



ENVIRONMENTAL STATEMENT

2021

(JAN – DEC)

Regulation (EC) No 1221/2009.

Regulation (EU) 2017/1505

Regulation (UE) 2018/2026



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1. INTRODUCTION

The **Environmental Statement** is made in accordance with **Annex IV of Regulation (EC) No. 1221/2009** of the European Parliament and the Council of the 25th of November 2009, which allows organizations to voluntarily adhere to a **community management and environmental auditing system (EMAS)**.

The Environmental Statement is updated and validated annually by an accredited inspector.

The objective of the Environmental Statement (ES) is the public announcement to interested parties of the continuous improvement of the impact and the environmental behaviour of the organization.

The ES informs the relevant parties (public, local communities, users, etc.) about the activities that the organization considers relevant (selection and evaluation of environmental aspects). All the data is taken from the year **2021** and the evolution from the years 2019 and 2020 has been noted.

The environmental system EMAS implemented in ADASA has other information from other sources apart from the ES, as it is required in the **Regulation (CE) N° 1221/2009**. In 2017 it was adapted to the new considerations of the **New Regulation (UE) 2017/1505** even though many of them had already been adopted with the standard **UNE-EN ISO 14001:2015**.

In 2019, the requirements determined by article 1 of Regulation (EU) 2018/2026, which modifies Annex IV of Regulation (EC) No. 1221/2009, are incorporated. References to Decision (EU) 2019/63 are also incorporated.

ADASA's Management is grateful to all the staff for their collaboration and participation in the achievement of the environmental objectives planned and in the improvement of the Organization's environmental behaviour.



Adasa is a member of the **EMAS Club**, a non-profit organization that safeguards and promotes the interests of the EMAS registered organizations and EMAS's visibility in society.

The creation of the EMAS Club in 2006 was a pioneer initiative in the European Union.

For the Verification process of this Environmental Statement, the steps that Adasa follows are: Internal Audit, External Audit and finally, registration of the Statement in the Department of Territory and Sustainability of the Generalitat de Catalunya.

Our Environmental Declaration is available to any interested party through our website, in the section "Quality, Environment and Prevention"

2. ACTIVITY

Adasa, set up in 1988, is a recognized engineering company that provides technological solutions for the integral management water cycle and the environment.



Adasa supports an integrated, multidisciplinary approach to water resources management and leads its activities to achieve environment protection. Adasa pursues technological excellence to assist public and private organizations in the development of their activities and the improvement of their service efficiency, ensuring resources optimization and reducing operational costs

As experienced services integrators, Adasa covers a wide spectrum of related services, including consultancy, development, maintenance, and operations. Adasa joins water and environment expertise and highly specific technology capabilities to meet the sector's needs. Its portfolio includes water resources management (water quality monitoring and hydrology), smart operations of water utilities and operators, and irrigation and rural water. Adasa also fosters environment monitoring solutions in

meteorology and air quality.

More than 25 years betting on R+D, 12 patents and more than 50 international projects certify Adasa commitment with equipment innovation of water quality monitoring as well as the development of ICT solutions for the water sector



On the road to excellence, ADASA has implemented an integrated management system based on the following standards: ISO 9001:15, ISO 14001:15 and EMAS Regulation.

The reach of the system is as follows:

Activities:

-Design, manufacturing, installation and maintenance of instrumentation and automatic stations to control hydrological and atmospheric quality parameters and hydrological and meteorological variables of water and atmospheric quality parameters and hydric and meteorology variables.

-Consultancy services, development, implantation and maintenance of information systems, telemetry, remote control and automation applicable to water cycle, environment, hydrology, meteorology, mobility and urban services, natural resources management, utilities and information systems.

-Engineering and consultancy services of water cycle, environment, air quality, meteorology, soil pollution and construction of hydraulic infrastructures.

Work center included in EMAS register:

BARCELONA
C/ Ignasi Iglesias 217-219,
08820El Prat de Llobregat, Barcelona, España

Day to day, Adasa remains committed to the values of the UN Global Compact, by making a strong effort to create economic, environmental and social value in the short and medium term, and to contribute to the progress of society's welfare.

Adasa is part of the **United Nations Global Compact**, an initiative that marks an ethical commitment by organizations who, as an integral part of their strategies and operations, have agreed to follow ten principles of conduct and action regarding human rights, employment, the environment and the fight against corruption. www.unglobalcompact.org

ADASA (Skion Group since 2020) has a presence in different areas in Spain and abroad. **Headquarters Office** is located in El Prat de Llobregat (**Barcelona**), been the only one included in EMAS registration due to it represents the main environmental impact of Adasa production.



3. POLICY

ADASA is a specialized engineering company delivering technological solutions for water, environment and meteorology. Adasa carries out its activity in a changing and globalized surrounding where the excellence of the production, the service and the management are necessary requirements for the competitiveness, the development, and the progress.

Adasa's knowledge and experience assures the development of the solutions that satisfy the needs and expectations of the clients.

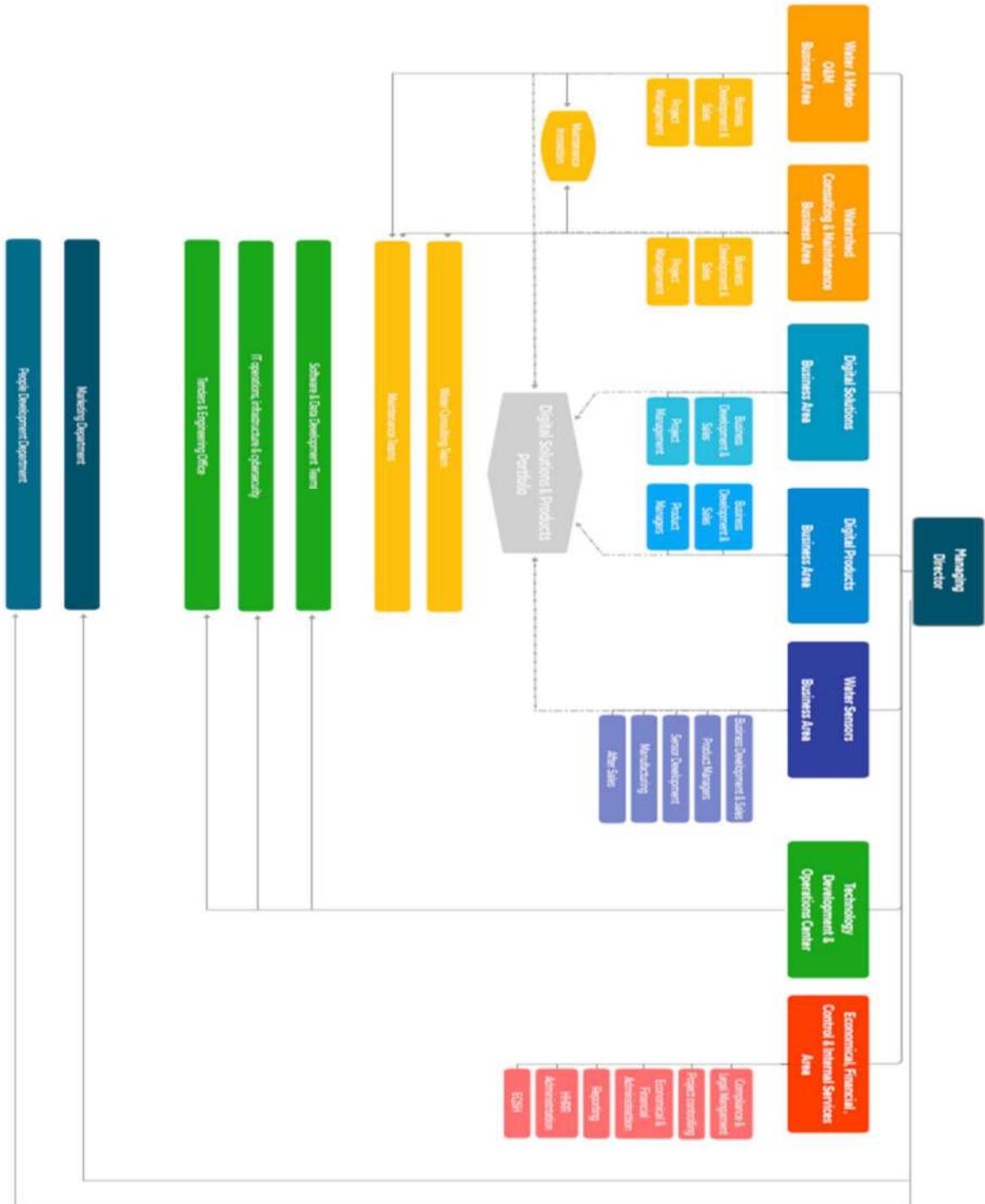
The General Management leads the organization towards a model of **TOTAL QUALITY EXCELLENCE**, taking as strategic planning lines: the direction by processes, the knowledge management, the team work and the innovative capacity of the organization. Adasa has implemented an integrated management system (quality & environment and health & safety) certified based on **ISO 9001, ISO 14001 and EMAS standards.**

