



РОСАТОМ

ГОСУДАРСТВЕННАЯ КОРПОРАЦИЯ ПО АТОМНОЙ ЭНЕРГИИ «РОСАТОМ»

Strategy of State Atomic Energy Corporation “Rosatom” till 2030

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By 2030, nuclear power generation is expected to keep pace with global energy demand

Development drivers

Thermal energy



- Significant share in the power balance
- Emissions of CO2 and nitrogen& sulphur oxides
- Volatile prices on fossil fuels

Renewables



- High costs (2-6 times more than nuclear energy)
- Low load factor
- Development of electricity transmission and storage technologies

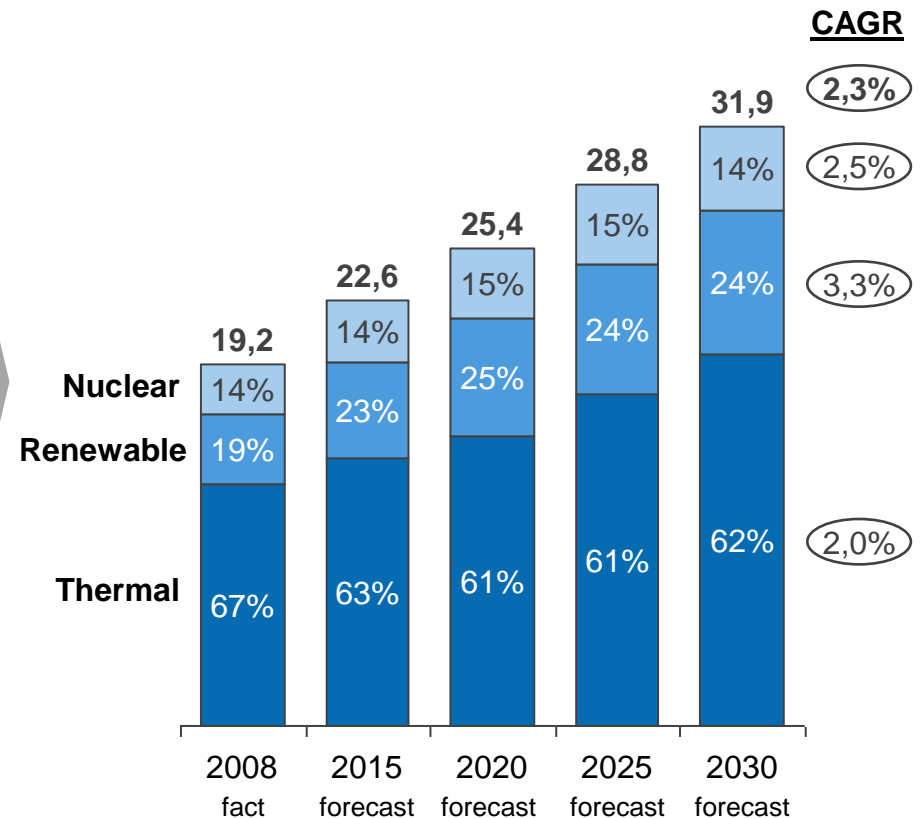
Nuclear energy



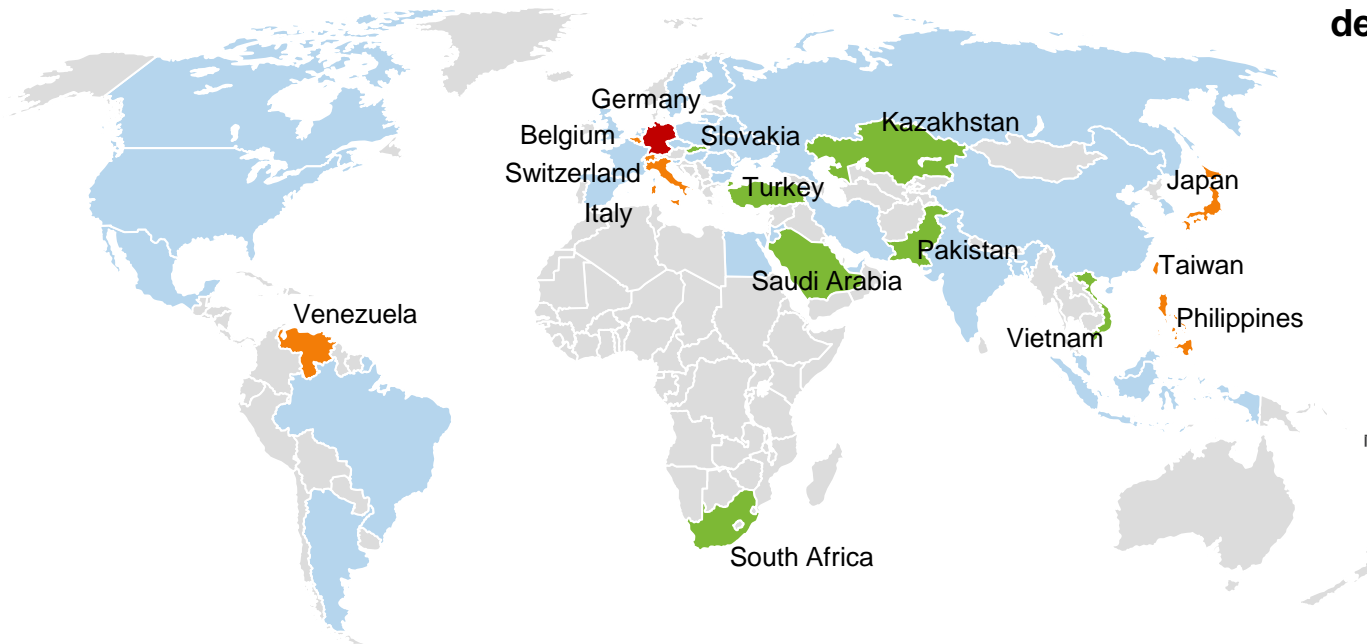
- Large scale electricity supplies in base load
- Absence of emissions of CO2 and nitrogen& sulphur oxides
- Low operating costs (including fuel) compared with thermal energy

