

**gorenje**group

**g**green



# EMAS Environmental Statement

of the companies Gorenje, d. d.,  
and Gorenje I.P.C., d. o. o.,

for the year 2016

GORENJE, D. D., ISSUED THE FIRST ENVIRONMENTAL REPORT IN 2000. ENVIRONMENTAL REPORT FOR 2003 ALREADY INCLUDED A CERTIFIED EMAS ENVIRONMENTAL STATEMENT. IN COMPLIANCE WITH THE PROVISIONS OF THE EMAS REGULATION, A COMPLETE ENVIRONMENTAL STATEMENT WAS ALSO PREPARED FOR THE YEARS 2006, 2009, 2012, 2013, 2014, AND 2015 WITH UPDATES TO THE ENVIRONMENTAL STATEMENT BEING ISSUED IN THE YEARS BETWEEN.



# Index

<b>1</b>	<b>Statement of Authenticity of Environmental Data</b> — 3
<b>2</b>	<b>Company Profiles</b> —4
<b>3</b>	<b>Scope of company activities</b> — 6
<b>4</b>	<b>Environmental management system</b> — 8
<b>5</b>	<b>Development</b> — 9
<b>6</b>	<b>Evaluation of suitability of environmental policy</b> — 10
<b>7</b>	<b>Identifying the key environmental aspects and assessment of environment impact</b> — 13
<b>8</b>	<b>Material balance</b> — 18
8.1	Material balance of Gorenje, d. d. — 16
8.2	Material balance of Gorenje I.P.C., d. o. o. — 17
<b>9</b>	<b>Environmental targets and efficiency of environmental management</b> — 18
9.1	Outline targets — 18
9.2	Implementation targets in Gorenje d. d. — 18
9.2.1	Location Velenje — 18
9.2.2	Location Rogatec — 19
9.2.3	Location Šoštanj — 20
9.3	Attainment of operating goals at Gorenje I.P.C., d. o. o. — 20
9.3.1	Location Velenje — 20
9.3.2	Location Šoštanj — 21
9.4	Environmental program efficiency — 21
<b>10</b>	<b>Information on extraordinary events</b> — 22
<b>11</b>	<b>Communication with interested parties and stakeholders</b> — 22
<b>12</b>	<b>Compliance with legislation and other requirements</b> — 25

# 1 Statement of Authenticity of Environmental Data

**The EMAS Environmental Statement for the period from January 1 to December 31, 2016, includes operations of the companies Gorenje, d. d., and Gorenje I.P.C., d. o. o. All information and facts specified in the EMAS Environmental Statement are authentic and reflect the true and actual state of the environmental management system at both companies. The Statement is also available on the website at [www.gorenjegrup.com](http://www.gorenjegrup.com).**

In 2003, the parent company Gorenje, d. d., adapted its operations to comply with the EMAS requirements as laid out in the EU Regulation No 761/2001; in early April 2004, the audit was successfully completed. Requirements for entry into the EMAS system register were met as of May 1, 2004 when Slovenia became a member of the European Union. In 2006, the company Gorenje I.P.C., d. o. o., joined the system. In March 2016, the Slovenian Institute of Quality and Metrology (SIQ) carried out an audit of the EMAS system and found that it complies with all requirements of the EU Regulation No 1221/2009 (the EMAS Regulation).

mag. Vilma Fece  
Head of Environment Protection and  
Occupational Safety and Health



## 2 Company Profiles

### Activities of the company Gorenje, d. d.

<b>Name:</b>	Gorenje, gospodinjski aparati, d. d.
<b>Date of entry into the Court Register:</b>	December 31, 1997
<b>Abbreviated company name:</b>	Gorenje, d. d.
<b>Head office:</b>	Velenje, Partizanska 12
<b>Company activity:</b>	Development, manufacturing, and sales of home appliance, and information and industrial equipment
<b>Activity code:</b>	27.510 Production of electric home appliances

### Activities of the company Gorenje I.P.C., d. o. o.

<b>Name:</b>	Gorenje I.P.C., Invalidsko podjetniški center, d. o. o. (social enterprise)
<b>Date of entry into the Court Register:</b>	June 25, 1991
<b>Abbreviated company name:</b>	Gorenje I.P.C., d. o. o.
<b>Head office:</b>	Velenje, Partizanska 12
<b>Company activity:</b>	Development and production of electrical components, packaging and expanded polystyrene, and printed material
<b>Activity code:</b>	27.330 Production of power outlets, switches, and other wiring 22.220 Production of packaging made of plastics 18.120 Other printing

# 107,493.64 t

**INPUT RAW MATERIALS**

for Gorenje, d. d.



# 11.6 t

**DISPOSED WASTE**

for Gorenje, d. d.

# 92,960 t

**PRODUCTS**

for Gorenje, d. d.

# 3

## Scope of company activities

### Activities of the company Gorenje, d. d.

The EMAS system includes activities of the parent company, taking place at the following locations:

- Velenje, Partizanska 12,
- Šoštanj, Primorska c. 6a in Primorska cesta 6d,
- Rogatec, Ceste 56.

Activities of Gorenje, d. d., at the Velenje location are taking place in a mixed zone indented for industrial, repair and maintenance, handicraft, and service activities; at Šoštanj and Rogatec locations, operating activities are conducted in an industrial and handicraft/artisan zone.

EMAS system does not include Gorenje, d. d., MEKOM Program, at location Hrastje 2a, Bistrica ob Sotli, where refrigeration appliance doors are produced and where other activities not related to the company core activity take place.

