Engine Power Components Group Europe

ENVIRONMENTAL STATEMENT FOLLOWING EMAS REGULATIONS

YEAR 2020

CONTENTS:

1. Presentation of the Statement

Engine Power Components Group Europe, S.L. (hereinafter, EPC GE, S.L.) is a large-scale manufacturer of precision components for engines, specifically of camshafts.

Being aware of the environmental impact caused by its activity, and of the public's increasing awareness of the environment, EPC GE S.L. implemented an Environmental Management System in 2018, based on the UNE-EN-ISO 14.001:2015 standards and EMAS regulations.

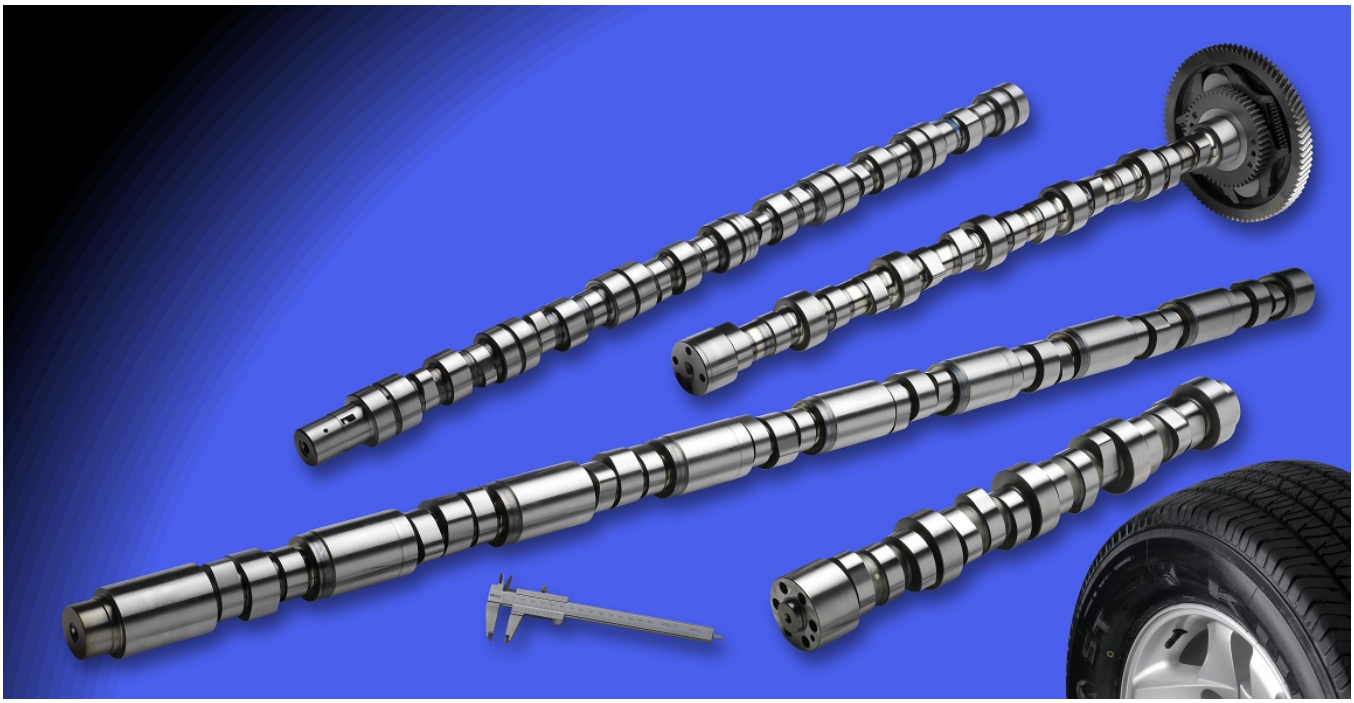
This Environmental Statement has been drawn up following the regulatory provisions below:

- Commission Regulation (EU) 2018/2026 of 19 December 2018 amending Annex IV to Regulation (EC) No 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS).

- Commission Regulation (EU) 2017/1505 of 28 August 2017 amending Annexes I, II and III to Regulation (EC) No 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS).

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

With this statement, the Eibar plant of EPC GE, S.L. aims to inform all stakeholders on all aspects and activities in the field of the environment relative to its business activity.



2. Profile of the Organisation

2.1. Presentation

EPC GE S.L. is the operational and production base for the European market of Engine Power Components, Inc. Due to operational reasons and the type of product, EPC GE S.L. also has a production plant, EPC Mx, in Torreón in Mexico.

However, this environmental statement applies solely to the EPC GE plant in Eibar.
Products manufactured both in EPC GE S.L. and EPC MX are mainly destined for the industrial and/or agricultural vehicle sector, and to a lesser extent, passenger vehicles - cars and motorcycles.

The market for these products is divided into spare parts and original equipment, mainly the latter.

The general details of the enterprise are as follows:

CNAE: *(National Classification of Economic Activities):*	2,932 - Manufacture of parts, pieces and non-electric accessories for the automotive industry.
TAX ID:	B-75066902
NIRI:	20-26409
Company Name:	ENGINE POWER COMPONENTS GROUP EUROPE, S.L.
Address:	Polígono Industrial Azitain nº5 Eibar C.P. 20.600 (Gipuzkoa)
Telephone:	943 820 010
Fax:	943 702 006
Contact:	Silvia González de Herrero
Representative of Management:	Quality and Environment Manager
E-mail:	sgonzalez@epcge.com
Registration Nº:	**ES-EU-000090**

2.2. EPC GE, S.L. in numbers

Table 1. Characteristics of EPC GE, S.L.

		2018	2019	2020
Camshaft production	Production Steel (Tn)	721.65	835.76	731.24
	Production Casting (Tn)	1,336.54	1,152.66	706.54
	TOTAL PRODUCTION (Tn)	**2,058.81**	**1,988.42**	**1,437.78**
Resources	Total consumption electrical energy (MWh)	4,845.53	4,406.72	3,456.30
	Consumption of natural gas (MWh)	571.91	900.87	566.827

Source: EPCGE, S.L.

3. Environmental objectives

The environmental objectives of EPC GE S.L. are established and approved by the Steering Committee, which first collects proposals and suggestions and takes into account the environmental and energy aspects that are significant to the company.

