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Environmental Declaration 2022

BEFESA

Validation of results 2022

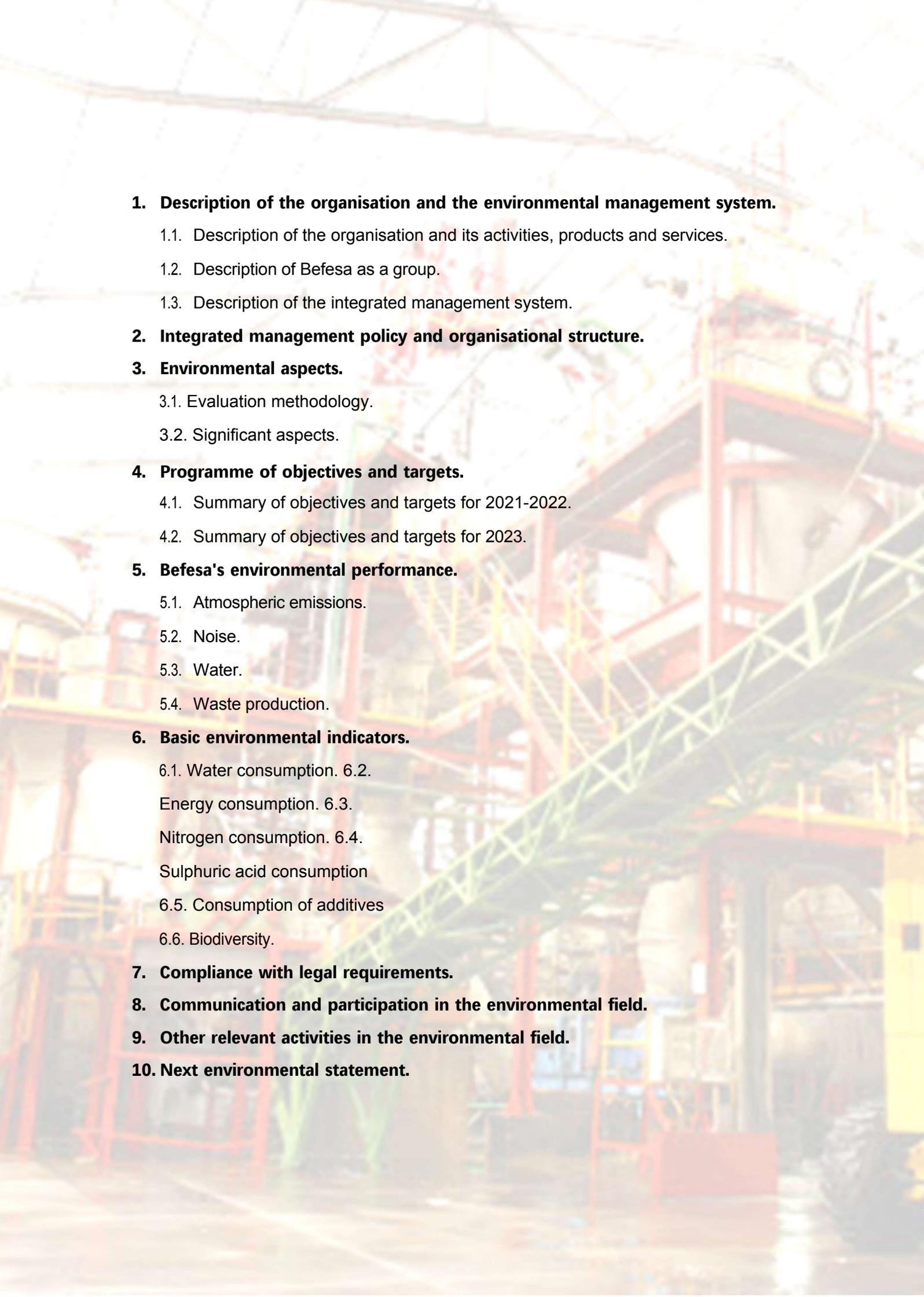
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1. Description of the organisation and the integrated management system





1.1. Description of the organisation and its activities, products and services.

Our work centre, Befesa Aluminio CT Valladolid (CNAE-38.32), has the scope of "Recycling, recovery and valorisation of waste from primary and secondary aluminium production".

From the reception of industrial waste, through storage and subsequent treatment, the minimisation of the possible environmental effects or impacts that our process could generate is taken into account at all times.

We are located in the municipality of Valladolid. Specifically, our facility is located about 5 km from the city centre of Valladolid, occupying an approximate surface area of 106,700 m².

Befesa Aluminio CT Valladolid's recycling and recovery processes have been considered as best available technologies (BAT) within the European Commission's BREF (Best available techniques Reference) documents for non-ferrous metallurgy.

The activities of Befesa Aluminio CT Valladolid are divided into four processes, which are described below:

Process 1: Obtaining aluminium concentrates by physico-chemical treatment.

The recycling process operated by Befesa Aluminio CT Valladolid allows the recovery of free metal and fluxing salts and the formation of inert products, mainly composed of aluminium oxide.

The process consists of a mechanical treatment of crushing and separation of metals, reaction of the hazardous components and aqueous dissolution of the salts, filtering of the inertised material and subsequent crystallisation of the salts.

The phases of the production process are:

- **Grinding:** The purpose of this treatment is, on the one hand, the extraction of the metallic aluminium and, on the other hand, the reduction of the particle size for a perfect reaction of the reactive components and the dissolution of the salts contained.





It consists of breaking the large blocks by means of a hydraulic hammer and then passing them to a mill that allows a maximum block size of 750 kg to enter. Once the material has been crushed, it passes through a screen, where a first product (aluminium concentrate) is obtained. The rest is reduced to powder and sent to the next stage.

- **Dissolution-Reaction:** The material (powder) obtained from the crushed or milled alumina is mixed with water to dissolve the salts. The dissolution is carried out with part of the condensate from the crystallisation and with the filtrate from the alumina concentrate.



The mixture is pumped into reactors where the aluminous compounds react by maintaining the temperature. The gases produced in the reactors are incinerated in the flare.

The pulp is sent to decanters that will separate the insoluble oxides from the brine by adding a flocculant. The reacted oxides are washed in belt filters. The filtrate water is recirculated for reuse.

The cakes obtained are sent to the final product warehouse, obtaining the product "Paval" which is used in ceramic and refractory products, rock wool, etc.

The brine obtained is purified in a clarifier before passing to the next stage.

- **Drying:** Paval can be dried in a rotary dryer. By the end of 2020 installs a new rotary dryer as a consequence of the publication in October 2020 of the new integrated environmental authorisation, which includes the non-substantial modification No 17 for adaptation to the best available techniques and which will be commissioned in 2021. Alternatively, in order to give greater weight to natural drying to the detriment of automated drying, in 2022 the





the collection system for the kettle storage shed, by installing two adjacent bells and modifying the existing one (MNS no. 19).

- **Crystallisation:** To separate salts from water. contained in the brine obtained in the previous stage, the vapours are evaporated and subsequently condensed. In this way a salt is obtained, a mixture of NaCl and KCl and condensates that are reused in the process.



A natural gas boiler is used for steam production.

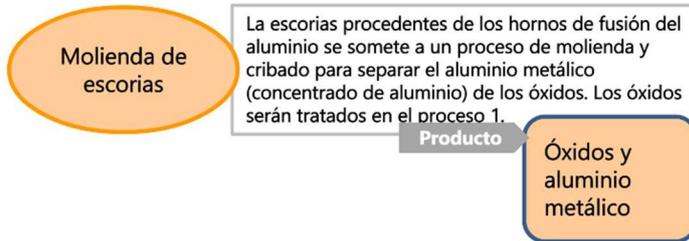
- **Gas scrubbing:** The air containing NH_3 from the drying process as well as the air from the extraction of the is led to the gas scrubbers where it is purified by washing with H_2SO_4 , obtaining $(\text{NH}_4)_2\text{SO}_4$.



Process 2: Milling and segregation of aluminium dross.

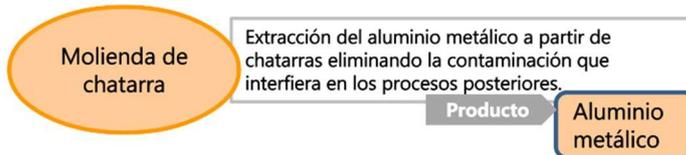
The dross from the aluminium smelting furnaces is subjected to a grinding and screening process in order to separate the metallic aluminium (aluminium concentrates) from the oxides, which are treated in process 1.

During the year 2022 this facility has only been used on an ad hoc basis.



Process 3: Grinding and segregation of aluminium scrap.

The purpose of this treatment is the separation of the metallic aluminium contained in aluminium scrap. Disused installation.



Process 4: Storage of waste that is not subject to treatment.

The raw materials processed in tonnes over the last three years are as follows:

Treated material (t)	LER code	2020	2021	2022
Salt slag (P1)	100.308	124.098	133.505	142.209
SPL (P1)	161.101/161.103	10.433	11.103	15.747
Slag dust from aluminium (P1)	100.321	427	0	0
Filter dust (P1)	100.319	0	0	0
Foundry sands (P1)	101.106	0	0	0
Aluminium scrap (P4)	120.103 160.118 191.203	205	128	506
Aluminium dross (P2)	100.304	1.040	65	0
Totals		136.203	144.801	158.462¹

Note: P=process

¹ The figure B will therefore be taken as the tonnes of raw materials treated.



The list of products obtained in tonnes over the last three years is as follows:

Product obtenido (t and %*)	2020	2021	2022
Salt	41.279t (33%)	41.989 (29%)	43.347 (27%)
Paval	107.610t (80%)	113.048 (78%)	117.756 (74%)
Aluminium concentrate	10.994t (9%)	11.993 (8%)	13.311 (8%)
Ammonium sulphate	NA	10.661 (7%)	12.113 (8%)
Totals	159.883	177.691	186.527

*Comparison with the total treated material in the corresponding year. The total sum of percentages is greater than 100% due to moisture and generation of new materials (hydrated oxides, etc.).

1.2. Description of Befesa as a group.

Befesa is a service company specialising in the recycling of steel dust, salt slag and aluminium waste, as well as logistics and other related industrial services. It offers environmental services specialising in the integral management of industrial waste from the steel and aluminium industries. Its activity is divided into two business units: Steel Dust Recycling Services and Aluminium Salt Slag Recycling Services.



Servicios de reciclaje de
polvo de acería



Servicios de reciclaje de
escorias salinas de aluminio

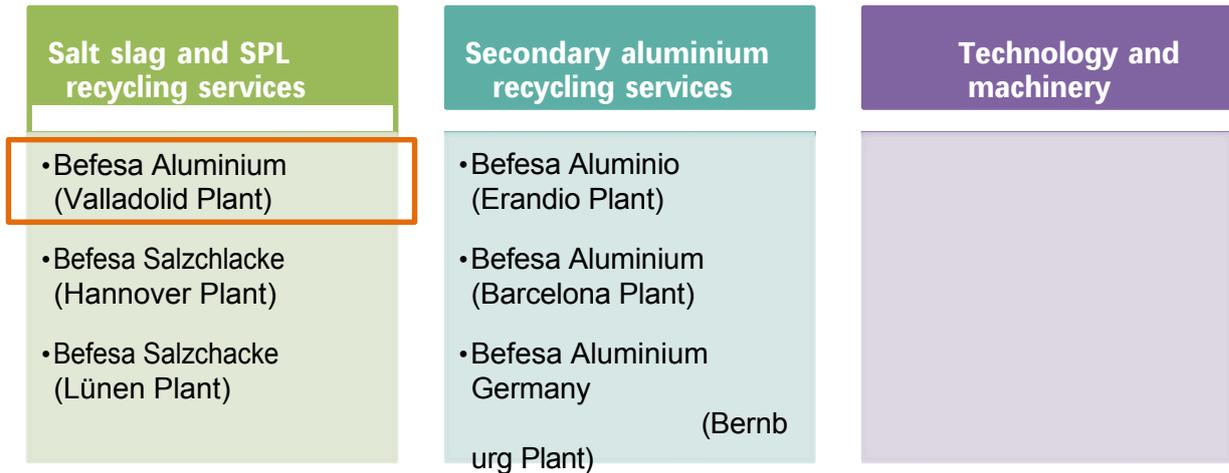
Befesa Servicios de Reciclaje de Escorias Salinas de Aluminio is divided into three services that carry out different but highly complementary activities:

- Recycling services for salt slag, Spent Pot Lining (SPL), spent refractories, and other wastes.