Adasa defines its act strategy in the following principles:

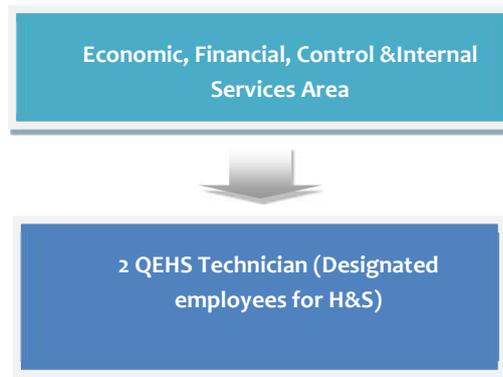


4. MANAGEMENT STRUCTURE

The general organizational structure of the company is defined below, with special attention to the team that carries out the maintenance tasks of the Integrated System of Quality, Environment and Security and Health, and which is in charge of complying with the requirements of the EMAS Regulation. Modified October 2021.



SHEQ DEPARTMENT



5. ENVIRONMENTAL ASPECTS

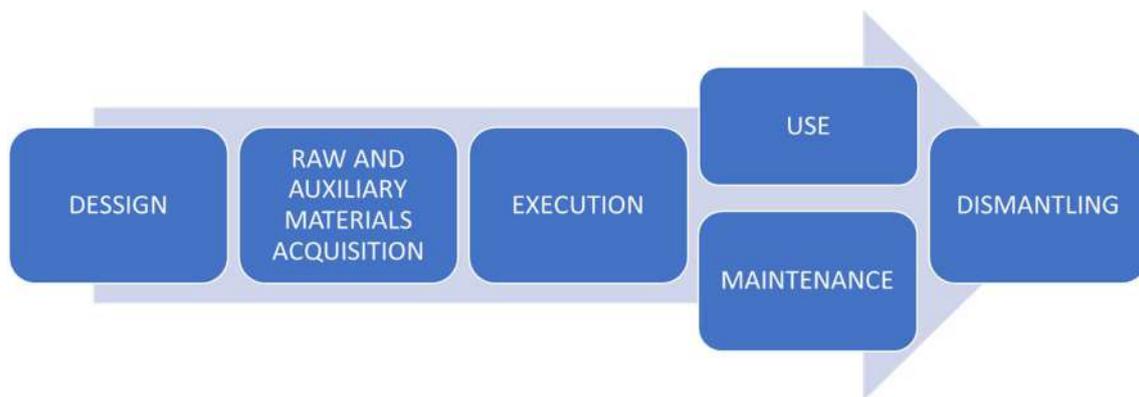
Adasa has a methodology to identify environmental aspects associated with its activity, from a life cycle point of view, in those aspects that it can control or influence. This method also quantifies which of those aspects can have a greater environmental impact and can track the objectives and goals.

With this system there are two main activity lines:

1. PROJECT/SERVICES MANAGEMENT
2. EQUIPMENT PRODUCTION

It also influences in the evaluation if the organization has control over the aspect or only influence (indirect aspect), as well as the probability of occurrence appears at organization's normal activities or only in emergency cases.

From the point of view of the organization, based on its control and / or influence, the two main lines of activity share a similar life cycle, with the following phases:



The environmental aspects related to quantities of elements consumed, generated, stored, discharged or emitted into the environment are quantified, obtained from the most appropriate sources of information for each case: invoices, delivery notes for waste collection, measurements, etc.

According to our internal procedure, the existence of legal requirements applicable to each environmental aspect is identified. When the evaluation is performed, the registered values are compared with those set by current regulations and their compliance is evaluated.

Environmental aspects are identified and evaluated taking into account normal, abnormal or emergency operating conditions and whether the company can do direct control or only has the capacity to influence.

The significance value takes into account: Magnitude, Probability, Severity and percentage of variation respect to the previous year.

As a result of the exercise of the identification and evaluation of the environmental aspects for 2021 (data 2020), the following is obtained:

ENVIRONMENTAL ASPECTS EVALUATION					
Office –Laboratory RDi – Workshop (Barcelona Branch)					
ASPECTS	OPERATING CONDITIONS			SIGNIFICANT	Direct (D) Indirect (I)
	Normal	Abnormal	Emergency		
WASTE					
Paper and Cardboard	X				D
Batteries	X				D/I
Cell Batteries	X				D
Fluorescent lamps	X				D
Toner	X				D
Plastic waste	X			X	D
Urban waste	X		X		D
Contaminated Glass containers	X				D
Contaminated Plastic containers	X				D
Contaminated absorbent material	X				D
Chemical reagents Waste	X				D
Total Laboratory Hazardous Waste	X				D
WEEE					
Waste electrical and electronical equipment	X				D
CONSUMPTIONS					
Water	X				D
Electricity	X				D/I
Fuel	X				D/I
Paper	X				D
Toner Consumption=waste	X				D
EMISSIONS and SPILLS					
Emissions					
Greenhouse Gases	X		X		D/I
Sewerage	X				D/I
Noise	X				D/I
Emissions Vehicles	X				D
Fugitive emissions (air conditioning)			X		D

Table 1. Environmental Aspects Evaluation – Barcelona 2021 (data 2020)

SIGNIFICANT ASPECTS	ACTIVITY	ASSOCIATED IMPACTS	ACTIONS
Plastic Waste	All the activities	The generation of more waste implies a greater expense in resources both in the production of the material used initially and when it is managed as waste.	There are good practices and proper waste management. More time is needed to see the evolution of this indicator.