Table 2. Environmental Program 2020

Objectives	Goals and Actions	Supervisor	Compliance degree	Implementation deadline
2% reduction in energy consumption (III)	Changing all lighting in offices and changing rooms to LED bulbs. (Done: Corridors, HR office, locker rooms, canteen. To be done: Metrology, Offices (HR), corridor engineering - manufacturing office). Timers (10 minutes) placed in the men's locker rooms: 3 bathrooms and 4 showers.	Maintenance	50%	December 2021
	Two washing towers installed to reduce the temperature in the workshop and prevent the use of individual industrial fans. This improves comfort and sustainability of machines.	Industrial	12.5%	December 2021
	Installation of a variable speed/consumption compressor	Maintenance	50% (compressor in production)	September 2020

Objectives	Goals and Actions	Supervisor	Compliance degree	Implementation deadline
100% reduction in filter consumption on lines HHP1 and HHP2	Installation of joint suction system for the lines. Connecting machines of the same line to a central suction system, thus reducing maintenance time on equipment and consumption of filters. Connected HHP2:39, 38, 2013, 265, 228 Pending HHP1: 33, 2012, 228 (enclosure), 274	Maintenance	50%	August 2020
Monitoring of 100% of the bus bars and main equipment (compressors and furnaces). Total of 27 elements/main consumptions to be monitored.	Installation of a monitoring system for the main production lines.	Technical assistant	100%	June 2018
	Improve monitoring and measuring energy use and consumption	Supervisor of energy efficiency	10%	1 year (meter installation in August)
	Installation of software for energy management: Grafana and Powercloud	Supervisor of energy efficiency	100%	September 2020
	Training for correct use of implemented software	Supervisor of energy efficiency	15%	February 2021
	Update of 2020 Network Analysis Plan	Supervisor of energy efficiency	75%	February 2021
98% reduction in waste from grinding burn coolant lubricant (III)	Approval of investment pending by customer.	Technical assistant	100%	July 2016
	Implementation of Barkhausen method	Technical assistant	100%	December 2019
	Approval by customer after presentation of process results	Technical assistant	0%	December 2020

As far as fulfilment of the aforementioned objectives is concerned, we can conclude that:

Objective 1: 2% reduction in energy consumption. In 2020, all lighting in the plant and offices was changed to LED lights, and the variable speed compressor was installed. These measures have resulted in a 10% reduction in energy consumption bearing in mind the total steel production. This calculation takes into account the production on the steel lines, the main energy consumers, and it is not done in relation to the total production. However, in 2021, work with the washing towers will continue to eliminate the use of manual industrial fans.

Objective 2: Reduction of contaminated absorbents by 20%. The joint suction project was completed in August 2020, resulting in the elimination of the filters from the HHP lines. This measure has led to a 60% reduction of contaminated absorbents and an annual saving of approximately 1,200 euros because of not using filter consumables.

Objective 3: Reduction of filter consumption in HHP1 and HHP2 lines by 100%. EPC has 4 sets of washable filters, and as a result, there was no consumption of conventional filters.

Objective 4: 98% reduction of waste from liquid used for detecting grinding burns. Steel products must always be checked for burns to ensure quality. Although it has not been possible to completely eliminate the liquid waste generated in 2020, the implementation of the Barkhausen technology on one of the HHP lines has resulted in a 27% reduction in the generation of this hazardous waste, which has had a major environmental impact in recent years.

The implementation of this new technology on the other lines will continue in 2021.

In general, we consider the degree of compliance with the set environmental and energy objectives to be very satisfactory. The programme of objectives for 2021 will address those that were not fully reached in 2020.

Other action taken in 2020:

Monitoring of 100% of the bus bars and main equipment (compressors and furnaces). Monitoring of all bus bars and the main equipment (furnaces and compressors) was completed. As a result, an analysis of the energy consumption of all different areas was made possible, and a beginning with optimisation of each area was made. The result of monitoring and analysis of the recorded data will be used to set objectives for the coming years.

The following objectives have been set for 2021:

- Reduction of electricity consumption by 2% through the installation of washing towers/evaporative cooling on the automotive lines.
  Maintenance is in charge
  Resources € 9,300/unit
  Despite its minor significance in terms of environmental protection, EPC considers it relevant due to the impact it has both economically and environmentally.

- 27% reduction of the waste generated in the burn control process. Aspect linked to the significance in terms of generation of coolant waste.
  Engineering and manufacturing are in charge of the project.
  Resources € 25,000

4. Environmental Management System

4.1 Introduction

EPC GE S.L., well aware of the environmental impact caused by its activity, which includes transport of raw materials and products, decided in 2013 to start a process to develop and implement an environmental management system.

It started by implementing an environmental management system complying with the ISO 14001 standard, and then adapted to comply with EMAS regulations, and entered the Community System for Environmental Management and Audit in late 2014. In 2017, the Management System was adapted to the updated ISO 14001:2015 standard, also new EMAS regulations.

In addition, throughout 2016, an energy efficiency system was implemented and certified, according to the framework ISO 50001:2011 standard, which has been integrated into the current environmental management system.

Organisational context analysis.

In June 2017, a first analysis of the context of the organisation was carried out in which relevant internal and external issues were analysed. This analysis is reviewed annually, the last time in 2020.

The annual risk and opportunity analysis was also carried out in 2020. The following action plan has arisen from both analyses:

- Reduction of consumption of raw material, making better use of materials, resulting in less scrap.
- Implementation and use of Barkhausen technology on one of the HHP lines, resulting in a reduction of acid consumption.
- Longer use of coolant and improvement in automatic dosing.
- Prioritising the use of returnable packaging with customers whenever possible.
- Monitoring of energy consumption with data output at the plant and improvements in energy management.

Analysis of stakeholders.

In the same way as the identification of stakeholders for the organisation is carried out, their needs and expectations are determined. These stakeholder needs and expectations are taken into account in the planning of the management system, thereby addressing the interests of customers, suppliers, employees, administration, industrial estate companies and others.

