



ANNUAL
REPORT

2018



LETTER FROM THE CEO

José María Bauzá de Mirabó Darder

Since 2006, the year in which Mac Insular began operating the public service for the management of construction-demolition and bulky waste, and used tyres in Mallorca, we have gone through various stages. During the first few years, coinciding with the construction boom, it became necessary to raise awareness of the players involved in the generation of this waste.

From 2008 to 2015 we experienced a deep economic crisis. In 2015 the construction sector started to recover, particularly in building refurbishment, causing a subsequent increase in waste production.

The upcoming challenges for 2019 onwards are exciting. However, we must intensify our efforts to raise awareness and encourage greater use of recycled materials, as well as trying to make progress in maximizing the recovery of waste treated by us.

To date, *we have treated 5 million tons of construction waste, 2.5 million used tyres and half a million appliances; we have recovered enough metal to build 9 Eiffel Towers and have sold 2 million tons of recycled aggregates, which would be enough to build 7 cathedrals similar to the one located in Palma de Mallorca.*

Our advanced model has reduced waste disposal to a minimum and we continue to work with the clear purpose of achieving maximum recovery and valuation of waste, while having the minimum environmental impact on the island of Mallorca.

Lastly, I would like to extend my gratitude to the workers of Mac Insular for their continued efforts, and more generally, to all the people who have joined us in our commitment to turn waste into resources and thus work to preserve Mallorca's natural environment.

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



SUSTAINABLE DEVELOPMENT GOALS



Mac Insular commits with the following SDGs:



Equal opportunities in recruitment and remuneration.



Rational and sustainable use of water. Mitigating measures to prevent water pollution controlled with regular environmental inspections.



Increase in the use of renewable energy: implementation of a photovoltaic electricity generation facility.



Responsible consumption. Employing people who are at risk of social exclusion. Protection of labour rights and accident prevention measures.



Installations designed from an environmental protection perspective.



Continued sustainable waste management from our Island.



Activity based on extending the life cycle of waste by turning it into a resource. Guaranteed management of hazardous waste.



Emission reduction through the implementation of a photovoltaic installation and the progressive change of our fleet of vehicles to electric.

WE TAKE CARE OF MALLORCA FOR THE NEXT GENERATION



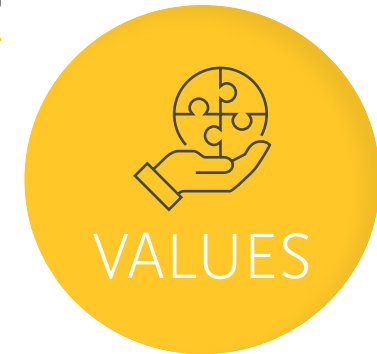
The design, construction and management of treatment plants for construction-demolition and bulky waste, and used tyres according to the highest standards of quality and optimum use of waste as a resource, **highest standards of quality and optimum use of waste as a resource, ensuring maximum environmental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



Our vision is to be the leading company in the treatment of construction-demolition and 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

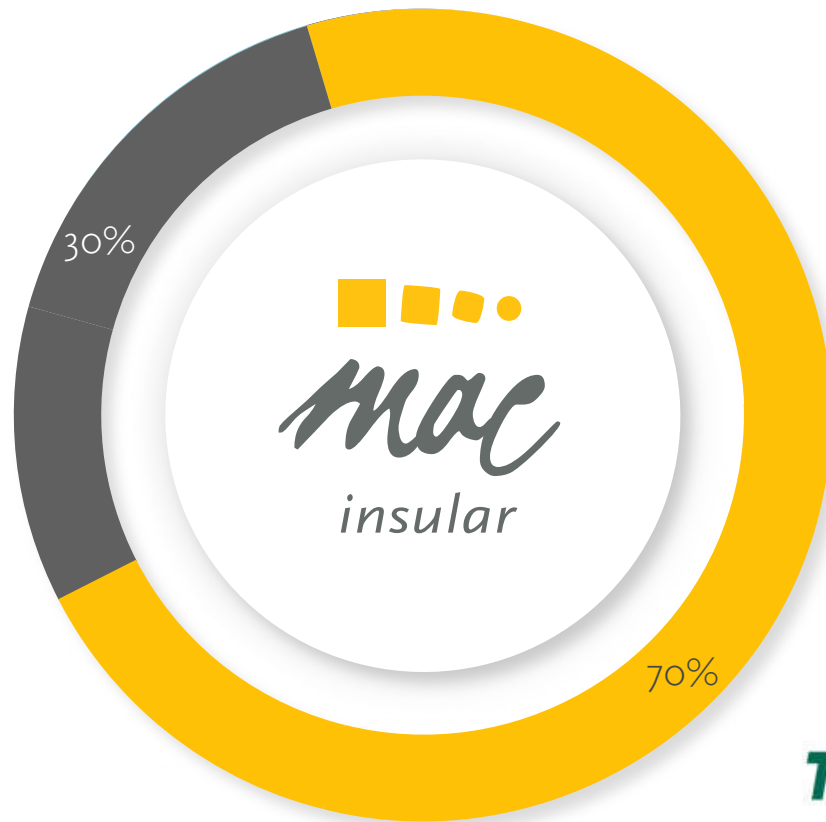
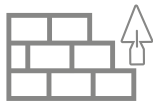


