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## **Regasificadora del Noreste, S.A.**

Punta Promontoiro s/n, 15620 Mugardos, A Coruña (Spain)

www.reganosa.com

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# EGANOSA



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# 1.1 ABOUT US

Reganosa is a company that develops and manages energy infrastructures with the aim of improving the welfare of society and the competitiveness of the business industry, creating energy systems that use resources sustainably and meet the European Union's emission mitigation targets for the 2030 and 2050 horizon.

Reganosa's vision is to develop infrastructures that connect energy markets using the latest technological innovations, provide innovative services that furnish integral solutions and guarantee the availability of the necessary infrastructure to supply safe, clean and efficient energy.

# **Corporate structure**

Reganosa's corporate and shareholder structure is a significant asset due to its diversity, robustness and knowledge of the industry:

# COMPANIES COUNTRY

Reganosa Holdco, S.A.	Spain	Parent
Regasificadora del Noroeste, S.A.	Spain	85.00%
Reganosa Servicios, S.L.	Spain	100.00%
Reganosa Asset Investments, S.L.	Spain	100.00%
Mibgas, S.A.	Spain	3.90%
Mibgas Derivatives, S.A.	Spain	1.76%
Reganosa Ghana Ltd.	Ghana	100.00%
Reganosa Italia Ltd.	Italy	100.00%
Reganosa Malta Ltd.	Malta	100.00%
Canerde, S.L.	Spain	20.00%
H2Pole, S.L.	Spain	100.00%
Impulsa Galicia	Spain	12.00%

# REGANOSA GROUP STAKE

# **1.1 ABOUT** US

# **Consultancy and project management**

- Feasibility studies, cost estimates and simulations
- Due diligence
- Assistance in tendering procedures (FEED/EPC) and bid management
- Property engineering services, supervising the execution of FEED, EPC and operation and maintenance engineering
- Writing manuals and operating procedures
- Training the operation team

# **Comprehensive operation and maintenance**

- Commissioning assistance
- Comprehensive operation and maintenance of LNG terminals.
- Optimisation of operation processes

# **Provision of services**

Reganosa provides operation and maintenance (O&M), network simulation, technical assistance, consultancy and training services for gas infrastructures.

It is present in all phases of the natural gas asset life cycle, from feasibility studies to the operation and maintenance of LNG terminals. Since 2016, Reganosa has provided services in 12 countries.

The sustainable management and operation of infrastructures is key for creating the energy of the future and developing a competitive social and industrial climate.



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as European transmission system operator

# **Global presence**



# Infrastructures we operate



# Ghana

# GAS PIPELINE Torage with FSU REGASIFICATION WITH FRU

### **Tema LNG Terminal**

Storage with FSU (Floating Storage Unit) Regasification with FRU - Floating Regasification Unit IFV Vaporisation Technology 5 km of gas pipeline (subsea and onshore)

# Malta



## Delimara regasification plant

Storage with Float Storage Unit (FSU)

IFV Vaporisation Technology

# Location

Our terminal is located in Punta Promontorio, in the municipality of Mugardos, province of A Coruña. This is an ideal geostrategic position as it is in the centre of the Atlantic routes and enjoys stable and safe sailing conditions.

Our core network of gas pipelines runs for 130 kilometres in the province of A Coruña and connects the terminal with the Tui-Llanera gas pipeline in Guitiriz and Abegondo.



### **Mugardos LNG Terminal**

On-shore, full containment storage

Vaporisation technology

ORV and SCV

Capacities:

- berth capacity: 600 m3 / 266,000 m3
- storage: 300,000 m3
- regasification: 412,800 Nm3 /h

130 km of gas transport pipeline



**Regasificadora del Noreste, S.A.** is a company specialising in the transport of natural gas and the storage and regasification of liquefied natural gas.

**Company name:** REGASIFICADORA DEL NOROESTE, S.A.

Tax ID no.: A15685324

Activity code: 5210 Deposit, storage and transport of gas

# 1.2 CONTACT DETAILS

OUR REGISTERED OFFICE: Punta Promontoiro, s/n - 15620 Mugardos (A Coruña).

OUR EMAIL ADDRESS: reganosa@reganosa.com

OUR PHONE NUMBER: (+34) 981 930 093

OUR FAX NUMBER: (+34) 981 930 092

OUR SOCIAL MEDIA PROFILE: https://es.linkedin.com/company/reganosa A copy of the EMAS Environmental Statement can be requested through our Communication department by e-mail: <u>comunicacion@reganosa.com</u>



# **1.3 ACTIVITIES & SERVICES**

# Natural gas infrastructure management

Reganosa is certified as a European transmission system operator (TSO) and manages part of the basic gas pipeline network of the Spanish gas system.

Its business guarantees diversification of supply and the correct operation and development of transmission infrastructures, which are prepared to act as a support for sustainable energy sources such as hydrogen and biogas.

The company is a member of Spanish and international organisations, including GIE, Sedigás and the European Network of Transmission System Operators for Gas (ENTSOG) to guarantee adequate, regulated and coordinated management and technical evolution of the transmission network in Europe.

Reganosa drives the development of renewable energy sources. In the last year it included two projects in the energy transition category in the European Ten-Year Network Development Plan (TYNDP 2020), to integrate renewable gases into the energy mix and develop hydrogen as a key vector in decarbonisation.



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HYDROGE

# The energy value chain



# **Commercial Services**

The Mugardos LNG terminal is a logistics hub in the north west of Spain, in a strategic location with operational flexibility.

# LNG transfer and vessel loading and unloading

LNG is transported from the country of origin to the country of destination in vessels which transport LNG at a temperature of -160°C. At the Mugardos terminal, the LNG stored in the tanks is transferred and cooling operations are carried out (from filling the gas carrier's tanks with natural gas—gassing up—to the gradual cooling of the tanks to their operating temperature—cooling down.).

# Regasification

The LNG, stored in the terminal tanks at -160°C, is transformed to its gaseous state and introduced into the gas pipeline network.

## Storage

LNG is stored in the terminal's tanks under the terms established in the regulations on access to the facilities.

# Tanker truck loading

The truck loading service allows LNG to be supplied to domestic consumers and industries in areas with little gas to be supplied through satellite plants.

## Transport of natural gas

The gas is transported at high pressure through transmission networks connecting the LNG terminal to other gas pipelines, qualified consumers connected directly to the network, and distribution networks.

## Laboratory analysis

Reganosa's laboratory provides services for the analysis of the composition and properties of natural gas to users of its facilities and external companies and entities, using fully verified equipment.

It holds UNE-EN ISO/IEC 17025 accreditation, certifying the suitability of its technical and quality management systems as a testing and calibration laboratory.

## Comprehensive repair services

The Port of Ferrol is one of few in the world where a ship can arrive, unload, be repaired, cool down, load up and depart, covering a full repair cycle. Naturgy, Navantia and Reganosa are part of an operational agreement to provide integral gas tanker repair services.

# **Technical characteristics and description of the facilities.**

# Promotion and management of the Mugardos LNG terminal (LSO).

Berthing capacity	Storage capacity	<b>Regasification capacity</b>
7,500 m3/ 266,000 m3	300,000 m3	412,800 Nm3/h

# Operation of 130 km of gas pipelines. (TSO)

## Abegondo-Sabón Gas Pipeline

Length	Regulation and metering stations	Positions	Design pressure	Diameter
44.7 km	2	6	80 bar	16/10"

## Cabanas-Abegondo gas pipeline

Length	Positions	Design pressure	Diameter
30.4 km	1	80 bar	26"

# Mugardos-As Pontes-Guitiriz gas pipeline

Length	Regulation and metering stations	Positions	Design pressure	Diameter
54.4 km	2	6	80 bar	30/26/20/16″

# Diagram



Refinery



Port

# **Mugardos LNG Terminal**

## Berth

The Mugardos terminal has a jetty with berthing capacity for methane tankers of up to 266,000 cubic metres, and also has three LNG transfer arms.

