

APPENDICES

APPENDIX 1. ABOUT THE REPORT

GENERAL INFORMATION

Energoatom Non-Financial Report 2016 (the Report) is the Company's first non-financial report prepared on a voluntary basis and addressed to a wide range of stakeholders. The Report discloses non-financial data that provide a comprehensive picture of the Company's sustainability activities.

The Report targets all the stakeholders of the Company: government authorities,

local communities and local governments, employees, contractors, academic and expert communities, international organisations and NGOs, civil society organisations and mass media.

The Report has been prepared in line with:

- Global Reporting Initiative (GRI G4 Guidelines, Core);

- UN Global Compact 10 Principles;
- AA1000 International Stakeholder Engagement Standard (Institute of Social and Ethical Accountability)

The Report builds upon the UN Sustainable Development Goals adopted in September 2015.

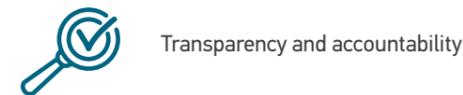
REPORT STRUCTURE

The Report presents information on economic, environmental and social aspects of Energoatom's operations.

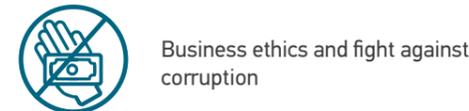
It provides description of the Company's activities in the following area:



Corporate governance



Transparency and accountability



Business ethics and fight against corruption



Stakeholder engagement



Development of local communities



Nuclear, radiation and environmental safety of NPPs



HR management, including employee engagement, competitive salaries and social benefits, professional development of employees



Safe working conditions



Environmental protection and energy efficiency.

Energoatom has included references to additional sources of information, including the Company's website, and other documents available in the public domain to make the Report reader-friendly.

In the Report, the words "Energoatom", "the Company" and "we" have the same meaning and refer to Energoatom and its separate subdivisions within the scope of the Report.

SCOPE OF THE REPORT

The Report covers the data about operations and performance of Energoatom and of separate subdivisions that are included in the consolidated financial indicators of the Company:

- ZAPORIZHZHYA NPP
- RIVNE NPP
- SOUTH-UKRAINE NPP
- KHMELNYTSKA NPP
- ATOMREMONTSERVICE
- ATOMKOMPLEKT
- SCIENTIFIC AND TECHNICAL CENTER
- ATOMENERGOMASH
- AUTOMATION & ENGINEERING
- EMERGENCY AND TECHNICAL CENTER
- ATOMPROJECTENGINEERING
- SKLADSKJE GOSPODARSTVO
- ATOMPRYLAD
- UPRAVLINNIA SPRAVAMY

The scope of the Report corresponds to an annual reporting cycle. The Report highlights operations of Energoatom in 2016. In addition, the Report covers the events before or after the

reporting period when they give better understanding of the information presented in the Report.

INDICATOR CALCULATION METHODOLOGY

The reporting statements which are annually submitted by the Company to the State Statistics Service of Ukraine serve as the source of quantitative information disclosed in the Report.

The Company collects and calculates some of the indicators according to the internal reporting forms audited by the competent representatives of the Company. Appendix 4 provides explanations on some GRI indicators that have been revised.

STATEMENT OF LIMITATION OF LIABILITY FOR PUBLICATION OF PROJECTION DATA

The Report contains the information on the Company's plans and initiatives for a long and medium term. The plans are forward-looking and their implementation depends, among other things, on a number of economic, political and legal factors beyond the

Company's control (economic and political situation inside and outside Ukraine, changes in the taxation, environmental and other legislation, etc.). Thus, the actual performance data of future periods can vary from the projections published in this Report.

REPORT PREPARATION PRINCIPLES

Principles for Defining Report Content

The Company reports against GRI G4 guidelines. Appendix 4 contains information on GRI disclosures in the Report.

Material Aspects

The Company has followed GRI recommendations in terms of defining material aspects to be disclosed in the Report:

- there is a list of material aspects in connection with the nature of the Company's operations (see matrix below);
- the Company provides an assessment of the materiality aspects on the basis of external and internal environment assessment, including:
 - ▶ analysis of internal environment: monitoring of documents regulating different aspects of the Company's activity, interviews with the representatives of the key subdivisions of the Company that are responsible for sustainable development.
 - ▶ analysis of external environment
 - review of sustainability reports of global nuclear companies;
 - analysis of media landscape (monitoring of important topics in mass media relating to Energoatom's operations);
 - analysis of stakeholders' opinion using such channels as public hearings (held in 2015–2016 to discuss the environmental footprint of the company) and analysis of issues raised by NGOs (including by environmental NGOs) and sent to the e-mail specified in the Contacts section.

The Company is going to improve its approach to take stakeholders' opinion into account while preparing its non-financial reports.

Principles for Defining Report Quality

The quality of the Report is ensured by the following GRI principles:

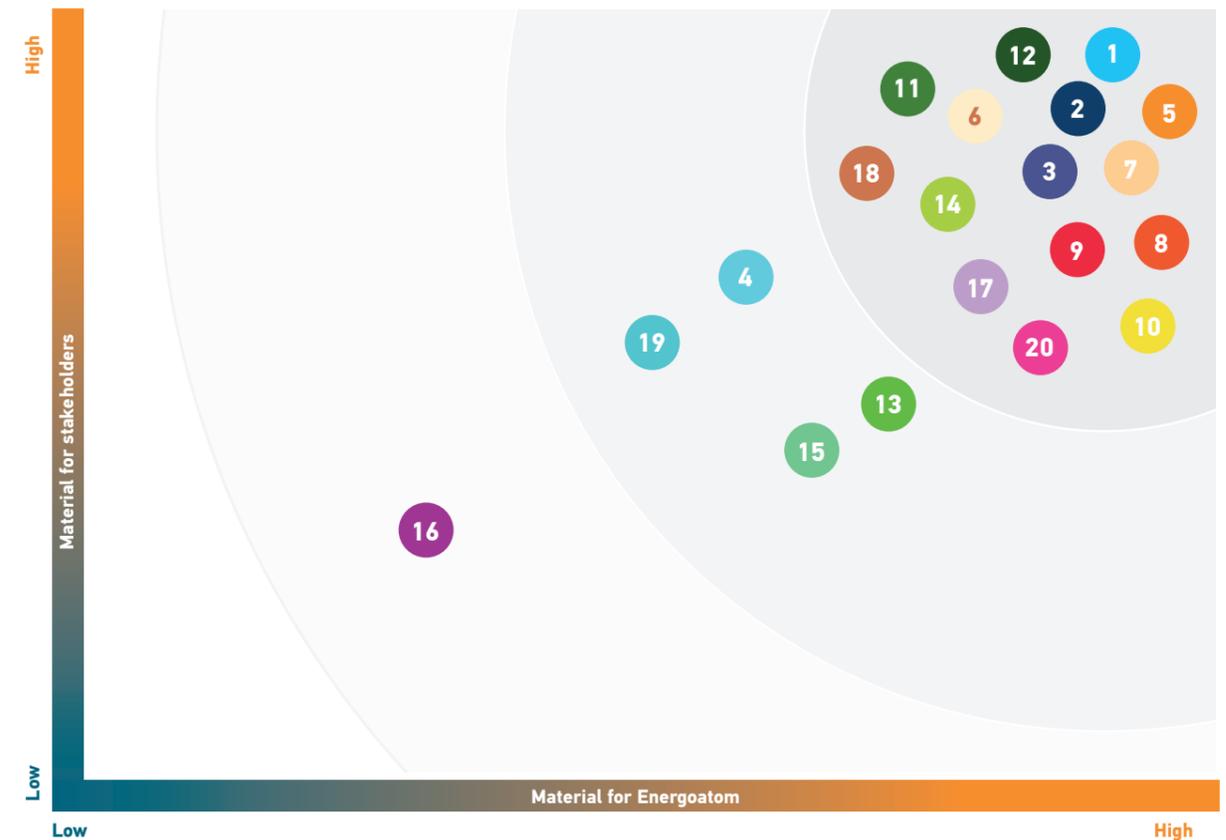
- Balance. The Company has tried to provide an unbiased picture of its operations and performance and included both achievements and areas of improvement.
- Comparability. The Report covers indicators for several years (2014–2016).
- Accuracy. The Report provides detailed information (in text format and in the form of quantitative data) to help stakeholders assess the Company's performance on
 - Clarity. The Report is written in clear language and contains a glossary.
 - Reliability. The Report provides references to the relevant sources.
 - Timeliness. The Report contains information for the calendar year 2016. The Report is to be published in 2017.

