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ROSATOM

INTERNATIONAL COOPERATION IN POWER GENERATION EQUIPMENT MANUFACTURING AND SUPPLY

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ATOMENERGOMASH TODAY



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ATOMENERGOMASH is one of the largest and leading suppliers of efficient wide-ranging solutions for nuclear and thermal power generation, as well as for gas and petrochemical industries in Russia and abroad

- ▶ More than **50** manufacturing, scientific and research, engineering facilities in Russia, Ukraine, Czech Republic, Kazakhstan, Hungary, Bulgaria, and Morocco
- ▶ More than **27 000** employees
- ▶ Order backlog over **€2 billion**

The company's equipment is installed at more than **13%** of NPPs and at about **2%** of thermal power stations worldwide, including **40%** of power plants in Russia, CIS and Baltic states



Unique production capabilities, strong research base and wide-ranging expertise are the basis for success and sustainable development of
ATOMENERGOMASH



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PRODUCTS AND SERVICES



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METALLURGICAL COMPONENTS

- Castings and forgings

NUCLEAR POWER GENERATION EQUIPMENT

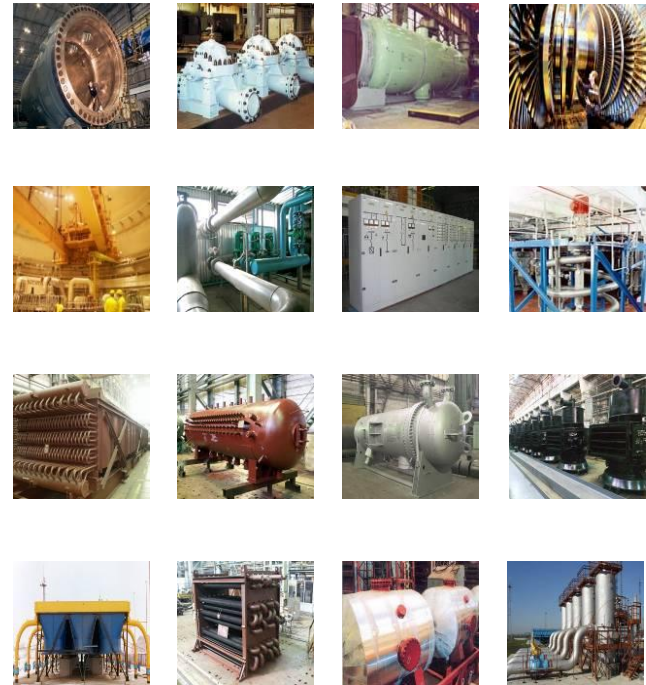
- Reactor vessel equipment
- Steam generators
- Turbine island equipment
- Pumps
- Transportation/lifting equipment
- Control and measurement equipment
- Auxiliary equipment
- Equipment for NRW and SNF

THERMAL POWER GENERATION EQUIPMENT

- Boilers, HRSG
- Heat-exchangers
- Auxiliary equipment

EQUIPMENT FOR OIL&GAS INDUSTRY

- Air-cooling units and reservoir equipment
- Auxiliary equipment



CONSTRUCTION AND INSTALLATION WORKS

SERVICE AND MODERNIZATION

ATOMENERGOMASH IS A COMPLEX SUPPLIER AND TECHNOLOGICAL PARTNER



ATOMSTROYEXPORT

- EPC-contractor for Russian-design NPP construction worldwide
- Global sourcing – equipment procurement for NPP construction



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НИАЭП



ATOMENERGOPROEKT
SAINT-PETERSBURG

ROSENERGOATOM – NIAEP – SPBAEP

- Customer/EPC-contractor for NPP construction in Russia
- Equipment procurement for NPP construction



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- System integrator/complex supplier for Russian-design NPPs
- Technological and strategic partnerships for organization of complex supplies for Russian-design NPP construction projects in Russia and abroad

While implementing different forms of cooperation with the leading global power generation equipment manufacturing companies ATOMENERGOMASH provides system integration of equipment and complex supplies for NPP construction

