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MORE BUSINESS

ANNUAL REPORT | 2018



ATOMENERGOMASH JSC
2018 INTEGRATED ANNUAL REPORT

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IN 2018 ATOMNERGOMASH JSC BECAME THE LEADING RUSSIAN POWER ENGINEERING HOLDING IN TERMS OF PRODUCED EQUIPMENT AN REVENUE:

33.9 %
MAJOR POWER EQUIPMENT PRODUCED IN RUSSIA

70.8 BILLION RUBLES
CONSOLIDATED REVENUE

DYNAMIC GROWTH OF ORDER PORTFOLIO BY 37.2 % AND REVENUE BY 3.4 % WAS ENSURED BY EFFICIENT COMMERCIAL PERFORMANCE IN KEY NON-NUCLEAR BUSINESS AREAS, NEW BUSINESS AREAS AND FOREIGN OPERATIONS:

623.8 BILLION RUBLES
ORDER PORTFOLIO

41 % IN PORTFOLIO	←	FOREIGN ORDERS	→	16 % IN REVENUE
52 % IN PORTFOLIO	←	NEW BUSINESSES / PRODUCTS	→	45 % IN REVENUE
8 % IN PORTFOLIO	←	NON-NUCLEAR AREAS	→	42 % IN REVENUE

EFFICIENT STRATEGY AND SOUND ASSET MANAGEMENT ENABLED THE COMPANY TO GAIN NET PROFIT FIRST TIME IN THREE YEARS, WHICH AMOUNTED TO 14.2 BILLION RUBLES.

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BUSINESS
MODEL



21

SALT
FACTORIES
EQUIPMENT



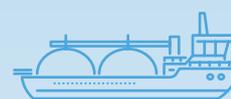
42

WASTE
INCENERATORS
EQUIPMENT



70

LNG
PLANTS
EQUIPMENT



80

THE COMPANY IN BRIEF

GRI 102-1, 102-2, 102-5

Atomenergomash JSC (“the Company”) is the Power Engineering Division of the State Atomic Energy Corporation Rosatom (“the Division”). Being one of the largest power and machine engineering holdings in Russia, Atomenergomash offers the full range of solu-

tions for design, production, and supply of equipment for nuclear power, thermal power, and gas and petrochemical industries, shipbuilding firms, and special steels market.

2018 PERFORMANCE HIGHLIGHTS

GRI 17



Economic Performance

71 B RUB

Division Combined Revenue

14.2 B RUB

New Profit

11.3 B RUB

EBITDA¹

45 %

Revenue Share of Newly-Affiliated Business

16 %

Revenue Share of Foreign Transactions



Efficiency Improvement

498.2 M RUB

RPS² Implementation Effect

141 M RUB

Non-Core Assets Revenue

4.3 M/person

Workforce Productivity



Commercial Performance

TOP 1

of the Russian Power Engineering Market by Revenue

623.8 B RUB

Order Portfolio by end of 2018

239.7 B RUB

Total Value of Contracts Concluded



Scientific Performance

225

scientific publications

145 M RUB

Total Value of Contracts with Universities

108

patents and intellectual property certificates

¹ Earnings before interest, taxes, depreciation, and amortization

² Rosatom Production System

The Company has full control over the production chain of key equipment for nuclear and turbine islands: from research and development, technical documentation design, and process engineering to manufacturing. The Division incorporates the largest power engineering enterprises, including production,

research, and engineering organizations across Russia, Europe, and the CIS. One-of-a-kind production and process competences of the Division's subsidiaries allow providing customers with equipment fully compliant with the strictest requirements.



Human Resources Development

18.120

Headcount

81%

Engagement

35%

10 Years+ Seniority Employees

33%

Specialists Under 35



Operating Performance

94.1%

Supply Timeliness

40.000 tons

of products shipped



Sustainable Development

164.7 M RUB

Environmental Protection Expenses

25.6 M RUB

Charity and Veteran Support Expenses

48%

LTIFR Decrease

2018 MILESTONE EVENTS



Nuclear Industry

- Atomenergomash JSC finished production of the equipment for the nuclear steam-supply system of the third and fourth units of the Kudankulam NPP (India).
- Atom mash, branch of AEM-Technologies finished production of the floor of the history's first VVER-TOI nuclear reactor of the first unit of the Kursk NPP-2.
- Production of the main equipment for modernization of the turbine island of the second unit of the Armenian NPP was finished.
- Two units with nuclear systems VVER-1000 produced by OKB GIDROPRESS JSC were put into operation: the third unit of the Tianwan NPP in China and the fourth unit of the Rostov NPP in Russia.



Thermal Power

- ZiO-Podolsk PJSC launched production of equipment for waste-to-energy processing plants being constructed in the Moscow Region and Tatarstan.
- Production of the first boiler system for thermal waste-to-energy processing plants is almost finished.



Gas and Petrochemicals

- SverdNIIKhim mash JSC is performing works on the full-scope supply of saliferous effluent evaporation system equipment at the industrial side of the petrochemical complex ZapSibNeftekhim LLC in Tobolsk.
- SNIIP JSC launched the new project on establishing the automated process parameter diagnostics system ensuring detection and forecasting of potential process equipment failures, security barrier integrity, treatment system performance, gas reduction systems, and switching systems.



Special Steels

- Energomashspetsstal PJSC (EMSS PJSC) finished the project on supplying blanks for the equipment of the first unit of the Akkyuyu NPP.



Shipbuilding

- Production of innovative RITM-200 reactor systems for three new-generation versatile icebreaker was finished; it is planned to use these reactor systems not only in icebreaking fleet but also in design of low-power marine and land NPPs.
- The start-up of the reactor system of the first reactor (developed in OKBM-Afrikantov JSC) was conducted as part of the integrated test of the world's first floating nuclear power plant (FNPP) "Akademik Lomonosov".



Developing New Business Lines

- Pilot contracts were concluded regarding the entire key equipment line for the fourth process line of the medium-tonnage plant within Yamal LNG project.
- Specialists of the Institute for Surface and Nanomaterial Technology of NPO TSNIITMASH JSC produced—on Russia's first 3D metal printer SLM—the prototype of a Wheel type blank for the industrial electric pump (with the use of a home-produced metal powder).



Efficiency Enhancement

- Within Mentor 2018 forum, Vladimir Putin, the President of Russia, met with the winners of the All-Russian Competition Best Mentorship Practices Dmitry Kucheryavin and Aleksandr Duymamet, employees of Atomenergomash, branch of AEM-Technologies.
- At Ekaterinburg Expo in Ekaterinburg, the 3rd WorldSkills Championship Atom-Skills-2018, conducted by Rosatom, finished. Specialists of Atomenergomash JSC's enterprises got 3 gold, 8 silver, and 2 bronze medals.
- At the site of Atomenergomash, branch of AEM-Technologies and NPO TSNIITMASH JSC, industry expertise center Welding Technology was established.

MESSAGES FROM THE COMPANY EXECUTIVES



Vladislav KOROGODIN

Chairman of the Board, Atomenergomash JSC,
TAC and NPP Lifecycle Management Director at Rosatom



Andrey NIKIPELOV

Atomenergomash JSC CEO

GRI 102-14

Dear Colleagues,

I am proud to introduce the Atomenergomash JSC 2018 Integrated Report that contains the analysis of production and financial performance, as well as social and environmental issues related to activities of Rosatom's Power Engineering Division.

In 2018 the Division continued its dynamic growth demonstrating the increase in financial and economic and production indices. The order portfolio gained almost 37% in the reporting year and amounted to 623.8 billion rubles. The consolidated revenue increased by 4% and came to 71 billion rubles. By this index, the Division took the leading position among Russian power engineering companies.

It is important to note that the revenue growth was preconditioned by sales of products not only to organizations of the nuclear industry, but also companies of other economic sectors, which fully serves Rosatom's diversification strategy. Specifically, production of equipment for domestic LNG plants should be highlighted: such projects are vital as they facilitate forming the new market for specific equipment manufacturers. The Division's participation in construction of first Russian-technology LNG plants helps us expect Atomenergomash JSC to take the superior positions in this market.

Also in 2018, the Division finished a series of nuclear-industry projects: supplied equipment for Belarusian NPP, manufactured main nuclear island equipment for the third unit of Kudankulam NPP, and heat-exchanging equipment for the turbine island of the fourth unit. Besides, the Division fulfilled all obligations related to manufacturing of RITM-200 reactor systems for new-generation icebreakers being constructed. With that, RITM-200 became the first reactor system fully manufactured within Atomenergomash JSC's contour: previously, the Division's enterprises were only responsible for design and engineering development.

One of the Company's growth priorities is focus on the innovative activities. Currently, the Division's enterprises successfully design cutting-edge technological solutions—being the key participants of industry projects on developing new equipment types—and form the future of the nuclear industry.

What predefines Atomenergomash JSC's progress is expertise of workers that is critical for further growth of the Company as one of the global power engineering leaders. On behalf of Rosatom, I express my gratitude to all the employees of the Power Engineering Division and its enterprises for the well-coordinated and efficient work aimed oriented to the success of the nuclear industry.

Vladislav Korogodin
Chairman of the Board, Atomenergomash JSC

Dear Shareholders, Colleagues, and Partners,

Let me present the 2018 Annual Report of Rosatom's Power Engineering Division — Atomenergomash JSC. The report was prepared in compliance with front-rank Russian and international reporting practices, as well as Reporting Standards of Global Reporting Initiative and International Integrated Reporting Council.

The previous year was saturated with important events that enabled the Company to take the leading positions in the Russian power engineering market: Atomenergomash JSC's consolidated revenue gained 4% and amounted to 71 billion rubles, while the Company's order portfolio increased by almost 37% for a decade and totaled 623 billion rubles. Such a growth of the order portfolio was supported by new contracts across various industries: complete reactor island and turbine island equipment supply for six power units. As of today, the Company is the complete nuclear steam-supply system equipment supplier for 17 NPP units. Also, AAEM Turbine Technologies LLCs, in partnership with General Electric, executes 17 agreements for complete supply of turbine island equipment (including turbine system equipment).

The volume of direct contracts concluded by the Division's enterprises in foreign market is also growing. Specifically, in 2018, OKBM-Afrikantov JSC and the China Institute of Atomic Energy (CIAE) entered into the agreement for CFR-600 equipment supply, supervised installation and adjustment training, and further operation support.

On the site of OKB GIDROPRESS, the Company started activities on complex design documentation preparation and acquiring permissive documents and licenses required for starting and supporting construction of new power units in Russia and abroad.

In non-nuclear industries, we also strive to expand the Company's involvement in LNG projects, produce main power equipment for waste-to-energy conversion plants. So far, the Company has already manufactured the first boiler and first turbine for the first waste-incineration plant in the Moscow Region. The Company is also a partner for deploying cutting-edge oil and petrochemical, shipbuilding, and power technologies in Russia. Last year, the Company's enterprises concluded a series of contracts across the main equipment line for the fourth process line of Yamal LNG plant: coil heat exchangers, LNG pumps, and other complex equipment. An agreement with European companies on joint manufacturing of column and reactor equipment for oil processing complexes.

In the framework of SverdNIKhimmash JSC's project, the Company continued the construction of the salt production plant in the Kaliningrad Region and water-treatment complex at the oil and petrochemical plant of ZapSibNeft-eKhim LLC.

Also, a plethora of production-related events took place in the reporting year. First and foremost, we finished—timely and in full—production of innovative RITM-200 reactor systems for three new-generation icebreakers. Those are brand-new reactors that manufactured—from design to shipment—within the Division's contour. OKBM-Afrikantov JSC is the designer, complete supplier, and manufacturer of a large part of the reactor system; ZiO-Podolsk PJSC is the package unit manufacturer; NPO TSNIITMASH JSC provided material-science support.

In order to realize the plans on constructing Lider-class icebreakers, OKBM-Afrikantov JSC has already designed a far-sighted RITM-400 power system that will provide icebreakers with year-round navigation across the Northern Sea Route and enable them to break ice over 4 meters thick.

Besides, specialists of our companies and other enterprises of the industry develop the brand-new product based on the accumulated expertise: FNPP to be equipped with modernized reactor system RITM-200M.

In 2018, the Company finished production and supply of reactor and turbine island equipment for the third unit of Kudankulam NPP. The equipment was manufactured at AEM-Technologies JSC, ZiO-Podolsk PJSC, and TsKBM JSC.

What also should be noted is the systematic work on production staff development activities carried out across the Company's enterprises. In 2018, the absolute winner of WorldSkills Hi-Tech championship, in the category Welding Technologies was Atom mash's worker Viktor Korobeynikov. Considering previous achievements, this enterprise today has four country's best welders: winners of WorldSkills 2015, 2016, 2017, and 2018. Also, the welding center continues its operation at Atom mash, where specialists of the Division's enterprises and other companies hone their professional skills.

In 2019, our strategic priorities are still timely fulfillment of contractual commitments, enhancement of the production profitability (including systematic implementation of the Rosatom Production System), increasing the volume of export contracts, and revenue growth across all business lines.

To conclude, I would like to thank all our customers and partners for the beneficial cooperation, and employees for their professionalism. I am convinced results of the previous year will be the foothold for further sustainable growth of Atomenergomash JSC as an international company providing clients with solutions of the highest possible quality and efficiency.

Andrey Nikipelov
Atomenergomash JSC CEO

01

200 MILLION TONS OF CARGO WAS
CARRIED WITH NUCLEAR ICE
BREAKERS USING OUR REACTOR
UNITS VIA THE NORTHERN SEA ROUTE



BUSINESS MODEL & DEVELOPMENT STRATEGY

LEADING POSITION

IN THE RUSSIAN POWER ENGINEERING:

33.9 % MAJOR POWER EQUIPMENT PRODUCED IN RUSSIA.

MAIN REVENUE GROWTH FACTOR —

EFFICIENT COMMERCIAL PERFORMANCE
IN KEY NON-NUCLEAR BUSINESS AREAS.

COMPANY VISION:

-  HIGH-END DIVERSIFIED HOLDING
-  SOLID GLOBAL MARKET POSITIONING
-  SUSTAINABLY GROWING IN THE LONG RUN

1.1. MARKETS

The Division is Rosatom's leading power engineering affiliate. As of the end of 2018, Atomenergomash JSC became the top-ranked company of the Russian nuclear power engineering industry: the Company produces 33.9% of major power equipment in Russia. What had the highest impact on the revenue change was efficient commercial performance of the Division in key non-nuclear business areas⁴.

GRI 102-4, 102-7

ASSETS

City, Country	CMC ⁵ Name
Volgodonsk, Russia	Atom mash, branch of AEM-Technologies
Petrozavodsk, Russia	Petrozavodsk mash, branch of AEM-Technologies PZM LZ LLC
Nizhny Novgorod, Russia	OKBM Afrikantov JSC
Ekaterinburg, Russia	SverdNIKhimmash JSC
Podolsk, Russia	OKB GIDROPRESS JSC REMKO CJSC ZiO-Podolsk PJSC ZIOMAR EC JSC
Saint Petersburg, Russia	TsKBM JSC AEM-Technologies JSC AAEM LLC
Moscow, Russia	NPO TsNIITMASH JSC ATM JSC SNIIP JSC OZTMITS JSC OKTB IS JSC
Dubna, Russia	IFTP JSC
Kramatorsk, Ukraine	ENERGOMASHPETSSTAL PJSC
Budapest, Hungary	Ganz EEM
Opava, Czech Republic	ARAKO spol. s.r.o.

⁵ Company in the Management Contour.

MAJOR MARKETS & PROJECTS

NUCLEAR POWER

- | | | | | |
|---|--|--|--|--|
| 1. KURCHATOV, RUSSIA
KURSK NPP | 6. NOVovorONEZH, RUSSIA
NOVovorONEZH NPP,
NOVovorONEZH NPP-2 | 11. METSAMOR, ARMENIA
ARMENIAN NPP | TEMELIN NPP | 22. BUSHEHR, IRAN
BUSHEHR NPP, BUSHEHR-2
NPP |
| 2. MAKAROVKS, RUSSIA
KURSK NPP-2 | 7. ZARECHNY,
SVERDLOVSK REGION, RUSSIA
BELOYARSK NPP | 12. OSTROVETS, BELARUS
BELARUSIAN NPP | 17. PAKS, HUNGARY
PAKS II NPP | 23. EL DABAA, EGYPT
EL DABAA NPP |
| 3. BALAKOVO, RUSSIA
BALAKOVO NPP | 8. POLYARNIYE ZORI, RUSSIA
KOLA NPP | 13. KUDANKULAM, INDIA
KUDANKULAM NPP | 18. KOZLODUY, BULGARIA
KOZLODUY NPP | 24. GULNAR, TURKEY
AKKUYU NPP |
| 4. VOLGODONSK, RUSSIA
ROSTOV NPP | 9. DESNOGORSK, RUSSIA
SMOLENSK NPP | 14. TIANWAN, CHINA
TIANWAN NPP | 19. BELENE, BULGARIA
BELENE NPP | 25. PABNA, BANGLADESH
ROOPPUR NPP |
| 5. SOSNOVY BOR, RUSSIA
LENINGRAD NPP,
LENINGRAD NPP-2 | 10. U MLYA, RUSSIA
KALININ NPP | 15. PYHÄJOKI, FINLAND
HANHIKIVI NPP-1 | 20. LEVICE, SLOVAKIA
MOHOVCE NPP | |
| | | 16. TEMELIN, CZECH REPUBLIC | 21. TRNAVA, SLOVAKIA
BOGUNICE NPP | |

THERMAL POWER

- | | | |
|---|--|---|
| 1. VERKHNIY TAGIL, RUSSIA
VERKHNETAGILSKAYA SDPP | 6. SHARYPOVO, RUSSIA
BEREZOVSKAYA SDPP | 11. SAINT PETERSBURG, RUSSIA
TSENTRALNAYA CHPP |
| 2. SVETLY, RUSSIA
PRIMORSKAYA TPP | 7. NAZAROVO, RUSSIA
NAZAROVSKAYA SDPP | 12. AKSU, KAZAKHSTAN
AKSU TPP |
| 3. ARKHANGELSK, RUSSIA
ARKHANGELSK CHPP | 8. NOVOMOSKOVSK, RUSSIA
NOVOMOSKOVSKAYA SDPP | 13. TOPAR, KAZAKHSTAN
TOPARSKAYA SDPP |
| 4. YAROSLAVL, RUSSIA
YAROSLAVL CHPP | 9. REFTINSKY, RUSSIA
REFTINSKAYA SDPP | 14. TARAZ, KAZAKHSTAN
ZHAMBYSKAYA SDPP |
| 5. KALININGRAD, RUSSIA
PREGOLSKAYA TTP | 10. IZLUCHINSK, RUSSIA
NIZHNEVARTOVSKAYA SDPP | |

GAS AND PETROCHEMICAL INDUSTRY

- | |
|--|
| 1. OMSK, RUSSIA
OMSK REFINERY |
| 2. MOSCOW, RUSSIA
MOSCOW REFINERY |
| 3. KALININGRAD, RUSSIA
VARNITSA LLC |
| 4. TOBOLSK, RUSSIA
WEST-SIBERIAN DEEP RAW
HYDROCARBON CONVERSION COMPLEX |



1.2. COMPETITIVE STRENGTHS

NUCLEAR POWER INDUSTRY

The scope and geography of traditional nuclear power industry markets for Atomenergomash JSC in Nuclear Power Industry line are defined by Rosatom's Roadmap for Constructing New NPP Units in Russia and Abroad; throughout the recent years, the number of foreign projects under this roadmap has been constantly growing. The participation of the Company in Rosatom's projects is not only about the number of

constructed units, but also completeness of the supplied equipment. The Company's key advantage in Nuclear Industry line is the ability for complete equipment supply for turbine and reactor (nuclear steam-supply system) islands.

The machine engineering Division develops several business lines, from which the major ones are thermal power, gas and petrochemicals, shipbuilding, and special steels.

THERMAL POWER

Atomenergomash JSC holds the leading positions in the thermal power market. The expertise of the Division's enterprises allows participating in TPP construction at any stage: from design to maintenance service.

The target market for the Company is the Russian market of thermal power facilities put into operation, including equipment for plants for thermal neutralization of solid utility waste. At the same time, the Division is actively cooperating in the field of supply and modernization of the power equipment in foreign markets.

The market volume is determined by the 2020 Russian General Power Generation Plant Layout, demand of power-generating companies for modernization and maintenance of thermal power plant units under the Program for Modernization of Thermal

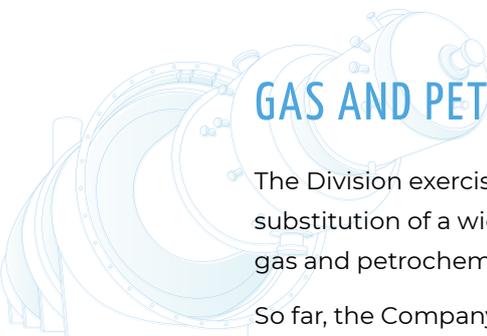
Power Plants, and priority national projects and other waste treatment regulations

In this regard, a large part of the revenue in this field concerns specialty products: steam boilers for power units 50 to 800 MW in power, gas turbine waste heat recovery units for modern combined-cycle gas systems up to 800 MW in power, and equipment for waste-incineration plants.

In 2018, the Company started production of equipment and supplied it to 5 plants for thermal neutralization of solid utility waste (rated capacity of each of them is processing of up to 700 thousand tons of waste per year and up to 70 MW). Beside manufacturing equipment for plants for thermal neutralization of solid utility waste, the Company plans to actively participate in the Program for modernizing thermal power plant gener-

ating units under the Program for Modernization of Thermal Power Plants as part of executing Decree No. 43 of the Government of the Russian Federation dd. January 25, 2019 in terms of boiler equipment supply. In this regard, the Company is going to deepen

cooperation with key Russian power generation organizations (power equipment customers) in order to establish long-term business relations, as well as develop and establish new technological partnership relations with thermal power enterprises.



GAS AND PETROCHEMICALS

The Division exercises activities on import substitution of a wide range of the critical gas and petrochemical equipment.

So far, the Company implemented a series of major import substitution projects—specifically, serial production of check valves for main oil and gas pipelines. Also, the Company finished supplying effluent treatment systems for ZapSib-2, developed and produces leakproof electric pumps to handle hydrocarbons, fire-hazardous, and toxic liquids.

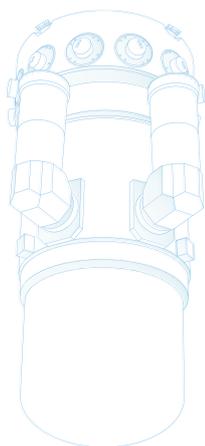
An important strategic goal is execution of Orders No. Pr-2699 of the President of the Russian Federation Vladimir Putin dd. December 25, 2017 regarding implementation of primary measures for localizing the critical equipment for medium- and high-tonnage LNG production.

In this field, the Company cooperates with major enterprises of the gas and petrochemicals industry, with which the Company entered into cooperation agreements.

In 2018, ZiO-Podolsk PJSC started manufacturing the main static equipment for the gas liquification line.

Another significant result of the reporting period is production—by OKBM-Afrikantov JSC—of LNG pumps for the fourth line of Yamal LNG. For the first time, Russian LNG pumps will be used at the operating LNG facility. For pump tests, Rosatom's D.V.Efremov Institute of Electrophysical Apparatus designed the liquid-nitrogen cryogenic stand. Similar pumps will be used in LNG icebreakers.

Using the accumulated expertise, OKBM-Afrikantov JSC developed solutions for high-performance LNG pumps.



SHIPBUILDING

The expertise and competences of the Division's enterprises enable the Company to follow the strictest quality standards. Atomenergomash JSC's enterprises are the Russian market's leaders in design and production of reactor plants for navy and nuclear ice-breaking fleet. Today, the Division produces not only auxiliary equipment but also power systems for the shipbuilding industry. The elaborate value chain—from a metal blank to end product—lets the Division cover a wide range of customer demands.

One of the key shipbuilding-related events in 2018 was the manufacturing and shipment

of RITM-200 reactor system for the second serial-production universal nuclear-power icebreaker.

In 2018, the Company largely expanded its presence in terms of supplying equipment for shipbuilding companies of Russia, specifically marine equipment not related to power reactor systems.

In 2018, pursuant to the import substitution program, the Company will prioritize introducing new types of supplied equipment, expanding the product range, and increasing the share of products manufactured at the Division's enterprises.



SPECIAL STEELS

This business line concerns production and R&D assets of the Division specified in design of new construction materials and technologies and in production of special cast and forged individual and small-batch products for the power industry (wind, stem, hydraulic, and nuclear), shipbuilding, metallurgy, and general power engineering of CIS and EU.

A traditional objective of the Company in 2018 was expansion of the presence not only in the nuclear power industry, but also in

non-nuclear segments—through cooperating with major Russian and international companies and concluding new contracts:

- EMSS PJSC was accredited as the forging supplier for General Electric (GE). The enterprise received the corresponding order for producing forgings for GE.
- New main circulating pump body made of 10GN2MFA steel is being qualified.

Efficient international cooperation and close interaction with global leaders contribute to the enhancement of the Company's positions.

GENERAL ELECTRIC

In December 2018, EMSS PJSC successfully passed the audit of GE.

Within the visit to Kramatorsk participants of the GE delegation inspected the entire process chain—from smelting and casting to machining of blanks and ultrasound control.

GE representatives also reviewed the technological and design documentation, verified the QMS

conformity to international standards and requirements. Blank production and control inspection was conducted for production of the high-pressure cylinder rotor. This is GE's first nuclear order at EMSS PJSC.

Foreign delegates highly appraised the equipment and automation level, staff productivity, innovative technologies, and product quality.

BELLELI ENERGY CPE SRL

In May 2018, at Atomexpo in Sochi, Russia, the Company signed an agreement with Italian company Belleli Energy CPE Srl for establishing technological partnership and forming the integrated offer for the gas and petrochemicals industry. This partnership

will allow balancing the load that facilities of Atom-mash, branch of AEM-Technologies will face during completing the nuclear order. With that, the order terms will shrink, prime cost will be reduced, and the revenue will be gained in full.

