



## Tools for environmental management

Isdefe, aware of the growing environmental problem and as a supporter of sustainable development, has implemented an Environmental Management System (EMS), which promotes environmental protection, the efficient use of natural resources, the prevention of pollution and climate change, and a more environmentally friendly way to manage the waste generated.

In 2021, Isdefe optimised its commitment to the environment by drafting a new environmental policy in accordance with the commitments made as part of the 2030 Agenda

Isdefe is aware that, over the course of its activities of providing consultancy and technical assistance services, it must encourage its staff to behave in a manner that is respectful of the environment.

Within the framework of this Environmental Policy, whose scope includes the activities carried out at its headquarters in Madrid, Isdefe undertakes the following commitments:

- » Comply with the environmental legislation applicable to its activities.
- » Identify and evaluate the environmental aspects resulting from its activities in order to prevent negative impacts on the environment.
- » Properly manage the waste generated through reuse, sorting and recycling.
- » Promote energy efficiency by using the available resources appropriately.
- » Enhance environmental awareness among all employees by promoting the establishment of good environmental practices in the workplace.
- » Establish a process of continuous improvement for its environmental performance by periodically reviewing its EMS and goals and targets.
- » Promote and disseminate this Policy among Isdefe employees, collaborators, subcontractors and suppliers, and make it available to stakeholders.

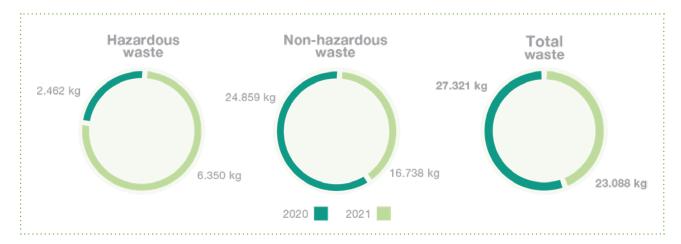




# Waste management

At Isdefe, we have a waste segregation plan at the source that relies on specific containers for each type of waste.

In our headquarters, there is a general recycling centre that provides evidence of proper sorting of waste, of the amounts generated, that it is properly labelled, and that it is correctly transported for subsequent treatment by an authorised manager.



Hazardous waste	2021*	2020*
Fluorescent bulbs	42	42
Contaminated packaging	14	11
Sharp and cutting objects	21	19
Oil filters	0	9
Thermal oil	0	42
Aerosols	0	7
Cells	63	2,332
WEEE	1,210	2,365
Sanitation Network Oil (kg)	5,000	4,827

#### Figures in kg

The new waste data monitoring company has changed the classification of WEEE waste, which is now hazardous.

Non-hazardous waste	2021*	2020*
Organic	5,966	4,863
Paper	4,988	4,037
Cardboard	2,801	2,198
Plastic	1,281	737
Glass	95	220
Scrap	491	68
Plastic cups	0	0
Biodegradable glasses	323	331
Wood	489	167
Batteries	74	0
Hygienic	55	71
CD/DVD/Hard Drives	0	39
Toner	166	68
Air filters	11	170



# Sustainable use of resources: water, raw materials, energy

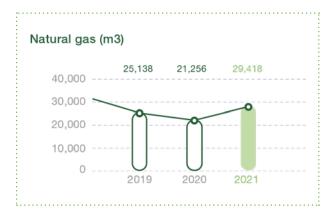
In keeping with our Environmental Policy and the objectives set for the year in our EMS, we pursue the responsible use and minimised consumption of natural resources (electricity, gas, water, paper). The EMS is evaluated by tracking and analysing the performance and functionality of the equipment and facilities that require these resources, optimising them and prioritising those from renewable sources.

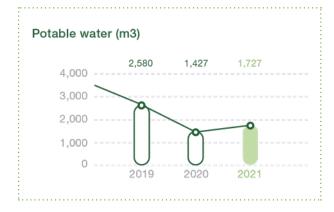
In 2021, we managed to reduce both energy billing and water and paper consumption, due to various factors:

- » Covid-19.
- Telework by a large part of the workforce that usually works at the headquarters in Beatriz de Bobadilla 3 (BdB3).
- » Continuing policies to analyse and track energy performance.

The responsible use of electricity, gas, water and paper resources for Isdefe's activity is ensured by tracking and analysing the performance and functionality of the equipment and facilities that require these resources, optimising them and prioritising those from renewable sources.











The 21.1% increase in water consumption compared to 2020 is not representative, since in 2020, the use, occupation and operation of the building was drastically reduced as a result of the COVID-19 pandemic. Comparing the values for 2021 with 2019 shows a reduction in annual consumption of 36%.

The increased demand for natural gas compared to 2020 was influenced by the implementation of COVID-19 prevention measures in winter, which entailed keeping windows open to aid with the mechanical ventilation of the building, thus resulting in more heating system use. Although the increase was 37% compared to 2020, the billing did not follow this trend, remaining close to 2019 levels due to the improved contractual conditions with respect to those from before the pandemic.

In addition to electricity and natural gas supplies, the building has self-supply energy production systems that reduce the external energy demand. All of these factors significantly influence the continuous reduction of the organisation's carbon footprint.