Electricity generation by types

'000 TWh

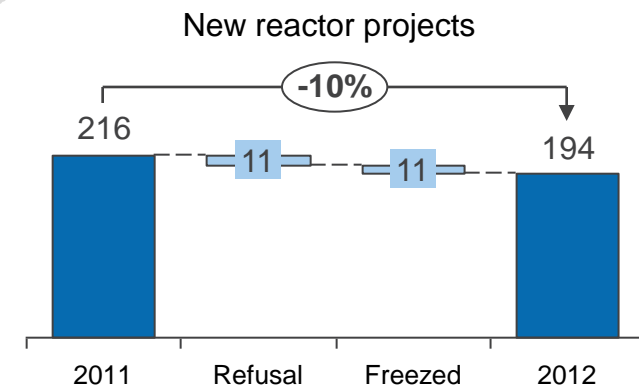
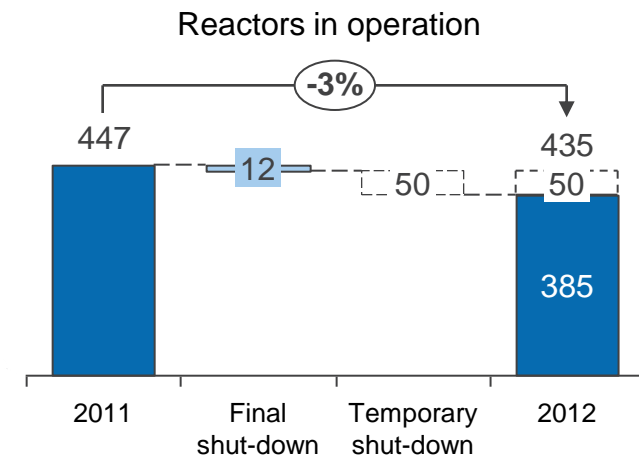


Within a year after Fukushima majority of the countries confirmed nuclear power development plans



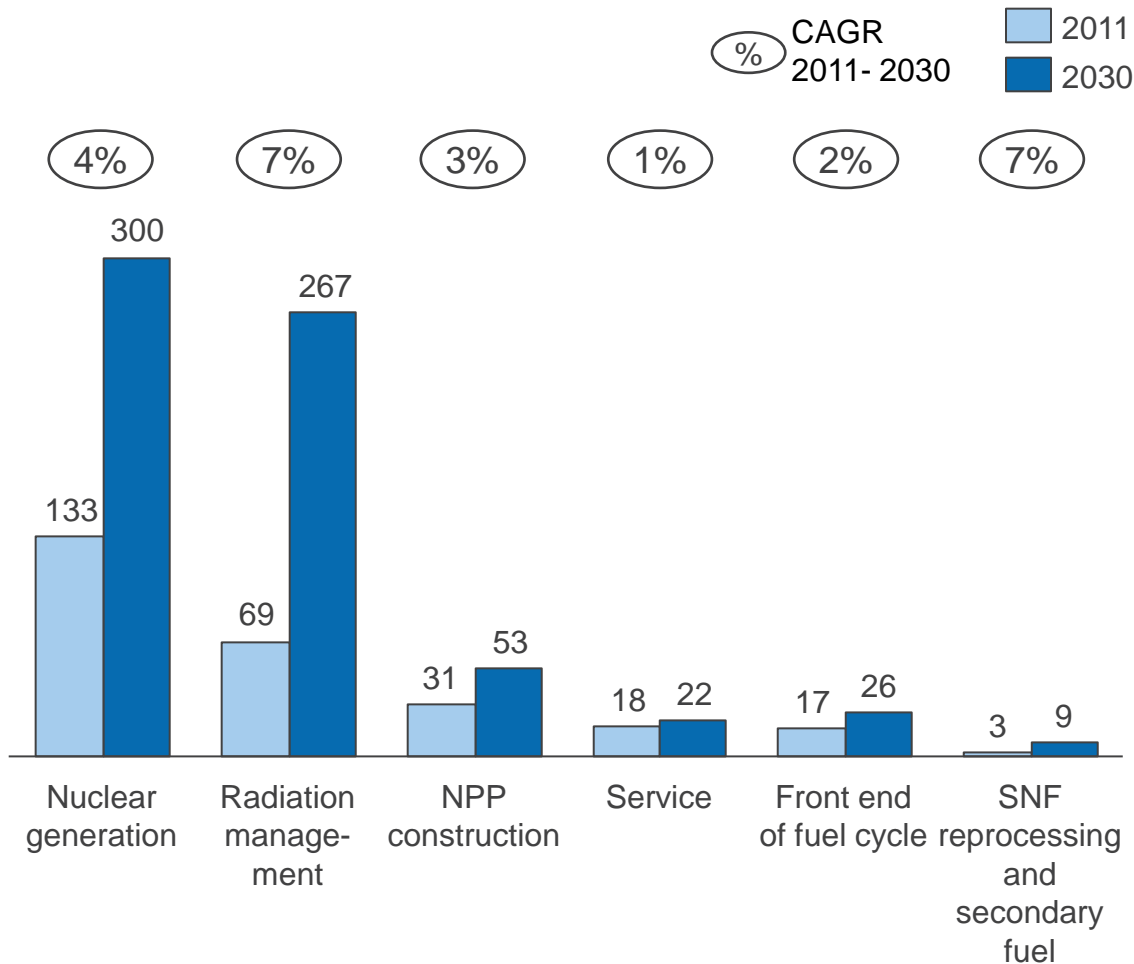
- Complete refusal from nuclear power with accelerated decommissioning
- Refusal/freezing of new reactors construction plans
- Confirmation of previous plans on nuclear power development
- Increased activity in nuclear power development