GE DIGITAL

In May 2018, in the framework of the 10th International Forum Atomexpo 2018, the company signed an agreement with GE Digital concerning implementation of digital technologies at production sites of the Division's enterprises. Atomenergomash

JSC and GE plan to develop the strategic partnership in the field of integrating digital technologies into the production to enhance the production efficiency, develop remote maintenance of equipment, optimize the processes, and reduce costs.

ELECTRICITE DE FRANCE

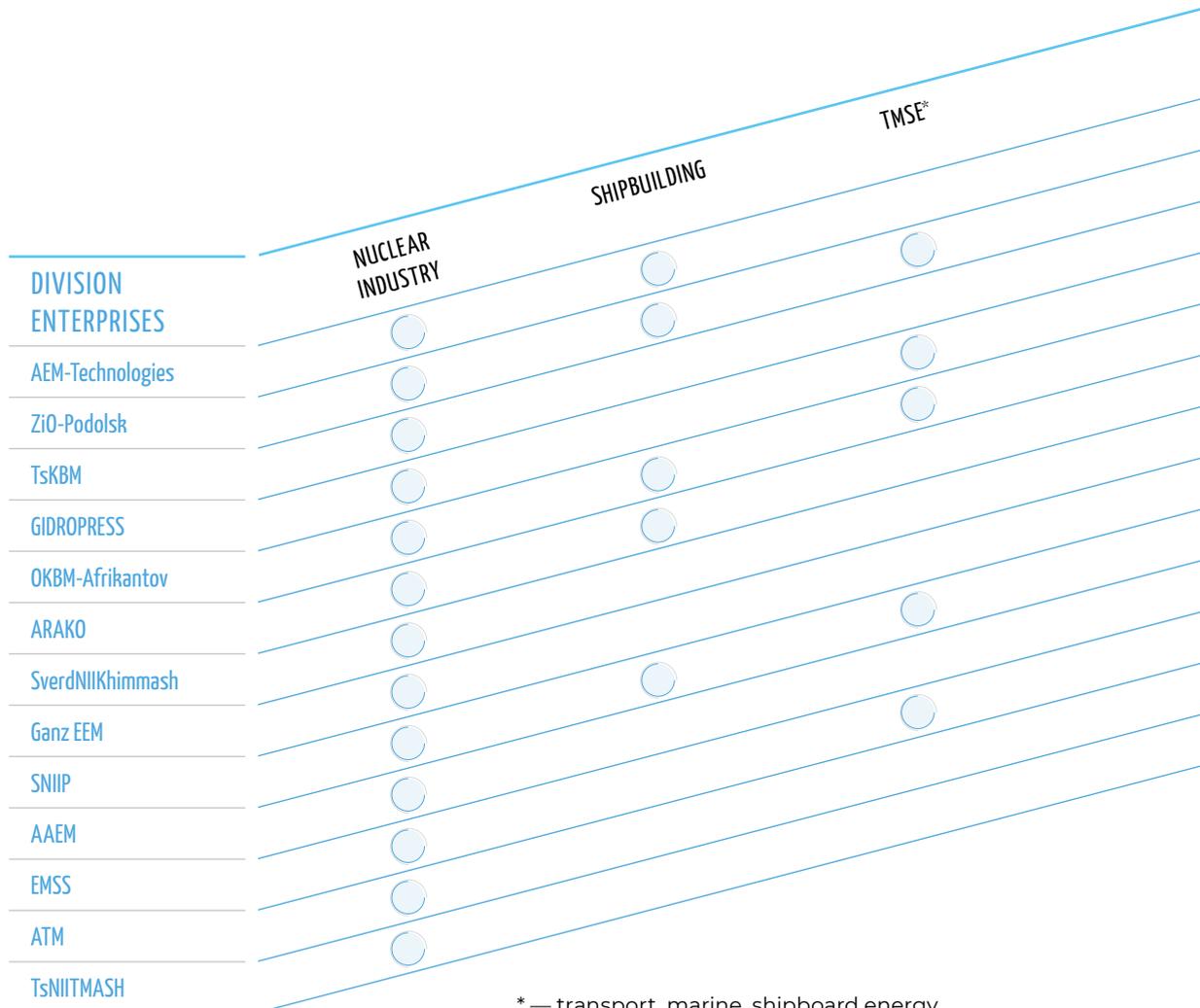
Following the results of the qualification project, EDF confirmed the ability of the Divisions's enterprises (Atomash, branch of AEM-Technologies, EMSS PJSC, NPO TSNIIT-MASH JSC, OKB GIDROPRESS JSC) to design and produce the Grade 1 ESPN equipment in compliance with French rules and standards.

As a result of implementing the pilot project with EDF, Rosatom's enterprises were successfully accredited as qualified suppliers: this status enables them to participate in open tenders for supply of products to French NPPs.

CHINA NUCLEAR NATIONAL CORPORATION

In November 2018, OKBM-Afrikantov JSC and enterprises of China Nuclear National Corporation (CNNC) signed additional contracts concerning realization of the project of fast-neutron demonstration reactor CFR600 implying supply of equipment and rendering of services, provision of the license granting rights to use software, and conduction of the documentation inspection.

The agreement preparation was performed as per the Strategic Agreement Package signed on June 8, 2018 in Beijing. This Package stipulated cornerstone principles and lines of developing cooperation between Russia and China in the nuclear industry for the next decades.



* — transport, marine, shipboard energy

ATOMENERGOMASH JSC IS ONE OF THE LARGEST POWER ENGINEERING HOLDINGS IN RUSSIA, OFFERING A FULL RANGE OF SOLUTIONS IN THE FIELD OF DESIGN, PRODUCTION AND DELIVERY OF EQUIPMENT FOR NUCLEAR AND THERMAL POWER, GAS AND PETROCHEMICAL, SHIPBUILDING AND SPECIAL STEELS INDUSTRIES.

THE DIVISION INCORPORATES THE BIGGEST POWER ENGINEERING COMPANIES, INCLUDING PRODUCTION, RESEARCH AND ENGINEERING ORGANIZATIONS IN RUSSIA, EUROPE AND CIS.

SPECIALIZATION OF THE DIVISION'S ENTERPRISES

THERMAL
POWER

GAS AND
PETROCHEMICALS

SPECIAL STEELS

GENERAL ENGINEERING

RAW/SNF**

To ensure the economic stability and increase the Division's competitive positions in key power markets, business lines consolidating enterprises by key product segment were established.

** — radioactive waste /spent nuclear fuel

1.3. BUSINESS STRATEGY⁶

The features of today's power engineering market are long cycle, high capital intensity, and performance. What affects the world's power engineering market is global power industry growth trends (higher power efficiency, implementation of environmental programs, etc.), and dynamics in introducing new generating facilities.

Estimates show that in 2018, the global power engineering market—considering equipment put into operation and the volume of the modernized facilities—gained 10.4% and amounted to some 571 GW. By type of power equipment, the market breakdown looks as follows: the heaviest share (57.4%) is held by equipment for enhancing capacity of unconventional renewable power energy sources, 33.8% by thermal power industry equipment, 6.5% by hydraulic power industry equipment, and 2.3% by nuclear power industry equipment. According to analysts, should these growth paces sustain, the global market of the power equipment annually put into operation may almost double by 2035 and come to some 987 GW.

The breakdown of equipment already in operation appears to be as follows: 63.2% are held by thermal power industry equipment, 19.6% by hydraulic power industry equipment, 6.2% by nuclear power industry equipment, and 11% by renewable energy sources.

Following the 2040 global power industry forecast, no significant changes in breakdown by energy type are expected: hydrocarbons will remain dominant. In the upcoming years, the power engineering market structure will be preserved, with the highest

share held by thermal power equipment. If the share of the nuclear power equipment put into operation is increased by 2-3% (considering the faster growth of other types), its share may come to 8-9% by 2040.

Russian power engineering equipment market hinges on the global power machine engineering market situation. In 2018, Russian market gained 20.3% and amounted to 23.1 GW, mostly due to the increase in production of central-heating boilers (for hot water or low-pressure steam supply) by 37% in 2018, totaling 19.8 GW. With that, other market segments demonstrated a slide. The volume of production of hydraulic turbines and waterwheels decreased by 68.9% to 628 MW, while the volume of production of gas turbines (except for jet and turboprop turbines) lost 12.8% and fell to the level of 634 MW. Meanwhile, steam turbine production scope gained 1.3% which somewhat compensated the drop.

Atomenergomash JSC gradually implements the 2030 Power Engineering Division Growth Strategy implying transforming the Company into the high-end diversified holding having solid market positioning and able to grow sustainably in the long run.

⁶ Forecast is based on Industrial Marketing Research Group's study Power Machine Engineering Market 2019.

⁷ Key fixed-capital risks are given in Appendix 12 to the Interactive Report.

ATOMENERGOMASH JSC STRATEGIC GOALS

AEM Vision	Single-source manufacturer of essential NPP equipment	Key player with strong positions in related product markets	Efficient manufacturer and provider of competitive solutions	
AEM's Strategic Goals (horizon – 2030)	<p>To provide deliveries for new Rosatom NPP units construction in Russia and abroad</p> <p>Share of market of essential NPP equipment at least</p> <p>50%</p>	<p>To become a stakeholder in adjacent non-nuclear markets</p> <p>Share of revenue outside the State Corporation contour at least</p> <p>50%</p>	<p>To become a stakeholder in the global power equipment market</p> <p>Revenue from foreign operations at least</p> <p>30%</p>	<p>To increase effectiveness</p> <p>EBITDA margin at least</p> <p>20%</p> <p>Labor productivity at the average level of global PPI companies or better</p>

Matching the Division's tasks with the goals of Rosatom State Corporation



TO INCREASE INTERNATIONAL MARKET SHARE



TO REDUCE PRODUCTION COSTS AND THE LEAD TIME



TO DEVELOP NEW PRODUCTS FOR THE RUSSIAN AND INTERNATIONAL MARKETS

2018 contribution

33.9%

SHARE IN RUSSIAN POWER EQUIPMENT MARKET

45%

SHARE OF REVENUE FROM NEW BUSINESSES

16%

SHARE OF REVENUE FROM FOREIGN OPERATIONS

16%

EBITDA MARGIN

4.2 million rubles/person

LABOUR EFFICIENCY

1.4. BUSINESS MODEL

The value chain – from resources consumed to finished products and major sales channels – lays the basis for the public business model of Atomen-ergomash JSC. The business model presented in the Report also reflects the value created in the reporting value (fixed capital additions) for the Company (in terms of strategic goals) and for stakeholders (in terms of their demands). This enables the Division to maintain the leadership and competitive strength over the long haul.



OPERATING ACTIVITIES

Structure of combined revenue in the reporting year for operational segments, bln RUB



¹⁰ Key fixed-capital risks are given in Appendix 12 to the Interactive Report.

MISSION

TO ESTABLISH AND DEVELOP GLOBALLY COMPETITIVE PROCESS SOLUTIONS FOR THE POWER INDUSTRY IN ORDER TO MAINTAIN A COMFORTABLE LIFE FOR PEOPLE AND TO ACHIEVE GROWTH IN THE COMPANY'S BUSINESS PERFORMANCE

VALUE CREATION FOR STAKEHOLDERS



Natural capital

Energy saving - 554.8 thousand g/j
(Savings increased > 2 times per year)



Social capital

Paid to the budget (charged): RUB 5.3 billion
Charity expenses: RUB 10.3 million

VALUE CREATION FOR THE COMPANY:



Personnel Composition

Increase in the staff efficiency level and development of staff capacity

8.1 %

GROWTH OF AVERAGE SALARY

5.9 %

GROWTH OF LABOR PRODUCTIVITY IN 2018



Financial and economic status

Ensuring economic efficiency and sustainability

141 RUB mln

INCOME FROM NON-CORE ASSET DISPOSAL

3.4 %

INCREASE IN REVENUE FOR NEW BUSINESSES



Infrastructure

Increasing the efficiency and flexibility of production capacity

498.2 RUB mln

EFFECT OF THE RPS

4.0 RUB bln

VOLUME OF INVESTMENTS MADE



Technologies

Ensuring product competitiveness and technological leadership

108

PATENTS AND IPR CERTIFICATES OBTAINED

225

NUMBER OF SCIENTIFIC PUBLICATIONS

4.5 bln RUB

6 %

Other segments

3.6 bln RUB

5 %

Special Steels

Special cast steels and forged products

2.5 bln RUB

4 %

General Engineering

Special-purpose equipment and components for heavy machinery

2.6 bln RUB

3 %

Thermal Power

Boiler and auxiliary equipment for thermal power industry

2 bln RUB

3 %

Gas and Petrochemical Industry

Gas and oil processing equipment for refineries and marine platforms

1.2 bln RUB

2 %

RAW / SNF

Equipment for RAW/SNF storage, transportation and reprocessing

SUPPLY CHAIN FOR THE NUCLEAR POWER BUSINESS LINE

01



RESEARCH EFFORTS

- FUNDAMENTAL AND APPLIED RESEARCH
- DEVELOPMENT OF NEW MATERIALS AND PROCESSES
- PROTOTYPING AND TESTING

— JSC TsNMTTMASH — JSC SverdNIIkhim mash

02



DESIGN AND ENGINEERING

- DEVELOPMENT OF REACTOR EQUIPMENT FOR ALL RUSSIAN NPPS
- REACTOR SYSTEMS FOR THE NUCLEAR-POWERED ICEBREAKING FLEET
- PERSPECTIVE STUDIES IN THE FIELD OF PRODUCTION OF REACTOR SYSTEMS FOR MEDIUM- AND LOW-POWER NUCLEAR POWER PLANTS

— GIDROPRES — ZIOMAR
— Afrikantov OKBM — AEM- Technologies

03



METALLURGICAL BILLETS AND SPECIAL STEELS

- MANUFACTURE OF METALLURGICAL BILLETS FOR NUCLEAR, POWER AND OTHER INDUSTRIES
- CREATION OF NEW CONSTRUCTION MATERIALS
- DESIGNING AND MANUFACTURING OF NON-STANDARD EQUIPMENT

— EMSS — TSNIITMASH
— Petrozavodskmash,
branch of AEM-Technologies

04



EQUIPMENT MANUFACTURE

- MANUFACTURE OF EQUIPMENT OF THE NUCLEAR ISLAND AND THE TURBINE ISLAND
- MANUFACTURE OF AUXILIARY NPP EQUIPMENT
- UNIQUE PROCESS AND PRODUCTION CONCEPTS

— GIDROPRESS — Atommash, branch
— Afrikantov OKBM of AEM-Technologies
— ZIOMAR

The Company's unique manufacturing capabilities enable it to offer the customers the main NPP equipment compliant with the strictest requirements. Equipment production quality and terms are accurately observed thanks to the flawless process chain and

close cooperation between the enterprises. High-grade vertical integration lets Atomenergomash JSC participate in Rosatom's projects on realizing the full NPP process cycle.

05



PACKAGED DELIVERY

— NSGP EQUIPMENT

— TURBINE ISLAND EQUIPMENT

— MARINE AND SHIPBOARD REACTOR PLANTS

COMPLETE EQUIPMENT SUPPLIER:

- AEM

COMPLETE EQUIPMENT SUPPLIER:

- AEM, AAEM

COMPLETE EQUIPMENT SUPPLIER:

- OKBM

SUBSUPPLIER:

- AEM-Technologies (RS equipment, steam generator, pressurizer, MCP etc.)
- TSKBM (RCPS etc.)
- ZiO-Podolsk (pipelines)
- Gidropress (CPS)

SUBSUPPLIER:

- Ganz EEM (condensate pumps)
- ARAKO (pipe fittings)
- ATM (VWHS** supplier)
- ZiO-Podolsk (heat exchangers)
- TSKBM (starting pumps, feedwater)

SUBSUPPLIER:

- Venta
- AEM

06



CUSTOMERS

— DELIVERY OF EQUIPMENT FOR POWER UNITS UNDER CONSTRUCTION AND COMMISSIONED POWER UNITS

— MAINTENANCE AND SUPPORT OF THE DELIVERED EQUIPMENT THROUGHOUT ITS LIFE CYCLE

— DELIVERY OF EQUIPMENT FOR RESEARCH REACTORS

— DELIVERY OF EQUIPMENT FOR THE NUCLEAR-POWERED FLEET

- ASE Group (foreign NPPs)

- Foreign energy holdings and corporations

- Rosenergoatom Corporate Group (domestic NPPs)

- Foreign partners and customers of ready solutions for nuclear energy

- Atomflot

- Rusatom Service

1.5. THE COMPANY'S SUSTAINABLE GROWTH

GRI 102-16

The Company considers adhering to the sustainable growth concept one of the cornerstone success-driving factors in the middle and long run. Sustainable growth principles are deeply and firmly integrated in the Company's operation and reflected in Atomenergomash JSC's mission pinpointed in the corporate strategy, namely: creation and development of global commercially-viable technological solutions for the power industry in order to maintain the high standard of people's living and attaining the Division's business goals.

Therefore, the Company tries to exercise its activities with the highest possible efficiency and transparency, respecting the envi-

ronment, ensuring safety, and supporting mutually-beneficial cooperation with all the stakeholders.

ENVIRONMENT AND OCCUPATIONAL SAFETY

GRI 102-11

The Division has always strived to take good care of the environment, sticking to environmental law, using natural resources rationally, and constantly enhancing the environmental protection practice. As the activities of any industrial organization are always tied to negative environmental impact, Atomenergomash JSC makes environmental protection of the highest priorities.

The major measures include implementing the new Environmental Policy in 2018, binding for all the Division's workers. In this regard, the key strategic goal of this policy is environment-focused growth of Atomenergomash JSC and its CCOs (control-contour organizations) with the maintenance of the

environmental safety and minimization of risks related to the use of nuclear power and exercising of other activities.

Atomenergomash JSC is aimed at following the cornerstone sustainable growth principles, thus ensuring the balance between the demands and expectations of all the stakeholders, including shareholders, employees, residents of the regions of the Company operation, counterparties, contractors, representatives of specialized ministries and governmental agencies, and mass media.

Further details of the Company's efforts in this field made in 2018 can be found on Page 67 of this Report.

OCCUPATIONAL HEALTH AND SAFETY

One of the Division's priority tasks is reducing the number of accidents and injuries. The Company fully realizes its responsibility before the employees and their families, as well as

before the society—providing the most convenient and comfortable labor conditions.

Further details on the Company's efforts in this field made in 2018 can be found on Page 77.

INTERACTION WITH LOCAL COMMUNITIES

The Division's enterprises are located in different constituents of the Russian Federation and Central Europe countries. In this regard, it is crucial for the Company to create and maintain the positive image in regions of presence and communicate with local specialists and communities.

In 2018, the Company continued cooperating with local administrations under the existing partnership agreements. Specifically,

the Company supported a range of projects within the program for developing the urban infrastructure, redevelopment, environment, and assistance for municipal administration. Besides, the Company actively supported the initiatives in sports, culture, and education last year; also, the Company interacted with public associations, implemented a series of charity projects and sponsorship campaigns.

Further details on the Company's efforts in this field made in 2018 can be found on Page 84.

02

*WE MANUFACTURE AND DELIVER
EQUIPMENT FOR ALL CONSTRUCTED
NUCLEAR PLANTS OF THE RUSSIAN
DESIGN LOCATED IN 12 COUNTRIES*



ECONOMICS AND FINANCE

70.8 BILLION RUBLES
+ 3.4 %

Combined revenue

11.3 BILLION RUBLES
+ 15.3 %

EBITDA

EBITDA margin: 16 %

14.2 BILLION RUBLES
Net profit

 SHARE OF REVENUE FROM NEW BUSINESSES **45 %**

×1.5  SHARE OF REVENUE FROM FOREIGN OPERATIONS **16 %**

 SUBSTANTIAL PART OF COMPANY'S REVENUE IS FORMED FROM
NON-NUCLEAR PRODUCTS
42 %

623.8 BILLION RUBLES
+ 37.2 %

Order portfolio

Foreign orders
in portfolio: 41 %

239.7 BILLION RUBLES
+ 35.8 %

Value of Contracts
Concluded

2.1. ECONOMIC PERFORMANCE AND FINANCIAL STANDING

Economic performance—a prosperity indicator—is one of the Company’s key indices.

In 2018, the Division’s sales revenue gained 3.4% compared to 2017 and came to 70.8 billion rubles. EBITDA gained 15.3% and reached the level of 11.3 billion rubles. The operating performance index (EBITDA profitability) came to 16%. Main drivers of the revenue growth were import substitution in terms of equipment for LNG projects, thermal power industry, and shipbuilding. With that, the most economically beneficial

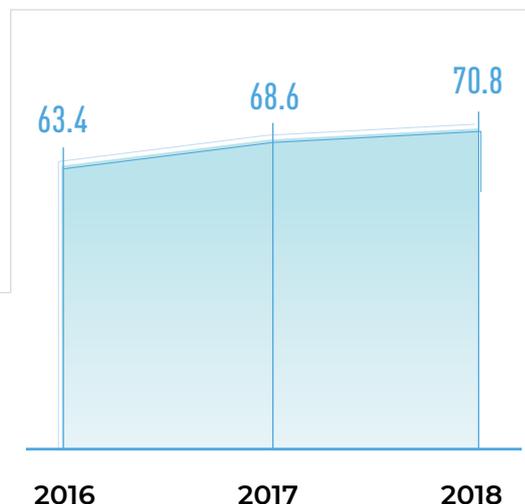
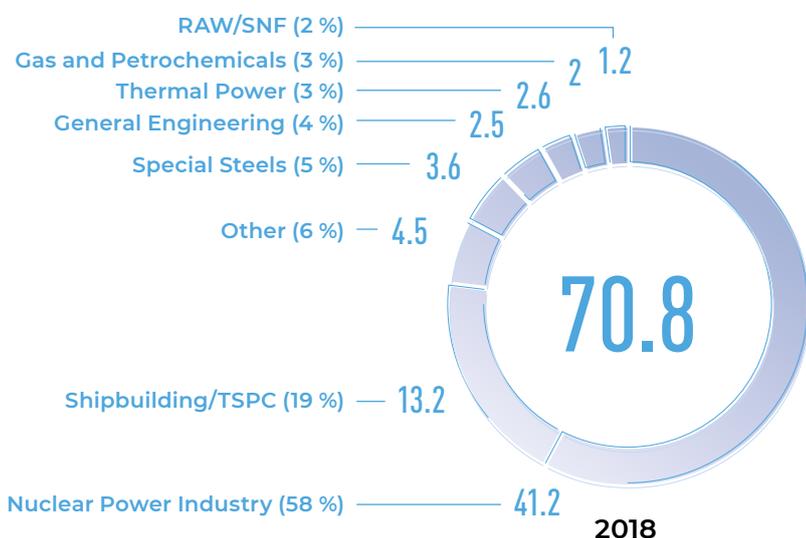
projects in new fields of activity facilitate rapid operating profit growth, ensuring the preservation of competitive strengths in the nuclear power market.

EBITDA increased by 15.3% in 2018, while the order portfolio gained 37%. The bulk of revenue (some 42%) was earned on non-nuclear manufacturing.

COMBINED REVENUE (BILLION RUBLES, %)

Index	2016	2017	2018
TOTAL (billion rubles)	63.4	68.6	70.8
New Enterprises (%)	44	45	45
Foreign Transactions (%)	12	11	16

COMBINED REVENUE BY SEGMENT (BILLION RUBLES)



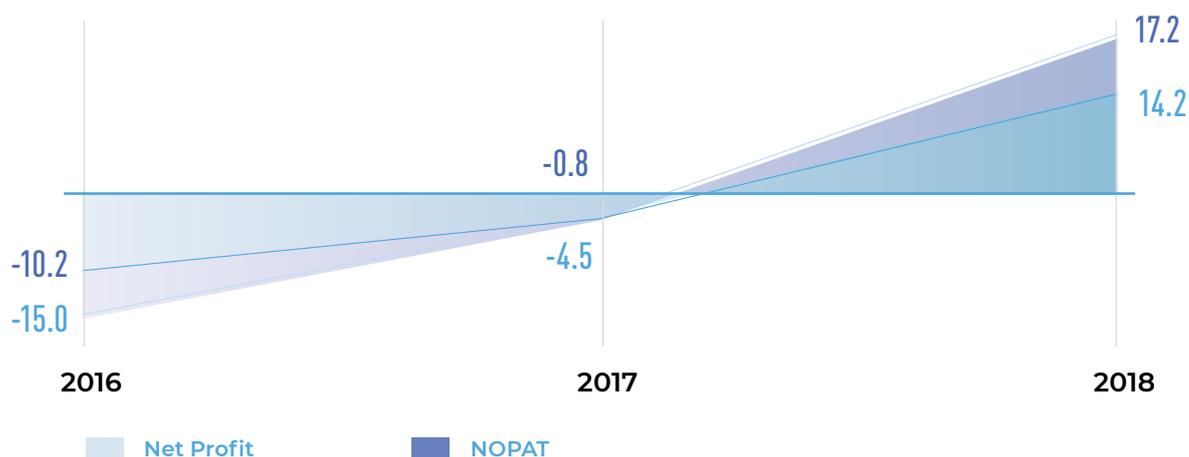
COMBINED REVENUE BY GEOGRAPHY (BILLION RUBLES)

Segment	2016	2017	2018
Russia	56.0	60.8	56.9
CIS	0.6	1.0	1.9
Foreign countries	5.8	5.4	9.6
Rusatom Service JSC	1.0	1.2	2.5
TOTAL	63.4	68.6	70.8

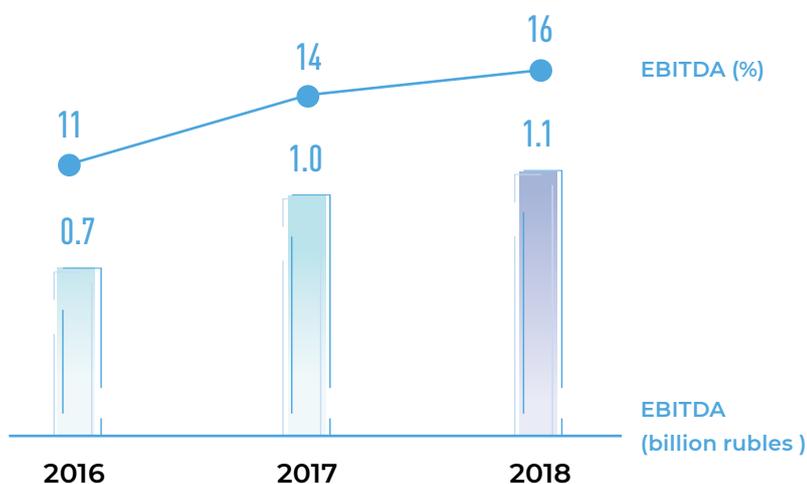
The Division's net profit gained 18.7 billion rubles in the reporting year mostly due to the growing income (+14.2 billion rubles against

2017) from currency rate fluctuations. NOPAT increase is directly tied to the net profit growth in 2018.

