Environmental policy

The Grupa Kęty S.A. Capital Group is committed to ensuring and maintaining a high level of the safety of processes. The Group companies strive to minimise environmental risks. It is achieved by monitoring material environmental aspects under the ISO14001:2015 standard and by proper maintenance of infrastructure based on predictive and preventive measures as well as the programme of internal audits. We have been constantly improving the management of environmental protection, thus achieving growingly better results.

We care about the environment

The report includes the total of 12 environmental indicators covered by the GRI standard. The process of defining the reporting areas comprised the prioritisation of environmental aspects identified within the framework of the management system based on the ISO 140001:2015 standard implemented at the Group companies. That register covers all elements of the activities of the companies, including goods and services which can interact with the environment. As a result, the following GRI indicators were selected: 103 2, 103-3, 301-1, 301-2, 302-1, 303-2, 303-3, 305-1, 305-7, 306-1, 306-2, 307-1, as they best refer to the activities of the Group and its impact on the environment. These indicators are associated with the environmental areas and components that the particular companies can influence to a great extent, i.e. air, water, effluents, waste, materials, fuels and energy consumption or compliance with legal regulations.

Materials consumed by weight or volume

GRI:**301-1**

Below reported is the total weight of basic materials used in the production processes within the reporting period. In each of our businesses, we focus on the effective consumption of raw materials and compliance with the binding standards. We take actions aimed at cooperation with those suppliers who are guided by the sustainable development idea. As regards our products, we apply a product life cycle approach, focusing on the search for new ecological applications. In that area, we conduct our own research and collaborate with scientific centres and institutions. Due to the specific nature of the Group production segments, the list of raw and other materials consumed is very diverse.
Major raw materials used by the EPS in the production of aluminium elements include aluminium, alloy components, and aluminium scrap. From them, the Segment

manufactures aluminium ingots, which are the input material for the sections extrusion process. The remelting process uses aluminium scrap originating from the plant and purchased from the market. The materials supplied to the plant are checked for contaminants. In this year's report the total quantity of scrap used has been presented, which means the scrap purchased from the market as well as the scrap from own production and that of the subsidiaries.
The characteristic materials used in the ASS production processes include: aluminium, steel, zinc alloy, chemical products for the treatment of aluminium and zinc electroplating of components, glass, separators, plastic pellets and powder coatings. These materials are used by the plants to manufacture window and door systems, façade systems, roller shutter profiles and boxes, roller-shutters, gates and accessories for PVC, wood and aluminium joinery.
The main raw materials used by the FPS include: granulated plastic (PP, PE, PA, EVOH, etc.), aluminium foils, paper, plastic films (OPP, PET, PE, PVC, PA, EVOH, etc.), paints, lacquers, adhesives and solvents. These materials are used to manufacture multi-layer plastic films, including high-barrier films, single- and multi-layer flexible laminates, including printed or coated ones. Prior to their purchase raw materials are approved for compliance with the requirements of the Food Law.
Raw materials are checked in compliance with the requirements of the ISO 9001, ISO 14001 and OHSAS18001 standards, to ensure safety of the manufacturing processes and to reduce emissions to the minimum. The Group companies have their own facilities and systems to conduct tests and checks.

Company	Specification	Unit	2017	2018
EPS	Aluminium	Mg	15,965	17,417
EPS	Alloy components	Mg	588	616
EPS	Master alloys	Mg	927	898
EPS	Purchased scrap	Mg	27,113	29,541
EPS	Imported ingots	Mg	34,734	57,189
FPS	Paints, lacquers, adhesives	Mg	7,670	7,921
FPS	Aluminium foil	Mg	3,871	3,988
FPS	PP, PET, PVC films	Mg	4,764	4,479
FPS	Plastic granulates	Mg	14,330	46,053
FPS	Paper	Mg	9,682	9,743
ASS	Aluminium profiles	Mg	25,684	31,228

Company	Specification	Unit	2017	2018
ASS	Powder coatings	Mg	753	953
ASS	Chemical substances	Mg	1,003	1,154