INTERNAL PROCEDURES FOR ENSURING REPORT QUALITY AND RELIABILITY

The Company is now building an internal system of non-financial reporting. Structural subdivisions of the Company that are responsible for the provision of information on each focus area of sustainable development have checked the quality and reliability of

the text and the quantitative data provided in the Report. Thus, this ensures the accuracy and reliability of the information disclosed in the Report.

Materiality Matrix



- | | | | |
|-------|--|-------|---|
| KA 1 | Nuclear, radiation and environmental safety | KA 11 | Professional development of employees |
| KA 2 | Environmental footprint minimisation | KA 12 | Safe working conditions |
| KA 3 | Nuclear facilities upgrade | KA 13 | Business ethics and fight against corruption |
| KA 4 | Corporate governance | KA 14 | Reliable and safe electricity supply |
| KA 5 | Dialogue with stakeholders | KA 15 | Human rights |
| KA 6 | Contribution to Ukraine's social and economic development | KA 16 | Charity |
| KA 7 | Compliance with national and international laws | KA 17 | Improvement of the standards of living in the areas of the Company's presence |
| KA 8 | Transparency and accountability | KA 18 | Development of local communities |
| KA 9 | Minimisation of negative environmental implications, the so called heritage of past years, which arose during the construction of NPPs | KA 19 | Energy efficiency |
| KA 10 | Competitive salary and social benefits for employees | KA 20 | Fight against climate change |

KA – Key material aspects

APPENDIX 2. MEMBERSHIPS IN ORGANISATIONS

Energoatom is a member of a number of international organisations.

Since 1997 it has been a member of the World Association of Nuclear Operators (WANO⁷¹). WANO helps its members share their operating experience to ensure they can jointly achieve the highest possible standards of nuclear safety during operation of their nuclear facilities. All members of WANO that operate nuclear facilities can communicate and share information in the cooperative and open climate.

In 2006, Energoatom joined the World Nuclear Association (WNA)⁷², an international organization seeking to promote the peaceful use of nuclear power as a sustainable energy resource for the coming centuries. The Association deals with nuclear power generation and all aspects of the nuclear fuel cycle including mining, conversion, enrichment, fuel fabrication, construction of power stations, transport, and the safe disposition of spent fuel.

Since 2007 Energoatom has been a member of EUR (European Utility Requirements) that was established in 1991 by European electricity producers in order the operating companies can develop technical specifications to new nuclear plants with light water reactors on the basis of common experience and cooperation.

In 2008, Energoatom invited Ukrainian fuel and energy companies to participate in establishment of the Ukrainian Nuclear Forum Association⁷³. The company is currently a member and a co-founder of the Association. The aim of the Ukrainian Nuclear Forum Association is the coordination of activities for solving common economic and social problems, the impact on the formation of public policy concerning nuclear industry, assistance in the achievement of higher level of confidence on the part of Ukrainian society to the use of nuclear energy in economics.

Since 2011 Energoatom has been a member of FORATOM⁷⁵ (through membership in the Ukrainian Nuclear Forum Association). FORATOM is the Brussels-based trade association for the nuclear energy industry in Europe. Ukraine has been an associate member of European Nuclear Forum since 26 June 2011.

In 2015, Energoatom joined ENISS⁷⁶, European Nuclear Installations Safety Standards Initiative (under the umbrella of FORATOM).

Over 2,500 employees of Energoatom are members of the Ukrainian Nuclear Society⁷⁷, the largest public nuclear science and technology organization that brings together key enterprises and academic institutions of nuclear industry of Ukraine.

Since 2014, Energoatom has been a member of the Centre for CSR Development⁷⁸, a non-profit organisation that brings together socially responsible companies of Ukraine.

APPENDIX 3. KEY TERMS AND ABBREVIATIONS

ARSMS (Automated Radiation Situation Monitoring System) — a system of technical facilities designed for providing permanent automated radiological and meteorological monitoring at the industrial site, buffer zone and supervised area, under all NPP operating modes (normal operation, design-basis and beyond design-basis accidents, and decommissioning activities).

Nuclear industry — a branch of power engineering that uses nuclear energy for electricity and heat generation.

VVER-1000 — a water-water energetic reactor with water as heat carrier and decelerator. The installed electric capacity of one power unit is 1,000 MW. They have 3,000 MW thermal capacity.

VVER-440 — a water-water energetic reactor with 440 MW electric capacity and 1,375 MW thermal capacity.

Radioactive release — radionuclide emission into the atmosphere, resulting from operation of a nuclear facility.

SF (spent fuel) — special type of radioactive nuclear fuel materials which present used (irradiated) nuclear fuel from NPP.

State Nuclear Regulatory Inspectorate of Ukraine — nuclear regulatory agency, the main central executive authority which forms and implements the public policy in the area of safe use of nuclear power.

Exogenic geological processes — geological processes taking place at or near the Earth's surface; they are mostly caused by solar radiation, in combination with the force of gravity and activity of organisms.

EBRD (the European Bank for Reconstruction and Development) — an international financial institution that helps countries from Central Europe to Central Asia to implement market reforms and integrate into international business relations.

Euratom (European Atomic Energy Community) — contributes to development and research of nuclear energy, creation of the common nuclear fuel market, control over nuclear facilities and the development of the peaceful uses of nuclear technologies in line with uniform safety standards.

Ionising radiation — any type of particle or electromagnetic radiation that has the potential to excite an atom or molecule through direct or indirect interactions.

Instrument for Nuclear Safety Cooperation (INSC) — a nuclear safety cooperation programme that has been implemented by the EU since 2007 instead of TACIS programme of the European Commission (1992-2006) that was in effect in Ukraine and a number of other independent states at that time.

Capacity utilisation factor — an important characteristic of the operational efficiency of NPP which presents the ratio of power unit (power plant) output for a specific time interval to the power unit output which could be reached at the nominal (installed) capacity for this time interval.

CCSUP (Complex (Consolidated) Safety Upgrade Programme of Power Units of Ukrainian NPPs) — the programme for improving safety at Ukrainian NPPs which was approved by Resolution of the Cabinet of Ministers of Ukraine dd. 7 December 2011 No. 1270. CCSUP was developed to make further improvements to safety as part of the implementation of long-term strategy for safety enhancement of Energoatom's power units. The programme allows Ukraine to meet its commitment as to the implementation of the IAEA recommendations that are based on the Ukrainian NPPs' design safety assessment carried out in 2008-2010 within the EC-IAEA-Ukraine Project. It can also help Ukraine meet its obligations to EBRD/Euratom as to the implementation of safety measures.

