



ANNUAL  
REPORT

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2019

# LETTER FROM THE CEO

José María Bauzá de Mirabó Darder

MAC INSULAR has been working for fourteen years with a passionate commitment to sustainability and respect for the environment in Mallorca. It hasn't always been a smooth journey, but we can proudly say that it has been worth the hard work, as we're now reaping hopeful fruits.

This is the second year in which we've published our activity report. It helps us make comparisons to observe the evolution of the company, highlight our successes and - of course - correct our mistakes.

We've underpinned our commitment to management with eleven of the seventeen Sustainable Development Goals (SDGs) set by the United Nations in its 2030 Agenda.

Our strategy is guided by equal opportunities, the sustainable use of water, the promotion of renewable energy, social inclusion, innovation and the fight against climate change. What's more, this year we've calculated the carbon footprint generated by our business for the first time ever. Improving this figure will be another of our challenges for the future.

In 2019, we treated almost 600,000 tons of waste in the public service, most of which correspond to construction and demolition

waste (C&DW). We managed to recycle or recover more than 99% of this waste, once again getting very close to the goal of zero disposal.

Fostering the use of recycled aggregates was another of the goals for the year. Well, more than half of the recycled aggregates obtained in our plants re-entered the construction cycle, being sold for use in new projects, while the rest were intended for quarry restoration.

Last but not least is our commitment to the creation of green jobs and the social aspect of our business. Thanks to our partnership with the Deixalles Foundation, during these years we have facilitated the employment of almost 500 people, many of them belonging to vulnerable groups or collectives at risk of exclusion.

There's still a long way to go, but the facts and figures in this 2019 activity report inspire us to continue converting waste into resources and taking care of Mallorca for future generations.



***“The clear purpose of achieving recovering and valuation of waste, while having the minimum environmental impact to the island of Mallorca”***

WE'RE CONCERNED ABOUT HOW THE FUTURE GENERATIONS WILL LIVE

That's why at **Mac Insular** we draw on all our experience to design a stage in which we can provide a long-term sustainable business.



MISSION

The design, construction and management of treatment plants for construction and demolition, bulky waste, and used tyres according to the **highest standards of quality and optimum use of waste as a resource, ensuring maximum environmental protection.**

With the objective of contributing to a more sustainable and attractive island for its citizen and visitors we aim to operate within a framework of economic efficiency while satisfying our shareholders: customers, employers, suppliers and investors.



VISION

Our vision is to be the leading company in the treatment of construction and demolition, bulky waste and used tyres as a resource, according to **the strictest environmental regulations.**

We maintain the highest waste management standards, ensuring the economic viability of the company and its longevity.



VALUES



Honesty



Human Capital



Transparency



Efficiency



Commitment



Responsibility

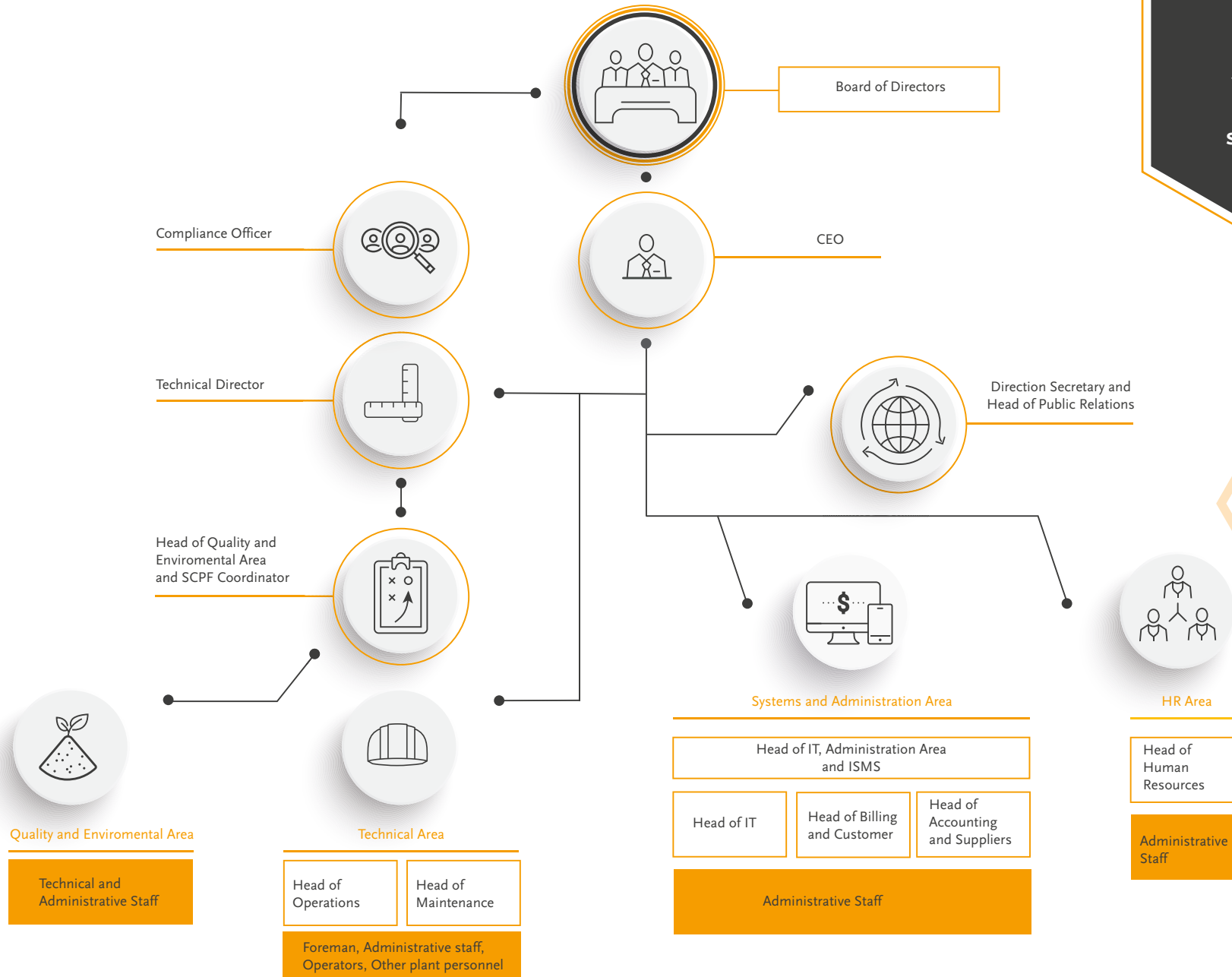


Environmental protection

# STRUCTURE AND ORGANIZATION

MAC Insular has a workforce of **86 employees**, who are the mainstay of the Company thanks to their work capacity and motivation to improve daily. A further **142 people** work through subcontracting companies.