# Environmental goals and performance in 2021

The year 2021 continued to be an atypical year as a result of the health pandemic brought about by COVID-19. Over the course of this year, the building and its facilities were seriously altered by the protective measures and workplace recommendations implemented by the organisation in order to prevent the possible spread of the virus within the company (promotion of telework).

As a result, the use, operation and occupation of the building and its facilities during much of this period were far from their objective reality (especially the occupation).

With these factors in mind, Isdefe has continued to constantly improve its environmental performance by adopting measures to better use raw materials, improve energy efficiency and increase the use of renewable energies.



#### Goal 1

Acquisition of tools to calculate scope 3 of the Carbon Footprint:

- » Start data recording and testing during 2021, regarding employee mobility when commuting to/from work and while on company trips.
- » Final objective to complete the data for the year 2022.

#### **Results**

- » May 2021: Search for vendors that provide applications to calculate scope 3 of the footprint.
- » July 2021: Technical evaluation of the proposals submitted and awarding of the project to the most appropriate application (app).
- » October-December 2021: Development meetings held.
- » Administer the commuting habits survey to the entire workforce.
- » Preparation and dissemination of video explaining the app and survey.
- » Launch of the app (Nov. 21).

Partial goal for 2021 fulfilled.

#### Goal 2

Replace the company's delivery vehicle (combustion engine) with a 100% electric, plug-in hybrid or nonplug-in hybrid vehicle with the aim of promoting more sustainable mobility, reduce the amount of atmospheric emissions and combat air pollution.

#### Results

- » Tender notice 25/05/2021.
- » Contract awarded 02/07/2021.
- » Purchase of a class-A hybrid gasoline vehicle with emissions of 104.00 g CO2/km, to replace the class-D diesel vehicle with emissions of 141 g CO2/km.

#### Goal accomplished.



#### Goal 3

Optimise the performance of the HVAC system at the BdB3 building to reduce its electrical consumption. Goal to be implemented over two years (2020 and 2021):

- » 2020: study and evaluate the different proposals made by specialised companies.
- » 2021: implement the selected measures that are feasible both technically and economically.



### Results

In 2020, the evaluation studies and analysis of proposals began by conducting an energy audit carried out by a third party as per the criteria of RD 56/2016.

The main measures implemented were as follows:

- » Replacement of the steam humidifier systems in the data centre (immersed Joule-heating electrodes) with more efficient technologies.
- » Installation of indirect free-cooling system in the server area and UPS of the data centre by installation of a supply and exhaust air network that is independent of the internal HVAC system of the data centre.
- » Installation of variable-speed regulation systems to control the hydraulic pump groups that serve the secondary loops of the water-condensed VRV system and independent cooling systems of the data centre

#### In 2021:

Based on the measures identified during 2020, the Resource Dept. opted, from a technical and economic point of view, to replace the joule-effect immersed electrode systems with STULZ low-consumption ultrasound precision cooling units.

The system was installed and placed into service in December 2021

#### Goal accomplished.



# Carbon footprint

In order to quantify our impact on climate change and identify corrective actions to reduce it, we calculate our carbon footprint annually. We do so using the Carbon Footprint Calculator developed by the Ministry for the Ecological Transition and Demographic Challenge (MITECO). This tool calculates the greenhouse gas (GHG) emissions associated with the activities of the organisation, covering both direct emissions (Scope 1) and indirect emissions from electricity consumption (Scope 2).



The Carbon Footprint (measured in t CO2eq) has evolved as follows:

	2018	2019	2020
Fixed equipment	64.6816	48.8022	41.5586
Travel in vehicles	3.9149	3.6559	3.1173
Heating & Cooling	20.875	0	2.088
Scope 1	89.4715	52.4581	46.7639
Scope 2	0	0	0
Total Scope 1+2	89.4715	52.4581	46.7639

The data from the previous year is usually published in April



Since 2018, the electricity consumed has come entirely from renewable sources, which has meant reducing the impact on the Carbon Footprint by 93.4%. The indirect emissions of greenhouse gases associated with the generation of electricity acquired and consumed by Isdefe (scope 2) have remained at 0 ever since.

In 2021, **100% of the energy purchased by Isdefe had a Guarantee of Origin certification**. This energy comes exclusively from 100% renewable sources.

Due to the use of 100% renewable energy sources and self-supply, Isdefe stopped emitting 394,703 kg CO<sub>2</sub>/kWh to the atmosphere in 2021.



#### ING.SIST. PARA DEFENSA ESPAÑA, S.A., SME, M.P (A78085719)

El Sistema de Garantía de origen de la electricidad procedentes de fuentes renovables y de cogeneración de alta eficiencia es supervisado y verificado por la Comisión Nacional de Mercados y la Competencia.