- Second-melting aluminium alloy processing services from scrap and metal-containing waste to produce custom alloys
- Technology and sale of specialised machinery.

ALUMINIUM SALT SLAG RECYCLING SERVICES



1.3. Description of the Integrated Management System.

Befesa Aluminio CT Valladolid has an Integrated Environmental Management System (SIGMA), certified by Bureau Veritas according to the requirements of the UNE-EN ISO 14001:2015 standard and the European Regulation no. 1221/2009 (EMAS) updated by Regulation (EU) 2017/1505 and Regulation (EU) 2018/2026, which is the tool used to implement and put the Environmental Policy into practice, and which enables it to internally manage environmental aspects, as well as to define its environmental objectives.

The documentation of the SIGMA provides an understanding of the organisation, roles and responsibilities within Befesa Aluminio CT Valladolid. There is a Management Manual that describes the interrelationships of the elements of the SIGMA, documents key roles and responsibilities and provides guidance on reference documentation. The manual provides an overview of the management and describes the basic requirements of the system. These requirements are developed through procedures, instructions and specifications for all activities that require them.



2. Integrated management policy and organisational structure

The company management defines an integrated policy on health and safety, quality, environment and energy efficiency in which it formally describes the guidelines and commitments adopted by Befesa. This policy is reviewed periodically on the basis of changes in the organisation, legislation, interested parties, etc. The last review and modification of the policy was in October 2021.

 División Escorias Salinas	Política integrada de Befesa División Escorias Salinas	Fecha: 18/10/2021 Rev.: 08
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Como organización líder en el reciclado y recuperación de residuos de la industria del aluminio primario y secundario, Befesa División Escorias Salinas, que incluye sus plantas de reciclaje en Valladolid (España), Lünen y Hannover (Alemania) centra su actividad en la búsqueda de la excelencia, a través de una gestión segura, eficiente y eficaz que contribuya al desarrollo sostenible.

La Dirección de Befesa División Escorias Salinas es consciente de que el factor clave para el éxito de sus operaciones es la satisfacción de todas las partes interesadas relevantes (clientes, empleados directos e indirectos (contratas y subcontratas), autoridades y legisladores, entorno social, etc.) y de acuerdo con ello, adopta la siguiente política que establece los siguientes compromisos:

- 1. Compromiso con la seguridad y la salud, con la prevención de riesgos laborales y la mejora de las condiciones de trabajo:** Befesa División Escorias Salinas vela por la seguridad y salud en el trabajo de todo el personal (empleados directos e indirectos) a través del cumplimiento de los requisitos legales y otros requisitos aplicables a la seguridad y salud de los trabajadores, aplicando mejoras para erradicar los actos y condiciones inseguras y eliminando los riesgos, mediante una política de cero accidentes, siendo la participación de los empleados un elemento esencial en la prevención de los riesgos laborales y la promoción de la salud. A tal fin, Befesa tiene implantado un sistema de gestión de la seguridad y salud en el trabajo que cumple con los requisitos de ISO 45001:2018.
- 2. Compromiso con un adecuado clima laboral, igualdad de oportunidades en el ámbito laboral, desarrollo de las competencias y conciliación de la vida familiar y laboral:** Befesa División Escorias Salinas promueve la igualdad de oportunidades y la formación para aumentar las competencias de sus trabajadores, y potencia un clima de confianza mediante el cumplimiento de las normas, analizando las necesidades y expectativas de los trabajadores y estableciendo los máximos estándares en las relaciones laborales, basadas en la integridad, la responsabilidad y la lealtad. Befesa dispone de un procedimiento de gestión interna de las bajas con el fin de eliminar las causas de la no asistencia al puesto de trabajo y garantizar el derecho al trabajo activo de todos los empleados.
- 3. Compromiso con la calidad de los productos y servicios:** Befesa División Escorias salinas se compromete a ofrecer a sus clientes productos y servicios con la calidad requerida, enfocados a la mejora continua, de acuerdo con los objetivos estratégicos de la compañía, teniendo en cuenta el contexto de la organización y las necesidades y expectativas de los clientes, evaluando los riesgos e implantando acciones para eliminarlos o reducirlos. Por ello, Befesa tiene implantado un sistema de gestión de la calidad certificado según ISO 9001:2015



- 4. Compromiso con la protección y defensa del medioambiente:** Befesa División Escorias Salinas mantiene un compromiso con la prevención de la contaminación y la preservación del medioambiente, cumpliendo la legislación vigente y otros compromisos que Befesa pudiera suscribir, de acuerdo con el contexto de la organización y considerando sus actividades, productos y servicios a lo largo del ciclo de vida. Por tanto, mantiene un sistema de identificación, evaluación y reducción de los impactos ambientales, promocionando un uso racional de los recursos naturales y la reducción en la generación de residuos, la economía circular, la reducción de emisión de GEI, y la mejora continua. Así, Befesa tiene implantado un sistema de gestión ambiental basado en ISO 14001:2015 y calcula y evalúa su huella de carbono según la norma ISO 14064.

- 5. Compromiso con la eficiencia energética y la gestión de la energía:** Befesa División Escorias Salinas es consciente de la importancia de la gestión eficiente de la energía, manteniendo un objetivo de eficiencia máxima. Por ello, Befesa mantiene un sistema de gestión de eficiencia energética que asegura la mejora continua del desempeño energético, incluyendo la eficiencia energética, el uso de la energía y el consumo energético, estableciendo objetivos de mejora continua, asegurando la disponibilidad de información y recursos necesarios para alcanzarlos, integrando el desempeño energético en las decisiones estratégicas y cumpliendo con los requisitos legales y otros requisitos asociados a la energía y la eficiencia. Así mismo, Befesa Escorias Salinas promueve la adquisición de productos y servicios eficientes energéticamente. Este comportamiento está avalado por la certificación en ISO 50001:2018.

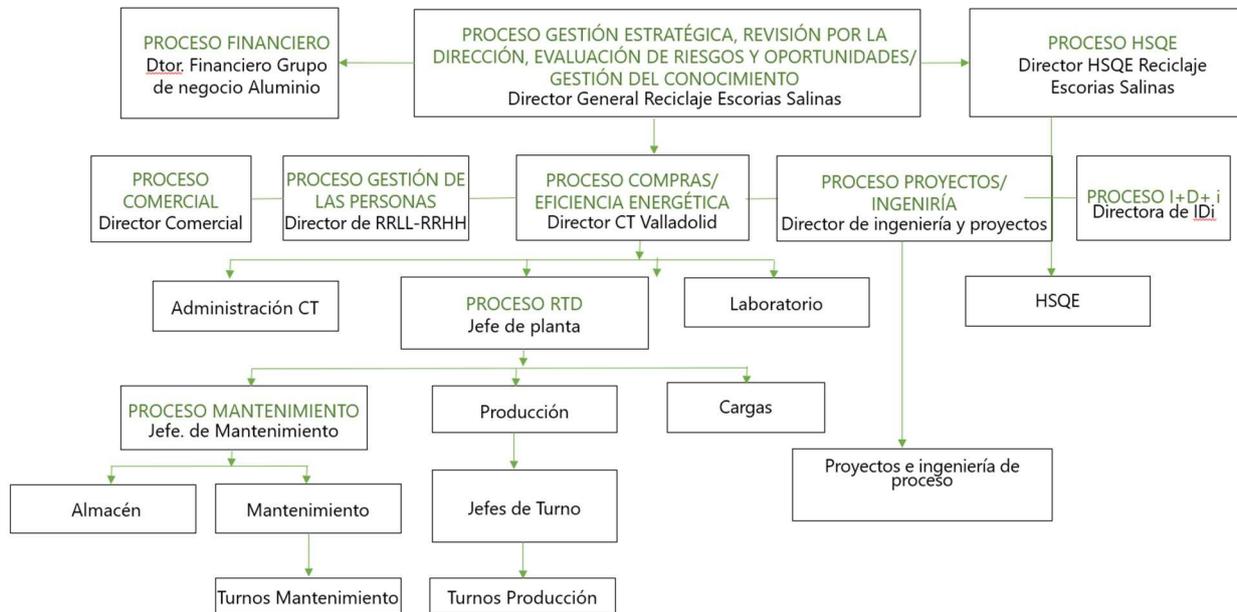
- 6. Compromiso con el carácter reservado de la información y protección y tratamiento adecuado de los datos personales:** Befesa División Escorias Salinas, tomando como base el carácter reservado de la información, promueve la seguridad de los datos legalmente protegidos y el buen uso de las herramientas informáticas, cumpliendo con las directrices establecidas por el grupo Befesa, promoviendo la racionalización, optimización y simplificación de la gestión informática, así como la mejora continua de la eficacia y la eficiencia de los sistemas de la información.

- 7. Compromiso legal, reducción de riesgos y mejora continua:** Befesa División Escorias Salinas se compromete a cumplir los requisitos legales y otros requisitos suscritos, la identificación, evaluación y eliminación o reducción de los riesgos identificados, la prevención de los efectos negativos, la mejora continua, la transparencia, la consideración de las necesidades y expectativas de las partes interesadas relevantes, teniendo en cuenta el contexto y la naturaleza de la organización en el establecimiento de su estrategia.

Dirección de Befesa División Escorias Salinas garantizará el mantenimiento y aplicación de la política y que sea entendida y aceptada por todas las partes interesadas. La política será distribuida a todos los empleados y explicada directamente. La política estará disponible para cualquier parte interesada bajo petición.



For the development of the activities linked to the Integrated Environmental Management System, the Valladolid work centre has the necessary human resources, which are expressly defined in the organisation chart.



3. Environmental aspects.

3.1. Evaluation methodology:

Befesa determines all the direct and indirect environmental aspects that have a positive or negative impact on the environment, as well as which of these aspects are significant on the basis of the established criteria. Therefore, in the identification of environmental aspects, the direct and indirect aspects of the activities, products and services have been taken into account, taking into account the different stages of the life cycle that includes the contracting of treatment services, reception, production, transport and use of the products obtained.

Direct environmental aspects are associated with Befesa's activities, products and services over which the company exercises direct management control. These aspects include:

- Atmospheric emissions
- Discharges to water, including infiltrations to groundwater



- Generation, recycling, reuse, reuse, transport and disposal of hazardous and non-hazardous wastes
- Land use and contamination
- Energy use
- Use of additives and auxiliaries
- Local problems (noise, vibrations, odours, dust, visual appearance)

Indirect environmental aspects are the result of interaction between the company and third parties and which can be influenced to a reasonable degree. These aspects include:

- Life cycle issues that can be influenced by the organisation
- Investments
- New markets
- Environmental performance and practices of contractors and

suppliers The assessment of the significant nature of the aspects takes into account:

- Relevant applicable legislation and internal requirements.
- Damage or benefits to the environment, including biodiversity
- Damages or benefits to the company.
- Situation of the environment
- Severity, frequency and reversibility of the aspect or impact
- Stakeholder interest/complaints

On the basis of these criteria, in the evaluation of the significance of the aspects, scores are assigned to determine which aspects are significant. For this purpose, the following are taken into account:

- Existing data on material and energy consumption, discharges, wastes and emissions in terms of risks.
- Activities regulated by environmental legislation
- Recruitment activities
- Activities with the most significant environmental costs and benefits.

In addition, account is taken of normal operating conditions, (abnormal) start-up and shutdown conditions and reasonably foreseeable emergency conditions, past, present and future, as well as investigations of previous incidents or accidents.