4.2 Environmental Management System at EPC GE, S.L.

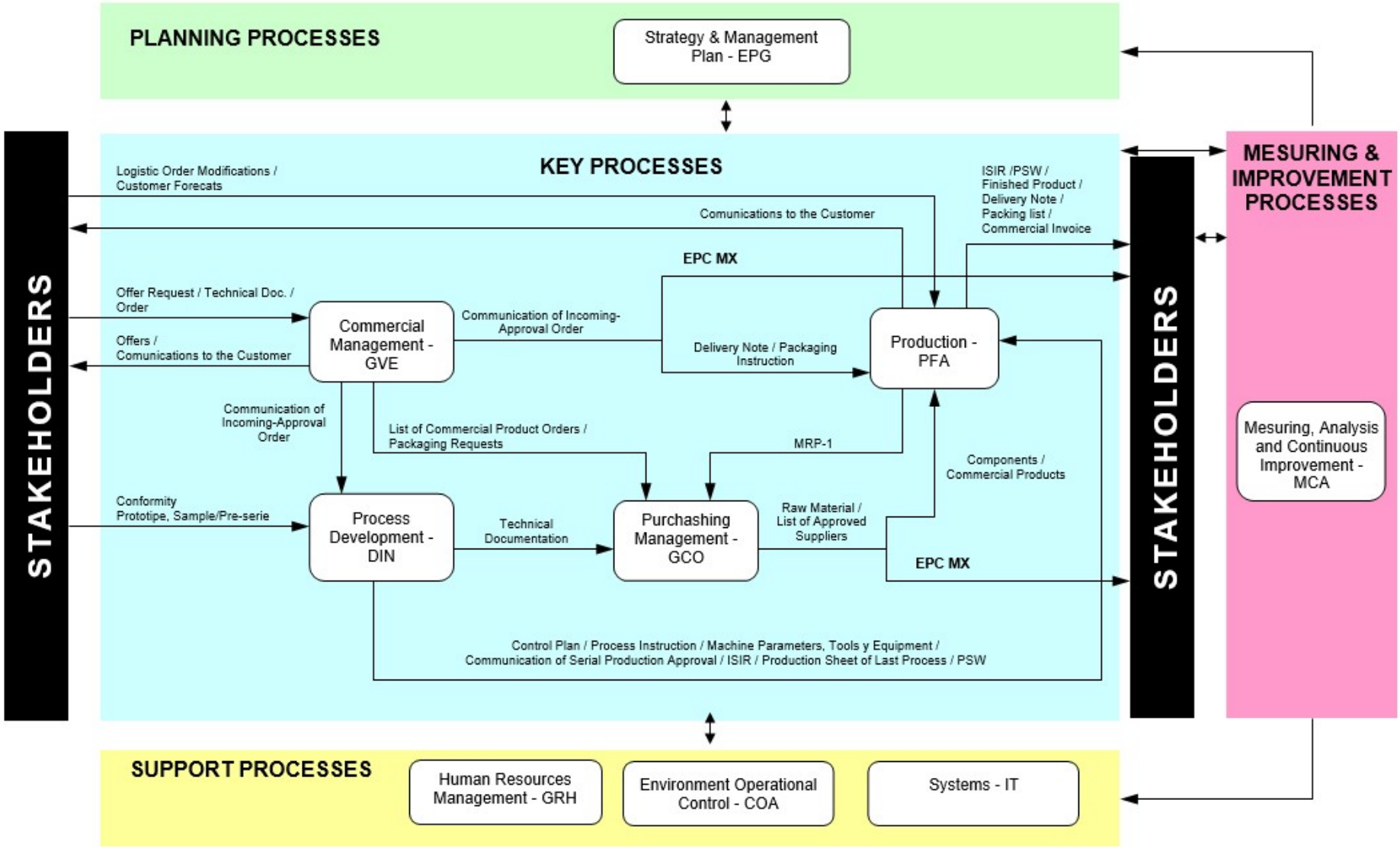
EPC GE S.L.'s environmental management system includes the following tools:

- Organisation: For the establishment of the environmental strategy by the Quality and Environment Management together with the rest of the management that make up the Steering Committee of the enterprise.
- Planning: The action and resources required to meet the environmental objectives approved by Management.
- Environmental Audits: Since the main instrument to manage the company's environmental assessment and monitoring and operating practices is the Environmental Audit Plan.
- Training: Training and environmental awareness at all levels of the company are essential for ensuring a sustainable business culture.

The EPC GE, S.L. management is firmly committed to the development and implementation of an environmental management system and supports it through the following activities:

- Communication to the rest of the organisation of the importance of meeting customer requirements as well as legal and regulatory criteria.
- Communication to the rest of the organisation and external stakeholders of the main environmental aspects and impacts and the results of the environmental performance of EPC GE, S.L. by means of the environmental statement according to the EMAS Regulation.
- The establishment of the policy and objectives for Quality and Environment.
- The revision of the system by management.
- Assurance of the availability of required resources and information.

The processes in place that support these commitments are written up in the following process map:


PLANNING PROCESSES
Strategy & Management Plan - EPG
KEY PROCESSES
STAKEHOLDERS
Logistic Order Modifications / Customer Forecats
Comunications to the Customer
ISIR /PSW / Finished Product / Delivery Note / Packing list / Commercial Invoice
EPC MX
Offer Request / Technical Doc. / Order
Offers / Comunications to the Customer
Commercial Management - GVE
Communication of Incoming-Approval Order
Delivery Note / Packaging Instruction
Production - PFA
Communication of Incoming-Approval Order
List of Commercial Product Orders / Packaging Requests
MRP-1
Components / Commercial Products
Conformity Prototipe, Sample/Pre-serie
Process Development - DIN
Technical Documentation
Purchashing Management - GCO
Raw Material / List of Approved Suppliers
EPC MX
Control Plan / Process Instruction / Machine Parameters, Tools y Equipment / Communication of Serial Production Approval / ISIR / Production Sheet of Last Process / PSW
STAKEHOLDERS
MESURING & IMPROVEMENT PROCESSES
Mesuring, Analysis and Continuous Improvement - MCA
SUPPORT PROCESSES
Human Resources Management - GRH
Environment Operational Control - COA
Systems - IT

4.3 Environmental policy

EPC GE S.L. expressed its commitment to the environment through its quality and environment and energy efficiency policy in its last edition in December 2017.

All staff at EPC GE S.L. have access to this policy, as it is published on the document server, displayed on bulletin boards and in the plant's central offices.

In addition, this policy is accessible and within the reach of all stakeholders at EPC GE S.L. through publication of the Environmental Statement on the web page www.engpwr.com .

QUALITY, ENVIRONMENT AND ENERGY EFFICIENCY POLICY

Engine Power Components Group Europe, S.A. (EPC GE, S.A.) is a large-scale manufacturer of precision components for engines (camshafts and balancer shafts), for the automotive sector and general industry.

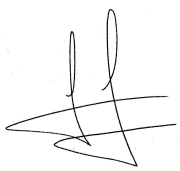
As our strategic objectives are the company's profitability, respect for the environment and leadership within our sphere of action, we accept and understand that the only way to achieve these is through total client satisfaction and minimising environmental impacts, especially those caused by our energy consumption, by purchasing efficient products and services to improve our energy performance.

Our systems, both for quality, the environment and energy management, continuous improvement in our performance, our staff, their development and safety, are the key instruments in reaching our goals.

The products and services oriented to markets for original equipment, as well as spare parts, must have the highest performance level possible to ensure that all our clients' needs are met, also legal requirements for the environment or relating to energy performance, or any others applicable.

The commitments acquired through this policy provide the framework for the company to establish aims and objectives promoting continuous improvement and are key instruments in achieving our purpose. Therefore, the company has made available all the information and resources required for success.