Percentage of recycled materials used in production processes

GRI:**301-2**

The EPS has in place an aluminium recovery process. There is a high share of secondary raw materials in the final production. The EPS recycles aluminium waste produced at the Capital Group facilities and also obtains and processes waste from the market. The waste is applied as a component material in the production of new elements extruded from aluminium and aluminium alloys. The plant selectively collects the particular grades of alloys and, as a result, it does not apply any fluxing agents that are harmful to the environment in the remelting process. The Company acquires both post-consumer aluminium waste (originating from end users) and pre-consumer aluminium waste (waste from manufacturing processes). This process is subject to strict requirements regarding the quality of the purchased scrap. As a result, there is no contaminated aluminium in the remelting process and no hazardous substances which could pose a risk to the environment are emitted to air. By recovering aluminium, the plant saves a lot of the energy needed to produce primary aluminium from bauxite ores, as the smelting process is highly energy-consuming. The recycling of aluminium also helps to reduce air and water pollution.

Company	Specification	Unit	2017	2018
EPS	POST-consumer aluminium scrap recycling	%	9.2	4.3
EPS	PRE-consumer aluminium scrap recycling	%	20.7	19.6
EPS	Own aluminium scrap recycling	%	38.5	41.7
EPS	Recycled materials used in the process	%	68.4	65.6

Energy consumption by main energy sources

GRI:**302-1**

At the Grupa Kęty S.A. Capital Group, energy efficiency of the production systems is a priority. In order to ensure energy efficiency, the Company has implemented a special

system of technical and organisational solutions in accordance with the ISO 14001 and ISO 50001 standards. The consumption of energy is subject to planning and monitoring. The business units of the Company must report their actual energy consumption, and – when the planned volumes are exceeded – the growth cause analysis is carried out. Consumption monitoring involves measurements at utilities supply and distribution points. The readings form basis for the costs allocation to the particular sources of their origin. Utilities consumption is measured using a special computer system which ensures real time control of all utilities processing devices. Data concerning their operation are transmitted to the central management point, which ensures immediate response to or correction of any deviations. In addition, as part of the ISO 14001:2015 system, the Group has implemented the utilities saving programme and performs energy efficiency audits. Electricity is used, for example, to power production and auxiliary devices and also to illuminate halls and rooms. The energy from the combustion of natural gas is used mainly in heat treatment processes at production lines, e.g. in aluminium remelting, extrusion and drawing, anodising and powder coating processes, and to heat rooms. Moreover, we support ‘Green Building’ by developing the so called ‘green products data sheets’ for the purposes of LEED and BREEAM certification. The data sheets for the EPS profiles and the ASS systems comprise information essential for the LEED and BREEAM certification processes.

Company	Specification	Unit	2017	2018
EPS	Electricity	GJ	297,270	326,207
EPS	Natural gas	GJ	281,787	314,824
EPS	Electricity consumption per production unit	GJ/Mg	2.56	2.42
EPS	Gas consumption per production unit	GJ/Mg	2.43	2.57
FPS	Electricity	GJ	184,507	199,480
FPS	Natural gas	GJ	121,142	125,822
FPS	Electricity consumption per production unit	GJ/Mg	3.35	3.11
FPS	Gas consumption per production unit	GJ/Mg	2.2	1.96
ASS	Electricity	GJ	62,411	67,383
ASS	Natural gas	GJ	75,164	83,029
ASS	Electricity consumption per production unit	GJ/Mg	1.73	1.54
ASS	Gas consumption per production unit	GJ/Mg	2.09	1.9

Total volume of water recycled and reused

GRI:**303-2**

Due to the nature of the production process, the recycling and reuse of water withdrawn from own intakes refers basically to the EPS. The aim is to increase to the maximum the percentage of recycled water in the total volume of water used in production processes, and to reduce the use of the environment. The effect is achieved by applying closed-circuit cooling within the thermal processes related to aluminium melting and processing. A closed-circuit system allows for substantial savings in terms of water consumption. Only small quantity of dirty water is periodically discharged and substituted with clean water in order to prevent the accumulation of suspended solids and oil-derivative substances. Cooling water is discharged to the central wastewater treatment plant.