Table 2. 2020 Environmental Aspects Evaluation Results

The increase in the generation of plastic wastes is related to the reactivation of the equipment manufacturing activity in 2020, specially in foreign contracts. Globally, the generation of waste had decreased in 2020, due to the pandemic.

The monitoring of the values continues in 2021 and its results are detailed in point 7.9 of this Statement.

Indicate that, as an action to create the minimum environmental impact from Adasa workers from the first moment they begin to work with us, they receive documentation (within the "Manual of welcome" Rev 08, 18th january 2022) and training in "Good practices" in the following fields:

- Use of Water.
- Consumption of paper
- Energy consumption
- Waste management
- Noise
- Fuel savings, etc.

6. OBJETIVES AND GOALS

Adasa's environmental objective for 2021 was established in accordance with the Environmental Policy, the applicable legal requirements, the Environmental Aspects evaluated at the end of 2020 and the results of the Objectives that had been set for 2020.

Due to the Covid19 pandemic, it was decided that this objective would have a closing date of 2021, since it was not possible to carry it out within 2020

OBJETIVE 1	GOAL
REDUCE ELECTRICITY CONSUMPTION AT PRAT DE LLOBREGAT ADASA FACILITIES	Reduce at least 1% of the indicator associated with electricity consumption
ACTIONS IMPLEMENTED	
<p>For 2020-2021, 2 actions were set to try to reduce the relative consumption of electricity;</p> <ol style="list-style-type: none"> 1. Change warehouse and stairs lights to LED 2. Reduce the number of heaters in the building and / or replace them with newer and more efficient ones. <p>Regarding the monitoring of these actions:</p> <ul style="list-style-type: none"> - Done Q4 2021. - A heater change was made in March 2020, and another 4 in early November 2020. <p>In the review at the beginning of 2021 comparing the data of 2019 and 2020 in the same periods, they return a result of:</p> <p>2019: 140,910 kWh / 69 workers = 2,042 kWh / employee</p> <p>2021: 150,330 kWh / 68 workers = 2,210 kWh / employee</p> <p>Which represents an increase of 7%, much higher than the 1% initially raised.</p> <p>But we have to keep in mind that:</p> <ul style="list-style-type: none"> - There has been an increase in activity in the building due to starting to work face to face this year. - Due to the Pandemic (Health & Safety management), we are using both plants for administrative working in order to have enough space between employees. Also we are working with open Windows in order to maintain a Good ventilation in the offices. This action increases a lot the electrical consumption. - Change warehouse and stairs lights to LED <p>Therefore, and although for now the result that is being obtained is understood as satisfactory, the evolution of the results will continue to be reviewed in 2022 to draw definitive conclusions on the effectiveness of the actions that have finally been implemented.</p>	

OBJETIVE 2	GOAL
REDUCE PLASTIC CONSUMPTION AT PRAT DE LLOBREGAT ADASA FACILITIES	Plastic waste < 4,5 kg/employee
ACTIONS IMPLEMENTED	
<p>For 2021 year, 1 action implemented:.</p> <p>1. Re-use plastic package</p> <p>Regarding the monitoring of these actions:</p> <p>- re-use of package plastic as far as posible. For instance, individual Covid-19 sanitizer bottles have been re-use for all the employees. Each employee had to use re-used bottles for this issue.</p> <p>In 2021, the figure is 4,13 kg plastic/employee. Tha objective has bee succesfully accomplished.</p>	

For the year 2022, the following objectives are determined:

OBJECTIVE N°1: REDUCE WATER CONSUMPTION PER EMPLOYEE BY 1% WITH RESPECT TO THE FIRST PRE-PANDEMIC YEAR (2018).

OBJECTIVE N°2: REDUCE TONER CONSUMPTION PER EMPLOYEE BY 5% COMPARED TO THE FIRST PRE-PANDEMIC YEAR (2018).

OBJECTIVE N°3: REDUCE PAPER CONSUMPTION PER EMPLOYEE BY 5% COMPARED TO THE FIRST PRE-PANDEMIC YEAR (2018).

OBJECTIVE N°4: PURCHASE AND USE OF AT LEAST 1 ELECTRIC VEHICLE IN THE PRAT DE LLOBREGAT WORK CENTER.

OBJECTIVE N°5: REDUCE THE GENERATION OF WEEE WASTE BY 10% COMPARED TO THE FIRST PRE-PANDEMIC YEAR.

7. ENVIRONMENTAL BEHAVIOR

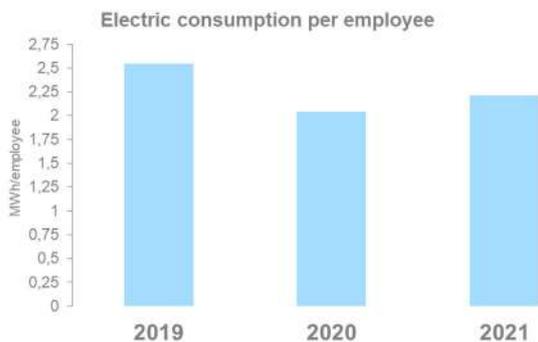
This statement presents the environmental performance of Adasa in its facilities in Prat de Llobregat during 2021 and the comparison with the years 2019 and 2020. The environmental performance results data are analysed. The origin of the data are invoices and delivery notes received.

Indicate that in specific cases, there are values that cannot be studied separately for the facilities of El Prat, so it has been necessary to use some others that would include more centers. It will be specified in those cases.

The number of employees in Barcelona used in this environmental statement are: 64 in 2019, 69 in 2020 and 68 in 2021.

7.1. ELECTRICITY CONSUMPTION

This indicator ($R = A / B$) is achieved by extracting data from the electricity consumption invoices of the Barcelona headquarters and dividing it by the number of employees at the headquarters (B).



Graph 1. Electrical consumption per employee

During 2021, the total consumption of the organization at the BCN headquarters was 150,33MWh (A), with a number of employees in Barcelona of 68 people (B). Average consumption per employee ($R = A / B$) is 2,21 MWh. There is an increase in total consumption (7%) and in average consumption per worker (8,3%)

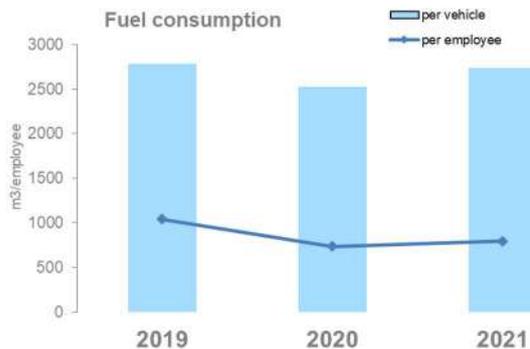
In Barcelona, renewable energy is not directly generated, although since October 2017 the organization changed its electricity supply company and purchases green energy for its consumption in this building. Therefore, these **150,33 MWh correspond to renewable energy**.

The increase in consumption is mainly due to the decrease in teleworking due to the 2021 better performance in pandemic statistics.

The data have been updated. All the figures represent Barcelona.

Indicator – Electricity consumption per employee		
2019	2020	2021
A: 162,73 MWh B: 64 employees R: 2,54 MWh/employee	A: 140,91 MWh B: 69 employees R: 2,04 MWh/employee	A: 150,33 MWh B: 68 employees R: 2,21 MWh/employee

7.2. FUEL CONSUMPTION



Graph 2. Fuel consumption per employee and per vehicle.