Safety culture is defined as a set of characteristics and attitudes in organisations and individuals and establishes that nuclear plant safety issues are an overriding priority and addressed according to their significance.

IAEA (the International Atomic Energy Agency) — an international organisation that seeks to promote the peaceful use of nuclear energy.

National Energy and Utilities Regulatory Commission of Ukraine — an independent collective government agency which provides government regulation, monitoring and control over business entities in the energy sector and utilities.

EIA (Environmental Impact Assessment) is used to establish the nature, intensity and extent of hazardous impact of any scheduled business activity on the environment and public health.

Paris Climate Agreement — an agreement within the United Nations Framework Convention on Climate Change (UNFCCC) dealing with greenhouse gas emissions mitigation starting from 2020. The agreement took effect on 4 November 2016.

A greenhouse gas (GHG) — a gas that absorbs heat energy emitted from Earth's surface and clouds and reradiates it back to the Earth. The primary greenhouse gases in Earth's atmosphere are water vapour (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone (O₃), sulphur hexafluoride (SF₆), hydrofluorocarbons (HFC) and perfluorocarbons (PFC).

RAW processing includes operations that intend to change the characteristics and/or the physical and chemical composition of radioactive waste and produce a waste package suitable for handling, transportation, storage and/or disposal.

RAW treatment — a general term that combines all types of operations associated with processing, conditioning, transportation, storage and/or disposal of radioactive waste.

Post-Fukushima measures — actions under the Complex (Consolidated) Safety Upgrade Programme of Power Units of Ukrainian NPPs that have been developed subject to the results of the deep complementary safety assessment of Ukrainian NPPs (stress tests). Such stress tests were carried out at European NPPs after the accident at Fukushima NPP in order to prevent serious accidents and ensure serious accident management.

Radiation safety — compliance with the radiation exposure limits prescribed by safety regulations, rules and standards for the staff, population and environment.

Radioactive waste (RAW) — nuclear materials and radioactive substances that cannot be used any longer.

Sustainable use of natural resources — the use of natural resources to the extent and in a way that ensure sustainable economic development, harmonised interaction between the society and natural environment, efficient use of natural resources potential, economic mechanisms for environmentally friendly use of nature.

Emergency Response System (ERS) — a complex of interconnected technical means and resources, organisational, technical and radiation prevention activities undertaken by an organisation to ensure emergency response — prevention or mitigation of radiation impact on the staff, population and the environment in case of an accident at NPP as well as in case of an emergency caused by such an accident.

NPP social infrastructure — cultural, sports and recreation facilities that are open for families of NPP employees and local residents.

Dry spent fuel storage facility — a site or installation for dry storage of spent fuel.

Sustainable energy — energy produced and used in ways that support human development over the long term, in all its social, economic, and environmental dimensions. The definition was given at the United Nations Conference on Environment and Development (UNCED), also known as the Rio de Janeiro Earth Summit (1992).

Third EU Energy Package — a legislative package for an internal gas and electricity market in the European Union. Its purpose is to further open up the gas and electricity markets in the European Union. It entered into force on 3 September 2009.

Physical protection — activity in the area of the use of nuclear power that is undertaken to ensure protection of nuclear facilities, nuclear materials, radioactive waste and other sources of ionising radiation and to strengthen the nuclear non-proliferation regime.

Civil defence — a function of the government to protect population, territories, the environment and property from accidents by preventing emergency situations, eliminating accident consequences and providing help to the victims during peacetime and also in times of crisis and conflict.

Central Spent Fuel Storage Facility (CSFSF) — an interim storage facility which is to be built at the site of the Chernobyl exclusion zone to store spent nuclear fuel from Rivne, South Ukraine and Khmelnytska NPPs.

ENTSO-E — European Network of Transmission System Operators for Electricity.

EUR (European Utility Requirement) — an international group established by European organisations that brings together 18 leading European energy generating companies operating over 130 power units with light water reactors. The organisation seeks to develop technical requirements for designs of new Generation III/III+ LWR nuclear power plants to ensure further development of nuclear industry in Europe.

IFNEC (International Framework for Nuclear Energy Cooperation) — formerly the Global Nuclear Energy Partnership (GNEP) began as a U.S. proposal announced by United States Secretary of Energy Samuel Bodman on 6 February 2006 to form an international partnership to promote the use of nuclear power and close the nuclear fuel cycle in a way that reduces nuclear waste and the risk of nuclear proliferation.

INES (International Nuclear Event Scale) was developed by the International Atomic Energy Agency (IAEA) to rate nuclear accidents. Since 1990, the scale has been

applied to classify accidents associated with emergency radioactive emissions from nuclear power plants, then extended to enable it to be applied to all installations associated with the civil nuclear industry.

INPRO (The International Project on Innovative Nuclear Reactors and Fuel Cycles) was established in 2000 to help ensure that nuclear energy is available to contribute to meeting the energy needs of the 21st century in a sustainable manner. It is a mechanism that enables INPRO Member States to cooperate in the areas of common interest.

ISO 9001 specifies requirements for a quality management system.

ISO 14001 — an international standard that specifies requirements for an environmental management system that an organisation can use to enhance its environmental performance.

OHSAS 18001 — an international occupational health and safety management system standard. OHSAS 18001 helps enhance health and safety working environment at the plants.

ProZorro — systematic reform of public procurement tenders in Ukraine.

STEM education — a sequence of courses or programmes of study that prepares students for successful employment, post-secondary education, or both that require different and more technically sophisticated skills including the application of mathematics and science skills and concepts. STEM stands for Science, Technology, Engineering and Mathematics.