Acquisition and localization of advanced foreign technologies

Acquisition of foreign players possessing modern technologies

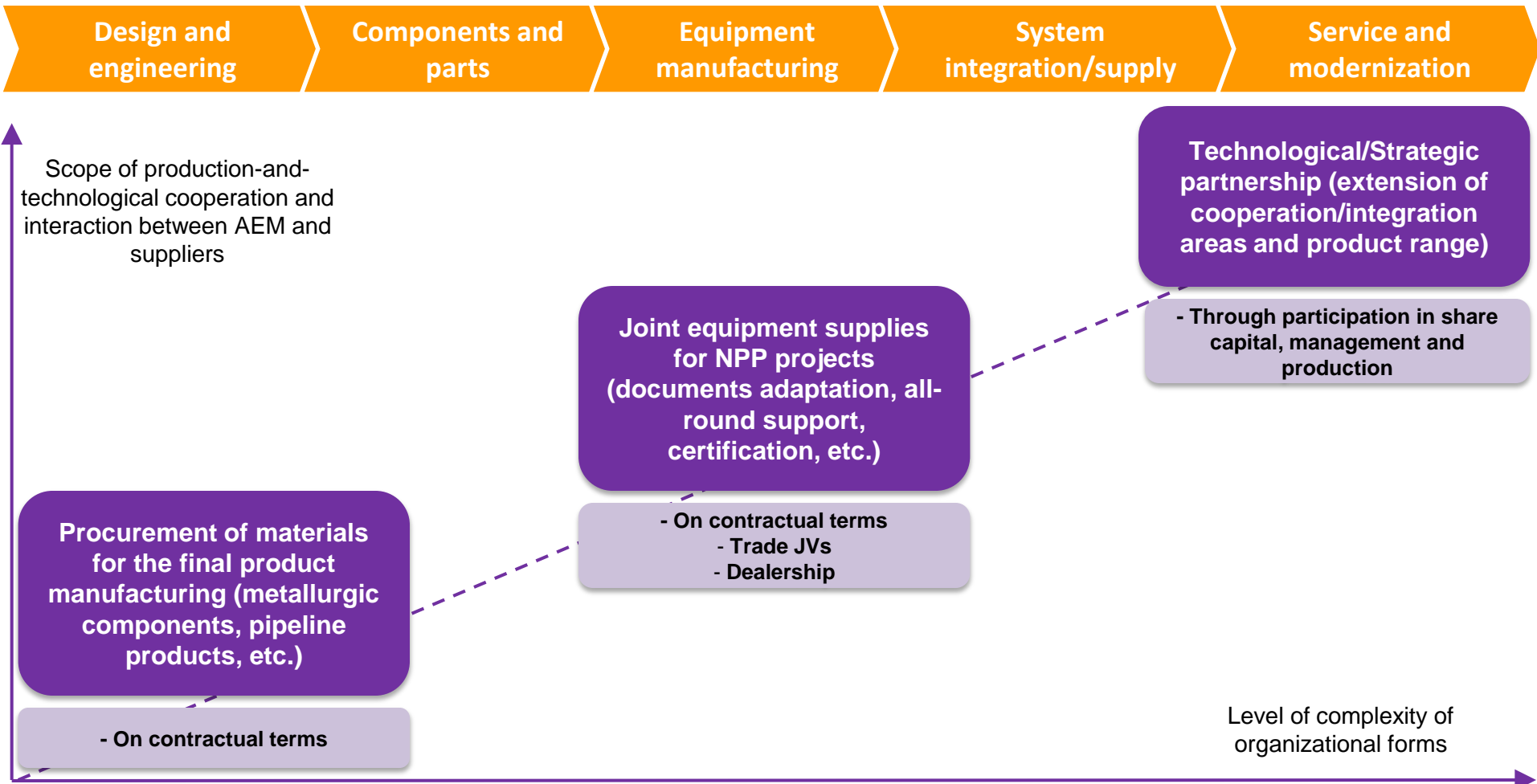
Integration into production processes and market chains of global players

Localization of production and technological base on target markets/Global sourcing



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AREAS OF COOPERATION WITH FOREIGN SUPPLIERS THROUGHOUT THE VALUE CHAIN

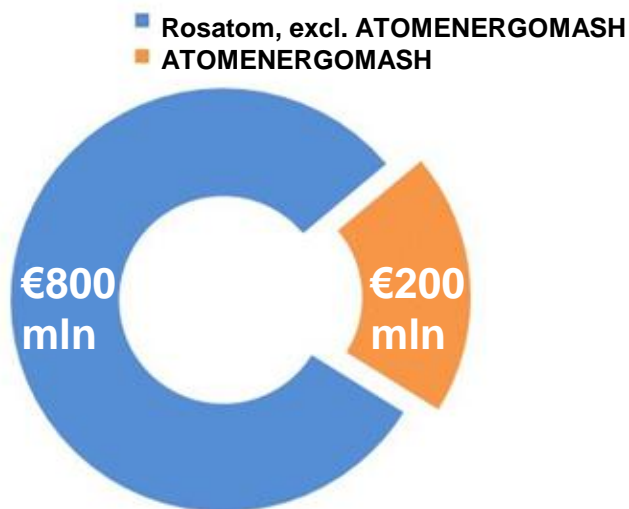


ATOMENERGOMASH is willing to explore different forms of cooperation with suppliers, namely in materials and components procurement, joint supplies of equipment and services for the final customer, engineering partnerships, etc.