## Storage

The terminal has two full-containment cryogenic tanks. Each can store 150,000 cubic metres of LNG and is made up of two large containers placed one inside the other and separated by an insulator called perlite. The inner tank is made of an alloy of steel and nickel, which makes it suitable for conserving liquefied natural gas at a temperature of -160 °C without any increases in pressure. The external tank is made of steel and cryogenic concrete.

In order to control pressure inside the tanks, the vapours generated when the liquefied natural gas evaporates (boil off) are regulated. These vapours are extracted and recovered by compressors that send the boil off to the reliquifier in order to return it to a liquid state and send it to the secondary pumps, which drive the LNG to the vaporisers. When it is not possible to recover all these vapours due to operational circumstances of the plant, they are diverted to a ground flare (combustor), where they are burnt off in a controlled environment.

## Regasification

Reganosa has a regasification capacity of 412,800 Nm<sup>3</sup>/h. The regasification process is carried out in two open rack vaporisers (ORV) that have a seawater circuit to raise the temperature of the liquefied natural gas until it returns to a gaseous state.

There is also a submerged combustion vaporiser (SCV). In this case the LNG is vaporized by a water bath, which is heated by an underwater natural gas-fired burner.

The natural gas enters the pipeline after passing through an odorization and metering station.



# **Mugardos LNG Terminal**

## Production

The production data include the regasification processes, loading of tanks and gross ship loading (LNG loaded to ships), and are in accordance with the activities developed by Reganosa in the regulated gas system to which it belongs.

	2019	2020	2021	2022
Tonnes	953,888	1,479,300	1,676,811	1,665,930
MWh	14,601,587.853	22,668,892.258	25,657,224.271	25,516,010.43
GWh	14,602	22,669	25,657	25,516

# Workforce

Below are data on the evolution of Reganosa's workforce over the 2018-2022 period:

	2019	2020	2021	2022
Number of employees	88	92	75	65





# 

# OUR MANAGEMENT SYSTEM



Reganosa has an Integrated Management System that is audited annually and has been certified in accordance with the UNE-EN ISO 14001 standard and the EU Eco-Management and Audit Scheme Regulation, among others. Reganosa obtained EU Eco-Management and Audit Scheme (EMAS) certification, with registration number ES-GA-000393. The implementation of this system ensures that all applicable regulatory provisions are fulfilled, that environmental procedures and guidelines are systematised, and that the commitment to continuous improvement to prevent and minimize impacts associated with the activity is carried through.

The scope of the Integrated Management System includes all the operations carried out by Reganosa:

- Loading and unloading of LNG vessels
- LNG Storage
- Regasification
- Transport of natural gas
- LNG tanker loading

Reganosa's Integrated Management System is based on management by processes with identification of the key risks affecting its activities, which are controlled through (internal and external) documents that manage safety, health, environment and quality aspects to ensure that processes are planned, operated and controlled efficiently.

The processes that make up Reganosa's Integrated Management System have been defined taking into account the following aspects:

- Understanding and fulfilling legal requirements and customer needs.
- Considering the risks and opportunities that the organization has detected in order to develop its activities at an operational and strategic level.
- Obtaining results as a result of the performance and effectiveness of process.
- Continuously improving processes based on objective measurements, by defining monitoring indicators.













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# OUR HEALTH, SAFETY ENVIRONMENT AND QUALITY MANAGEMENT POLICY

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IR HEALTH.



This Policy defines the occupational health, safety, environment and quality principles applicable to all professionals of the companies that form part of the Reganosa Group.

Reganosa has made the following commitments in the development of its various activities:

- 2. Commitment to continuous improvement: Reganosa strictly complies with the legislation and systems for measuring fulfilment.
- are complemented by a performance appraisal system as well as drills and exercises.
- 4. Leadership and responsibility: The principles of health, safety and the environment are the responsibility of each and every one of Reganosa's professionals.
- use of energy and natural resources.
- information received.

Reganosa's Management undertakes to provide the human and material means necessary to ensure that this Policy is received, implemented and respected by all the Group's professionals and external collaborators.

## Health, Safety, Environment and Quality Policy.

1. Management and risk control: Reganosa has an Integrated Management System that is certified and periodically reviewed in accordance with international norms and standards. Its purpose is to configure services that provide value, while ensuring maximum environmental protection and guaranteeing health and safety. Reganosa also has a system for managing key risks and opportunities in its areas of activity.

regulations applicable to its activities and in particular with regard to environmental management, safety and prevention of serious accidents in infrastructures where applicable, and voluntarily assumes additional controls. In addition, Reganosa continuously improves its processes, establishing specific objectives and

3. Staff training: Reganosa establishes training programmes for its professionals, focused on achieving excellence and developing the necessary technical knowledge in each area of activity. These programmes

5. Incorporation of health, safety and sustainable development criteria: Reganosa includes health, safety and sustainable development criteria throughout the life cycle of the Group's operations. Reganosa is committed to providing safe and healthy working conditions in all its activities and to protecting the environment and reducing the effects of climate change, respecting biodiversity and promoting the efficient

6. Communication, participation and consultation: Reganosa shares information with its stakeholders in an accessible, rigorous and transparent manner. In addition, it has established permanent internal and external dialogue and communication channels that allow it to answer any questions and requests for

Mugardos, February 2022

Managing Director **Emilio Brugetas Serantes** 

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# ENVIRONMENTAL ASPECTS

# **4.1 ENVIRONMENTAL ASPECTS**

**4.2 DIRECT ENVIRONMENTAL ASPECTS** 

**4.4 ENVIRONMENTAL ASPECTS** (NEW PROJECTS)

**4.5 INDIRECT ENVIRONMENTAL ASPECTS** 



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# OUR ENVIRONMENTAL ASPECTS

The environmental aspects generated by the terminal and the gas pipeline network and that interact with the environment are identified and evaluated to determine which have or may have significant impacts (significant environmental aspects). They are then considered in the maintenance and continuous improvement of the environmental management system and the required control measures are implemented, with a lifecycle approach.

When identifying and evaluating **environmental aspects**, current aspects associated with normal and abnormal operating conditions that are fully controlled by the company (direct aspects) are taken into account, as well as those generated as a result of thirdparty activities over which the company does not have full management control (indirect aspects). Furthermore, potential environmental aspects derived from possible accidents or emergency situations are taken into account, as well as environmental aspects associated with **new projects** and modifications to current activities.

Reganosa has established the following system to identify and evaluate environmental aspects:

- associated environmental aspects.
- Keep all information of interest updated.

• Identify activities and services with the potential environmental impacts and the

• Define the internal criteria to record and periodically evaluate the identified aspects.

• Take into account aspects determined as significant when establishing Reganosa's environmental objectives and goals and when defining operational control guidelines.

# 4.1 ENVIRONMENTAL ASPECTS

Environmental aspects are evaluated based on previously established criteria to determine which are significant:

# Direct

### Water consumption

Seawater (collection)
 Water from the municipal network

### Energy and fuel consumption

Electric power
Natural gas
Vehicle fuels
Diesel from the emergency generator and fire pump

### Consumption of raw and auxiliary materials

· THT · Nitrogen · Sodium bisulphite

### Air emissions

• Vaporiser combustion gases • Greenhouse gases (GHG)

### Noise

· Noise in the facilities and the surroundings

### Hazardous waste

· Used absorbents · Used oils · Ni-Cd accumulators · Lead batteries · Aerosols and sprays Antifreeze · Non-chlorinated emulsions (oil-water mixture) · Contaminated empty metal containers Contaminated empty plastic containers Other fuels (liquid THT) · Batteries · Inorganic chemicals · Organic chemicals Acid waste (laboratory) Waste adhesives and sealants · Metal salts (laboratory) Toner and printer cartridges · Fluorescent tubes and other lamps · Solvents and solvent mixtures

### Non-hazardous waste

- Packaging cardboard
- · Expired helmets
- Scrap metal
- $\cdot$  Electrical and electronic equipment
- · Office paper
- Plastics
- · Wood
- $\cdot$  Used work clothes and boots
- · Sludge from pool cleaning
- · Remains of vegetation (biodegradable waste)
- · Screening waste (seawater filters)
- · Alkaline and lithium batteries
- · Construction elements (concrete, bricks, ceramic materials)