FOOTNOTES

1. ARSMS – Automated Radiation Situation Monitoring System.
2. Transparency International Ukraine assessed the transparency of corporate reporting and anti-corruption programmes in 2016. For more information, please go to <https://ti-ukraine.org/en/research/trac-en/>
3. In 2008-2009, fourteen IAEA expert missions carried out comprehensive assessment of safety at all Ukrainian power unit, covering design safety, operational safety, RAW treatment and decommissioning. This was an initiative of unprecedented scale implemented within the framework of a joint project Ukraine-EU-IAEA. Following the assessment, IAEA and EU experts established the conformity of all power units at Ukrainian nuclear power plants to the IAEA's nuclear safety requirements.
4. The Cabinet of Ministers of Ukraine issued Order No. 671-p *Launch of the Ukraine – European Union Energy Bridge Pilot Project* on 15 June 2015 to provide for the supply of electricity from Khmelnytska NPP to Poland and other EU countries. The pilot project is the first step that has been taken to develop interstate trunk networks and utilise the capacity of unit No. 2 at Khmelnytska NPP to ensure long-term electricity exports and use proceeds from the export of electricity produced by unit No. 2 at Khmelnytska NPP for financing the construction of power units No. 3 and No. 4 at Khmelnytska NPP.
5. For more information about the Company's cooperation with Holtec International, please go to the Company's web site <http://www.atom.gov.ua/en/>
6. For more about IAEA, please go to <https://www.iaea.org/>
7. For more about EBRD, please go to <http://www.ebrd.com/ukraine.html>
8. For more about European Commission, please go to <https://ec.europa.eu/>
9. For more about European Atomic Energy Community (Euratom), please go to <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/euratom>
10. For more about EUR, please go to <http://www.europeanutilityrequirements.org/>
11. According to Resolution of the Cabinet of Ministers of Ukraine "On Approval of the List of Companies of Strategic Importance for the Economy and Security of the State", No. 1734 dd. 23 December 2004.
12. The Law *On the Use of Nuclear Energy and Radiation Safety* regulates the provision of a social and economic compensation to the population living in the territories where NPP facilities are based. In accordance with this Law, Energoatom shall pay a compensation duty for the exposure risk faced by the population living in the supervised areas, such duty is to be equal to 1% of sales of electricity produced by the Company over a corresponding period. These funds are credited to local budgets in the form of a state subsidy to finance social and economic measures to compensate the population in the supervised areas.
13. Donuzlavskaya VES is located in the temporary occupied territory of Crimea.
14. The total amount of Westinghouse fuel assemblies made 84, more than half of fuel placed in the reactor core.
15. The State Nuclear Regulatory Inspectorate of Ukraine submitted the report about results of stress tests at Ukrainian NPPs to the Secretariat of the European Commission.
16. WANO is the World Association of Nuclear Operators.
17. The income data in the table are given according to Form No.2 "Statement of Financial Performance" (Statement of Comprehensive Income).
18. Energy Strategy 2035 is available at <http://mpe.kmu.gov.ua/minugol/doccatalog/document?id=245213112>
19. For more about the project for the CSFSF construction, please go to the Company's web site <http://www.atom.gov.ua/en/>
20. ENTSO-E, the European Network of Transmission System Operators, represents 43 electricity transmission system operators (TSOs) from 36 countries across Europe. Established in 2009 within the framework of the Third Legislative Package, ENTSO-E pursues the mission to ensure reliable operation, optimal management and development of the European electricity transmission system with a view of liberalising energy markets.
21. The EU Third Energy Package includes a set of laws on domestic gas and electricity markets in the European Union. Its goal is to ensure more open gas and energy markets in the European Union. The package was proposed by the European Commission in September 2007 and approved by the EU Parliament in July 2009.
22. For more about BEMIP, please go to <https://ec.europa.eu/energy/en/topics/infrastructure/baltic-energy-market-interconnection-plan>
23. Complex (Consolidated) Safety Upgrade Programme of Power Units of Ukrainian NPPs (CCSUP) is the key programme that helps ensure reliability and safety of Ukrainian power units. For more information, please go to <http://zakon3.rada.gov.ua/laws/show/1270-2011-%D0%BF/paran10#n10>
24. Energoatom Strategic Development Plan 2017-2021 was drafted in pursuance of Order of the Ministry of Energy and Coal of Ukraine dd. 24 December 2013 No. 1002 "On approval of the procedures for the development and approval of strategic plans for state-owned companies, institutions, organisations and associations under the administration of the Ministry of Energy and Coal Industry of Ukraine, as well as for business entities in which the Ministry of Energy and Coal Industry of Ukraine manages the government-held corporate rights and controls implementation of strategic plans".
25. Law of Ukraine *On the list of government-owned facilities that are not subject to privatisation*, No.847-XIV dd. 7 July 1999, Appendix 2 "List of government-owned facilities that are not subject to privatisation but may be corporatised".
26. Transparency International (TI Ukraine) is a Ukrainian branch of a global anti-corruption NGO Transparency International with over 100 chapters worldwide. TI Ukraine focuses on monitoring anti-corruption reform implementation and seeks to reduce corruption in Ukraine by promoting transparency, accountability and integrity of public authorities and civil society. Website: <https://ti-ukraine.org/en/>
27. The contest was organised by the Centre for CSR Development. <http://csr-ukraine.org/en/>
28. Launched in February 2015, ProZorro public e-procurement system is designed to ensure transparent and efficient use of public funds and prevent corruption by implementing public control and expanding the pool of suppliers during the procurement procedures. For more information about ProZorro, please go to <https://prozorro.gov.ua/en>
29. The data on all indicators include both the company's officials and functional employees and specialists. For more information about the survey results, please go to the Company's website <http://www.atom.gov.ua/en/>
30. Sustainable energy is the energy produced and used in ways that support human development over the long term, in all its social, economic, and environmental dimensions.
31. To identify the material issues, we have taken into account a number of documents that specify the approaches of the international community to nuclear energy, including the documents of IAEA, the Nuclear Energy Institute (NEI), OECD, the UN, and others.
32. A sustainable city or eco-city is an innovative city that uses ICT and other tools to improve the standards of living, performance efficiency and services in cities, as well as to boost competitiveness and meet economic, social and environmental needs of present and future generations.
33. For more about cooperation between Energoatom and the European Commission under INSC, please go to the Company's web site <http://www.atom.gov.ua/en/>
34. For more about the loan from EBRD and Euratom, please go to <http://www.ebrd.com/what-we-do/sectors/ukraine-nuclear-safety-upgrade.html>
35. For more about INPRO, please go to <https://www.iaea.org/inpro/>
36. For more about Energoatom's participation in EUR, please go to the Company's web site <http://www.atom.gov.ua/en/>