The global consumption of fuels (from vehicle movements) during 2021 has been **120.291 l**. Consumption per vehicle registers a value of **2.734 l/vehicle** and **797 l/employee**.

In the 2020 & 2021 calculations, the total number of vehicles and employees of the company has been taken into account, because it has not been possible to differentiate the exclusive trips in Catalonia.

For 2020 & 2021, global values of the company throughout Spain are used as a source of data, due it is not possible to differentiate the center associated to a certain consumption because vehicles are moving between different delegations.

The indicators are still being relative and giving a real image of these consumptions

The indicators ($R = A / B$ and $R' = A / B'$) are obtained through the fuel consumption invoices associated with Adasa vehicles (A), the vehicle ratio (B), and the global number of employees (B').

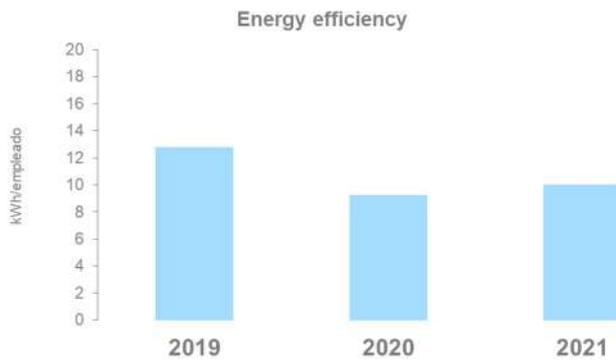
There has been an increase of 8,3% in consumption per vehicle and 8,3% per employee compared to 2020

During this year, work trips have been increased due to relaxation of the restrictive measures of the pandemic. Our employees have done more visits to the clients than previous year.

Indicator – Fuel consumption per vehicle and per employee

2019	2020	2021
A: 66.799,51 l.	A: 111.039,96l.	A: 120.291
B: 24	B: 44	B: 44
B':64	B':151	B':151
R= 2.783 l/vehicle	R= 2.524 l/vehicle	R= 2.734 l/vehicle
R'= 1.044 l/employee	R'= 735 l/employee	R'= 797 l/employee

7.3. ENERGY EFFICIENCY



Graph -3. Energy consumption per employee.

This indicator is extracted from the indicators already seen in this Statement:

-A1: Electricity Consumption MWh / employee,

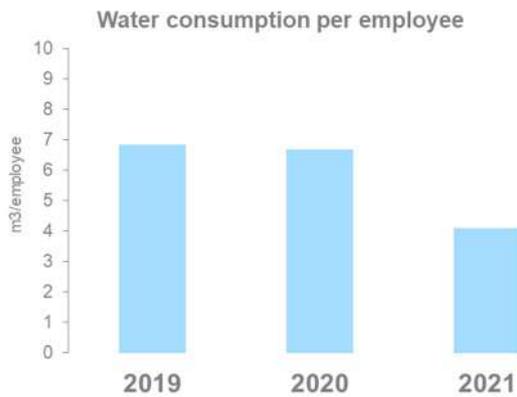
-A2: Fuel Consumption MWh / employee.

For fuel consumption (diesel in all cases), the conversion factor is "A liter of diesel weighs 0.832 kg", "1kg Diesel = 11.8kWh (Source: IDAE)."

There has been an increase of 8,3% compared to 2020 due to the increase of electricity and fuel consumption.

Indicator - Energy Efficiency		
2019	2020	2021
A1: 2,54 MWh/e	A1: 2,04 MWh/e	A1: 2,21 MWh/e
A2: $1044 * 0.832 * 0.0118 = 10.25$ MWh/e	A2: $735 * 0.832 * 0.0118 = 7.22$ MWh/e	A2: $797 * 0.832 * 0.0118 = 7.82$ MWh/e
A1+A2: 12.79 MWh/e	A1+A2: 9.26 MWh/e	A1+A2: 10.03 MWh/e

7.4. WATER CONSUMPTION



Graph 4. Water consumption per employee.

The use of water is common among employees for both personal hygiene and consumption as a beverage. It's also used during facilities cleaning services.

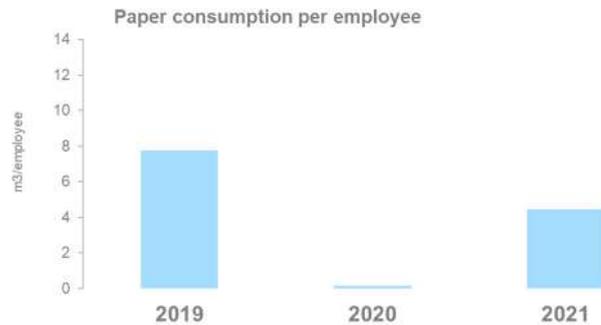
The total consumption for the Barcelona Headquarters (El Prat) during 2020 was **279 m³** and the consumption per employee was **4.10 m³ /employee**. Which represents a decrease compared to 2020 of **39%** in this indicator, due to lower presence of employees in the workplace because of the pandemic.

During this year, the actions derived from a positive for legionellosis in the facilities (2019) didn't consume the same amount of water than previous year. Also remain that a possible neglect in the closing of a water stopcock key in the first quarter of 2019 has not been repeated in 2020.

The indicator ($R = A / B$) is obtained through the water consumption invoices (A) and the number of employees (B).

Water Consumption		
2019	2020	2021
A: 437 m ³	A: 461 m ³	A: 279 m ³
B: 64	B: 69	B: 68
R: 6.82 m³/ employee	R: 6.68 m³/ employee	R: 4,10 m³/ employee

7.5. PAPER CONSUMPTION



Graph 5. Paper consumption per employee

The consumption of paper occurs as a consequence of office activity. During 2021, **337,5 kg** of paper have been consumed in BCN. The average global consumption per employee is **4,96 Kg / person**, **2.640%** more than in 2020.

The indicator $[R = \sum (A_i * B_i) / C]$ is extracted by adding the number of paper sheets purchased (A_i), by the relative weight of each one (B_i) extracted from the different invoices, and divided by the number of workers (C)

Paper consumption is related to the needs of ongoing projects and the preparation of offers to clients, which are highly variable in different periods.

An attempt is made to explain the significant decrease this year for two reasons:

- Gradual return to face to face work
- Order for paper planned for late 2020 done in 2021.

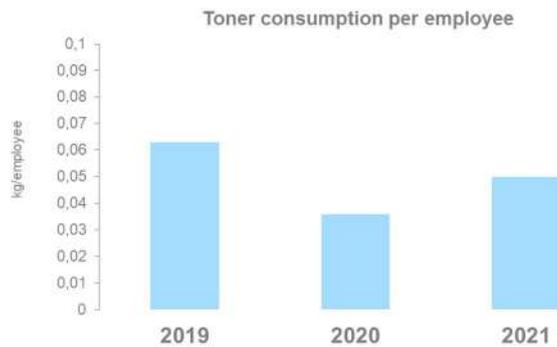
The paper used in the offices has the eco-label and is 100% recycled. In addition, DIN A3 has the “Der BlaueEngel” label.