NET PROFIT (BILLION RUBLES)

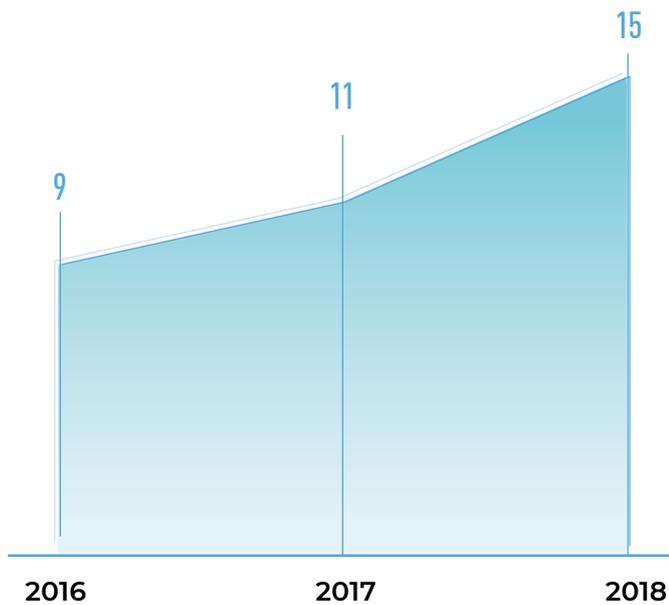


EBITDA AND EBITDA PROFITABILITY (BILLION RUBLES / %)

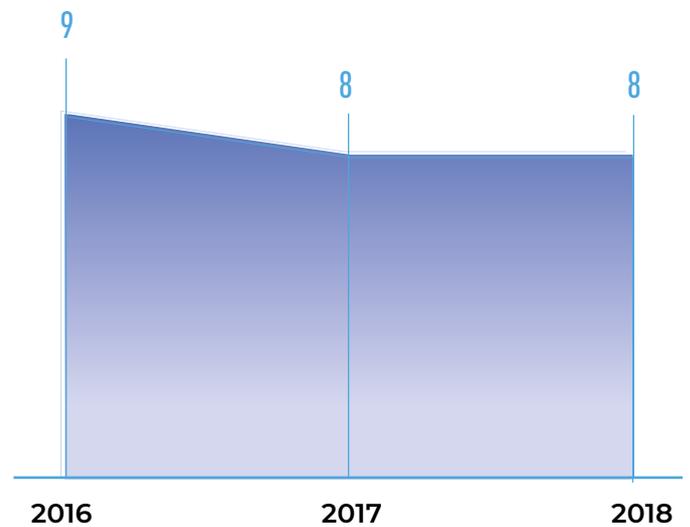


Increase in the Division's operating margin was induced by the revenue and expenses dynamics in the reporting years.

OPERATING MARGIN (%)



SHARE OF MANAGEMENT EXPENSES IN REVENUE (%)



141

MILLION RUBLES

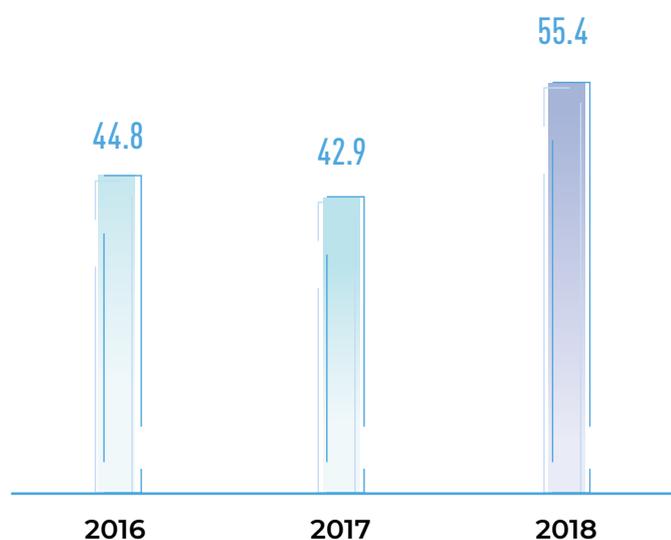
THE DIVISION EARNED IN 2018 FROM RESTRUCTURING OF NON-CORE ASSETS

In 2018, the current ratio came to 2, demonstrating 0.23% growth compared to 2017. The reason for that was the reduction of short-term liabilities of Atomenergomash JSC by 4% and growth of current assets by 8%.

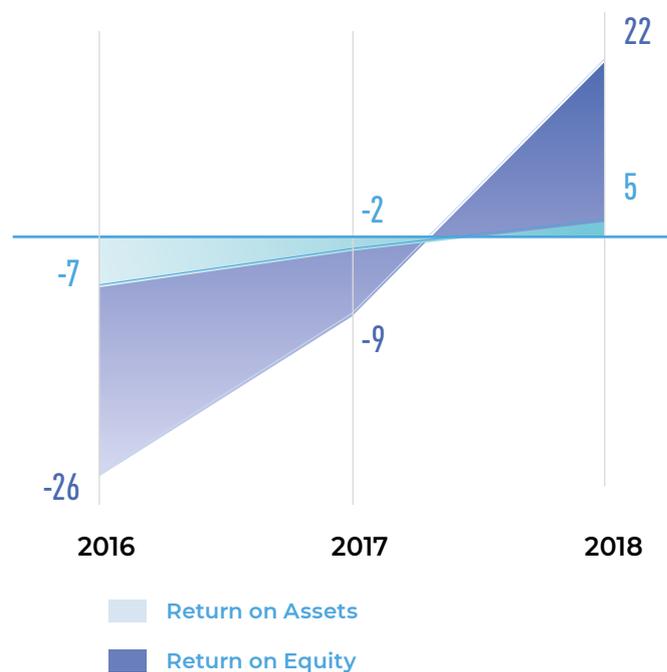
A decrease in the debt-to-equity ratio in 2018 was linked to the equity growth by 28% while the debt capital gained only 6%. With that, equity growth was preconditioned by net profit and change in the consolidation perimeter in 2018.

An increase in the receivables-to-payables ratio in the reporting year was due to the 8% growth of the receivables while the payables gained only 7% compared to 2017.

NET ASSETS EXCESS OVER EQUITY (COMBINED REPORTING, MILLION RUBLES)



INDEX (COMBINED REPORTING) (%)

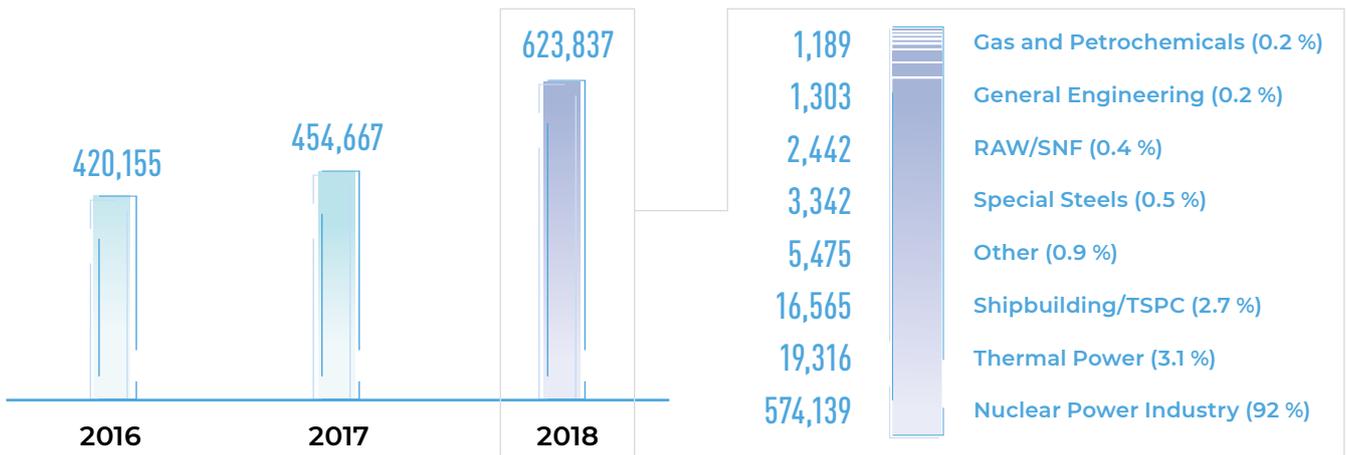


The reason for the positive dynamics in ROE and ROA in 2018 is the growth of the net profits against 2017 figures.

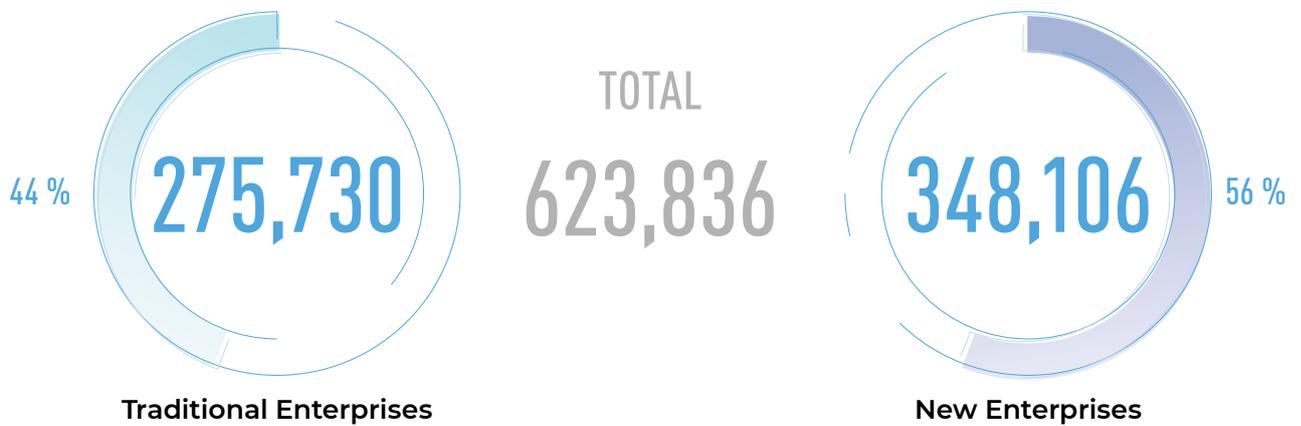
2.2. COMMERCIAL ACTIVITY

The Company's commercial activity is aimed at expanding the order portfolio both in nuclear and related industries. The Company has the balanced and sustainable order portfolio that includes perspective contracts for new businesses and foreign projects, which guarantees the full-fledged load for the upcoming years.

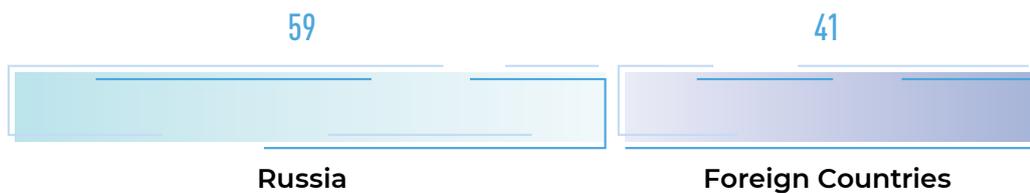
ORDER PORTFOLIO BY INDUSTRY (YEAR-END, MILLION RUBLES, %)



ORDER PORTFOLIO BY ENTERPRISE TYPE (MILLION RUBLES, %)



ORDER PORTFOLIO BY GEOGRAPHY (YEAR-END, %)



2.3. INVESTMENT ACTIVITIES

Investment activities in the Company are primarily focused on ensuring the Company's growth, including:

- Manufacturing of new products
- Modernization of existing facilities
- Production efficiency enhancement

The Company's top-priority projects are related to implementation of the Roadmap for Constructing NPP in Russia and Foreign Countries, and fulfillment of undertakings in terms of supplying non-nuclear equipment (major enterprises are AEM-Technologies JSC, TsKBM JSC, OKB GIDROPRESS JSC, ZiO-Podolsk PJSC).

When exercising investment activities, Atomenergomash JSC is guided by Rosatom's regulatory documents concerning investment activities and capital investments management, resolutions of Rosatom's Investment Committee, Atomenergomash JSC Investment Activity Procedure, and resolutions of Atomenergomash JSC's Investment Committee.

To enable the projects to attain the targets at the investment phase, the Company adopted the following performance indicators:

- 1) Integral investment efficiency index, composed of three constituents:
 - Portfolio profitability plan/forecast
 - Milestone schedule compliance
 - EBITDA and revenue milestone completion
- 2) Project management system maturity.

The following projects made a great positive contribution to investment activities in 2018:

- AEM-Technologies JSC's "Production Engineering for NPPs and Gas and Petrochemistry"
- TsKBM JSC's "Replenishment and Modernization of TsKBM JSC's Production Facilities"

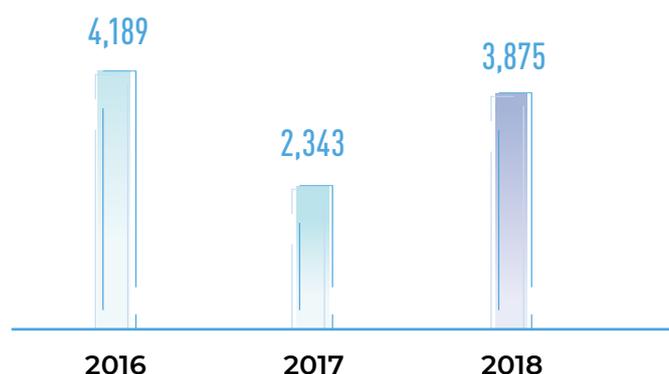
Efficiency fall and failure to complete EBITDA and revenue objectives in the following projects had the negative impact:

- ZiO-Podolsk PJSC's "Enhancing Power to Complete General Engineering Production Plan"
- AEM-Technologies JSC's "Establishing the High-Tech Production of Slide and Wedge-Type Stamp-Welded Valves"
- ZiO-Podolsk PJSC's "Production of Equipment for Waste Incineration Plants"

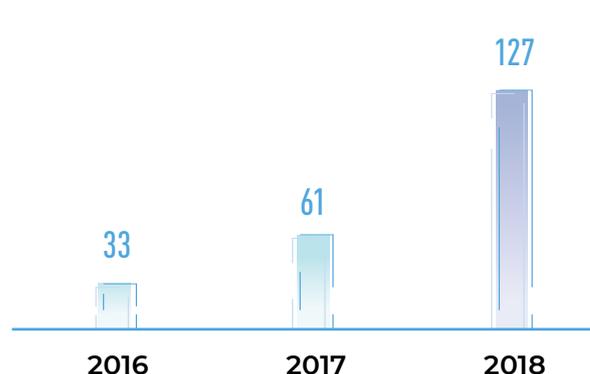
IN THE REPORTING YEAR,
THE INVESTMENT PROGRAM
FUNDING AMOUNTED TO

4,002
million rubles

INVESTMENT VOLUME BY CCO IN RUSSIA
(MILLION RUBLES)



INVESTMENT VOLUME BY CCO BEYOND
RUSSIA (MILLION RUBLES)



03

ATOMENERGOMASH'S ADVANTAGE IS IN THE CAPABILITY TO IMPLEMENT A FULL WORK CYCLE - FROM ENGINEERING TO DELIVERY AND MAINTENANCE OF EQUIPMENT FOR NUCLEAR AND HEAT POWER PLANTS, FOR GAS AND PETROCHEMISTRY



PRODUCTION ACTIVITY

TIMELY SUPPLY OF HIGHEST QUALITY EQUIPMENT
IS THE PINNACLE OF ATOMENERGOMASH'S LEADERSHIP

EQUIPMENT SUPPLY TIMELINESS AS
THE KEY PRODUCTION PERFORMANCE INDICATOR: **94.1 %**

PRODUCTS PASSED CUSTOMER INPUT
QUALITY INSPECTION ON THE FIRST TRY: **98.7 %**

498.2 — ECONOMIC EFFECT FROM PERFORMANCE ENCHANCEMENT
MILLION RUBLES FROM 367 RPS PROJECTS REALIZATION IN 2018



NUCLEAR INDUSTRY

IN 2018, THE DIVISION'S ENTERPRISES SHIPPED PRODUCTS TO 7 NPP UNITS: BALTIC NPP, KALININGRAD NPP, KOLA NPP, LENINGRAD NPP, INCLUDING 3 FOREIGN NPPs: BELARUSIAN NPP, KUDANKULAM NPP (UNITS 3, 4), RUPPUR NPP.



GAS AND PETROCHEMICALS

THE DIVISION SUPPLIED EQUIPMENT FOR THE KOGALYMNEFTEGAZ OIL PRODUCTION PLANT, FOR CONSTRUCTION OF THE OIL PROCESSING PLANT IN NIZHNEKAMSK (TATARSTAN, RUSSIA) and FOR YAMAL LNG.

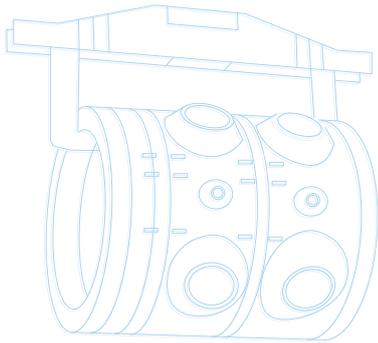


SPECIAL STEELS

PRODUCTS MANUFACTURED AND SHIPPED TO RUSSIA'S AND CIS' LEADING METAL PRODUCTION PLANTS, TO ARCELORMITTAL GROUP'S ENTERPRISES and CHINESE ENTERPRISES (JIANGSU SHAGANG INT., ANYANG).

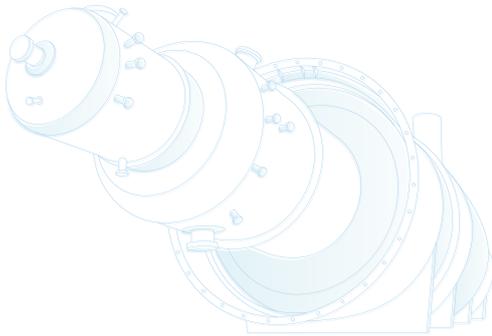
3.1. PRODUCTION ACTIVITY RESULTS

The key production performance indicator is equipment supply timeliness: in 2018 this goal was completed at 94.1%.



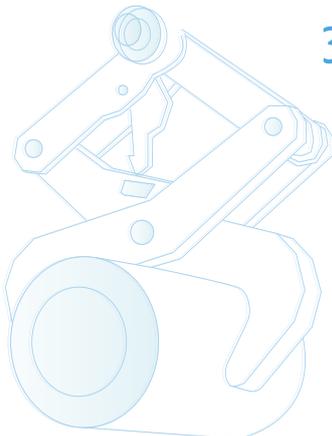
1) NUCLEAR INDUSTRY

IN 2018, THE DIVISION'S ENTERPRISES SHIPPED PRODUCTS TO 7 NPP UNITS (INCLUDING 3 FOREIGN): BALTIC NPP, KALININGRAD NPP, BELARUSIAN NPP, KOLA NPP, LENINGRAD NPP, KUDANKULAM NPP (THIRD AND FOURTH UNITS), RUPPUR NPP.



2) GAS AND PETROCHEMICALS

- EQUIPMENT SUPPLY FROM ZIO-PODOLSK PJSC, ATOMMASH, BRANCH OF AEM-TECHNOLOGIES TO RUSSIA'S LARGEST POWER COMPANIES:
 - FOR MODERNIZATION OF THE OIL PRODUCTION PLANT KOGALYMNEFTEGAZ
 - FOR CONSTRUCTION OF THE OIL PROCESSING PLANT IN NIZHNEKAMSK, TATARSTAN, RUSSIA
- EQUIPMENT SUPPLY FROM OKBM-AFRIKANTOV JSC FOR YAMAL LNG.



3) SPECIAL STEELS

- PRODUCTS MANUFACTURED AND SHIPPED TO RUSSIA'S AND CIS' LEADING METAL PRODUCTION PLANTS.
- TURNING AND BACKUP ROLLS MANUFACTURED AND SHIPPED TO ARCELORMITTAL GROUP'S ENTERPRISES.
- PRODUCTS SHIPPED TO CHINESE ENTERPRISES (JIANGSU SHAGANG INT., ANYANG).

3.2. QUALITY AND OCCUPATIONAL SAFETY

Quality and safety are strategic imperatives in the field of using nuclear power. Using this type of energy by the global community and perspectives of nuclear power as the method for satisfying energy demands of the human-kind hinge on the safety level.

GRI 416-1

Growing requirements regarding safety of constructed and operating nuclear facilities put special product quality commitments on the Division's enterprises; thus, safety assessment becomes the integral part of manufacturing of all product types.

The quality of CCO-manufactured products is ensured by the designed and certified quality management system adopted by CCOs in compliance with ISO 9001.

ENTERPRISES CERTIFIED TO ISO 9001

Company Name	Certification System
Atomenergomash JSC	IQNet (Russky Registr, Saint Petersburg)
AEM-Technologies JSC	IQNet (Russky Registr, Saint Petersburg)
NPO TSNIITMASH JSC	TÜV Rheinland Cert
OKBM-Afrikantov JSC	TÜV Thüringen
SverdNIKhimmash JSC	IQNet (Russky Registr, Saint Petersburg)
SNIIP JSC	TÜV CERT
TsKBM JSC	IQNet (Test-S. Petersburg LLC)
OKB GIDROPRESS JSC	DQS GmbH (Germany)
ATM JSC	AFNOR Certification,
AAEM LLC	IQNet (Russky Registr, Saint Petersburg)
ZiO-Podolsk PJSC	Lloyd's Register Quality Assurance
EMSS PJSC	TÜV Thüringen
Ganz EEM	EMT CJSC (NQA representative in Hungary)
ARAKO	TÜV ZUD

In the reporting year, the Company ensured the required quality level of equipment manufactured for constructed and operating NPPs (based on first-try input quality inspection).

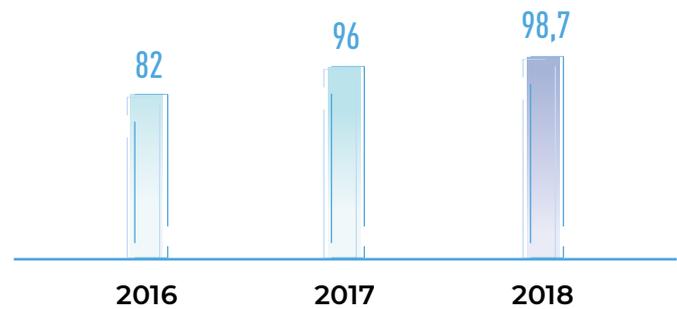
In 2018, Atomenergomash JSC made several efforts aimed at supporting and develop-

ing the safety culture both in the Company and CCOs:

- Safety culture-related measures were taken pursuant to the plan approved on January 29, 2018 by the First Deputy CEO – Business Operations Director.

- Quality Assurance Department specialists participated in international events organized by the customer and owner of Hanhikivi-1 NPP.
- 4 safety culture workshops were held by Rosatom's Power Engineering Division.
- The internal safety culture audit was conducted jointly with the Atomenergomash JSC management system audit; no safety culture deviations were found.
- Atomenergomash JSC specialists participating in international projects were made aware of the safety culture basics.
- The safety culture monitoring system was implemented to control the employee safety culture across the Atomenergomash JSC's CCOs.
- The procedure for safety culture training of Atomenergomash JSC's employees was put into effect (Order No. 33/383-P dd. August 29, 2018 "On organizing safety culture training of Atomenergomash JSC's employees").

PRODUCTS PASSED CUSTOMER INPUT QUALITY INSPECTION ON THE FIRST TRY (%)



- Event "Safety-Educated Children" was held, aimed at ensuring the involvement of Atomenergomash JSC's employees and employees of Atomenergomash JSC's CCOs in safety-related issues.

3.3. PROCESS OPTIMIZATION

The implementation of the production system of Rosatom (RPS) is an industry project aimed at the creation of a universal system for complex optimization management for the production and management processes at the enterprises of Rosatom State Corporation based on the best examples of domestic and foreign experience.

The main regulatory documents for RPS implementation are the Charter of the project "Complex Optimization of Nuclear Industry Enterprises" and RPS guidelines designed by Rosatom.

In the reporting year, the enhancement of the Division's performance with the use of RPS instruments was continued. Totally, 367 RPS projects were realized, 1,670 improvement suggestions were implemented. The overall economic effect amounted to 498.2 million rubles.

In 2018, the RPS Division's leading enterprises (OKBM-Afrikantov JSC, ZiO-Podolsk PJSC, TsKBM JSC, OKB GIDROPRESS JSC, Atommash, branch of AEM-Technologies) adopted 8 best global practice-compliant main production flows and trained employees on RPS basics (3,337 people/courses).

Besides, the Company develops its suppliers and participates in the program for enhancing productivity and supporting employment of Russian residents. In 2018, the Division's employees trained 213 employees of third-party organizations .