Activities include development, production, and sale of home appliances, and information and industrial equipment. Following are

the manufacturing plants within the parent company:

- Fridge Freezer and Dishwasher Program: refrigerators and combined appliances, dishwashers
- Cooking appliance program: electric and gas cookers, ovens, cooking hobs;
- Laundry appliance program: washing machines, laundry dryers;
- MEKOM Program: metal and plastic components;
- Point program: development, production, and sale of information technology equipment;
- Heating systems program: development and sale of heating systems.

As at December 31, 2016, Gorenje, d. d., had 4,410 employees, of which 4,029 were employed at the Velenje location, 97 worked at the Šoštanj plant, and 213 worked at the Rogatec plant.

### **Activities of the company Gorenje I.P.C., d. o. o.**

The EMAS system includes company activities taking place at the following locations:

- Velenje, Partizanska 12,
- Šoštanj, Primorska c. 6d.

Activities of Gorenje, I.P.C., d. o. o., at the Velenje locations are carried out in a mixed zone intended for industrial activities, repair and maintenance, handicraft, and service activities. In Šoštanj, Gorenje I.P.C., d. o. o., is located in the industrial zone along the Primorska cesta, intended for industry and handicrafts.

Company activities comprise the following key processes:

- development and production of electronic components;
- design and printing,
- development and production of expanded polystyrene packaging; and
- assembly of subsets for home appliances.

The production facilities include the following:

- Packaging Program: production of expanded polystyrene packaging;

- Services Program: assembly of subsets for home appliances;
- Graphics Program: production of instruction manuals for home appliances;
- Electrical Components Program: production of cable sets for home appliances.

As at December 31, 2016, Gorenje I.P.C., d. o. o., had 900 employees. The number of employees at the Šoštanj location was 426, number of employees at Velenje location was 474.

Gorenje, d. d., is the sole shareholder of Gorenje, I.P.C., d. o. o., holding 100 percent ownership of the company. 96.8 percent of Gorenje I.P.C., d. o. o. production output is intended for programs of Gorenje, d. d. Gorenje I.P.C., d. o. o. is connected to production processes of Gorenje, d. d., via the SAP information system. The systems of quality management, environment protection, and occupational health and safety are integrated into the said systems of Gorenje, d. d.; the same applies to maintenance, organization, and IT.



## 4 Environmental management system

**At Gorenje, d. d., the environmental management system in compliance with the requirements of the ISO 14001 standard was certified in 2000. The company was entered into the EMAS register in 2004. In 2006, Gorenje, d. d., introduced a system of safe and healthy work in compliance with the OHSAS 18001 standard. Following the decision to implement integrated systems of environment protection and occupational safety and health, the systems were also introduced in 2006, and certified in 2007, by the company Gorenje, I.P.C., d. o. o. In 2015, the company KEMIS, d. o. o., a Gorenje Group member and a part of Gorenje Group's portfolio investments, was entered into the EMAS system register. The company released an independent EMAS environmental statement.**

Gorenje, d. d., issued the first environmental report in 2000. Environmental Report for 2003 already included a certified EMAS Environmental Statement. In compliance with the provisions of the EMAS Regulation, a complete environmental statement was also prepared for the years 2006, 2009, 2012, 2013, 2014, and 2015 with updates to the Environmental Statement being issued in the years between.

The Rules of Procedure are the fundamental document for the environmental management systems and occupational health and safety management systems. It specifies the measures for continuous monitoring and improvement of the environment and occupational health and safety at the Group companies. Environmental management of procedures is further specified at each organizational unit with internal normative acts. Implementation of programs leads to attainment of goals, which paves the way for continuous progress. Audits and inspections are carried out to control the progress of programs aimed at our goals. The reports for the public summarize and present the information on the environmental effects and the progress made in the field of environment protection. "Environment Protection and Occupational Health and Safety" are in charge of the activities in environment protection at the parent company Gorenje, d. d. This department has a consulting, supervisory, development, and operational role both at the parent company Gorenje, d. d., and at the entire Gorenje Group. Company management reviews the efficiency of the environmental management system once per year, during the managerial review.



# 5 Development

**Consistently with our vision, we are looking to become the best design-driven home appliance innovator in the world. Therefore, we are paying particular attention to new product development and design, which is also manifest in the increase of our investment into research and development.**

In 2016, R&D investments amounted to EUR 32.3 million (2.6 percent of total Group revenue). In 2017, we will continue to invest into development and technologies that enable it, as this will boost our long-term competitive edge. Innovation is a Gorenje Group value that has to become present in the work and conduct of every employee.

The key goal in the development of any new appliance is excellent user experience. Therefore, we seek to understand the habits and the needs of our customers and to anticipate the trends affecting their shopping decisions. In this pursuit, we are focusing on the areas that improve the competitiveness of our products and services:

- superior product and service design, starting with the earliest development stages, with the final user actively involved in the development of solutions;
- development of innovation that solves relevant challenges for the users and simplify their lives,
- energy efficiency of products and environment responsibility with constant care for their functionality;
- quest for solutions that allow better management of complexity;

- providing product quality by continuous improvement of product optimization methods and procedures.

Key new developments of 2016 include the following:

- updated built-in under-counter fridge-freezers, width 600 mm,
- 10-kg load washing machines for our strategic industrial partner,
- Asko Craft line of premium built-in ovens,
- new line of mid-range dishwashers (Gorenje brand).