37. IFNEC is the International Framework for Nuclear Energy Cooperation, formerly known as GNEP (Global Nuclear Energy Partnership). For more information, please go to <https://www.ifnec.org/ifnec/>
38. Complex [Consolidated] Safety Upgrade Programme of Power Units of Ukrainian NPPs (CCSUP) was approved by the Cabinet of Ministers of Ukraine, Resolution No. 1270 dd. 7 December 2011. In 2012, the initiative was updated to include additional post-Fukushima safety measures based on results of stress tests. The initiative will continue until 2020, costing UAH 20.1 billion. For more information about the Programme, please go <http://zakon5.rada.gov.ua/laws/show/1270-2011-n>
39. For more information about the Investment Programme of Electricity Production for Nuclear Power Plants, please go to the Company's web site <http://www.atom.gov.ua/en/>
40. For more information about the Investment Programme of Electricity Production for Tashlyk Hydroelectric Pumped Storage Power Plant and Olexandrivska Hydro Power Plant, please go to the Company's web site <http://www.atom.gov.ua/en/>
41. For more information about the Investment Programme in Heat Supply, please go to the Company's web site <http://www.atom.gov.ua/en/>
42. For more information about the Investment Programme for Water Supply and Drainage, please go to the Company's web site <http://www.atom.gov.ua/en/>
43. For more about IAEA, please go to <https://www.iaea.org/>
44. For more about EBRD, please go to <http://www.ebrd.com/ukraine.html>
45. For more about European Commission, please go to <https://ec.europa.eu/>
46. For more about European Atomic Energy Community, Euratom, please go to <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/euratom>
47. For more about EUR, please go to <http://www.europeanutilityrequirements.org/>
48. The loan agreement with EBRD took effect on 19 December 2014, and the loan agreement with Euratom became effective on 28 May 2015, with a total loan amount being €600 million. For more about the agreements, please go to <http://zakon3.rada.gov.ua/laws/annot/1267-18>
49. Total costs of power units No.3 and No.4 at Khmelnytska NPP are in the 2012 prices in line with the feasibility study approved by the Cabinet of Ministers of Ukraine, Order No. 498-p dd. 4 July 2012.
50. The project was approved by the Cabinet of Ministers of Ukraine, Order No. 671-p *Launch of the Ukraine-EU Energy Bridge Pilot Project* dd. 15 June 2015.
51. ENTSO-E is the European network of transmission system operators for electricity. For more information, please go to <https://www.entsoe.eu>
52. The central facility to store spent fuel of VVER-type reactors operating at domestic nuclear power plants is being built in the Chernobyl Exclusion Zone (Kyiv Oblast) in accordance with the Law of Ukraine on the Central Spent Fuel Storage Facility, No. 4384 dated 9 February 2012.
53. Launched in 2009, the project "Creating a National Training Centre for Energoatom's repair staff and senior managers on the site of Zaporizhzhya NPP" is a part of the international technical cooperation programme between the EU and Ukraine. Many European leaders in the nuclear sector have joined the project, in particular Germany-based AREVA NP GmbH and CA&R Engineering.
54. Ukraine signed the Convention on Nuclear Safety on 20 September 1994 and put it into effect by the Law of Ukraine *On Ratification of the Convention on Nuclear Safety* on 17 December 1997.
55. OHSAS 18001 is an internationally applied standard for occupational health and safety management system that helps create a safe and healthy working environment at the companies.
56. According to NP 3062.141-2008 "General Safety Provisions for NPPs".
57. The definition is in line with the Code of Civil Defense of Ukraine dd. 2 October 2012, No. 5403-VI.
58. For more about Energoatom's measures under the CCSUP, please go to http://www.atom.gov.ua/en/actvts/integrated_security_program/46366-vikonannya_kompleksno_zvedeno_programi_pdvischennya_bezpeki_energoblokv_atomnih_elektrstantsiyi_ukrani_u_vmu_kvartal_roku/
59. NP 306.2.-141-2008 "General Safety Provisions for NPP", as defined by the IAEA.
60. WANO is the World Association of Nuclear Operators.
61. ISO 14001 is an international standard focusing on environmental management system to make organisation's environmental activities systemic and effective.
62. ISO 9001 is an international quality management standard.
63. OHSAS 18001 is an international occupational health and safety management standard.
64. For more about the Law of Ukraine on the Central Spent Fuel Storage Facility, please go to <http://zakon3.rada.gov.ua/laws/annot/4384-17>
65. Olexandrivske Reservoir and the Southern Buh River are a part of South-Ukrainian Energy Complex. The reservoir is near Yuzhnoukrainsk town, taking territories of Arbutynka, Voznesensk and Domanivka districts, Mykolaiv Oblast. For more about the project, please go to the Company's web site <http://www.atom.gov.ua/en/>
66. For more about the Aarhus Convention, please go to http://zakon2.rada.gov.ua/laws/show/994_015
67. For more about the Espoo Convention, please go to http://zakon3.rada.gov.ua/laws/show/995_272
68. Energoatom's expenses on housing, social and cultural infrastructure maintenance were used in 2016 to repair and improve non-residential premises, hostels in satellite localities, purchase furniture, fire-fighting equipment, metering devices, etc.
69. The 2016 budget earmarked UAH 65.586 million for personnel training. However, that year young specialists were not trained as a specialised university in the Crimea had been lost because of the peninsula's annexation.
70. For more about supporting social infrastructure, please see Maintaining and Developing Social Facilities subsection.
71. For more information about WANO, please go to <http://www.wano.info/en-gb/aboutus/>
72. For more information about WNA, please go to <http://www.world-nuclear.org/>
73. For more about Ukrainian Nuclear Forum, please go to <http://www.atomforum.org.ua/>
74. For more about Ukrainian Nuclear Forum, please go to <http://www.atomforum.org.ua/>
75. For more about FORATOM, please go to <https://www.foratom.org/>
76. For more about ENISS, please go to <http://www.eniss.eu/>
77. For more about Ukrainian Nuclear Society, please go to <https://ukrns.org/en/>
78. For more about the Centre for CSR Development, please go to <http://csr-ukraine.org/en/>
- The 20 Years in Facts and Figures figure on pages 8-9 of the Report features data and facts for 1996-2016.

APPENDIX 4. GLOBAL REPORTING INITIATIVE (GRI) TABLE 4.0

Indicator	Definition	Report section
General Standard Disclosures		
Strategy and analysis		
G4-1	Statement from the most senior decision-maker of the organization about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability	ADDRESS BY ENERGOATOM PRESIDENT
G4-2	Description of key impacts, risks and opportunities Not disclosed	Currently, the Company is preparing for corporatization and developing an effective risk management system. For more information, see our next reports
Organization Profile		
G4-3	Name of the organization	ENERGOATOM TODAY
G4-4	Brands, products and services	ENERGOATOM TODAY
G4-5	The location of the organization's headquarters	Contacts
G4-6	The number of countries where the organization operates	ENERGOATOM TODAY
G4-7	The nature of ownership and legal form	ENERGOATOM TODAY Appendix 1
G4-8	The markets served	ENERGOATOM TODAY
G4-9	The scale of the organization	ENERGOATOM TODAY
G4-10	The total number of employees Partly disclosed	ENERGOATOM TODAY, OUR EMPLOYEES AND LOCAL COMMUNITIES No significant change was in the headcount over the reporting period
G4-11	The percentage of total employees covered by collective agreements	100% of full-time employees of the Company are covered by collective bargaining agreements
G4-12	The organization's supply chain	CORPORATE GOVERNANCE AND SUSTAINABILITY
G4-13	Any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	No change
G4-14	Precautionary approach	SAFETY CULTURE, ENVIRONMENTAL RESPONSIBILITY
Commitments to External Initiatives		
G4-15	Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses	CORPORATE GOVERNANCE AND SUSTAINABILITY, INVESTMENT PROJECTS, SAFETY CULTURE, ENVIRONMENTAL RESPONSIBILITY, Appendix 2

G4-16	Memberships of associations (such as industry associations) and national or international advocacy organizations	Appendix 2
Identified Material Aspects and Boundaries		
G4-17	All entities included in the organization's consolidated financial statements or equivalent documents	Appendix 1
G4-18	The process for defining the report content and the aspect boundaries	Appendix 1
G4-19	List all the material Aspects identified in the process for defining report content	Appendix 1
G4-20	Aspects within the organization	Appendix 1
G4-21	Aspect outside the organization	The scope of all material aspects covers only SE NNEGC Energoatom and its separate subdivisions
G4-22	The effect of any restatements of information provided in previous reports, and the reasons for such restatements	No effect
G4-23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	No change
Stakeholder Engagement		
G4-24	List of stakeholder groups engaged by the organization	CORPORATE GOVERNANCE AND SUSTAINABILITY
G4-25	The basis for identification and selection of stakeholders with whom to engage	
G4-26	The organization's approach to stakeholder engagement	
G4-27	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns	
Report Profile		
G4-28	Reporting period (such as fiscal or calendar year) for information provided	Appendix 1
G4-29	Date of most recent previous report (if any)	Report 2016 is the first report published by the Company
G4-30	Reporting cycle	Annual
G4-31	The contact point for questions regarding the report or its contents	pr@atom.gov.ua Energoatom's Centre for External Communications Tel/fax: +38 (044) 277-78-89
G4-32	GRI Content Index for 'In accordance' option the organization has chosen	Appendix 1, Appendix 4
G4-33	The organization's policy and current practice with regard to seeking external assurance for the report	The Report had no external assurance
Corporate governance		
G4-34	Corporate governance structure	CORPORATE GOVERNANCE AND SUSTAINABILITY
G4-36	An executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body	CORPORATE GOVERNANCE AND SUSTAINABILITY
G4-37	Processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics	CORPORATE GOVERNANCE AND SUSTAINABILITY, ENVIRONMENTAL RESPONSIBILITY, OUR EMPLOYEES AND LOCAL COMMUNITIES
G4-38	The composition of the highest governance body and its committees	CORPORATE GOVERNANCE AND SUSTAINABILITY
G4-39	Whether the Chair of the highest governance body is also an executive officer	CORPORATE GOVERNANCE AND SUSTAINABILITY