Company	Closed-circuit system	Unit	2017	2018
EPS	Total volume of water recycled and reused	m^3 thousands	3,079	3,078

Total water withdrawal by source

GRI:**303-3**

At the Grupa Kęty S.A. Capital Group, only Grupa Kęty S.A. withdraws water from its own water intakes, i.e. from a well and from ground drainage at the plant. The well is a source of drinking water for the plant and for the employee amenities. In addition, the water is used for fire safety purposes. Water for the production processes originates mainly from ground drainage at the plant and is collected by way of a drainage system. Water resources are used pursuant to the permit required under the Water Law and the integrated permit. Analyses of the impact of water withdrawal on the environment confirm that the respective activities do not significantly affect the availability of water resources or functioning of protected areas. The quantity of water withdrawn is kept well below the prescribed limits. The ASS and the FPS do not have their own water intakes. Water is purchased from third-party suppliers on the basis of appropriate agreements. Water at the ASS is used for employee amenities and for production purposes in the process of chemical treatment of aluminium profiles prior to powder coating. Water consumption increase at the ASS results from the inclusion of ROMB S.A. in the report, where water is used for zinc electroplating of components as well as cleaning of aluminium and steel elements. At the FPS, due to the nature of its production process, water is used mainly for employee amenities and fire safety purposes. Only at Alupol Films, first reported in 2017, water is also used at the chemical treatment of printing cylinders line and in the PP film production system.

Company	Water source	Unit	2017	2018
EPS	Underground water	m^3	206,885	249,869
EPS	Ground drainage	m^3	364,909	378,892
EPS	Public water supply system	m^3	6,301	6,016
FPS	Public water supply system	m^3	20,800	22,500
ASS	Public water supply system	m^3	94,107	107,205

Direct greenhouse gas emissions

GRI:**305-1**

The companies of the Capital Group strive to limit the impact on the environment by creating low emission industry, within an active response to climate change and effective use of resources. When analysing the environmental impact of the Capital Group companies, we pay particular attention to air emissions of gases and dust, especially of carbon dioxide, as air emissions are sources of direct environmental impact. Total greenhouse gas emissions are low due to the nature of in-house processes and thermal efficiency of devices. The Capital Group companies are not subject to the EU Emissions Trading System. Greenhouse gases emitted by the systems at the EPS, the ASS and the FPS include CO2 and HFCs. The emitted carbon dioxide originates from the combustion of natural gas in boilers, radiators, thermal oxidisers, heaters and industrial furnaces, whereas the emitted HFCs – from the release of refrigerant by the air-conditioning devices.

Company	Emission type	Unit	2017	2018
EPS	Greenhouse gas emissions	Mg p.a.	13,169	16,835
FPS	Greenhouse gas emissions	Mg p.a.	3,907	6,196
ASS	Greenhouse gas emissions	Mg p.a.	3,003	4,306

NOx, SOx and other significant air emissions by compound type and weight

GRI:**305-7**

As part of their environmental impact audits, the Group companies periodically measure emissions from the systems. The measurements taken as part of the monitoring process prove the compliance with the standards specified in permits and licences. Total emissions by the companies of the Grupa Kęty S.A. Capital Group are well below limits. Apart from carbon dioxide, the EPS emits sulphur dioxide, nitrogen oxides, carbon monoxide, dust and small amounts of inorganic compounds to air. The source of emission is the process of natural gas combustion and chemical treatment of aluminium elements. The main pollutants emitted by the ASS include sulphur dioxide, nitrogen oxides, carbon monoxide, dust, sulphuric acid, hydrogen chloride, fluorine, inorganic acids and aliphatic hydrocarbons. The sources of gases and dust emission include the process of natural gas combustion as well as the processes of chemical treatment and machining of metals. In addition, the FPS companies emit VOCs and ozone to air. The sources of emission include the process of packaging printing and lamination as well as natural gas combustion in boilers and thermal oxidisers used in VOCs emission reduction. In 2018 the emission by a new plant within the FPS – Alupol Films – was included.