In 2017, ZiO-Podolsk PJSC established the Division's first Rosatom Process Factory—a training platform where trainees meet each other, get practical experience of using RPS instrument, and learn how they affect the operating performance. In the reporting year, OKBM-Afrikantov JSC established and launched a similar platform. In total for 2018, 289 people were trained at ZiO-Podolsk PJSC's center and 60 at OKBM-Afrikantov JSC's center.

3.4. PROCUREMENTS

Atomenergomash JSC carries out procurement activities according to Federal Law No. 223-FZ dd. July 18, 2011 “On Procurement of Goods, Works, Services by Individual Types of Legal Entities”, Federal Law No. 135-FZ of June 26, 2006 “On Protection of Competition” and the Unified Industry Procurement Standard¹².

In 2018, the annual procurement program of Atomenergomash JSC amounted to 160 billion rubles, while the economic effect reached some 3.5 billion rubles. The number of tenders increased by 1.3 times in 2018 (by 734 tenders) against 2017. Procurement timeliness rate came to 98%.

GRI 102-9, 102-10

The government's and industry's procurement policy aimed at forming market-feasible prices, encouraging fair competition, and combating corruption, does not allow international supply chain management methods. Suppliers of special products and services are selected by means of tenders (except for cases stipulated in the Standard).

¹² Suppliers of the Machine Engineering Division, and participant organizations of the program for enhancing enhancing productivity and supporting employment of Russian residents.

This means no long-term relations are established with suppliers. Besides, tender parties are not subject to any special requirements that may lead to limitation of the number of tender parties or violation of Russian anti-monopoly law.

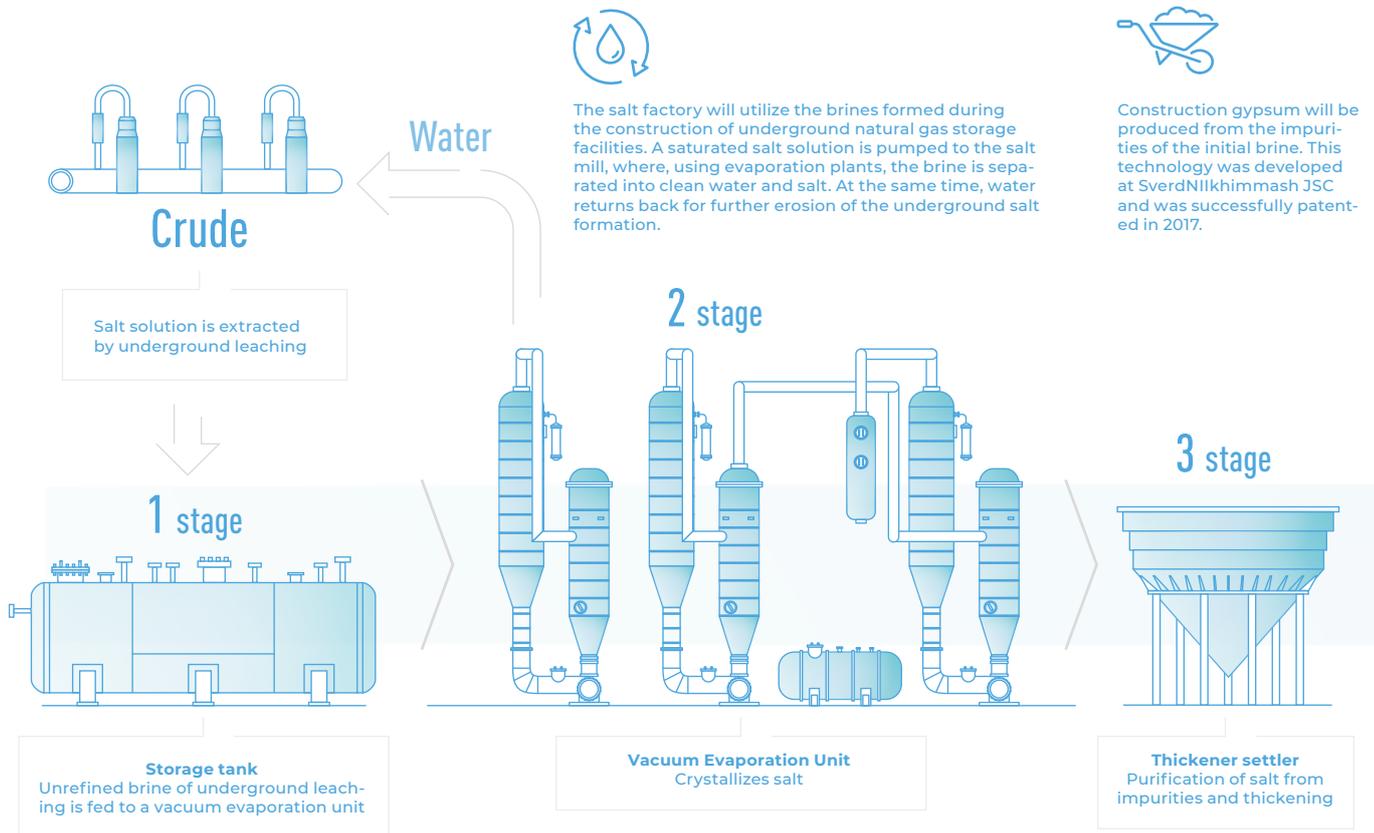
One of the instruments for ensuring the public control of procurements is the opportunity to appeal against the procurement organizer's resolution at any time. To develop this instrument, the dedicated KPI¹⁰ was developed for the Division's enterprises:

share of grounded or partially grounded complaints on the procurement organizer's actions. In 2018, this index came to 18 complaints (12 in 2017)—i.e. 0.2% of all procurement cases—which meets the target.

In the reporting year, the share of Atomenergomash JSC's procurements from small and medium-sized enterprises (SMEs) came to 87% of all procurements (75% in 2017).

SALT FACTORIES EQUIPMENT

The installation of the main technological equipment, evaporators, developed and supplied by SverdNIIkhimmash JSC (part of the Division), which is the first domestic developer of evaporation equipment of high productivity and has significant experience in implementing such installations, has been completed at the salt factory under construction in the Kaliningrad Region.



IN 2018, COVER AND EFFECT OF CATEGORICAL PROCUREMENTS CAME TO THE FOLLOWING FIGURES:

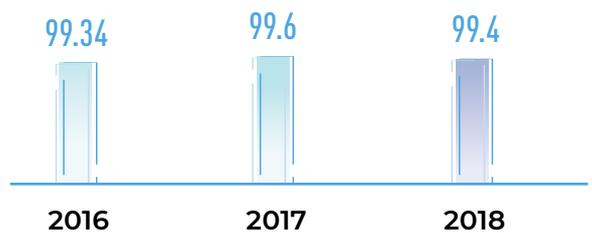
Index	2017	2018
Materials and Equipment (%)	90	91
Works and Services (%)	75	83
Effect of categorical strategies	12	9
Share of Grounded Complaints	12 (0.2 % of the overall number)	18 (0.2 % of the overall number)

GRI 204-1

The Division's enterprises involve local suppliers on common basis, which is preconditioned by the impossibility of providing any privileges (e.g. by geography). Results of 2018 show that the share of local suppliers in procurement procedures totaled 99.4%.

In the 2018, the Division was nominated for the award Tender Leader in the category Best Procurement Workflow Modernization Project.

SHARE OF RUSSIAN SUPPLIERS¹³ (%)



THE MAIN FEATURE OF THE FACTORY:

THE ABSENCE OF THE USE OF CHEMICALS FOR THE PURIFICATION OF SALT.

At the same time, in the technological process, salt will be obtained that complies with the Extra grade food grade salt standard.

Factory capacity will reach **400** thousand tonnes of salt per year



Product



The equipment is made of titanium alloys and corrosion-resistant chromium-nickel steels, which will prevent the formation of corrosion and operate it for a long period of time.



6 stage



¹³ Excluding joint ventures

04

A FLOATING NUCLEAR POWER PLANT (FNPP) WILL FULFILL THE NEED FOR ENERGY IN FAR INHABITED LOCATIONS, WILL PROMOTE STARTING NEW PRODUCTIONS AND THE DEVELOPMENT OF INFRASTRUCTURE



CORPORATE GOVERNANCE

ONE OF THE KEY PRIORITIES OF THE COMPANY'S ACTIVITIES IS FULL COMPLIANCE WITH LAWS AND ABIDANCE BY HIGH INTERNATIONAL STANDARDS AND BEST PRACTICES OF BUSINESS ETHICS.

> 700 MILLION RUBLES
Economic effect
of risk management
measures taken in 2018

**Main indicator for risk
management effectiveness**

is deviation of the adjusted free cash
flow of Atomenergomash JSC from the
planned value:

+19.7 %

Target risk preparedness value
set by Rosatom was met.

38
audits
to analyze and prevent corruption
risks were carried out by the
Atomenergomash JSC's Safety
Direction

15
inspections
to identify risks and assess efficiency of fields
and business processes were carried by the
Internal Audit Directorate

There were no remarks from
governmental agencies made
based on the process inspection
results.

4.1. CORPORATE GOVERNANCE SYSTEM

The Corporate Governance System of the Company is underpinned by Russian corporate law.

CORPORATE GOVERNANCE PRINCIPLES

The Company follows the corporate governance principles related to allocation of functions of the Company governance

bodies, interaction enhancement, prevention of conflicts of interest, and specification of responsibilities between parties.

CORPORATE GOVERNANCE PURPOSES

The key purposes of the Company's corporate governance are establishing an effective system to ensure the integrity and rational use of funds provided by shareholders, reduce risks that may not be evaluated or ac-

cepted by the shareholders: if not managed properly by the stakeholders in the long run, such risks may lead to lower investment appeal and share value of the Company.

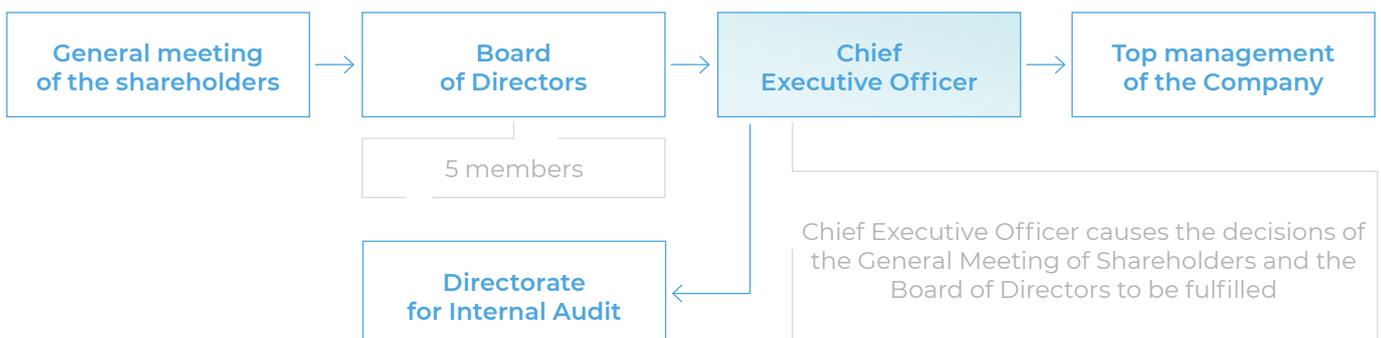
GRI 102-18

KEY GOVERNANCE BODIES

Pursuant to the Charter, the Company's governance bodies are :

- General Meeting (Sole Shareholder)
- Board of Directors
- Director General (Sole Executive Body).

ATOMENERGOMASH JSC CORPORATE GOVERNANCE DIAGRAM



¹⁴ The Company has no Audit Committee as the internal audit of activities is conducted pursuant to the internal documents and local regulations of the Company.

GRI 201-4, GRI 102-10

AUTHORIZED CAPITAL STRUCTURE

The Company's Authorized Capital consists of the par value of shares purchased by the shareholders. As of 2018, the registered amount of the Company's Authorized Capital came to 2,566,657 (two million and five hundred and sixty-six thousand and six hundred

and fifty-seven) rubles, divided into 2,566,657 (two million and five hundred and sixty-six thousand and six hundred and fifty-seven) ordinary registered shares ("shares"), each worth 1 ruble at par.

As of December 31, 2018, the placed shares were distributed as follows:

Shareholder Name	Shares, pcs.	% of All Placed Shares
Atomic Energy Power Corporation Joint-Stock Company	2,566,657	100
TOTAL	2,566,657 ordinary registered shares	100

GRI 102-26, 103-3

Throughout 2018, the Company made no transactions that are subject to approval by the authorized executive body of the Company pursuant to Chapter X of Federal Law "On joint-stock companies".

The definition of a third-party transaction is given in Chapter XI of Federal Law "On joint-stock companies". With that, Clause 3.11 of the Company's Charter stipulates that provisions of Chapter XI of Federal Law "On joint-stock companies" are not applied to the Company.

GENERAL MEETING

The powers and procedure for convening and holding the General Meeting are stipulated in the Company's Charter and Federal Law "On joint-stock companies". In 2018, three General Meetings—one annual and three off-schedule—were held.

In 2018, no dividends were paid as the General Meeting did not make any decisions on declaring and paying out dividends based on the results of 2017, nor Q1, half, or 9 months of the reporting year. The Company approved no local regulatory acts governing the dividend policy.

BOARD OF DIRECTORS

The Board of Directors in 2018 counted 5 members (the same as in 2017).

The composition of the Board of Directors was changed only once.

¹⁵ Details on major transactions and related-party transactions deals with are provided in Appendix 13 to the interactive version of the Report.

GRI 102-33, 102-34

The powers of the Board of Directors are stipulated in the Company's Charter. The meetings of the Board of Directors are convened when necessary, initiated by the Chairman or members of the Board of Directors, Chief Executive Officer, or Auditor.

The Board of Directors exercises the strategic management of the Company's activities and supervises the activities of the executive body.

In 2018, 24 meetings of the Board of Directors were held, 33 matters were discussed.

GRI 102-22

The Company has no independent—as it is defined in the Corporate Governance Code—members of the Board of Directors.

GRI 102-36, 102-18

Throughout 2018, there were no resolutions on paying rewards and/or compensations to the members of the Board of Directors: no rewards were paid, no expenses were compensated. No committees under the Board of Directors were established. Apart from the Chief Executive Officer, the Board of Director includes no members that had been the Company's full-time or part-time employees throughout the reporting year.

None of the members of the Board of Directors hold the Company's shares.

MEMBERS OF THE BOARD OF DIRECTORS¹⁶

GRI 102-23



Vladislav KOROGODIN
CHAIRMAN OF THE BOARD OF DIRECTORS

Date of Birth:
October 25, 1969

Tenure of Office:
June 30, 2015

From 2012 to present: TAC and NPP Lifecycle Management Director at Rosatom.



Ilya NIKOLSKY

Date of Birth:
October 28, 1981

Tenure of Office:
since June 29, 2018

From 2017 to present: Head of the Economic Planning and Modeling Department at Rosatom.



Boris SILIN

Date of Birth:
October 28, 1981

Tenure of Office:
since November 27, 2014

From 2010 to present: Advisor to the First Deputy Director General for Operation Management at Rosatom.



Andrey NIKIPELOV

Date of Birth:
March 7, 1968

Tenure of Office:
since June 29, 2012

From 2012 to present: Head of the Power Engineering Division at Rosatom.
From 2012 to present: Member of the Board at Rosatom.
From 2012 to present: Chief Executive Officer of Atomenergomash JSC.

¹⁶ <http://www.aem-group.ru/about/leadership/directors/sig.html>

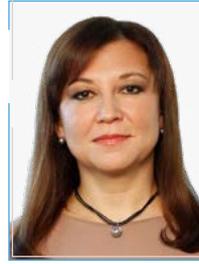


Boris ARSEEV

Date of Birth:
September 22, 1971

Tenure of Office:
since June 30, 2017

From 2016 to present: Deputy Head of the Development Section and International Business Unit – Head of the International Business Department at Rosatom.



Ekaterina LYAKHOVA

Date of Birth:
June 7, 1975

Tenure of Office:
from June 29, 2012 to June 29, 2018

From 2011 to present: Deputy Head of the Nuclear Engineering Complex Directorate, Director for Economics and Investments at Rosatom.

PRINCIPLES OF THE BOARD OF DIRECTORS' ACTIVITIES:

- The Board of Directors shall exercise strategic management of the Company's activities.
- The Board of Directors shall define the major principles and approaches in regard to establishing the Company's risk management and internal control system.
- The Board of Directors shall efficiently supervise the activities of the Company's executive body.
- The Board of Directors shall be accountable to the General Meeting.



CHIEF EXECUTIVE OFFICER

Functions and powers of the Chief Executive Officer are stipulated in the Company's Charter and exercised in compliance with Federal Law "On joint-stock companies".

The Chief Executive Officer of the Company, Andrey Vladimirovich Nikipelow, has been exercising his powers since April 17, 2012, pursuant to resolutions of the General Meetings (Minutes No. 04/12-BOCA dd. April 16, 2016 and No. 02/17-BOCA dd. April 14, 2017) . Holds no Company's shares.

GRI 102-36

The reward for the Chief Executive Officer shall be stipulated in the employment contract in compliance with Russian Law and based on the remuneration system adopted in Rosatom's affiliate organizations that considers the efficiency of fulfilling Key Performance Indicators set for the Chief Executive Officer every year.

The information regarding declared incomes, property, and property liabilities are annually published on Rosatom's official website, in Corruption Control section (in compliance with Russian law).

¹⁷ <http://www.aem-group.ru/about/leadership/management/nav.html>

GRI 102-20

SENIOR MANAGEMENT¹⁹**Andrey NIKIPELOV**

Chief Executive Officer

**Vladimir RAZIN**

First Deputy CEO

**Aleksandr RANTSEV**

First Deputy CEO

**Sergey FILATOV**

Deputy CEO

**Sergey KULESHOV**

Deputy CEO

**Yulia NIKOLAEVA**

Deputy CEO

**Vladimir SMIRNOV**Gas and Petroleum
Chemistry Director**Sergey SHATOKHIN**

Thermal Power Director

**Aleksandr SOTNIKOV**

Internal Audit Director

**Andrey SINYAKOV**Director for Procurements
and Inventory and Logistics
Management**Natalya SHIROKOVSKIKH**

Senior Accountant

¹⁹ Biography and other information regarding the Chief Executive Officer and Senior Management of the Company can be found here: <http://www.aem-group.ru/about/leadership/management/nav.html>

4.2. ETHICS AND ANTI-CORRUPTION PRACTICES

Atomenergomash JSC employs procedures ensuring compliance with anti-corruption regulations. The key functions of the Company's officers responsible for prevention of corruption and other types of misdemeanor include the following:

GRI 102-17

FUNCTIONS

1. Enforcement of observance—by Atomenergomash JSC's employees—of limitations and prohibitions, conflict of interest prevention and resolution requirements, performance of obligations stipulated in Federal Law No. 273-FZ dd. December 25, 2008 "On corruption prevention" and other federal laws (demeanor requirements).
2. Taking measures aimed at identifying and elimination of reasons and conditions for conflicts of interest
3. Enforcement of observance—by Atomenergomash JSC's employees—of demeanor requirements and resolution of conflicts of interest.
4. Providing Atomenergomash JSC's employees with advisory on matters related to use of demeanor requirements and principles, and informing the employer's representative, prosecution service of the Russian Federation, and other governmental agencies of corruption offenses, failure to provide or provision of incomplete records of income, property, and material obligations.
5. Enforcement of Atomenergomash JSC's employees' obligation to inform the employer's representative, prosecution service of the Russian Federation, and other governmental agencies, of any corruptive requests from any third parties.
6. Cultivating legal awareness of Atomenergomash JSC's employees
7. Organization and conduction of audits
8. Verifying validity and completion of records of income, property, and material obligations provided by persons pretending to hold positions at Atomenergomash JSC, in compliance with Russian regulations; verifying observance of demeanor requirements by Atomenergomash JSC's employees; verifying observance—by persons retiring from Atomenergomash JSC—of limitations stipulated in the labor agreement and/or civil contracts, in cases prescribed in federal laws.
9. Preparing drafts of corruption prevention regulations.
10. Cooperation with law enforcement agencies in the activity field.

In 2018, no corruption cases were identified, no employees of the Division's enterprises were held liable. No discrimination complaints or claims were received.

Asset protection departments are constantly monitoring conflicts of interest between relatives, if such cases concern subordinacy of such employees.

16 employees trained / instructed for anti-corruption policies and procedures

GRI 205-3

Pursuant to the Atomenergomash JSC's Staff Recruitment and Adaptation Procedure adopted and 2018–2020 Corruption Control Plan, the Division and the Division's enterprises constantly take measures to make the newly-hired employees aware of the adopted corruption prevention regulations. Corruption prevention regulations are published in the unified database (portal) of key processes and regulatory documents of the Company.

Pursuant to the Cross-Industry Procedure for Processing Hotline Complaints, Rosatom and affiliate organizations conducted the audit on 48 claims from individuals and legal entities. With that, the share of anonymous messages came to 37.5%. With that, 38 claims (80% of the overall number) turned out to be ungrounded. The most popular claim topics are: procurement violations, employee misdemeanor, social benefits. Following the claim processing, enterprise executives held 17 employees liable.

CORRUPTION PREVENTION IN PROCUREMENT OF GOODS, WORKS, AND SERVICES

In 2018, 189 conflict on interest-related audits were conducted (relatives, share in the authorized capital and membership in boards of other companies whose interest may conflict with the Company's interests) on cases regarding employee compliance with business communication ethics and Corporate Ethics Code; income records were constantly controlled. Also, the Company prevented cases of holding positions by relatives in cases when some of relatives would be subordinate to the others.

Demeanor Compliance and Conflict of Interest Resolution Committees of Atomenergomash JSC and CCOs review income records of the Company's employees if positions of such employees may be subject to corruption risks.

Also, Atomenergomash JSC takes the following measures as stipulated in appropriate regulations:

- Procurement documentation expertise to prevent conflict of interest between the customer and procurement party.
- Control over activities of the customer's officers to reduce or eliminate setting ungrounded primary (maximum) price or procurement party specifications leading to competition limitation.
- Identification and prevention of corruption and/or other offenses during procurement procedures; evaluation of corruption risks of business processes, subprocesses, and procedures.

GRI 102-17

In 2018, Atomenergomash JSC's Safety Direction conducted 38 audits to analyze corruption risks, specifically analyzing the potentially corruptive positions.

Throughout the reporting period, 43 local corruption-related regulations were issued (updated). Atomenergomash JSC and Atomenergomash JSC's CCOs designed and

approved 2018–2020 Corruption Prevention Plans. To enhance the corporate culture, establish the environment of fairness and honesty, the Company created a corruption control-dedicated page on the corporate website: <http://www.aem-group.ru/pro-tivodejstvie-korruptcii/>.

4.3. INTERNAL CONTROL AND AUDIT

GRI 103-3

Internal control and audit are the functions exercised by the Internal Audit Directorate that reports directly to the Chief Executive Officer of the Company. The Directorate carries out its activities following the International Professional Standards of Internal Audit, guided by the principles of independence, objectivity, expertise, and professional morale.

To carry out the activity, a Plan of control measures for the half-year is formed; all employees of the Company have the right to put forward proposals for conducting a control measure during the formation of this Plan.

The efficiency of activities in this area is measured based on the KPI "Absence of actual incidents or significant comments after inspections by the governmental agencies and/or higher specialized internal control bodies (SICB) of the organization's processes not previously identified by the SICB". This KPI is discrete with the target value of 0. Based on 2018 results, the target was attained.

In the reporting year, the Internal Audit Directorate conducted 15 inspections (100% completion) of structural units and CCOs to identify risks and assess efficiency of fields and business processes of Atomenergomash JSC. Following the results of inspections, suggestions and recommendations for corresponding units of the Company. There were no remarks from governmental agencies made based on the process inspection results.

4.4. RISK MANAGEMENT

Atomenergomash JSC has a Risk Management Group acting based on the Regulation on the Risk Management Group of Atomenergomash JSC. Its activities focus on the formation of the Corporate Risk Management System (CRMS) and coordination of activities in the area of risk management and insurance, and the settlement of insured events. The group's objectives include regular audit of risks and verification whether the size thereof complies with the established risk limits, organization of interaction in making decisions related to risks and insurance, among all parties to the risk management process from CCOs to Rosatom.

The CRMS is integrated into the processes of strategic, investment, and budget planning, and receivables and payables management. The Risk Management Group is included in the circuit of mandatory preliminary approval of contracts to be entered into by Atomenergomash JSC, which significantly increased the capabilities of monitoring and controlling risks at the stage of contract preparation.

Combining the risk management and insurance processes of Atomenergomash JSC involves analysis of the property risks of the main production CCOs (including pre-insurance surveys) followed by the formation of a property risk management program, and the organization and control of settlement of insured events at the enterprises.

In 2018, Atomenergomash JSC established the Risk Committee that included the risk owners of the Power Engineering Divisions at the level of Deputy CEOs. The potential project risk assessment model in 1C CRM was designed, training programs in terms of risk and insurance management were developed, training seminars for executives and specialists of main CCOs responsible for risk and insurance management were carried out.

The Company regularly improves the risk management system and assesses its compliance with international standards (ISO

31000:2009, etc.), with the best industry and international practice.

Key risks for the Company in 2018 are currency risk, operating risks (failure to meet or rescheduling of the implementation date), inflation and interest risks, loan risks (counterparty risks).

Key risk factors are the remaining macro-economic and foreign uncertainty, possible deterioration of the market conditions, and financial state of existing and potential counterparties.

The most efficient risk management methods and measures in 2018 were the control of purchases made in foreign currency or in rubles at the exchange rate of foreign currency; mirror conditions in income and expenditure contracts; production start-up rescheduling; implementation of RPS projects; savings from procurement procedures; changes in the amount of overhead costs; saving of raw material consumption; analysis of counterparty risks in entry into contracts; and monitoring the risks of debt throughout the life of the project. The overall economic effect of measures taken amounted to over 700 million rubles.