Ethics and Integrity		
G4-56	The organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	CORPORATE GOVERNANCE AND SUSTAINABILITY
G4-57	The internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines	CORPORATE GOVERNANCE AND SUSTAINABILITY
G4-58	The internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity	CORPORATE GOVERNANCE AND SUSTAINABILITY
Specific Standard Disclosures		
ECONOMIC		
Aspect: Economic Performance		
G4-DMA	Disclosures on management approach	ENERGOATOM TODAY, CORPORATE GOVERNANCE AND SUSTAINABILITY
G4-EC1	Direct economic value generated and distributed	ENERGOATOM TODAY, CORPORATE GOVERNANCE AND SUSTAINABILITY
Aspect: Market Presence		
G4-DMA	Disclosures on management approach	OUR EMPLOYEES AND LOCAL COMMUNITIES
G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation The indicator was rephrased into a ratio of the Company's average monthly salary to Ukrainian industry average monthly salary	OUR EMPLOYEES AND LOCAL COMMUNITIES, Appendix 5
Aspect: Indirect Economic Impacts		
G4-DMA	Disclosures on management approach	OUR EMPLOYEES AND LOCAL COMMUNITIES
G4-EC7	Development and impact of infrastructure investments and services supported Partly disclosed	OUR EMPLOYEES AND LOCAL COMMUNITIES, Appendix 5
Aspect: Procurement Practices		
G4-EC9	Proportion of spending on local suppliers at significant locations of operation	The Company has no centralised accounting system in place for procurements from local suppliers
ENVIRONMENTAL		
Aspect: Energy		
G4-DMA	Disclosures on management approach	ENVIRONMENTAL RESPONSIBILITY
G4-EN6	Reduction of energy consumption Partly disclosed	ENVIRONMENTAL RESPONSIBILITY
Aspect: Water		
G4-DMA	Disclosures on management approach	ENVIRONMENTAL RESPONSIBILITY
G4-EN8	Total water withdrawal by source	ENVIRONMENTAL RESPONSIBILITY, Appendix 5
G4-EN9	Water sources significantly affected by withdrawal of water by the organization	ENVIRONMENTAL RESPONSIBILITY
Aspect: Biodiversity		
G4-DMA	Disclosures on management approach	ENVIRONMENTAL RESPONSIBILITY
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	ENVIRONMENTAL RESPONSIBILITY

G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	ENVIRONMENTAL RESPONSIBILITY
G4-EN13	Preserved and restored habitats	ENVIRONMENTAL RESPONSIBILITY
Aspect: Emissions		
G4-DMA	Disclosures on management approach	ENVIRONMENTAL RESPONSIBILITY
G4-EN15	Direct greenhouse gas emissions (Scope 1)	ENVIRONMENTAL RESPONSIBILITY, Appendix 5
G4-EN19	Reduction of greenhouse gas (GHG) emissions	ENVIRONMENTAL RESPONSIBILITY
G4-EN20	Emissions of ozone-depleting substances (ODS)	ENVIRONMENTAL RESPONSIBILITY, Appendix 5
G4-EN21	NOx, SOx, and other significant air emissions	ENVIRONMENTAL RESPONSIBILITY, Appendix 5
Aspect: Effluents and Waste		
G4-DMA	Disclosures on management approach	ENVIRONMENTAL RESPONSIBILITY
G4-EN22	Total water discharge by quality and destination	ENVIRONMENTAL RESPONSIBILITY, Appendix 5
G4-EN23	Total weight of waste by type and disposal method	ENVIRONMENTAL RESPONSIBILITY, Appendix 5
Aspect: Products and Services		
G4-DMA	Disclosures on management approach	ENVIRONMENTAL RESPONSIBILITY
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	ENVIRONMENTAL RESPONSIBILITY (in the context of radioactive waste and spent fuel treatment)
Aspect: Compliance		
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	No fines or liability to compensate for environmental damages were imposed on the Company
Aspect: Overall		
G4-DMA	Disclosures on management approach	ENVIRONMENTAL RESPONSIBILITY
G4-EN31	Total environmental protection expenditures and investments by type	ENVIRONMENTAL RESPONSIBILITY, Appendix 5
Aspect: Environmental Grievance Mechanisms		
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	Public liaison offices at NPPs and public hearings on environmental issues are key grievance mechanisms. For more information, see ENVIRONMENTAL RESPONSIBILITY

SOCIAL		
Labor Practices and Decent Work		
Aspect: Employment		
G4-DMA	Disclosures on management approach	OUR EMPLOYEES AND LOCAL COMMUNITIES
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region Partly disclosed	OUR EMPLOYEES AND LOCAL COMMUNITIES, Appendix 5
G4-LA2	Benefits provided to employees	OUR EMPLOYEES AND LOCAL COMMUNITIES
G4-LA3	Return to work and retention rates after parental leave	Appendix 5
Aspect: Labor/Management Relations		
G4-DMA	Disclosures on management approach	OUR EMPLOYEES AND LOCAL COMMUNITIES
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	The minimum period to notify employees about significant organizational changes is at least three months, which is in line with applicable laws of Ukraine. The period is indicated in the Company's collective bargaining agreement
Aspect: Occupational Health and Safety		
G4-DMA	Disclosures on management approach	OUR EMPLOYEES AND LOCAL COMMUNITIES
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender Partly disclosed	OUR EMPLOYEES AND LOCAL COMMUNITIES, Appendix 5
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	OUR EMPLOYEES AND LOCAL COMMUNITIES
G4-LA8	Health and safety topics covered in formal agreements with trade unions	Health and safety issues are reflected in official agreements with trade unions as provided for by applicable laws of Ukraine
Aspect: Training and Education		
G4-DMA	Disclosures on management approach	OUR EMPLOYEES AND LOCAL COMMUNITIES
G4-LA9	Average hours of training per year per employee by gender, and by employee category The indicator was rephrased as the Company has a well-established internal system in place to account training activities that includes a "number of man-hours" indicator	OUR EMPLOYEES AND LOCAL COMMUNITIES, Appendix 5
G4-LA10	Programs for skills management and lifelong learning	OUR EMPLOYEES AND LOCAL COMMUNITIES
Aspect: Diversity and Equal Opportunity		
G4-DMA	Disclosures on management approach	OUR EMPLOYEES AND LOCAL COMMUNITIES
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender and age group	OUR EMPLOYEES AND LOCAL COMMUNITIES, Appendix 5
Human rights		
Aspect: Investment		
G4-DMA	Disclosures on management approach	OUR EMPLOYEES AND LOCAL COMMUNITIES