3.2. Significant environmental aspects.

Befesa takes into account the direct and indirect environmental aspects of its activities, products and services, including those derived from new projects, emergency situations or abnormal operating conditions that may have an impact on the surrounding environment.

Furthermore, in accordance with the new ISO 14001:2015 standard, the European Regulation 2017/1505 amending Annexes I, II and III of the European Regulation 1221/2009 (EMAS), and Regulation (EU) 2018/2026 amending Annex IV of Regulation (EC) For each of the identified aspects, the changes to the environment from a life cycle perspective (environmental impacts) are determined for each of the aspects identified.

Befesa considers its significant environmental aspects in the planning of its Integrated Environmental Management System and in the definition of its environmental objectives and targets: Positive direct and indirect environmental aspects that are considered significant under normal conditions:

Environmental aspects significant	It comes from:	Environmental impact	Remarks
Consumption of recycled raw materials.	Aspects assessment 2022 and 2023.	Protection of natural resources	Befesa CT Valladolid closes the circle of natural resource protection by collecting hazardous industrial waste, recycling it and then reintroducing valuable materials into the production process (salt, paval, aluminium and ammonium sulphate). Befesa has been part of the circular economy for more than three decades.
Hazardous waste treatment	Aspects assessment 2022 and 2023.	Protection of natural resources	Befesa CT Valladolid's activity consists of providing sustainable solutions to the primary and secondary aluminium industry by servicing and recycling the hazardous waste generated.
Company environmental responsibility	Aspects assessment 2022 and 2023.	Protection of natural resources	Befesa CT Valladolid has an environmental liability insurance policy that covers the liabilities derived from its activity.



Negative direct environmental aspects that are considered significant under normal conditions:

Significant environmental aspects	It comes from:	Environmental impact	Actions
Water consumption	Assessment of aspects 2022 and 2023	Depletion of natural resources	Reuse of process water and rainwater Target 2022 and 2023.
Electricity consumption	Assessment of aspects 2022 and 2023	Depletion of natural resources	Certification in ISO 50001 and establishment of energy efficiency measures Target 2022 and 2023.
Generation of non-hazardous waste	Assessment of aspects 2023.	Soil contamination	Study of materials to increase the service life of filter cloths.
Gas consumption	Assessment of aspects 2022. In 2023 it is no longer significant.	Depletion of natural resources	MNS n°19. Replacement of automated drying with natural drying (fume hoods)

The use of natural drying (hood aspiration system) to the detriment of automated drying in the rotary dryer (natural gas consumption) has made it possible to reduce the impact of gas consumption by the year 2023, resulting in a non-significant aspect.



4. Programme of objectives and targets.





On an annual basis, objectives and targets are established based on the identification and evaluation of environmental aspects and impacts. The evolution of the actions planned and the degree of compliance with the established objectives are reviewed on a monthly basis.

4.1. Summary of objectives and targets 2021-2022.

The following objectives were set for the financial year 2021, the results of which could be quantified in 2022:

- **Environmental aspect: electricity consumption**

Adequacy of compressed air installations		Associated indicator: kW/t processed	Annual target value: 5% reduction in electricity consumption compressed air
Targets	Responsible	Deadline	Media
The aim is to improve the compressed air installation by producing savings in the energy management of the compressed air installation.	Energy efficiency	December 2021	6.000€

In December 2021, more modern equipment with variable frequency drives and improved energy management (stop/start flow control for leakage and waste analysis) was installed. The associated compressed air power consumption indicator (kW/t processed) for 2021 was 5.25, by 2022 it will be 5.01, a saving of 5%.

1% reduction in electricity consumption-Associated code 06kWh/t1% savings	Indicator processed	Target value : annual: FO-	
		processed	obtained
Targets	Responsible	Deadline	Media
Establish energy contingency and self-consumption plans.	Energy efficiency	December 2021	300.000€
Adjusting the compressed air system	Energy efficiency	December 2021	90.000€
Adapt the consumption of large consumers to the real needs of the plant.	Energy efficiency	December 2021	To be determined

Implemented OCR (Network Outage Body) for consumption control and line change for the work centre.



Installed emergency generator with connection to key process equipment and possibility of operation as required.

The compressed air installation has been adapted in December 2021 and the monitoring of compressed air consumption is started.

Target met. 85 kWh/t in 2021 compared to 84 kWh/t in 2022. This represents a decrease of 1%.

The following objectives were set for the financial year 2022:

- **Environmental aspect: gas consumption.**

Reduction of gas consumption per processed tonne of salt slag (ES) to below 441kWh/t by favouring natural drying over automated drying in the rotary (MNS19)		Associated indicator: kWh/t ES processed	Annual target value: 441 kWh /t EN
Targets	Responsible	Deadline	Media
M1.- Increase the current gas collection capacity of the turkey storage facility. M2.- Optimise the NH3 gas scrubbing system. existing	Projects/ Energy efficiency	December 2022	800.000€

The project was carried out in two phases. The first phase involved the enlargement of the extraction hood of the peacock storehouse, the installation of new complementary hoods and the installation of a second filling bed in the existing scrubbers, increasing their total height.

The use of natural drying (hood aspiration system) to the detriment of automated drying in the rotary dryer (natural gas consumption) has made it possible to meet the target value for the year by avoiding the consumption of natural gas in the equipment.

405 kWh/tES have been consumed in 2022.

Objective achieved

- **Environmental aspect: electricity consumption.**

Reduction of in-plant electricity consumption per tonne processed to below 90kWh/t by improving consumption control. - Internal Code 2022-EE-RO-1: Improve the control of energy consumption		Associated indicator: kWh/t processed	Annual target value: 90 kWh /t
Targets	Responsible	Deadline	Media



<p>M1.-Make a power map defining the relevant areas and the consumers within each area M2. the controls controls in powercloud M3.-Expose the consumptions per processed tonne</p>	<p>Energy Efficiency</p>	<p>December 2022</p>	<p>NA</p>
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The different consumers have been defined by areas and data collection and controls have been updated in real time for subsequent analysis, which has made it possible to be more efficient in monitoring electricity consumption on a day-to-day basis in order to act more quickly in the event of any deviations detected.

The indicator associated with the target at the end of the year is 84 kWh/t processed, so the target is met.

Note: For this purpose, tonne processed is defined as SPL and treated salt slag.

Objective achieved

- **Environmental aspect: water consumption.**

<p>Reduction of water consumption per tonne processed by 2% compared to 2021 by means of the improved stormwater management. - Code internal 2022-RTD-RO-2.</p>	<p>Associated indicator: m³/t processed</p>	<p>Value objective annual: 1.02m³/t</p>	
<p>Targets</p>	<p>Responsible</p>	<p>Deadline</p>	<p>Media</p>
<p>M1.-Installation of water pipes to feed the filter press from the waste water tank. M2.-Commissioning and optimisation of the system</p>	<p>Production</p>	<p>July 2022</p>	<p>5.000€</p>

Target 1: Installation completed by the end of February.

Target 2: In March, the testing phase begins, with some modifications being made. After verifying its satisfactory operation, the installation is prepared for continuous operation, becoming operational in July. The water collected in the rainwater tanks is mainly used for washing the crystallisation area, replacing the water collected from the condensate tanks.

The indicator associated with the target at the end of the year is 0.98 m³ /t processed, which means that the target is met.

Note: For this purpose, tonne processed is defined as SPL and treated salt slag.

Objective achieved

- **Other environmental objectives.**



Reduction of MSW by 10% compared to 2021 - Internal Code 2022-HSQE-RO-5		Associated indicator: t MSW	Annual target value: 11,50 t
Targets	Responsible	Deadline	Media
M1.-Placement of selective collection containers in changing rooms, plant areas. Quarterly monitoring of waste generation. M2.- Development of MA documentation for internal trainings (examples of bad practice/good practice) M3.-Training on waste management for own and contracted personnel M4.-Adaptation to the TC of Valladolid of the corporate waste management procedure	Quality, Environment and Prevention	December 2022	NA

The placement of selective collection containers (cardboard, plastic and MSW), not only in the common areas, but also during maintenance stops, has led to an improvement in the segregation of waste, achieving a reduction in Solid Urban Waste (SUW), with a consequent increase in the cardboard and plastic fractions.

In order to encourage their use and correct segregation, documents have been drawn up and waste management awareness training has been provided.

The indicator associated with the target at the end of the year is 9.72t of MSW, which means that the target is met.

Objective achieved

Adaptation to ISO14064:2018 for the improvement of the company's environmental footprint-Internal Code 2021-HSQE-RO-2		Associated indicator: NA	Annual target value: Obtain certification
Targets	Responsible	Deadline	Media
M1.- Recalculation of scope 3. M2.-Update the corresponding procedure. M3.-Internal audit M4.-Certification	Quality, Environment and Prevention	December 2022	1.500€

During 2022 the Valladolid site has been certified to ISO 14064:2018, including the recalculation of scope 3 (indirect emissions).

Objective achieved

Minimising the consequences of energy supply shortages-Internal code: 2022-EE-RO-2		Associated indicator: NA	Annual target value: NA
Targets	Responsible	Deadline	Media



M1.-Connection of the compressed air system to the stand-alone system M2.-Procedure the protocol for action in the event of a power failure. M3.-Enter the corresponding proceedings	Energy Efficiency	December 2022	NA
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In February, the compressed air was connected to the emergency generator and the system connected to the SCADA to manage the automatic start-up of the connected equipment.

In March, the technical instruction is carried out where the action protocol is defined and the first tests and training are carried out in August and December, prior to the maintenance shutdown, with satisfactory results.

Objective achieved

4.2. Summary of objectives and targets 2023.

After reviewing and analysing the results of the 2022 financial year, taking into account the significant environmental aspects and analysing our business unit risks and opportunities, the following objectives for 2023 are formulated.

Environmental aspect: non-hazardous waste generation

5% reduction of waste from filter maintenance (press and belt) by extending the life of the belt filter cloths. Internal code: 2023-HSQE/MAI-Other-1	Associated indicator: t filter fabrics produced	Annual target value: 14.38t
Targets	Responsible	Deadline
M1.-Searching for alternative fabrics for band filters M2.-Quarterly monitoring of the indicator	Quality, Environment and Prevention /Maintenance	December 2023
		Media
		NA

Environmental aspect: water consumption

Maintain water consumption by 2022, despite increasing water-consuming equipment, through new water reuse systems in the water sector. process-Internal code: 2023-RTD-RO-1	Associated indicator: m3/t processed	Annual target value: 0.98
Targets	Responsible	Deadline
M1.-Study and monitoring of water collected at the plant. M2.-Action plan for modifications.	Production	December 2023
		Media
		4.000€

Environmental aspect: electricity consumption



Maintaining electricity consumption, despite increasing consumers, by optimising equipment, processes and uses in Internal code: 2023-RTD-RO-2		Associated indicator: kWh/t processed	Annual target value: 96
Targets	Responsible	Deadline	Media
M.1.- Review of each area of the plant to identify non-optimised points (changes in the process, inadequate habits, etc.). M.2.- Action plan to reduce consumption electrical and monitoring	Production	December 2023	200.000€

Maintain 2022 consumption by optimising the evaporation plant to run all crystallisers at the same time. Internal code: 2023-EE-OTHER-2		Associated indicator: kWh/t processed	Annual target value: 32
Targets	Responsible	Deadline	Media
Goal 1: Study by a specialised company Goal 2: Modification of the working conditions of the first phase Goal 3: Study and removal of impurities where appropriate insoluble in brine (carbonates, etc.)	Energy Efficiency	December 2023	5.000€

Environmental aspect: other

Improve greenhouse gas reporting - Internal code: 2023-GEI-1		Associated indicator: N/A	Annual target value: N/A
Targets	Responsible	Deadline	Media
M1.- Include indirect emissions in the assessment of environmental aspects M2.- Seek new sources of information to reduce the uncertainty of the associated data. M3.- Improving the data collection system M4.- Modify the materiality assessment procedure to improve the reporting of indirect emissions. M5.- Integrate the inventory with the rest of the salt slag plants in order to carry out internal and external audits. joint external	Quality, Environment and Prevention	August 2023	2000€



5. Befesa's environmental performance.





The following section reflects the company's environmental performance.