-  — Environmental protection
-  — Responsibility
-  — Commitment
-  — Efficiency
-  — Transparency
-  — Human Capital
-  — Honesty

CORPORATE INFORMATION



Companies from the construction sector.



70% TIRME

Manages the facilities included in the sectoral master plan for the management of urban waste in Mallorca.

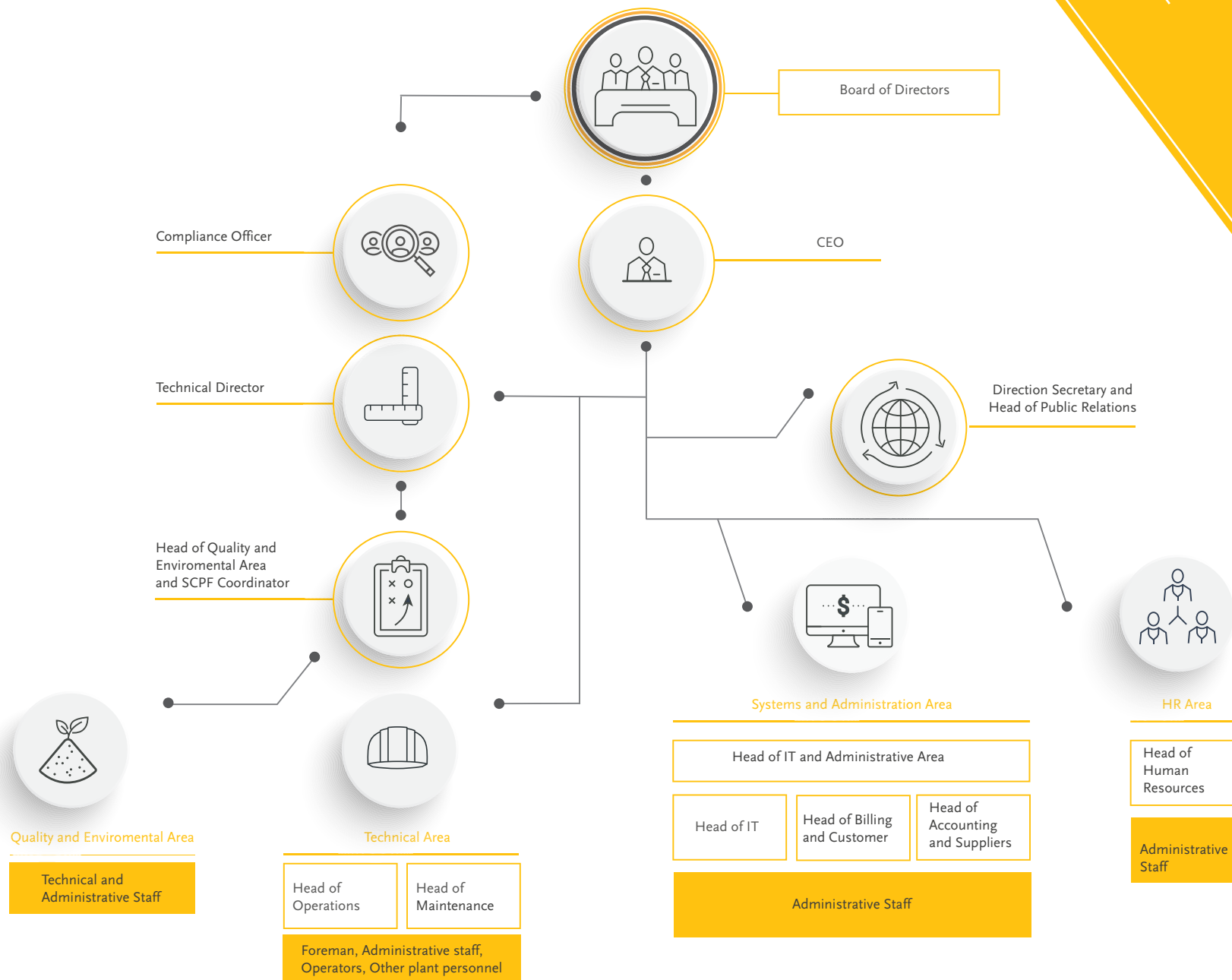
www.tirme.com