**WE GENERATE GREEN EMPLOYMENT**



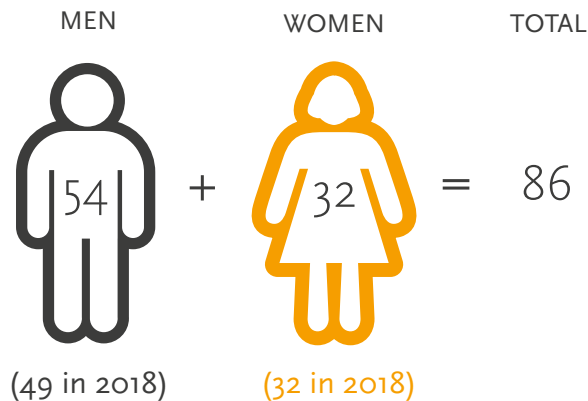
# STRUCTURE AND ORGANIZATION

5 GENDER EQUALITY

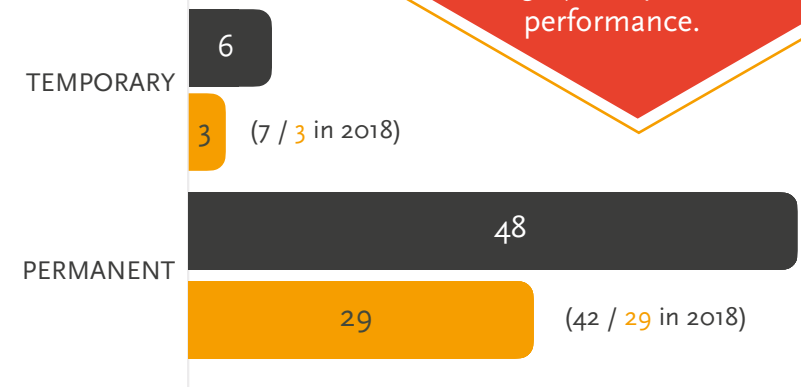


At MAC Insular, equal opportunities in access to employment are guaranteed and an equitable salary is offered according to the functions of each category and personal performance.

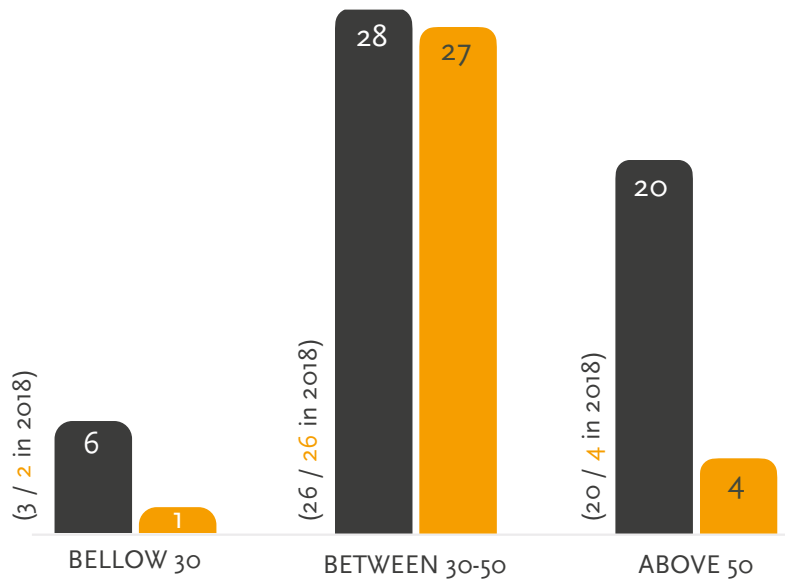
Staff distribution by sex, age and type of contract:



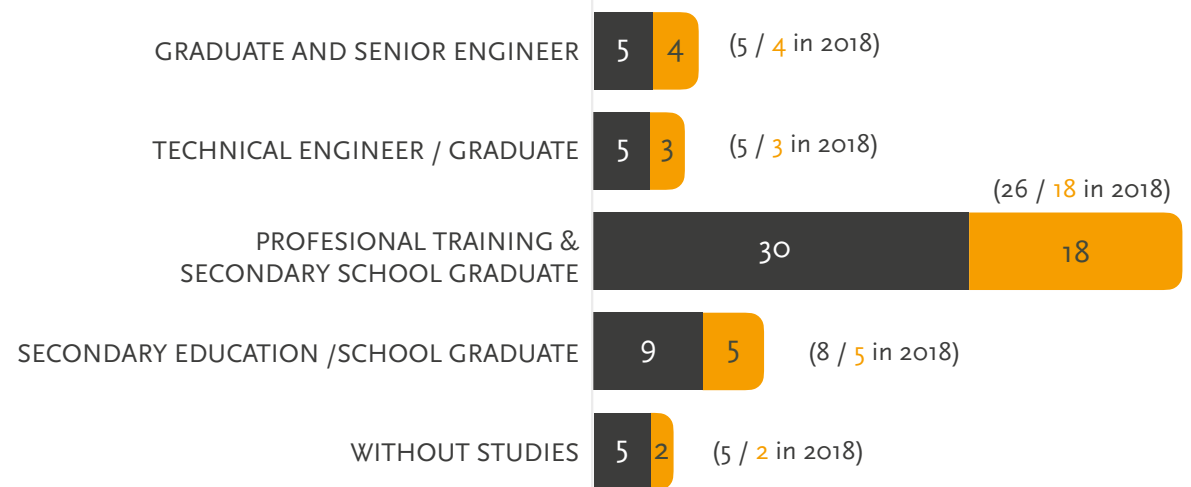
## CONTRACTS



## AGE



## ACADEMIC TRAINING





The activity of **MAC Insular** is based on converting waste into resources, thereby extending its life cycle and reducing pollution.