> Alfonso Calderón Jiménez Director Comercial

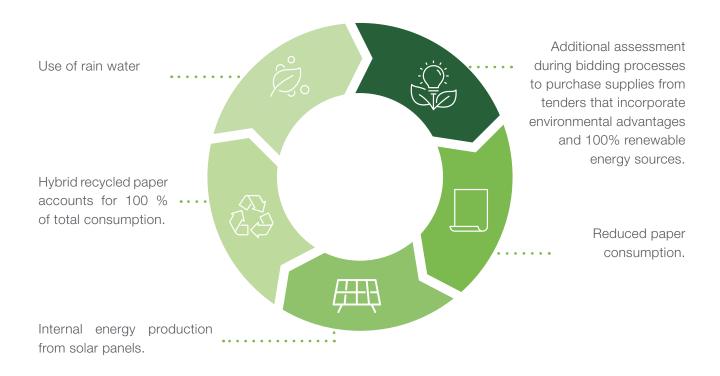
Iberdrola es un lider en la implantación de energias renovables y en la protección del medio ambiente. Dispone de su propia Politica Medioambiental, que es de obligatorio cumplimiento en todas las áreas de Iberdrola y de su grupo de empresas, as instalaciones han sido certificadas medioambientalmente por AENOR, según la norma UNE-EN ISO 14001. Ha sido adhenta formalmente al Pacto Mundial de Naciones Unidas de buenas prácticas de lo Derechos Humanos y Medio Ambiento, ha paricipados en el programa pieto de emcantemos ed enviados del Polos de Ciscolo de Kilod de la Celizio Españato del Celizio Companio del Indicio Dev. Jones de Sostenibilidad.

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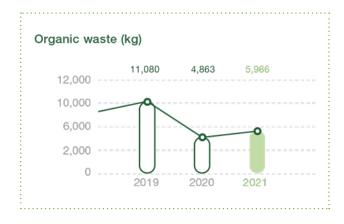
## Isdefe's contribution to the Circular Economy

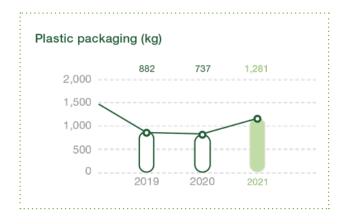
Isdefe implements prevention, recycling and reuse measures, and other methods to recover and dispose of waste, and takes actions to combat food waste.

This contribution takes the form of:



### Quantities of waste managed for recovery or recycling

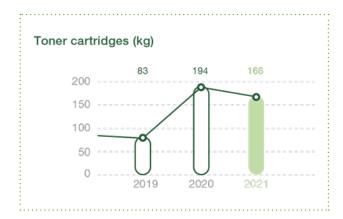


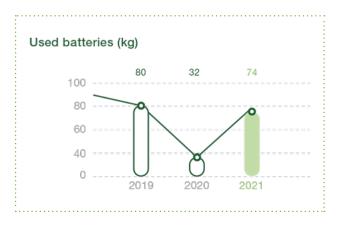


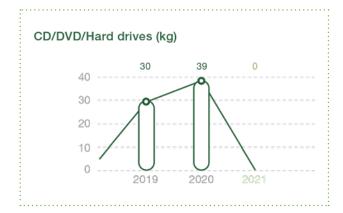




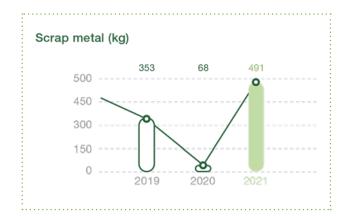










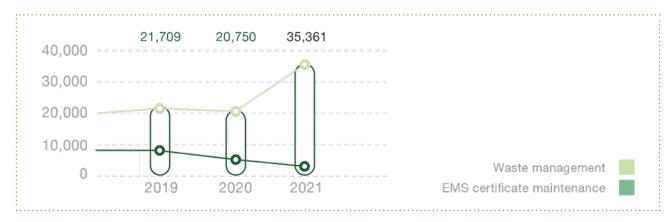




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## Investment in the environment

In 2021, €35,361 was invested in environmental expenses, which includes waste management, the maintenance of the Environmental Management System Certificate and other expenses (such as internal audit, etc.).





# Resources allocated (€) for waste management and to maintain the EMS Certificate





## Challenges for 2022

To prepare for next year and in order to continue working actively to constantly improve our environmental performance, we have set the following **goals** for ourselves:

#### Acquisition of tools to calculate scope 3 of the Carbon Footprint and data capture.

Final goal: to have complete data for the year 2022.

Air Quality Control in indoor spaces in BdB3 (in two years: 2022 and 2023).

- » Have a quality control system for the indoor air at BdB3 (measure relative humidity (%RH), temperature (°C), carbon dioxide (ppm CO2) and suspended particles (PM 2.5)) that provides information on these parameters in real time so that the HVAC system can be controlled to respond more efficiently to the actual environmental conditions.
- » Take the actions needed, over the course of 2023, to integrate the installation referred to above into the building's centralised technical management system (BMS-Trend) so that the operation of the mechanical ventilation installation in the building can be automatically optimised and adjusted.

For 2022, and as a result of COVID 19, no consumption and waste reduction goals were formally established (the number of in-person work days went up in 2021 compared to 2020, but they have not returned to pre-pandemic values yet). This does not mean that we are not continuing to implement measures to contain and reduce consumption and waste.