30% Group of companies from the construction and promotion sector of the Balearic Islands.



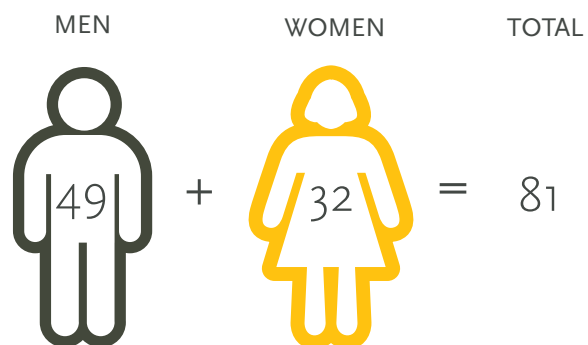
STRUCTURE AND ORGANIZATION

MAC Insular has a workforce of **81 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**

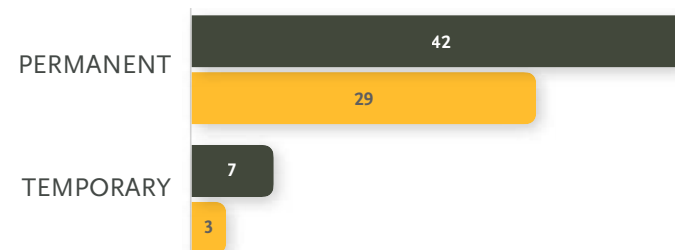


STRUCTURE AND ORGANIZATION

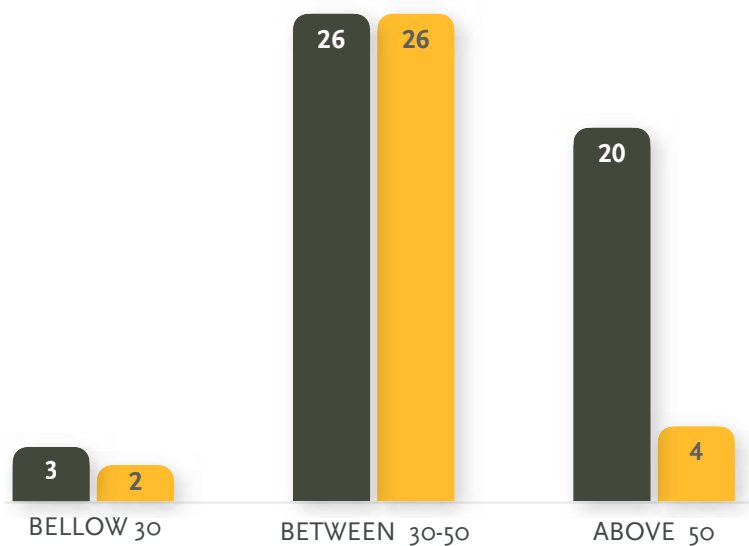
Staff distribution by sex, age and type of contract:



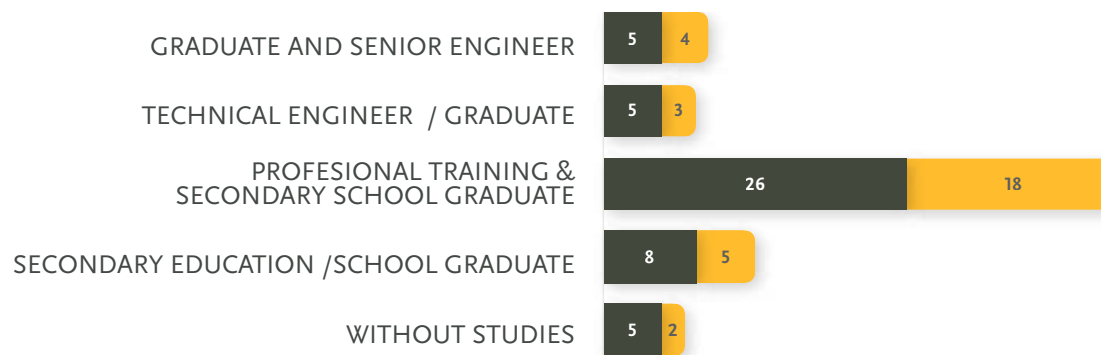
CONTRACTS



AGE



ACADEMIC TRAINING



ABOUT US

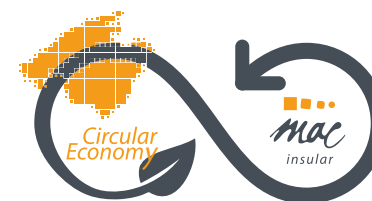
Mac Insular is the public service provider for the management of construction-demolition and bulky waste, as well as used tyres of the island of Mallorca. We offer a **waste management system based on a circular economy model**, to achieve maximum recovery of waste while minimizing the environmental impact on the island of Majorca.



Data entries by waste type

2018 ENTRIES	TOTAL*
Construction-Demolition Waste	502.353
Electrical appliances with CFC	892
Electrical appliances without CFC	418
Electronic and Computer equipment	85
Remaining Bulky Waste	49.736
Used Tyres	3.477
TOTAL	556.964

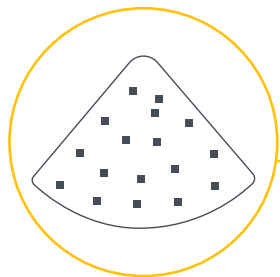
*Data in Tons



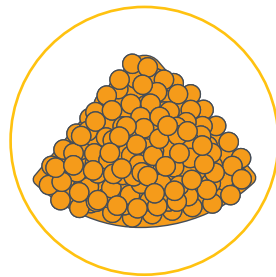
CONSTRUCTION - DEMOLITION WASTE

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.

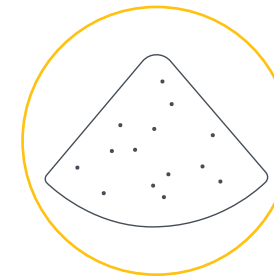
From the treatment process of construction - demolition waste, we obtain recycled aggregates into the following fractions:



0 - 8 mm



8 - 40 mm



0 - 15 mm



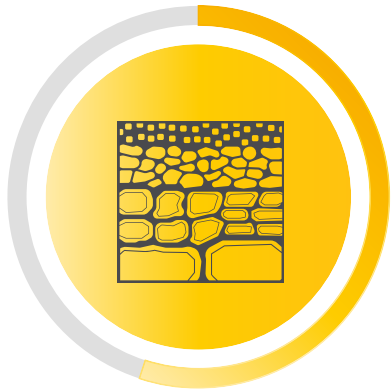
These recycled aggregates are CE marked according to the following standards:

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”.