Changes in official positions of countries on nuclear power development, March 2011 – May 2012



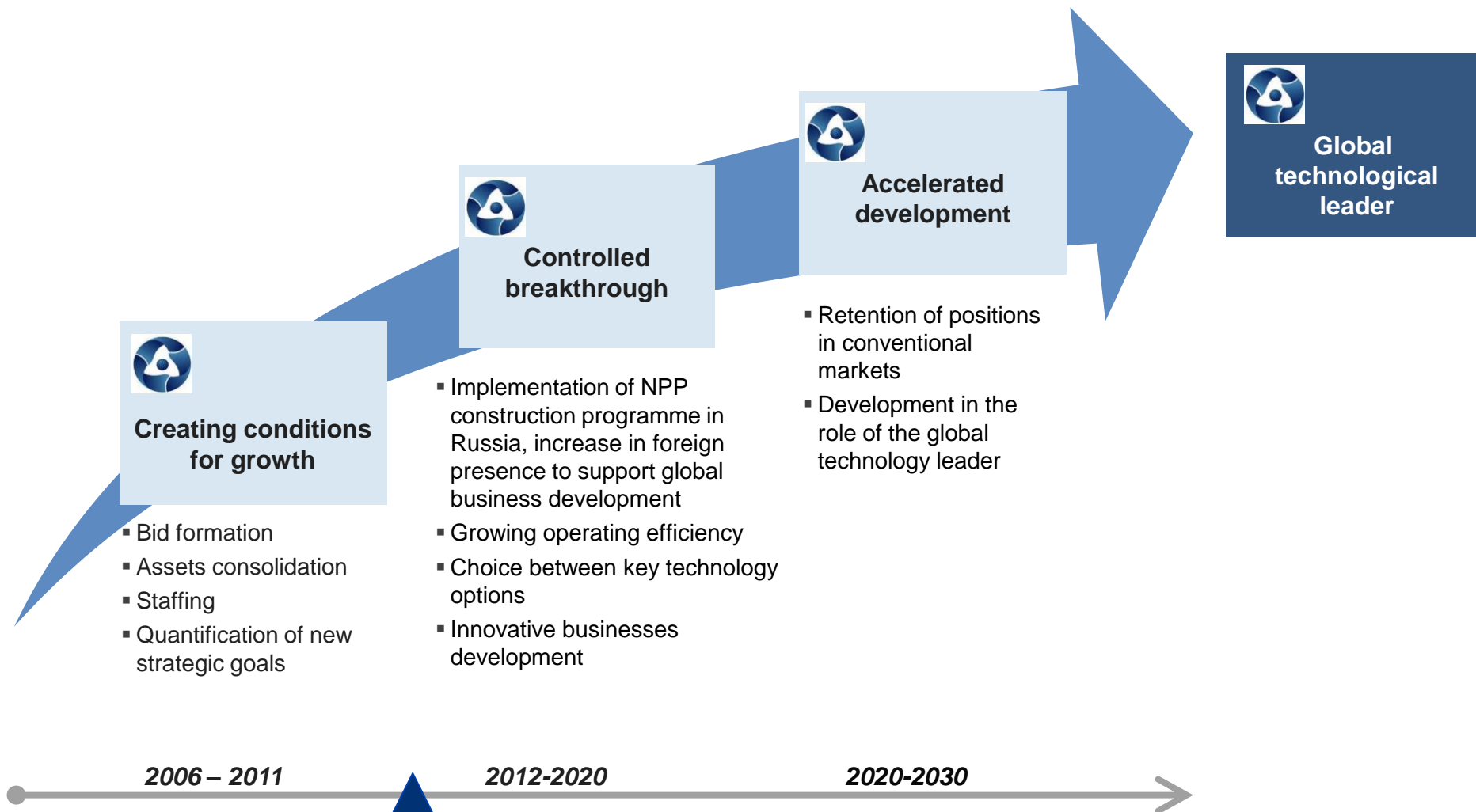
Steady growth of nuclear power will be accompanied by development of nuclear related segments

Nuclear market segments in 2011-2030,
bln USD



- All nuclear markets are expected to grow until 2030
- Radiation management and SNF reprocessing are likely to grow at the highest rate:
 - Radiation management nuclear technologies may be used in the sphere of ecology waste destruction, nuclear medicine, radiation centres, security systems and nondestructive testing
 - SNF reprocessing allows to solve the problem of nuclear wastes condition to development of reprocessing technologies and breeders