G4-HR3	Total number of incidents of discrimination	No discrimination incidents were registered
Aspect: Child Labor		
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	Not relevant. Child and forced labor is prohibited by the applicable laws of Ukraine.
Aspect: Forced or Compulsory Labor		
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of all forms of forced or compulsory labor	The Company does not operate in countries with a high risk of human rights violations, including child or forced labor
Aspect: Indigenous Rights		
G4-DMA	Disclosures on management approach	OUR EMPLOYEES AND LOCAL COMMUNITIES
G4-HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken	Nor relevant for the Company
Society		
Aspect: Local Communities		
G4-DMA	Disclosures on management approach	OUR EMPLOYEES AND LOCAL COMMUNITIES
G4-S01	Percentage of operations with implemented local community engagement, impact assessments, and development programs	OUR EMPLOYEES AND LOCAL COMMUNITIES
G4-S02	Operations with significant actual and potential negative impacts on local communities	ENVIRONMENTAL RESPONSIBILITY (in the context of nuclear and radiation safety), OUR EMPLOYEES AND LOCAL COMMUNITIES
Aspect: Anti-corruption		
G4-DMA	Disclosures on management approach	CORPORATE GOVERNANCE AND SUSTAINABILITY
G4-S04	Communication and training on anti-corruption policies and procedures	CORPORATE GOVERNANCE AND SUSTAINABILITY
Aspect: Compliance		
G4-S08	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	No significant fines
Product responsibility		
Aspect: Customer Health and Safety		
G4-DMA	Disclosures on management approach	ENVIRONMENTAL RESPONSIBILITY
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services	ENVIRONMENTAL RESPONSIBILITY (in the context of nuclear and radiation safety)

APPENDIX 5. KEY PERFORMANCE INDICATORS FOR 2014-2016

HR

Energoatom average headcount, 2014-2016, employees

Company	Company's average headcount		
	2014	2015	2016
Energoatom	34,508	34,253	34,186

Average monthly salary at Energoatom, 2014- 2016, UAH

Company	2014	2015	2016
Energoatom	9,930	10,324	12,943

Energoatom total headcount, 2014-2016, employees

Company	Energoatom's total headcount (at the year-end), employees		
	2014	2015	2016
Energoatom	35,149	35,186	34,950

Energoatom staff training, 2014-2016, man courses

Company	2014					
	Type of training					
	Primary vocational training	Retraining	Skills sustainment	Special training	Skills upgrading	Total for 2014
Zaporizhzhya NPP	430	411	4,898	11,706	3,265	20,710
Rivne NPP	849	56	5,408	6,674	3,650	16,637
South-Ukraine NPP	229	257	6,118	5,272	1,959	13,835
Khmelnyska NPP	361	27	3,319	9,805	789	14,301
AtomRemontService	14	0	76	2,304	72	2,466
Atomenergomash						
Head office					213	213
Total for Energoatom	1,883	751	19,819	35,761	9,948	68,162

Energoatom staff training, 2014-2016, man courses

Company	2015					
	Type of training					
	Primary vocational training	Retraining	Skills sustainment	Special training	Skills upgrading	Total for 2015
Zaporizhzhya NPP	271	177	4,918	10,896	3,378	19,640
Rivne NPP	815	81	5,405	16,214	2,817	25,332
South-Ukraine NPP	352	203	6,186	6,584	1,358	14,683
Khmelnyska NPP	404	135	5,345	10,292	1,304	17,480
AtomRemontService	49	0	537	2,497	43	3,126
Atomenergomash						
Head office					195	195
Total for Energoatom	1,891	596	22,391	46,483	9,095	80,456

Energoatom staff training, 2014-2016, man courses

Company	2016					
	Type of training					
	Primary vocational training	Retraining	Skills sustainment	Special training	Skills upgrading	Total for 2016
Zaporizhzhya NPP	311	187	5,178	9,947	3,724	19,347
Rivne NPP	935	43	5,703	16,572	3,404	26,657
South-Ukraine NPP	362	134	5,780	6,377	2,008	14,661
Khmelnyska NPP	496	44	4,066	11,577	1,335	17,518
AtomRemontService	37	21	448	2,609	50	3,165
Atomenergomash						
Head office					238	238
Total for Energoatom	2,141	429	21,175	47,082	10,759	81,586

**Energatom staff training pattern,
2014-2016, man courses**

Training format	Employee training		
	2014	2015	2016
Training centres	51,027	53,952	53,037
Other divisions at NPPs	14,023	23,088	23,578
Third-party providers	3,112	3,416	4,971
Total	68,162	80,456	81,586

**Energatom staff training expenses,
2014-2016, '000 UAH**

Type of expenses	Employee training expenses, '000 UAH		
	2014	2015	2016
Technical training aids	2,735.7	16,585.4	25,917.3
Licences	43.8	44.7	34.8
Retraining and skills upgrading	4,854.4	6,837.3	8,335.6
Development of training centres	8,827.3	743.5	2,944.6
Total	16,461.2	24,210.9	37,232.3

Energatom full-time employees by category, age and gender, 2014-2016, persons

Categories	2014	2015	2016
senior managers	4,873	4,891	4,870
professionals	7,361	7,513	7,588
specialists	1,669	1,657	1,629
technical manpower	368	357	357
skilled workers	19,600	19,471	19,046
basic positions	1,278	1,297	1,460
TOTAL	35,149	35,186	34,950

Age categories	2014	2015	2016
under 35	9,490	9,069	8,689
35 to 50	14,160	14,123	14,055
50+	11,499	11,994	12,206
TOTAL	35,149	35,186	34,950

Gender representation	2014	2015	2016
men	23,480	23,499	23,345
women	11,669	11,687	11,605
TOTAL	35,149	35,186	34,950

**Energatom employees on parental leave to attend a child to the age established by applicable laws,
2014-2016, persons**

	2014	2015	2016
Employees on parental leave to attend a child to the age established by applicable laws, including	827	784	780
men	20	14	19
women	807	770	761

Industrial placement/internship at Energatom, 2014-2016, students

Type of internship	Number of students who had industrial placement/ internship at Energatom		
	2014	2015	2016
Industrial placement	516	505	471
Pre-graduation internship	347	331	255
Total	863	836	726

Type of educational institutions	Number of students who had industrial placement/ internship at Energatom		
	2014	2015	2016
Universities	506	462	442
Vocational schools	357	347	284
Total	863	836	726

Energatom social spending financed by electricity supply tariff, 2014-2016, million UAH

Expense line	2014	2015	2016
Maintaining and operating housing, social and cultural facilities	139.0	129.6	104.8
Financing facilities of special construction bureaus under maintenance agreements	0.8	0.0	1.2
Trade union deductions	22.1	29.7	66.5
Cultural, social, health improvement and other public events and measures	2.0	1.8	0.2
Employee health improvement	2.1	1.6	1.6
Other social benefits established by law, collective bargaining agreement or granted by joint decisions of the administration and trade unions	42.4	35.0	25.5
Single social contribution (charged on expenses indicated in previous lines)	0.4	0.5	0.1
Insurance expenses not posted to other accounts	1.0	0.0	0.0
Other social expenses	0.1	0.1	0.1
TOTAL	210.0	198.3	199.9

ENVIRONMENT

Energatom air emissions, 2014-2016, tonnes

Company	Gross NOx emissions			Gross SOx emissions			Gross particulate emissions		
	2014	2015	2016	2014	2015	2016	2014	2015	2016
Zaporizhzhya NPP	3.15	2.741	5.988	0.206	0.189	0.38	3.683	3.656	3.952
Rivne NPP	5.69	6.698	6.574	1.819	1.744	1.417	2.425	1.768	1.38
South-Ukraine NPP	7.203	5.964	6.136	0.601	0.598	2.707	17.565	12.849	11.186
Khmelnyska NPP	2.782	2.784	2.888	0.417	0.47	1.921	6.932	6.927	7
Total for Energatom	18.825	18.187	21.586	3.043	3.001	6.425	30.605	25.2	23.518