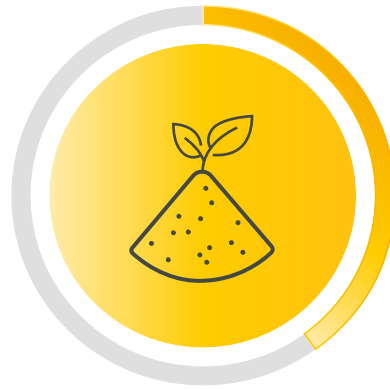
CONSTRUCTION - DEMOLITION WASTE

2018 RECOVERY RESULTS:



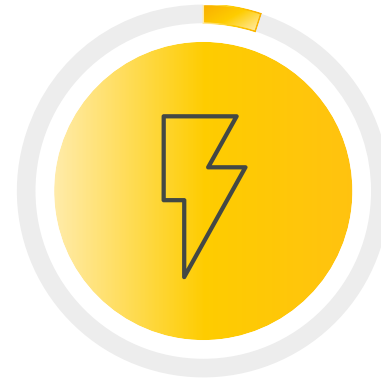
55.2%

Recycling



39.3%

Material recovery -
Quarrying Restoration



4%

Energy Recovery



1.5%

Disposal



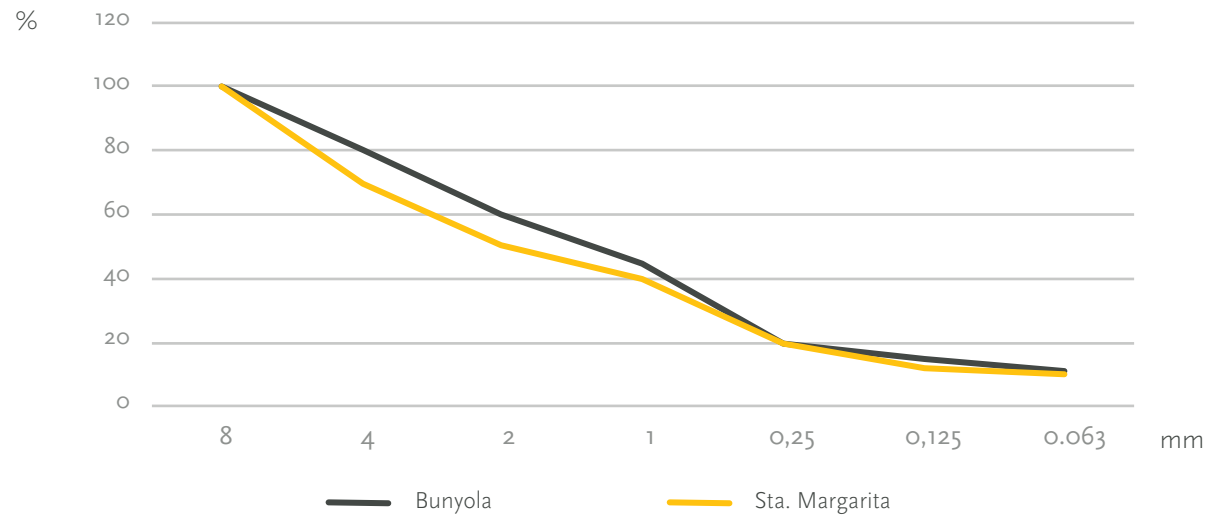
OBTAINED PRODUCTS



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 mm
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

Results of performed tests	Bunyola	Sta.Margalida
Particle density (EN 1097-6)	2.4-2.8 g/cm ³	2.4-2.7 g/cm ³
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)	50 min	50 min
Minor pollutants (EN 1744-1:2009-A1)	≤0.1%	≤0.1%
Organic pollutants (Húmic) (EN 1744-1:2009-A1)	Absence	Absence

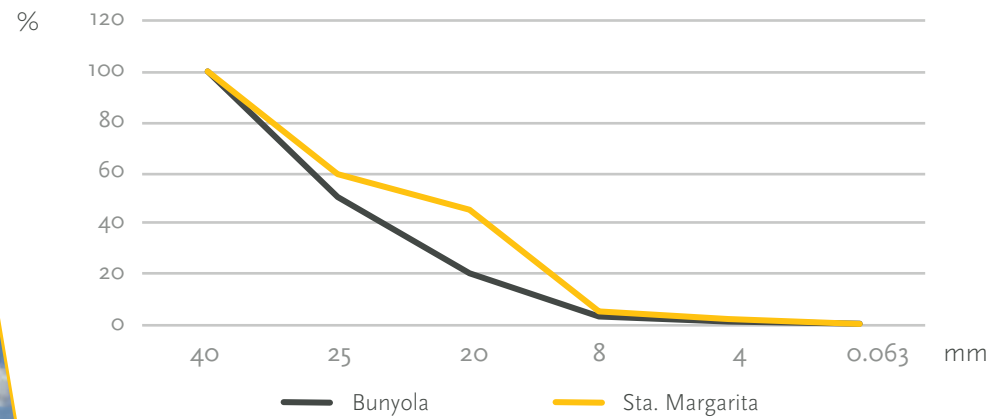


OBTAINED PRODUCTS

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 mm
Bunyola	100	50	20	3.5	1	0.6
Sta Margarita	100	60	45	5	2	0.5