Company	EMISSION TYPE	Unit	2017	2018
EPS	Total dust	Mg p.a.	1,78	1,76
EPS	SO_2	Mg p.a.	1,65	1,94
EPS	NO_2	Mg p.a.	11,38	12,6
EPS	CO	Mg p.a.	5,35	6,68
EPS	Fluorine	Mg p.a.	0,15	0,12
EPS	Chlorine	Mg p.a.	0	0
EPS	Sulphuric acid	Mg p.a.	2,9	2,88
EPS	Metal hydroxides	Mg p.a.	2	1,99
FPS	Total dust	Mg p.a.	0	0
FPS	SO_2	Mg p.a.	0	0
FPS	NO_2	Mg p.a.	3,4	5,4
FPS	CO	Mg p.a.	0,5	0,8
FPS	VOCs	Mg p.a.	67,3	89,3
FPS	Ozone	Mg p.a.	2,5	3,6

Company	EMISSION TYPE	Unit	2017	2018
ASS	Total dust	Mg p.a.	1,5	3,11
ASS	SO_2	Mg p.a.	0,1	0,16
ASS	NO_2	Mg p.a.	8,7	10,72
ASS	CO	Mg p.a.	0,6	0,81
ASS	Sulphuric acid	Mg p.a.	14,03	20,97
ASS	Acetone	Mg p.a.	0,32	0,34
ASS	Aliphatic hydrocarbons	Mg p.a.	1,3	1,16
ASS	Aromatic hydrocarbons	Mg p.a.	0,04	0,06

In the calculation of the particular types of pollutants emission indicators were used, as determined on the basis of the actual emission measurements in relation to the actual production volume. As regards gas combustion sources, emission indicators prepared for the National Centre for Emissions Management (KOBiZE) were used.

Total water discharge by quality and destination

GRI:**306-1**

Among all the Group companies, only Grupa Kęty S.A. (EPS) discharges treated industrial effluent directly to the environment. After treatment, wastewater is discharged to the Soła River. Wastewater from the chemical treatment of aluminium elements is first neutralised in pre-treatment systems designed specifically for that purpose. The Company possesses permits required under the Water Law and limits are fully observed. Impact reduction was possible due to the installation of separate wastewater neutralisation stations within those systems in which wastewater is produced, installation of meters at wastewater discharge points and application of a number of technical and organisational solutions that ensure the appropriate quality of produced wastewater, such as a multi-stage washing process, microprocessor-based control of reagents dosing, bath recovery equipment, mutual neutralisation of acidic and alkaline wastewater or reuse of leachate in the neutralisation process.
At the ASS, wastewater is discharged directly to the environment by ROMB S.A. The other companies discharge wastewater to the sewage systems of third-party companies, after pre-treatment at in-house neutralisation stations. At ROMB S.A., wastewater from the electroplating shop and from the processes of steel and aluminium elements cleaning is discharged, after treatment, to the Głomia River. At ALUPROF S.A. plants in Bielsko Biała and Opole, industrial effluent, after pre-treatment at in-house

neutralisation stations is discharged to the sewage systems of third-party companies, whereas at the Goleszów plant, it is discharged to a retention basin and afterwards collected by a specialised company with a proper licence. The companies hold permits required under the Water Law and ensure an adequate level of purity. Wastewater quality is monitored and the limits provided for in the permits are adhered to. In addition, the plants have signed appropriate agreements with sewage companies to collect wastewater.
Likewise, the FPS companies discharge wastewater to sewage systems of third-party companies. Industrial effluent from the electroplating processes, after treatment at the in-house neutralisation station, is discharged to the sewage system on the basis of agreements and water permits possessed. The requirements of water permits are fully met.