All indicators presented below are represented in absolute and relative ratios (per tonne of total raw material processed).

5.1 Atmospheric emissions.

The designation of the outbreaks changes in 2021 following the entry into force of the new integrated environmental authorisation. In 2022, a new source, No. 10, is added as a result of MNS No. 19 of the AAI. There are 10 emission sources, listed below.

- Focus no. 1: boiler A.
- Focus no. 2: Boiler B.
- Focus no. 3-6: Belt filter extraction-Rotary dryer-Scrubber
- Focus no. 4: Flare duct
- Focus no. 5: extraction of salt slag milling baghouse.
- Focus No. 7: Aluminium slag filter grinding extraction
- Focus No. 8: Sampling furnaces.
- Focus No. 9: Scrap milling
- Focus area 10: Diffuse ammonia emissions

Befesa Aluminio CT Valladolid complies with Royal Decree 100/ 2011, of 28 January, which updates the catalogue of activities that potentially pollute the atmosphere and establishes the basic provisions for its application. The installation, layout and dimensions of connections and accesses are adequate for measurements and sampling. The results of the last inspection are entirely within the authorised limits of the regulations in force.

The results of the emission measurements carried out during the year 2022 are presented below, in addition to the emission limit values of the sources established in our AAI (Integrated Environmental Authorisation). As part of the Befesa Aluminio, SL CT Valladolid self-monitoring system, more measurements are taken than strictly required in the AAI. The data presented are the average of the measurements taken in 2022, none of which exceeded the limits reflected in the AAI in force at that time.



- **Focus 1: Boiler A.** This boiler is the one used under normal operating conditions.

Parameter assessed	2020	2021	2022	VLE
CO mg/ Nm ³	<6,5	3,67	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	100
CO kg/ t	4,77*10 ⁻⁵	2,53*10 ⁻⁵	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	N/ A
NO _x mg/ Nm ³ expressed in NO ₂	167,5	178,04	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	200
NO _x kg/ t expressed in NO ₂	0,001	0,001	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	N/ A



*Biennial periodicity according to AAI

- **Focus no. 2: boiler B.** Occasional use (maintenance operations or breakdowns of boiler A).

Parameter assessed	2020	2021	2022	VLE
CO mg/ Nm ³	<7,5	3,9	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	100
CO kg/ t	5,51*10 ⁻⁵	2,69*10 ⁻⁵	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	N/ A



			N/A* N/A* N/A* N/A	
NOx mg/ Nm ³ (expressed as NO ₂)	68	98,66	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	200
NOx kg/ t expressed in NO ₂	4, ⁹⁹ 10 ⁻⁴	6, ⁸¹ 10 ⁻⁴	N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A* N/A*	N/ A

*Biennial periodicity according to AAI

- **Focus no. 3-6:** Belt filter extraction-Rotary dryer-Scrubber

Parameter assessed	2020	2021	2022	VLE
HCl mg/ Nm ³	<0,1	0,1065	0,10	230
HCl kg/ t	7, ³⁴ 10 ⁻⁷	7 ³⁵ 10 ⁻⁷	6, ³¹ 10 ⁻⁷	N/ A
NH ₃ mg/ Nm ³	9,7	0,4925	0,058	10*
NH ₃ kg/ t	7, ¹² 10 ⁻⁵	3, ⁴² 10 ⁻⁶	3, ⁶⁶ 10 ⁻⁷	N/ A
PH ₃ mg/ Nm ³	N/ A	0,0246	0,023	10*
PH ₃ kg/ t	N/ A	1, ⁷⁰ 10 ⁻⁷	1, ⁴⁵ 10 ⁻⁷	N/ A
SH ₂ mg/ Nm ³	N/ A	0,21	0,18	2*
SH ₂ kg/ t	N/ A	1, ⁴⁵ 10 ⁻⁶	1, ¹³ 10 ⁻⁶	N/ A
Particulates mg/ Nm ³	-	0,97	0,71	5*
Particulates kg/ t	N/A	6, ⁷⁰ 10 ⁻⁶	4, ⁴⁸ 10 ⁻⁶	N/ A

*VLE of the new environmental authorisation.



- **Focus no. 4:** Torch

No measurements are taken as this is not a requirement of the integrated environmental authorisation.

- **Focus no. 5:** baghouse extraction salt slag grinding.

Parameter assessed	2020	2021	2022	VLE
Particulate matter, (PM ₁₀) mg/ Nm ³	<1	0,66	0,45	5
Particulates, (PM ₁₀) kg/ t	7,34*10 ⁻⁶	4,56*10 ⁻⁶	2,839*10 ⁻⁶	N/ A



- **Focus no. 7:** extraction filter grinding of aluminium slag.

Parameter assessed	2020	2021	2022	VLE
Particulate matter, (PM ₁₀) mg/ Nm ³	<1	N/A	1,47	5
Particulates, (PM ₁₀) kg/ t	7,34*10 ⁻⁶	N/A	9,27*10 ⁻⁶	N/A



In 2021 the facility has been idle.

- **Focus no. 8:** Sampling furnace.

Parameter assessed	2020	2021	2022	VLE
Particulate matter, (PM ₁₀) mg/ Nm ³	<1	1,55	<0,59	5
Particulates, (PM ₁₀) kg/ t	7,34*10 ⁻⁶	1,07*10 ⁻⁵	3,723*10 ⁻⁶	N/ A



- **Focus no. 9:** extraction and milling of aluminium scrap.

During 2022, no emission measurements have been carried out at source no. 9 of the scrap grinding extraction facility due to the fact that the installation has not been used, and this situation has already been communicated.



- **Focus area 10:** Diffuse ammonia emissions

Parameter assessed	2020	2021	2022	VLE
Point average (NH3) mg/ Nm3	-	-	0,091	10
Point average (NH3) kg/ t	-	-	$5,76 \cdot 10^{-3}$	NA

The data in the table shows the average of the results of the three sampling points of the report, all of them individually being within the established limits.

The total channelled emissions in 2022 of CO, NO_x, Cl⁻, NH₃ and PM have been as follows.

Parameter assessed	2020	2021	2022
Particulate matter, (PM ₁₀) kg	402	716	1035
Particulates, (PM ₁₀) kg/ t	0,003	0,005	0,007
NO ₂ kg	4.466	4.795	4.576
NO ₂ kg/ t	0,033	0,033	0,029
CO kg	160	99	94
CO kg/ t	0,001	0,0007	0,0006
Cl ⁻ kg	22	60	95
Cl ⁻ kg/ t	$1,61 \cdot 10^{-4}$	$4,14 \cdot 10^{-4}$	$5,99 \cdot 10^{-4}$
NH ₃ kg	2194	261	55
NH ₃ kg/ t	0,016	0,002	0,0003
SO ₂ kg	498	0	0
SO ₂ kg/ t	0,004	0	0

In relation to annual greenhouse gas emissions, the direct emissions (scope 1) and indirect emissions from energy (scope 2) of Befesa Aluminio S.L CT Valladolid totalled 16,424.09 t CO₂ eq, or 0.104 t CO₂ eq per tonne of material treated.

The annual emissions of each type of greenhouse gas in 2022 are as follows:



Emissions of greenhouse gases greenhouse	2020	2021	2022
CO ₂ (t CO ₂ equiv.)	16.569	16.781	16.409
CO ₂ (t CO ₂ equiv./t processed)	0,114	0,115	0,103
CH ₄ (t CO ₂ equiv.)	7,10	7,39	6,25
CH ₄ (t of CO ₂ equiv./ t processed)	5,21*10 ⁻⁵	5,10*10 ⁻⁵	3,95*10 ⁻⁵
N ₂ O (t of CO ₂ equiv.)	9,64	9,59	8,31
N ₂ O (t of CO ₂ equiv./ t processed)	7,08*10 ⁻⁵	6,62*10 ⁻⁵	5,24*10 ⁻⁵
HFCs (t CO ₂ equiv.)	0	0	0
HFCs (t CO ₂ equiv./ t processed)	0	0	0
SF ₆ (t CO ₂ equiv.)	0	0	0
SF ₆ (t CO ₂ equiv./t processed)	0	0	0

Effect gas greenhouse	2020	2021	2022
Total emissions	16.585,31	16.798,40	16.424,09
Total emissions/ ton	0,122	0,116	0,104

No PFCs (perfluorocarbons) and NF₃ (nitrogen trifluoride) have been emitted.

In 2022, the ISO14064 Greenhouse Gas (GHG) audit was carried out jointly with the plants of the Salt Slag Division.

Table: GHG inventory summary of the Salt Slag Division

	t CO ₂ eq	t CO ₂ eq	t CO ₂ eq
SCOPE 1	TOTAL BES-Valladolid	TOTAL BSG-Lünen	TOTAL of all plants
Total scope 1	12.640,57	36.250,57	48.891,13
SCOPE 2			
Electric power	3.783,52	5.883,99	9.667,51
Steam	NA	12.831,79	12.831,79
TOTAL Scope 2	3.783,52	18.715,78	22.499,31
TOTAL (SCOPE 1 AND 2)	16.424,09	54.966,35	71.390,44



5.2 Noise.

The noise and vibrations emitted in our facilities are those typical of the activity of the industrial treatment plant due to the machines in movement and the movement of lorries transporting raw materials or our products.

For the evaluation of noise emissions into the atmosphere, we have taken as a reference both the legislation in force and the periodicity (biennial) and emission limits established in our AAI (night noise: 55 Laeq dB (A) and daytime noise: 65 Laeq dB (A)).

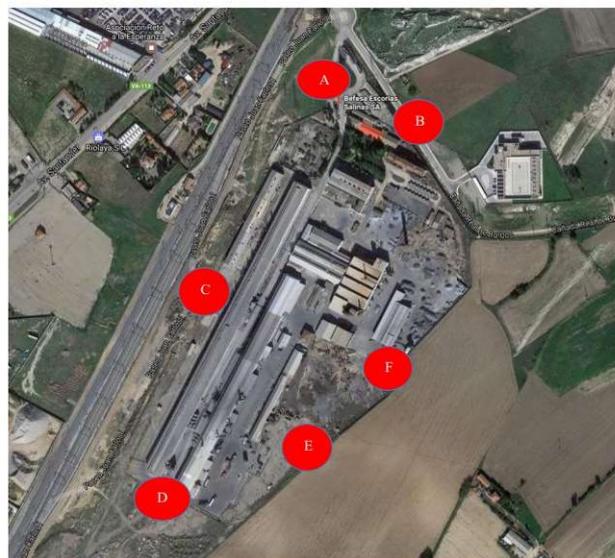
Also taken into account was Law 5/2009 of 4 June 2009, on noise in Castilla y León, which establishes in Article 13 that, in the case of corrections for the presence of emerging tonal components, low frequency or impulsive noise, the limits will be 5 dB(A) higher than the corresponding value in Annex I.

For this reason, the limits applicable to Befesa Aluminio CT Valladolid are 70 dB (A) during the day and 60 dB (A) at night.

The results of the 2021 biennial measurements are as follows:

Date 27/01/2021	Point A dB	Point B dB	Point C dB	Point D dB	Point E dB	Point F dB
Daytime	58,4	53,2	53,5	63,8	61,4	55,7
Nocturno	53,9	57,1	57,8	52,2	52,2	53,9

The measurement points are shown on the map below:



Fuente: Google Maps



5.3 Water

At Befesa Aluminio CT Valladolid, all water generated in the production process and rainwater or runoff water is collected through a system of storage tanks. This recovered water is pumped back into the process to cover part of the water consumption needs. The existence of these tanks allows us greater room for manoeuvre in the event of a possible accidental spillage that could affect the discharge point.

Outside the process, Befesa Aluminio CT Valladolid has a water discharge authorisation granted by the Confederación Hidrográfica del Duero whose parameters are periodically checked by means of analyses carried out by an accredited laboratory. The analytical results are shown below with a comparison of the limit values. **Control point 1: PC-1**

- The company discharges its rainwater directly into the river Pisuerga through the outfall of the Duero canal.