Gardening

Ditch improvements



OBTAINED PRODUCTS

Characteristics of 8/40 mm

Results of performed tests	Bunyola	Sta.Margalida
Slab index (EN 933-3)	≤35%	≤20%
Particle density (EN 1097-6)	2.4-2.8 g/cm³	2.4-2.7 g/cm³
Absorption / water suction (EN 1097-6)	<10%	<9%
Content in fines (EN 993-1)	≤2%	≤2%
Los Angeles abrasion resistance (EN 1097-2)	≤50%	≤40%
Acid-soluble chlorides (EN 1744-5)	≤0.3%	≤0.2%
Water-soluble sulphates (EN 1744-1:2009-A1)	≤0.2%	≤0.2%
Acid-soluble sulphates (EN 1744-1:2009-A1) 2	1.5%	1.5%
Total sulfur content (EN 1744-1:2009-A1)	<1%	<1%
Crushed and broken surfaces (EN 933-5:1998/A1:2004)	50% crushed 30% rounded	50% crushed 30% rounded
Magnesium sulphate (EN 1367-2)	≤18%	≤18%

OBTAINED PRODUCTS



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



Unrestored quarry

Restored quarry

HOUSEHOLD APPLIANCES AND OTHER BULKY WASTE



In the case of bulky waste, we prepare for reuse those that can be repaired, and we recover valuables (iron, wood, non-ferrous metals, plastics, etc.) from those that cannot be recovered. **Thus ensuring the proper management of its hazardous components.**



HOUSEHOLD APPLIANCES AND OTHER BULKY WASTE



2018 RECOVERY RESULTS

ELECTRIC APPLIANCES WITH CFC:



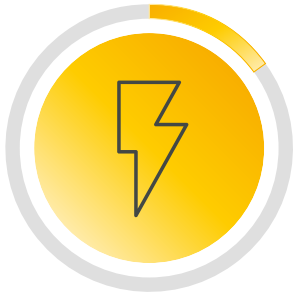
0.3%

Preparation for reuse



82.3%

Recycling



13.4%

Energy recovery



4%

Disposal

ELECTRIC APPLIANCES WITHOUT CFC:



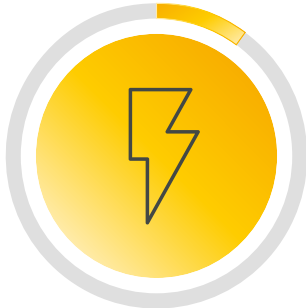
1.6%

Preparation for reuse



86.5%

Recycling



11.1%

Energy recovery



0.8%

Disposal

HOUSEHOLD APPLIANCES AND OTHER BULKY WASTE

2018 FURNITURE AND HOUSEHOLD GOODS RECOVERY:



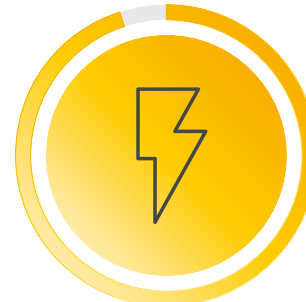
13.274 Kg

Preparation for reuse



6%

Recycling



94%

Energy recovery



0%

Disposal

WE REUSE HOUSEHOLD APPLIANCES



Furniture and appliances that are in good condition 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.** Products repaired by MAC Insular can be purchased at the points of sale of Deixalles.



USED TYRES



In 2018
495.966 uds.



TYRES were treated
for **energy recovery**.