Engine Power Components Group Europe, S.L., 4 December 2017

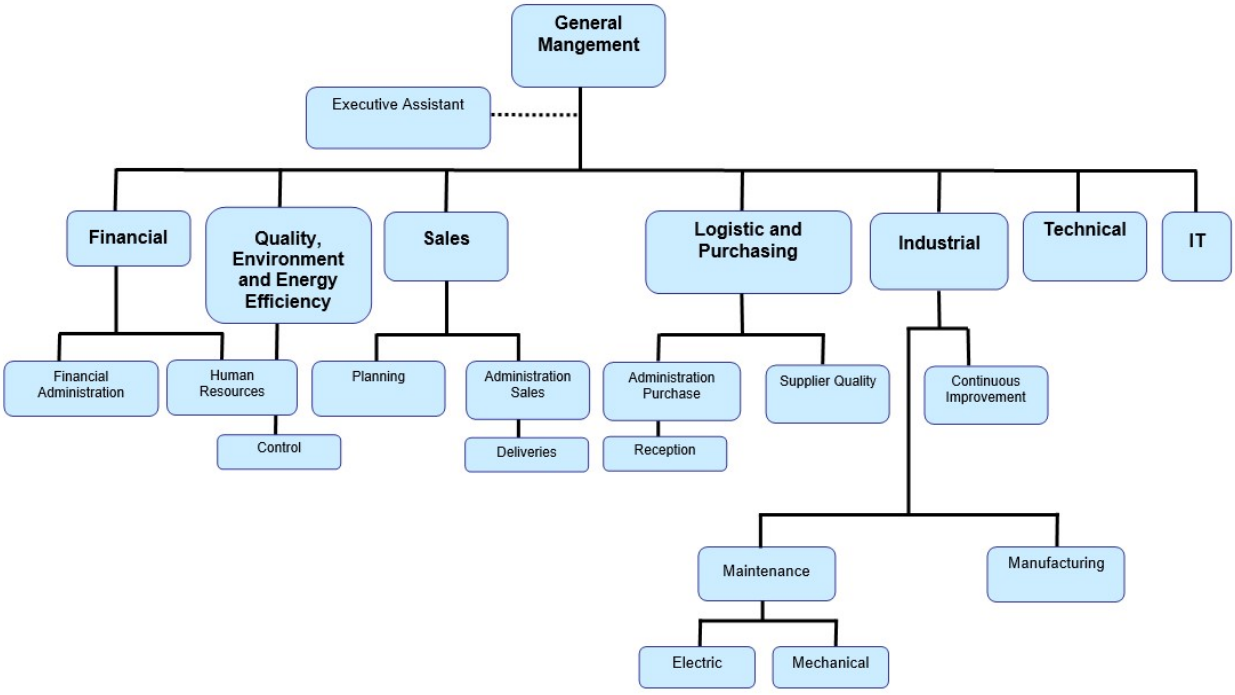


Iñigo Pérez-Arregui
EPC GE General Manager

4.4 Functions and responsibilities

The quality and environment management is responsible for coordinating and monitoring the environmental management system. It depends directly on the General Management, with there being another 6 management departments in the company: Financial, Sales, Human Resources, Logistics and Procurement, Industrial and Technical.

The organisational chart at EPC GE S.L. is as follows:



The environmental management system at EPC GE S.L. is fully integrated into the daily activity in the company, and therefore all responsibility arising from its implementation is shared among the various managers, and the whole is coordinated by the quality and environment department.

4.5 Environmental aspects

EPC GE, S.L. has implemented an instruction IN EPG-2, subordinate to the strategy process and management plan, to identify, evaluate and record the environmental aspects of its activity, both in normal conditions (i.e. controlled, normal and planned operating conditions) and abnormal conditions (operations during scheduled shutdown for maintenance and similar), as well as in potential emergency situations.

This instruction applies to all activities/facilities that may have an impact on the environment and that are carried out/present in the main office, plant and storage facilities of EPC GE, S.L.

EPC GE, S.L. identifies, quantifies and evaluates the activities/facilities on a yearly basis or whenever modifications take place in order to determine those with the greatest impact during the performance of its activity.

These most significant aspects resulting from the evaluation are taken into account when the environmental objectives of the enterprise are drawn up.

First, the term Environmental Aspect should be defined as "an element of the activities, products or services from an organisation that may impact the environment".

There are two types of environmental aspects:

- Direct environmental aspect: Environmental aspect originated by the activities, products or services of the enterprise, on which the enterprise can act directly and which are managed by the enterprise.

- Indirect environmental aspect: Environmental aspect not originated by the activities, products or services of the enterprise, but directly derived from the former and on which the enterprise cannot act directly and which are not managed by the enterprise.

The criteria for evaluating the direct aspects and defining the significant ones are as follows:

A. **Magnitude**: meaning the amount of environmental aspects
B. **Toxicity and hazard**: takes the danger and toxicity of each aspect into account.
C. **Extent**: Interpreted as the area or zone affected by any environmental impact, so that greater importance is given to risks affecting larger areas or zones.
D. **Probability**: The possibility of a hazardous environmental aspect causing an incident.
E. **Opinion or complaints** from external interested parties.

To assess each environmental impact identified and decide on which are significant, criteria are applied according to the following table:

Environmental aspects	**Applied criteria**
Consumption	A, B and E
Waste	A, B and E
Effluents	A, B and E
Emissions	A, B and E
External noise	A, B and E
Contaminated ground	A, B and E
Environmental emergencies (environmental risks)	B, C and D

The overall rating of the aspect, representing its significance, except for environmental emergencies, is obtained by multiplying the partial ratings for each of the assessment criteria.

Minimum global rating = 1 (1*1*1) and maximum = 27 (3*3*3).

Environmental emergencies (environmental hazards) are evaluated by applying the following:

Hazard = Probability x Severity, taking severity as the mean value of the extent and toxicity, i.e.:

$$Riesgo = \text{Pr}obabilidad \ x \ Gravedad = \text{Pr}obabilidad \ x \ \frac{(extensión + toxicidad)}{2}$$

After obtaining the global assessment of each aspect as a numerical value, significant aspects are those that receive the highest score.

EPC GE S.L. considers 10% of the aspects obtaining the highest score to be significant, as well as those not complying with any current legal requirement.

Indirect environmental aspects will be evaluated depending on whether they are generated internally in EPC GE, S.L. plants or externally.

Those generated internally in EPC GE S.L. plants will be assessed according to the following criteria:

1. **Potential Severity**: possible damage caused by the identified indirect environmental aspect.
2. **Control**: the environmental behaviour shown by the originating source, agent or supervisor of the aspect through non-conformities.
3. **Frequency:** the number of times per year that the environmental aspect occurs.

Indirect aspects generated outside EPC GE S.L. plants will be assessed according to the following criteria:

1. **Degree of environmental impact**: scale of natural resources affected by the environmental aspect.
2. **Level of preoccupation of interested parties**: number of interested parties with complaints, suggestions, needs or expectations relating to the environmental aspect.
3. **Viability of implementing improvement actions**: existence and difficulty in implementing improvement opportunities relating to the environmental aspect.

The global rating of the aspect is obtained by multiplying the partial ratings for each of the assessment criteria.

The company considers significant indirect environmental aspects to be those scoring higher than 9 points.