In 2018, a KPI in this area was the compliance with the risk preparedness level prescribed by Order of Rosatom State Corporation in

the amount of 5 % of the extreme negative deviation of the adjusted free cash flow of Atomenergomash JSC from the planned

value. In 2018, there was a positive deviation of 19.7 %. Therefore, the target risk preparedness value was met.

4.5. LEGAL COMPLIANCE

What the Company considers the underpinning guidelines are rules and principles based on the absolute compliance with legal regulations conforming to international standards and advanced corporate management and ethics practices. In this regard, a critical legal management task is prevention of legal incompliance by the Company's employees, and reduction in the number and severity of such actions that may take place.

Currently, Atomenergomash JSC and all the Division's enterprises are absolutely compliant with legal regulations and rules and

principles conforming to international standards, striving to enhance the transparency of activities.



05

MBIR REACTOR COMPLEX IS A UNIQUE TOOL FOR THE DEVELOPMENT OF FUTURE TECHNOLOGIES AND FOR EXPERIMENTAL RESEARCHES IN ORDER TO IMPROVE TODAY'S TECHNOLOGIES



INNOVATION ACTIVITY

ONE OF THE KEY FACTORS ENHANCING THE COMPANY'S COMPETITIVE STRENGTH IS INVESTING IN INNOVATIONS AND SCIENTIFIC ADVANCEMENTS. REALIZING THE NECESSITY FOR DEVELOPING THIS FIELD, THE DIVISION CONSIDERS R&D PROJECTS AS VITAL AND PRIORITY INITIATIVES.

225
theses and
articles
published

585
conferences
participated
(252 of which with a thesis)

Key indicators for Division's R&D performance:

30.2 MILLION RUBLES
Commercialized
intellectual
property assets
2 times
growth

108 PCS
Intellectual
property assets
created

In 2018, the Division continued designing digital products powered by process support information systems, supply term management systems, equipment quality assurance systems, staff operation optimization and equipment monitoring systems, technical documentation management systems, and others.

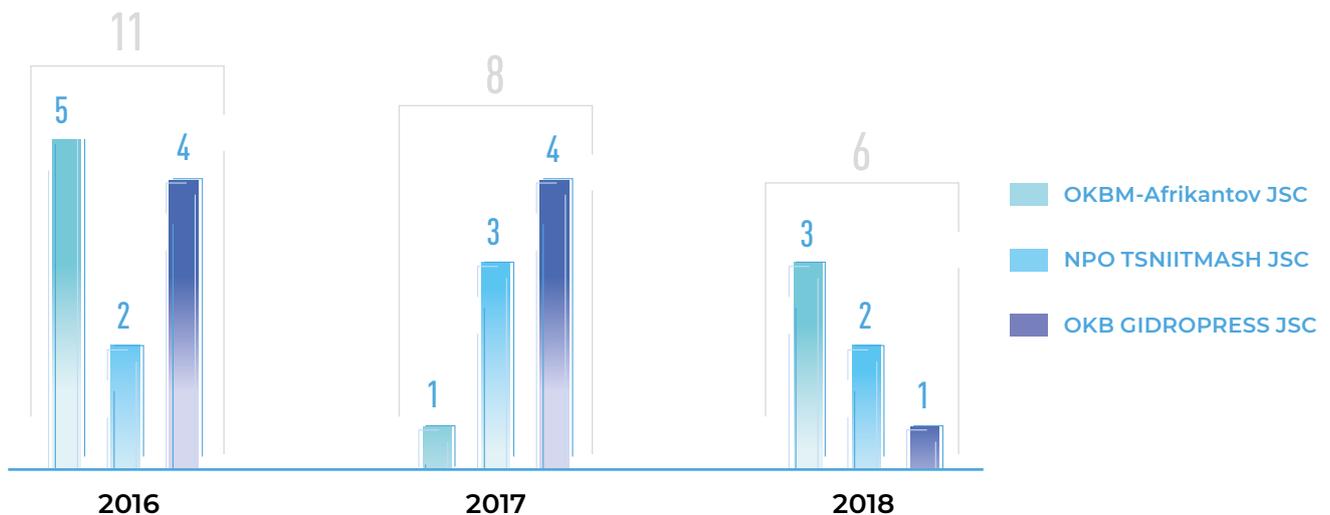
5.1. SCIENTIFIC ACTIVITY

The Division includes the constellation of legendary universities and design offices having unique expertise in design of innovative solutions for the power industry. Most scientists employed by the Division's enterprises have national awards given for their scientific results.

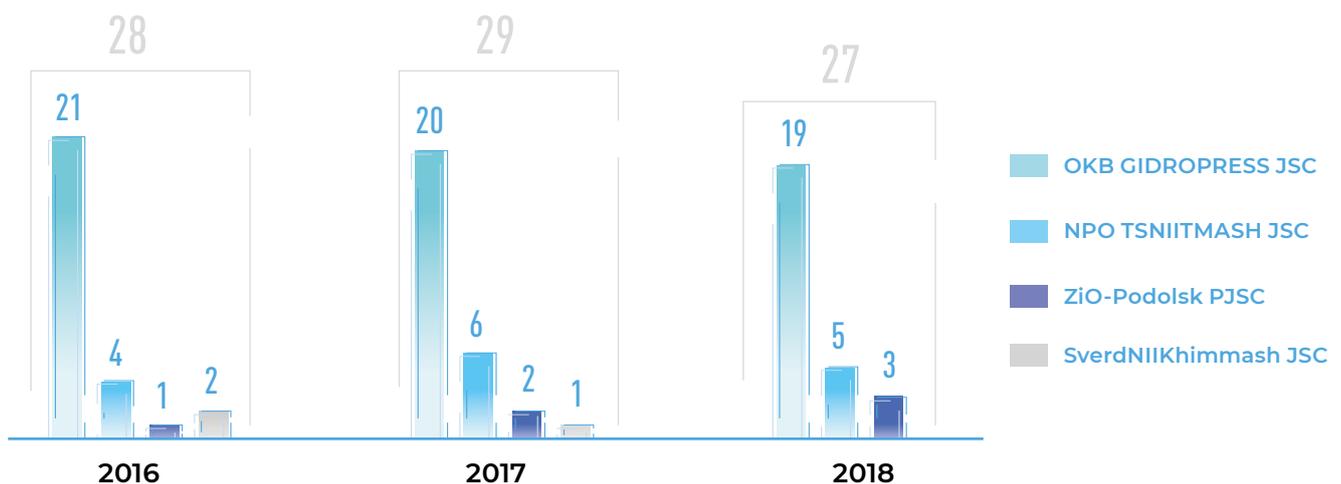
Also, the Division's enterprises offer residency and have Dissertation Councils in place. In 2018, 27 employees were residents, from which 19 were employees of OKB GIDRO-

PRESS JSC. In Dissertation Councils, 6 theses were defended (from which 3 were defended at OKBM-Afrikantov JSC).

WORKS DEFENDED BEFORE ENTERPRISE DISSERTATION COUNCILS



ENTERPRISE RESIDENTS (PEOPLE)



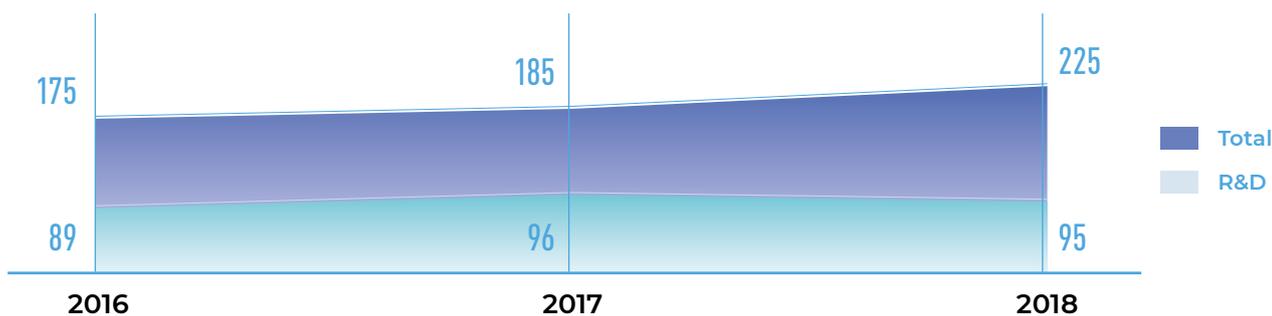
RESIDENTS WORKING AT ENTERPRISES (PEOPLE)

Company	2016	2017	2018
OKB GIDROPRESS JSC	18	17	15
OKBM-Afrikantov JSC	8	9	8
NPO TSNIITMASH JSC	4	4	4
SNIP JSC	-	3	3
ZiO-Podolsk PJSC	1	2	3
AEM-Technologies JSC	-	1	2
TsKBM JSC	-	-	1
SverdNIKhimmash JSC	10	9	1
TOTAL	41	45	37

The key indicator of the Division's innovation activity is the volume of published scientific theses and articles. In 2018, Atomenergomash

JSC's affiliate enterprises published 225 theses, more than half of which were prepared by OKBM-Afrikantov JSC's employees.

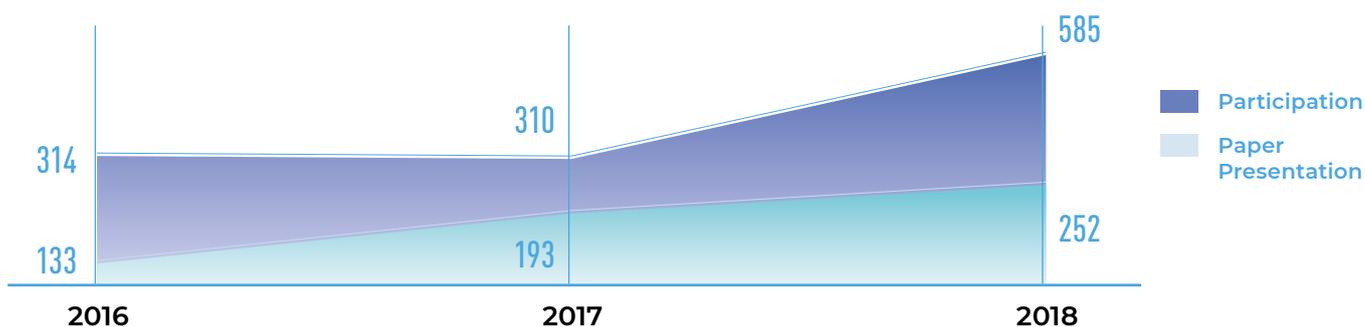
THESES AND ARTICLES PUBLISHED (INCL. R&D-RELATED)



Another innovation activity performance indicator is participation in scientific conferences with papers. In 2018, the number of conferences (incl. paper presentation) in

which specialists of the Division's enterprises were involved increased (585 conferences, from which at 252 conferences specialists presented their papers).

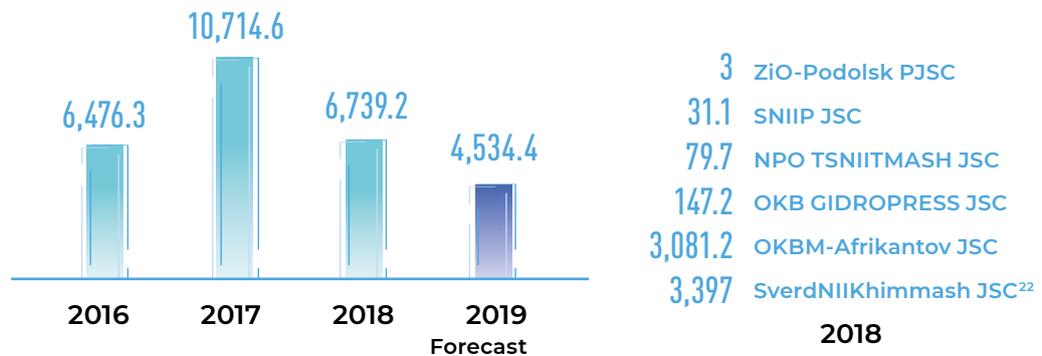
PARTICIPATION IN CONFERENCES (INCL. PAPER PRESENTATION)



5.2. INNOVATION-DRIVEN GROWTH

One of the key factors enhancing the Company's competitive strength is investing in innovations and scientific advancements. Realizing the necessity for developing this field, the Division considers R&D projects as vital and priority initiatives.

R&D EXPENSES (MILLION RUBLES)²¹



In order to implement and then use the cutting-edge technologies and innovations, Atomenergomash JSC implements the Innovation-Driven Growth Program. The key innovation activity performance indicator in 2018 was the Quality of Implementing the Innovation-Driven Growth Program. According to 2018 results, this target was realized at high level.

To ensure perspective advancements, the Company embraces the technical potential

of universities with which the corresponding agreements are concluded. In 2018, the Division's enterprises concluded 10 such contracts for a total amount of 144.2 million rubles. The bulk of works were performed by the Moscow Engineering Physics Institute, Lobachevsky University, Saint Petersburg Marine Technical University, Ural Federal University named after the first President of Russia Boris Yeltsin, and MISIS National University of Science and Technology.

INTELLECTUAL PROPERTY MANAGEMENT

The intellectual property management system is implemented in compliance with regulations of the Russian Federation and

local regulatory acts of Rosatom, Atomenergomash JSC and CCOs.

²¹ Deviation of actual values from the 2018 plan was due to adjustment of terms and conditions of agreements with OKB GIDROPRESS JSC and OKBM-Afrikantov JSC initiated by Customers.

²² R&D is considered the enterprise's key activity.

Atomenergomash JSC adopted the Intellectual Property Management Concept that stipulates the cornerstone principles and regulations regarding intellectual property management. The intellectual property management system includes:

- Identification of intellectual property assets subject to legal protection as inventions, know-hows, computer programs, databases (Cross-Industry Uniform Procedure for Identification of Intellectual Property Assets, Cross-Industry Uniform Procedure for Identifying Intellectual Property Assets as Know-Hows).
- Acquisition of copyright documents: patents, certificates, tangible know-how media (Cross-Industry Uniform Procedure for Legal Protection and Accounting of Intellectual Property Assets, Cross-Industry Uniform Copyright Protection Procedure).
- Using copyright-protected intellectual property assets in the production process of the Company and industry organizations, and other enterprises (Cross-Industry Uniform Procedure for Implementing and Using Intellectual Property Assets).

THE PURPOSES OF THE INTELLECTUAL PROPERTY MANAGEMENT SYSTEM ARE:

1. Growth of strategic assets, integration of the staff expertise and knowledge into the knowledge capital, Division capitalization enhancement, performance improvement, and competitive position reinforcement by virtue of high scientific and technical level and quality of products demanded in the Russian and foreign markets; establishing conditions for innovation-driven development of top-priority projects.
2. Commercialization of knowledge capital, raising more funds.
3. Enhancement of the intellectual property management system that ensures further growth and better competitive position of the Company.

THE KEY PURPOSES OF THE KNOWLEDGE MANAGEMENT SYSTEM ARE:

- Preservation of the Company's intellectual potential.
- Protection from the unauthorized use of the Company-copyrighted intellectual property assets.
- Enhancing competitive positions through supervising R&D in priority fields.
- Improving competitive positions and investment appeal of the Company.
- Ensuring strong positioning of the Company in the internal and international machine engineering markets.
- Promoting the Company as a technically-developed company having the established intellectual property management culture.
- Establishing the legal grounds for civil circulation of copyright (including commercialization of copyright based on license or disposition of exclusive rights).
- Using legislated tax reductions regarding intangible assets of the Company.

THE VOLUME OF COMMERCIALIZED
INTELLECTUAL PROPERTY ASSETS
DOUBLED AGAINST 2017 AND CAME TO

30 million
rubles

COMMERCIALIZED INTELLECTUAL PROPERTY ASSETS (MILLION RUBLES)

Company	2016	2017	2018
OKB GIDROPRESS JSC	-	-	14.8
TsKBM JSC	13.8	12.5	10.9
ZiO-Podolsk PJSC	-	-	3.6
OKBM-Afrikantov JSC	0.3	0.9	0.9
TOTAL	14.1	13.4	30.2

PURCHASED INTELLECTUAL PROPERTY ASSETS (MILLION RUBLES)

Company	2016	2017	2018
OKB GIDROPRESS JSC	22	0.4	0.2
OKBM-Afrikantov JSC	0.03	0.1	-
TOTAL	22.03	0.5	0.2

EVALUATING MARKET VALUE OF THE COMPANY'S INTELLECTUAL PROPERTY ASSETS

As part of executing Order No. 1/570-P dd. June 1, 2018 of Rosatom, OKB GIDROPRESS JSC initiated evaluation of intellectual property assets to determine the license fee for using the nuclear steam-supply system. In this regard, Atomenergomash JSC chose and approved the organization to perform the independent evaluation of the of OKB GIDROPRESS JSC's portfolio profitability index.

OKB GIDROPRESS JSC and the chosen organization entered into the service agreement on evaluating the market value of intangible assets and intellectual property.

Based on the services rendered, OKB GIDROPRESS JSC received the evaluation report approved by Atomenergomash JSC.

INNOVATIONS INTEGRATED INTO THE PROCESS

Throughout 2018, progressive technologies were implemented—as per the approved Innovation Integration Plan—in the following fields:

OKBM-AFRIKANTOV JSC PERFORMED THE FOLLOWING WORKS:

— Product machining.

Implementation of progressive technological processes on the existing equipment with the use of new advanced tools and instrumentation.

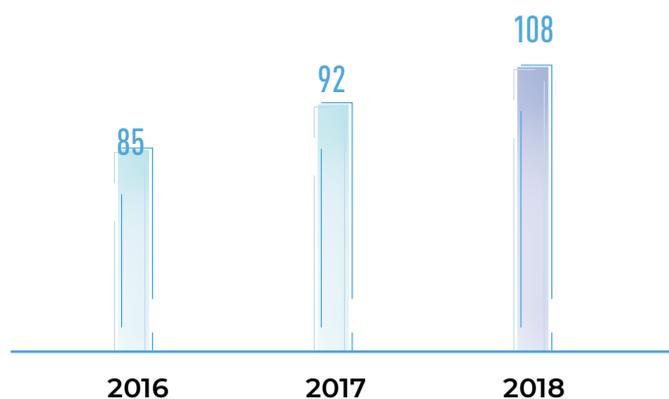
— Process mechanization and automation.

AEM-TECHNOLOGIES JSC INTEGRATED THE FOLLOWING INNOVATIONS INTO THE PROCESS IN 2018:

Patent No.	Name
2579309	METHOD AND DEVICE FOR DRYING INNER SURFACES OF THE SHELL AND TUBE HEAT EXCHANGER
150009	DEVICE FOR MEASURING GAS LEAK IN SEAL ELEMENTS
160775	SHELL MOVEMENT TRAVERSE
166498	DEVICE FOR LOCAL THERMAL TREATMENT OF WELDED JOINTS OF LARGE-SIZED SERIAL PRODUCTS
168033	FLEXIBLE-SHAFT DRIVE
2653911	MODULAR TRAVERSE
2655553	METHOD FOR JOINING PIPES TO THE HEAT EXCHANGER HEADER
2550982	METHOD FOR ELECTROSLAG COVERING OF THE INNER PIPE SURFACE

SNIP JSC integrated the know-how “One-stage luminescent layer forming during production of TLD-580K sensors”.

INTELLECTUAL PROPERTY ASSETS (PCS)



DIGITAL ECONOMICS GROWTH CONTRIBUTION

In 2018, the Division continued designing digital products powered by process support information systems, supply term management systems, equipment quality

assurance systems, staff operation optimization and equipment monitoring systems, technical documentation management systems, and others:

ZIO-PODOLSK PJSC

Major Projects	Result
<p>The universal barcoding system allows automating data input by users and minimizing the human impact on the input data accuracy.</p> <p>Currently, this system is used for discharging products from the warehouse, in card accounting, in single-piece accounting of sheet material; it is planned to use the system in closing shift tasks in blank production.</p>	Universal barcoding system implemented.
The defect certificate generation and electronic approval system was developed and put into operation.	Defect certificate generation digitalized

AEM-TECHNOLOGIES JSC

Major Projects	Result
Products under the 5-year roadmap were loaded and calculated. Required equipment capacity was determined. Accounting of actually completed operations was integrated into roadmap modeling. Export of center load charts (XLSX) for further analysis was implemented.	Roadmap modeling in PlantSimulation
Registering of shift task start/end on MPS-equipped machines was implemented. The report for comparing the planned and actual labor intensity of operations was developed.	RPS project "Optimizing evaluation of the actual labor intensity of mechanical operations on key equipment" implemented
Implemented: registering—in the information system—the list of documents required for forming the technological passport linked to pipe fitting operation. Developed: the mechanism for timely introduction of passport document scans. Configured: document completeness control.	RPS project "Forming the electronic technological passport in 1C: Production Plant Management on Piping Valves" Production implemented
Equipment adjustment time was reduced from 50% to 30% of the total time. The list of registered equipment statuses was reviewed; the Placing/Marking status was separated. To reduce this status, supply of movement instrument was optimized.	RPS project "Production process equipment monitoring optimization" implemented
Implemented: forming all QA forms for Akkyuyu products. Implemented: generating forms of passports of Akkyuy products.	RPS project "Optimization of product passport generation in SAP ERP"

OKBM-AFRIKANTOV JSC

Major Projects	Result
Implemented: electronic analysis and implementation of control cards based on switches, task completion marks, and QA control marks in blank production.	Primary documentation (control card) generation and approval digitalized
Automated forming of the enterprise's cash flow plan, industrial use of the procurement and operating cost budget, and implementation of the Executive's Automated Workplace.	Enhancing timeliness and accuracy of data provided to the executives for further decision-making
Implemented: full-fledged end-to-end electronic coordination of the technological documentation (from design to Customer's approval).	Issuing and approving the agreement on electronic interaction between the enterprise's technological services and customer's representatives
References of IPS, ASVP were synchronized with 1C: Project Organization Management directory in terms of GID ECO, "traffic light" principle was organized.	Only purchasable materials are described in the design documentation

TSKBM JSC

Major Projects	Result
Completed: construction of the network infrastructure ensuring use of wireless data collection terminals of the barcoding system.	Wireless data collection terminals of the barcoding system now can be used

NPO TSNIITMASH JSC

Major Projects	Result
IPS-powered technical archive was put into operation	IPS-powered technical archive was put into operation

SVERDNIKHIMMASH JSC

Major Projects	Result
Implemented: contractual commitment planning and supervision system employing MS Project and SharePoint	Contractual commitment planning and supervision system put into operation

06

WASTE INCINERATOR OF THE "ENERGY FROM WASTE" PROJECT DIFFERS FROM THE CLASSIC INCINERATORS NOT ONLY BY ITS ENVIRONMENTAL FRIENDLINESS, BUT BY THE VERY APPROACH TO THE PRODUCTION OF ELECTRIC ENERGY: 1 PLANT IN THE MOSCOW REGION ABLE TO PROCESS 700 THOUSAND TONS OF WASTE GENERATE 485 MILLION KW*H OF ELECTRICITY PER YEAR



ENVIRONMENTAL IMPACT

ENVIRONMENTAL SAFETY ISSUES ARE THE INTEGRAL PART OF THE DIVISION ENTERPRISES' ACTIVITIES THAT IMPLEMENT AND MAINTAIN THE ENVIRONMENTAL MANAGEMENT SYSTEM PURSUANT TO THE INTERNATIONAL STANDARD ISO 14001.

164.7 MILLION RUBLES
Funds spent on preventive measures on reducing the environmental impact in 2018

554.8 THOUSAND GRAMS/J
Energy saved in 2018
Savings grew 2 times up
231 million rubles saved

The Division's enterprises regularly initiate measures aimed at reducing emission of greenhouse gases and wastes.

46.8 %
Reusable waste share in 2018
Grew 2 times up compared to 2017

6.1. ENVIRONMENTAL MANAGEMENT

Environmental safety issues are the integral part of the Division's positioning—both in regard to supplying cutting-edge power solutions and protecting the environment when exercising business activities.

The Division's affiliate enterprises implement and maintain the Environmental Management System (the EMS) pursuant to the international standard ISO 14001.

THE EMS IS ADOPTED BY THE FOLLOWING ENTERPRISES:

- Atomenergomash JSC
- OKB GIDROPRESS JSC
- TsKBM JSC
- NPO TsNIITMASH JSC
- OKBM Afrikantov JSC
- SNIIP JSC
- ZiO-Podolsk PJSC
- AM JSC
- EMSS PJSC

FROM THEM, THE EMS WAS ADOPTED BY THE FOLLOWING COMPANIES IN 2018:

- OKB GIDROPRESS JSC
- OKBM Afrikantov JSC
- SNIIP JSC
- EMSS PJSC

The priority objective is minimizing the negative environmental impact that nuclear plants have. By implementing the large-scale projects, the Division's enterprises allocate funds to exercising preventive measures on reducing the environmental impact and maintaining the EMS. In 2018, the overall amount of funds spent on related initiatives came to almost 165 million rubles.

Besides, the Division conducts redevelopment of proprietary territories and territories of municipal entities where the Division's enterprises are located. In 2018, the following area cleaning and greening events took place:

- Employees of Atom mash, branch of AEM-Technologies performed the clean-up across the enterprise area and participated in tree planting as part of the municipal initiatives.

- Employees of ZiO-Podolsk PJSC planted trees across the enterprise area and the city territory as part of the greening activities organized by the local administration.
- Specialists OKBM-Afrikantov JSC performed greening of the area of the nursery school No. 389 in Nizhny Novgorod.
- Employees of Petrozavodsk mash, branch of AEM-Technologies, performed the clean-ups across the enterprise area and along Dostoievskogo, Injenernaya, and Zayceva Streets of Petrozavodsk.
- A cleanup was organized and performed across the area of NPO TSNIITMASH JSC.

Redevelopment of enterprise areas and city territories is planned for 2019 by Atom mash, branch of AEM-Technologies, ZiO-Podolsk PJSC, ZiO-Podolsk PJSC, Petrozavodsk mash,

branch of AEM-Technologies, and NPO TSNIITMASH JSC.