Rosatom strategy implies transformation into the global market leader through development of new segments based on conventional markets

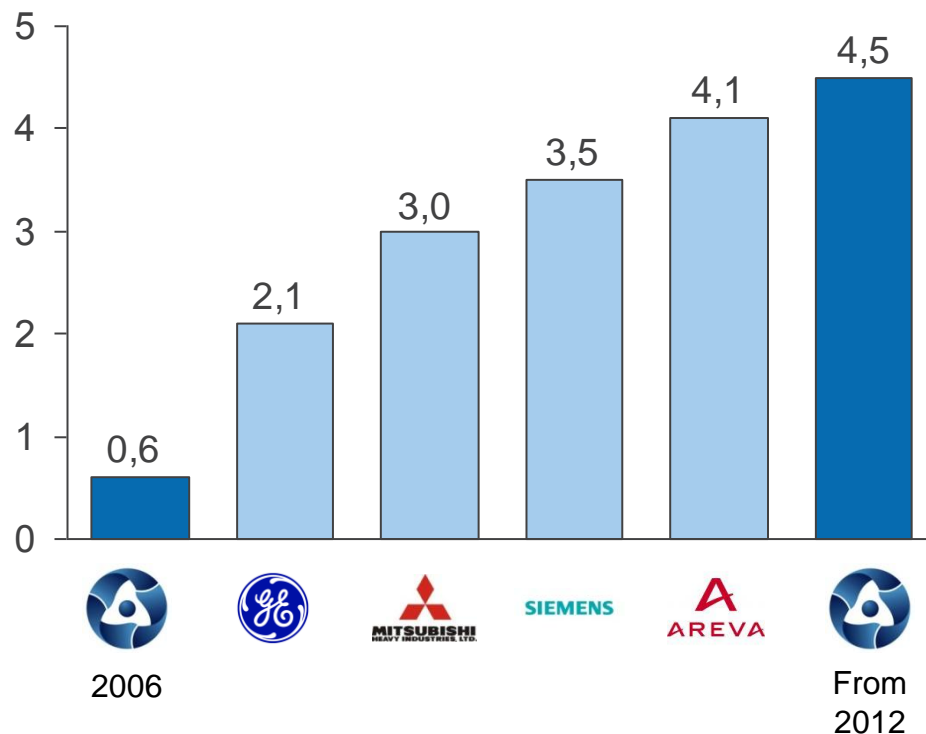


The objective of Rosatom global leadership is specified in key 2030 target indicators

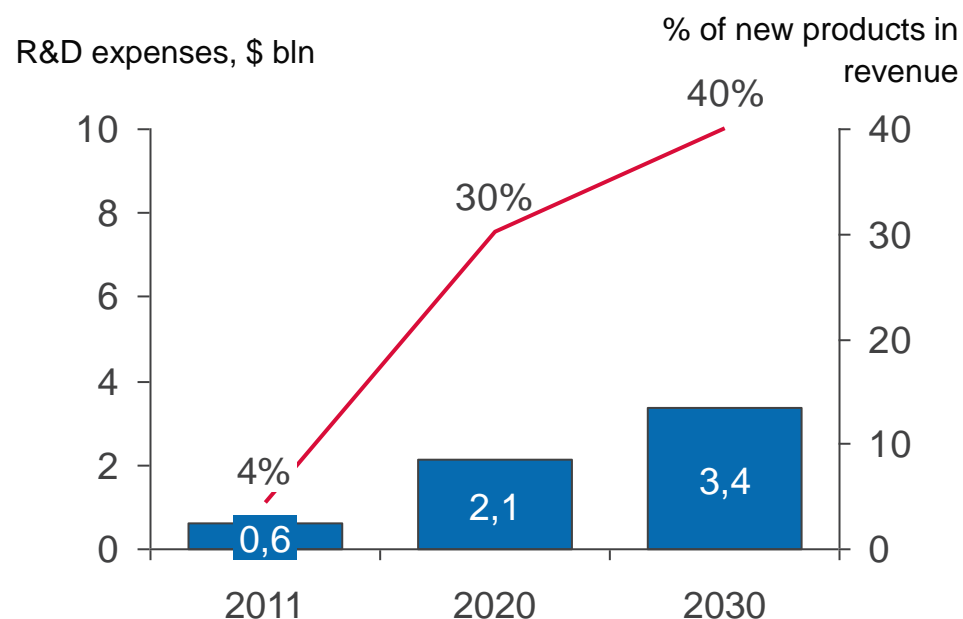
Corporate goals	Target goal for 2030
1 Technological leadership <ul style="list-style-type: none">Investments in new projects up to \$3 bln per yearLaunch of IV generation reactors (breeders)R&D commercialization	R&D expenditures 4,5% of revenue Share of new products 40%
2 Global presence <ul style="list-style-type: none">Top-3 in all key nuclear market segments	Foreign operations share 50% Foreign assets share 25% Brand awareness Top-100 in the world
3 Scale <ul style="list-style-type: none">Business scale which can be compared with nuclear leaders	Nuclear generating capacities 2,5 times growth Revenue 5 times growth NPP construction abroad Launch of 30 units