We actively developed digital solutions, including connectible appliances.

In heating systems, the main development challenge in 2016 was improvement of energy efficiency.

## 6 Evaluation of suitability of environmental policy

**In 2007, we specified a joint environment protection and occupational health and safety policy for the companies Gorenje, d. d., Gorenje I.P.C., d. o. o., and Gorenje Orodjarna, d. o. o.**

In 2011, the policy was also adopted by the companies Gorenje Valjevo, d. o. o., and Gorenje GAIO, d. o. o. In 2012, the policy was adjusted to the guidelines and policies laid down in the Gorenje Group Strategic Plan for the period 2012–2015.

In 2014, the environment protection and occupational health and safety policy was updated to match the Gorenje Group's new strategic policies for the period 2014–2018. In 2014, the policy was also adopted by the company Gorenje Gostinstvo, d. o. o. In 2015, it was adopted by Gorenje Home, d. o. o., Zaječar, and INDOP, d. o. o., Šoštanj. At the end of 2015, a new Gorenje Group Strategic Plan for the period 2016–2020 was adopted. The environment protection policy and occupational health and safety policy did not have to be

adjusted due to the changes in the Strategic Plan. Environment protection and occupational safety and health are constituent parts of Gorenje Group's corporate governance policy and organizational culture. Therefore, the key values that lead us, consistently with the new strategic policies, in our pursuit of the corporate vision and mission and in our day-to-day actions, have to be strongly embedded in the very core of the environment protection and occupational health and safety policy. These values include responsibility, innovation, and entrepreneurship. In environment protection and occupational health and safety, they are asserted through openness of thinking, team spirit, respect, efficiency, goal-orientation, and commitment.

# Environment protection and occupational safety

**SAFE. HEALTHY.**  
2015 – the year of safety  
and health at work

Gorenje's strategic plan is based on the pursuit of the Group's vision and mission: to create original, superiorly designed products and services that afford simplicity for our users. We are focused on increasing customer satisfaction and creating value for our owners, employees and other stakeholders of the Gorenje Group companies in a socially responsible manner. Owing to its importance, the environmental protection and occupational health & safety policy is an integral part of the corporate governance policy and organisational culture of the Gorenje Group.

Environmental protection and the provision of safe working conditions are among the basic rights, obligations and responsibilities of all employees, and as such are treated as constituent parts of the Company's corporate governance.

#### **We undertake to continue carrying out the following activities in future:**

- incorporating the protection of the working and broader environment into our development strategy as well as annual and operational plans via the foreseen measures, assets, responsible persons, service provides and deadlines in order to allow our employees to fulfil their tasks in a safe and health manner, while constantly reducing the risk of injury or illness and continuously reducing negative impacts on the environment;
- monitoring and measuring indicators of the state of the working environment and environmental aspects, including appropriate response measures in case of any deviations;
- improving the condition of the working and broader environment at our company, subject to relevant regulations;
- planning and implementing new technologies and products in line with environmental protection principles, and introducing appropriate, flawless, and ergonomic working equipment while constantly seeking opportunities to improve working conditions;
- using such materials and components that will comply with the strictest domestic and foreign environmental standards;
- planning new products in compliance with the requirements of environmental design which includes the entire useful life of a product: from development, through production, to production and waste management after the expiry of its useful life;
- reducing the volume of generated waste and rationalising the use of energy resources;
- educating, training and raising awareness of employees and partners about their responsibility to the working and broader environments;
- cooperating with interested internal and general publics in order to contribute to the success of joint efforts in environmental protection and occupational health & safety;
- informing the public on our achievements in environmental protection and concern for occupational health and safety.



**Franjo Bobinac**  
President and CEO

Velenje, 1. 3. 2014

Gorenje, d.d.  
Gorenje d.o.o. Valjevo  
Gorenje Home d.o.o. Zaječar

Gorenje I.P.C., d.o.o.  
Gorenje GAIO, d.o.o.  
Indop d.o.o.

Gorenje Orodjarna, d.o.o.  
Gorenje Gostinstvo, d.o.o.

[www.gorenjegrup.com](http://www.gorenjegrup.com)

**gorenjegrup**

**-8%**



**LOWER CONSUMPTION  
OF ELECTRIC POWER**

in whole Gorenje I.P.C. in  
2016 compared to 2015

# 7

## Identifying the key environmental aspects and assessment of environment impact

**Environmental aspects are defined as activities, products, and services that interact with and bear an impact on the environment. The analysis of environmental aspects includes all stages of the production process, products, and activities, both in normal operation and in operation under extraordinary conditions or states of emergency.**

The following criteria are applied to identify a particular aspect:

- environment policy and legislative requirements;
- opinion of interested parties and stakeholders;
- risk assessment;
- own assessments; and
- assessments pertaining to extraordinary conditions and states of emergency.

In assessing the environmental impacts which include every change to the environment, favourable or detrimental, resulting in part or entirely from the activities, products, and services taking place, being produced or being rendered at Gorenje, d.d., and Gorenje I.P.C., d.o.o., the following has been considered:

- **direct impact**, i.e. direct results of the two companies' own activities over which the companies have direct control; and
- **indirect impact**, i.e. the effects caused directly by other parties, the occurrence, scope, and the nature of pollution of which, however, may be affected by our activities (e.g. use of our products, logistics, power production, etc.).