Power engineering enterprises need fault-free and high-grade power supply to ensure the high-quality process. Power is required for operation of machines, heating, illumination, and thermal treatment of finished products and blanks.

To evaluate the performance of enhancing the power efficiency, the Division defines the differentiated target value of the annual percentage of resources saved. In 2018, this goal was attained at 21.85% (over 213 million rubles were saved)—the target value was achieved.

Average power consumption across key enterprises is declining. Currently, top 3 enterprises by the volume of energy saved are AEM-Technologies JSC's subsidiaries Atom-mash and Petrozavodskmash, and OKBM-Afrikantov JSC.

Water resources ensure business operations of enterprises and are used in processes (cooling/heating, integrity checks, process liquids). There was no significant change in the water consumption volumes compared to 2017. The volume of wastewater decreased in 2018.

THE FOLLOWING WATER PROTECTION MEASURES WERE TAKEN IN 2018:

- In OKBM-Afrikantov JSC, the wastewater treatment facility operation monitoring was optimized in units 94 and 96.
- AEM-Technologies JSC's subsidiary Petrozavodskmash developed and submitted for approval to Glavgosexpertiza of Russia the project on Reconstruction of wastewater treatment facilities of the internal-drainage water supply system of Petrozavodskmash, branch of AEM-Technologies.

GRI 306-1

WATER CONSUMPTION (THOUSAND M³)

Company	Source, Type	2016	2017	2018
Atom-mash, branch of AEM-Technologies	Municipal sewage system	641.5	630.5	662.9
ZiO-Podolsk PJSC	Municipal sewage system	301.3	246.5	244
OKBM-Afrikantov JSC	Municipal sewage system	415.7	406.4	379.7
Other	Municipal sewage system	253.6	227.5	231.9
Petrozavodskmash, branch of AEM-Technologies	Municipal sewage system	316.8	309	281.2
	Lake Onega	23.5	27.3	31.5
EMSS PJSC	Municipal sewage system	165	144.4	139.7
	Kazenny Torets River	195.3	191.5	193.7
TOTAL		2,332.3	2,203	2,184.7

6.2. EMISSIONS AND WASTE

Pursuant to Russian law, enterprises design projects of emissions and waste standards and disposal limits, and projects for maximum tolerable pollutant emissions. As a result, enterprises obtain the permission documents for disposal of production and consumption waste and permission for pollutant emission.

The Division's enterprises regularly initiate measures aimed at reducing emission of greenhouse gases. In this regard, the following measures are taken across the enterprise areas:

- Process environmental control and monitoring of pollutant emissions.
- Regulatory compliance control, environmental law compliance control.
- Redevelopment of the sanitary protection zone.

- Maintenance, servicing, and cleaning of dust and gas cleaning machines, and effluents.

The increase in the overall waste weight in the reporting year is related to the growing production volumes and supply of main equipment. The bulk of emissions is made by the Division's major enterprises: PZM LZ LLC, ZiO-Podolsk PJSC, OKBM-Afrikantov JSC, and EMSS PJSC.

WASTE INCENERATORS EQUIPMENT

Waste incinerator operating on equipment made by Atomenergomash JSC

280
MW

TOTAL CAPACITY OF THE INCENERATOR SYSTEM OF THE MOSCOW REGION

700

THOUSAND TONS
WASTE PROCESSING
VOLUME OF ONE PLANT
PER YEAR



RECEPTION AND SORTING

FRAGMENTATION

INCINERATION

COOLING
AND DISTRIBUTION

In 2018, enterprises within Atomenergomash JSC's control contour started performing the separate waste collection:

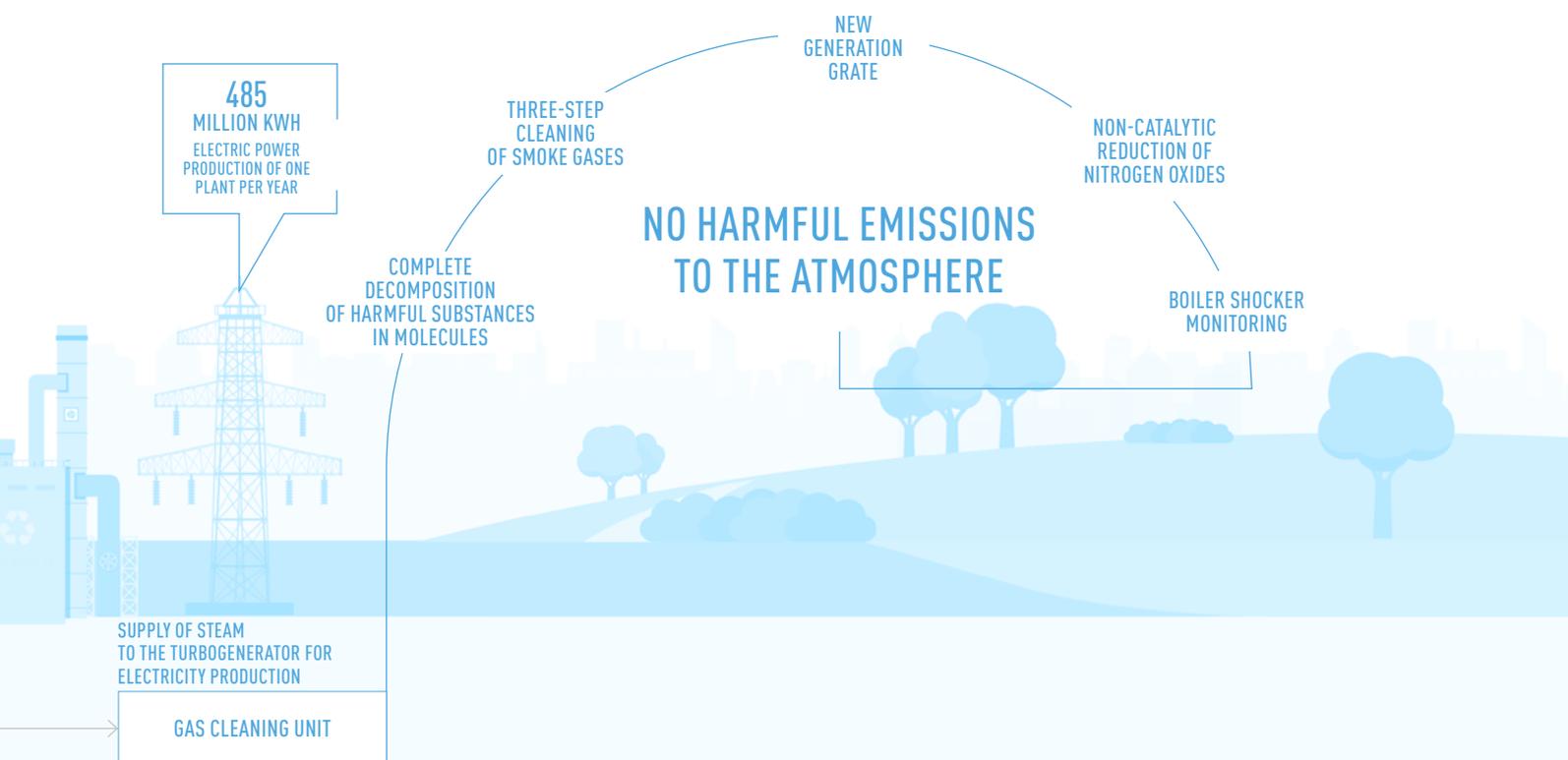
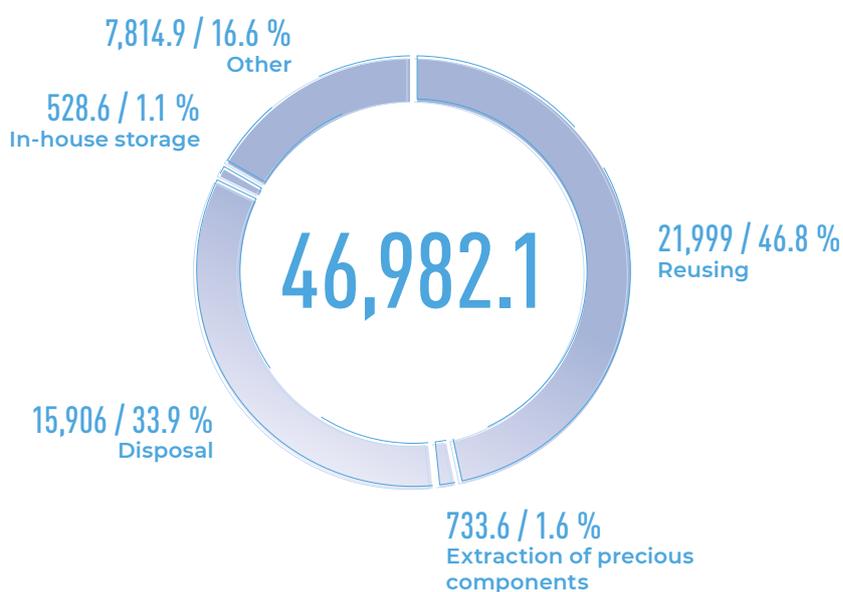
- ZiO-Podolsk PJSC (collection of waste paper, cardboard, polyethylene, and batteries).
- SNIIP JSC (separate collection of paper, cardboard, and plastic).

Also, some enterprises take measures on reducing mercury waste of the 1st hazard class by replacing mercury-vapor lamp with energy-saving LED lamps:

- Atom mash, branch of AEM-Technologies in Volgogradsk.
- NPO TSNIITMASH JSC.

General waste recycling methods adopted at the Division's enterprises are reusing, disposal, and transfer to specialized contractors.

WASTE BREAKDOWN BY RECYCLING METHOD



07

*POWERFUL PRODUCTION AND
BEST SPECIALISTS MAKE A SCALING
CONTRIBUTION TO THE MODERNIZATION
OF DOMESTIC ENERGY SYSTEM*



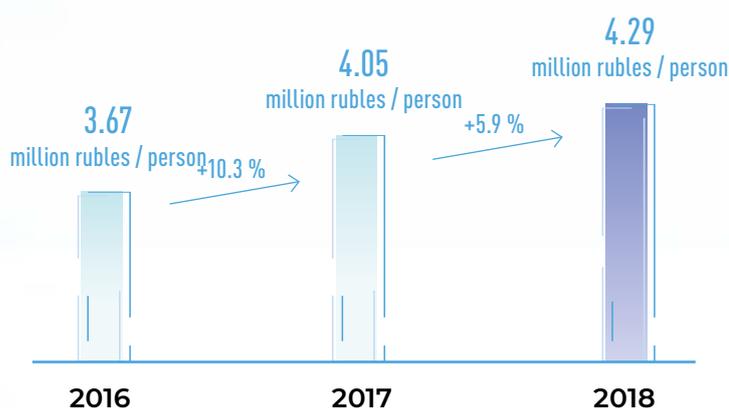
STAFF MANAGEMENT

ATOMENERGOMASH JSC FOLLOWS THE PRINCIPLES OF SOCIALLY RESPONSIBLE BUSINESS AND ONE OF ITS MAIN TASKS IN THIS DIRECTION IS CREATION OF CONDITIONS FOR NEW AND BETTER JOBS, WHERE HIGHLY MOTIVATED STAFF WILL DEVELOP CORPORATE EXPERTISE AND MANAGEMENT SKILLS. ALONGSIDE MUCH ATTENTION IS GIVEN TO THE QUESTIONS OF ADAPTING NEW EMPLOYEES AND THE TRANSFER OF KEY KNOWLEDGE FROM EXPERIENCED MENTORS FOR FASTER POSITIVE RESULTS.

THE MAIN STAFF EFFICIENCY INDICATOR IS LABOUR PRODUCTIVITY THAT HAS BEEN SUSTAINABLY GROWING FOR THE RECENT YEARS:

Division-average turnover rate decreased almost 1.5 times down to 11%.

The share of long-tenured employees remains high across the Division's affiliate enterprises.



Actual headcount
18,120 PERSONS

7.1. STAFF COMPOSITION

Atomenergomash JSC, as a power engineering Division and one of Rosatom's key subsidiaries, is one of the most appealing employers in Russia. The Division's affiliate enterprises offer all employees—regardless of gender differences—broad opportunities for professional growth and developments and high-grade social benefits and protection.

GRI 102-7, 102-8

In the reporting year, the staff composition did not significantly change compared to 2017. Over 80% of the headcount are employed by six major enterprises of the Division: OKBM-Afrikantov JSC, Atom mash, branch of AEM-Technologies, Petrozavodsk mash, branch of AEM-Technologies, ZiO-Podolsk PJSC, OKB GIDRO-PRESS JSC, and EMSS PJSC.

Considering the specifics of production—specifically, hard process labor—the men-women ratio comes to some 65:35. Scientific and design enterprises note the prevailing number of seniors, which reflects the lack of young scientists across Russia.

The majority of employees (99%) are full-time workers. Term contracts are concluded with 2.1% of employees; this number keeps falling every year despite the overall headcount growth (in 2017 the share of term contracts amounted to 3.2%).

The Division's enterprises maintain the best possible balance between the highly-skilled and experienced senior-age employees (some 17%) and young and up-and-coming specialists (some 33%).

In terms of education levels, manufacturing sites of the Division are dominated by employees having secondary vocational education, while personnel of design departments and managing companies mostly consists of specialists having higher vocational education.

The largest number of employees having academic degrees, professors and academy fellows of the RAS, work at enterprises concerned with scientific activities (OKBM-Afrikantov JSC, NPO TsNIITMASH JSC, and OKB GIDROPRESS JSC).

PH.DS, DOCTORS OF SCIENCES, RAS ACADEMY FELLOWS, PROFESSORS (PEOPLE)

Company	Ph.Ds			Doctors of Sciences			Academy Fellows			Professors		
	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018
OKBM-Afrikantov JSC	92	90	89	20	21	20	2	1	1	6	6	5
NPO TsNIITMASH JSC	77	80	75	36	35	30	1	1	1	20	19	19
OKB GIDROPRESS JSC	60	61	60	9	9	12	2	1	1	2	3	5
Other	48	43	40	7	5	4	-	-	-	-	-	-
TOTAL	277	274	264	72	70	66	5	3	3	28	28	29

7.2. INCENTIVES AND SOCIAL POLICY

Atomenergomash JSC follows its social commitments and considers ensuring generation of new jobs one of the top-priority tasks in this regard. To enhance the transparency of remuneration and staff incentives, the Division adopted the Unified Remuneration Plan allowing setting the same salary for employees holding positions equal in value they have to Rosatom.

Development of social programs and active cooperation with regional administrations on the job market organization and employment of residents are factors that make the Company more appealing to employees and reduce the social tension in regions of Russia.

Employees receive bonus payments for achieving the given KPIs. In case of exceeding the preset level of KPIs, employees may receive even higher bonuses. The employee performance is evaluated as per the RECORD system .

The adopted manager performance evaluation system is based on the annual analysis that includes KPI completion accounting. Besides, the performance of executives and Legacy-level talent pool members is evaluated based on the 360 Degrees method

that includes not only self-assessment and performance analysis, but also surveying of colleagues and subordinates.

Every year, affiliate companies consider indexation of salaries above the inflation level (following the Federal Statistics Service's data). As a result, the average salary of employees across the Division's enterprises increased by 8% and reached the amount of 82,400 rubles.

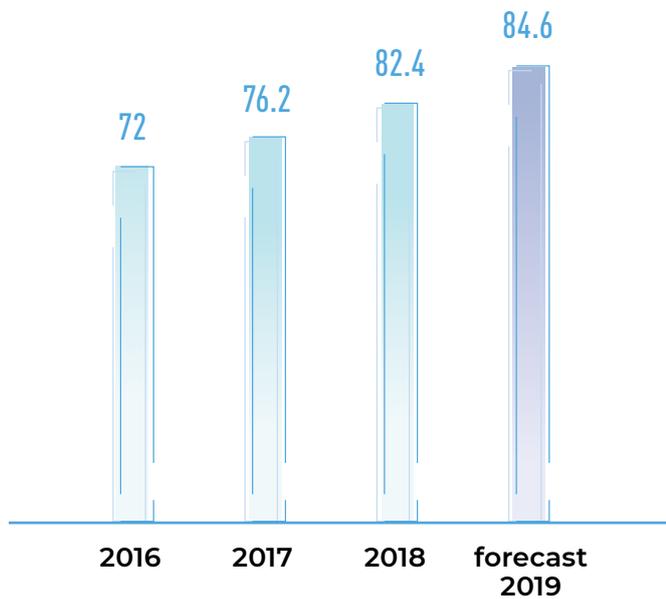
When making decisions on hiring new employees, the Company is guided by and complies with Article 64 of the Labor Code of the Russian Federation: Unjustified refusal to conclude a labor contract, or a discriminative refusal, shall be prohibited. The company has no formalized procedure for hiring new employees from local²⁵.

²⁹ Since 2016, this system includes not only employee efficiency, and development of professional and technical knowledge and skills, but also evaluation based on industrial values.

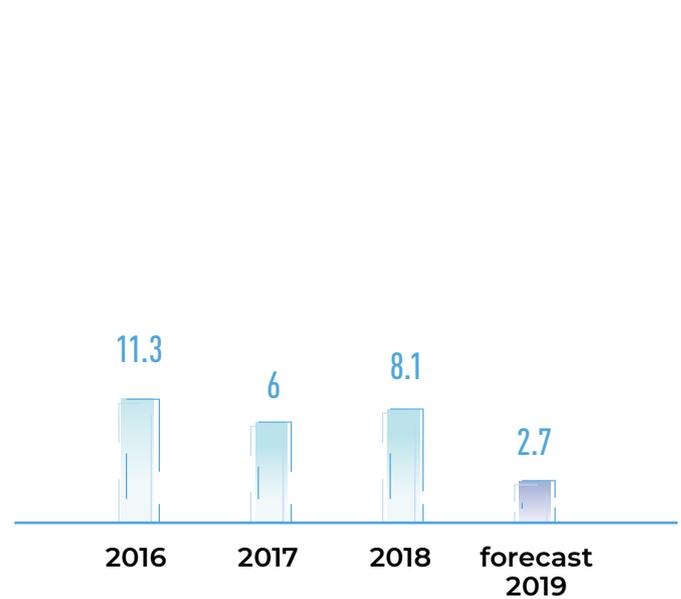
³⁰ Locals are employees that are residents of the territory of the employer company's operation—i.e. only employees constantly living the region of the enterprise's operation.

AVERAGE SALARY³¹

Average Salary (thousand rubles per month)³²



Average Salary Growth (%)



GRI 102-13

The underpinning regulatory document is the Remuneration Policy. Also in the reporting year, the Division's enterprises were following the 2018-2020 Nuclear Engineering, Production, and Science Agreement between Rosatom, Union of Employers of the Nuclear Industry, Power, and Science of Russia, and Russian Professional Union of Nuclear Engineering and Industry Employees ("the Cross-Industry Agreement") that stipulated the general principles for regulating social and employment relations in the nuclear engineering industry, including mutual undertakings of the parties in regard to remuneration, labor conditions and safety, work-rest hours, employment status, social benefits, compensations, and privileges.

GRI 102-41

Most of the Division's enterprises adopted bargaining agreements concerning all employees of such enterprises: ARAKO LLC,

Petrozavodskmash, branch of AEM-Technologies, OKB GIDROPRESS JSC, ZiO-Podolsk PJSC, IK ZIOMAR JSC, OZTMITS JSC, OKBM-Afrikantov JSC, SNIIP JSC, Sverd-NIIKhim mash JSC, TsKBM JSC, EMSS PJSC, IFTP JSC (over 75% of all the Division's employees).

GRI 402-1

Pursuant to the Labor Code of the Russian Federation, employees of all the Division's enterprises shall be informed of organizational changes within at least two months. Notifications regarding significant in-Company changes are regulated by the Cross-Industry Agreement (see Section 7.2) and stipulated in bargaining agreements of the Division's enterprises.

GRI 401-2

The Division's enterprises provide all their employees—regardless of their statuses and employment contract types—the social

³¹ Data including accrued reserves, excluding KPI bonuses and leave allowances.

³² Division-average values.

benefits and privileges as stipulated in the appropriate regulatory documents:

- health insurance
- pension programs
- housing programs
- health resorts and rest for employees and their children
- dining for employees
- material support
- corporate discounts on sports and health club membership
- veteran and senior support

Evaluating the engagement level is one of the key aspects that ensure high staff performance. Following the insights found over the course of such a study, the Company's administration can figure out to which extent the staff is motivated to solve the highest-priority tasks and what are major engagement and motivation drivers.

In 2018, the Company conducted the annual employee engagement study: the Division-average engagement level came to 81%. Therefore, this value matched the industry-specific figures, but still it turned out to be higher than in other Russian companies.

IN 2018, AVERAGE SOCIAL EXPENSES AMOUNTED TO

24,300
rubles
per employee

7.3. OCCUPATIONAL HEALTH AND SAFETY

The Company focuses on enhancing the occupational safety level, preventing injuries, ensuring fault-free operation of production facilities, and constantly reducing the negative environmental impact.

To this end, the cornerstone instrument for attaining this strategic goal and decreasing the risk probability is middle-term target programs that stipulate target figures. In the reporting year, LTIFR amounted to only 0.11.

All the Division's employees working in harsh environments (4,517 people) regularly undergo medical inspections and are entitled to undergo off-schedule medical inspections.

GRI 403-2, 403-3

OCCUPATIONAL INJURIES AND DISEASES

Figure	Sex	2016	2017	2018
Injuries	Male	9	6	2 ³³
	Female	-	1	2
Days Lost Because of Injuries	Total	508	380	474
Occupational Diseases	Male	-	-	2
	Female	-	-	-
Fatal Injuries	Male	-	1	-
	Female	-	-	-
Employees Working in Harsh Environments	Total	4,398	4,310	4,517
LTIFR ³⁴	Total	0.25	0.21	0.11

ENTERPRISES CERTIFIED TO OHSAS 18001³⁵

Companies	OHSAS 18001
ZiO-Podolsk PJSC	YES
NPO TsNIITMASH JSC	YES
AAEM LLC	YES
Ganz EEM	YES
ARAKO	YES

GRI 402-1, 403-4

The principal documents regulating relations between the Company and employees are the Cross-Industry Agreement and bargaining agreements of the Division's enterprises.

Issues related to health and safety of the industry employees, occupational safety, social benefits, sports and recreational activities,

and awareness-raising work are regulated by the Cross-Industry Agreement (see Section 7.2) and reflected in bargaining agreements of the Division's enterprises.

Every year, the Division's enterprises organize events aimed at enhancing the employee awareness of industrial and fire safety,

³⁴ Excluding the Division's enterprises located beyond Russia.

³⁵ OHSAS 18001 is the standard series stipulating requirements and containing recommendations regarding designing and implementing the occupational health and safety management systems.

occupational safety, and improving the education quality in this field. The major events include the following:

- Full-time or remote education, retraining, and further education of employees.
- Implementation of the special staff training for employees working at hazardous facilities.
- Facilitating popularization of the safety culture.

THE OCCUPATIONAL SAFETY-RELATED EXPENSES INCREASE YEAR OVER YEAR: IN 2018, THE SPEND AMOUNTED TO

over
429
million
rubles

WHICH IS BY QUARTER HIGHER THAN IN 2017 (340 MILLION RUBLES).

7.4. STAFF DEVELOPMENT PROGRAMS

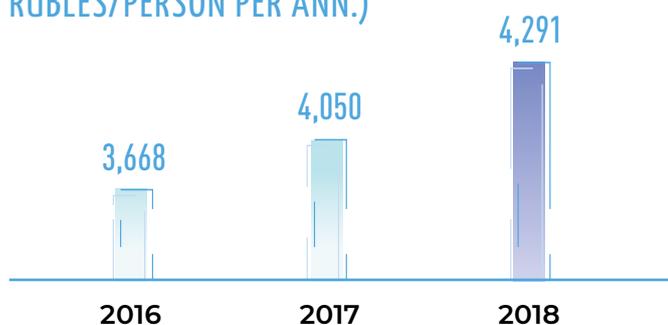
GRI 404-3

The Division has the uniform staff performance management policy in force, including:

- Elaborating uniform principles for setting KPIs and evaluating achievement thereof by employees.
- Evaluating skill development of employees—including payment of bonuses.
- Preparing recommendations for talent pool formation.
- Creating individual growth plans for employees to plan further training.

THE MAIN STAFF EFFICIENCY INDICATOR IS PRODUCTIVITY. THIS PARAMETER HAS BEEN SUSTAINABLY GROWING FOR THE RECENT YEARS:

PRODUCTIVITY (THOUSAND RUBLES/PERSON PER ANN.)



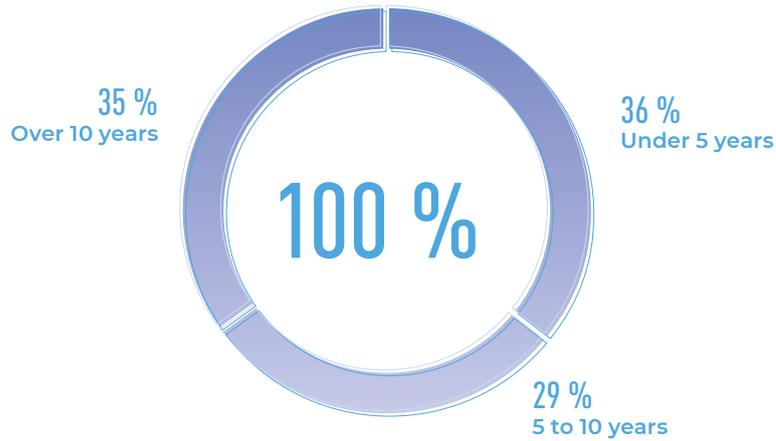
GRI 401-1

Turnover is what any company faces. Across the Division's enterprises, there is no cyclic (season-based, etc.) headcount fluctuation: the change in the headcount is caused by headcount optimization procedure and voluntary retirements. In 2018, the Division-average turnover rate decreased against 2017 (16%) and reached 11%. The share of newly-hired employees remained on the same level as in 2017 and came to 14%. The share of long-tenured employees remains high across the Division's affiliate enterprises.

