6.6. IMPACT OF THE ENVIRONMENT (THE NATURAL CAPITAL)

6.6.1. ENERGY

Engineering enterprises require uninterrupted and sound supply of energy to support the process. The energy is required to operate the machines, for space heating, and heat treatment of finished products and billets.

Pursuant to the Federal Law No.261 dated 11/23/2009 and the Order of Rosatom State Corporation No.1/676-P dated 08/09/2011, the Division implements the "Energy conservation and energy efficiency improvement" project. Responsibility for the project is assigned to the Deputy CEO — Business Operations Director, V.P. Razin. The indicators related to the reduction of energy consumption are included in his KPIs and decomposed to the level of managers and employees of the Technical Department of OJSC Atomenergomash and Chief Engineer Service at SASC.

The current energy efficiency improvement program covers the period of 2010–2015. As the latest, in 2015 a repeated energy audit should be conducted in order to develop the program for the period of 2016–2020.

TARGETS FOR REDUCTION OF ENERGY CONSUMPTION VS THE REFERENCE FIGURE[1]

2014	2015
23%	25%

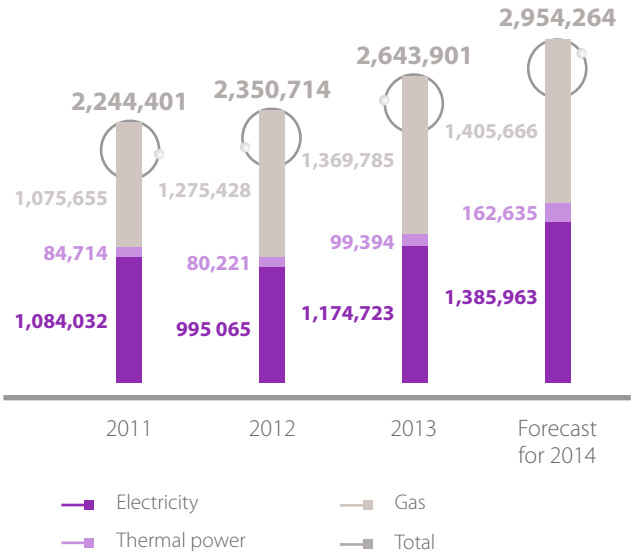
[1] Hereinafter, means the position number in the Risk Map.

In 2013, within the framework of the energy efficiency project, low cost measures and measures under modernization and overhaul programs were mainly implemented. The 2013's target for the Division (20% reduction vs the reference figure) has been achieved (the resulting figure is 22.94%).

Main tasks for the future as regards energy efficiency improvement:

- Combine measures for energy efficiency improvement with the modernization and maintenance program;
- Implement contracts for energy services;
- Improve control over energy consumption with assigning personal responsibility to employees..

ENERGY SUPPLY COST FOR THE ENTIRE DIVISION, THOUSAND RUBLES



[1] VISION OF ROSATOM STATE CORPORATION

[2] INTERFAX-ERA RATING

"Our company conducts systematic work aimed at improvement of production energy efficiency. For us, the highest grade given by experts for our performance is a binding factor stimulating us to maintain the energy efficiency improvement rates and to further reduce the environmental impact"

Vladimir Razin,
Deputy CEO — Business Operations Director of Atomenergomash

AEM 4.2.3

GRI EN6

ENERGY SAVING IN THE DIVISION (G/J)

Organization	2011			2012			2013			TOTAL in 2013
	Heat	Electricity	Gas	Heat	Electricity	Gas	Heat	Electricity	Gas	
OJSC SverdNIIKhimmash	2050.2	1600.8	0.0	1602.5	801.3	0.0	4741.9	2874.9	0.0	7616.7
OJSC PZM	0.0	25346.9	233022.3	0.0	31703.0	180113.5	0.0	40173.1	276811.1	316984.2
OJSC TsKBM	11214.5	379.1	0.0	3395.9	7638.7	0.0	921.2	9280.2	0.0	10201.4
OJSC OKB Gidropress	2895.3	1837.8	0.0	3305.4	3986.8	-2297.7	-125.5	5597.5	8819.4	14291.3
OJSC ZiO-Podolsk	0.0	64196.9	180009.9	0.0	66958.3	412515.5	0.0	58885.3	226687.1	285572.5
OJSC OZTMiTS	0.0	-27.7	0.0	-627.6	6125.8	0.0	-1576.3	6360.4	0.0	4784.0
OJSC TsNIITMASh	3347.2	3806.5	5765.7	418.4	234.2	6436.7	10250.8	9003.1	6616.1	25870.0
OJSC IFTP	75.3	79.6	0.0	117.2	101.9	0.0	347.3	120.6	0.0	467.9
OJSC SNIIP	2426.7	2066.4	0.0	543.9	-1362.6	0.0	-1589.9	2417.9	0.0	827.9
OJSC Afrikantov OKBM	0.0	14364.0	-15096.9	0.0	8424.0	29140.5	0.0	10598.4	60925.8	71524.2
OJSC VNIIAM	1820.0	1231.2	0.0	-916.3	903.6	0.0	-1510.4	156.8	0.0	-1353.6
OJSC GSPI	10836.6	1838.8	0.0	141486.1	2630.3	0.0	9497.7	2871.5	0.0	12369.2
OJSC Venta	-197.6	3921.3	28180.8	-725.5	2534.7	22586.8	-1548.1	2311.2	29023.4	29786.6
TOTAL:	**32623.1**	**120076.0**	**431881.9**	**12783.2**	**126013.0**	**648506.2**	**19550.0**	**143655.2**	**608894.2**	**772099.3**

[1] INTERFAX-ERA RATING

[2] INDICATOR 4.2.1 ENERGY CONSUMPTION (G/J)", EN3

6.6.2. MATERIALS

The materials used in production, including raw materials and semi-finished products are not only one of the essential elements of the product quality and a guarantee of stability and continuity of production, but also an important indicator reflecting the Company's contribution to preservation of the world's resources.