R&D development is one of the key Rosatom priorities for 2012-2030

Share of R&D expenses in revenue, %

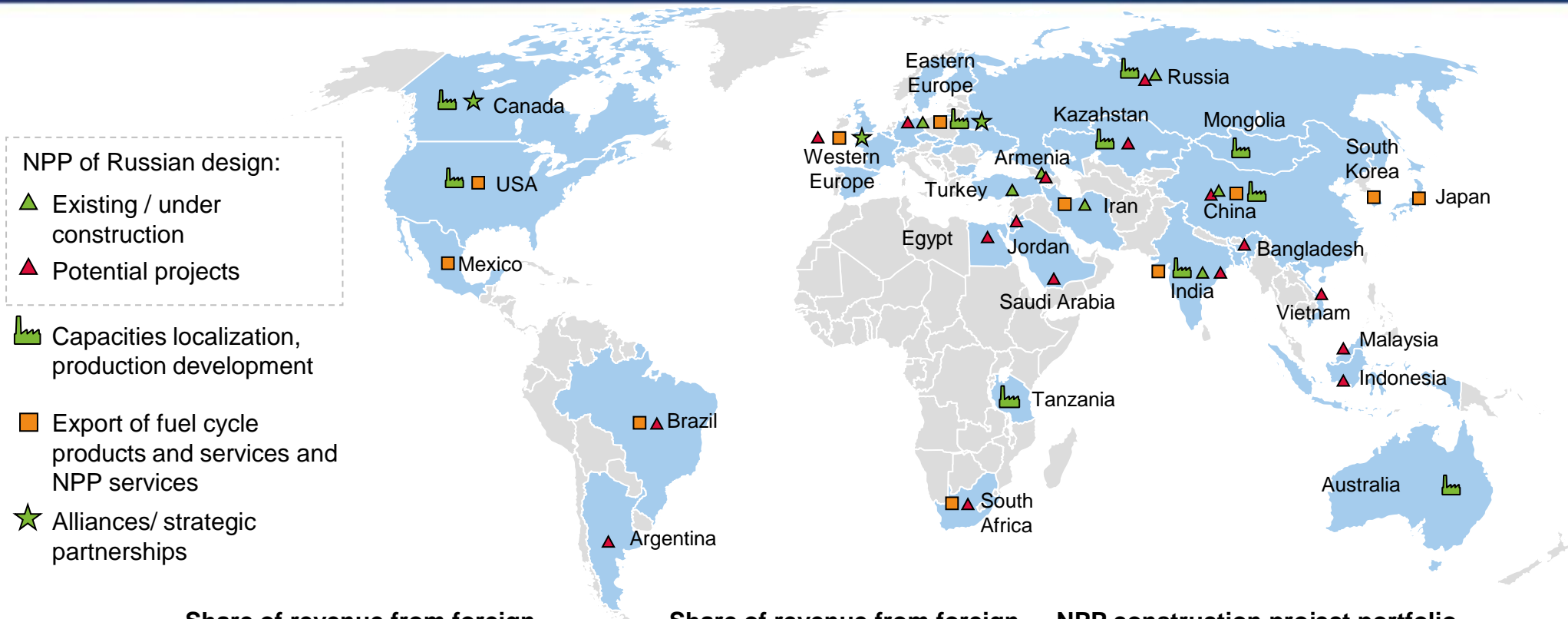


R&D expenses and share of new products in revenue

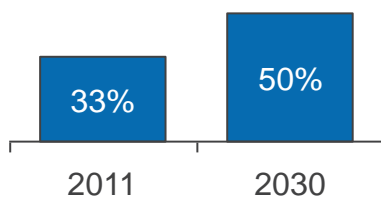


- Share of R&D expenses in the revenue the Corporation has reached the leading global technological companies
- The objective of the Corporation is to enter Top-20 leading innovative companies. That will require annual R&D expenses at least at the level of 4,5% of revenue
- Taking into account growing R&D expenses Rosatom is planning to increase its share of new products in revenue up to 40% by 2030

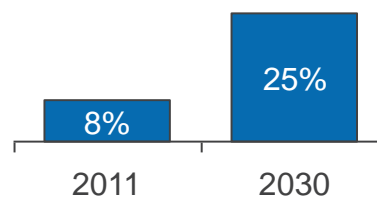
Growth of NPP construction projects, development of foreign operations and assets are expected to support Rosatom global presence



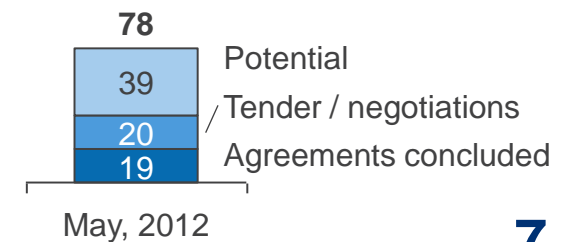
Share of revenue from foreign operations