Framework and operative environmental targets and programs have been defined for major environmental aspects and the identified environmental aspects are being adapted in compliance with the

legislation (raw materials, emissions into air, water, and ground, noise, waste etc.) and environmental policy. Gorenje, d.d., is also monitoring the use of energy resources that represent a vital part of environment protection for the holders of the Integrated Pollution Prevention and Control Permit (who are liable to comply with the relevant requirements).

In 2013, environmental aspects were fully assessed at Gorenje, d.d., and Gorenje, I.P.C., d.o.o. In 2014, the environment aspects of dishwasher production were assessed for the first time, as well as environment aspects of the relocation of a part of the Mekom program production from the Šoštanj plant to the Galvana plant. New assessments did not affect the range of identified environment aspects and therefore, the environmental aspect register has not been changed.

Thus, product/service, and industrial wastewater from production processes remain the major aspects at Gorenje, d.d. With regard to products and technological wastewater, the emphasis is on the content of hazardous substances. Technological wastewater was classified as a major environmental aspect based on an in-house assessment. Wastewater management at Gorenje, d.d., does not include only cleaning of industrial wastewater at own waste water treatment plant, but also implementation of measures for optimum consumption of water and chemicals for industrial purposes. Indirect aspects have been studied in detail through



development of new products.  
At Gorenje I.P.C., d. o. o., product/  
service is defined as an important  
aspect.

In December 2016, we started the  
assessment of environment aspects  
consistently with the requirements of

the new ISO 14001:2015 standard.  
The assessment also included a  
consideration of the stages of the life  
cycle of aspects that we can control or  
influence. The new assessments could  
affect the changes in the environmental  
aspect register, but not sooner than in  
2017.

Chart: **Detailed overview of  
identified and estimated  
environmental aspects of the  
operation of the companies  
Gorenje, d. d., and Gorenje  
I.P.C., d. o. o.**

**IDENTIFIED  
ENVIRONMENT ASPECTS  
AT GORENJE, d. d.**

**1. RAW MATERIALS**

- sheet metal
- components of non-metal and metal origin
- chemicals
- thermal and sound insulation
- rubber and plastic semi-products
- packaging

**2. ENERGY RESOURCES**

- electricity
- heat
- natural gas
- compressed air
- water

**3. OTHER**

- stationery
- auxiliary material

**4. EMISSIONS**

- emissions into air
- emissions into ground
- noise emissions
- emissions into water
  - industrial wastewater
  - cooling wastewater
  - communal wastewater
  - sewage system
- light pollution
- odours

**5. WASTE**

- hazardous waste
- waste packaging
- municipal/communal solid waste
- other non-hazardous waste

**6. PRODUCTS**

- product/service
- own parts

**IDENTIFIED  
ENVIRONMENT ASPECTS  
AT GORENJE I.P.C., d. o. o.**

**1. RAW MATERIALS**

- components of non-metal and metal origin
- chemicals
- thermal and sound insulation
- rubber and plastic semi-products
- packaging

**2. ENERGY RESOURCES**

- electricity
- heat
- natural gas
- compressed air
- water

**3. OTHER**

- stationery
- auxiliary material

**4. EMISSIONS**

- emissions into air

- emissions into water

- industrial wastewater

- communal wastewater

- sewage system

- light pollution

- odours

**5. WASTE**

- hazardous waste
- waste packaging
- municipal/communal solid waste
- other non-hazardous waste

**6. PRODUCTS**

- product/service
- own parts

The environmental aspects of the use of our products  
are regulated by the relevant legislation (energy label).

They are also regulated after the expiry of the appli-  
cances' useful life (inclusion in the waste electric and  
electronic equipment scheme, waste sorting etc.).

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AT GORENJE, D. D., THE ENVIRONMENTAL MANAGEMENT SYSTEM IN COMPLIANCE WITH THE REQUIREMENTS OF THE ISO 14001 STANDARD WAS CERTIFIED IN 2000. THE COMPANY WAS ENTERED INTO THE EMAS REGISTER IN 2004. IN 2006, GORENJE, D. D., INTRODUCED A SYSTEM OF SAFE AND HEALTHY WORK IN COMPLIANCE WITH THE OHSAS 18001 STANDARD. FOLLOWING THE DECISION TO IMPLEMENT INTEGRATED SYSTEMS OF ENVIRONMENT PROTECTION AND OCCUPATIONAL SAFETY AND HEALTH, THE SYSTEMS WERE ALSO INTRODUCED IN 2006, AND CERTIFIED IN 2007, BY THE COMPANY GORENJE, I.P.C., D. O. O.

# 8 Material balance

## 8.1 Material balance of Gorenje, d. d.

	2006		2009		2012		2015		2016	
	(t)	(%)	(t)	(%)	(t)	(%)	(t)	(%)	(t)	(%)
<b>Input raw materials</b>	<b>188,685.8</b>	<b>100</b>	<b>150,009.0</b>	<b>100</b>	<b>115,303.0</b>	<b>100</b>	<b>105,349.91</b>	<b>100</b>	<b>107,493.64</b>	<b>100</b>
<b>Output</b>										
Products	171,029.1	90.6423	138,388.4	92.2534	102,635.0	89.0133	91,182.0	86.56	92,960.000	86.44
Metal secondary raw	13,451.7	7.1291	8,272.9	5.5149	9,196.8	7.9762	10,442.0	9.91	10,596.6	9.85
Non-metal secondary	2,633.1	1.3955	2,102.6	1.4017	2,454.8	2.1290	3,287.1	3.12	3,580.1	3.33
Disposed waste	1027.4	0.5445	670.9	0.4472	15.3	0.0133	18.0	0.02	11.6	0.01
Non-hazardous waste	/	/	461.3	0.3075	377.7	0.3276	310.5	0.29	239.84	0.27
Hazardous waste	498.2	0.2641	101.9	0.0679	95.4	0.0827	108.0	0.10	102.7	0.10
Emissions into water	1.120	0.0006	0.170	0.0001	0.129	0.0001	0.135	0.0001	0.239	0.0001
Emissions into air	45.2	0.0235	10.9	0.0073	14.4	0.0125	2.17	0.0021	2.56	0.0024