Adasa has a Green Purchase Technical Instruction (Rev 01) for the acquisition of office supplies with sustainability criteria

Data from 2019 and 2020 have been recalculated due to a mistake with the formula used in the calculations done.

Indicator – Paper consumption per employee		
2019	2020	2021
$\sum A_i * B_i = 282,5 \text{ kg}$	$\sum A_i * B_i = 12,5 \text{ kg}$	$\sum A_i * B_i = 337,5 \text{ kg}$
C= 64	C= 69	C= 68
4,41 kg/employee	0,18 kg /employee	4,96 kg /employee

7.6. TONER CONSUMPTION / WASTE



Graph 6. Toner consumption/waste per employee

For the calculation of the consumption of toners and cartridges it is considered that the consumption is equal to the generated waste.

In 2021 there has been an increase of 140% compared to previous year. In 2020 it has been made only a waste removal in March. The next waste removal was in March 2021 (5kg) which included the waste of last 12 months.

After that, another waste removal has been made in September 2021 (1kg)

The organization works in awareness campaigns to reduce the number of prints, the use of draft paper for internal document prints and the use of ink-saving fonts (ecofont).

This indicator ($R = A / B$) is obtained by dividing the kg of toner produced as waste (A) by the number of employees (B).

Indicator – Toner consumption per employee		
2019	2020	2021
A= 4 kg B=64	A= 2,5 kg B=69	A= 6 kg B= 68
R= 0,06 kg/employee	R= 0,036 kg/employee	R = 0,08 kg/employee

7.7. BIODIVERSITY

As a biodiversity indicator, the surface occupation of the Adasa offices is calculated among the number of employees at the BCN headquarters. The sealed surface is 100% (1195 m²). There is no surface oriented regarding nature and there is no surface outside the center.

Indicator - Biodiversity - Surface occupation		
2019	2020	2021
A= 1195 m ² ; B= 64 employees A/B= 18,7 m²/employee	A= 1195 m ² ; B= 69 employees A/B= 17,32 m²/employee	A = 1195 m ² ; B = 68 employees A/B= 17,6 m²/employee

We have an increase of 1% in global occupancy per employee compared to 2020. Increase that is directly due to the number of employees.

7.8. EMISSIONS

7.8.1. NOISE

The source of the noise pollution generated by ADASA is its motor vehicles and some specific work carried out at the workshop located at the Hospitalet (Barcelona) Office. At some sites (when the use of machinery by subcontracted companies is required) some noise pollution peaks may occur. Even so, no corrective action was required to be taken in 2021 relative to the noise levels that were produced directly and indirectly

7.8.2. DUST

ADASA generates dust emissions in projects requiring civil work outsourcing. In order to minimize the environmental impact, it's necessary to carry out the following measures:

- ✓ Irrigate the soil especially during the summer months and sections close to areas with vegetation or inhabited areas.
- ✓ Place a tarp on top of the vehicle that transport dust-generating material.
- ✓ Restrict traffic and limit the speed of machinery and vehicles.
- ✓ Carry out the dustier activities, whenever possible, to the schedules when it affects less people.
- ✓ Cover easily dispersible materials in windy conditions.

7.8.3. FUGITIVE EMISSIONS (AIR CONDITIONING)

During 2021 no action has been required to recharge the cooling circuit of the El Prat facilities.

Through the maintenance records of the installation, we know the recharges volume and therefore the gas emitted into the atmosphere. Finally, the associated impact is calculated (GWP-Global Warming Potential).

Since 2014, fugitive emissions from air conditioning refrigerants have been included in the calculation of CO₂ equivalent emissions.

7.8.4. GREENHOUSE GASES

Adasa's activities that directly emit greenhouse gases are: Travels by car, train and plane. Indirectly, it also contributes to the emission of CO2 through the consumption of water and the generation of waste. Electric power is contracted with a "No emissions" certificate.

In 2020, due to the Covid-19 pandemic, trips have been restricted to only the "essentials" in shared means of transport (plane and train), increasing the total emission in road trips.

In 2021 we have increased the number of trips, mainly to foreign countries.

An emission factor for the use of water has been incorporated, indicated in the guide used to calculate emissions: "Guide for the calculation of greenhouse gas emissions version 2020 of the OCCC – Oficina Catalana Cambio Climático".

There are also data that we have had to recalculate from 2018 and 2019 (water), although without great variation, due to the use of this guide.

For emissions by transport, the number of employees used this year (and previous year) is the total of the company in Spain (instead of the sum of the delegations of Barcelona and Madrid as in 2019), although the final data is still indicated in Tn relative CO2 equivalent emitted by each employee. This is due to the change in the management company of the company's trips, and that the data received has a different model than in previous years. In the calculation:

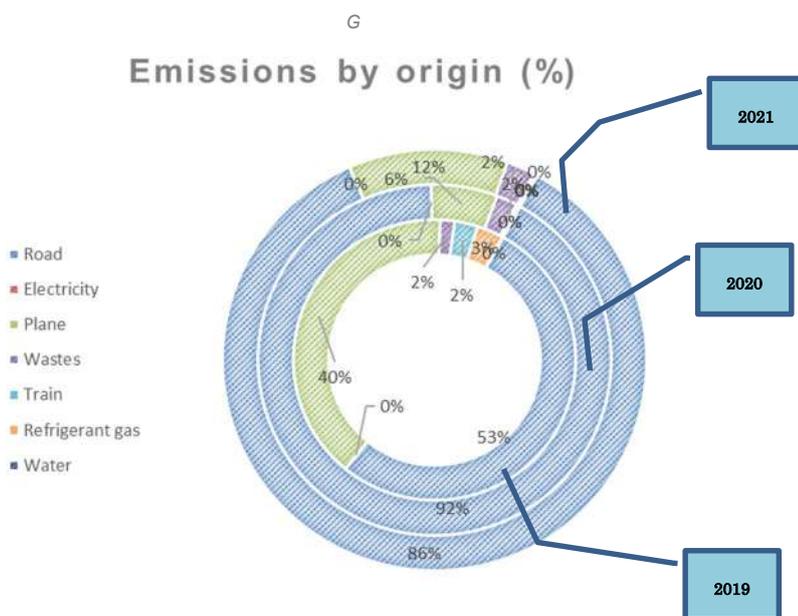
-The CO2 emission per km traveled by plane has been averaged, using the Methodology of the ICAO-International Civil Aviation Organization (www.icao.int).

-Value A: Equivalent emissions due to: Travel (by road, train and plane), water consumption, electricity consumption, waste generation.

-Value B: number of employees Barcelona and others, is used for: Travel

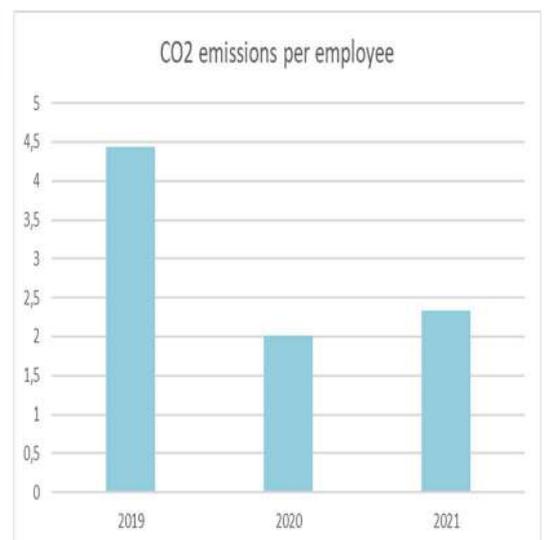
-Value B': number of employees in Barcelona, is used for: water consumption, electricity consumption, waste generation.