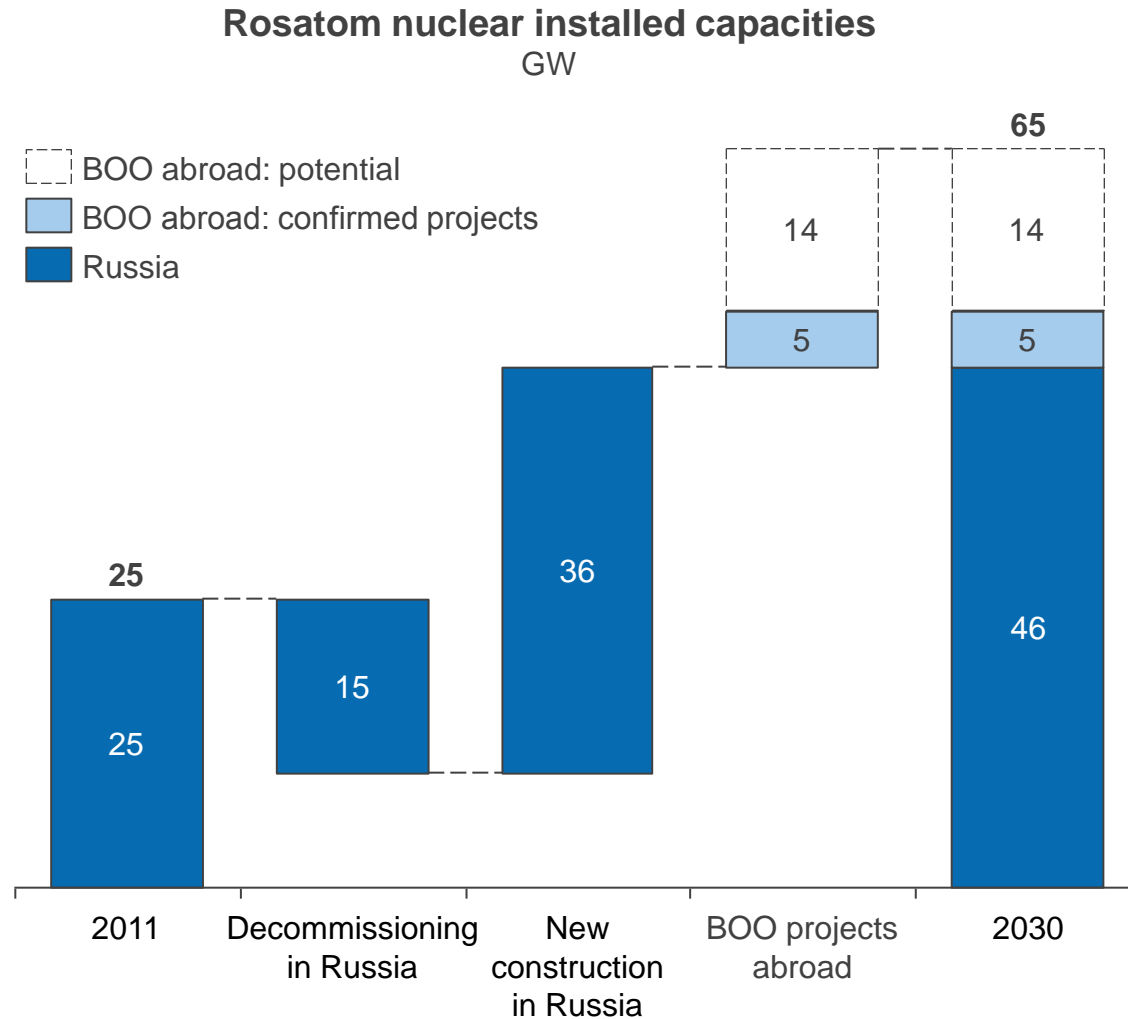
Share of revenue from foreign assets



NPP construction project portfolio on foreign markets (EPC and BOO)



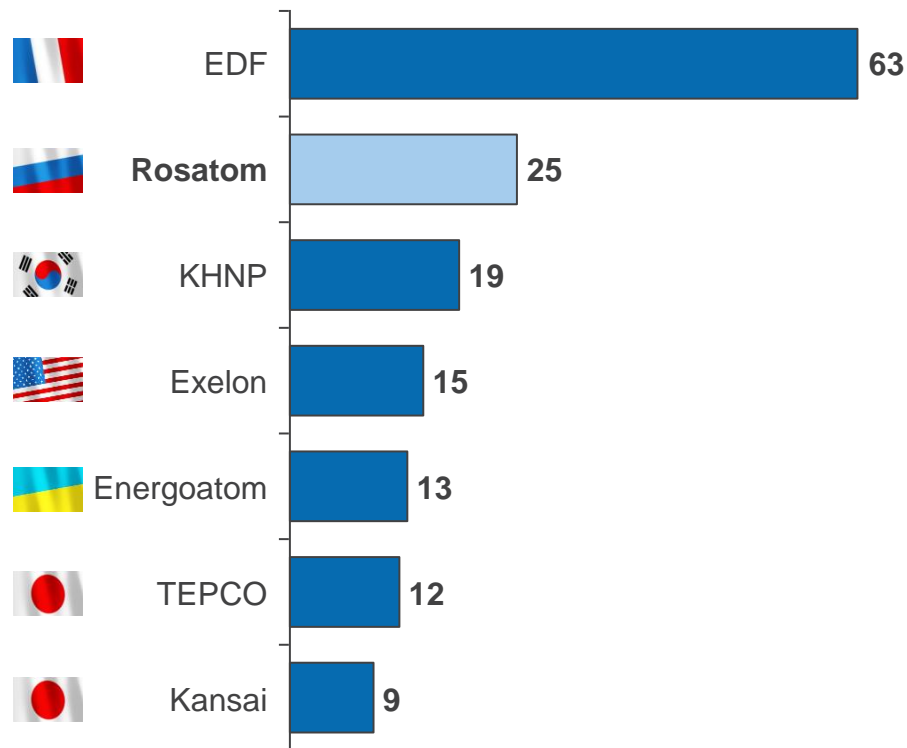
Rosatom will increase its power generation through construction of NPPs in Russia and BOO projects abroad