**The balance for 2016 includes production of home appliances at plants located in Velenje, Šoštanj, and Rogatec. Šoštanj and Rogatec plants mostly manufacture components that are in turn installed into final products – home appliances produced at the Velenje plant. The quantities of input raw materials depend on the planned or actually produced volume of home appliances.**

Basic input raw materials for home appliance production are sheet metal, plastic granulates, electrical components, chemicals, and packaging materials. Output of the material balance includes products (home appliances), waste, and emissions into water and air.

Waste is classified into secondary raw materials (metal and non-metal), hazardous waste, disposed waste, and other non-hazardous waste (waste dust, ashes, enamel, and sludge generated in the waste water treatment plant). Polymer waste is recycled within in-house processes. Hazardous waste includes waste chemicals, oil-stained cloth, and used emulsions and mineral oils.

Emissions into air include emissions from all technological processes at Gorenje, d. d., except for emission of flue gasses resulting from consumption of fuels. Emissions into water include all parameters specified by the national legislation and environmental permits, except for sulphate which is not classified as a major environment aspect of Gorenje, d. d., operations.



## 8.2 Material balance of Gorenje I.P.C., d. o. o.

	2006		2009		2012		2015		2016	
	(t)	(%)	(t)	(%)	(t)	(%)	(t)	(%)	(t)	(%)
<b>Input raw materials</b>	<b>4,374.7</b>	<b>100</b>	<b>3,549.9</b>	<b>100</b>	<b>2,966.4</b>	<b>100</b>	<b>2,665.9</b>	<b>100</b>	<b>3,060.8</b>	<b>100</b>
<b>Output</b>										
Products	4,103.9	93.8103	3,279.0	92.3699	2,760.9	93.0708	2,376.06	89.125	2,758.75	90.13
Metal secondary	10.9	0.2480	10.8	0.3032	16.4	0.5522	15.9	0.6	22.4	0.73
Non-metal secondary	143.5	3.802	194.4	5.4773	153.6	5.1772	273.1	10.24	274.4	8.96
Disposed waste	115.0	2.6288	64.3	1.8099	35.5	1.1964	0.71	0.03	3.8	0.12
Hazardous waste	1.3	0.0297	1.2	0.0338	/	/	/	/	1.4	0.05
Emissions into water	/	/	0.005	0.0001	0.012	0.0004	0.048	0.002	0.012	0.0004
Emissions into air	0.1	0.0030	0.2	0.0058	0.09	0.0030	0.08	0.003	0.08	0.003

**The balance for 2016 includes production at Velenje and Šoštanj plants.**

Basic input raw materials are paper used at the Graphics program and expanded polystyrene which is the basic raw material for packaging. Materials used at the Services Program and Electro Components Program are the property of Gorenje, d. d.; the company Gorenje, I.P.C., d. o. o., only provides the services.

The output side of the material balance includes products (printed material, packaging), waste, and emissions into water and air. Emissions into water and air are generated at the Packaging Program. Metal secondary raw materials include waste wire, while non-metal secondary raw materials include waste paper from the print shop and waste packaging. Hazardous waste includes oil from the machinery used in the Packaging Program.

# 9 Environmental targets and efficiency of environmental management

## 9.1 Outline targets

**In 2014, the following goals were specified and adopted at Gorenje, d. d., with regard to environment protection, to be attained by 2018:**

- implementation of requirements related to hazardous substances in products;
- reducing the amount of waste generated;
- rational use of energy.

**Following are the environment protection goals of Gorenje I.P.C., d. o. o., for the period from 2014 to 2018:**

- implementation of requirements related to hazardous substances in products;
- reducing the amount of waste;
- rational use of energy.

## 9.2 Implementation targets in Gorenje, d. d.

\* The Regulation on Natural Gas Market (OJ RS No. 61/16) and provisions of the Act amending the Act on the Methodology for Network Charge Calculation for The Natural Gas Distribution System (OJ RS No. 85/2016), the method of charging the natural gas supply services was changed as of January 1, 2017. Until the end of 2016, gas consumption was measured and charged by standard cubic metres of gas (Sm<sup>3</sup>). As of January 1, 2017, this shall be transformed into energy units – kilowatt hours (kWh).

In 2016, our manufacturing output was higher than in the year before by 4 percent. Due to higher demand for our products, we hired additional 530 workers in 2016.