The result is the sum of the relative indicators ($R = \sum A / B$)



Graph 7. Emissions by origin

Graph 8. Emissions per employee



Indicator – CO₂ emissions
 Journeys (car, train, aircraft), electrical consumption, fugitive emissions, waste, water

2019	2020	2021
A = 313,93 t; B = 71 employees (Madrid + Barcelona), B ' = 64 employees (Barcelona) R = 4,3 t CO₂ / employee	A = 299,99 t; B = 151 employees throughout Spain, B ' = 69 employees (Barcelona) R = 2,009 t CO₂ / employee	A = 347,48 t; B = 151 employees throughout Spain, B ' = 68 employees (Barcelona) R = 2,329 t CO₂ / employee

An increase of 15,92% in CO₂ equivalent has been done compared to 2020. We relate it to the recovery of the activities (travel, water, waste...) due to the improvement of the pandemic conditions.

7.8.5. SO₂, NO_x AND PM EMISSIONS.

For the calculation of SO₂, NO_x and PM emissions, the data on fuel consumption in Adasa cars will be used. All these cars use "diesel" as fuel.

The conversion factors of "EMEP / EEA air pollutant emission inventory guidebook 2019" in its annex 1.A.3.b-iv Road transport 2019, and table 3-6 and 3-14, will be used to transform fuel consumption in grams of SO₂, NO_x and PM emission.

Vehicle type	Fuel	SO ₂	NO _x	PM
Small car	Diesel	A: 0.003 g/kg diesel	A': 12.96 g/kg diesel	A'': 1.10 g/kg diesel

We consider that a liter of diesel weighs 0.832 kg, being:

B: liters of diesel per employee.

R: g SO₂ per employee, where $R = A * B * 0.832$

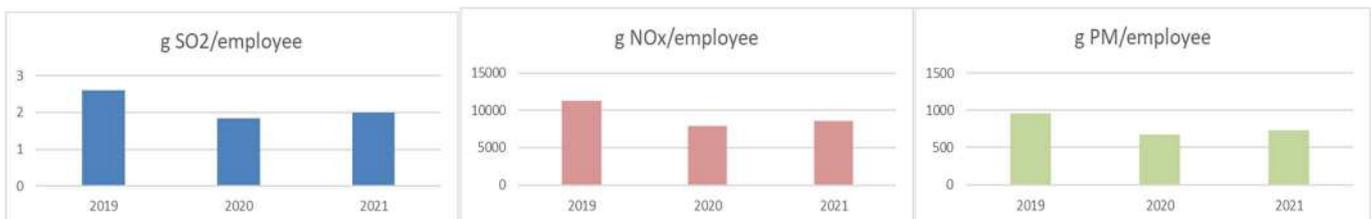
R': g of NO_x per employee, being $R' = A' * B * 0.832$

R'': g of PM per employee, being $R'' = A'' * B * 0.832$

Using the values obtained in point 7.2, we obtain as a result, an increase of 8,33% of these values compared to 2020:

Indicator - SO₂, NO_x and PM emission per employee

2019	2020	2021
B: 1.044 l/employee R: 2,61 R': 11257,16 R'': 955,47	B: 735 l/employee R: 1,83 R': 7929,22 R'': 673	B: 797 l/employee R: 1,99 R': 8590 R'': 729,1



g PM/employee

7.9. WASTES

In order to properly separate the waste, specific containers are available at the different office sites and waste areas are designated for storing each type of waste so that it can be subsequently collected by the authorized waste manager, which guarantees the assessment and specific treatment.

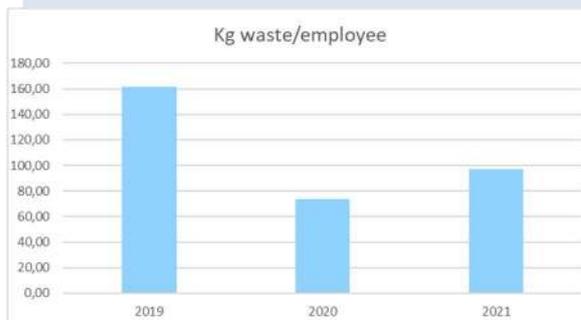
The quantity data used in these sections has been taken from the official documentation generated during the movement and management of waste by authorized managers.

Office-Workshop-Laboratory Barcelona		Maintenance	
Toner	NH	Cables	NH
Paper and cardboard		Packaging (Plastic and cardboard)	
Plastic (NHW)		Scrap metal	
Non-segregated waste collection		Wood	
Non-Hazardous Electrical and Electronic Equipment (WEEE)			
Batteries and Cell-batteries			
Fluorescent lamps			
Contaminated containers			
Contaminated absorbent paper		H	
Non-Hazardous Electrical and Electronic Equipment (WEEE)			
Chemical reagents	H	Maintenance solutions	

Table 3. Waste Identification.

7.9.1. TOTAL WASTE

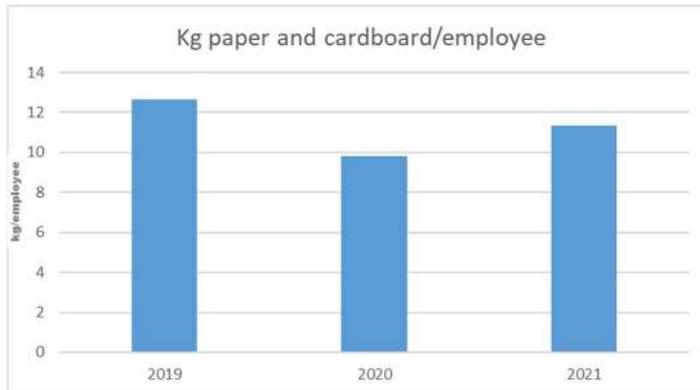
Indicator – Total Waste (except Projects: WEEE, Batteries)		
2019	2020	2021
A= 10353,6 kg; B = 64 employees A/B = 161,78 kg/employee	A= 5101 kg; B= 69 employees A/B= 73,93 kg/employee	A = 6609 kg; B = 68 employees A/B = 97,17 kg/employee



The waste is managed through an waste authorized manager.

The result shows a relative increase of 31% compared to 2020, due to the return to face to face work.

7.9.2. PAPER AND CARDBOARD WASTE



Graph 9. Paper and cardboard waste per employee.

The cardboard from packaging is reused for the internal shipment. This significantly reduces the requirement for cardboard boxes for the preparation of new shipments of material between delegations.