Parameter	2020	2021	2022	Limit value AAI
pH	7,42	7,22	7,35	6-9
Aluminium	0,007	0,1	0,1	0,5 mg/ L
Suspended solids	8,75	10	10	35 mg O2/ L
COD	39	46,75	54,75	125 mg O2/ L

Quarterly controls are carried out. The data in the table show the average of the 4 annual analyses. All of them are within the established limits.

With regard to stormwater discharge, during 2022 it was 9,377 m³, which is within our Integrated Environmental Authorisation of 31,500 m³.



Checkpoint 2: PC-2

- There is a septic tank with seepage of sanitary sewage into the ground. This discharge is characterised as "urban".

Parameter	2020	2021	2022	Limit value AAI
BOD5	<15	34	19,75	60 mg O2/ L
COD	94	80	42,50	200 mg O2/ L
Solids in suspension	33	28	7,25	90 g/ L
pH	NA	8	7,97	5.5-9.5 ud pH

Quarterly controls are carried out. The data in the table show the average of the 4 annual analyses. All of them are within the established limits.

Taking into account the number of workers and average water consumption, the estimated discharge from the septic tank is 653m³ compared to 990m³ for the AAI.

- Discharge estimate= $Tm \cdot Cm \cdot d$ (2022)
- Tm : average no. of workers=60= no. of hours worked in 2022(172,303h)/(8h*365)
- Cm : Average water consumption per person (without shower) =133L (average water consumption according to INE*)-100L (shower)=33L
 - Data taken from the 2020 Water Supply and Sanitation Statistics published by the National Statistics Institute (INE) in 2021.
 - The average water consumption for showering according to the WHO is 100l for 5 minutes.
- d (2022): Days worked in 2022 in Valladolid TC=330

5.4 Waste production.

In accordance with the provisions of Law 7/2022, of 8 April, on waste and contaminated soils for a circular economy, Befesa Aluminio CT Valladolid is considered a producer of hazardous waste.

Hazardous waste generated during 2022 is as follows:



Producer No 07P01094700000009				
Hazardous waste IWWW	LER code	2020	2021	2022
Used oil (t) and (t/ t)	130205	1,70	2,86	1,77
		1,35*10 ⁻⁵	1,97*10 ⁻⁵	1,11*10 ⁻⁵
Aerosols (t) and (t/t)	160504	0	0	0,055
		0	0	3,47*10 ⁻⁷
Packaging of leftover substances hazardous (t) and (t/ t)	150110	14,32	0,6	0,420
		1,05 *10 ⁻⁴	4,14 *10 ⁻⁶	2,65*10 ⁻⁶
Absorbents, absorbent materials filtration (t) and (t/ t)	150202	3,10	6,97	4,7
		2,28*10 ⁻⁵	4,81*10 ⁻⁵	2,97*10 ⁻⁵
Oil filters (t) and (t/ t)	160107	0,07	0,12	0,04
		5,14*10 ⁻⁷	1,38*10 ⁻⁶	2,52*10 ⁻⁷
Chemicals (t) and (t/ t)	160506	0,02	0,04	0,015
		1,47*10 ⁻⁷	8,29*10 ⁻⁷	9,46*10 ⁻⁸
Fluorescent tubes (t) and (t/ t)	200121	0,13	0	0,01
		9,54*10 ⁻⁷	0	6,31*10 ⁻⁸
Batteries (t) and (t/ t)	200133	0	0,0402	0
		0	2,76*10 ⁻⁴	0
Non-halogenated organic solvent (t) and (t/ t)	120301	1,2	1,4	1,4
		8,81*10 ⁻⁶	9,67*10 ⁻⁶	8,83*10 ⁻⁶
Grinding dust (t) and (t/ t)	100321	427,29	0	0
		3,14*10 ⁻³	0	0
Total (t) and (t/ t)		447,83	12,03	8,42
		0,0031	8,3*10 ⁻⁴	5,31*10 ⁻⁵

Non-hazardous waste generated during 2022 is as follows:

Producer No. 07P03204700000009				
Non-hazardous waste IWWW	LER code	2020	2021	2022
RCDs	170107	10,28	8,98	0
		7,55*10 ⁻⁵	6,20*10 ⁻⁵	0
Cardboard and paper (t) and (t/ t)	150101	2,760	2,26	2,34
		2,03 *10 ⁻⁵	1,56*10 ⁻⁵	1,48*10 ⁻⁵
Wood (t) and (t/ t)	150103	8,10	9,24	8,2
		5,95*10 ⁻⁵	6,38*10 ⁻⁵	5,17*10 ⁻⁵
Scrap (t) and (t/ t)	Various	1.671,98	1.785,56	1.838,00
		1,23*10 ⁻³	0,012	0,11
Septic tank sludge (t) and (t/ t)	200304	67,44	66,92	64,3
		4,95*10 ⁻⁴	4,62*10 ⁻⁴	4,00*10 ⁻⁴
Total (t) and (t/ t)		1.760	1.873	1.913
		0,011	0,013	0,012

All waste produced has been handed over to authorised waste management companies for treatment and/or disposal.

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CT Valladolid.

² Battery data for 2021 corrected

**Environmental
Declaration 2022**





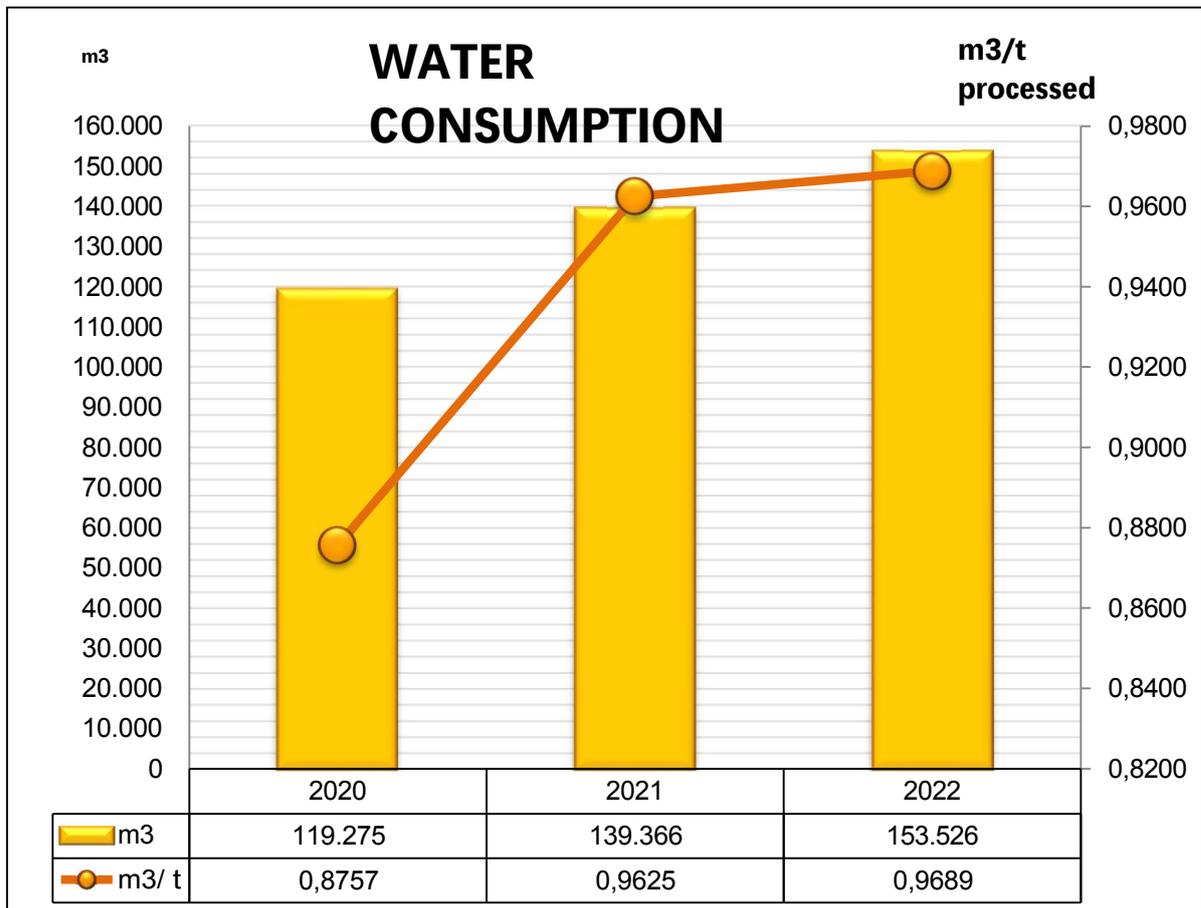
6. Basic environmental indicators.





6.1. Water consumption.

The volume of water from the well used from process 1 per total unit of tonnes processed is shown below.



The amount of water used was 153,526 m³ compared to the 119,300 m³ authorised in our Integrated Environmental Authorisation, which means a consumption of 0.9689 m³ per tonne processed. The increase in water consumption per tonne processed is due to the modification of the suction systems of the turkey store, which required the gas scrubbers to be enlarged in order to capture the ammonia sucked in, and to the scarce rainfall during the year, which prevented the reuse of the rainwater collected.

At the end of 2020, procedures were initiated with the Duero Hydrographic Confederation for a modification of the groundwater exploitation concession. The application to extend the water catchment was submitted and signed in January 2021, the last communication received from the Hydrographic Confederation being dated 13/03/2023. This communication indicates that, in principle, the Water Quality Department has no objection to the modification of the characteristics and requests justification for the fact that



the increase in the volume collected from the well does not imply a modification in the characteristics of the discharge, as justified in the communication to the Confederación Hidrográfica del Duero dated 16/03/2023. A resolution by the Confederación Hidrográfica del Duero is still pending.

With regard to the rest of the processes, water is only consumed from the Valladolid water network for sanitary use, and is therefore not considered significant, being less than 1% of the consumption of water from the well.

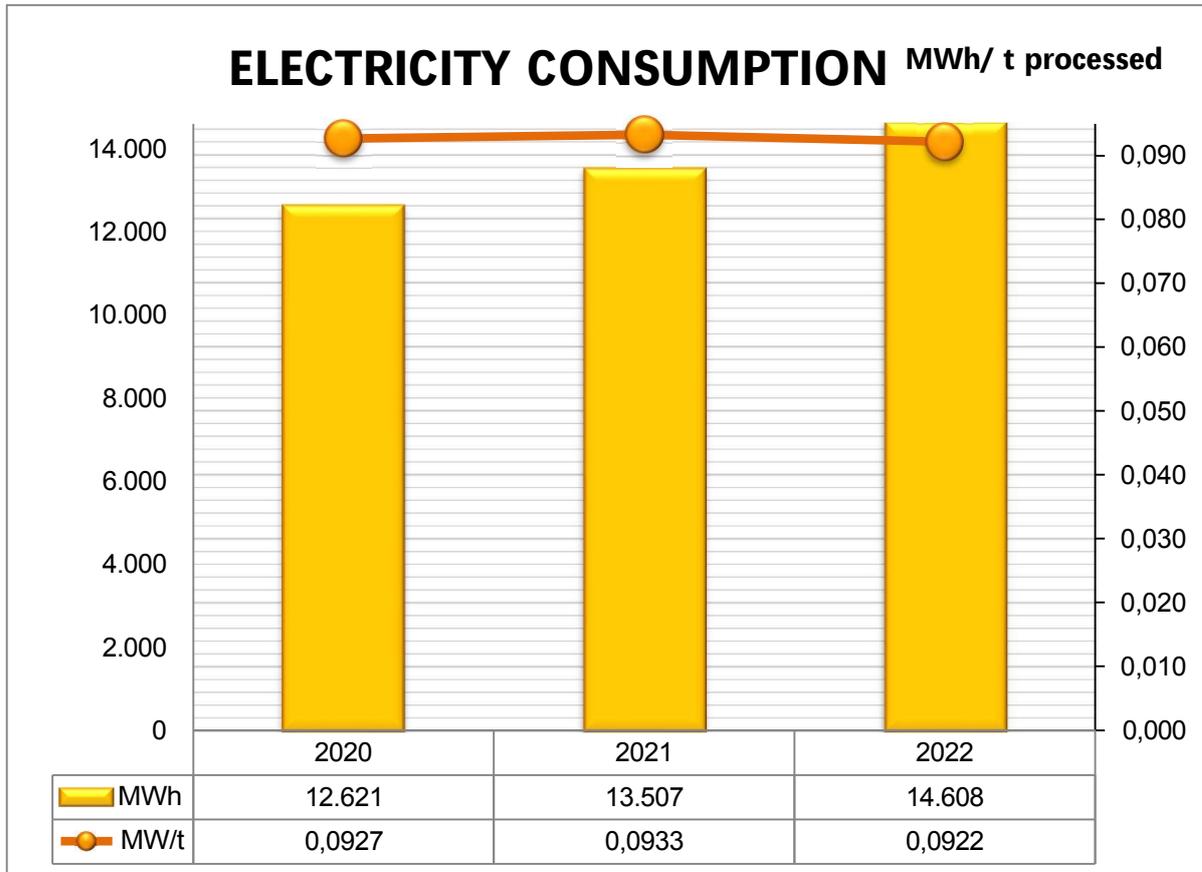
6.2. Energy consumption.