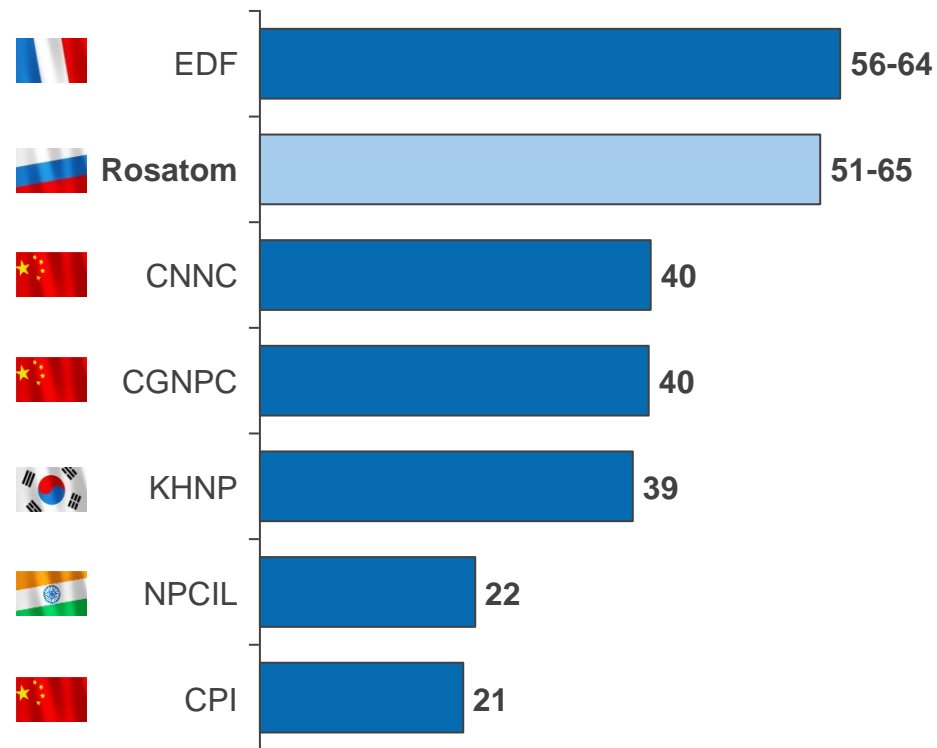
- By 2030, nuclear generation share in Russia will increase from 17% to 23%
- Confirmed BOO projects: Akkuyu NPP in Turkey (4xVVER-1200)
- Potential BOO projects: Jordan, Hungary, Slovakia, South Africa

By 2030 Rosatom is expected to approach global leadership among nuclear generating companies by installed power capacity

TOP-7 nuclear generating companies 2011,
GW (NPP installed capacity)

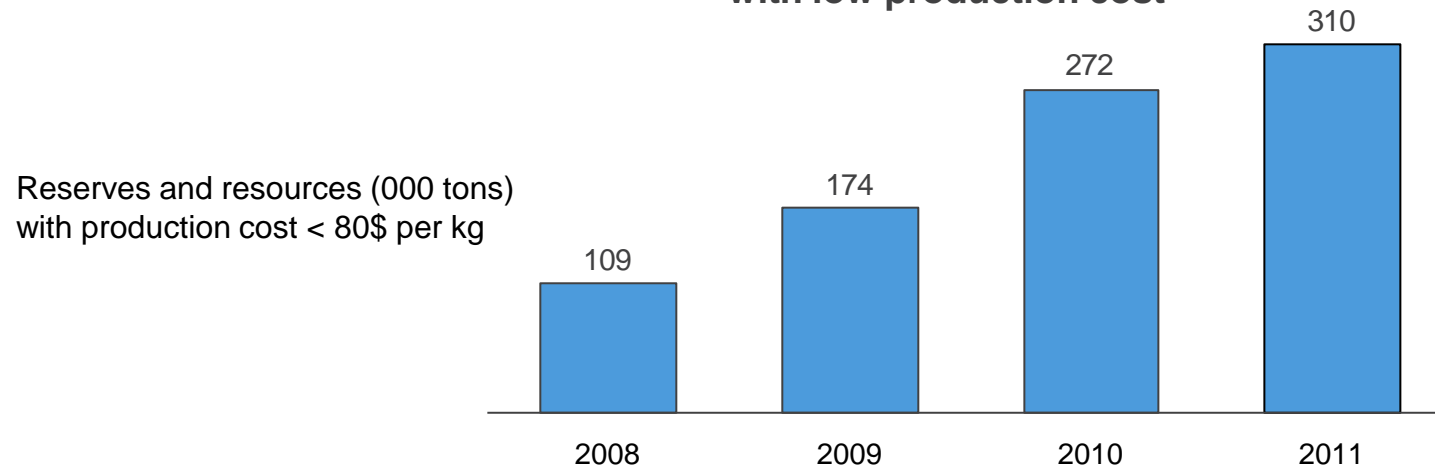


TOP-7 nuclear generating companies 2030,
GW (NPP installed capacity)