4.5.1 Direct

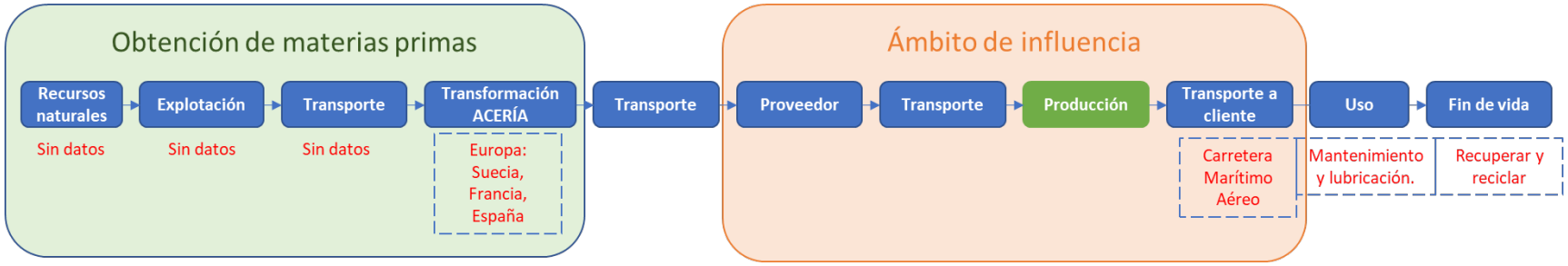
The significant direct environmental aspects given below refer to the whole of EPC GE S.L., including all facilities, and result from the identification and evaluation made based on information available from 2020.

Table 3. Significant direct environmental aspects

SIGNIFICANT DIRECT ENVIRONMENTAL ASPECTS	
ORIGIN	**HAZARDOUS WASTE**
Production plant	Fluorescent tubes
	Electrical and electronic equipment
	Grinding sludge
	Used coolant
	Used batteries
	Plastic containers
	Laboratory waste
ORIGIN	**NON-HAZARDOUS WASTE**
Production plant	Waste mixtures (paper, cardboard, plastic, grinding wheels, abrasives)
ORIGIN	**CONSUMPTION**
Production plant	Corrosion inhibiting oil
	Coolant

4.5.2. Indirect

Indirect environmental aspects from a life-cycle perspective are as follows:



The environmental aspects involved in each phase are detailed below:

Table 4. Indirect environmental aspects

ORIGIN	INDIRECT ENVIRONMENTAL ASPECTS GENERATED OUTSIDE EPC PLANT, FROM A LIFE-CYCLE PERSPECTIVE
OBTAINING RAW MATERIALS: manufacture of raw and auxiliary materials.	Consumption of natural gas
	Electricity consumption
	Drinking water consumption
	Consumption of natural gas
	Non-hazardous waste generation: scrap metal.
	Hazardous waste generation: metal containers, plastics, etc.
TRANSPORT OF RAW MATERIALS	Fuel consumption: diesel
	Generation of emissions from combustion.
PRODUCT USE AND END OF LIFE	Oil consumption
	Generation of used oil
	Generation of scrap metal
TRANSPORT OF PRODUCTS AND WASTE GENERATED IN EPC GE	Fuel consumption: diesel
	Generation of emissions from combustion
MANAGEMENT OF HAZARDOUS WASTE GENERATED IN EPC GE	Hazardous waste incinerated: Emissions to the atmosphere
	Recycled hazardous waste
MANAGEMENT OF NON-HAZARDOUS WASTE GENERATED IN EPC GE	Recycled non-hazardous waste
	Non-hazardous waste sent to the waste disposal site
EFFLUENT MANAGEMENT	Sewage discharge in treatment plants: generation of sludge.

GENERATION OF WASTE FROM USING THE PRODUCT	Scrap metal

INDIRECT ENVIRONMENTAL ASPECTS GENERATED IN EPC PLANTS
Client's own containers: Wood
Transport for products: Fuel consumption a generation of emissions
Spare parts for machinery. Scrap metal and electrical and electronic waste

This year, transport of products was considered a significant factor.

4.5.3. Environmental aspects and impacts

Impacts on the environment are the direct cause of environmental aspects, and are related as shown in the table below:

Table 5. Aspects - Environmental impacts

ENVIRONMENTAL ASPECTS		ENVIRONMENTAL IMPACTS
NATURE OF ASPECT	**ASPECT RELATIVE TO EPC GE ACTIVITY**	
USE OF RESOURCE	Water consumption	- Depletion of natural resources - Increased effluents
	Consumption of natural gas	- Depletion of natural resources - Increase in emissions to air
	Consumption of electrical energy	- Increase of the indirect emissions to the atmosphere
	Consumption of raw and auxiliary materials	- Depletion of natural resources
GENERATION OF WASTE MATERIAL	Generation of hazardous waste	- Effect on human health due to possible improper handling - Pollution of soil and water by (accidental) spills
	Generation of non-hazardous waste	- Overburden of landfill sites
SPILLS INTO WATER	Sewage spills	- Reduction of dissolved O_2 in the aquatic environment. - Contamination of water
ATMOSPHERIC EMISSION	Atmospheric emissions (SO_2, NOx, particles)	- Effect of human health - Effects on forests - Acidification and reduction of oxygen in waters
	Emission of greenhouse gases (CO_{2e})	- Greenhouse effect
NOISE	Environmental noise	- Noise pollution - Harmful effects on human health
LAND USE	Usage of land	- Land use - Depletion of resources - Effect on flora and fauna

5 Environmental Performance

5.1 Basic indicators

5.1.1 Consumption

Table 6. Consumption of raw material

		Units	2018	2019	2020
Raw material	**Steel**	Tn	1,035.26	1,035.88	827.19
	Pig-iron	Tn	1,661.40	1,420.42	889.00
	Forging	Tn	0	0	0
	TOTAL	**Tn**	**2,696.67**	**2,456.30**	**1,716.19**
Production	**Total production**	**Tn**	**2,058.81**	**1,988.42**	**1,437.78**
	TOTAL consumption raw material / total production	**Tn/Tn**	**1.31**	**1.24**	**1.19**
	Trend (Base 1)	-	**1**	**0.94**	**0.91**

Source: EPCGE, S.L.

Over the last 3 years, the consumption of raw materials has seen a reduction of 5% each year, largely due to better use of the material and the experience acquired, which has resulted in less scrap.

The largest volume of scrap produced at EPC comes from steel production. Taking into account only steel production, this year 28% less scrap was generated (scrap metal and tips + metal swarf).

The consumption of forging material this year has been nil.

Table 7. Consumption of auxiliary materials

	Units	2018	2019	2020
Oil	Tn	24.36	24.68	22.18
Corrosion inhibiting oil	Tn	6.9	7.85	7.35
Coolant	Tn	34.7	28.3	30.20
Hydrochloric acid	Tn	2.58	2.15	1.53
Nitric acid	Tn	1.98	1.62	1.23
Methanol	Tn	2.3	4.525	1.56
TOTAL	**Tn**	**72.81**	**69.135**	**64.033**
TOTAL consumption auxiliary materials / TOTAL production	**Tn / Tn TOTAL production**	**0.0354**	**0.0348**	**0.0445**

	Units	2018	2019	2020
Trend (Base 1)	**-**	**1.00**	**0.98**	**1.26**

Source: EPCGE, S.L.