## Discharge

- · Cooling water from seawater vaporisers
- · SCV cooling water
- · Sanitary water
- · Potentially polluted stormwater
- · Unpolluted stormwater

# Potential

## Natural gas dispersion

- · Flammable cloud
- · Water consumption
- · Discharge

## LNG leaks

- $\cdot$  Flammable cloud of natural gas
- Water consumption
- Discharge
- · Foam consumption

## Leakage of liquid odorant (THT)

- THT vapours and liquids
- · THT-contaminated absorbents

### Fire

- · Flammable cloud of natural gas
- · Water consumption
- · Discharge
- · Waste

## Explosion

- · Noise
- · Waste

### Ship emergencies

- · Flammable cloud of natural gas
- · Water consumption
- · Discharge
- · Waste

## Pollution and environmental damage

- · Spilled hazardous substance
- · Water consumption
- Discharge
- · Waste (contaminated absorbents)

# **4.2 DIRECT ENVIRONMENTAL ASPECTS**

The direct environmental aspects currently identified are evaluated considering the following criteria:

- Frequency: this is determined by how often the environmental aspect is generated.
- Danger: this refers to the characteristics or components that give it the ability to ٠ cause damage to the environment.
- Extent: this is an expression of the quantity, the proximity to legal limits or reference values established as indicators to control parameters related to the aspect in question.
- Environmental Context: this is an expression of the criticality of an environmental aspect for the organization.

The significance of the environmental aspect is determined by the following formula

Significance = (Frequency + Danger + Extent) \* Environmental Context

The result of the environmental aspects evaluation corresponding to the period of the Environmental Statement (2022) identifies the following significant aspects:

# Significant direct aspects

## **ENVIRONMENTAL** ASPECT

## ASSOCIATED **ENVIRONMENTAL** IMPACT

ТҮРЕ	DESCRIPTION OF THE ASPECT	
CONSUMPTION	Natural gas consumption	Decrease and/or depletion of natural resources
WASTE	Generation of hazardous waste	Waste generation and management
	Generation of NON-hazardous waste	waste generation and management
EMISSIONS	Greenhouse gas emissions under the emissions trading system.	Greenhouse effect: influence on climate change.
DISCHARGE	Parameter: suspended solids in the discharge of potentially polluted stormwater.	Pollution of the receiving environment.

The consumption of natural gas at the plant contributes to greenhouse gas emissions. During 2022, natural gas consumption has been reduced by 59% compared to 2021, mainly associated with combustor start-ups (ground flare or emergency burner) in ship operations due to a technical improvement in the management of gas generated in ship operations (gassing-up and cooling-down). It is identified as a critical environmental aspect due to its environmental context, which is why it is considered significant.

Electricity consumption was slightly lower in 2022 than in 2021, and the electricity consumed / production ratio was 1.41% lower than in 2021 due to a slight increase in regasification and a slight decrease in tanker and ship loading.

During 2022, the generation of hazardous waste increased by 2.5% compared to 2021, due to corrective maintenance work (removal of lagging from plant equipment), removal of spent lead batteries and contaminated rags and absorbents used in corrective and planned maintenance work as in the case of used lubricating oils and electrical insulation oils as well as organic and inorganic chemicals and other hazardous waste in better quantities than the previous ones. The percentage of hazardous waste sent for recycling in 2022 was 47%, slightly more than in 2021.

In the case of NON-hazardous waste, the generation of this type of waste increased by 284% in 2022 compared to the amount generated in 2021, due to tidying and cleaning operations at the regasification plant facilities and the disposal of obsolete and out-of-service material in the materials warehouse. The percentage of NON-hazardous waste sent to recycling processes in 2022 was 98.5%.

This aspect together with the generation of non-hazardous waste is considered significant and critical as it is related to policies or strategic organisational management aspects, such as circular economy, life cycle, etc. The ultimate objective will be to create a zero-waste policy and increase the amount of waste recycled.



# **4.3 POTENTIAL ENVIRONMENTAL ASPECTS**

The value of the suspended solids parameter in the discharge of potentially polluted rainwater and the fire-fighting network has been included as a significant and critical environmental aspect in the year 2022, due to the value of the extension of this parameter in the evaluation of environmental aspects by monthly sampling in which the value obtained was close to the discharge limit. Although the assessment of environmental aspects takes the average value of all discharge parameters compared to the discharge limits. In the specific case of the parameter suspended solids in the discharge of potentially polluted stormwater and fire-fighting network, the other monthly controls carried out during the year 2022 showed values well below the discharge limit in three monthly controls and below the limit of quantification of the analytical method in 8 monthly controls. It has been ascertained that the reason for the point value of suspended solids was due to the fact that this discharge was sampled after maintenance work had been carried out on the lamellar hydrocarbon separator, so that for future samplings the information will be coordinated with the Maintenance Department to avoid sampling at this discharge point after maintenance work on this equipment.

Indirect greenhouse gas emissions associated with electricity generation are considered an important aspect in the environmental context of the organisation.

For 2022-the same as in 2021-this was not considered to be a significant environmental aspect as electricity was purchased with a Guarantee of Origin (GO) which certifies that 100% of the electricity consumed at the regasification terminal comes from 100% renewable sources.

The potential environmental aspects that would be generated if any of the identified emergency situations with an environmental impact were to occur are evaluated taking into account the following aspects:

- Probability: estimation of the possibility/frequency of occurrence of emergency probability are:
  - Historical data from similar facilities.
  - Information on manufacturers, suppliers, etc.
  - Specialized bibliography.
- Severity: estimation of the damage or consequences on the receiving environment if an emergency situation were to occur.

The significance of the aspect is calculated using the following formula:

## Significance = Probability \* Severity

No significant aspects have been identified as a result of the potential environmental aspects evaluation corresponding to the period of this Environmental Statement (year 2022).

situations with an environmental impact. Some examples of the data used to estimate

# **4.4 ENVIRONMENTAL** ASPECTS (NEW PROJECTS)

The environmental aspects of new projects and their impact on the planning, construction and operation phases are assessed beforehand, through the necessary studies from a legal and sustainability point of view.

During 2022, the "Adaptation of the Mugardos LNG terminal jetty for small scale operations" project was developed. This project was in the construction phase during 2022, so its environmental aspects were assessed as part of the project's Environmental Management Plan.

The environmental aspects associated with the projects developed by Reganosa Servicios, S.L. during 2022 at Reganosa's facilities are analysed in the direct environmental aspects evaluation and in the environmental assessment of new projects.



# 4.5 INDIRECT ENVIRONMENTAL ASPECTS

Indirect environmental aspects are evaluated by:

- Evaluation of the aspects generated: the incidents caused by contractors, subcontractors and suppliers, in addition to the qualitative evaluation of the aspect according to their nature or danger, are taken into account to obtain the corresponding evaluation.
  - Incidents are detected by Reganosa and presented in writing through the organization's ordinary channels.
  - Danger refers to the characteristics or components of the aspect that give it the ability to damage the environment.
- Environmental management assessment: a value that quantifies environmental management and/or the adequacy of environmental practices in the management of aspects in the different services and activities where indirect aspects are identified.

The consumption of electricity, water and other supplies associated with the work carried out by contractors and subcontractors are evaluated within direct environmental aspects, as they are directly consumed by the facility.

## Significant direct aspects

ТҮРЕ	DESCRIPTION	ACTIVITY
WASTE	NON-hazardous	Gardening and other work inside and outside the facilities
		Maintenance of the gas pipeline network
		Sample drawing at the terminal and outside
	Hazardous	Gardening
		Maintenance of the gas pipeline network
EMISSIONS	Greenhouse gases	Gardening and work in the terminal and outside
	Natural gas	Maintenance of the gas pipeline network
CONSUMPTION	Plant protection products	Gardening
NOISE	Sound emissions	Maintenance of the pipeline network and other operations in the terminal or outside
DISCHARGE	Spills of liquids and fuels from vehicles and maintenance oils and greases	Maintenance of the gas pipeline network and other operations in the terminal and outside

The consumption of electricity, water and other supplies associated with the work carried out by contractors and subcontractors are evaluated within direct environmental aspects, as they are directly consumed by the facility.