DATA ENTRIES BY WASTE TYPE			
ENTRIES (Data in Tons)	2019	2018	%
Construction-Demolition Waste	544,571	502,353	+7.75%
Electrical appliances with CFC	414	892	-53.58%
Electrical appliances without CFC	195	418	-53.35%
Electronic and Computer equipment	69	85	-18.82%
Remaining Bulky Waste	50,691	49,736	+1.88%
Used Tyres	3,510	3,477	+0.94%
<b>TOTAL</b>	<b>599,450</b>	<b>556,964</b>	<b>+7.08%</b>

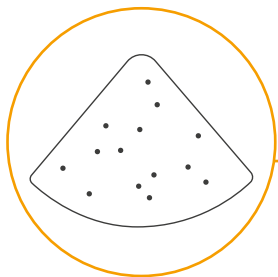


# CONSTRUCTION - DEMOLITION WASTE

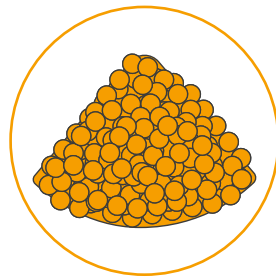
The construction - demolition waste which enters the plant is **cleaned, crushed and sieved**.

The cleaning stage used to obtain recycled aggregates entails the removal of magnetic metals, the suction of low density unsuitable materials, manual selection and ultimately, a ballistic separation to finish cleaning the material.

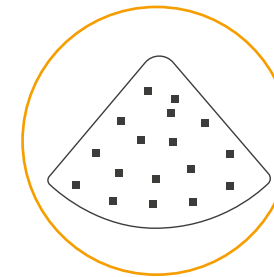
From the treatment process of construction - demolition waste, we obtain recycled aggregates into the following fractions:



0 - 8 mm



8 - 40 mm



0 - 15 mm

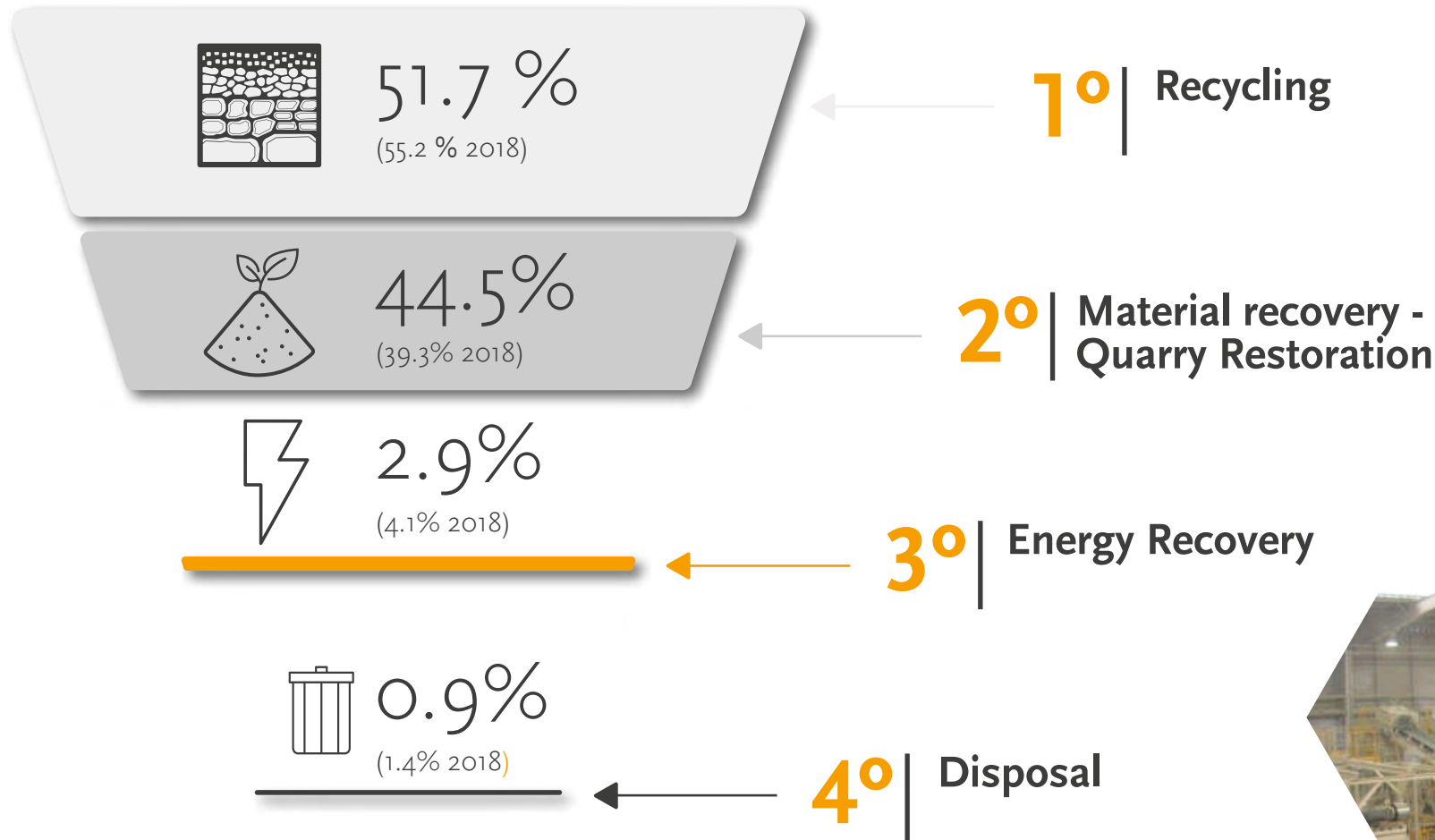
These recycled aggregates bear the CE marking according to the following standards:

EN 12620:2002+A1:2008,  
"Aggregates for concrete, prefabricated materials and other uses"

EN 13242:2002+A1:2007,  
"Aggregates for unbound and hydraulically bound materials for use in civil engineering and road construction".