This year saw a considerable reduction in acid consumption. These acids are used exclusively in the manufacture of steel parts. An analysis of the consumption of acids in steel production yields the following results:

	Units	2018	2019	2020
Hydrochloric acid	Tn	2.575	2.155	1.525
Nitric acid	Tn	1.975	1.625	1.225
Methanol	Tn	2.300	2.225	1.558
TOTAL	**Tn**	**6.850**	**6.005**	**4.308**
TOTAL acid consumption / TOTAL STEEL production	**Tn acid/ Tn TOTAL STEEL production**	**0.009**	**0.007**	**0.006**
Trend (Base 1)	**-**	**1**	**0.757**	**0.667**
Consumption HCl/ Tn steel production	**Tn HCl/ Tn TOTAL STEEL production**	**0.004**	**0.003**	**0.002**
Trend (Base 1)	**-**	**1**	**0.723**	**0.50**
HNO3 consumption/ Tn Steel production	**Tn HNO3/ Tn TOTAL STEEL PRODUCTION**	**0.003**	**0.002**	**0.002**
Trend (Base 1)	**-**	**1**	**0.710**	**0.667**
Consumption Methanol/ Tn steel production	**Tn Methanol/ Tn TOTAL STEEL production**	**0.003**	**0.003**	**0.002**
Trend (Base 1)	**-**	**1**	**0.835**	**0.667**

Source: EPCGE, S.L.

The reduction in acid consumption compared to the previous year per unit of production stood at 14.28%

This reduction is entirely due to the implementation and use of the Barkhausen technology on one of the HHP lines, which does not use acid.

On the other hand, concerning the consumption of coolant, the improvement of the smart automatic coolant dosage unit to fill the coolant tank with mains water and coolant stands out. This unit has a dosing device that supplies the desired mixture to the tank in the established proportion, optimising the consumption of coolant. Also, monthly analyses of coolant are carried allowing a more prolonged use as it is kept in in optimum condition.

Table 8. Consumption of containers and packaging

	Units	2018	2019	2020
Plastic	Tn	5.9	6.85	4.38
Wood	Tn	8.39	9.81	6.31
Cardboard	Tn	34.23	14.94	11.02
Paper	Tn	0.73	0.56	0.54
Wood and cardboard	Tn	1.83	0.73	1.90
TOTAL	**Tn**	**51.08**	**32.89**	**24.16**
Total packaging / tn production	**Tn / Tn total production**	**0.025**	**0.017**	**0.017**
Trend (Base 1)	-	**1**	**0.67**	**0.68**

Source: EPCGE, S.L.

This year, the consumption of containers and packaging was practically the same as the previous year. The customer's requirement to ship products in a certain way directly affects the products used for packaging, making it difficult to make any changes in this respect.

As far as possible and when the customer agrees, the use of returnable packaging is preferred by EPC.

A. POWER CONSUMPTION

Table 9. Power consumption

	Units	2018	2019	2020
Total Energy	MWh	4,845.53	4,406.72	3,456.30
Energy consumption / Tn TOTAL production	**MWh / Tn TOTAL production**	**2.35**	**2.22**	**2.40**
Trend (Base 1)	**-**	**1**	**0.94**	**1.02**
Energy consumption / Tn TOTAL STEEL production	**MWh / Tn TOTAL STEEL production**	**6.71**	**5.27**	**4.73**
Trend (Base 1)	**-**	**1**	**0.79**	**0.70**

Source: EPCGE, S.L.

Electricity consumption fell by 10% taking into account steel production, which is responsible for the highest energy consumption. However, in relation to total production, this consumption increased slightly compared to the previous year.

It should also be noted that 100% of the electricity consumed in 2020 will come from renewable sources.

B. CONSUMPTION OF NATURAL GAS

Table 10. Consumption of natural gas

	Units	2018	2019	2020
Total natural gas	MWh	571.91	900.87	566.83
Energy consumption / Tn TOTAL production	**MWh / Tn TOTAL production**	**0.278**	**0.453**	**0.394**
Trend (Base 1)	-	**1**	**1.63**	**1.42**

Source: EPCGE, S.L.

Gas consumption is seasonal, as it is only used for heating in winter, so the consumption depends largely on the seasonal weather conditions.

In 2020, gas consumption decreased and returned to the absolute values of 2018. The installation of thermostats and a selector switch for regulation from inside the office has made it more accessible and easier to control.

It is planned to install an alarm within the fire alarm system to inform if the gas is left on. This will also contribute to reduction of consumption.