³⁶ Employees of all the Division's enterprises are subject to assessment.

³⁷ Based on the average headcount.

STAFF COMPOSITION BY TENURE OF OFFICE (%)



Professional development of employees is what preconditions the Company's dynamic growth, competitive strength, and solid market positioning. The Division's enterprises are active participants of professional skill and managerial competence development programs. With that, what is prioritized is

adaptation of new employees and transfer of knowledge to them from experienced mentors to let young specialists demonstrate high performance soon and preserve the unique and valuable proprietary information within enterprises.

LNG PLANTS EQUIPMENT

ZiO-Podolsk PJSC (part of the Division) created the first domestic heat exchanger for the Yamal LNG project.

As part of the project, ZiO-Podolsk manufactures six devices related to critical equipment: five ethane evaporators and one flash tank.

#1

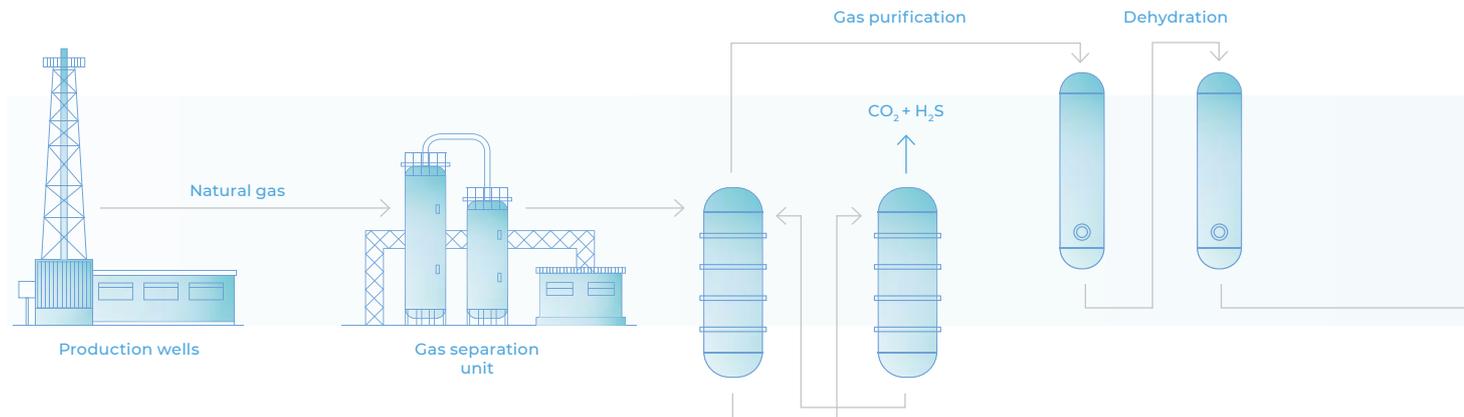
Yamal LNG is Russia's largest LNG plant

5.5 million tonnes per year

Project capacity of each of the three launched lines

17.4 million tonnes per year

LNG plant capacity after launch of the fourth line



As the Company implements the cost reduction policy, the academic time is condensed.

In 2018, the Division continued the HR management initiative that included implementation of development and education programs concerning specialists of different groups and competence levels.

In order to completely satisfy the Company's demand for experienced and properly-skilled employees, the program for integration of professional education and production is being implemented. The Division's enterprises adopted the high-efficiency staff development system that includes different education forms and types. Education is provided by and at the expenses of the enterprise (tutors are the company's specialists), or with involvement of educational institutions. The Division conducts events aimed at establishing and opening of basic departments and

branches of departments of Russia's leading technical universities (Moscow Engineering Physics Institute, Moscow State Technological University "Stankin", Bauman Moscow State Technical University, Nizhny Novgorod State Technical University, Ural Federal University named after the first President of Russia Boris Yeltsin, etc.) in the Division's enterprises; also, the Company organizes in-house training (internship) for students under strategical partnership with educational institutions.

Every year, over 500 undergraduates (secondary and higher vocational education) undertake internship in the Division's enterprises. Following the internship results, students that have approved themselves best, are offered employments (163 people or 32% of all interns in 2018).

The height of the evaporators is about 15 meters, the diameter is up to 2.6 m, and the mass is from 61 to 86 tons. The inside of the apparatus contains three thousand eight hundred heat-exchange pipes with a total length of more than 70 km. The equipment is directly involved in the process of liquefying natural gas and will operate in temperatures below 170 degrees Celsius.

"Arctic cascade"

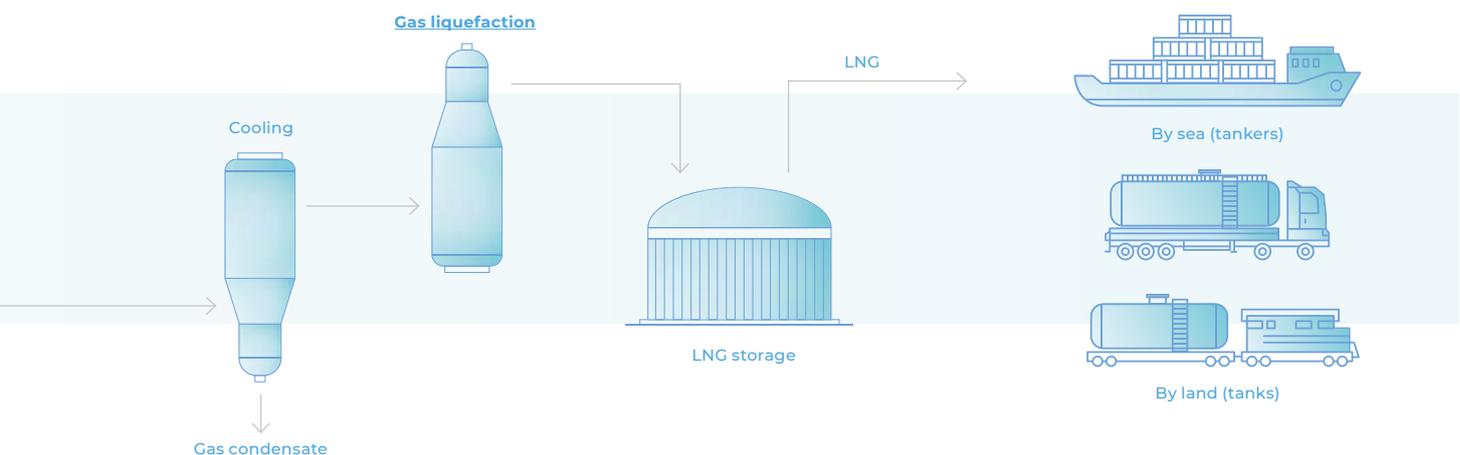
The patented technology for liquefying natural gas will be used in the construction of the 4th line of the plant

Arc7

The project is supported by a fleet of Arc7 ice-class tankers together with lower-class gas carriers designed for LNG transportation

Transportation

LNG is delivered even to areas located far from the main gas pipelines; it is transported in special cryogenic tanks



08

*WE ANNUALLY SHIP AROUND
30 THOUSAND TONS OF PRESETS,
ROLLS AND OTHER PRODUCTS FOR
POWER ENGINEERING, METALLURGY,
SHIPBUILDING, AIRCRAFT CONSTRUCTION
AND OTHER INDUSTRIES*



STAKEHOLDER RELATIONS

THE DIVISION'S ENTERPRISES HAVE SIGNIFICANT IMPACT ON LOCAL COMMUNITIES. BY INVESTING IN PRODUCTION FACILITIES, ENSURING HIGH-GRADE LABOR CONDITIONS, IMPLEMENTING CHARITY PROGRAMS, THE COMPANY FACILITATES THE SOCIAL AND ECONOMIC GROWTH OF TERRITORIES WHERE IT OPERATES.

10.3 MILLIONS RUBLES

Charity contributions

Grew almost 2 times
from 2017

10,521

**Mentions of the Division
in mass media,**

5 thousand of which were
positive with only 1.4 %
negative

5.3 BILLIONS RUBLES

Payments to budgets

8.1. SOCIAL POLICY AND CHARITY

The Division is a major employer, tax payer, product supplier, and goods and services consumer. The Company respects and responsibly treats all stakeholders considering their demands, implements the social policy for the benefit of employees, and heavily contributes to improving the standard of living in regions of Russia.

The Division's enterprises have significant impact on local communities. By investing in production facilities, ensuring high-grade labor conditions, implementing charity

programs, the Company facilitates the social and economic growth of territories where it operates.

GRI 203-1

CHARITY CONTRIBUTIONS (THOUSAND RUBLES)

Company	2016	2017	2018
OKBM-Afrikantov JSC	1,723	2,046	2,220
Atomenergomash JSC	-	3,511	6,547
ZiO-Podolsk PJSC	-	-	955
OKB GIDROPRESS JSC	49,8	17,5	450
AEM-Technologies JSC	-	150	166
EMSS PJSC	12,051	-	-
TOTAL	13,824	5,725	10,338

IN 2018, THE DIVISION'S ENTERPRISES HELD THE FOLLOWING CHARITY EVENTS:

- Employees of Atommash, branch of AEM-Technologies in Volgodonsk carried out the cleanup within the enterprise territory and participated in tree planting as part of the city event Tree Planting Day.
- Employees of ZiO-Podolsk PJSC planted trees across the enterprise and territories.
- Specialists of OKBM-Afrikantov JSC carried out greening of the nursery school No. 398 in Nizhny Novgorod and organized the charity clothes collection for the Nizhny Novgorod Regional Clinical Tuberculosis Dispensary and the Social Support Center Radost (Happiness).

One of the Company's priorities is implementation of the corporate social program in terms of material support for unemployed seniors and nuclear industry veterans: in the reporting year, the Division's enterprises spent almost 20 million rubles on the related initiatives.

The Division's key enterprises—Cross-Industry Agreement parties—comply with the regulations and ensure that the minimum salary is not lower than the living wage of

able-to-work residents of the constituents of the Russian Federation. In 2018, all the Division's enterprises complied with this requirement.

The Division's enterprises pay taxes to budgets of different levels every year, while OKB GIDROPRESS JSC, OKBM-Afrikantov JSC, AEM-Technologies JSC and ZiO-Podolsk PJSC are one of the largest taxpayers in their respective regions.

8.2. EXTERNAL COMMUNICATIONS AND CORPORATE BRANDING

GRI 102-43, 417-3

One of significant fields of Atomenergomash JSC's activities is ensuring the communications environment favorable for the economic growth, brand promotion, and establishing the positive image of the Company's operation through marketing relations, demonstration of achievements, product advertising, participation in exhibitions, forums, and conferences. Efficiently-organized communications are the imperative for maintaining the Division's brilliant business reputation and a prerequisite for successful market activity.

Atomenergomash JSC strives to timely inform the stakeholders of all significant activity aspects. In the reporting year, the Company organized 3 press tours and 3 blog tours for regional and industrial mass media, as part of the marketing campaign.

To promote its brand, the Company participates in specialized exhibitory events organized in and beyond Russia. In October 2018, the Nuclear Industry Supplier Forum ATOMEKS-Region was held in Podolsk. In 2018, Atomenergomash JSC and the Division's affiliate enterprises participated in over 30 exhibitory events, 13 of which took

place abroad. With that, the Division's general stand was presented at the 2 following events:

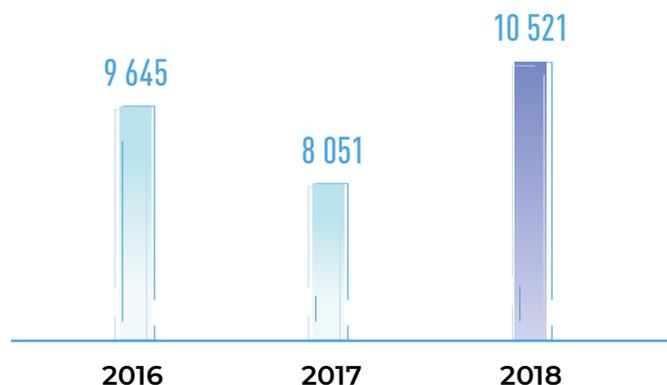
- International Exhibition and Forum NDExpo 2018 — High-Tech for Sustainable Growth (September 25–27, Moscow, Russia)
- International Forum ATOMEXPO 2018 (May 14–16, Sochi, Russia)

Atomenergomash JSC complies with current Russian and international law in the field of marketing relations, advertising, and product promotion.

In 2018, the number of Division mentions in mass media reached 10.5 thousand times; with that, almost 5 thousand mentions were

positive, and the share of negative information decreased shrank to the last year more than twice.

MENTIONS IN MASS MEDIA (TIMES)



KEY PRODUCTION PROJECTS INTERACTIVE WEBSITE SECTION⁴¹

In 2018, the Company released the new interactive section Key Production Projects on the corporate website. The section consists of two blocks: finished projects and current projects. On the website pages, visitors can find detailed info about which equipment

was manufactured and supplied, and which equipment is being designed (equipment layouts and photos are attached to every project). Key Production Projects section provides the comprehensive picture of the Division's activity and equipment designed.

NUCLEAR WHYERS, E-BOOK⁴²

The Company released the children's electronic book Nuclear Whyers on the corporate website. The target audience is children of employees, schoolchildren, and everyone interested in the nuclear industry but having little knowledge in this field. This book is not a reference volume, nor the nuclear power

encyclopedia; this book is a fiction, an adventure story of friends traveling across the world of the nuclear power with Nucleusov, a scientist and inventor. In this regard, the purpose of the book is to give the readers the grounding in the nuclear power science.

³⁹ 8 thousand mentions in 2017.

⁴⁰ From 2.9% to 1.4% of the overall number of mentions.

⁴¹ <http://www.aem-group.ru/mediacenter/klyuchevyie-proizvodstvennyie-proektyi/>

⁴² <http://www.aem-group.ru/mediacenter/atomnyie-pochemuchki/>

8.3. INTERNAL COMMUNICATIONS

GRI 102-43

In 2018, Atomenergomash JSC and major CCOs implemented the following internal communications development projects:

AEM BULLETIN

In support of the common information space of the Division there is a printed version of AEM Bulletin released monthly in three languages (Russian, Czech, Hungarian). An extended online version is available alongside with the printed edition. In 2018, the Company continued to regularly update the newspaper: as a result, the number of visitors increased by 1.5 times against 2017. AEM

Bulletin's online version is the information resource aimed at expanding the cover of the printed version by virtue of presenting information in a modern way, providing unique content not included in the printed version, and public accessibility.

STRANA ROSATOM

For the purpose of keeping the good reputation of the enterprises in the cities of presence and informing wider population of the key projects, Atomenergomash JSC takes part in the industry-specific broadcast of research and information TV program Strana Rosatom. In 2018, the Division's news block included spots prepared by AEM-Tech-

nologies JSC's subsidiaries Atomash and Petrozavodskmash, SverdNIKhimmash JSC, ZiO-Podolsk PJSC, OKBM-Afrikantov JSC, NPO TSNIITMASH JSC, and SNIIP JSC (in total, over 100 TV spots dedicated to operation of the Division's enterprises were broadcasted in 2018).

INFORMATION SHARING AND DIRECTOR DAYS

Following the tradition of Rosatom, the Company's executives regularly meet with the employees in the format of Information Sharing and Director Days. These events are held not only to make the staff aware

of critical corporate information, but also to establish the communication between the executives and the staff. In 2018, two Information Sharing Days and two Director Days were conducted.

APPENDICES

APPENDIX 1.

GLOSSARY

ABBREVIATIONS USED IN THE REPORT

AFCF	adjusted free cash flow	NPP	nuclear power plant
AH	actual headcount	NSGP	nuclear steam generating plant
APMS	automated project management system	OBPU	optimize buoyant power unit
ASN	average staff number	ORP	oil refinery plant
ATPMS	Automated Technical Process Management System	PPE	power plant engineering
BoD	board of directors	PWR	water reactor
CCGT	combined cycle gas turbine unit	QMS	quality management system
CHP	combined heat plant	RAW	radioactive waste
CCO	control circuit organizations	RC	refining company
CPS	control and protection system step electromagnetic drive	RES	Renewable Energy Resources
SED		RF	reactor facility
ERMS	Enterprise Risk Management System	RF MCS	reactor facility monitoring and control system
FNHPP	floating nuclear heat and power plant	RIA	results of intellectual activity
FR	fast reactor	RPS	Rosatom production system
GMS	general meeting of stockholders	SCP	State Circulation Pump
GPC	gas and petroleum chemistry	SDPP	state district power plant
INES	international nuclear event scale	SMB	small and medium-sized business entities
JV	joint venture	SNF	spent nuclear fuel
KPI	key performance indicators	SPS	shipping packaging set
LCOE	levelised cost of energy	TMSPS	transport, marine and shipboard power supply
LNG	liquefied natural gas	TPP	thermal power plant
LTIFR	lost time injury frequency rate	USPS	Unified Sectoral Procurement System
MCP	main circulation piping	USSP	ultra supercritical steam parameters
MCPU	main circulation pump unit	WPP	water power plant
MSMP	minimum statutory monthly pay		
MS(R)	Moisture Separator/Reheater		

TERMS USED IN THE REPORT

INES is international nuclear event scale that evaluates all unusual events at nuclear facilities according to the 8-score scale.

LCOE is levelised cost of energy throughout the power plant life cycle of (including all possible investments, costs and revenues).

LTIFR is lost time injury frequency rate.

Topic is a topic that describes an activity of the Company or its impact on stakeholders.

Employee engagement is an emotional and intellectual state that motivates an employee to fulfill his/her work effectively.

Incoming inspection is quality and completeness control of products received at the NPP site to be used in its construction and operation.

Top management are the Company's employees who make decisions that have a significant impact on the enterprise's business in general (from the level of functional unit managers to CEO).

Integrated additional incentive (IAI) is a portion of salary paid to an employee every month for a level of skills, professionalism and labour efficiency determined following the efficiency and potential evaluation (RECORD assessment or employee's professional status evaluation procedure).

Combined proceeds are total proceeds of the companies included in the combined accounting reporting profile in accordance with the method in force in the company net of the intracompany balance proceeds and other adjustments.

MFR is a multipurpose research fast reactor of the fourth generation being built in Russia in the town of Dimitrovgrad (JSC SRC NIIAR).

Local employees/managers are employees who reside in the area of the employer's activity.

Mini-WPP is mini-hydrogeneration equipment (package miwater power plants).

MSMP is minimum statutory monthly pay under the federal law.

AFCF is a key performance indicator of Rosatom State Corporation; primary activity cash flow adjusted by non-cash income and expenses. It describes the behaviour of cash flows investable in development.

Stakeholder is an individual, a group of persons or an organization under the company's influence and/or capable of influencing the company.

Significant regions of activity are regions where production capacities and key staff of the enterprise are located.

Significant topic is a topic that reflects a significant activity of the Company or an impact on stakeholders.

APPENDIX 2.

INFORMATION ABOUT THE REPORT

GRI 102-50

In accordance with the Russian law, JSC Atomenergomash Annual Accounting Standard and GRI Sustainability Reporting Standards ("GRI Standards") JSC Atomenergomash issues this Integrated Annual Report ("the Report") that discloses the key performance indicators of the Power Engineering Division of Rosatom State Corporation for the period of 01/01/2018 – 31/12/2018 and long-term development prospects.

GRI 102-51, 102-52

JSC Atomenergomash traditionally uses the full-year cycle reporting; the previous Report was issued in 2017 based on the 2016 financial year results.

GRI 102-12

The Report was drafted given the requirements of external regulatory documents as amended):

- Federal Law of 26 December 1995 no. 208-FZ On Joint-Stock Companies;
- Order of Rosatom State Corporation of 18 July 2017 no. 1/671-P On Approval of Unified Industry-Specific Methodical Guidelines for Public Reporting of Rosatom State Corporation and its organizations;
- Regulation of Bank of Russia of 30 December 2014 no. 454-P On Disclosure of Information by Equity Securities Issuers;
- Letter of Bank of Russia of 10 April 2014 no. 06-52/2463 On Corporate Governance Code;
- AA1000 Accountability standards;
- Global Reporting Initiative (GRI) sustainable development standards;
- International Integrated Reporting Standard (IIRC).

The Company has an internal regulatory document in force: Public Annual Reporting Standard approved by decree of the CEO of August 14, 2018 no. 33/360-P. It defines the procedure for the Report preparation and responsibility of the process participants as well as

requirements to the Report, including the System of Certificated Performance Indicators of JSC Atomenergomash.

GRI 102-32

The Strategy and Development Department is responsible for the Report preparation. The Public Reporting Committee is involved throughout the key stages of the Report preparation (chaired by the Strategy and Development Department director) with the main task to coordinate the Report preparation work and to assess the significance and completeness of information disclosed in the Report.

GRI 102-40, 102-42

The Company recognizes interaction with stakeholders as one of the fundamental factors of sustainable development and jointly with the Division's enterprises successively develops structural interaction. This work implies resolving the following tasks:

- Analysis of mutual influence of the Company and stakeholders in various aspects of activity;
- Determination of expectations and interests of stakeholders;
- Responding to stakeholders' expectations and searching for consensus in problematic issues;
- Establishment of long-term partner relations with key stakeholders.

GRI 102-43

In accordance with the existing pattern of interaction with stakeholders, the Company held public discussions by means of correspondence. For instance, in the beginning of the reporting campaign stakeholders were questioned by means of correspondence about the contents and approval of the concept of the Report by the Company's Public Accounting Committee, including the questionnaire results, list of indicators and main accents (20/10/2017 – 08/11/2017).

GRI 102-47

SIGNIFICANT TOPICS AND THEIR BOUNDARIES

#	Topic
1	Economic effectiveness and financial standing*
2	Market presence
3	Business activities
4	Investment activities
5	Production activity results
6	Quality and safety*
7	Production activity optimization
8	Procurement activities*
9	Innovation-driven growth
10	Scientific activities
11	Emissions and waste*

#	Topic
12	Environmental management*
13	Staff composition*
14	Labour conditions and management*
15	Health and safety at workplace*
16	Staff performance management
17	Staff replacement*
18	Impact on regions of presence*
19	Anti-corruption practices*
20	Statutory compliance*
21	Marketing and PR communications*
22	Activity of corporate governance bodies
23	Internal control audit and risk management

* GRI topics

GRI 102-48

Reformulation of information compared with the previous year did not happen.

GRI 102-10, 102-45, 102-49 and 103-1

Based on a survey of members of the Atomenergomash Annual Reporting Committee, the boundaries of each significant topic were determined. In 2018, changes took place in the structure of the Division: the OJSC Venta was excluded due to the sale of the asset, and NPO TsNIITMASH was reorganized in the form of a merger with JSCVNIIAM.

DISCLAIMER

This Report contains a number of forecasts concerning the future position of the Company broken down by various topics, its plans and expected results. In view of their specificity, the forecasts are associated with inherent risk and uncertainty. The Company's business

and its environment may be exposed to the influence of several economic, political, social and other factors of probabilistic nature. Therefore, the Company notes that the actual results may differ from those directly or indirectly given in forecasts contained in the Report.

BOUNDARIES OF SIGNIFICANT TOPICS

Topics	Company																			
	AAEM, LLC	ARAKO	JSC ATM	JSC Atomenergomash	JSC AEM-Technologies	LZ PZM LLC	JSC OKB GIDROPRESS	Ganz EEM	PJSC ZIO-Podolsk	JSC IK ZIOMAR	JSC IFTP	JSC OZTM i TS	JSC Afrikantov OKBM	JSC REMKO	JSC SNIIP	JSC SverdNIikhimmash	JSC TSKBM	JSC NPO TSNITMASH	PJSC EMSS	
1	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+		
2	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	
3	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	
4	+	+	+	+	+		+	+		+	+		+		+	+	+	+	+	
5	+	+	+	+	+		+	+	+	+	+	+	+		+	+	+	+	+	
6	+	+	+	+	+		+	+		+	+	+	+	+	+	+	+	+	+	
7	+	+	+	+	+		+	+		+	+		+		+	+	+	+		
8	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+		
9		+	+	+	+		+			+	+		+		+			+		
10		+	+	+	+		+		+	+			+		+	+				
11	+	+	+	+	+		+	+	+		+	+	+	+	+		+	+		
12	+	+	+	+	+		+	+	+	+	+	+	+		+		+		+	
13	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
14	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
15	+	+	+	+	+	+	+	+	+	+	+		+	+	+		+		+	
16	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
17	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
18	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
19	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
20	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
21	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	
22		+	+	+	+	+		+		+	+	+	+		+	+		+	+	
23																+				

INDEX OF GRI STANDARDS

GRI 102-54, 102-55

THE REPORT HAS BEEN PREPARED IN ACCORDANCE WITH GRI STANDARDS, MAIN VARIANT.