Specific containers are distributed in the offices, which are periodically managed by the authorized Waste Manager for subsequent recovery

In 2021 there has been a 15,73% increase in waste of paper and cardboard compared to 2020 from 9.79 to **11.34 kg per employee.**

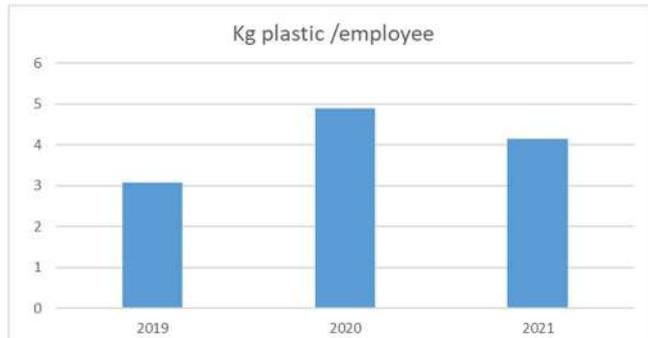
Actions on the use of digital formats and printing in saving format for documents for internal use have been maintained.

The return to face to face work due to the improve in Covid19 pandemic conditions is also understood to have been a determining factor for this decrease.

Indicator – Paper and Cardboard waste per employee

2019	2020	2021
A= 810 kg; B= 64 employees R= A/B = 12,7 kg/employee	A= 676 kg; B= 69 employees R= A/B = 9,79 kg/employee	A= 771 kg; B= 68 employees R= A/B = 11,34 kg/employee

7.9.3. PLASTIC WASTE



Graph 10. Plastic waste per employee.

In 2021, a residual plastic value of **4,15 kg per employee** was registered, with a decrease of **15,34%** compared to the previous period.

The residual plastic comes mainly from packaging and unused containers. Packaging materials in good condition, as with cardboard, are reused internally.

During this year we have been prioritizing plastic pallets instead of wood.

Modifications in 2020 have been done

Indicator – Plastic waste per employee		
2019	2020	2021
A= 197 kg; B= 64 employees R= A/B = 3,08 kg/employee	A= 338 kg; B= 69 employees R= A/B = 4,90 kg/employee	A= 282 kg; B= 68 employees R= A/B = 4,15 kg/employee

7.9.4. HAZARDOUS WASTE (LABORATORY - WORKSHOP)

The origin of the laboratory residues are the activities of preparation and replacement of reagents of the analytical equipment for water quality parameters, and of the residual reagents of the laboratory tests associated with R+D+i projects in the laboratory of El Prat (Barcelona).

The separation of toxic and dangerous waste, its storage and its final conditioning are regulated by legislation and by the procedures and instructions of the Adasa Management System.

Waste (kg)	2019	2020	2021
Contaminated absorbent paper	0	0	0
Waste Products / Chemical Preparations	1147	1876 (instead of 1321)	1792
Waste Containers Contain Hazardous Substances (plastic)	28	22	59
Contaminated Glass Waste	138	20	15
Hazardous Waste Indicator (kg)	1313	1958 (instead of 1363)	2892,72
Nº Employees	64	69	68
Hazardous Waste Indicator (kg / employee)	20,52	28,37 (instead of 19,75)	42,54
No. Hours worked Laboratory / Maintenance	3150	5808	6758
Hazardous Waste Indicator (kg / Hours)	0,42	0,33 (instead of 0,23)	0,42

Table 4. Laboratory and workshop waste.



Graph 3. T.

The generation of the waste (A) is not proportional to the number of employees, but is linked to the needs of the R+D+i projects, in the way that the indicator is calculated with respect to the hours of production (B). Indicator $R = A / B$.

There is a 27% increase in relative Hazardous Waste (kg/h), due to the fact that in 2021 the workload has been restarted. The figures of 2019 and 2021 are similar.

Waste figures in 2020 have been modified due to problems with the documents sent by the former waste authorized manager.

7.9.5. PROJECT WASTE MATERIALS

A Quality, Environmental and Health & Safety Action Plan is drafted for each project to identify and assess the specific environmental hazards and all the procedures and elements that must be taken into account to ensure correct environmental management; waste management preventive and corrective actions, good environmental practice data sheets, etc.

The Action Plan is communicated to ADASA stakeholders involved on the project in order to guarantee its accomplishment.



Due to ADASA's activity, the generation of waste is variable and depends on each project's needs

Figures of batteries 2020 have been modified.

¹Waste Project site materials (batteries, cables,...) are not represented as a ratio of total value per employee (A/B) because this indicator has variable generation and low representativeness and is not significant according to the environmental analysis – Chapter 2.3.2.2 Commission Decision of 4 March (2013/131/UE).

Waste1 (kg)	2019	2020	2021
Batteries	4860	4579 (instead of 4119)	3600
Wood	520	0	0
WEEE NH (Waste Electrical and Electronic Equipment - Non-Hazardous)	315	384	0

Table 5. Main worksite project waste materials.

7.10. COMPLIANCE WITH EU DECISION 2019/63

At the beginning of 2019 the “COMMISSION DECISION (EU) 2019/63” enters into force.

It consists of a sectoral reference document on best environmental management practices, sectoral indicators of environmental performance and comparative parameters of excellence for the electrical and electronic equipment manufacturing sector.

In accordance with Annex IV, Section B, letter e) of the EMAS Regulation, the environmental declaration must contain “a summary of the information available on the behavior of the organization regarding its environmental objectives and targets in relation to its significant environmental impacts; Core indicators and other relevant existing environmental performance indicators should be reported as set out in section C. ' In Annex IV, section C, the following is stated: “Each organization must also report annually on its behavior in relation to the more specific environmental aspects indicated in its environmental statement and, if available, must take into account the reference documents sectors referred to in article 46 ».

The Best Environmental Management Practices (BEMPs) applicable to Adasa are detailed according to its activities and facilities, and the monitoring indicator used.

BEMP	INDICATOR DESCRIPTION	BASIC INDICATOR	COMPLIES	DESCRIPTION OF COMPLIANCE
3.1.2	Coefficient of System Performance (COSP)	Energy efficiency	YES	Installation implemented in compliance with energy efficiency guidelines. Follow-up: See point 7.1 of this ES We can't verify exclusively the refrigeration electricity consumption so we are using total electricity as indicator
3.1.9	Share of electricity from renewable sources (self-generated or purchased with verified additionality) out of the total electricity use (%)	Energy efficiency	YES	100% Energy consumption is renewable
3.1.10	Waste disposal diversion rate of the waste generated at manufacturing plants	Wastes	NO	Annual indicators of waste generation. See points 7.9 of this ES 7.549,72 kg waste (valorization) and 2.660 kg waste (no valorization). Aprox 73% valorization vs 93% required.
3.2.2	Periodical (e.g. annual) publication of GHG emissions calculated with a recognised standard method (Y/N)	Emissions	YES	Annual indicators of equivalent CO2 emissions. See points 7.8.4 of this ES and Global Compact report.
3.2.2	Periodical (e.g. annual) publication of GHG emissions calculated with a recognised standard method	Emissions	YES	Annual indicators of equivalent CO2 emissions. See points 7.8.4 of this ES and Global compact report.