# CONSTRUCTION - DEMOLITION WASTE

2019 RECYCLING AND RECOVERY RESULTS:





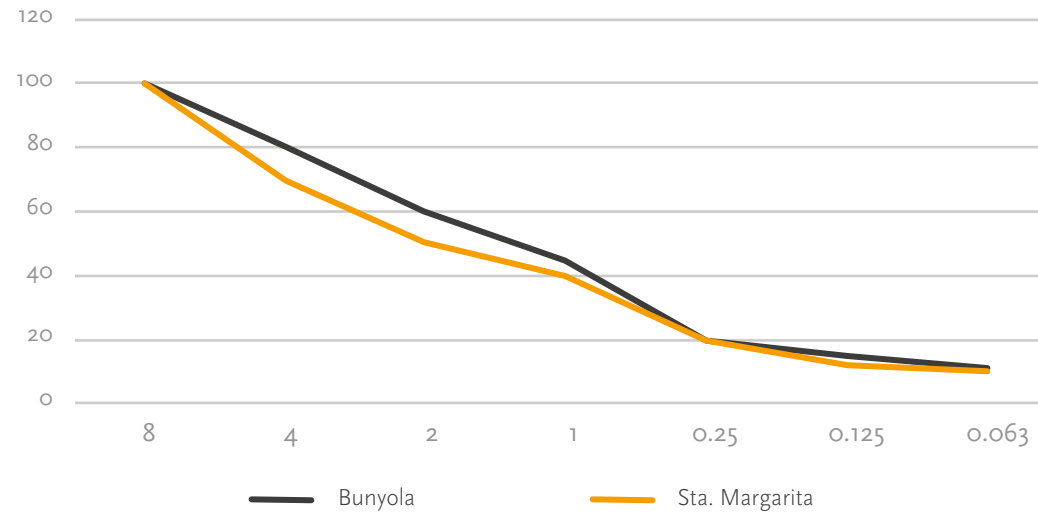
# OBTAINED PRODUCTS



**0/8 mm sand:** Among other uses, it can be used in surfaces, ditch filling or for the improvement of rural roads.

### Granulometric curve

	8	4	2	1	0.25	0.125	0.063
Bunyola	100	80	60	45	20	15	11
Sta. Margarita	100	70	50	40	20	12	10



# OBTAINED PRODUCTS

## Characteristics of the 0/8 mm

Resultats assajos realitzats	Bunyola	Sta.Margarita
Particle density (EN 1097-6)	2.4-2.8 g/cm <sup>3</sup>	2.4-2.7 g/cm <sup>3</sup>
Absorption / water suction (EN 1097-6)	<5%	<5%
Sand equivalent (EN 933-8:2012+A1:01/1M)	>60%	>60%
Content in fines (EN 993-1)	≤16%	≤16%
Influence on initial cement setting time (EN 1744-6)	75 min	85 min
Minor pollutants (EN 1744-1:2009-A1)	≤2%	≤1%
Organic pollutants (Húmic) (EN 1744-1:2009-A1)	Absence	Absence

Mortar for ditch channelling



Rural road



Land levelling



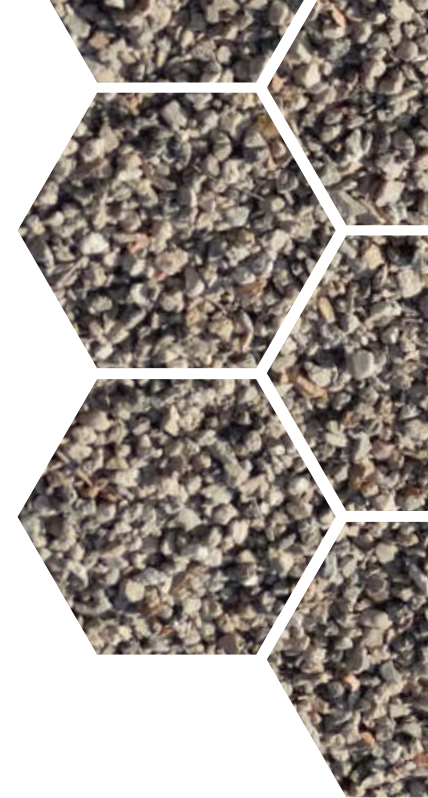
Pedestrian path



# OBTAINED PRODUCTS

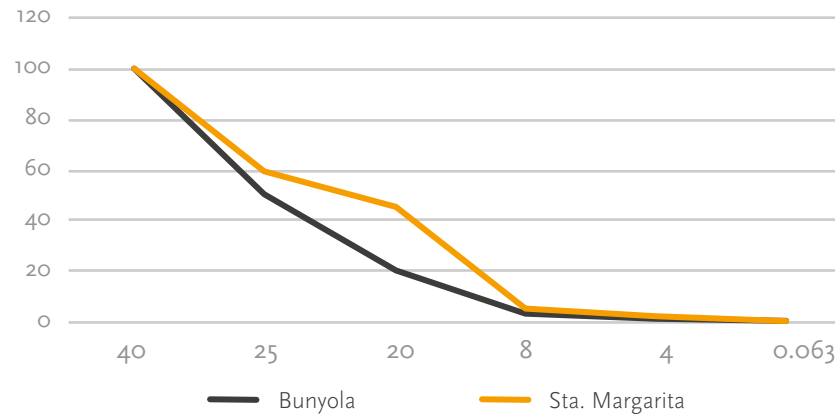


**8/40 mm gravel:** Suitable, among other uses, for improving road ditches, gardening, drainage, concrete paving and wall tiling.



Granulometric curve

	40	25	20	8	4	0.063
Bunyola	100	50	20	3.5	1	0.6
Sta. Margarita	100	60	45	5	2	0.5



# OBTAINED PRODUCTS

## Characteristics of 8/40 mm

Results of performed tests	Bunyola	Sta. Margarita
Slab index (EN 933-3)	≤35%	≤35%
<b>Particle density (EN 1097-6)</b>	<b>2.4-2.8 g/cm<sup>3</sup></b>	<b>2.4-2.7 g/cm<sup>3</sup></b>
Absorption / water suction (EN 1097-6)	<10%	<9%
<b>Content in fines (EN 993-1)</b>	<b>≤2%</b>	<b>≤2%</b>
Los Angeles abrasion resistance (EN 1097-2)	≤50%	≤50%
<b>Acid-soluble chlorides (EN 1744-5)</b>	<b>&lt;0.3%</b>	<b>&lt;0.2%</b>
Water-soluble sulphates (EN 1744-1:2009-A1)	≤0.7%	≤0.7%
<b>Acid-soluble sulphates (EN 1744-1:2009-A1) 2</b>	<b>1.5%</b>	<b>2%</b>
Total sulfur content (EN 1744-1:2009-A1)	≤1%	>1%
<b>Crushed and broken surfaces (EN 933-5:1998/A1:2004)</b>	<b>50% crushed 30% rounded</b>	<b>50% crushed 30% rounded</b>
Magnesium sulphate (EN 1367-2)	≤18%	≤25%