Responsibility for utilization and consumption of materials was assigned to SASC managers, but the specific indicators were not included in the KPIs.

Currently, the Company has not initiated the processes to reduce consumption of materials for production or to reduce consumption of non-renewable materials. In this regard, not all enterprises of the Division keep detailed record of materials in actual values or assess the efficiency of their use in production. Information regarding all enterprises of the Division will be included in the succeeding reporting periods.

AEM 4.1.1

GRI EN1

MATERIALS (RAW MATERIALS) USED, TONS[1]

Company	2011	2012	2013
CJSC ATM	33	136	160,000
LLC Casting Plant	538,336.2	467,347.3	145,785.2
OJSC Venta	139,719.2	70,381.3	37,811.0
OJSC SverdNIIKhimmash	18,039	40,236	32,132
OJSC Afrikantov OKBM	1,148.3	1,691.53	2,442.92
ARAKO	311.78	205.00	381.38
OJSC OZTMiTS	18.1	29.7	37.3

[1] Information is shown only for the enterprises keeping relevant records.

6.6.3. WATER

Water resources support the business activities of the enterprises and are used in the processes (cooling (heating) systems, product tightness tests, are included in the process fluids).

Responsibility for consumption and utilization of water was assigned to SASC managers, but the specific indicators were not included in the KPIs.

AEM 4.3.1

GRI EN8

CONSUMED[2] WATER, THOUSAND CUBIC METERS[3]

Company	2011	2012	2013	Forecast for 2014
ARAKO	3.6	3.4	3.2	3.4
CJSC ATM	1.4	0.4	0.4	0.4
CJSC AEM Technologies	203	204.2	188	195
OJSC Venta	239.2	249.8	276.1	305.3
OJSC OKB Gidropress	28.3	30.1	26.4	42
OJSC GSPI	25.9	27.6	25.9	–
OJSC IFTP	3.5	2.3	3.1	3.5
OJSC OZTMiTS	43.8	44	43.7	44
OJSC Afrikantov OKBM	0.6	0.5	0.5	0.5
OJSC PZM	279.5	265	266	260
OJSC SNIIP	37	35.1	34.1	–
OJSC SverdNIIKhimmash	16.3	11.3	12.5	13.8
OJSC TsKBM	47.8	38.3	37.7	41.1
OJSC TsNIITMASh	65.2	74.7	62.1	67

[2] Data obtained by direct measurements.

[3] Enterprises not shown in the table, rent the premises and do not keep record of water consumption.

WATER CONSUMED, THOUS. M³. OTHER SOURCES

Company	2011	2012	2013	Forecast for 2014
Wastewater				
OJSC Venta	219.3	222.7	247.8	275.7
OJSC VNIIAM	4.8	4.3	4.4	4.5
OJSC OZTMiTS	35	35.2	35	35.4
OJSC TsNIITMASh	64.2	73.4	62	65
Rain water				
OJSC VNIIAM	4.1	4.1	4.1	4.1
Ground water				
OJSC Afrikantov OKBM	6.2	5.6		
OJSC Energomash-spetsstal	435	393	312	325
Surface water				
OJSC PZM	443	440.5	430.6	425
OJSC TsKBM	1.1	1.2	0.6	4.2

On average, the water consumption remains unchanged.

6.6.4. ENVIRONMENTAL COMPLIANCE

Environmental safety issues are an essential part of the Division's enterprises positioning both in terms of the market for advanced energy solutions and in terms of environmental protection within the framework of business activities.

ENTERPRISES HOLDING ISO 14001 CERTIFICATES

AEM 4.7.3

SASC	Availability of ISO 14001 certificate
OJSC SNIIP	YES
CJSC AEM Technologies	Certification planned for 2015
OJSC Energomashspetsstal	YES

Responsibility for impact on the environment was assigned to SASC managers, but the specific indicators were not included in the KPIs.

PAYMENTS FOR ENVIRONMENTAL IMPACTS, THOUSAND RUBLES

AEM 4.7.1

2

Company	2011	2012	2013
Entire Division	5,946.7	5,642.6	7,720.3

The largest charges for negative impact on the environment are born by OJSC Afrikantov OKBM, OJSC ZiO-Podolsk and CJSC AEM Technologies.

AEM 4.7.2

No penalties or non-monetary sanctions for failure to comply with environmental laws were applied to the Division's enterprises in the reporting year.

GRI EN29

3

1 REGULATORY FRAMEWORK

2 BREAKDOWN BY SACS

3 PENALTIES (THOUSAND RUBLES) AND NON-MONETARY SANCTIONS FOR FAILURE TO COMPLY WITH ENVIRONMENTAL LAWS

"The company implements an environmental policy focused on the safe and sustainable development of the enterprise, production of environmentally friendly and safe products and reduction of environmental impact. OJSC Afrikantov OKBM's high score in the federal rating demonstrates the high efficiency of the production operations of the enterprise and compliance with all applicable requirements for environmental protection"

Alexey Denisov,
Environmental Protection Laboratory Manager, OJSC Afrikantov OKBM

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6.6.5. DESCRIPTION OF KEY STRATEGIC RISKS AND OPPORTUNITIES

№[1]	Risk	Risk factors	Control measures/opportunities
11	Physical damage to the company's assets	• Natural and industrial disasters	• Development of a production and environmental safety system