All indirect environmental aspects have been controlled and none of them were significant.

# **H05**

# OUR ENVIRONMENTAL PERFORMANCE

5.2 USE AND CONSUMPTION OF ELECTRICITY AND FUELS

**5.3 USE AND CONSUMPTION OF RAW AND AUXILIARY MATERIALS** 

5.4 WASTE

**5.5 WASTEWATER** 

**5.6 AIR EMISSIONS** 

**8 BIODIVERSITY** 

# 5.1 WATER COLLECTION & CONSUMPTION

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# 5.1 WATER COLLECTION & CONSUMPTION

The water used at Reganosa's facilities has two sources:

- Seawater: collected for use in the regasification process and returned entirely to the sea.
- Water for on-site services: used for industrial and cleaning purposes. This also includes sanitary and auxiliary uses.

The following tables contain information on water collection and consumption in recent years:

## Seawater collection

COLLECTION	2019	2020	2021	2022
Seawater (m³/year)	32,852,917	49,819,793	55,517,867	55,700,115
Seawater (Hm³/year)	32.85	49.82	55.52	55.70

# Internal indicator for seawater consumption/production

INDICATOR	2019	2020	2021	2022
Seawater/production (Hm³/GWh)	0.00225	0.00220	0.00216	0.00218

## Mains water consumption

CONSUMPTION	2019	2020	2021	2022
Mains water (m³/year)	447	419	687	539

Seawater collection rose by 0.33% in 2022 due to a slight increase in LNG regasification compared to 2021.

Consumption of drinking water from the municipal network decreased by 9.47% attributable to the decrease of 10 people in the workforce at Reganosa in 2022 compared to the workforce in 2021.



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# **EMAS indicators -**Water collection and consumption

INDICATOR	2019	2020	2021	2022
Seawater (m³)/production (t)	34.441	33.678	33.109	33.435
Mains water (m³)/no. of employees	5.08	4.55	9.160	8.292

Total production (which includes the processes of regasification, tanker loading and gross ship loading) decreased by 0.65% in 2022 compared to 2021.

Also, the seawater collection / production ratio was 0.98% higher in 2022.

The ratio of mains water consumption to the number of employees reduced by 9.5% during 2022.





# 5.2 USE AND CONSUMPTION OF ELECTRICITY AND FUELS

The following sources of energy are used at Reganosa's facilities:

- Electrical energy to operate the facility's fixed machinery, lighting, and air conditioning system, as well as other general uses. High-voltage electricity from the general distribution network and converted to medium and low voltage by a transformer for general use.
- Natural gas for use in the SCV.
- Diesel for use in the fire pump, emergency generator and office gas pipeline and maintenance vehicle.
- Petrol, from the end of January 2020 for the new office vehicle.

In terms of total renewable energy consumption, the organisation does not generate or consume energy from its own renewable sources.

The following tables show energy and fuel consumption data for recent years:

A 1.4% decrease in electricity consumption is observed in 2022 compared to 2021 mainly related to the increase in natural gas emission and to a lesser extent due to the slight increase in ship operations.

Natural gas consumption was reduced by 59% compared to the previous year, mainly due to the implementation of a technical improvement in the start-up of the combustor or emergency burner for ship operations, which has made it possible to reduce the flow of gas sent to the emergency burner during these operations.

In 2022, diesel consumption in emergency equipment rose by 68% compared to 2021, mainly due to the operation hours of emergency generator associated with plant shutdowns for maintenance work.

For company cars, from 2020 EMAS indicators for company vehicle energy consumption will be changed to "Fuels" and include the MWh value of both diesel A and petrol E5.

Fuel consumption in company vehicles was reduced by 5% for the maintenance vehicle and by 27% for the office vehicle due to the reduced use of these vehicles for travel.

# **Energy and fuel consumption**

CONSUMPTION	2019	2020	2021	2022
Electrical energy (MWh/year)	20,362	24,567	27,473	27,086
Electrical energy/production (MWh/GWh)	1.3945	1.0837	1.0708	1.0615
Natural gas (MWh/year)	5,989	9,034	16,881	6,882
On-road diesel company vehicles (I/year)	1,778.26	1,372.95	1,121.88	1,067.64
On-road diesel company vehicles (MWh)	21.40	16.52	13.50	12.85
On-road E5 petrol company vehicles (I/year)	-	88	199.78	146.33
On-road E5 petrol company vehicles (MWh)	-	1.09	2.49	1.82
Off-road diesel emergency generator and fire pump (I/year)	9,819.2	7,927	9,516.20	15,991.60
Off-road diesel emergency generator and fire pump (MWh)	118.17	95.4	114.53	192.46
Total direct energy consumption MWh/year	26,491	33,714	44,484	34,175

# Internal indicator for electricity consumption/production

INDICATOR	2019	2020	2021	2022
Electricity/Production (MWh/GWh)	1.3945	1.0837	1.0708	1.0615

# **EMAS Indicators - Consumption of energy and fuels**

INDICATOR	2019	2020	2021	2022
Electrical energy (MWh)/production (t)	2.13E-02	1.66E-02	1.64E-02	1.63E-02
Natural gas (MWh)/production (t)	6.28E-03	6.11E-03	1.01E-02	4.13E-03
Fuels - company vehicles (MWh)/production (t)	2.24E-05	1.19E-05	9.53E-06	8.81E-06
Off-road diesel (MWh)/production (t)	1.24E-04	6.45E-05	6.83E-05	1.16E-04
Total direct energy consumption (MWh)/production (t)	2.78E-02	2.28E-02	2.65E-02	2.05E-02

Note: 1 tonne of diesel = 1.035 toe; 1 MWh = 0.086 toe; 1 litre of diesel = 0.0120348 MWh Note: 1 tonne of petrol = 1.070 toe; 1 MWh = 0.086 toe; 1 litre of petrol = 0.01244186 MWh



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# 5.3 USE AND CONSUMPTION OF RAW AND AUXILIARY MATERIALS

Reganosa uses various raw materials that fulfil an auxiliary function in its production process:

- **THT**, used in gas odorization. Its concentration in gas pipelines is determined by regulations and its consumption is linked to the regasification that is carried out.
- Sodium bisulphite used to neutralise the sodium hypochlorite used in the seawater circuit.
- **Nitrogen** used to inert equipment before and after maintenance tasks, as well as to sweep and empty arms upon completion of LNG loading and unloading operations of ships and tanker trucks.

# **EMAS Indicators - Consumption** of raw and auxiliary materials

## INDICATOR

THT (t) / Production (t)

Nitrogen (t) / Production (t)

Sodium bisulphite (t) / Production (t)

# **Consumption of raw and auxiliary materials**

CONSUMPTION	2019	2020	2021	2022
THT (t/year)	17.473	27.952	30.51	30.69
THT/production (t/GWh/year)	1.20E-03	1.23E-03	1.19E-03	1.20E-03
Nitrogen (t/year)	299.023	328.189	321.170	437.574
Nitrogen/production (t/GWh/year)	2.05E-02	1.45E-02	1.25E-02	1.71E-02
Sodium bisulphite (t/year)	5.85	7.6	10.35	6.5

THT consumption increased by 0.6% compared to 2021 due to the slight increase in LNG regasification.

Nitrogen consumption increased by 36% compared to 2021 related to an increase in line inertisation work.

The consumption of sodium bisulphite has been reduced by 37% compared to 2021, due to better control of the electrochlorination system's operation.

# THT CONSUMPTION / PRODUCTION RATIO (t/t)

1	1	1	
2019	2020	2021	2022
1.83E-05	1.89E-05	1.82E-05	1.84E-05

# NITROGEN CONSUMPTION / PRODUCTION RATIO (t/t)





2019	2020	2021	2022
1.83E-05	1.89E-05	1.82E-05	1.84E-05
3.13E-04	2.22E-04	1.92E-04	2.63E-04
6.13E-06	5.14E-06	6.17E-06	3.90E-06



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# **5.4 WASTE**

At the terminal, there are suitable containers to collect and separate each type of waste generated in the different departments. The waste collected is temporarily stored in specially prepared areas until it is delivered to the authorised manager, and in no case does it exceed the maximum storage time established by law.