# OBTAINED PRODUCTS



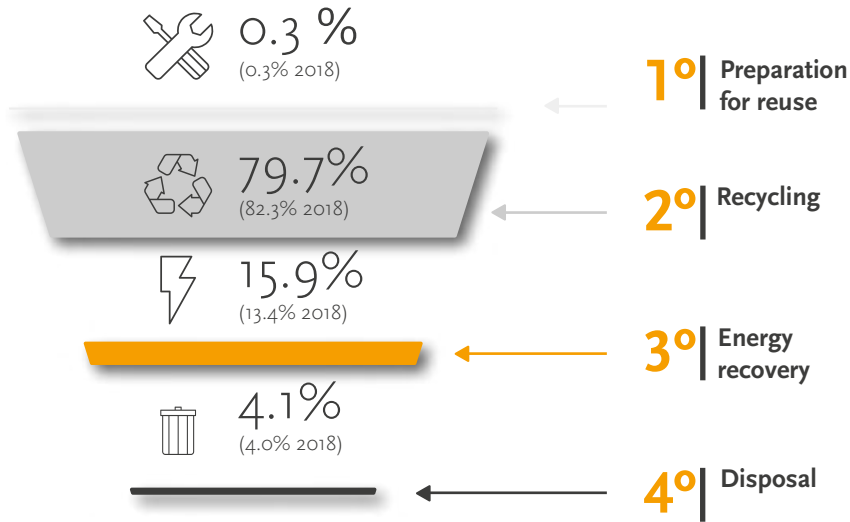
**0/15 mm sand:** An earthy sieved material suitable for filling and quarry restoration.



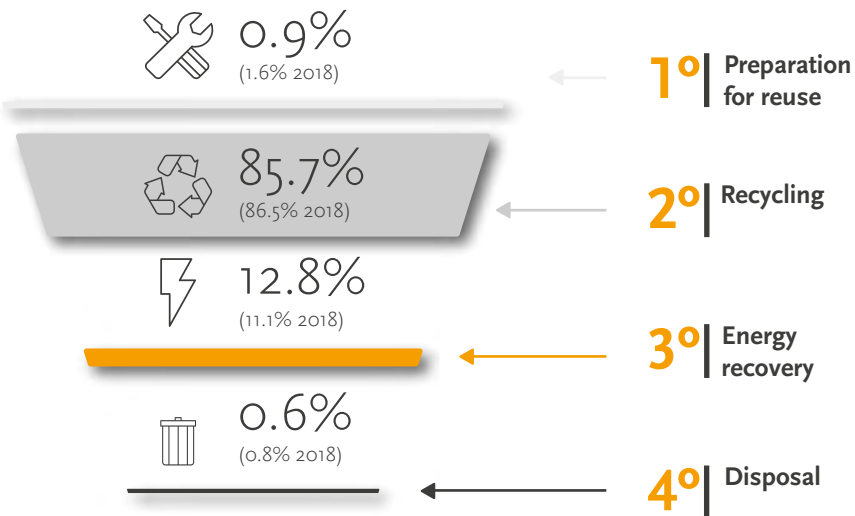
# HOUSEHOLD APPLIANCES AND OTHER BULKY WASTE

## 2019 RECYCLING AND RECOVERY RESULTS

### MANAGEMENT OF ELECTRICAL APPLIANCES WITH CFC:



### MANAGEMENT OF ELECTRICAL APPLIANCES WITHOUT CFC:



# HOUSEHOLD APPLIANCES AND OTHER BULKY WASTE

FURNITURE AND HOUSEHOLD GOODS RECOVERY:



14,701 kg  
(13,274 kg 2018)

1° | Preparation  
for reuse



5.7%  
(5.6% 2018)

2° | Recycling



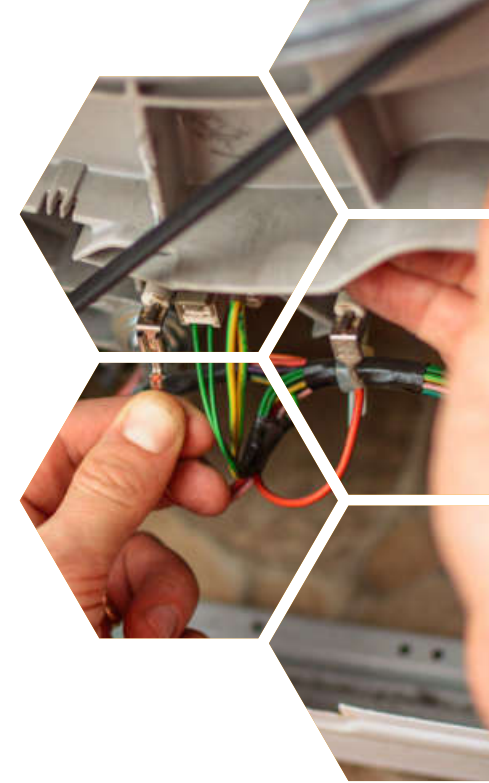
94.2%  
(94.3% 2018)

3° | Energy  
recovery



0.1%  
(0.1% 2018)

4° | Disposal



# WE REUSE HOUSEHOLD APPLIANCES

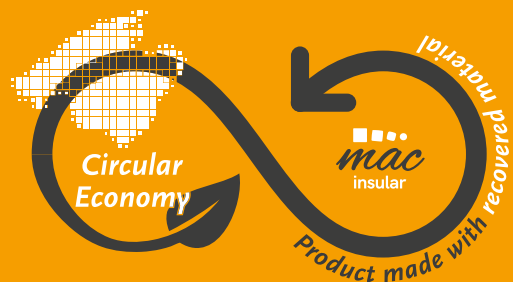


Furniture and appliances that are in good conditions are repaired so that they can be reused. Repair workshops hire social integration staff from the Fundació Deixalles.

This organization is also in charge of their commercialization.

**We're committed to the circular economy  
and we generate green employment** based on this.

Products repaired by MAC Insular can be purchased at Deixalles outlets.





# USED TYRES

In 2019

501,484 uds.