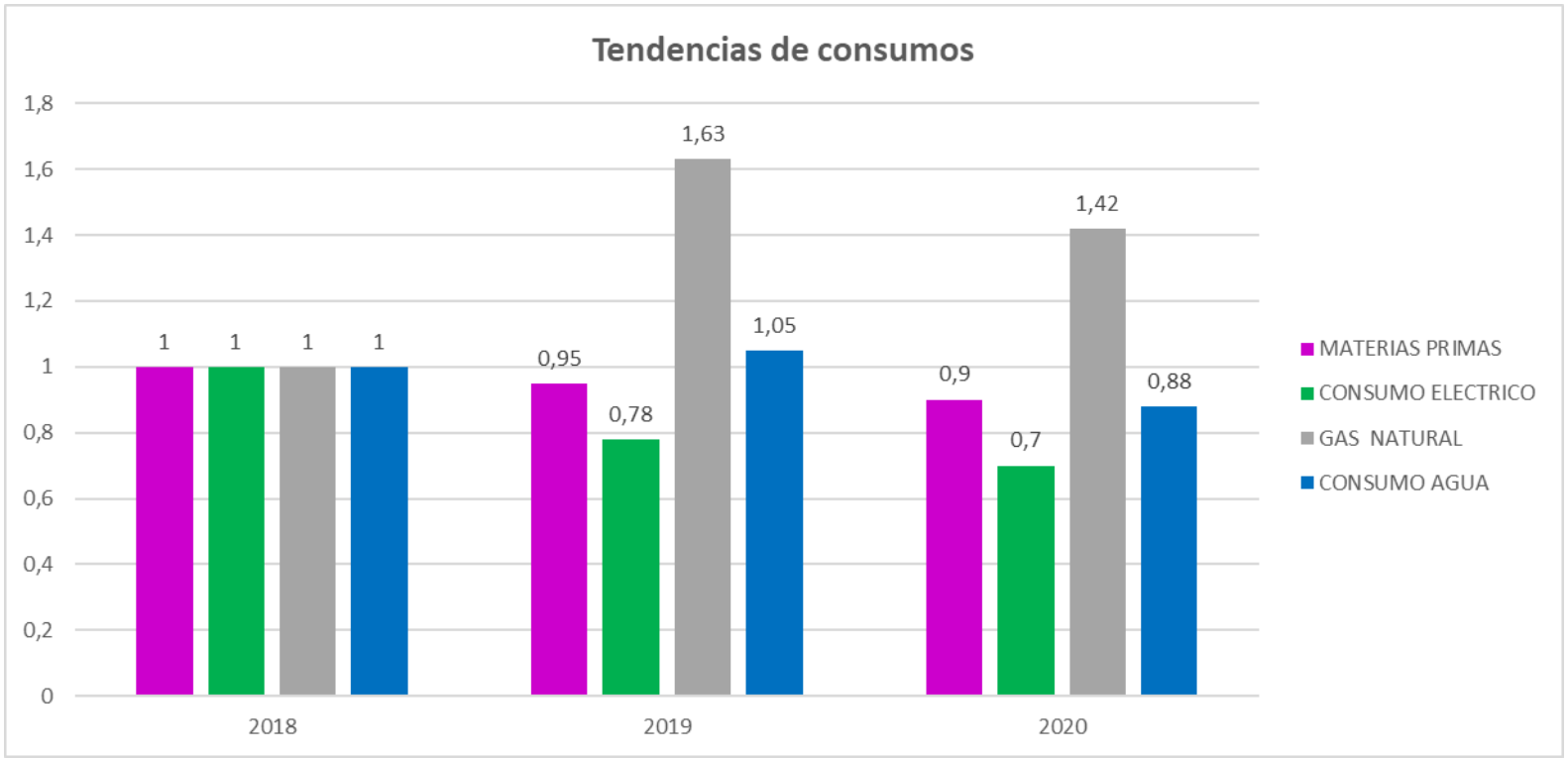
C. WATER CONSUMPTION

Table 11. Water Consumption

	Units	2018	2019	2020
Water	m^3	3,452	4,193	3,101
Water consumption / Tn TOTAL production	**m^3 / Tn TOTAL production**	**1.68**	**2.11**	**2.16**
Trend (Base 1)	**-**	**1**	**1.26**	**1.29**
Water consumption / Tn STEEL production	**m^3 / Tn TOTAL production**	**4.78**	**5.02**	**4.24**
Trend (Base 1)	**-**	**1**	**1.05**	**0.88**

Source: EPCGE, S.L.

In 2020, water consumption in relation to total production increased slightly, but bearing in mind this consumption is concentrated during the manufacture of steel, it shows a downward trend: a reduction in consumption of 16%.


Tendencias de consumos
1,8
1,6
1,4
1,2
1
0,8
0,6
0,4
0,2
0
1
1
1
1
0,95
0,78
1,63
1,05
0,9
0,7
1,42
0,88
2018
2019
2020
MATERIAS PRIMAS
CONSUMO ELECTRICO
GAS NATURAL
CONSUMO AGUA

5.1.2 Atmospheric emissions

A. DIRECT EMISSION

EPC GE, S.L. has natural gas boilers used for heating. The APCA code for these is 02 01 03 03 and they are currently not included in the Resolution as a potential atmospheric pollutant.

The metal cutter (saw with coolant as a refrigerant) and the extractor hood in the laboratory are not included in Annex I of RD 100/2011 for potential atmospheric pollutants.

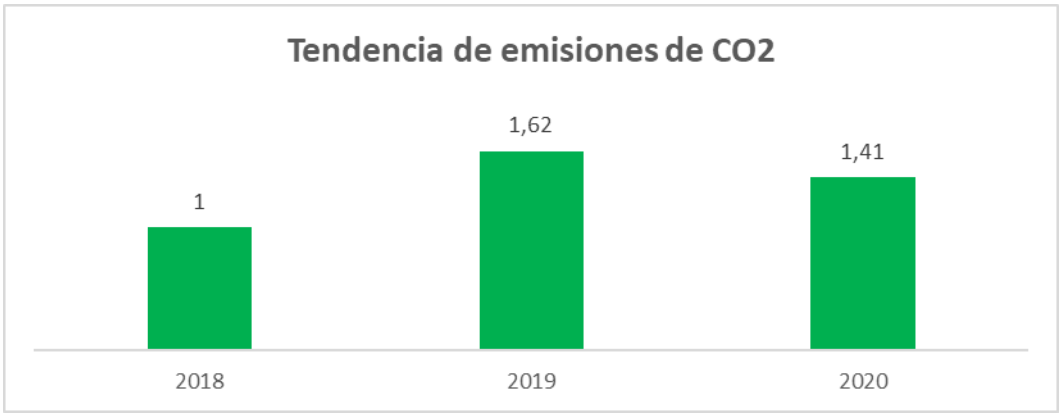
All machinery and facilities at EPC GE S.L. have filtering systems to reduce pollution, and produce diffuse pollution.

Table 12. Estimated direct emissions from natural gas consumption

	Units	2018	2019	2020
CO2	Tn CO_{2e}	115.30	181.62	114.27
CH4	Tn CO_{2e}	51.47	81.08	51.02
N2O	Tn CO_{2e}	61.36	96.65	60.81
Total	Tn CO_{2e}	**228.12**	**359.34**	**226.10**
Total emissions / Tn production	**Tn / Tn production**	**0.111**	**0.181**	**0.157**
Trend (Base 1)	**-**	**1**	**1.63**	**1.41**

Source: In-house compilation based on emission factors according to:

- *Spain, GHG inventory report.*
- *IPCC 2006-Seasonal combustion, Industry*
- *IPCC - AR 4*



5.1.3 Waste

A. HAZARDOUS WASTE

Table 13. Hazardous Waste Generated

	Units	2018	2019	2020
Metal containers (contaminated by hazardous substances)	Kg	40	80	10
Plastic containers (contaminated by hazardous substances)	Kg	4,400	3,200	2,180
Coolant	Kg	64,940	22,220	52,160
Grinding sludge	Kg	271,920	253,200	193,300
Contaminated material	Kg	6,240	6,240	2,460
Oil and coolant filters	Kg	100	60	20
Office equipment	Kg	550	1,360	940
Grinding burn coolant lubricant	Kg	69,400	118,888	37,360
Aerosols	Kg	80	58	8
Fluorescent tubes and bulbs containing mercury	Kg	0	50	35
Batteries and used batteries	Kg	3.10	1.36	21.68
Laboratory waste	Kg	0	15	20
TOTAL	**Kg**	**417,673**	**405,372**	**288,515**
HW GENERATED / TN PRODUCTION	**Kg HW / Tn production**	**202.87**	**203.87**	**200.67**
Trend (Base 1)	**-**	**1**	**1.00**	**0.99**

Source: EPCGE, S.L.

	Units	2018	2019	2020
Coolant	Kg	64,940	22,220	52,160
Grinding burn coolant lubricant	Kg	69,400	118,888	37,360
TOTAL	**Kg**	**134,340**	**141,108**	**89,520**

	Units	2018	2019	2020
Coolant + Burn Control Liquid / TN STEEL PRODUCTION	**Kg HW / Tn STEEL production**	**186.16**	**168.84**	**122.42**
Trend (Base 1)	-	**1**	**0.91**	**0.66**

Source: EPCGE, S.L.

Noteworthy is the 34% reduction of hazardous waste compared to 2018, largely due to reduced use of coolant and burn control liquid after the implementation of the above-mentioned Barkhausen technology.

This assessment of these two waste materials together is because they are both processed in the evaporator and the generated waste is stored in a 10,000 litre tank. This generated waste is managed as coolant waste or burn control liquid depending on the resulting pH.

As a major technological improvement, EPC has a large volume evaporator that allows recirculation of all hazardous waste for the production of distilled water used in the induction hardening processes, allowing self-management of the plant.