The main fuel at Befesa Aluminium S.L. CT Valladolid is natural gas, which is used in the steam generating boilers, in the rotary dryer and in the torch.

The electrical energy is used to power the motors of pumps, mills, conveyor belts, fans, etc., as well as to control the entire plant.

Diesel fuel is not used in the production process, but is used for internal transport (loaders and forklifts), the heating boiler in one of the buildings and nitrogen for the inertisation of the reactors.

Electricity: The total electricity consumption for the last three years per total tonne processed is as follows.



Consumption per tonne processed remains almost constant, which shows a higher energy efficiency of the process, as the new turkey warehouse facilities have been in operation during 2022, which means an increase in electricity consumption.

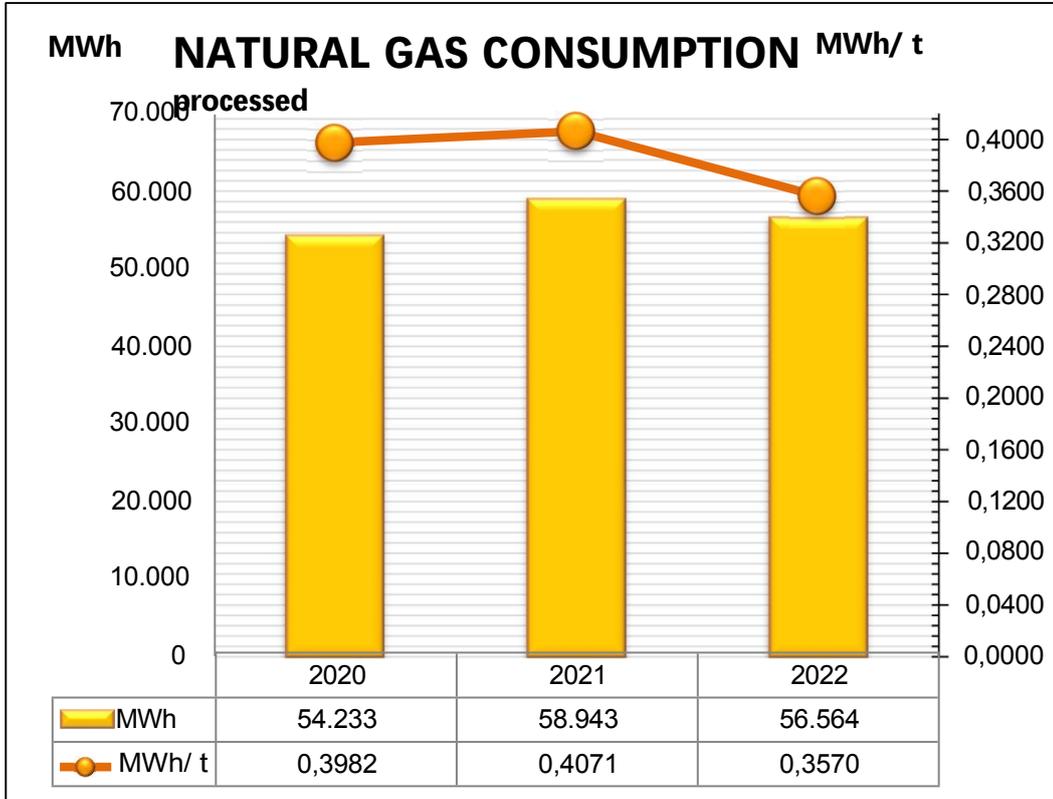
The energy consumed by the organisation from renewable energy sources is 26 % of the annual consumption in 2022. The origin of the electricity production is guaranteed by the breakdown of the mix of production technologies corresponding to the energy sold by the energy supplier presented on each invoice.

Renewable energy			
Year	Renewable energy	Mwh	Mwh / t
2020	14	1.798	0,013
2021	19	2.613	0,018
2022	26	3.739	0,024

No energy generated by the organisation is produced from renewable energy sources.



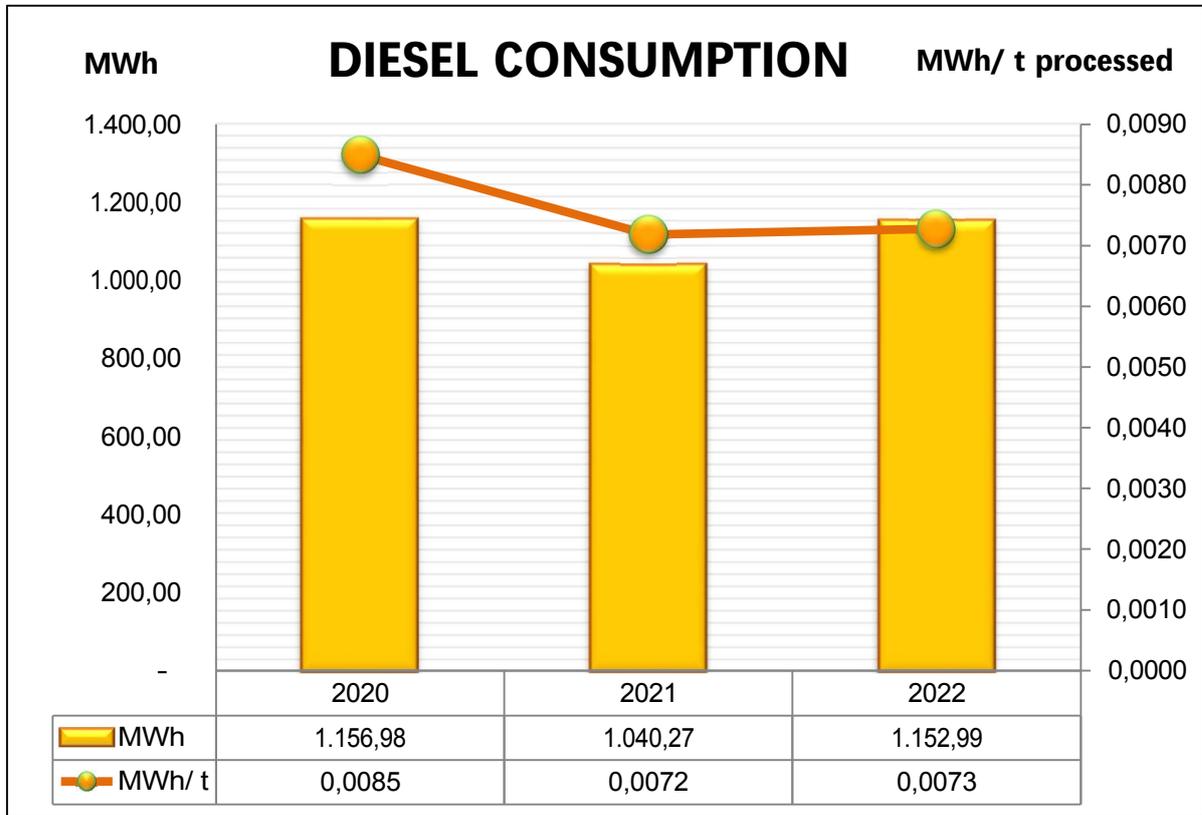
Natural gas: The consumption of natural gas used to fuel the boilers over the last three years is as follows:



The use of natural drying (hood aspiration system) to the detriment of automated drying in the rotary dryer (natural gas consumption) has made it possible to meet the target value for the year by avoiding the consumption of natural gas in the equipment.



Diesel: Diesel is used for heating the offices and as fuel for the machinery (loaders). The consumption for the last three years is shown below.



The conversion of diesel to MWh has been done through the PCI (lower calorific value) of the diesel, obtained from the value given by the IDAE 2020 and the density of the safety data sheet, being the value of 10.033 kWh/l.

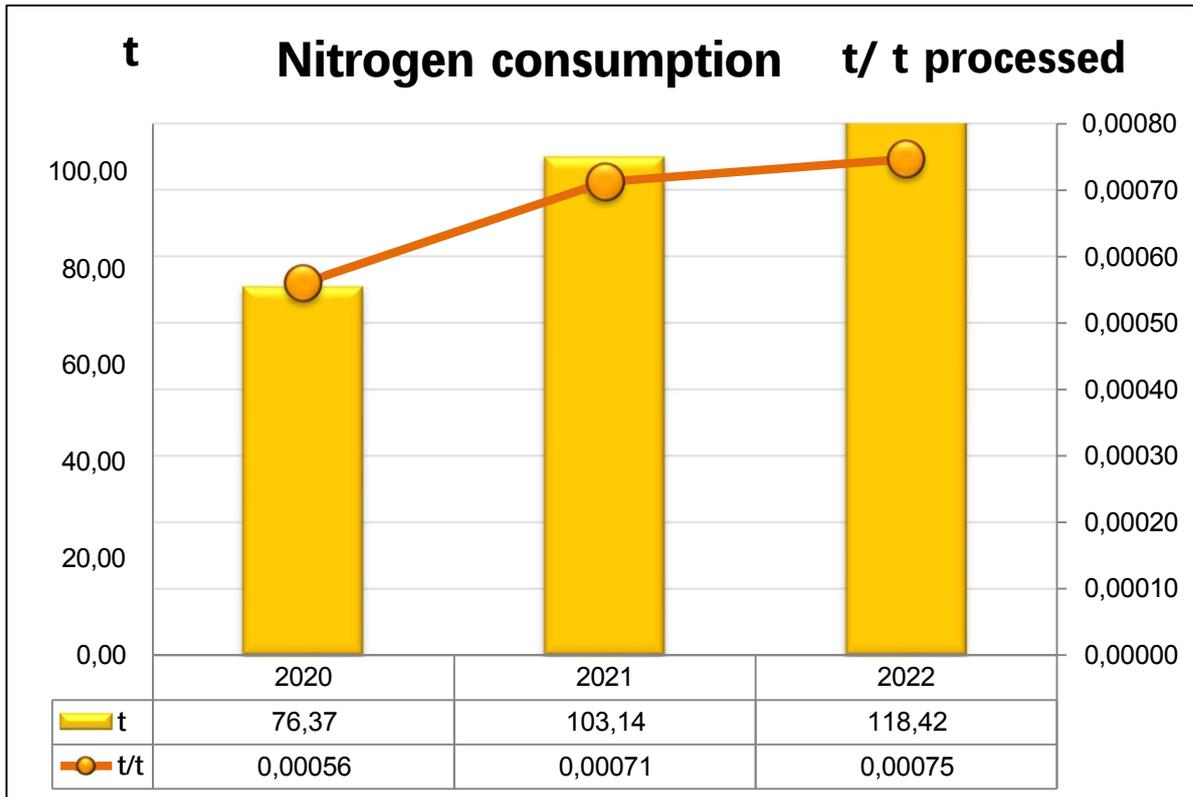
Diesel consumption remains virtually unchanged.