Company	Specification	Unit	2017	2018
EPS	To public sewage system	m^3 thousand p.a.	25	29
EPS	To surface waters	m^3 thousand p.a.	891	679
EPS	including effluent from the chemical treatment of aluminium	m^3 thousand p.a.	491	517
FPS	To public sewage system	m^3 thousand p.a.	11	23
ASS	To public sewage system	m^3 thousand p.a.	62	68
ASS	including effluent from the chemical treatment of aluminium	m^3 thousand p.a.	44	48
ASS	To surface waters	m^3 thousand p.a.	33	38

Total weight of waste by type and disposal method

GRI:**306-2**

Waste produced by the Capital Group is managed in accordance with the EU and Polish regulations, ensuring safety for the environment. Waste is collected selectively. Waste storage areas are separated from the ground, and waste is kept in special hermetic containers. The Company keeps quantitative and qualitative waste records. An advanced computer system is used to monitor waste management. Waste which is not managed in-house is handed over to companies with the required licences. Waste management processes are monitored within the implemented environmental

management system, in accordance with the ISO 14001 standard.
Aluminium scrap and melting loss are typical waste produced by the EPS. Aluminium waste is a valuable material for the production of aluminium profiles. For that reason, the Group recycles it and, as a result, aluminium scrap is transformed into direct input material. The Company manages 100% of aluminium waste produced at the plant, and also collects and processes waste from the market. The main waste produced by the ASS includes waste from aluminium processing, sludge from sewage treatment plants and waste coating powders. Characteristic waste produced during the packaging manufacturing at the FPS includes waste in the form of multi-material laminates, paper, plastics, waste paints, lacquers and adhesives.

Company	Specification	Unit	2017	2018
EPS	Produced hazardous waste	Mg	3,309	4,619
EPS	Produced non-hazardous waste	Mg	31,542	33,455
EPS	Total produced waste	Mg	34,851	38,074
EPS	Waste produced per production unit	Mg/Mg	0.3	0.31
EPS	Waste recovered	Mg	34,843	38,057
EPS	Neutralised waste	Mg	8	16
FPS	Produced hazardous waste	Mg	1,978	2,061
FPS	Produced non-hazardous waste	Mg	8,140	7,983
FPS	Total produced waste	Mg	10,119	10,044
FPS	Waste produced per production unit	Mg/Mg	0.18	0.59
FPS	Waste recovered	Mg	10,014	9,897
FPS	Neutralised waste	Mg	105	148
ASS	Produced hazardous waste	Mg	525	527
ASS	Produced non-hazardous waste	Mg	3,215	3,924
ASS	Total produced waste	Mg	3,740	4,452
ASS	Waste produced per production unit	Mg/Mg	0.1	0.1
ASS	Waste recovered	Mg	3,420	4,093

Company	Specification	Unit	2017	2018
ASS	Neutralised waste	Mg	320	359

Environmental charges

GRI:**103-3**

We have been constantly improving the management of environmental protection, thus achieving growingly better results. The main companies within each of the production segments possess certified Integrated Management Systems, including environmental systems in accordance with the ISO 14001 standard. Moreover, there is an efficient integrated system based on the ISO 9001 and OHSAS 18001 standards.
The Capital Group companies comply with all applicable laws and regulations. In 2018, the State Environmental Protection Inspectorate carried out a series of inspections at the Group companies, during which no serious breaches were found. In accordance with the requirements, the Company has calculated and timely paid the fees on account of the use of the environment.

Company	Specification	Unit	2017	2018
EPS	Air emissions charges	PLN	23,368	27,217
EPS	Water withdrawal charges	PLN	44,425	166,414
EPS	Wastewater charges	PLN	31,534	172,250
EPS	Total environmental charges	PLN	99,327	365,881
FPS	Air emissions charges	PLN	101,200	125,896
ASS	Air emissions charges	PLN	40,873	52,486
ASS	Wastewater charges	PLN	3,483	1,927
ASS	Total environmental charges	PLN	44,356	54,413

Monetary value of environmental charges and fines and the total number of non-monetary sanctions for non-compliance with the environmental laws and regulations

GRI:**307-1**

The Capital Group companies comply with all applicable laws and regulations. The results of audits performed in 2018 by the Environmental Protection Inspectorate and by independent auditors from accredited supervision units as part of the ISO 14001 system confirmed the compliance. The environment quality measurements and analyses carried out by the companies are an additional confirmation of compliance with the standards. In 2018, none of the Capital Group companies paid any fines for non-compliance with the environmental laws and regulations.