### 9.2.1 Location Velenje

Aspect	Unit	2012	2013	2014	2015	Target 2016	Actual result 2016	Target 2017
<b>Rational use of Energy</b>								
Water consumption	m <sup>3</sup> /unit	0.085	0.079	0.084	0.08	0.08	0.087	0.080
	kg/t	1.74	1.68	1.82	1.78	1.75	1.91	1.77
Power consumption	kWh/unit	24.98	24.03	23.09	23.98	23.00	23.24	23.00
	kg/t	511.7	508.8	498.1	510.6	506.9	506.7	509.7
Consumption of compressed air	m <sup>3</sup> /unit	14.03	13.67	12.25	12.87	12.5	16.56	16.50
	kg/t	287.4	289.5	264.3	273.8	272.1	361.1	365.7
Natural gas consumption*	Sm <sup>3</sup> /unit	1.28	1.35	1.28	1.28	1.25	1.18	
	kWh/unit						12.7	12,7
	kg/t	26.25	28.5	27.6	27.2	26.5	25.7	
	kWh/t						277	275

Table 1: Attainment of environment protection goals at the Velenje plant

In rational use of energy, we exceeded our goals in 2016 (per appliance produced):

- in terms of natural gas consumption by 5.6 %;

The goal was exceeded for:

- compressed air specific consumption indicator by 32.5 %;
- water consumption by 8.8 %; and
- power consumption by 1.0 %.

Compressed air consumption is higher than the goal laid down due

to the new method of data capture using the SUEGO system (Gorenje Energy Management System).

In recent years, compressed air consumption was based on a calculation method relying on compressor capacity.

No corrective measures were required as a result of the deviation from the specified goals, as all discrepancies are below the tolerable level of 15 %.

## 9.2.2 Location Rogatec

Aspect	Unit	2012	2013	2014	2015	Target	Actual result	Target
						2016	2016	2017
<b>Reducing the quantity of</b>								
hazardous waste	t	5.19	5.0	4.6	5.2	5.0	3.9	3.9
waste to be disposed	t	12.69	3.9	4.7	/	/	/	/
<b>Rational use of energy</b>								
Power	kWh			1,681,176	1,826,184	1,826,000	1,850,777	1,850,000
Natural gas	Sm <sup>3</sup>			220,257	240,012	239,000	226,283	2,441,500 kWh

Table 2: Attainment of environment protection goals at the Rogatec plant

Comparison of the amounts of hazardous waste in 2016 indicates a decrease relative to last year. Hazardous waste amount is 22 % lower than planned, which is a result of a reduction in the amount of waste black lacquer. Use of natural gas was lower than the specified goal by 5.3 %, and the use of electric energy was higher by 1.4 % as the production output at the Rogatec plant also increased.

No corrective measures were required as a result of the deviation from the specified goals, as all discrepancies are below the tolerable level of 15 %.

### 9.2.3 Location Šoštanj

Aspect	Unit	2012	2013	2014	2015	Target	Actual result	Target
						2016	2016	2017
<b>Reducing the quantity of</b>								
hazardous waste	t	0.97	0.92	0.890	0.90	0.90	0.850	0.900
<b>Rational use of energy</b>								
Water consumption	m <sup>3</sup>	1,158	1,124	686	651	650	738	800
Power consumption	kWh	1,508,487	1,431,395	1,446,645	1,419,141	1,400,000	1,607,088	1,700,000

Table 3: Attainment of environment protection goals at the Šoštanj plant

In 2016, the amount of hazardous waste decreased by 5.6 %. Water consumption was higher than planned by 135 % and power consumption exceeded the plan by 14.8 % due to higher production output and higher number of employees at the Šoštanj plant. No corrective measures were required as a result of the discrepancy relative to the specified goals.

## 9.3 Attainment of operating goals at Gorenje I.P.C., d. o. o.

### 9.3.1 Location Velenje

Aspect	Unit	2012	2013	2014	2015	Target	Actual result	Target
						2016	2016	2017
<b>Rational use of energy</b>								
Water consumption	L/€NS*	2.718	2.952	3.009	3.292	3.621	3.730	3.693
Power consumption	kWh/€NS*	0.135	0.140	0.133	0.144	0.147	0.139	0.136
Compressed air consumption	m <sup>3</sup> /€NS*	0.152	0.169	0.137	0.167	0.850	1.371	1.364
Compressed air consumption**	Sm <sup>3</sup> /€NS*	0.182	0.191	0.182	0.193	0.180	0.219	2.274
	kWh/€NS*						2.295	2.274

Table 4: Attainment of environment protection goals at the Velenje plant

\* Measurement unit for the aspect per EUR of net revenue

\*\* The Regulation on Natural Gas Market (OJ RS No. 61/16) and provisions of the Act amending the Act on the Methodology for Network Charge Calculation for The Natural Gas Distribution System (OJ RS No. 85/2016), the method of charging the natural gas supply services was changed as of January 1, 2017. Until the end of 2016, gas consumption was measured and charged by standard cubic metres of gas (Sm<sup>3</sup>). As of January 1, 2017, this shall be transformed into energy units – kilowatt hours (kWh).

Use of electric energy was 5 % lower than the specified target. Compressed air consumption was 61 % above the target; natural gas consumption was 22 % above the target; and water consumption was 3 % above the target. Use of energy is higher due to sub-optimal utilization of machinery. Compressed air consumption is higher than the goal laid down due to the new method of data capture using the SUEGO system (Gorenje Energy Management System). In recent years, compressed air consumption was based on a calculation method relying on compressor capacity.

Due to discrepancies from the goals laid down, we continue to optimize our machinery utilization and to monitor the use of energy.