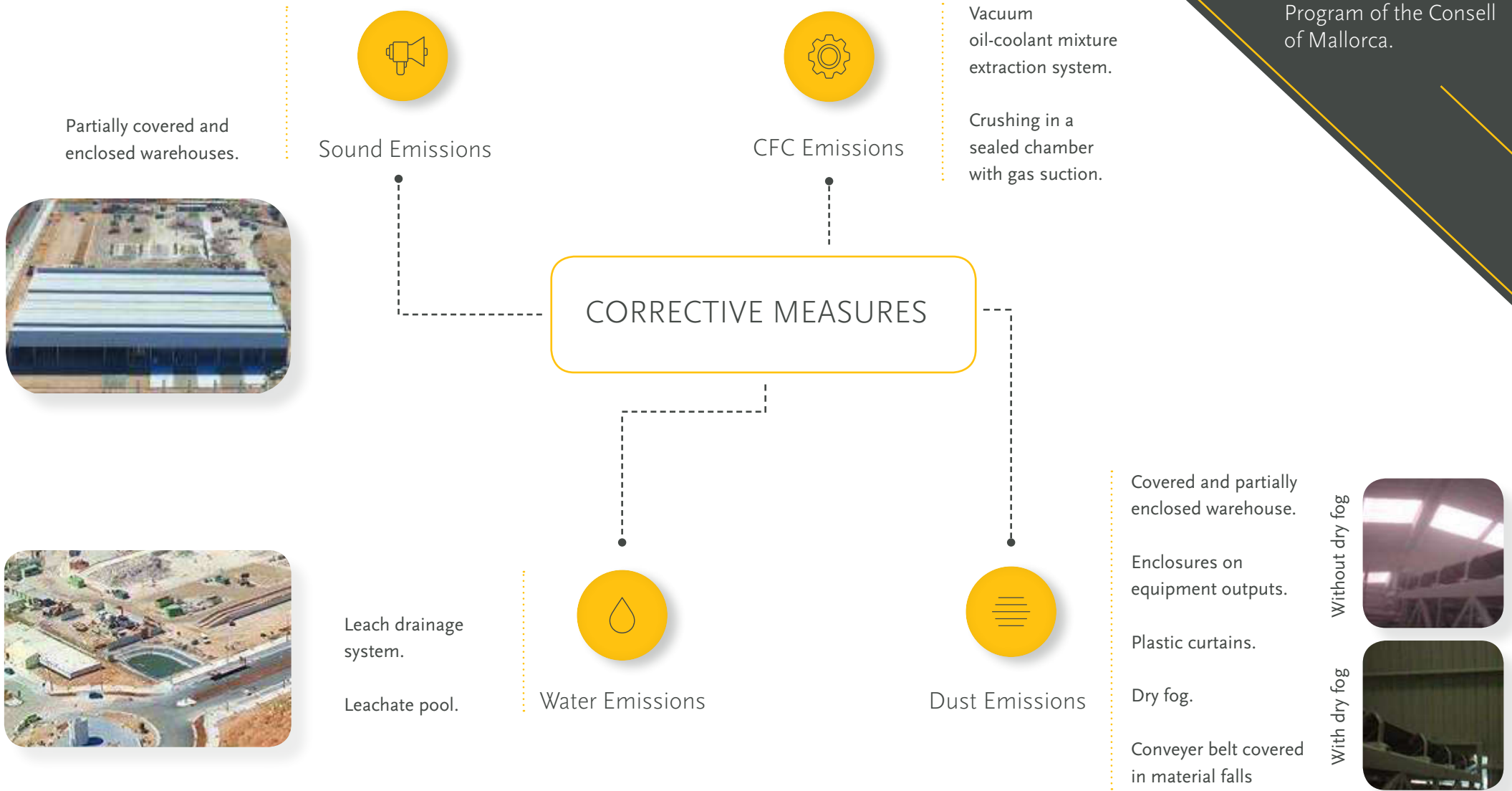
OUR FACILITIES

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



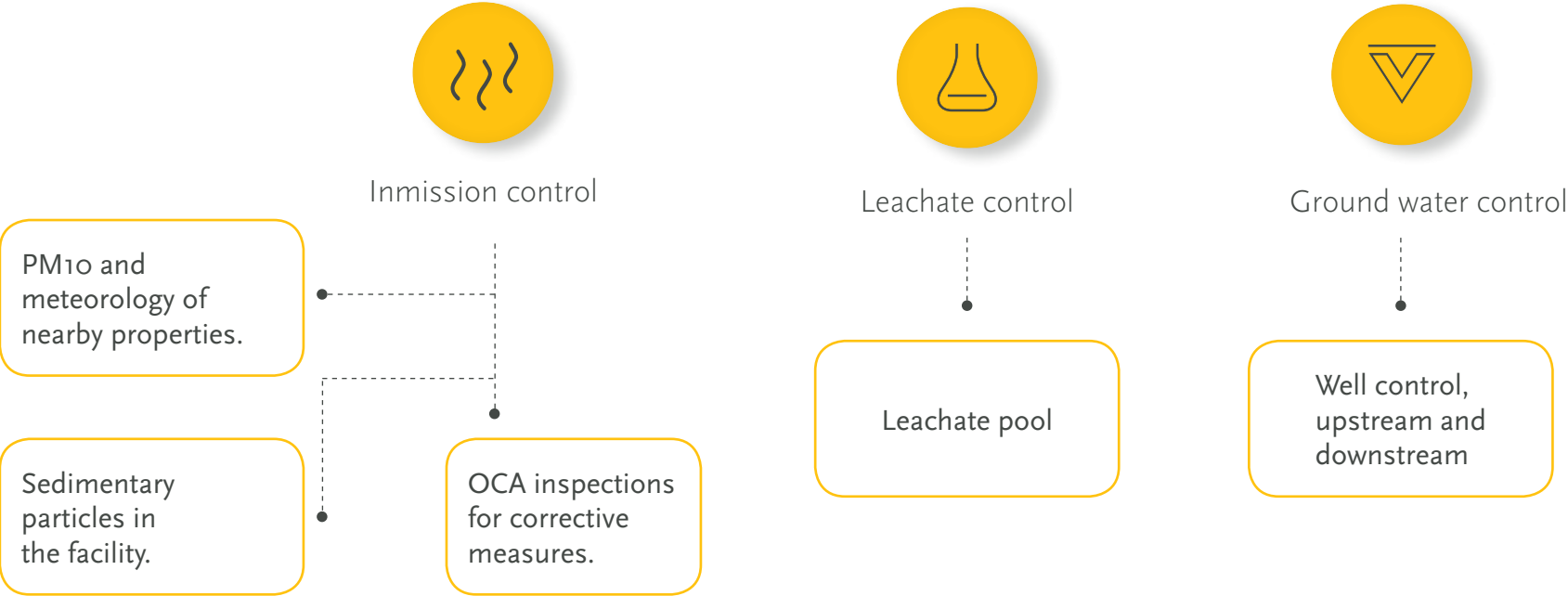
ENVIRONMENTAL ASPECTS



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.



ENVIRONMENTAL CONTROLS



ENVIRONMENTAL ASPECTS



2018 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 ₁₀	PT1 ,PT2 y CTPs		Campaña anual.
			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 ₁₀	PT1	Annual PM ₁₀ inspection of baghouse carried out by OCA.	215.44 Kg/ year
				Estimation of diffuse particle emission by OCA.	2.54 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 ₁₀ measurements of the baghouse.	83.77 Kg/ year
				Estimation of diffuse particle emission by OCA.	3.50 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. (2018)
CFC	PT1	Annual estimate of CFC emissions from the Electric appliance with CFC treatment plant based on the number of units treated.	0.38 Kg/ year		

PM10: Particles in suspension of less than 10 µm

SOCIAL ASPECTS



Close to **500 people** have been able to find **work** thanks to the collaboration made between **Fundació Deixalles and MAC Insular.**

Approximately **75% of the people hired belong to groups that are vulnerable and at risk of becoming socially excluded.**

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.



Manua sorting cabin



Appliances workshop



Carpentry workshop



**Fundació
Deixalles**

www.deixalles.org

IMPLEMENTATION OF MANAGEMENT SYSTEMS



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.



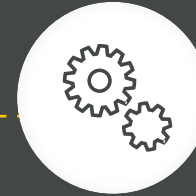
2010



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



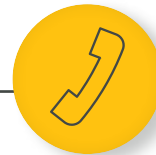