6.3. Nitrogen consumption.

Nitrogen is used for the inerting of equipment.

Nitrogen consumption varies depending on the number of reactor outages, the consumption for the last three years is shown below.

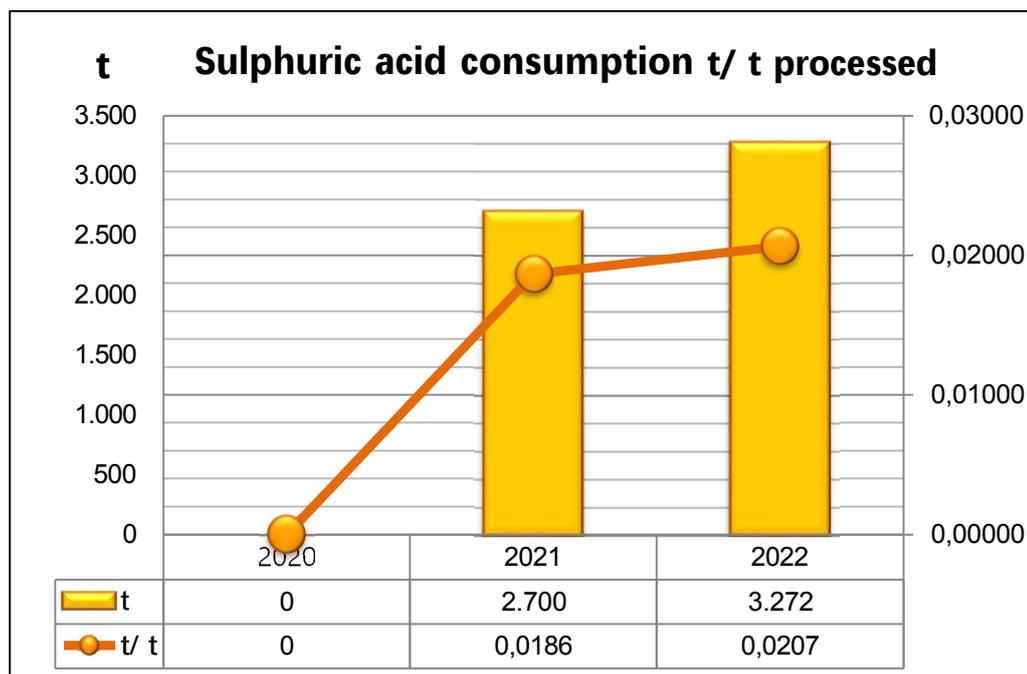


Note: To convert from m³ of nitrogen to tonnes, the density data given in the product safety data sheet is used.

Nitrogen consumption above 2021, mainly burdened by problems in exchangers, plant shutdowns, etc.

6.4. Sulphuric acid consumption

Sulphuric acid is used for scrubbing the air stream with NH₃ from the drying process as well as from the extraction of the production hall in the scrubbers.



We can observe a significant increase in the consumption of sulphuric acid compared to the previous year due to the extension of the gas scrubbers to be able to capture the ammonia generated in the new installation of hoods in the turkey warehouse.

6.5. Consumption of additives

In addition to the raw materials mentioned above, the following chemical products are consumed as additives to the process at Befesa Aluminio CT Valladolid:

- Flocculant: used in the reaction-decantation process of solids.
- Defoamer: to reduce foaming in reaction and settling.

Average consumption over the last three years has been as follows:

Consumption of additives						
Date	Flocculant			Defoamer		
	kg	t	t/ t	kg	t	t/ t
2020	10.992	10,992	0,00008	9.823	9,82	0,000072
2021	8.937	8,937	0,00006	9.151	9,15	0,000063
2022	7.897	7,897	0,00005	9.681	9,68	0,000061

Both defoamer and flocculant consumption remain within normal ranges.



6.6. Biodiversity.

The following is a list of the constructed surface area at Befesa Aluminio CT Valladolid.

Land use	2020		2021		2022	
	Usable area (m ²)	Usable area (m ² /t processed)	Usable area (m ²)	Usable area (m ² /t processed)	Usable area (m ²)	Usable area (m ² /t processed)
Total use (buildings)	38.757,37	0,285	38.757,37	0,268	38.757,37	0,244
Total sealed surface (waterproof)	97.500,00	0,716	97.500,00	0,673	97.500,00	0,615
Total surface area in the centre oriented by nature	0	0	0	0	0	0
Total area outside the centre oriented by nature	0	0	0	0	0	0
Total occupancy of facilities	106.700,00	0,783	106.700,00	0,737	106.700,00	0,673

The total occupancy of our facilities is 106,700 m² . However, there is no impact on biodiversity, neither the land nor the surrounding area is considered a special protection area.



7. Compliance with legal requirements.





Environmental authorisations and permits are listed below along with relevant information associated with compliance with specific legal requirements, in addition to compliance with other legislative requirements.

At the end of 2020, Order FYM/1088/2020, of 13 October, was published regarding the review for their adaptation to BATs and waste regulations of the companies "Befesa Aluminio, S.L." and "Befesa Aluminio, S.L.U."; the Non-Substantial Modification 17 (MNS17) of "Befesa Aluminio, S.L.U."; and the unification of the environmental authorisations of the treatment and recovery plants for scrap metal, aluminium waste and salt slag, in the municipality of Valladolid, of both companies, in "Befesa Aluminio, S.L.U." as the sole owner. The order limits its effects to the revision and adaptation to the best available techniques (BAT) of the integrated environmental authorisation (AAI), the incorporation of the non-substantial modification 17 (MNS17) and the unification of the environmental authorisations held by Befesa Aluminio, S.L.U. The implementation of the modifications included in this order will take effect during the first four months of 2021.

ORDER FYM/1007/2021, of 27 August, which modifies Order FYM/1088/2020, of 13 October, relating to the review for adaptation of the BATs and waste regulations of the companies "Befesa Aluminio, S.L." and "Befesa Aluminio, S.L.U." and the Non-Substantial Modification 17 (MNS17) of "Befesa Aluminio, S.L.U." and the unification of the environmental authorisations for the treatment and recovery plants for scrap, aluminium waste and salt slag, in the municipality of Valladolid, of both companies, in "Befesa Aluminio, S.L.U." and "Befesa Aluminio, S.L.U.", in the municipality of Valladolid."and the unification of the environmental authorisations of the treatment and recovery plants for scrap metal, aluminium waste and salt slag, in the municipality of Valladolid, of both companies, in "Befesa Aluminio, S.L.U." as the sole owner, as a consequence of Non-Substantial Modification 18 (MNS 18). 043-21-MNSVA

- Installation of a new reactor which will act as a backup to maintain the production rate during the cleaning, shutdown and maintenance operations of the other five reactors.
- Installation of metal separation equipment at the end of the salt slag crushing process in order to increase the recovery of the metallic aluminium contained in the slag, as well as to increase the quality of the aluminium concentrates obtained in this part of the process.



ORDER MAV/1027/2022, of 3 August, which modifies Order FYM/1088/2020, of 13 October, relating to the review for adaptation to the BATs and waste regulations of the companies "Befesa Aluminio, S.L." and "Befesa Aluminio, S.L.U." and the non-substantial modification 17 (MNS17) of "Befesa Aluminio, S.L.U." and the unification of the environmental authorisations for the treatment and recovery plants for scrap metal, aluminium waste and salt slag, in the municipality of Valladolid, in "Befesa Aluminio, S.L.U." and "Befesa Aluminio, S.L.U." and the unification of the environmental authorisations of the treatment and recovery plants for scrap metal, aluminium waste and salt slag, in the municipality of Valladolid, of both companies, in "Befesa Aluminio, S.L.U." as the sole owner, as a consequence of non-substantial modification 19 (MNS 19). 027-22-MNSVA

- Extension and modification of the collection system currently installed in the aluminium oxide storage building (Paval), by replacing and extending the current hood together with the new installation of two adjacent hoods, increasing storage and collection capacity.
- Increasing the treatment capacity of the scrubbers with the installation of new filling and enlargement of the contact/washing surface, which will improve the efficiency of the system from 95 to 97.5%.

EMAS:

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)

DECREE 53/2015, of 30 July, establishing the procedures for the processing, suspension and cancellation of registration in the Register of organisations adhering to the Community eco-management and audit scheme in the Community of Castilla y León.



Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) and repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC.

Royal Decree 239/2013 of 5 April establishing the rules for the implementation of Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), and repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC.

Emissions:

Royal Legislative Decree 1/2016, of 16 December, approving the revised text of the Law on Integrated Pollution Prevention and Control.

- ✓ Submitting to the Junta de Castilla y León the measurements carried out in 2021 with the limits established in the corresponding AAI (Integrated Environmental Authorisation).

Royal Decree 508/2007 of 20 April 2007, which regulates the provision of information on emissions from the E-PRTR Regulation and integrated environmental authorisations.

- ✓ Reporting all emissions and waste data to the PRTR Castilla y León Registry by February 2023.

Noise and vibrations:

Regulation for the Protection of the Environment against Noise and Vibration Emissions of Valladolid City Council.

By presenting a technical report of biennial measurements accrediting technical compliance with the noise levels, the last one presented in May 2023 and being compliant at all measurement points.

Waste:

Law 7/2022 of 8 April on waste and contaminated soils for a circular economy

- ✓ Complying with this Law with all waste generated and processed at the facilities.

Royal Decree 553/2020 of 2 June regulating the shipment of waste within the territory of the State.

- ✓ Complying with the requirements established for waste shipments.

Registration in the Hazardous and Non-Hazardous Waste Manager Register under number 7G04084700000009 and 07G01964700000009 respectively and registration in the Hazardous Waste Producer Register under number 07P01094700000009.

- ✓ Presenting in February 2023 both the annual report of managers and producers for the year 2022.
- ✓ Waste minimisation study for the period 2019-2022 presented.

Royal Decree 646/2020 of 7 July regulating the disposal of waste by landfill.

- ✓ In compliance with the same.

Flooring:

Royal Decree 9/2005, of 14 January 2005, establishing the list of potentially soil-polluting activities and the criteria and standards for the declaration of contaminated soil.

- ✓ The soils report was delivered on 05/10/2016.
- ✓ In June 2019, a detailed analytical characterisation of the subsoil at the Befesa Aluminio CT Valladolid facilities was performed. The subsoil was found to be affected by hydrocarbons, unrelated to any source of impact on the site, but rather to a historical accidental spillage prior to the paving of the plot. To



In the case of soils with concentrations above the generic reference levels (GRLs) contemplated in the aforementioned legislation, a Quantitative Risk Analysis (QRA) was carried out. This report determines that, having analysed the possible current and future scenarios at the site and in the surrounding area, there is no unacceptable risk to human health derived from the existing effects on the site's soils.

- ✓ On 16/07/2020 the Junta de Castilla y León received the "Communication on acceptance of the soil situation report in accordance with Royal Decree 9/2005".

Energy efficiency:

Royal Decree 56/2016 of 12 February transposing Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency as regards energy audits of energy service providers and auditors and promotion of energy supply efficiency.

- ✓ In compliance with this royal decree, the energy audit was carried out and submitted to the Junta de Castilla y León on 23/09/2016. A communication was received from the Junta de Castilla y León regarding the administrative register of energy audits on 04/10/2016.
- ✓ On 25/06/2020 the energy audit communication is carried out.

Environmental liability:

Law 26/2007, of 23 October, on Environmental Responsibility and Order ARM/1783/2011, of 22 June, by which, before 31/10/2018, it must communicate the constitution of the financial guarantee that allows it to face the environmental responsibility inherent to its activity, in the event that it is required to do so.

Royal Decree 2090/2008, of 22 December, approving the Regulations for the partial implementation of Law 26/2007.

Law 11/2014 of 3 July 2014 amending Law 26/2007 of 23 October 2007 on environmental liability.



Royal Decree 183/ 2015, of 13 March, amending the Regulations for the partial development of Law 26/2007, of 23 October, on Environmental Liability, approved by Royal Decree 2090/2008, of 22 December.