### 9.3.2 Location Šoštanj

Aspect	Unit					Target	Actual result	Target
		2012	2013	2014	2015	2016	2016	2017
<b>Rational use of energy</b>								
Water consumption	L/€NS*	0.185	0.243	0.299	0.318	0.327	0.323	0.320
Power consumption	kWh/€NS*	0.158	0.135	0.134	0.157	0.162	0.137	0.137

Table 5:  
Attainment of  
environment  
protection  
goals at the  
Šoštanj plant

\* measurement unit for the aspect per  
EUR of net revenue

Water consumption was 1 % lower than the specified target and power consumption was 15 % below the specified target.

Realistic goals have been laid down as a result of the deviation from the specified goals, and energy consumption is being monitored in detail.

## 9.4 Environmental program efficiency

### At Gorenje d. d. our goals were supported by 14 environmental programs in 2016.

With regard to the program Content of Substances in Technological Procedures and Home Appliances, we set up a computer database with documentation on input raw materials. We are starting to revise the decorative chrome-coating process. The revision will eliminate the use of Cr VI+. We are also examining the option to connect the discharge from the Gorenje central waste water treatment plant to the public sewage system which terminates at the Municipal waste water treatment plant for the Šalek Valley (Šaleška dolina). In 2016, we started to implement the new features introduced by the new standard ISO 14001:2015.

At Gorenje I.P.C. d. o. o., the main emphasis in 2016 was placed on improvement of energy efficiency of buildings. A special manual »Waste Management at Gorenje I.P.C.« was prepared for the employees.

Activities in new product development are described in section 5 of this Environmental Statement.



## 10 Information on extraordinary events

**Our employees are continuously trained for safe work and for conduct in case of extraordinary events. We do regular evacuation drills and practical fire extinguishing tests. We also conduct regular control of technological procedures and we regularly monitor the effects on the environment.**

In 2016, the Professional Fire Brigade intervened twenty-eight times in cases of extraordinary environmental events at Gorenje, d. d. The most common incident was spill of hydraulic oil from forklift trucks and ingress of precipitation during heavy rain. All events were minor and did not require further measures. There were no negative effects on the environment resulting from extraordinary events at Gorenje, d. d., and Gorenje I.P.C., d. o. o. in 2016.

In October, Gorenje professional fire brigade worked with the »PGD Velenje mesto« fire brigade to hold a fire fighting and evacuation drill at the Turna plant.

## 11 Communication with interested parties and stakeholders

**In 2016, Slovenian press (or media) ran 927 reports (articles, contributions) on environmental topics, related to the Gorenje Group, or 12 % of all reports. Relative to 2015, this is 275 reports more.**

Fewest environment-protection-related reports were run in August (44 reports). The media reported most frequently on environmental issues in April and October (119 contributions). In April, the media ran extensive reports on the Pure Pleasure campaign, a pan-Slovenian humanitarian and environmental campaign that also involved the company Gorenje Surovina. It included collection of waste raw materials, and the collected funds were donated to children with emotional and behavioural disorders from financially weak families. In October, the most media attention was garnered by the old electric appliance collection campaign titled: "There is no debate, take your old appliances to Gorenje Surovina." Among environmental issues, the media paid the most attention in 2016 to the company Gorenje Surovina (302 reports). This was followed by reports on e-waste management (209) and waste electric and electronic equipment (200) of the company Zeos.

Media reports can be seen as positive as they mostly concerned activities of the companies Gorenje Surovina and Zeos in the field of waste management, i.e. the issues related to waste packaging, waste electric and electronic equipment, and waste candles.

Internal communication that includes environment protection is conducted via Works Council, system of submission and awarding of beneficial proposals called "Sparks" ("Iskrice"), the 20 key system, internal magazines, and coordinators for environment protection and occupational safety and health. Independent portals Environment Protection and Occupational Health and Safety have been set up on the Gorenje Group intranet to provide efficient notification. Employees are also notified and informed about the events, activities, and policies in environment protection and occupational health and safety with contributions in company weekly newsletter info.G.

In 2016, Gorenje d. d. was addressed by 3 groups or individuals looking for additional information on environmental management. On the 20th anniversary of EMAS systems, the European Commission for the Environment presented to Gorenje d. d. a special commendation as the first Slovenian company entered into the EMAS register.

Neighbours on Partizanska cesta complained about the night-time noise caused by emptying of the waste containers. In response, Gorenje prohibited night-time emptying of waste containers, of which the neighbours were informed.

The reporters developing an almanac for the municipalities of Velenje, Šoštanj, and Šmartno ob Paki" for 2016 invited us to contribute a report on work, progress, and new acquisitions in the field of environment protection at Gorenje.

In the best annual report contest held every year by the Finance Business Academy, Gorenje Group won in the category of large enterprises, winning the Best Annual Report Award for 2015, according to the opinion of the expert jury, in the category of communication and with regard to risk management and corporate governance. The core of the sustainability report includes information on environment and social aspects of operations, with emphasis on environmental and social sustainability.

Periodic training on occupational safety and health, fire safety, and environment protection was carried out according to annual plans in 2016. We held training on new aspects and developments in environment protection and occupational health and safety, to which all responsible persons at all Gorenje Group companies with certified systems were invited. Participants learned about the trends in environment protection and occupational safety and health, the LCA method, EHS SAP system, legislation relevant for Gorenje products, the new ISO 45001 standard, and the activities for introduction of the ISO 14001:2015 standard to the Gorenje Group.

In October, Gorenje professional fire brigade worked with the »PGD Velenje mesto« fire brigade to hold a fire fighting and evacuation drill at the Turna plant.

