Venta

MEASUREMENT AND CONTROL EQUIPMENT
SNIIP, NIITFA, IFTP, NII Kontrolpribor, Molniya, Signal

ELECTRICAL EQUIPMENT
Progress plant

CONSTRUCTION AND INSTALLATION ACTIVITIES

SevKavEnergoMontazh, Atomenergomontazh, TrestSpetsAtomEnergoMontazh, TverAtomEnergoMontazh, Construction and installation company «South», E-4 Centrenergomontazh, Mospromtechmontazh

ORGANIZATION OF COMPLETE DELIVERIES

Energomashcomplex (EMCO)

Key activities:

- **securing order processing for NPP equipment in the volume necessary to execute current and future plans of NPP construction in Russia and abroad;**
- **increasing of scope and business profitability, diversification of activities in neighbouring sectors, development of cooperation with world leaders of energy machine building industry and increasing services portfolio;**
- **realizing programs of R&D, introduction of advanced and effective construction and production processes.**

Research and development

- Enterprises of JSC “Atomenergoprom” realize a great sector of scientific research and design and survey works in different fields, which provide development and support current technological platform and also provide building of new technological platform and realizing innovative projects.

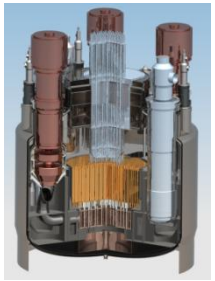
Short- and mid-term priorities:

VVER-technology optimization

Creation of VVER -1000 Type design as multidimensional information model (6D), complying with the modern requirements for :
- safety,
- life-cycle management at all stages,
- economic characteristics at construction and exploitation stages.

Nuclear fuel cycle closing

Power technologies of new producing platform, including new generation fast-reactor technologies, fuel provision and spent nuclear fuel handling technologies as the part of closed-loop nuclear fuel cycle .



Innovative projects realization

Developments, products and services by directions:
- superconductor industry,
- plain water,
- industrial diagnostics,
- nuclear medicine.

The possibility of project realization in the sphere of nanotechnologies is being studied.

ATOM ENERGO PROM

Future Business Development Activities

- **TVS-Kvadrat** – realization of this project will allow to strengthen market positions by entry to the market of fuel for reactors of western design

- **Fast Neutron Reactor** – construction of an advanced power generation plant with increased level of economic performance and ecological safety (transition to closed fuel cycle on the basis of MOX-fuel)

- **Floating NPP (PATES) –** construction and operation of floating NPPs as energy sources for remote and isolated regions of Russia and others world regions. PATES can be used for desalination of water

- **NPP – 2006 –** increase competitiveness due to improvement of technical and economic characteristics providing guaranteed safety