POTENTIAL FOR COOPERATION IN THE FIELD OF MATERIALS AND COMPONENTS PROCUREMENT

Power generation equipment sector is the largest consumer of materials and components for NPP, TPP, gas & petrochemical facilities. ATOMENERGOMASH purchases materials and components both from Russian and foreign producers and is continuously extending its international pool of suppliers

Average procurement volumes for materials and components, per year



The most demanded product range

- Castings and forgings: shaft work pieces, shells, bottom blanks, etc.
- Flat metal products
- Clad tubes
- Die tooling
- Tubes of corrosion-resistant grades of steel
- Stainless tape
- Other metals and metal products

Current geography of material supplies for AEM

- Russia
- Ukraine
- Czech Republic
- Germany
- Italy
- France
- Other countries

Cooperation of ATOMENERGOMASH with Czech suppliers with regard to the above mentioned product range today is of case-by-case nature, whereas the annual volumes of Company's procurements allow establishment of deeper and longer cooperation

COOPERATION IN JOINT EQUIPMENT AND SERVICES SUPPLIES

ATOMENERGOMASH is the system integrator/complex supplier of equipment for NPPs, TPPs and petrochemical facilities. Integration of foreign-made equipment into Russian projects requires observation of legal norms and standards, technical regulations, quality standards, which could be provided by the Russian partner

Topical issues of cooperation in case of joint supplies

- Joint development of documentation, technical specifications
- Approvals with local authorities and governmental bodies
- Acceptance procedure tracking at the sites
- Quality assurance
- Certification with the relevant authorities
- Work with subcontractors in terms of observation of the regulatory documents and quality standards

Relevant case of similar cooperation



SIGMA[®]



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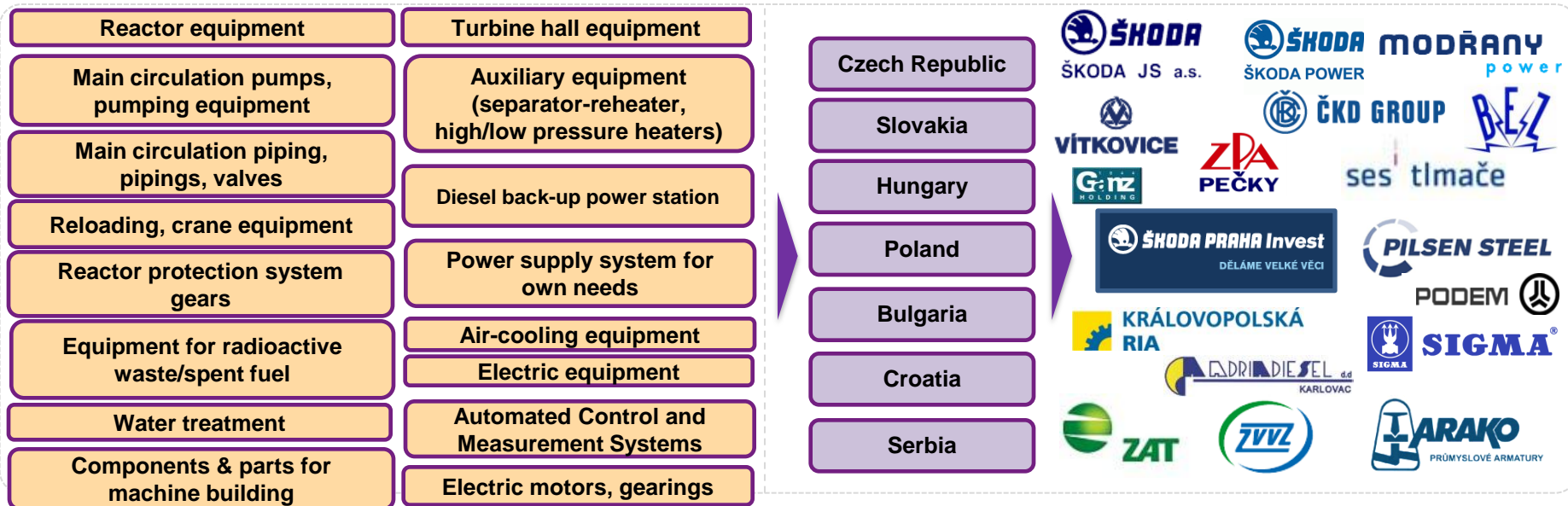
•Sigma Group (Czech Republic) and ATOMENERGOMASH have wide cooperation experience in pumping equipment supplies for the following Russian NPPs: Novovoronezhskaya, Kalininskaya, Beloyarskaya.