BEMP	INDICATOR DESCRIPTION	BASIC INDICATOR	COMPLIES	DESCRIPTION OF COMPLIANCE
3.2.3	Inclusion of LCA according to the ISO standards 14040 and 14044 in the environmental strategy of the company and use of LCA when taking major decisions for developing new and redesigned products	Energy efficiency Material efficiency Water Waste Biodiversity Emissions	NO	LCA: life cycle, R&O, integrated aspects included in ISO 14001 but we are not using ISO 14040. Life cycle assesment. Started in Aquabio (measuring device). Project I bathwater Implementing ETV (European Technology Verification) of Aquabio (measuring device)
3.2.4	Formulation of procurement guidelines and requirements for the most relevant products and materials identified in the biodiversity assessment	Material efficiency	YES	14001 / EMAS requestion to suppliers
3.3.1	Setting of circular economy objectives for new products	Material efficiency	NO	The manufactured equipment is completely removable, repairable by parts and separable by components for recycling
3.3.1	Share of products or components (by number or revenue) for which design cycles or redesign cycles have been embarked upon that explicitly address the different approaches of circular economy	Material efficiency	YES	100% of the manufactured equipment is designed to be completely removable, repairable by parts and separable by components for recycling
3.3.2	Implementation of the IPSO model ensuring that it delivers environmental benefits	Material efficiency	YES	The installation and maintenance service recovers the waste generated and is in charge of environmentally sound management. There is an agreement with ECOTIC for the correct management of the same volume of WEEs with respect to EEEs that Adasa puts on the market

8. LEGAL COMPLIANCE

Adasa identifies records and reviews the applicable legal environmental requirements and the requirements of voluntary commitments it has acquired.

Adasa currently has no open disciplinary proceedings or proceedings in environmental matters and compliance with all legal requirements applicable.

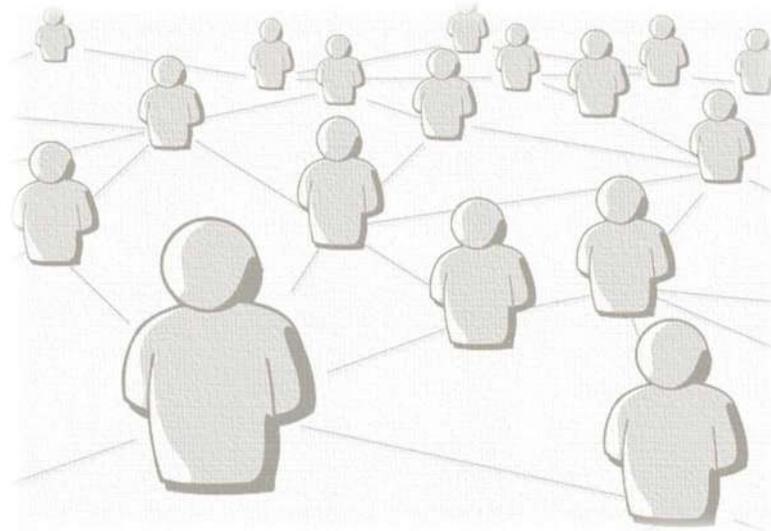
Areas	Associated Regulations	Compliance assessment
Activities License	<p>-L20/2009, of 04-12-2009, on prevention and environmental control of activities.</p> <p>-Ordinance of municipal environmental, security and public health intervention in El Prat de Llobregat.</p> <p>- Ordinance type of municipal environmental, security and public health intervention of the Diputació de Barcelona.</p>	<p>The headquarters has an Activities License.</p> <p>In 2020 the favorable resolution of the non-substantial modification of your License is obtained.</p>
Low voltage	<p>-RD 842/2002, of 02-08-2002, approving the Low Voltage Electrotechnical Regulation.</p> <p>-RD 314/2006, dated 03-17-2006, which approves the Technical Building Code.</p>	<p>The electrical installation has passed the inspections both internal (maintenance company) and external by external maintenance Company.</p>
Lifting devices.	<p>-RD 88/2013, of 08-02-2013, which approves the Complementary Technical Instruction AEM 1 "Lifts" of the Regulation of lifting and handling equipment, approved by Royal Decree 2291/1985</p>	<p>Periodic inspections of lifting devices are being carried out.</p> <p>In 2020, the external inspection of the elevator in use was passed favourably.</p>
Energy efficiency.	<p>-RD 56/2016, of 03-12-2016.</p> <p>-RD 314/2006, of 03-17-2006, which approves the Technical Building Code.</p>	<p>The Energy Audit has been carried out with the former Company COMSA.</p> <p>The building has an energy rating.</p>
Air conditioning	<p>-RD 314/2006, of 03-17-2006, which approves the Technical Building Code.</p> <p>-RD 1027/2007 of 07-20-2007, approving the Regulation of Thermal Installations in Buildings.</p>	<p>The facilities at the headquarters have been legalized.</p> <p>Legal inspections passed.</p>

Areas	Associated Regulations	Compliance assessment
Fire extinguishing systems	<p>-Order 07-27-1999 determining the conditions to be met by fire extinguishers installed in vehicles for transporting people or goods.</p> <p>-RD 2060/2008, of 12-12-2008, which approves the Regulation of pressure equipment and its complementary technical instructions.</p> <p>-RD 2267/2004, of 03-12-2004, which approves the Regulation of fire safety in industrial establishments.</p> <p>-RD 314/2006, of 03-17-2006, which approves the Code</p> <p>-RD 513/2017, of 05-22-2017, which approves the Regulation of fire protection installations.</p>	All periodic inspections and maintenance of fire protection installations are carried out.
Legionellosis	-RD 865/2003 of 04-07-2003 establishing the hygienic-sanitary criteria for the prevention and control of legionellosis.	<p>All periodic inspections and maintenance of sanitary water facilities are carried out.</p> <p>In 2020 a positive was detected. An action program has been implemented.</p> <p>Problem solved.</p>
Annual Declaration of Waste	-D 93/1999 of 06-04-1999 on waste management procedures.	It's carried out annually
Annual Packaging Declaration	-RD 782/1998, of April 30, which approves the Regulation for the development and execution of Law 11/1997, of April 24, on packaging and packaging waste	It's carried out annually
Waste management	<p>-D 93/1999, of April 6, on waste management procedures.</p> <p>- RD 553/20 waste movement.</p>	<p>All waste is managed through Authorized Managers and carriers.</p> <p>-The legal procedures defined in the different applicable regulations are complied with.</p>
Statement of EEEs placed on the market	RD 110/2015, of 02-20-2015, on waste from electrical and electronic equipment. (WEEE)	Quarterly statements are made.
ITV	RD 920/2017, of October 23, which regulates the vehicles technical inspection.	The ITVs of the vehicles are passed at the marked frequency.

9. STAKEHOLDERS

Adasa ratified its commitment to social and economic and especially environmental sustainability, which is in fact the core business of the Company.

The drafting of a Dialogue Map for stakeholders has enabled the most suitable action to be applied with collaborators, clients, suppliers, employees and other companies which are working in the same sector.



10. TRAINING AND COMMUNICATION

ADASA keeps employees involved in activities or practical training in order to reach the set goals and objectives.

In the Employee Portal the staff can contribute and exchange information with other employees. This information is analysed by the *Environmental, Quality and Health&Safety Committee*.
[https://portal.adasasistemas.com/en/group/adasa/foros/-/message_boards? 19 mbCategoryId=33065](https://portal.adasasistemas.com/en/group/adasa/foros/-/message_boards?_19_mbCategoryId=33065)



11. VALIDATION

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This Environmental Declaration has been validated by *SGS Internacional Certification Services Ibérica, S.A.U.* Date.....

“SGS INTERNATIONAL CERTIFICATION SERVICES IBERICA, S.A.U. accredited by ENAC number ES-V-0009 and authorised by Direcció General de Qualitat Ambiental de la Generalitat de Catalunya number 034-V-EMAS-R



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