Company	Specification	Unit	2017	2018
EPS	Total environmental fines	PLN	0	0
FPS	Total environmental fines	PLN	0	0
ASS	Total environmental fines	PLN	0	0

Total environmental protection spending

GRI:**103-2**

The Group companies keep complete records of environmental protection costs. ‘Green accounting’ is a model of allocating environmental costs within corporate accounting, which enables the assessment of the costs structure and changes over time. The sources of data for the financial evaluation of environmental activities are as follows: expenditure on eco-investment projects, costs of the maintenance and operation of protection devices, costs of waste disposal and emission purification, legally required environmental charges.
The accounting is a tool facilitating the decision-making process in the area of environmental activities, investment projects and organisational measures.
The investment priority is to regularly upgrade the machinery and improve the environmental management system, which goes beyond the legal requirements. Moreover, measures have been implemented to reduce the quantity of water withdrawn and wastewater discharged. Based on the ‘employee suggestions’ programme, the Group has implemented a number of projects to improve the efficiency of utilities consumption or reduce emissions. As part of the environmental management system, the Company has recognised a special provision in the budget which facilitates the effective implementation of the ‘Environmental Programme’, being a schedule of environmental measures for a given year.

Company	Specification	Unit	2017	2018
EPS	Total environmental costs	PLN	6,392,744	7,295,166
EPS	Protection of ambient air and climate	PLN	814,568	876,700
EPS	Wastewater management	PLN	2,860,993	3,588,222

Company	Specification	Unit	2017	2018
EPS	Waste management	PLN	802,513	901,209
EPS	Protection of soil as well as surface and underground water	PLN	1,437,521	1,679,183
EPS	Other environmental costs	PLN	477,149	249,852
FPS	Total environmental costs	PLN	2,449,973	2,936,290
FPS	Protection of ambient air and climate	PLN	1,431,185	1,086,240
FPS	Wastewater management	PLN	258,253	332,135
FPS	Waste management	PLN	554,685	1,187,262
FPS	Protection of soil as well as surface and underground water	PLN	1,402	9,949
FPS	Other environmental costs	PLN	204,448	282,854
ASS	Total environmental costs	PLN	1,589,933	3,736,811
ASS	Protection of ambient air and climate	PLN	153,204	191,973
ASS	Wastewater management	PLN	750,271	2,541,032
ASS	Waste management	PLN	597,907	708,927
ASS	Protection of soil as well as surface and underground water	PLN	15,074	12,652
ASS	Other environmental costs	PLN	73,477	281,526

Number of grievances about environmental impact filed, addressed, and resolved through formal grievance mechanisms

GRI:**103-2**

None of the companies of the Grupa Kęty S.A. Capital Group received any stakeholder grievances concerning the use of the environment. Environmental audit authorities and local residents did not have any complaints, which confirms that the plants impact is under control. The open information policy implemented by the Company, including the

publication of annual environmental reports, helped to increase the stakeholders' awareness of the nature and extent of the Company impact on the environment.

Company	Specification	Unit	2017	2018
EPS	Grievances	pcs	0	0
FPS	Grievances	pcs	0	0
ASS	Grievances	pcs	0	0

Precautionary principle – Management of the environmental risk

GRI:**103-2**

The Capital Group is committed to ensure and maintain a high level of safety of its processes. The Group companies strive to minimise the environmental risks. It is achieved by monitoring material environmental aspects under the ISO14001:2015 standard and by proper maintenance of infrastructure based on predictive and preventive measures as well as the programme of internal audits.
The Group companies constantly monitor and assess environmental risks, taking measures referred to in the operational control procedures for processes which are material. In addition, they take preventative measures or measures aimed at eliminating the potential hazards.

Management of the environmental risk.

Company	Specification	Unit	2017	2018
EPS	Number of controlled environmental aspects	pcs	87	88
EPS	Number of preventive environmental measures	pcs	51	48
FPS	Number of controlled environmental aspects	pcs	162	193
FPS	Number of preventive environmental measures	pcs	15	48
ASS	Number of controlled environmental aspects	pcs	51	117
ASS	Number of preventive environmental measures	pcs	13	11