• The cooperation includes joint development of technical specifications, documentation approvals, acceptance arrangement, etc.



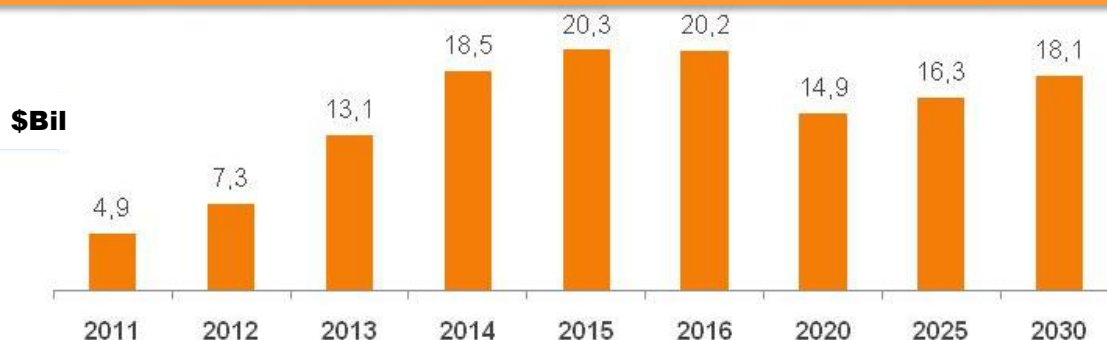
ATOMENERGOMASH possesses all necessary competencies and resources for efficient integration of suppliers into the supply chain

POTENTIAL FOR COOPERATION WITH CENTRAL AND EASTERN EUROPEAN COUNTRIES



Potential scope of equipment market for NPPs' leads to the necessity of the creation of strategic and technological partnerships between suppliers for their joint operations in Russia, Central and Eastern European countries and in the global markets.

In 2011-2030 the global market of VVER NPP equipment is estimated at ~\$242 bn.



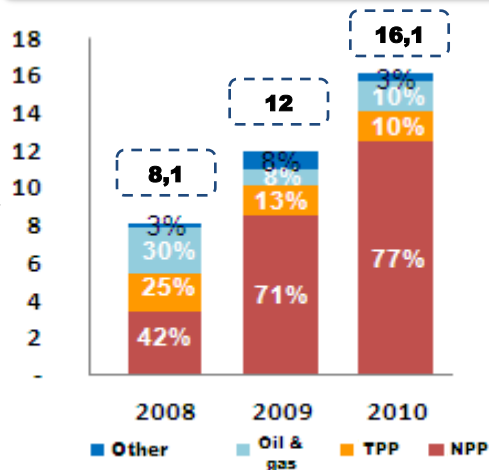
CZECH COMPANIES WITH RUSSIAN PARTICIPATION



ARAKO produces piping valves for nuclear power industry, thermal power generation, gas & petrochemical industry

ATOMENERGOMASH participation in ARAKO has increased utilization of manufacturing capacities and ensured of significant financial and economic results

Financial performance



Growth in 2007-2010 in more than 3 times

References

ARAKO is widely experienced in supplies of special fittings to the following Russian NPPs:

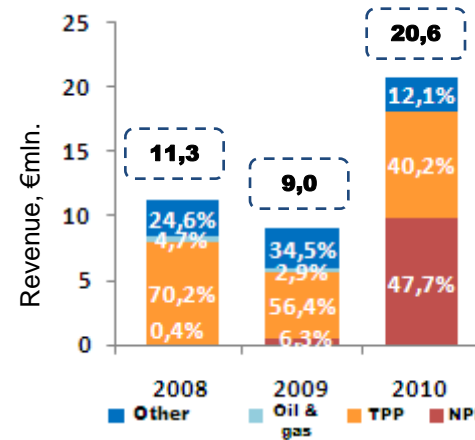
- Smolenskaya NPP,
- Kurskaya NPP,
- Novovoronezhskaya NPP,
- Leningradskaya NPP,
- Kalininskaya NPP,
- Balakovskaya NPP,
- Rostovskaya NPP,
- Kolskaya NPP.



CHV is a complete supplier of industrial cooling equipment for nuclear and traditional power industries

Integration of CHV into ATOMENERGOMASH will strengthen CHV positions while implementing projects in the Czech Republic, Russia and CIS, as well as in other target markets of Rosatom, including Europe and Asian-Pacific countries.

Financial performance



Sufficient revenue growth in 2010 due to increasing nuclear segment

References

Integration into ATOMENERGOMASH will allow CHV to participate in tenders while reconstructing and constructing the NPPs in Russia and abroad.

- Possible nearest projects:
- Baltiiskaya NPP,
 - Novovoronezhskaya NPP,
 - Leningradskaya NPP.





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