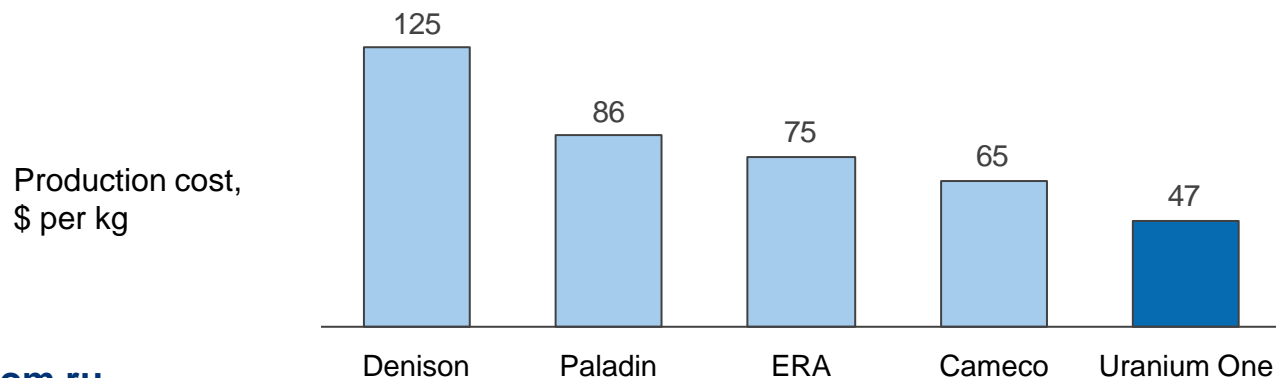


Rosatom is increasing profitable resource base to provide NPPs under construction with fuel

Rosatom is increasing uranium reserves and resources with low production cost

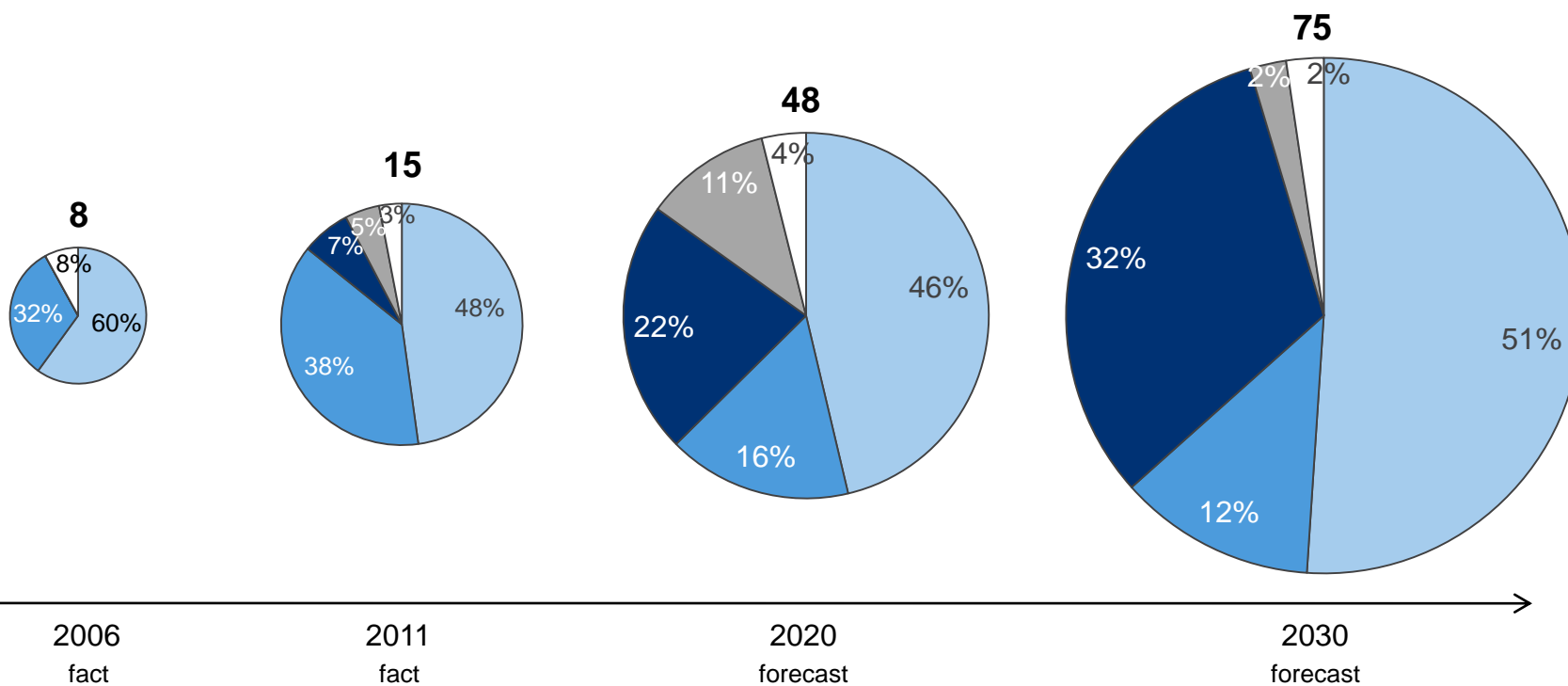


Uranium One (Rosatom foreign uranium assets) has the lowest production costs among public non-diversified uranium producers



By 2030 Rosatom consolidated revenue can reach \$75 bln

Revenue, bln USD (2010 prices)



- Nuclear generation and electricity retail
- New businesses
- Other revenue

- Front end of nuclear fuel cycle
- NPP construction, nuclear power equipment