Implementation of a **criminal risk prevention model** (Compliance).

2018 CUSTOMER SATISFACTION REGARDING SERVICE

Overall satisfaction
of the Insular MAC
user with the service
is of 80.5%



92.2% rated on-site
attention from plant
operators as **good
or very good.**



98.8% rated the
telephone service as
good or very good.



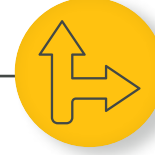
81.6%, rated
waiting time for
dumping as **good
or very good.**



On-site service
offered by
customer service
received **95.7%
positive ratings.**



The website
was rated with
**100% positive
comments.**



Signalling to reach
the plant was
rated with **94.3%
positive mentions.**



Information
received about
acceptable waste
received a **96.8%
of good ratings.**

2018 CUSTOMER SATISFACTION REGARDING PRODUCT



Consumer loyalty to the product is of **88.9%**.



The majority of respondents rated their knowledge about current waste management regulations as medium, high or very high **75.5%**.

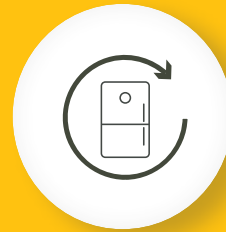


62.2% of recycled aggregate customers **rates its quality as good or very good.**

2018 CUSTOMER SATISFACTION REGARDING SOCIO-ENVIRONMENTAL AND SOCIAL ASPECTS



Recruitment of people at risk of exclusion rated at **97%**



Recycling of furniture and appliance rated at **97%**



IMPORTANCE OF THE DIFFERENT ENVIRONMENTAL AND SOCIAL ASPECTS OF THE COMPANY



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



In **97%** of cases, debris is recycled into aggregates





We take care of Mallorca
for the next generation.



900 221 100
Free of charge



www.mac-insular.com



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