- ✓ On 19/07/2018, a declaration of responsibility was delivered to the Junta de Castilla y León, determining the financial guarantee.
- ✓ The risk analysis report is carried out by an external company. Following the Environmental Risk Analysis (ARA) carried out, it can be concluded that, given the amount of the costs of repairing the potential environmental damage to be expected, within the framework of the provisions of Law 26/2007, on Environmental Responsibility, there is no obligation to deposit a mandatory financial guarantee.
- ✓ In March 2022, a new environmental risk analysis and assessment report was carried out by an external company, as a result of one of the requirements of Annex III of the Environmental Conditions of ORDER FYM/1088/2020. As in the previous report, it is concluded that there is no obligation to deposit a mandatory financial guarantee.

Royal Decree 208/2022 of 22 March on financial guarantees for waste.

- ✓ In compliance with the same.

Chemicals:

Royal Decree 656/2017, of 23 June, approving the Regulation on the Storage of Chemical Products and its Complementary Technical Instructions MIE APQ 0 to 10.

- ✓ In compliance with the same.

REGULATION (EU) 2019/1009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 June 2019 laying down provisions on the making available on the market of EU fertiliser products and amending Regulations (EC) No 1069/2009 and (EC) No 1107/2009 and repealing Regulation (EC) No 2003/2003



- ✓ In compliance with the same.

Legionella:

Royal Decree 865/ 2003, of July, establishing the hygienic-sanitary criteria for the prevention and control of legionellosis.

- ✓ Complying with all operational notifications and maintenance operations.

Regulation to be repealed. See subsequent legislation.

Royal Decree 487/2022 of 21 June establishing the health requirements for prevention and control of legionellosis.

- ✓ Complying with all operational notifications and maintenance operations.

Oil installations:

Royal Decree 2085/ 1994, of 20 October 1994, approving the Regulation on Petroleum Installations (as amended by Royal Decree 1523/ 1999, of 1 October 1999).

- ✓ Periodic inspections of the installations are carried out periodically.

Fire-fighting installations:

Royal Decree 513/2017 on Regulation of fire protection installations.

- ✓ Complying with the conditions for industrial establishments in case of fire.

Electrical installations:

Royal Decree Royal Decree 842/2002, of 2 August, approving the Low Voltage Electrotechnical Regulations.

- ✓ Complying with the established requirements in terms of revisions.



Royal Decree 337/ 2014, of 9 May, approving the regulation on technical conditions and safety guarantees in high-voltage electrical installations and its technical instructions.

- ✓ Complying with the established requirements in terms of revisions.

Thermal installations:

Royal Decree 1027/2007 approving the Regulation on Thermal Installations in Buildings. The Royal Decree has been drawn up jointly by the Ministry of Industry, Tourism and Trade and the Ministry of Housing.

Royal Decree 178/2021, of 23 March, amending Royal Decree 1027/2007, of 20 July, approving the Regulation on Thermal Installations in Buildings.

- ✓ In January 2017, the thermal installations of several rooms of the work centre were registered.
- ✓ Periodic inspections of the installations are carried out periodically.

Transport of goods:

European Agreement concerning the International Carriage of Dangerous Goods by Land (ADR)

- ✓ Complying with its last amendment of 2021.

Water.

Authorisation from the Confederación Hidrográfica de Duero for the discharge of sanitary waste water into the ground.

- ✓ By submitting the annual declaration report.
- ✓ Complying with the requirements of Royal Legislative Decree 1/ 2016 approving the revised text of the Law on Integrated Pollution Prevention and Control.
- ✓ Submitting to the Junta de Castilla y León the measurements carried out during the year 2021 in compliance with the limits established in the AAI.

Authorisation has been granted by the Duero Hydrographic Confederation for direct discharge into the River Pisuerga via the Duero Canal drain.



- ✓ By submitting the annual declaration report.

By means of file CP 23302-VA, the Confederación Hidrográfica del Duero granted Befesa Escorias Salinas S.A. the concession for the exploitation of groundwater, with a maximum annual volume of 119,300 m³ .

- ✓ In January 2021, procedures were initiated with the Duero Hydrographic Confederation to modify the characteristics of the groundwater exploitation concession. A maximum annual volume of 165,600 m³ has been requested.

Order FYM/1088/2020 establishes the effluent emission limit value in the following cases 31,500 m³ per year.

- ✓ Complying with the new limits.



8.-Communication and participation in the field of the environment.



Befes Aluminio CT Valladolid has communication, consultation and participation procedures that define, among other points, the existing form and means for both internal communication (of the Befesa Group with the Escorias Salinas Division, of the General Manager of Escorias Salinas with the plant, and communication with workers and/or their representatives) and external communication (customers, suppliers, investors, authorities, etc.). Throughout the year 2022, no sanctions related to environmental issues or complaints from interested parties have been recorded.

In order to carry out the consultation and participation of employees and/or their representatives, the Valladolid workplace carries out the following activities:

- **Works Council:** the works council together with the management of the company meets on a regular basis in accordance with current legislation. The minutes of these meetings are published on the notice boards.



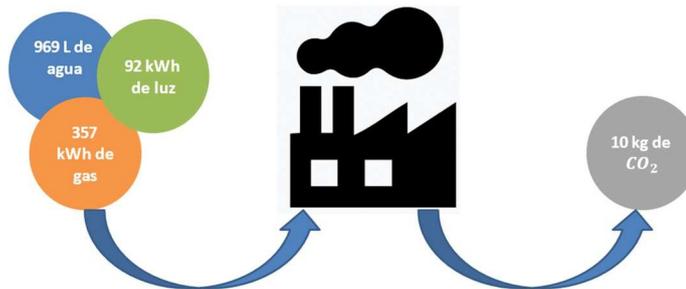
- **Accident and environmental incident investigations** with generation of lessons learned documents.
- **Complaints channel**, located on the Befesa website (www.befesa.com) through which anyone can anonymously report non-compliance of the code of conduct.
- **Suggestion box**: There is a suggestion box available to employees in the canteen of the facilities.
- **Environmental competition**: Every year the company organises an environmental competition for employees to participate in (see point 9).
- **Environmental Preventive Observations (OPA)**: visits to the plant to review compliance with environmental management procedures, in which discussions are held with workers and possible opportunities for improvement or deficiencies are recorded.
- **5S**: 5S audits (tidiness and cleanliness), regulated by the technical instruction IHSQEESP.07
- **Informal meetings, which can be daily, weekly or monthly**, in which, although the workers do not participate directly, demands or suggestions are collected and reviewed and analysed by those responsible for process and shift leaders.
- **Notice boards**: employee participation is encouraged through the posting of tenders, new jobs, information for suggestions for ongoing or planned projects, etc.
- **Psychosocial risk surveys**: every two years, the company carries out a psychosocial risk survey and, depending on the results obtained, an action plan is established if necessary.
- **Environmental triptych and good environmental practice documents with regard to waste management: this is an** informative document. to help workers in the correct classification of waste, about which, if they have any doubts or questions, they can consult the environmental manager. It is provided to workers in the induction training given to them on their first day of work.



- **Format for improvement opportunities and non-conformities:** this is managed through the continuous improvement procedure. Employees can fill in the appropriate form and put it in the mailbox or hand it in to the person responsible for the process.
- **HSQE Newsletter:** published both by email and on the **HSQE** bulletin boards. plant announcements. Among other things, it informs employees about aspects related to environmental objectives, consumption or waste generated.

Resumen datos HSQE.

Por cada tonelada de material procesado:



- **Integrated Environmental Authorisation.** Befesa has an Integrated Environmental Authorisation published in the Official Gazette of Castilla y León (BOCYL).



9.-Other relevant activities in the field of environment.





In accordance with the ISO 14.001:2015 standard and the European EMAS Regulation, Befesa Aluminio CT Valladolid has undergone the corresponding environmental audits, both internal and external, to verify the correct operation of the environmental management system in place. The performance of audits is a key element in verifying the correct performance of each of the processes of the management system. When non-conformities are detected during the course of the audits, corrective actions are established to eliminate these non-conformities. The programme of internal and external audits has been satisfactorily completed during the year covered by this statement.

- Befesa Aluminio CT Valladolid has a CO₂ environmental certificate verified under the ISO 14064 greenhouse gas standard, and since November 2016 it has also been certified under the ISO 50.001 standard on energy efficiency in order to reduce energy consumption and, as a result, reduce CO₂ emissions into the atmosphere.
- Befesa belongs to and actively participates in the following associations:
 - Spanish Confederation of Metal Business Organisations CONFEMETAL being an active member of the environment committee.
 - Asociación Española de gestores de residuos especiales ASEGRE (Spanish Association of Special Waste Managers): ASEGRE brings together companies in Spain whose activity is the management of hazardous waste.
 - Valladolid Metal Entrepreneurs Association (VAMETAL)
- Competition 2nd Edition - BEFESA Environmental Initiative
 - During the year 2022 Befesa has organised a competition to promote the environmental commitment of employees.
 - At Befesa we believe that with the environmental commitment of employees in the community, we can help preserve natural resources and create a positive environmental impact.

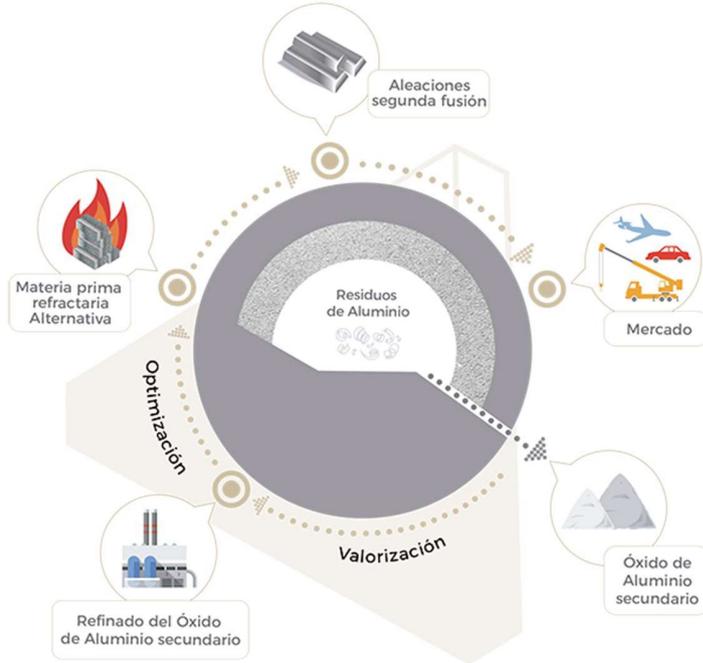


- Sustainability is part of Befesa's DNA - we demonstrate our commitment at all levels, to the nature of our business model, to the sustainable way we run our factories and now also by supporting our employees' environmental initiatives by promoting a good cause through a donation.

The prize winner chose the Hatay Tabiatı Koruma Derneği (Hatay Nature Conservation Association) for the donation, which will be earmarked and used to improve gazelle habitats in the mountainous areas of Hatay, Turkey, to ensure the continuity of this species.



- Befesa regularly participates in R&D&I programmes with different research centres and other European companies, mainly aimed at improving the recycling, valuation and complete use of waste from the aluminium industry.
 - An example of this and related to the Circular Economy is the Life Bauxal II project that will allow the transformation of a secondary aluminium oxide (paval) into an alternative raw material to bauxite in the manufacture of refractories.
 - More information can be found on the project's website: <http://www.bauxal2.com/>.





10.- Next environmental statement.





This environmental statement is intended to inform employees, authorities, customers, suppliers, media and neighbours about our management policy and also to propose a constructive dialogue.

The next validated environmental statement will be made in June 2024.

The environmental verifier validating this declaration is Bureau Veritas Certification, a certification body accredited by ENAC under number ES-V-0003, with registered office at Calle Valportillo Primera, 22-24; Edificio Caoba- Polígono Industrial La Granja 28108 Alcobendas, Madrid.

This declaration is valid for one year from the date of validation.