B. NON-HAZARDOUS WASTE

Table 14. Main Non-hazardous Waste

	Units	2018	2019	2020
Scrap and tips	Tn	148.14	224.06	93.83
Metal chips	Tn	400.23	384.57	288.7
Wood	Tn	61.68	53.16	50.62
MIXES: Paper, cardboard and plastic	Tn	24.38	11.82	11.49
Toner	Tn	0.032	0.018	0.035
Wheels and abrasives	Tn	8.4	3.48	0
TOTAL	**Tn**	**642.86**	**677.11**	**444.68**
NHW GENERATED / TN PRODUCTION	**Tn NHW / Tn production**	**0.31**	**0.34**	**0.31**
Trend (Base 1)	-	**1**	**1.09**	**1.00**

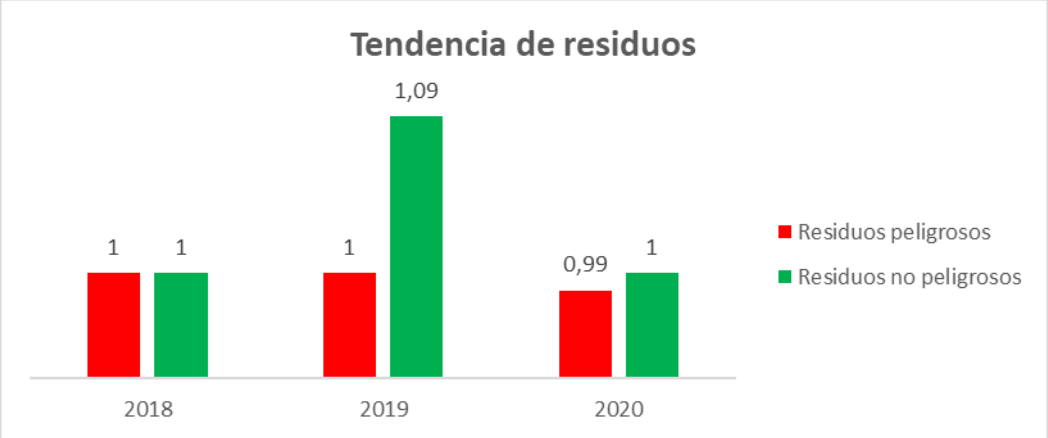
Source: EPCGE, S.L.

As regards non-hazardous waste, the trend of previous years is stable, although the chart shows a decrease in "Scrap and tips" and "Metal swarf" waste, as a result of improved management of raw materials.

If the trend of this NHW is set against steel production, the decrease can be better appreciated.

	Units	2018	2019	2020
Scrap and tips	Tn	148.140	224.060	93.83
Metal chips	Tn	400.230	384.570	288.70
TOTAL	**Tn**	**584.370**	**608.630**	**382.53**
NHW GENERATED / TN PRODUCTION	**Tn NHW / Tn production**	**0.760**	**0.728**	**0.523**
Trend (Base 1)	-	**1**	**0.96**	**0.68**

Source: EPCGE, S.L.



5.1.4 Noise

In June 2014, EPC GE S.L. hired APPLUS to take noise measurements in accordance with specifications in the company's business licence; max 60 dB (A) in adjacent industrial operations, regardless of municipal regulations.

The range of results was between 49 and 53 dB(A), fully meeting requirements, and therefore no action was needed to reduce the level of ambient noise.

Since the last measurement report on outdoor noise, no modifications to facilities and processes have been done that could affect the impact of environmental noise.

5.1.5 Biodiversity

EPC does not have facilities or areas dedicated to the conservation or restoration of nature or to promoting biodiversity, either inside or outside the organisation.

The data on land use are given below.

Table 15. Land use

	Units	2018	2019	2020
Constructed area	m^2	6,017.44	6,017.44	6,017.44
Total sealed area	m^2	10,400.00	10,400.00	10,400.00
Total area of the centre (plot)	m^2	10,400.00	10,400.00	10,400.00
Total area outside the centre	m^2	0	0	0
Constructed area/ Tn production	m^2 / Tn production	2.92	3.03	4.18
Trend (Base 1)	**-**	**1**	**1.04**	**1.43**

Source: EPCGE, S.L.

5.2 Other indicators of environmental performance

EPC GE, S.L. has procedures within its Environmental Management System to measure and control nonconformities, corrective and preventive action, planning of audits and environmental training given to people of the organisation.

The internal audit for the environmental management system took place in June 2020, with a comprehensive review of the documentation created and implemented including the previous EMAS Statement.

6 Legal environmental requirements and degree of compliance

EPC GE S.L complies with all applicable legal requirements, among which are the following principal permits:

- Business Licence form the Eibar town council, dated 16/06/1998.
- Permit to discharge sewage and rainwater from the Gipuzkoako Ur Kontsortzioa (Water Board Gipuzkoa), updated on 29/07/2016.
- HW Producer permit of 1/10/2009, updated and extended on 04/07/2014 by the Basque government's Dept. of the Environment and Land Planning.
- APCA authorization (activities that are potentially contaminating the atmosphere) issued on 17/12/2014. EPC GE S.L. sent the corresponding ECA report required for authorisation within the established term.

EPC GE, S.L. performs an identification and evaluation of legal environmental requirements, which allows us to have up-to-date information of the applicable legislation and the degree of compliance. In addition, the company uses the ECONET application, which provides users with updated information on new and projected regulations at all levels (EU, national, autonomous community, municipal, etc.).

In 2020, the Container Statement and the report on activities for loading, unloading and transporting hazardous goods were submitted to the public administration, in compliance with obligations for environmental communication.

7 Interrelationship with interested parties

EPC GE, S.L. informs all its interest groups on relevant aspects and activities in the environmental field through this report.

The identified interest groups of EPC GE, S.L. are the following:

- Customers
- Company staff
- Suppliers
- Owner
- Institutions
- The society as a whole

All employees can participate in improving the environmental performance of the enterprise, by communicating suggestions or improvement actions to the quality and environment manager or his/her superior. Suggestions are analysed for possible implementation. A survey is held among all staff on a yearly basis, and responses are analysed and answered individually. In 2020, two suggestions of an environmental nature were submitted regarding the non-use of single-use plastics and the implementation of a container for organic matter.

On the other hand, suggestions and opportunities for improvement received from the meetings of the Energy Management Committee are also periodically collected. Noteworthy in 2020 in this sense were the change to a variable compressor and switching off of the quenching pumps.

Anyone interested can request information on the environment by writing to the following e-mail address: sgonzalez@epcge.com

No environmental complaints or claims were received in 2020.

In collaboration with some customer companies, EPC continues to establish good practices to minimise the generation of containers and container waste by using returnable ones.

8 Environmental verification

The EMAS 2020 Environmental Statement, Revision 1, was validated in compliance with article 8 of Regulation 1221/2009 by Lloyd´s Register Quality Assurance S.L.U., ES-V-0015, during verification of the Management System.

The validated statement is the Spanish statement, if any doubt, Spanish version is mandatory.