**-7,8%**



**LOWER CONSUMPTION  
OF NATURAL GAS**

for Gorenje, d. d. in 2016  
compared to 2015



# 12 Compliance with legislation and other requirements

**In 2016, two inspections were carried out at Gorenje d. d.**

Inspectorate of the Republic of Slovenia for the Environment and Spatial Planning, Environment and Nature Inspection Service, regional unit Celje, conducted an inspection on September 20, 2016, due to a change in the environmental permit for a device that could cause substantial pollution. No irregularities or deficiencies were found.

The Ministry of the Republic of Slovenia for Agriculture, Forestry and Food, Administration of the Republic of Slovenia for Food Safety, Veterinary and Plant Protection, conducted on October 12, 2016, a phytosanitary inspection at the Gorenje plant as a reference point, due to international traffic, in relation to a suspicion of presence of quarantine fungus on pine branches. The inspection was stopped as laboratory analyses indicated that no quarantine fungus was present on the collected sample of branches with needles.

At Gorenje I.P.C., d. o. o., the Inspectorate of the Republic of Slovenia for the Environment and Spatial Planning, Environment and Nature Inspection Service, regional unit Celje, conducted an inspection in June 2016. It was found during the inspection that its operation did not cause any excessive load to the

environment; that it met all mandatory requirements regarding reporting to the Slovenian Environment Agency; that it had in place an adequate system for waste management, and packaging and waste packaging management; and that it met all other environmental management standards.

The companies Gorenje d. d. and Gorenje I.P.C. have all required environmental permits.

Gorenje d. d. obtained the Integrated Environmental Permit No. 35407-91/2006-13 for its Velenje plant, for the following:

- operation of equipment that may cause major pollution, activity 2.6; and for
- operation of equipment for surface treatment of metals using electrolysis and chemical procedures, with a total tub volume of 215.4 m<sup>3</sup>. The permit is effective through September 2018 or to the first major change in the technological procedure covered by the environmental permit. In 2016, the Environmental Protection Act (ZVO-1I), specifying the obtained permits, was amended, without major changes, for an indefinite period of time. Due to anticipated minor changes



in technological procedures, a decision was issued in May 2015 on the change to the environment permit No. 35406-17/2014-13.

In 2015, the Rogatec plant obtained its Environmental Permit (Decision No. 35444-71/2014-6) for release of industrial wastewater, valid until March 12, 2025. Black lacquer coating chamber is registered with consecutive number 2 in the records of equipment using organic solvents. In 2016, the permit was extended (decision No. 35412-12/2016-3) until October 28, 2026. In 2014, Gorenje d. d. obtained a partial water course permit (Decision No. 35536-83/2013-2) for the Rogatec plant, which allows direct use of water for industrial/technological purposes. Water course permit is effective until August 30, 2040. A Plan on Reduction of Volatile Organic Compound Emissions was developed and confirmed for the black lacquer coating chamber at the Rogatec plant.

Partial water course permit for Gorenje d. d., for the Velenje plant, was changed in 2015 due to inclusion of new consumption points and

reassessment of the annual water consumption potential. Water course permit No. 35536-10/2015-6 is valid until March 31, 2039.

In 2016, Gorenje I.P.C. d. o. o. obtained its water course permit (Decision No. 35536-109/2015-4) for the Packaging (Embalaža) Program, which allows direct use of water from facilities and devices for provision of potable water, for industrial/technological purposes. The permit is valid until October 31, 2045. Environmental permit for Gorenje I.P.C. d. o. o. No.: 35441-8/2004-5 dated September 29, 2004 (amended by decision No. 35441-81/2009-5 dated June 14, 2010, and extended by decision No. 35441-34/2014-5 dated October 14, 2014) is valid until October 15, 2024.

Gorenje d. d. and Gorenje I.P.C. d. o. o. report on regular basis to the Slovenian Environment Agency on all environmental impact.



**Environmental Verifier's Declaration on verification and validation  
activities No O-001 and No O-002**

**Slovenian Institute of Quality and Metrology,**  
with EMAS environmental verifier registration number SI-V-0001,  
accredited for the scope (NACE: 27.510, 27.330, 22.22 and 18.120)

declares to have verified the sites as indicated in the environmental statement of the  
organizations

**Gorenje, d.d.**  
Partizanska 12, 3320 Velenje, Ceste 56, 3252 Rogatec in Primorska cesta 6d, 3325 Šoštanj  
with registration number Reg.No. SI-00001

and  
**Gorenje I.P.C. d.o.o.,**  
Partizanska 12, 3320 Velenje in Primorska cesta 6d, 3325 Šoštanj  
with registration number Reg.No. SI-00002

meet all requirements of the Regulation (EC) No 1221/2009 of the European Parliament and  
of the Council of 25 November 2009 on the voluntary participation by organizations in a  
Community eco-management and audit scheme (EMAS).

By signing this document, we declare that:

- the verification and validation has been carried out in full compliance with the requirements of Regulation (EC) No. 1221/2009;
- the outcome of the verification and validation confirms that there is no evidence of non-compliance with the applicable legal requirements relating to the environment;
- the data and information in the environmental statement "**EMAS Environmental Statement of the companies Gorenje, d. d., and Gorenje I.P.C., d. o. o., for the year 2016**" reflect a reliable, credible, and correct image of all the organisations activities, within the scope specified in the environmental statement

This document is not equivalent to EMAS registration. EMAS registration can only be granted by a Competent Body under Regulation (EC) No. 1221/2009. This document shall not be used as a stand-alone piece of public communication.



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