Reganosa is registered in the Registry of Waste Producers and Managers of Galicia as a small producer of hazardous waste, with the registration number CO-RP-P-PP-00926.

The quantities of waste managed in the period covered by the Environmental Statement and previous years are indicated in the following table:

# **Managed waste**

ТҮРЕ	2019	2020	2021	2022
Non-hazardous Waste (t/year)	10.7096	18.338	4.59	17.645
Non-hazardous Waste/Production (t/GWh)	7.33E-04	8.09E-04	1.79E-04	6.92E-04
Hazardous Waste (t/year)	3.34	5.72	7.82	8.01
Hazardous Waste/Production (t/GWh)	2.26 E-04	2.52E-04	3.05E-04	3.14E-04

Reganosa produces a limited amount of hazardous waste related to the maintenance and cleaning of the facilities and equipment. In 2022, generation of hazardous waste increased by 2.5% compared to the previous year and the generation of NON-hazardous waste increased by 284% compared to 2021.

In 2022, the generation of electrical and electronic equipment, bulky waste and alkaline batteries decreased compared to 2021. On the other hand, in 2022, the generation of waste paper and cardboard, plastics, wood, scrap metal, plastic containers (cable boxes), work clothes and boots, concrete, tiles and ceramic materials, biodegradable waste (vegetation and sludge from cleaning rain gutters and pipes) and discarded equipment such as electrical and electronic equipment (luminaires) increased due to the implementation of order and cleaning programmes in all the organisation's buildings, which led to the removal of a greater amount of NON-hazardous waste that was in the material warehouse and in the external warehouse that was no longer in use.



# **5.4 WASTE**

During 2022, there was an increase in the generation of hazardous waste of: used oils due to changes for preventive maintenance, organic chemical products due to the removal of remains of foaming agents that are out of use or expired, and to a lesser extent the generation of empty plastic and metal containers contaminated by increased consumption of chemical reagents, solvent and paint containers, and solvent waste and solvent mixtures associated with maintenance work for cleaning and painting surfaces increased. There was also a slight increase in the generation of waste from the lagging process, thermal insulation of LNG lines caused by corrective maintenance work, as well as waste antifreeze or the water/glycol mixture also associated with maintenance work on the glycol system in the BOG compressors and the generation of metallic salts, waste generated in the analyses carried out in the laboratory. Finally, the generation of exhausted lead batteries and Nickel-Cadmium accumulators increased, due to the consumption and exhaustion of these batteries.

On the other hand, waste fell for: oil/water emulsion, fluorescent tubes due to changes to LED screens, empty aerosols and sprays, no change of large quantities.

The company recycles and reuses waste whenever possible. Thus, in 2022, 48% of the hazardous waste and 96% of the non-hazardous waste generated was earmarked for recycling operations.

Reganosa mainly manages its waste with management companies, transporters and authorised waste treatment plants located in Galicia.

# **EMAS indicators - Managed waste**

## TYPE

Non-Hazardous Waste (t)/Production (t)

Hazardous Waste (t)/Production (t)

Total waste (t)/Production (t)

# NON-HAZARDOUS WASTE / PRODUCTION RATIO (t/t)



2019	2020	2021	2022
1.12E-05	1.24E-05	2.74E-06	1.06E-05
3.50E-06	3.86E-06	4.66E-06	4.81E-06
1.47E-05	1.63E-05	7.40E-06	1.54E-05





# **5.5 WASTEWATER**

The following types of wastewater are generated at Reganosa:

- Process water (cooling): used in the vaporization process in ORVs (open rack vaporisers).
- Process water (submerged combustion vaporiser SCV).
- Potentially polluted process stormwater and fire-fighting system water. •
- Unpolluted stormwater. ٠
- Sanitary water.

In accordance with the terms of the Environmental Effects Statement (EES), the Environmental Impact Statement for wastewater discharge (EIS 2005), in the Environmental Impact Statement for the "Reganosa Mugardos LNG Regasification Plant (A Coruña)" project (EIS 2020) and the Discharge Authorisation, Reganosa has developed a water quality monitoring and surveillance plan to control effluents and the receiving environment, in this case including the coves closest to the terminal (A Barca and Santa Lucía) and Bestarruza beach.

The control parameters associated with each type of wastewater are listed below:

# Wastewater monitoring plan according to discharge authorization

EFFLUENT	SAMPLING FREQUENCY	PARAMETERS
Cooling wastewater from seawater vaporisers used in the LNG regasification process	Continuously	Collection flow. Free residual chlorine and temperature difference (inlet - outlet)
Potentially polluted waste stormwater and fire-fighting network wastewater	Monthly	Discharge flow, suspended solids, oils and fats and detergents
Sanitary wastewater	Monthly	Discharge flow, suspended solids, $\text{BOD}_{\text{5}}$ , COD and oils and fats
Unpolluted waste stormwater	Quarterly	Discharge flow, suspended solids, oils and fats and detergents

Quality controls of the water of the receiving environment according to discharge authorization, EIS and EES

PARAMETERS	SAMPLING FREQUENCY	NO. OF CONTROL POINTS
Temperature	Fortnightly	27
Suspended solids	Bimonthly	7
Total organic carbon	Bimonthly	7
Oils and fats	Bimonthly	7
Faecal coliforms	Bimonthly	1*
Total coliforms	Bimonthly	1*
Faecal streptococci	Bimonthly	1*
pH, suspended solids, BOD5, temperature, dissolved oxygen, hydrocarbons, colour, salinity, total arsenic, dissolved cadmium, total zinc, total copper, chromium, total chromium VI, dissolved mercury, dissolved nickel, silver, dissolved lead, total selenium, total organic carbon. faecal coliforms, total coliforms and faecal enterococci (*)	Quarterly	2

(\*) Measurement taken at Bestarruza beach.

# **5.5 WASTEWATER**

The results obtained in wastewater discharge effluent controls are displayed in the table below:

The results obtained in wastewater discharge effluent controls are displayed in the table below:

# Wastewater control

		RESULT					
EFFLUENI	PARAMETERS	2019	2020	2021	2022	LIMII	UNITS
Cooling wastewater	Flow	32.85	48.92	55.52	55.70	93.5	Hm³/year
from seawater vaporisers after LNG	Free residual chlorine	0.027	0.025	0.024	0.025	0.1	mg/l
regasification	Temperature change	-4.60	-4.78	-4.72	-4.81	-6	°C
	Flow	29,292.91	22,148	31,721	21,925	24,000	m³/year
Potentially polluted waste stormwater	Suspended solids	8	7	9	7	25	mg/l
and fire-fighting network wastewater	Oils and fats	0.31	0.29	0.30	0.37	10	mg/l
	Detergents	0.10	0.10	0.11	0.11	2	mg/l
	Flow	26,200.18	31,103.7	32,124	42,379	27,400	m³/year
Unpolluted	Suspended solids	6.05	6.5	6.62	5	25	mg/l
stormwater	Oils and fats	0.22	0.29	0.91	0.20	10	mg/l
	Detergents	0.10	0.10	0.25	0.1	2	mg/l
	Flow	907.09	1,070	1,203	997	3,571	m³/year
	COD	32	27	38	43	125	mg/l
Faecal or sanitary wastewater	BOD <sub>5</sub>	7	5	6	8	25	mg/l
	Suspended solids	14	12	12	16	35	mg/l
	Oils and fats	0.38	0.39	0.30	0.65	10	mg/l

FREE RESIDUAL CHLORINE WASTEWATER EFFLUENT FROM THE LNG VAPORISATION PROCESS (mg/l)



TEMPERATURE DIFFERENCE WASTEWATER EFFLUENT FROM LNG VAPORIZATION PROCESS (°C)

2019	2020	2021	2022
-4.60	-4.78	-4.72	-4.81

# **5.6 AIR EMISSIONS**

Within Reganosa's production process, the chimney of the submerged combustion vaporiser (SCV) is identified as a source of air emissions. In the SCV, LNG is vaporized with water that is heated by an underwater natural gas-fired burner.