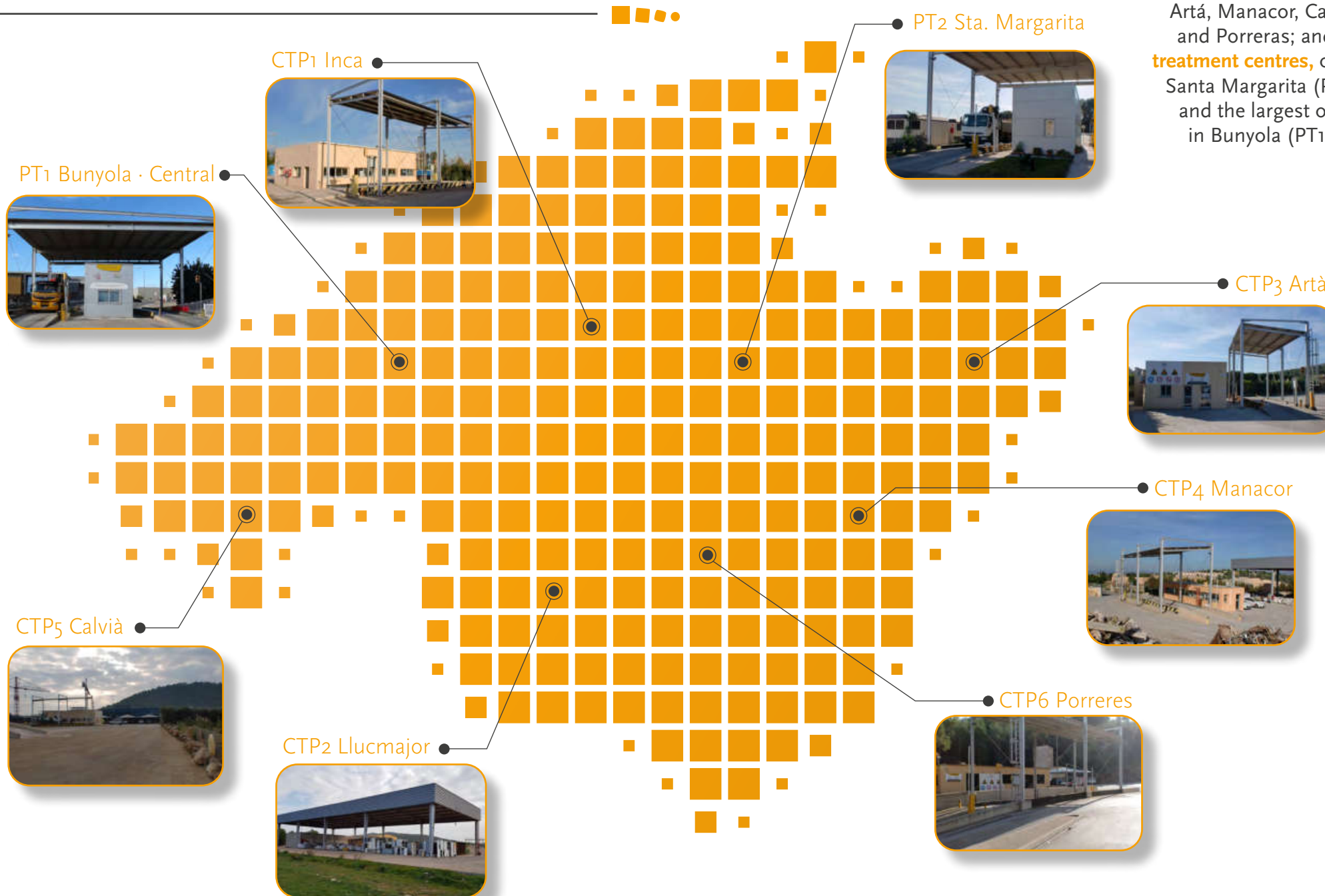
**USED TYRES** were treated for **energy recovery**.

2018 : 495,966 uds.



# OUR FACILITIES

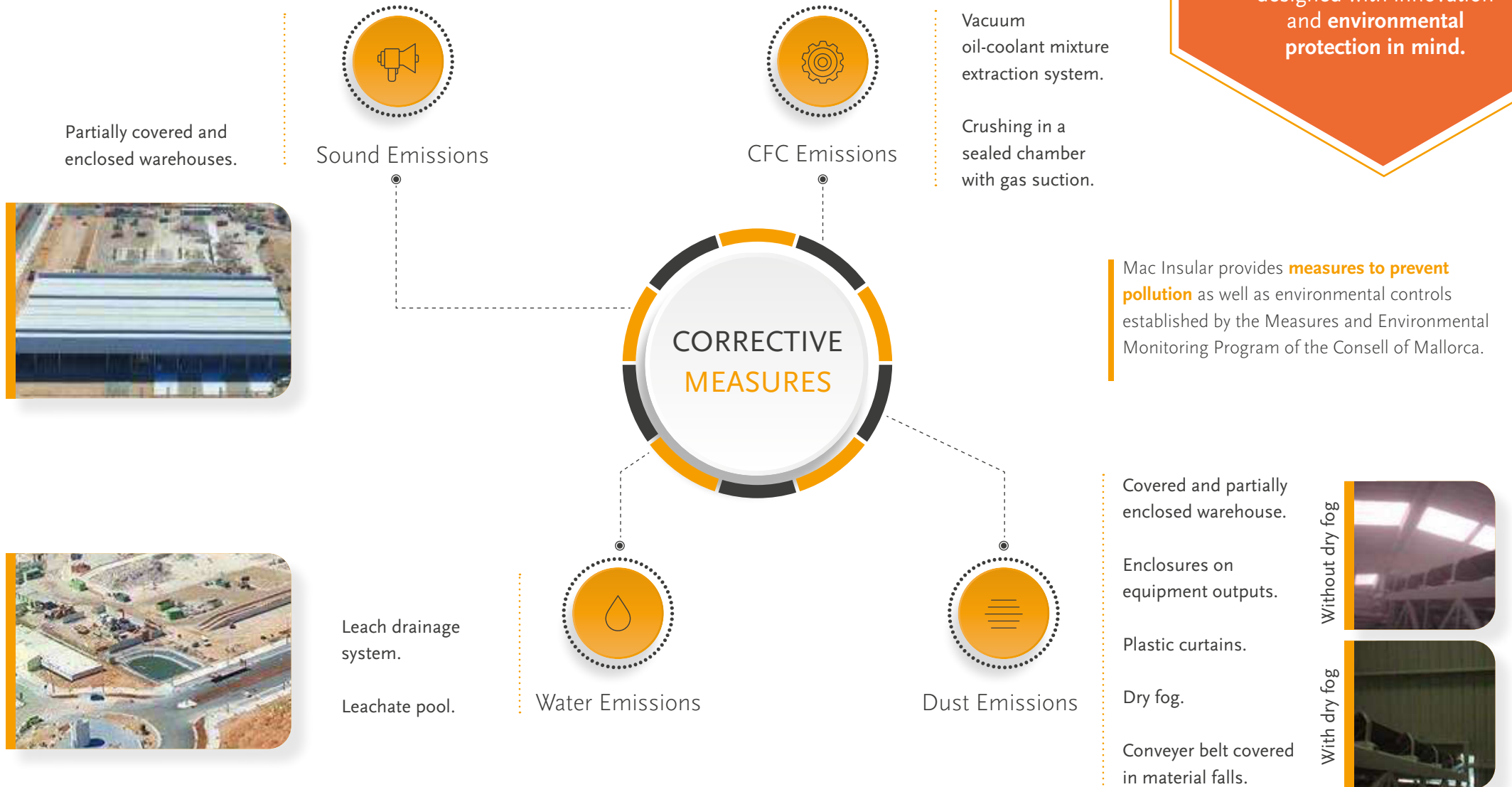
We have **6 transfer and pre-treatment centres (CTPs)** located in Inca, Lluçmajor, Artà, Manacor, Calvià and Porreres; and **2 treatment centres**, one in Santa Margarita (PT2) and the largest one in Bunyola (PT1).