Energatom air emissions, 2014-2016, tonnes

Company	Gross CO emissions			Gross emissions of nonmethane volatile organic compounds			Total air emissions		
	2014	2015	2016	2014	2015	2016	2014	2015	2016
Zaporizhzhya NPP	1.539	1.565	2.969	3.341	3.252	4.114	11.94	11.47	17.43
Rivne NPP	2.365	2.723	2.56	25.037	22.551	21.463	45.19	35.73	33.83
South-Ukraine NPP	8.609	8.92	9.029	109.959	109.802	110.075	144.16	138.35	139.539
Khmelnyska NPP	7.765	7.225	7.291	5.509	5.509	5.509	43.9	41.8	43.3
Total for Energatom	20.278	20.433	21.849	143.846	141.114	141.161	245.19	227.35	234.099

Energatom use of potable and service water, 2014-2016, thousand m³

Company	Water source	thousand m ³		
		2014	2015	2016
Zaporizhzhya NPP	Artesian water	878*/685**	766*/609**	809*/674**
	TPP's channel (Dnipro River)	346,261	364,838	323,870
Rivne NPP	Water well in Ostriv village	1,705+/285**	1,700+/385**	1,632+/531**
	Styr River	54,547	55,849	50,063
South-Ukraine NPP	Tap water	605**	610**	495**
	Southern Buh River	71,478	60,981	60,108
Khmelnyska NPP	Artesian water	1,738*/1,179**	1,429*/953**	1,276*/853**
	Hnyly Rih River, Horyn River	18,807	22,233	37,206
Energatom	Potable water	2,754**	2,557**	2,553**
	Service water	471,247	503,901	491,093

Note

* - total volume taken from natural sources, including water losses during transportation to satellite localities (which losses are attributed to NPPs' expenses) and water volumes used for NPPs' auxiliary facilities

** - used directly on production sites of NPPs
+ - total volumes taken from artesian water wells

Energatom use of water resources, 2014-2016, thousand m³

Indicator	2014	2015	2016
Limit	881,956	881,956	881,956
Volimes actually taken, received, used and transferred	446,487	492,059	446,593

Energatom CO₂ emissions, 2014-2016, tonnes

Indicator	2014	2015	2016
CO₂ emissions, tonnes	930.737	521.939	552.153

Energatom methane emissions, 2014-2016, tonnes

Indicator	2014	2015	2016
Emissions of methane (CH₄), tonnes	18.283	18.28	18.284

Ozone destroying substances used at Energatom facilities, 2016

Company	Substance	Unit of measurement	Q-ty	Notes
2016				
Zaporizhzhya NPP	Chlorofluorocarbons: dichlorodifluoromethane (CFC 12)	kg	171.8	Freon R12
	Hydro chlorofluorocarbons: R22	kg	6,868.3	Freon R22
Rivne NPP	Dichlorodifluoromethane (CFC 12)	kg	84.9	Freon R12
	Chlorodifluoromethane (HCFC 22)	kg	2,650.6	Freon R22
South-Ukraine NPP	HFC 134a	kg	13.4	
	Chlorodifluoromethane (HCFC 22)	kg	1,756.1	Freon R22
Khmelnyska NPP	Chlorofluorocarbons: R12	kg	74.5	Freon R12
	Hydro chlorofluorocarbons: R22	kg	1,255.1	Freon R22
Total for Energatom			12,874.7	

Energatom wastewater discharges, 2014-2016, thousand m³

Company	Wastewater discharges into surface water bodies, thousand m ³		
	2014	2015	2016
Zaporizhzhya NPP	245,993.2	282,158.5	255,368.0
Rivne NPP	13,985.0	12,722.4	1,378.6
South-Ukraine NPP	6,793.6	37,227.9	25,516.9
Total for Energatom	266,771.8	332,108.8	282,263.5

Non-radioactive waste generated by Energatom, 2014-2016, tonnes

	2014	2015	2016
Non-radioactive waste, tonnes	34,310	33,916	30,563

Radioactive waste generated by Energatom, 2014-2016, m³

	2014	2015	2016
Radioactive waste, m³	3,228	3,100	2,898

Energatom environmental tax, 2014-2016, million UAH

	2014	2015	2016
Environmental tax, million UAH	674.0	707.3	778.7

Energatom environmental investments, 2014-2016, million UAH

Environmental expenses	2014	2015	2016
Current environmental expenses, million UAH	181.765	160.595	182.467
Capital investment, million UAH	273.327	114.436	133.617
TOTAL	455.092	275.031	316.084

HEALTH AND SAFETY

Occupational injuries at Energatom, 2014-2016

Company	Number of injuries						Injury frequency rate			Injury severity rate		
	total			fatal injuries			2014	2015	2016	2014	2015	2016
	2014	2015	2016	2014	2015	2016						
Total for Energatom	4	3	8	0	0	0	0.11	0.09	0.23	40.5	105	34.5

Calculation methodology

Rates are calculated according to the following formulas:
 Injury frequency rate = (Naccid / Nheadcount) * 1,000
 Injury severity rate = (Ntempincap / Ninjured) * 1,000

Ninjured is a number of injured employees (excluding fatal injuries) over the reporting period, employees

Nheadcount is an average headcount over the reporting period, employees

Where:

Naccid is a number of occupational accidents over the reporting period

Ntempincap is a length of the temporary incapacity for work resulting from an occupational accident (excluding fatal injuries) over the reporting period, working days

Fatal Injury Frequency Rate for 2014-2016 was not calculated, because Energatom had no fatal accidents over the period.

Energatom H&S expenses, 2014-2016, million UAH

	2014	2015	2016
Total for Energatom	224.2	232.1	272.1

LOCAL COMMUNITIES

Energatom social and economic compensation paid to the national budget's special fund, 2014-2016, million UAH

	2014	2015	2016
Social and economic compensation paid by Energatom to the national budget's special fund, million UAH	224.7	314	349

Note:

Under the Law of Ukraine *On the Use of Nuclear Energy and Radiation Safety*, Energatom pays a social and economic compensation for the risks faced by population in the supervised areas. The compensation duty amounts to 1% of sales of the electricity generated by the company for a relevant period.

FEEDBACK FORM

Dear reader,

You have read Energatom Non-Financial Report 2016, which has been addressed to a wide range of stakeholders.

The readers' opinion is very important to us.

We will highly appreciate if you help improve the quality of the Company's reporting by answering the questions in this form.

1. Please, give your feedback on the Report, using the following criteria:

On a 1 to 10 scale, with 10 being "excellent" and 1 being "poor".

Reliability and objectivity of information	_____
Completeness and materiality of information	_____
Report structure, easiness of information search	_____
Style of information presentation	_____

2. Point out the report sections which you find the most important and useful:

3. In your opinion, which topics do we need to disclose in our next report?

4. Your recommendations and additional comments

5. Please, specify your stakeholder group

6. Your contact information, including your e-mail address

Full name _____

Company _____

Position _____

Contact information (telephone, e-mail)

Please, send the completed form to the following address:

Energoatom
3, Nazarivska Street
Kyiv 01032

or e-mail the form to: pr@atom.gov.ua

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