The parameters indicated below correspond to those requested in the 2019 Air Emissions Authorisation, which were measured by an Accredited Control Body in 2022.

# SCV EMISSIONS

PARAMETERS	2019	2020	2021	2022	LIMIT
NOx emissions (mg/Nm <sup>3</sup> )	155	164	190	156	200 mg/Nm <sup>3</sup>
CO emissions (mg/Nm <sup>3</sup> )	<10	<10	<11	56	100 mg/Nm <sup>3</sup>
Gas opacity (Bacharach scale)	<1	<1	<1	<1	2

Emissions of NOx, CO and gas opacity have remained below the limits established since 2019 in the authorisation of atmospheric emissions for the SCV emission source according to Law 34/2007 and Royal Decree 102/2011.

Other emissions generated at the plant are CO<sub>2</sub> emissions from the SCV, the combustor and the emergency engines (fire fighting pump and emergency generator). CO, emissions are included in the greenhouse gas emissions permit and are verified annually by an accredited external entity, as they are included in the Emissions Trading System (EU-ETS).

Reganosa carries out the annual greenhouse gas emission verifications provided for in the applicable legal regulations (Commission Regulation 2018/2066 of 19 December 2019 on the monitoring and reporting of greenhouse gas emissions). Direct emissions (Scope 1 under the GHG Protocol standard) are generated by the combustion of natural gas, as well as in the auxiliary engines (which use diesel) of terminal equipment. Indirect emissions (Scope 2 under the GHG Protocol standard) are generated by electrical energy consumption in the terminal.

Total CO<sub>2</sub> emissions include both fixed source combustion emissions and methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O) and refrigerant gases (HFCs) emissions, expressed in tonnes of CO<sub>2</sub> equivalent.

No SF<sub>6</sub> sulphur hexafluoride emissions are generated at the terminal.

The data on annual greenhouse gas emissions are taken from Reganosa's verified carbon footprint calculation (Scope 1 and 2) for the years 2019, 2020, 2021 and 2022.

# SCV AIR EMISSIONS FOR THE 2019-2022 PERIOD



# 5.6 AIR EMISSIONS

# Greenhouse gas emissions under the emissions trading system (EU-ETS)

FACILITY	2019	2020	2021	2022
Verified emissions (EU-ETS) CO <sub>2</sub> (t/year)	1,721	1,885	3,356	1,584
Free $CO_2$ allocation (t/year)	382	303	408	595

EU-ETS GHG emission generation decreased in 2022 due to an improved technique in the management of combustor start-ups associated with gassing-up and cooling-down operations.

# Greenhouse gas emissions according to the carbon footprint calculation, scopes 1 and 2 (direct and indirect emissions)

FACILITY		2019	2020	2021	2022
	Stationary combustion (*)	1,726	1,887	3,360	1,585.51
Scope 1 emissions (t CO <sub>2e</sub> ). They include:	Mobile combustion. Company vehicles (**)	4.52	3.63	3.26	3.00
	HFC refrigerant fugitive emissions	48	63	28.38	22.74
	Fugitive emissions in plant	505	230	316.42	328.08
Scope 2 emissions (t CO <sub>2e</sub> )	electric power procurement focused on the market	6,157	3,471	0	0
Total GHG emissions (t CO <sub>2e</sub> )		8,441	5,654	3,708	1,939

(\*) Stationary combustion included in the carbon footprint calculation reports tonnes of  $CO_2$  equivalent, including carbon dioxide  $CO_2$ , nitrous oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>) as greenhouse gases.

(\*\*) GHG emissions associated with mobile combustion include the maintenance vehicle associated with the pipeline network, in addition to office vehicles.

# **EMAS** indicators - Emissions

FACILITY

EU-ETS CO<sub>2</sub> emissions (t)/Production (t)

Total GHG emissions (t  $CO_{_{2e}})$ /Production (t)

# EU-ETS $tCO_2$ EMISSIONS / PRODUCTION RATIO (t/t)



In 2021, Reganosa carried out the second part of a campaign to detect and quantify fugitive emissions in the terminal and the gas pipeline network with two measurement periods: May and October 2021.

The first campaign to detect and quantify fugitive emissions was carried out in September 2019 and February 2020.

2019	2020	2021	2022
1.80E-03	1.27E-03	2.00E-03	9.51E-04
8.85E-03	3.82E-03	2.21E-03	1.16E-03

# RATIO TOTAL GHG EMISSIONS $tCO_{2e}$ / PRODUCTION (t/t)



# **5.7 NOISE**

As established in the Environmental Effects Statement (EES), Reganosa carries out quarterly environmental noise measurement campaigns at 10 sampling points in areas adjacent to the terminal at three different times (morning, afternoon and night), in order to check possible noise pollution from Reganosa's equipment and facilities.

During 2022, controls were carried out at 2 emission points (in areas close to the facilities) and 8 immission points located in the homes closest to the facilities.

The sound levels obtained were below the regulatory limits. As shown by the historical measurements taken before the existence of the Mugardos terminal, Reganosa's activity has an insignificant impact on the noise levels in the surrounding areas.

## The sound levels around the plot are indicated in the following table:

SOUND LEVEL	2019	2020	2021	2022	LIMIT
Daytime immission sound level (dB(A))	54	53	53	53	55
Evening immission sound level (dB(A))	52	51	54	54	55
Night-time noise immission level (dB(A))	43	44	44	44	45
Daytime emission sound level (dB(A))	56	51	58	58	65
Evening emission sound level (dB(A))	54	52	55	55	65
Night-time noise emission level (dB(A))	54	54	54	53	55

The data indicated in the table above show that the applicable regulations on noise and noise pollution are respected, both in the closest inhabited areas (immission) and the perimeter points closest to the industrial facility (emission). The data for 2022 correspond to the least favourable noise data obtained at the indicated control points.



# **5.8 BIODIVERSITY**

The terminal is located on privately owned land in the public port domain. As total land use, the plot has a total built-up area of 108,859 m<sup>2</sup>. The sealed area – or the original layer of soil that was covered to make it waterproof and which corresponds to buildings, roads, pavements and jetty - is 52,190 m<sup>2</sup>.

The nature-oriented area includes the on-site area (with landscaped areas) that represents 949 m<sup>2</sup>, and the total off-site nature-oriented area includes the land adjacent to the storage and regasification terminal, owned by Reganosa, which represent a total of 66,569 m<sup>2</sup>.

## The biodiversity indicator is therefore presented as follows:

# Biodiversity indicator

INDICATOR	VALUE	UNITS
Built-up area	108,859	m²
Sealed area	52,190	m²
Total on-site nature-oriented area	949	m²
Total off-site nature-oriented area	66,569	m²

# EMAS biodiversity indicators

ТҮРЕ	2018	2019	2020	2021
Built-up area (m²)/production (t)	1.14E-01	7.36E-02	6.49E-02	6.53E-02
Sealed area (m²)/production (t)	5.47E-02	3.53E-02	3.11E-02	3.13E-02
Total on-site nature-oriented area ( <sup>m²</sup> )/production (t)	9.95E-04	6.42E-04	5.66E-04	5.70E-04
Total off-site nature-oriented area ( <sup>m²</sup> )/production (t)	6.98E-02	4.50E-02	3.97E-02	4.00E-02



# 5.9 SOILS

In October 2013, the Contaminated Soils Status Report was renewed through the telematic application of the *Consellería de Medio Ambiente* (Galician Ministry of the Environment).

In February 2014, approval of the Contaminated Soils Status Report was received.

In April 2019, the last approval of the Contaminated Soils Status Report was received with changes in the frequency of controls. These controls will be carried out in 2021, 2023 and 2024.

Groundwater quality is controlled through sampling and analysis in the Reganosa plant's piezometric wells, located upstream and downstream within the facility. The results of the last control carried out in August 2021 by an ENAC-accredited laboratory indicate that there is no soil contamination. The results of this analytical control are sent to the regional environmental body responsible for soil contamination.