# ENVIRONMENTAL ASPECTS



Mac Insular facilities are designed with innovation and **environmental protection in mind.**



Mac Insular provides **measures to prevent pollution** as well as environmental controls established by the Measures and Environmental Monitoring Program of the Consell of Mallorca.

# ENVIRONMENTAL ASPECTS



Regular inspections are carried out by the authorized inspection authorities to verify the proper functioning of the corrective measures for diffuse air emissions from the movement of CDW, vehicle transit and the collection of powdered material.



Inmission control



Leachate control



Ground water control

PM10 and meteorology of nearby properties.

Sedimentary particles in the facility.

OCA inspections for corrective measures.

Leachate pool.

Well control, upstream and downstream.

**6 CLEAN WATER AND SANITATION**

Water is used rationally and sustainably, corrective measures are implemented to avoid water contamination, and environmental controls are carried out on the activity.



# ENVIRONMENTAL ASPECTS



The **management of the waste** that enters MAC Insular **prevents the contamination of air, water and soil**, thereby contributing to the protection of ecosystems and the reduction of negative impacts on public health. What's more, **waste is recovered by betting on a circular economy model**.

## 2019 ENVIRONMENTAL MONITORING RESULTS

ASPECT		FACILITY	MONITORING GUIDELINES	RESULT	
WATER	Wells	All facilities	Annual control of the area surrounding the industrial plants.	No reported incidents. Values within the standard and according to historical data.	
	Leachates	All facilities	Monthly leachate analysis.		
Inmisiones	1) Particles in suspension PM <sub>10</sub>	PT1 ,PT2 and CTPs	Annual campaign.		
		PT1	Biannual campaigns in Es Garrovers, Palmanyola and Son Sardina carried out by TIRME.		
	2) Sedimentary particles	All facilities	Biannual inspections.		
ATMOSPHERE	Noise	PT1	Annual sound inspection carried out by OCA.	Favourable compliance result.	
	Emissions	Particles in suspension PM <sub>10</sub>	PT1	Annual PM <sub>10</sub> inspection of baghouse carried out by OCA.	515.2 Kg/year.
				Estimation of diffuse particle emission by OCA.	4.28 kg/year.
				*Annual OCA inspection for the correct implementation of corrective measures for the emission of particles.	Satisfactory inspection.
			PT2	Self-monitoring inspection every 18 months and every 3 years by OCA for the PM <sub>10</sub> measurements of the baghouse.	77.10 Kg/year.
				Estimation of diffuse particle emission by OCA.	4.68 kg/year.
				*Annual OCA inspection for the correct implementation of corrective measures for the emission of particles.	Satisfactory inspection.
		CTPs	*Five-year OCA inspection for the correct implementation of corrective measures for the emission of particles.	Satisfactory inspection.	
	CFC	PT1	Annual estimate of CFC emissions from the Electric appliance with CFC treatment plant based on the number of units treated.	0.33Kg/year.	

# CARBON FOOTPRINT

Calculation of **GHG emissions released into the atmosphere by MAC Insular's activity**. This project involves the quest for ways to enhance environmental management, **identifying all sources of emissions and drawing up a reduction plan**.

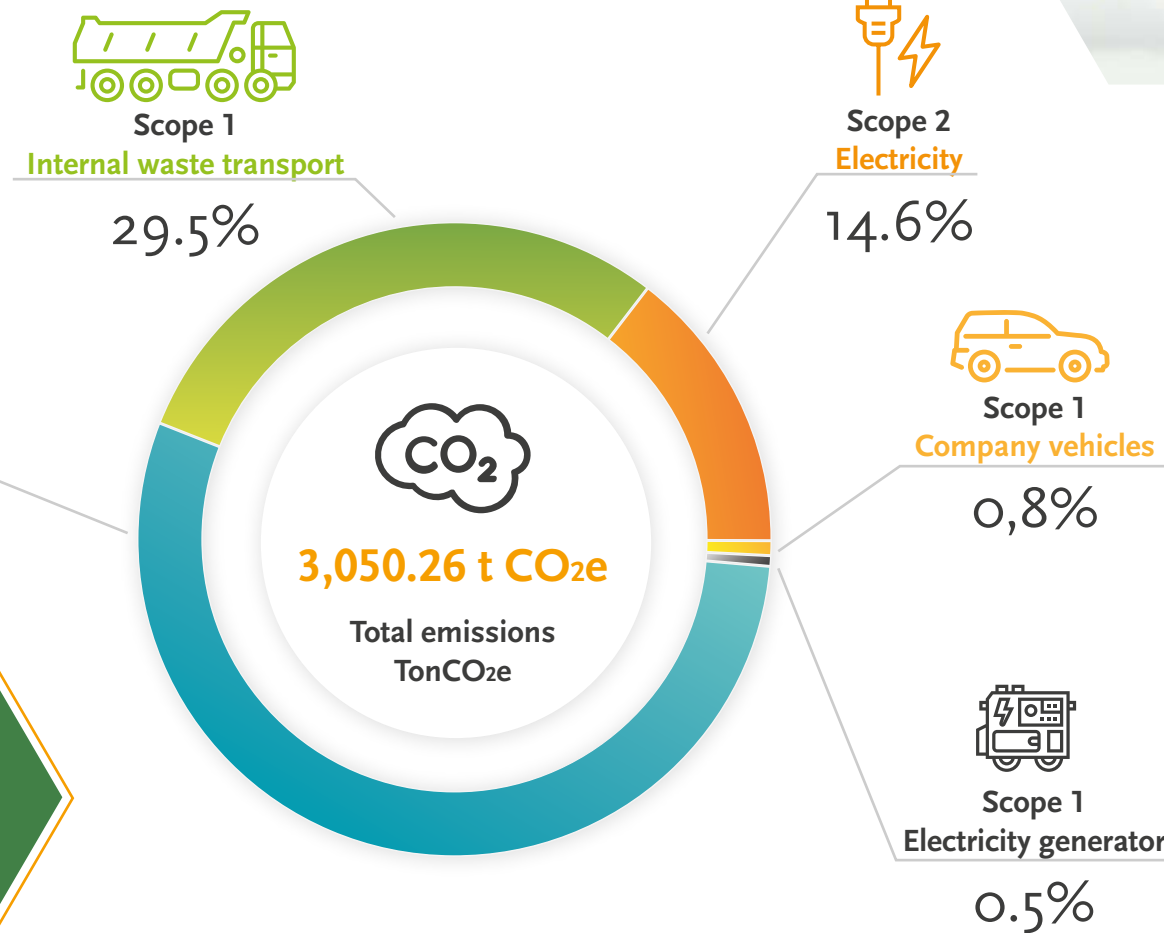
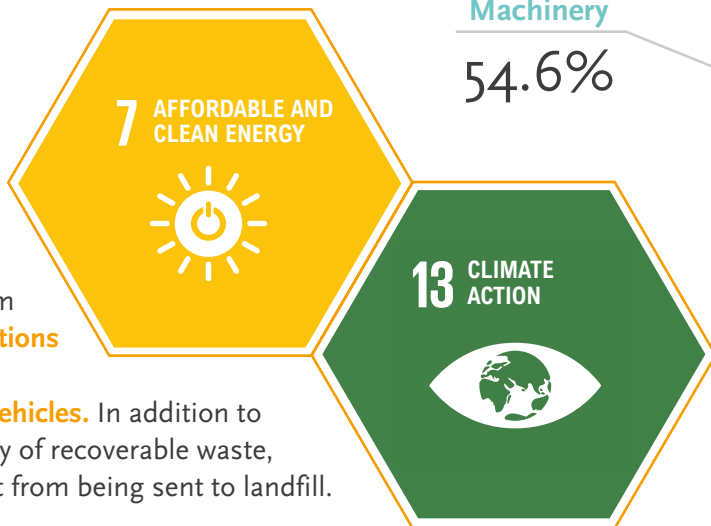
MAC Insular's carbon footprint in 2019 was:

## 3,050.26 t CO<sub>2</sub>e

(tons of CO<sub>2</sub> equivalent).

**Reduction of CO<sub>2</sub> emissions** by fostering the use of **renewable energy** obtained from **photovoltaic installations** and from a **fleet of electric and hybrid vehicles**.

In addition to leveraging the energy of recoverable waste, thereby preventing it from being sent to landfill.



# SOCIAL ASPECTS



In 2019 **57 people** have been able to **find work** thanks to the collaboration between **Fundació Deixalles** and **MAC Insular**.

People hired belong to vulnerable groups **and at risk of social exclusion**.

These workers are in charge of selecting the valuable materials that enter the

treatment plants, as well as repair of bulky waste -furniture and electrical appliances- that are later sold at the **points of sale managed by Fundació Deixalles across Mallorca**.



Fundació  
**Deixalles**

[www.deixalles.org](http://www.deixalles.org)



Manual sorting cabin

Appliances workshop

Carpentry workshop



**8** DECENT WORK AND ECONOMIC GROWTH



**Employment rights** are protected and **accident prevention measures** are applied, while partnerships are created among agents from generators, managers and administrations, as well as occupational integration NGOs, **providing employment opportunities to people at risk of social exclusion**.

**17** PARTNERSHIPS FOR THE GOALS



# IMPLEMENTATION OF MANAGEMENT SYSTEMS



Standards and Certification

MAC Insular's strong commitment to quality and excellence, as well as its environmental commitment has been formalized through the implementation and maintenance of various management systems and attainment of Aenor certificates:

2008



ISO 9001 Quality Management System Certificate.

ISO 14001 Environmental Management System Certificate.



2010



Certification of the Information Security Management System UNE/ISO-EC 27001.



2014



MAC Insular has implemented a **Factory Production Control System** with the aim of increasing the confidence in the aggregates, thus obtaining the **Aenor CE Marking certification** for the 0-8mm and 8-40mm aggregates.



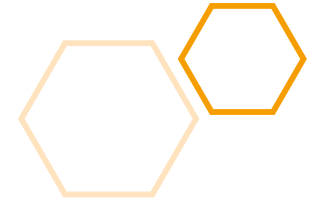
2017



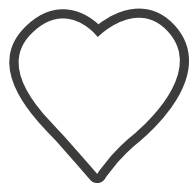
Implementation of a **criminal risk prevention model** (Compliance).



# 2019 CUSTOMER SATISFACTION REGARDING SERVICE



# 2019 CUSTOMER SATISFACTION REGARDING PRODUCT

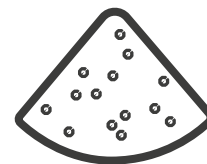


Consumer loyalty to the product is of **87.4%**.  
(88,9% in 2018)

Returning customers: **63%**  
Customers + 5 years: **52%**  
Customers + 10 years: **28%**



**68.6%** of recycled aggregate customers **rates its quality as good or very good.**  
(62,2% in 2018)



Customers who buy aggregates use them for: **44.1% landfills, 34.1% roads, and 21.9% foundation slabs.**  
(44,4% / 21,1% / 30% in 2018)

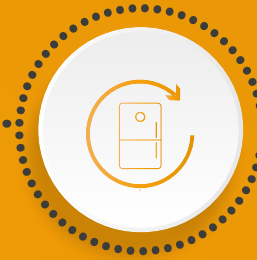


**Recycled aggregate** customers: **656**  
Annual average consumption per customer: **479 tons**

# 2019 CUSTOMER SATISFACTION REGARDING SOCIO-ENVIRONMENTAL AND SOCIAL ASPECTS



Recruitment of people at risk of social exclusion rated at **96.6%**.  
(97.0% in 2018)



Recycling of furniture and appliance rated at **98.9%**  
(97.0% in 2018)



The environmental preservation of Mallorca continues to be the most important aspect for our clients with a **99.5%** rating.  
(97.5% in 2018)



In **98.9%** of cases, debris is recycled into aggregates  
(97.0% in 2018)



We take care of Mallorca  
for the next generation.



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