Reporting element	Report page	Reporting element	Report page	Reporting element	Report page
GRI 101. Basics (2016)					
101					
GRI 102. General elements (2016)					
102-1	4	102-16	26	102-43	85, 87, 91
102-2		102-17	51, 53	102-44	104
102-3	 105	102-18	46, 47	102-45	91, 100
102-4	12	102-20	50	102-46	
102-5	4	102-22	47	102-47	 91, 95
102-6	13	102-23	48	102-48	91
102-7	12, 74	102-26	 47	102-49	91
102-8	74	102-32	90	102-50	90
102-9	41	102-33	47	102-51	90
102-10	41, 47, 91	102-34	47	102-52	90
102-11	26	102-36	 47, 49	102-53	105
102-12	90	102-40	90	102-54	93
102-13	76	102-41	76	102-55	93
102-14	8	102-42	90	102-56	 100
GRI 103. Management approaches (2016)					
103-1	91, 95	103-2	95	103-3	 47, 53, 95
GRI 201. Economic effectiveness (2016)					
201-4	47	In 2018, Atomenergomash JSC and its subsidiaries did not receive significant amounts of state aid			
GRI 203. Indirect economic impact (2016)					
203-1	84				
GRI 204. Procurement practices (2016)					
204-1	43				
GRI 205. Anti-corruption practices (2016)					
205-3	52				

 — Extended version (see interactive report)

Reporting element	Report page	Reporting element	Report page	Reporting element	Report page
GRI 302. Energy (2016)					
302-1		302-4			
GRI 303. Water (2016)					
303-1					
GRI 305. Emissions (2016)					
305-1		No data expressed in equivalent of CO ₂			
305-6		305-7			
GRI 306. Waste water and waste (2016)					
306-1	69	No breakdown by water quality as such records are not kept.			
306-2		Waste management is not broken down into the handling of hazardous and non-hazardous waste			
GRI 307. Environmental compliance (2016)					
307-1		No substantial fines			
GRI 401. Employment (2016)					
401-1	79	No breakdown by region			
401-2	76				
GRI 402. Relations of employees and management (2016)					
402-1	76, 78				
GRI 403. Staff health and safety (2016)					
403-2	78	Accident frequency rate, days off work rate, occupational illness rate, absentee rate, particularly broken down by gender are not disclosed as such records are not kept.			
403-3	78	403-4	78		
GRI 404. Training and education (2016)					
404-1		404-3	79		
GRI 416. Diversity and equal opportunities (2016)					
416-1	39				
GRI 417. Consumer's health and safety (2016)					
417-3	85				
GRI 419. Labelling of products and services (2016)					
419-1		Social and economic compliance (2016) In 2018, the enterprises of the Division did not receive significant fines			

 — Extended version (see interactive report)

INFORMATION ON MANAGEMENT APPROACHES

#	Topic	Chapter	Page
1	Economic effectiveness and financial standing (GRI 201. Economic effectiveness (2016))	2.1. Economic effectiveness and financial standing	28
2	Market presence	1.1. Company's market position	12
3	Business activities	2.2. Business activities	33
4	Investment activities	2.3. Investment activities	34
5	Production activity results	3.1. Production activity results	38
6	Quality and safety (GRI 416. Consumer's health and safety (2016))	3.2. Quality and industrial safety	39
7	Production activity optimization	3.3. Process optimization	40
8	Procurement activities (GRI 204. Procurement practices (2016))	3.4. Procurement activities	41
9	Innovation-driven growth	5.2. Innovation management	60
10	Scientific activities	5.1. Scientific activities	58
11	Emissions and waste (GRI 305. Emissions (2016), GRI 306. Waste water and waste (2016))	6.2. Emissions and waste	70
12.1	Environmental management and compliance (GRI 307. Environmental compliance (2016))	6.1. Environmental management	68
12.2	Energy consumption (GRI 302. Energy (2016))	6.1. Environmental management	68
12.3	Water consumption (GRI 303. Water (2016))	6.1. Environmental management	68
13	Staff composition (GRI 405. Diversity and equal opportunities (2016))	7.1. Staff composition	74
14	Labour conditions and management (GRI 402. Relations of employees and management (2016))	7.2. Labour conditions and management	75
15	Health and safety at workplace (GRI 403. Staff health and safety (2016))	7.3. Health and safety at workplace	77
16	Staff performance	7.4. Staff performance management	79
17	Staff replacement (GRI 401. Employment (2016), GRI 404. Training and education (2016))	7.2. Labour conditions and management 7.4. Staff performance management	75 79
18.1	Impact on regions of presence (GRI 203. Indirect economic impact (2016))	8.1. Social policy and charity	84
18.2	Social investments and charity	8.1. Social policy and charity	84
19	Anti-corruption practices (GRI 205. Anti-corruption practices (2016))	4.2. Ethics and anti-corruption practices	51
20	Statutory compliance (GRI 419. Social and economic compliance (2016))	4.5. Statutory compliance	55
21	Marketing and PR communications (GRI 417. Labelling of products and services (2016))	8.2. External communications and corporate branding	85
22	Activity of corporate governance bodies	4.1. Corporate governance system	46
23	Internal control audit and risk management	4.3. Internal control and audit 4.4. Risk management	53 54

APPENDIX 4.

COMBINED FINANCIAL STATEMENTS

COMBINED BALANCE SHEET
AS OF DECEMBER 31, 2017Company **Atomenergomash JSC**

Taxpayer's ID:

Line of business:

nuclear and power engineering

Legal form of incorporation / form of ownership:

Measurement: '000 RUB

Location (address): **24, Bolshaya Ordynka St., Moscow 119017**Form according to National Index of
Administrative Documentation

Date (day, month, year)

under Russian Classifier of Businesses
and Organizations (OKPO)

Taxpayer's ID (INN)

under Russian Classification of
Economic Activities (OKVED) codeunder Russian Classifier of Forms of
Incorporation/ Forms of Propertyaccording to All-Russia Classifier of
Measurement Units

CODES		
0710001		
31	12	2018
94507811		
7706614573		
384		

Explanations Indicator	Code	At 31 december 2018	At 31 december 2017	At 31 december 2016
ASSETS				
I. NON-CURRENT ASSETS				
Intangibles	1110	33,489,373	30,917,106	34,495,219
5.5 including: Goodwill	1111	32,354,005	30,209,628	33,966,715
R&D deliverables	1120	316,647	400,414	395,416
Intangible development assets	1130	0	-	-
Tangible development assets	1140	0	-	-
Fixed assets	1150	33,068,260	29,160,909	29,430,915
Buildings, machinery, equipment, etc. Fixed assets	1151	26,821,539	23,821,816	24,119,755
In-progress capital investments in fixed assets	1152	5,835,446	5,003,305	4,817,016
Advances to suppliers and contractors for capital construction, suppliers of fixed assets	1153	411,274	335,789	494,144
Interest-bearing investments into tangibles	1160	130,648	112,458	121,006
5.3 Financial investments	1170	2,452,884	2,942,696	2,984,945
including: financial investments into associated companies	1171	-	-	-
Deferred tax assets	1180	2,464,261	3,094,295	3,013,166
Other non-current assets	1190	30,575,988	24,476,273	5,913,011
Total section I	1100	102,498,061	91,104,151	76,353,677

Explanations Indicator	Code	At 31 december 2018	At 31 december 2017	At 31 december 2016
II. CURRENT ASSETS				
Reserves	1210	28,330,045	21,829,332	25,579,472
including:				
Raw, materials and other similar	1211	9,360,686	6,344,818	7,012,686
Costs in production-in-progress	1212	17,437,232	14,387,484	16,963,330
Finished goods and goods for resale	1213	1,457,486	1,028,977	1,289,134
shipped goods	1214	74,640	68,053	314,321
Other inventories and costs	1219	-	-	-
Value-Added Tax on purchased valuables	1220	2,376,606	1,895,589	1,963,330
Receivables	1230	57,859,501	56,928,362	51,932,831
Trade accounts receivable	1231	23,583,892	27,640,686	24,124,890
Disbursed prepayments	1232	10,661,014	11,012,126	13,335,150
Other receivables	1233	4,101,352	3,062,951	1,974,312
Not presented for payment accrued Revenues	1234	19,513,243	15,212,571	12,498,480
Financial investments (except for cash equivalents)	1240	4,912,412	18,727,983	9,238,516
Cash and cash equivalents	1250	63,197,285	46,455,732	58,507,220
Other current assets	1260	4,730,604	3,622,167	4,860,688
Total current assets II	1200	161,406,455	149,459,164	151,709,608
BALANCE SHEET TOTAL	1600	263,904,516	240,563,316	228,435,733
LIABILITIES				
III. CAPITAL AND PROVISIONS				
5.4 Authorized capital (share capital, capital stock, partners' contributions)	1310	2,567	2,566	1,016
5.4 Authorized capital of the companies, a stake in which is not held by the parent company	1311			3,400,100
Treasury shares repurchased with shareholders	1320	-	(3,141)	-
Contribution to the share capital received from shareholders (participants) before registration of changes into constituent documents	1330	340,000	338,200	33,460,278
Revaluation of non-current assets	1340	104,497	317,222	239,568
5.4 Share premium (w/o revaluation)	1350	63,421,139	59,613,397	26,921,181
Surplus	1360	732,158	808,502	792,070
including: with law	1361	209,035	336,891	332,794

Explanations Indicator	Code	At 31 december 2018	At 31 december 2017	At 31 december 2016
provisions created according to constituent documents	1362	523,123	471,612	459,277
Retained profit (uncovered loss)	1370	(7,703,212)	(16,753,244)	(13,164,072)
Total Capital and Provisions III	1300	56,897,147	44,323,504	51,650,141
5.6 Minority share	1301	(2,319,366)	(1,889,258)	(3,563,563)
5.5 Goodwill	1302	22,198	52,730	52,730
IV. LONG-TERM LIABILITIES				
5.7 Borrowings	1410	27,272,300	28,239,825	25,503,301
Deferred tax liabilities	1420	-	-	-
Estimated liabilities	1430	423,029	188,677	396,457
Other liabilities	1450	94,778,165	79,566,318	60,387,875
Total Long-Term Liabilities IV	1400	122,473,494	107,994,819	86,287,633
V. SHORT-TERM LIABILITIES				
5.7 Borrowings	1510	16,675,919	13,148,683	21,541,433
Payables	1520	64,458,337	71,422,803	65,918,498
including: suppliers and contractors	1521	17,434,708	15,324,673	14,265,000
Received prepayments	1522	28,104,648	38,023,090	42,872,970
indebtedness to the company's personnel	1523	657,946	581,573	665,606
indebtedness to governmental off-budget funds	1524	347,605	336,250	287,772
Tax and due payments	1525	2,933,794	2,841,586	1,989,920
Other lenders	1526	14,979,637	14,315,632	5,837,231
Deferred income	1530	121,089	53,307	41,828
Estimated liabilities	1540	5,448,732	4,934,485	5,850,319
TARGET FINANCING	1546	119,534	427,233	656,713
Trade receivables	1547	5,212	94,250	-
Other liabilities	1550	2,221	761	-
Total section V	1500	86,831,043	90,081,521	94,008,791
BALANCE SHEET TOTAL	1700	263,904,516	240,563,316	228,435,733

Deputy CEO —
Director, Economy and Finance


(Signature)

S. N. Filatov
(clarification of signature)

01 April 2019

COMBINED INCOME STATEMENT FOR 2018

Company **Atomenergomash JSC**

Taxpayer's ID:

Line of business:

nuclear and power engineering

Legal form of incorporation / form of ownership:

Measurement: **'000 RUB**

Form according to National Index of Administrative Documentation

Date (day, month, year)

under Russian Classifier of Businesses and Organizations (OKPO)

Taxpayer's ID (INN)

under Russian Classification of Economic Activities (OKVED) code

under Russian Classifier of Forms of Incorporation/ Forms of Property

according to All-Russia Classifier of Measurement Units

CODES		
0710002		
21	12	2018
94507811		
7706614573		
384		

Explanations Indicator	Line code	For the reporting period	For similar period of the previous year
5.8 Revenues	2110	70,791,837	68,470,068
Cost of sales	2120	(53,330,640)	(54,344,610)
Gross profit (loss)	2100	17,461,196	14,125,458
Selling expenses	2210	(1,368,867)	(1,434,935)
Managerial expenses	2220	(5,616,911)	(5,198,885)
Income (loss) from sales	2200	10,475,418	7,491,637
Incomes from participation in other companies	2310	52,147	19,622
Interest receivable	2320	1,631,420	1,549,361
Interest payable	2330	(2,699,498)	(3,666,244)
Other incomes	2340	14,602,769	2,458,052
Other expenses	2350	(4,875,940)	(10,443,749)
3.3 Capitalized income (loss)	2360	-	-
Pre-tax profit (loss)	2300	19,186,315	(2,591,321)
Current income tax	2410	(4,582,486)	(1,032,575)
including permanent tax liabilities (assets)	2421	(433,901)	(804,684)
Change in deferred tax liabilities	2430	199,689	(614,836)
Change in deferred tax assets	2450	(336,580)	436,800
Other	2460	(619,983)	(98,214)
Reallocation of income tax within the consolidated taxpayers' group	2465	376,266	(567,555)
Net profit (loss)	2400	14,223,223	(4,467,701)
Profit belonging to group	2470	13,288,027	(3,288,472)
Profit held by small shareholders	2480	935,196	(589,614)

Deputy CEO —
Director, Economy and Finance


(Signature)

S. N. Filatov
(clarification of signature)

01 April 2019

OPINION ON THE ASSURANCE

OF THE INTEGRATED ANNUAL REPORT OF JSC ATOMENERGOMASH FOR 2018 BY AN INDEPENDENT AUDIT ORGANIZATION

This opinion is intended for the management of Joint Stock Company “Atomic and Power Engineering Division” (hereinafter referred to as JSC Atomenergomash).

The assurance is focused on the interaction of JSC Atomenergomash with stakeholders as part of its activities related to sustainable development; and the Integrated Annual Report of JSC Atomenergomash for 2017, including information on JSC Atomenergomash and 20 control circuit organizations (hereinafter referred to as the Report).

Responsibilities of the Parties

JSC Atomenergomash is responsible for the preparation of this Report.

We are only responsible for making a conclusion based on the results of the assurance of the Report to JSC Atomenergomash pursuant to the engagement agreed with it and assume no responsibility to any third party.

Scope, criteria and level of assurance

The interaction of JSC Atomenergomash with stakeholders as part of its activities related to sustainable development was assessed based on the following criterion:

- The nature and extent of compliance of JSC Atomenergomash with the principles of the AA1000APS 2008 standard – inclusivity, materiality, responsiveness. The report was assessed based on the following criteria:
- Compliance of disclosure with the requirements of the Sustainability Reporting Standards of the Global Reporting Initiative (hereinafter referred to as the GRI Standards) to the main version of the report;
- Compliance with the International Standard for Integrated Reporting;
- Compliance with the requirements of the laws of the Russian Federation to the annual statements of joint-stock companies concerning disclosed information; • Compliance with the regulatory requirements of Rosatom State Corporation and internal local regulations of JSC Atomenergomash concerning the content of public reporting.

Our audit was planned and performed according to the AA1000 Assurance Standard, (hereinafter referred to as AA1000AS 2008) (moderate level of assurance) and the International Standard on Assurance Engagements 3000 (revised) “Assurance Engagements Other than Audits and Reviews of Historical Financial Information” (limited assurance). Assurance corresponds to Type 2 according to the definition of AA1000AS 2008, taking into consideration the limitations specified in the section “Assurance Boundaries” of this opinion.

Our selective verification of information in the Report made to ensure the above level of assurance is not intended to provide a high level of guarantees for assurance. The work on assurance was based on the supporting information provided by the Company’s management and employees, on data from available sources and on analytical methods of assurance. In respect of the quantitative information contained in the Report, the work performed cannot be considered sufficient to identify all possible inaccuracies and misrepresentations. However, the assurances we have collected are sufficient to form our position according to the above levels of confidence.

Assurance Methodology

As part of our work, we:

- Studied and tested on a selective basis the systems and processes implemented by JSC Atomenergomash in order to ensure and analyze the compliance of its activities with the AA1000 APS 2008 principles, collected evidence supporting the practical implementation of the principles.
- Studied the protocols of dialogues and public consultations with stakeholders;

- Interviewed, and obtained documentary evidence from, representatives of the management and employees of JSC Atomenergomash.
- Studied information available on the websites of JSC Atomenergomash and key control circuit organizations (hereinafter referred to as “CCO”) regarding activities related to issues of sustainability.
- Studied published third-party statements concerning the economic, environmental and social aspects of the activities of JSC Atomenergomash and CCOs in order to verify the validity of the statements made in the Report.
- Analyzed non-financial statements of companies in a similar market segment in order to benchmark.
- Analyzed processes of internal audit of non-financial statements used in JSC Atomenergomash.
- Studied on a selective basis the documents and data on the efficiency of the management systems for economic, environmental and social topics of sustainability that are in place in JSC Atomenergomash.
- Studied the current processes of collection, processing, documentation, verification, analysis and selection of data to be included in the Report.
- Analyzed the information in the Report for compliance with the above criteria.

Assurance Boundaries

Assurance covered only the data of 2018.

The reliability of the information on efficiency as provided in the Report was assessed for compliance with the requirements for the main version of the Report “in accordance” with the GRI Standards and the information referred to in the GRI Content Index, as well as for compliance with the requirements of the International Standard for Integrated Accounting and the requirements of the laws of the Russian Federation to the annual statements of joint stock companies concerning disclosed information. The quantitative indicators are assessed for the compliance with the external and internal statements presented to us.

Assurance did not cover forward-looking statements; statements expressing judgments, beliefs or intentions of JSC Atomenergomash to take any actions related to the future; or statements based on expert judgments as indicated in the Report.

Assurance was only made with respect to the version of the Report previously approved by the CEO xx.xx.xxxx. Assurance was made with respect to the Russian version of the report in MS Word format and containing information to be published both in hard copy and in soft copy on the website of JSC Atomenergomash.

Conclusions

The following conclusions are based on our work on assurance carried out within the above scope and boundaries.

Nature and extent of compliance by JSC Atomenergomash with the principles of AA1000APS 2008 Based on the procedures carried out and the evidence obtained, we saw no facts that would make think that the interaction of JSC Atomenergomash with stakeholders as part of its sustainability-related activities does not meet in all material aspects the criteria of AA1000 APS 2008 in terms of compliance with the principles of inclusivity, materiality, responsiveness. Compliance of the Report with the requirements of the GRI Sustainability Reporting Standards (the main version of the report)

ANALYSIS OF COMPLIANCE WITH THE GRI STANDARDS

In order to form a position on this issue, we analyzed compliance with the GRI Standards with respect to the principles and elements of reporting for the selected version of the report “in accordance” in the preparation of the Report.

- Common elements of reporting are disclosed in compliance with GRI 102 (2016) for the declared version of the report “in accordance”.
- The requirements of GRI 103 (2016) for the disclosure of approaches to the management of material topics are generally met in the Report: the reasons for recognizing the topics material, management approaches and, on selected material topics, mechanisms for assessing management approaches are disclosed.
- The topical elements of the reporting required to ensure compliance with the requirements for the main version of the report “in accordance” with the GRI Standards are given in the Report in compliance with the requirements of the GRI Standards. Where the indicators cannot be disclosed in full, the report indicates which information was excluded. Reasons for incomplete disclosure are given for all indicators required to ensure compliance with the requirements for the main version of the report “in accordance” with the GRI Standards.

OVERALL ASSESSMENT OF THE REPORT

Based on the procedures carried out and the evidence obtained, we saw no facts that would make think that the Report does not meet in all material aspects the requirements for the main version of the Report “in accordance” with the GRI Standards. This conclusion is based on above analysis of compliance with the GRI Standards.

Compliance of the Report with the International Standard for Integrated Reporting

Based on the procedures carried out and the evidence obtained, we saw no facts that would make us think that the Report does not meet in all material aspects the requirements of the fundamental principles of the International Standard for Integrated Reporting and the requirements for the composition of the content elements mandatory for the integrated report.

Compliance with the laws of the Russian Federation to the annual statements of joint-stock companies concerning disclosed information

Based on the procedures carried out and the evidence obtained, we saw no facts that would make us think that the Report does not meet in all material aspects the requirements of the Regulation on Information Disclosure by Issuers of Equity Securities concerning the disclosure of information in the annual report of the joint-stock company.

Compliance with the regulatory requirements of Rosatom State Corporation and internal local regulations of JSC Atomenergomash concerning the content of public reporting

Based on the procedures carried out and the evidence obtained, we saw no facts that would make us think that the Report does not meet in all material aspects the requirements of the Unified Industry Policy of Rosatom State Corporation in the area of public reporting and the Public Annual Reporting Standard of JSC Atomenergomash.

We advise

1. Expanding the practice of disclosing indicators in relation to the planned values for the reporting year and the target values for the future for all the disclosed GRI indicators.
2. Increasing the level of the disclosure of indicators for which the requirements of the GRI Standards have not been fully taken into account (partial disclosure).
3. In all cases of incomplete disclosure of indicators, explaining the reasons for incomplete disclosure in accordance with the requirements of GRI.
4. Expanding the practice of disclosing information on assessing the efficiency of management approaches to include all significant aspects.

The above recommendations are not aimed at changing the output. Our findings are not modified in relation to the circumstances specified in these recommendations.

Limited Liability Company Financial
and Accounting Consultants based
on Power of Attorney No. 76/18
of December 17, 2018 Russian Federation,
Moscow, June 18, 2019



V. Yu. Skobarev
Partner

OPINION ON PUBLIC ENDORSEMENT

Representatives of JSC Atomenergomash (the Company) suggested that we assess Integrated Annual Report 2018 (the Report) in terms a completeness and significance of information disclosed, and efficiency of the Company's response to stakeholders' requests.

We take into consideration that JSC Atomenergomash promotes mastering of the leading international and industry-specific standards, including the latest GRI Standards, International Integrated Reporting Standard (IIRC), AA1000 standards and Rosatom State Corporation Public Reporting Policy.

The Report deals with the most important topics significant to the Company and its stakeholders. The Report structure allowed for disclosing the key results and impacts in the economic, environmental and social spheres of activity. The method developed and implemented by the Company for assessing the significance of information to be included in the Report based on international standards allowed for considering opinions of the Company's top management and stakeholders. We think that there are no reasons to doubt the objectivity of the procedure for determining the Report contents.

In our opinion, the Report contains information of most significance to stakeholders. We do not know any facts that put in doubt the reliability of information set out in the Report or indicate to any concealment of any significant information. The Report sets forth performance results in the Report in a balanced manner: it presents both the Company's achievements and key problems and risks.

In the reporting year, the Company engaged stakeholders in the Report preparation process in the format of public discussions y means of correspondence to allow the participants to offer their recommendations and receive the Company's feedback. Based on the discussions, there were protocols drafted and approved with the participants subject to which the Report text is amended to increase stakeholders' awareness of issues of their interest. In addition, the Company has fulfilled the obligations it took in the course of the previous reporting campaigns.

In the current year, the Company has kept the efficiency of interaction with stakeholders. It should be specifically noted that the Company is constantly doing a serious work to ensure a wider audience for discussions, particularly engaging new participants.

We are sure that JSC Atomenergomash will be successively fulfilling obligations, plans and intentions defined in Report 2017, and keep developing the activity in the area of public reporting and interaction with stakeholders.

Belousov P.A.

Head of the IATE Innovation and Technology Center NII MEPhI, Head of Educational Programs, Associate Professor

Golovachev S. S.

Head of the project "Development of the reporting system of Rosatom State Corporation and its organizations"

Davydova N.G.

Director of the Institute for Environmental Projects Consulting ANO

Radovsky I.A.

Head of CSR Department of JSC Technabexport

Nikitin A.K.

General Director of EPC Bellona

Oirah M.I.

General Director of Horizon KF LLC

Petrunin V.V.

First Deputy Director - General Designer of JSC «Afrikantov OKBM»

Dementzova N.A.

Head of Communications, JSC ASE IC

Saakyan Yu.Z.

General Director of ANO "Institute of the Problems of Natural Monopolies"

Timonov A.V.

Director of the Information and Public Relations Department of Rosenergoatom Concern JSC

Feoktistova E.N.

Managing Director for Corporate Responsibility, Sustainable Development and Social Entrepreneurship RSPF

Khasiev A.V.

Chairman of the Oka Interregional Movement

Khitrov A. Yu.

General Director of the All-Russian Industrial Association of Employers «Union of Employers of the Nuclear Industry, Energy and Science of Russia»

APPENDIX 7.

STAKEHOLDER OPINION CONSIDERATION

GRI 102-44

CONSIDERATION OF STAKEHOLDERS' SUGGESTIONS REGARDING THE ANNUAL REPORT

#	Suggestion / Recommendation	Company Response
Shareholders, Rosatom		
1.	It is suggested to complement the annual report with the following information: - top-priority fields of the Company's activity - the report of the Board of Directors (Supervisory Committee) on the Company's development in top-priority fields - growth perspectives - description of key risk factors related to the Company's activity	Partially realized. The Division's highest-priority fields of activity and growth perspectives are reflected in Business Model and Development Strategy section. Key risk factors will be included later, after the Risk Management Group approves the corresponding subsection. The report of the Board of Directors on the Company's development in top-priority fields is reflected in the Speech of the Chairman of the Board.
2.	It is suggested to complement the annual report with information regarding approval of this report by the General Meeting or Board of Directors (Supervisory Committee).	Realized.
3.	It is suggested to complement the 2018 Key Indicators table with information regarding the Division's economic performance for several last reporting periods (including retrospective analysis), and notes on the impact of the above-mentioned factors on the change in the Division's financial standing and performance.	Rejected. The report only presents 2018 data, without relation to or comparison with previous-period indices. Further report sections present some of those indices with retrospective analysis.
4.	It is recommended to complement the report with social performance information (social projects, local community relations, cultural and other significant events).	Realized.
Staff / Labor Unions		
5.	It is recommended to provide more information and data reflecting the Company's contribution to fulfilment of Sustainable Growth Objectives in Responsible Consumption and Production and Innovation-Driven Growth sections.	Realized. New section—1.5 Sustainable Growth—was added.
Business Partners, Industry Entities		
6.	It is recommended to reflect Division restructuring results or plans.	To be realized in the next reporting campaign is this program regards 2018 milestone events.
Scientific and Expert Community		
7.	It is recommended to complement the report with information regarding R&D activities conducted by universities—that are the part of the consortium of backbone universities of Rosatom—under agreements with the Division's enterprises (incl. the number of agreements, and funding volume).	Realized.
8.	It is recommended to remove the lists of regulatory documents as they make the report too heavy.	Realized.

GRI 102-3, 102-5, 102-53

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atomenergomash
COMPANY OF ROSATOM

JOINT-STOCK COMPANY "NUCLEAR AND POWER ENGINEERING"

JSC ATOMENERGOMASH

OGRN: 1067746426439, REGISTERED

ON 29/03/2006 BY INTER-DISTRICT OFFICE

OF THE FEDERAL TAX SERVICE NO. 46 FOR THE CITY OF MOSCOW

REGISTERED ADDRESS: 24 BOLSHAYA ORDYNKA STR., MOSCOW 119017

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