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# ENVIRONMENTAL OBJECTIVES AND GOALS





We are concerned about the natural resources that surround us, and we want to contribute to their maintenance and improvement through our actions. The implementation of the Integrated Management System in accordance with these standards ensures advanced environmental management, compliance with all regulatory provisions and the systematisation of environmental procedures and guidelines, and enacts the commitment to continuous improvement to prevent and minimise impacts associated with our activity. The company establishes a control system that includes optional periodic studies and procedures, in addition to training activities for the workforce. Environmental actions are carried out transparently. The company has put in place several communication channels that enable it to respond to information requests from any stakeholders, including this Statement.

Reganosa's objectives for 2022, also included in the Annual Report, were as follows: An 100% reduction in greenhouse gas emissions, associated with carbon footprint Scope 2, has been achieved by purchasing electricity with a guarantee of origin (GO) from renewable sources. Total electricity consumption in 2022 was slightly lower than in 2021, even so, the reduction in Scope 2 of the carbon footprint was considerable compared to 2021, when indirect greenhouse gas emissions or those associated with Scope 2 were reduced by 84%, due to the purchase of electricity from 100% renewable sources.

GHG emission reduction and GHG emission offset projects have not been developed during 2021 and will therefore be planned during the period 2022-2025.

The electricity consumption efficiency project for the installation of a renewable energy system has not been developed, and this project will not be developed due to the purchase of electricity from renewable sources for consumption both in the regasification plant and in the natural gas transport network (gas pipeline).

Reganosa runs and promotes an open door policy. Guided tours around the terminal and informative meetings are held year-round with community associations and groups, to discuss and assess their particular expectations and needs. Anyone can visit our facilities by sending a request to:

http://www.reganosa.com/es/antes-de-visitarnos.

# **Objectives for 2022**

OBJECTIVE	ASSOCIATED ASPECT	INDICATOR	INITIAL DATA	VALUE OBTAINED	% ACHIEVED	COMPLIANCE
Reduce GHG emissions by 5%. 2020-2025 period	Emissions	Tonnes of CO <sub>2e</sub> reduced	3,495 tCO <sub>2e</sub>	0 tCO2e	100	Yes
Offset 15% of GHG emissions. 2020-2025 period	Emissions	CO <sub>2e</sub> offset in tonnes	1,721 tCO <sub>2e</sub>	0	0	No
Electricity consumption efficiency project and introduction of renewable energies (2020 - 2022).	Energy consumption	Analysis of alternatives with renewable supply sources. System design and installation	33,510 kWh/year 2021	0	0	No



Reganosa has established the following objectives for 2023 based on the critical environmental aspects and its environmental policy:

# Objectives for 2023

OBJECTIVE	ASSOCIATED ASPECT	INDICATOR	TARGET VALUE	INITIAL DATA	
Zero Waste Certification 2023-2025	Waste	Achieve Zero Waste Certification	Develop initial plan during 2023	17,645 tonnes/year 2023 of non-hazardous waste	Develop the initial p and quantities of w the final destination activities.
30% reduction in the quantification of CO <sub>2</sub> emissions under the emissions trading system. 2023-2024	Emissions	EU-ETS CO <sub>2</sub> emission reduction percentage	Reduction of CO <sub>2</sub> emissions	1,584 EU-ETS tCO <sub>2</sub> verified in 2022	<ul> <li>Develop a new met processes of ship o</li> <li>Gassing-up.</li> <li>Cooling-down.</li> <li>Heel loading.</li> <li>Approval by th methodology a EU-ETS emission</li> </ul>
2022 carbon footprint calculation for scope 3 indirect emissions 2023-2024	Emissions	Calculation of the carbon footprint. Preparation of the report. Verification	Calculation. Report. Verification	No data	<ul> <li>Development of</li> <li>Primary data of</li> <li>Emission facto</li> <li>Preparation of</li> <li>Carbon footpri</li> </ul>

## PROPOSED MEASURES

plan for zero waste certification by assessing the types vaste and the necessary documentation to confirm n of the waste generated in waste recycling and reuse

thodology for calculating CO2 emissions in the operations such as:

ne competent authority of the new calculation and its application to the monitoring and verification of ions

of the carbon footprint calculator. collection. ors and calculation process. the corresponding report. int verification.

# 

# LEGAL COMPLIANCE



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Reganosa identifies and evaluates the applicable legislation in the area of industrial safety, prevention of occupational risks, environment and quality, both new regulations and applicable requirements derived from resolutions of competent bodies that apply in a particular way (licenses, authorizations, permits, Environmental Impact Statement and Environmental Effects Statement).

Reganosa fulfils all the applicable legal and administrative requirements in accordance with the commitment established in the Health and Safety, Environmental and Quality Management Policy.

AUTHORISATION	NOTIFIED BODY	REQUIREMENTS	INCIDENTS
Environmental Effects Statement	Secretaría Xeral de Calidade Ambiental e Cambio Climático (Galician Secretary General for Environmental Quality and Climate Change)	Submission of quarterly reports/ Reports sent for the four quarters of 2022	No incidents
Environmental Effects Statement	Secretaría Xeral de Calidade Ambiental e Cambio Climático (Galician Secretary General for Environmental Quality and Climate Change)	Submission of quarterly reports on the management of hazardous waste/ Reports sent for the four quarters of 2022	No incidents
Spanish Royal Decree 100/2011	Environmental Laboratory of Galicia. Dirección Xeral de Calidade Ambiental e Cambio Climático (Galician Directorate General of Environmental Quality and Climate Change)	2022 Annual Air Pollution Load Report submitted	No incidents
Authorization of air emissions. April 2019	Secretaría Xeral de Calidade Ambiental e Cambio Climático (Galician Secretary General for Environmental Quality and Climate Change)	2022 Annual Report on the Regulatory Control of Air Emissions submitted	No incidents
Environmental Impact Statement of the wastewater discharge project	Dirección Xeral de Desenvolvemento Pesqueiro (Directorate General of Fishing Development). Consellería do Mar (Galician Regional Ministry for the Sea)	Quarterly reports submitted for 2022	No incidents
Discharge Authorization	Augas de Galicia (Galician water authority)	Monthly reports and annual report submitted for 2022	No incidents
Decree 136/2017 of 31 May, approving the Regulation on the water tax and the discharge coefficient to public wastewater treatment systems (Galicia)	Augas de Galicia (Galician water authority)	Quarterly flow statements sent for 2022	No incidents
Administrative Concession of the Port Authority of Ferrol - San Cibrao (APFSC)	Port Authority of Ferrol - San Cibrao (APFSC)	2022 Annual Report submitted	No incidents
Agreement on good environmental practices Reganosa - Port Authority of Ferrol - San Cibrao (APFSC)	Port Authority of Ferrol - San Cibrao (APFSC)	2022 Environmental Report submitted	No incidents

AUTHORISATION	NOTIFIED BODY	REQUIREMENTS	INCIDENTS
Greenhouse gas emissions authorisation 2021-2030	Subdirección Xeral de Meteoroloxía e Cambio Climático (Galician Sub-Directorate General of Meteorology and Climate Change) Dirección Xeral de Calidade Ambiental e Cambio Climático (Galician Directorate General of Environmental Quality and Climate Change)	2022 annual greenhouse gas emissions verification report submitted. 2022 activity level verification report sent	No incidents
Contaminated Soils Status Reports	Secretaría Xeral de Calidade Ambiental e Cambio Climático (Galician Secretary General for Environmental Quality and Climate Change)	Sent in 2021, in accordance with the latest notification of renewal of the soil status report and the control and monitoring measures in the facility	No incidents
Resolution of 7 July 2016, from the Directorate General for Energy Policy and Mines, which grants Reganosa administrative authorisation and approval for the project to execute the facilities of the liquefied natural gas reception, storage and regasification plant in Mugardos (A Coruña).	Nature Conservation Service, <i>Xunta de Galicia</i> (Regional Government of Galicia)	Two six-monthly reports corresponding to 2022 regarding monitoring of sediments and organisms of the coastal strip near the Mugardos terminal (SAC Costa Ártabra) submitted	No incidents
Resolution of 2 December 2020 from the Spanish Directorate General for Environmental Quality and Assessment, which formulates the Environmental Impact Statement for the "Reganosa LNG Regasification Plan in Mugardos (A Coruña)" project. Conditions: • D.2.4.2 • D.2.5.1	Dirección Xeral de Calidade Ambiental, Sostibilidade e Cambio Climático (Galician Directorate General of Environmental Quality, Sustainability and Climate Change)	Report including the proposal for the micro-implementation of an air quality monitoring station sent to the competent authority for assessment. Response received with approval of the micro-implementation report for the installation of an air quality monitoring station from the competent authority.	No incidents
		Installation of an air quality monitoring system connected to the Rede Galega de Calidade do Aire (Galician Air Quality Network).	The necessary actions for the installation of the air quality monitoring station started in 2022. Between November and December, the civil works for the installation of the station began.
	Directorate-General for the Coast and the Sea	Two six-monthly monitoring reports on marine eelgrass meadows and scallop beds corresponding to 2022 submitted.	No incidents

# **8.1 INCIDENTS AND SITUATIONS SITUATIONS**

**RELATIONS** 

**OTHER ENVIRONMENTAL** 

# **8.2 TRAINING AND AWARENESS-RAISING** 8.3 COMMUNICATION AND COMMUNITY

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# 8.1 INCIDENTS AND EMERGENCY SITUATIONS

Guidelines have been established for possible incidents and emergency situations with an environmental impact, detailing the preventive measures foreseen to prevent these incidents or emergencies from occurring, and the way to act in the event that they cannot be avoided, to control the environmental impact derived from such a situation.

As part of Reganosa's staff training, the following drills were carried out in 2022.

- Oil leak in BOG compressors May 2022
- Slope fire. Category 1. October 2022.
- NG/LNG leaks Category 1. December 2022.

During 2022 there were no incidents with an impact on the environment.



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# 8.2 TRAINING AND AWARENESS-RAISING

In 2022, 28.5 hours of training per employee were given at Reganosa on health, safety and the environment.

In addition to the above, safety and environmental talks were also given to the staff of collaborating companies (16 workers).

The EMAS Environmental Statement is registered on the company's communication channel prior to the external verification process for consultation and participation by the workforce.



# 8.3 COMMUNICATION AND COMMUNITY RELATIONS

Reganosa has established internal and external communication channels that facilitate, on the one hand, the participation of personnel in the Integrated Management System, and, on the other hand, an open dialogue with external stakeholders and interest groups in general.

Thus, Reganosa's personnel will participate through the meetings of the Health and Safety Committee, where any possible environmental issues will be discussed. There is also a suggestion box so that staff can contribute their opinions and improvement suggestions in environmental, safety or operational matters.

The management of these communication channels provides feedback on the system, identifying the needs and expectations of stakeholders and allowing for the continuous improvement of the system.

Reganosa has established communication channels for issues related to environmental management by communicating the Health and Safety, Environmental and Quality Policy; evaluating the indirect environmental aspects of collaborating companies and suppliers; and assessing the perception that Reganosa's main clients have of its environmental performance, among others aspects.

Likewise, any stakeholder can communicate their concerns about the environmental impact of our activities and services (Ethical Channel of Reganosa's website), thus establishing a continuous exchange of information regarding the organisation's environmental performance.

The publication of this Environmental Statement is one of the main communication channels to ensure that stakeholders have information regarding Reganosa's environmental performance. Furthermore, Reganosa undertakes to periodically update the Statement and disseminate it once it has been externally validated.

The Environmental Statement will be communicated to stakeholders through Reganosa's website.

Likewise, all personnel visiting Reganosa's facilities will have access to the Environmental Statement, if requested.

This Environmental Statement will be sent to the competent authorities and any public body that requests it.

Other collaborative initiatives in which Reganosa participates are listed below:

# Participation as an entity-level partner in the Forética climate change cluster

Reganosa has been part of the Climate Change Cluster managed by Forética since 2017 and actively participates in the initiatives proposed annually.

# Best Environmental Practices Agreement, signed between APFSC and Reganosa.

By signing this agreement in 2013, Reganosa undertook to comply with the stipulations of the Environmental Best Practices Guidelines approved by Puertos del Estado (the state port authority), and to implement continuous improvement systems for the control of operations and maintenance tasks.

To verify this, an annual monitoring and review process is carried out to compel the company, among other requirements, to maintain the certification of its environmental management system according to the ISO 14001 standard and the EMAS Regulations, and to develop its commitment through the execution of environmental investments.

# 8.3 COMMUNICATION AND COMMUNITY RELATIONS

Study of "periodic monitoring of the evolution of the infralittoral benthic communities in Santa Lucía bay" performed by the Graña Marine Biology Station, run by the University of Santiago de Compostela.

Since 2006, Reganosa has prepared a bimonthly voluntary studies monitoring the composition and structure of infralittoral benthic communities in Santa Lucía Bay.

These analyses monitor the development of these communities and evaluate the substrate, the amount of organic matter deposited and the hydrodynamic influence of Reganosa's discharge on sedimentation processes.

The results show that the discharge affects neither the composition nor the structure of the benthic communities located in the vicinity of the terminal. Furthermore, comparisons of the state of micro-organism systems with historical data (prior to the presence of Reganosa) have also shown that the terminal has had no impact on the marine environment.

The processes, parameters and monitoring mechanisms are periodically reviewed to provide a better understanding of the evolution of benthic communities and the quality of the substrate that supports them.

# Agreement with AMBILAMP for the management of gas-discharge lamp waste

The collaboration agreement between AMBILAMP and Reganosa has been in place since 2016 to manage waste from fluorescent tubes and gasdischarge lamps, thus guaranteeing optimal management and promoting the recycling of this type of waste.

Reganosa carries out annual visits to its facilities as part of its communication and community relations policy. In this connection ,the following visits took place in 2022:

NO. OF VISITS BY TYPE OF VISIT		NO. OF VISITORS BY TYPE OF VISIT	
Further education	0	Further education	0
/ocational training	1	Vocational training	24
Secondary education	0	Secondary education	0
Jniversity	5	University	62
Opinion leaders	2	Opinion leaders	28
TOTAL	8	TOTAL	114

Reganosa's promotion of these visits to its facilities has not changed in these years, but it remains constant. The variation in visits during the year 2022 has been normalised to the data prior to the COVID-19 pandemic during 2020 and increased notably in the year 2022, both in the number of visits and, above all, in the number of people per visit, especially from Vocational Training Centres, Universities and advisors.



# ACRONYMS USED



# GLOSSARY OF TERMS AND ABBREVIATIONS

# LNG

Liquefied Natural Gas at -160 °C.

# SCV

Submerged Combustion Vaporiser

(Submerged Combustion Vaporiser)

## ORV

Open Rack Vaporiser

(Open Rack Vaporiser)

*Gassing-up* Putting gas into a methane tanker

# Cooling-down

Cooling a methane tanker

# Boil-off Gas or BOG

LNG evaporation gas

# LSO

LNG system operator

# TSO

Transmission system operator

# CCPP

Combined cycle power plant

# THT

Tetrahydrothiophene (natural gas odorant)

# GHG

Greenhouse gases

# GO or GOs

Guarantee of Origin. Accreditation that ensures the megawatt hours of electrical energy have been generated from renewable energy sources or highefficiency cogeneration.

# APFSC

Port Authority of Ferrol - San Cibrao (APFSC)

# Jetty

LNG terminal unloading/loading dock

# EES

Environmental Effects Statement

# EIS

Environmental Impact Statement

# PSSP

Plan for the Security of Ships and of Port Facilities





# ENVIRONMENTAL VALIDATION AND VERIFICATION

A States



This Environmental Statement of REGASIFICADORA DEL NOROESTE, S.A, was created with the data collected from 1 January 2022 to 31 December 2022, and will be valid for one year from the day following its validation by: Alejandro García from LRQA España S.L.U., registered Environmental Verifier no. EMAS-ES-V-0015.

All the information provided is supported by perfectly justified source data.

This Environmental Statement is only considered validated if it is accompanied by the corresponding verification statement.

LRQA España, S.L.U. representative signing the Environmental Statement: Olga Rivas.

Signed:

Reganosa Punta Promontoiro s/n 15620, Mugardos, A Coruña reganosa@reganosa.com