

CLEAN ENERGY FOR EU ISLANDS

CULATRA'S WASTE TRANSITION

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CULATRA'S WASTE TRANSITION

Before taking action, we need to know:

- ❖ What activities are developed at Culatra?
- ❖ What type, and how much, waste is produced on the island?
- ❖ What is the islands future, on the residents perspective?

- ❖ **Culatra:** living lab of the dynamics and metabolism of the Algarve
- ❖ **Main activities:** fishing and tourism
- ❖ **Inhabitants:** **±1000 permanently** in Winter
>7,500/day in Summer

Waste management in Algarve

- ❖ A system for the management of urban waste, managed by *Algar - Valorização e Tratamento de Resíduos Sólidos, S.A.* (14 waste management facilities)
- ❖ 32 waste management operators
- ❖ Urban waste is collected by municipalities
- ❖ Recyclable waste collected by Algar
- ❖ **Culatra:** all waste is collected by Fagar, Faro's Municipal Water and Waste Company

Recyclable waste collected by Algar

	2018	2019
Cardboard	21,140 Kg	11,140 Kg
Plastic	7,820 Kg	8,035 Kg
Glass	61,610 Kg	70,150 Kg
Recyclable waste	90,570 Kg	89,895 Kg

± 90 Kg/inhabitant/year of recyclable waste

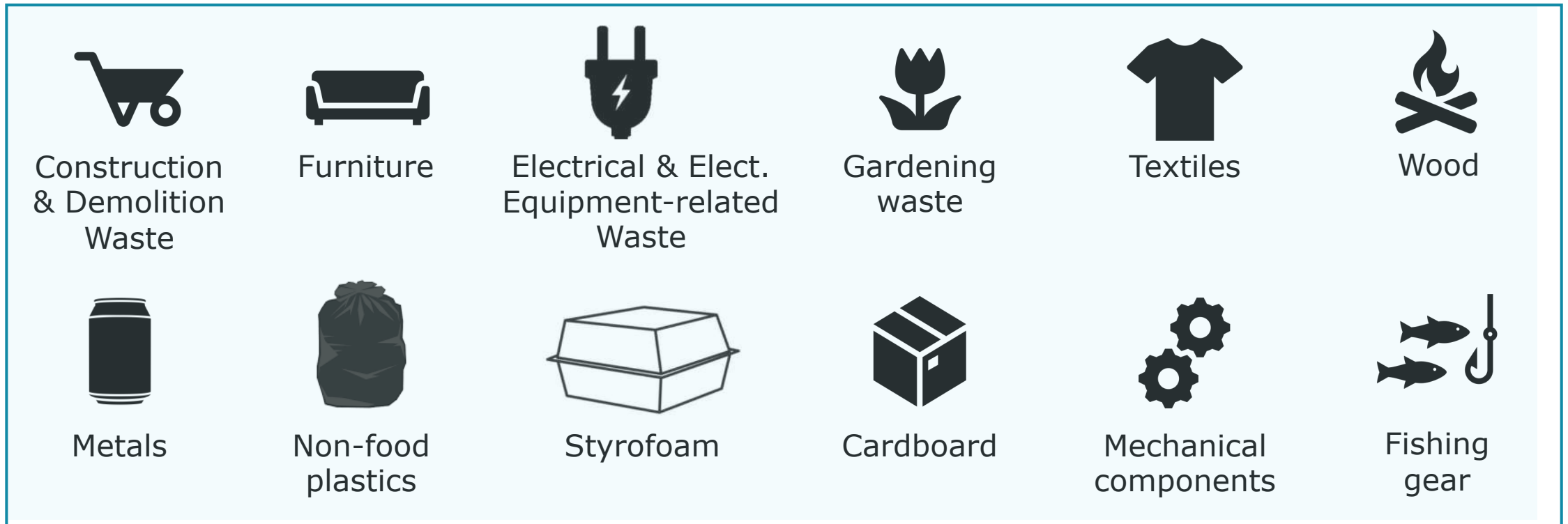
What is intended? Clean Energy

What to do? Reduce emissions on site and contribute to the reduction of emissions downstream. Change consumption habits.

How to make it happen? **SEPARATE** waste. Do not mix waste, because in the following treatment (valorization) the energy needed for sorting, and the use of raw materials, will be reduced.

What type of waste can be separated?

Whatever is not reused, which can be recycled and that contributes to the circularity of products and raw materials, making the Economy Circular!



OUTLINE OF A CIRCULAR ECONOMY

PRINCIPLE

1

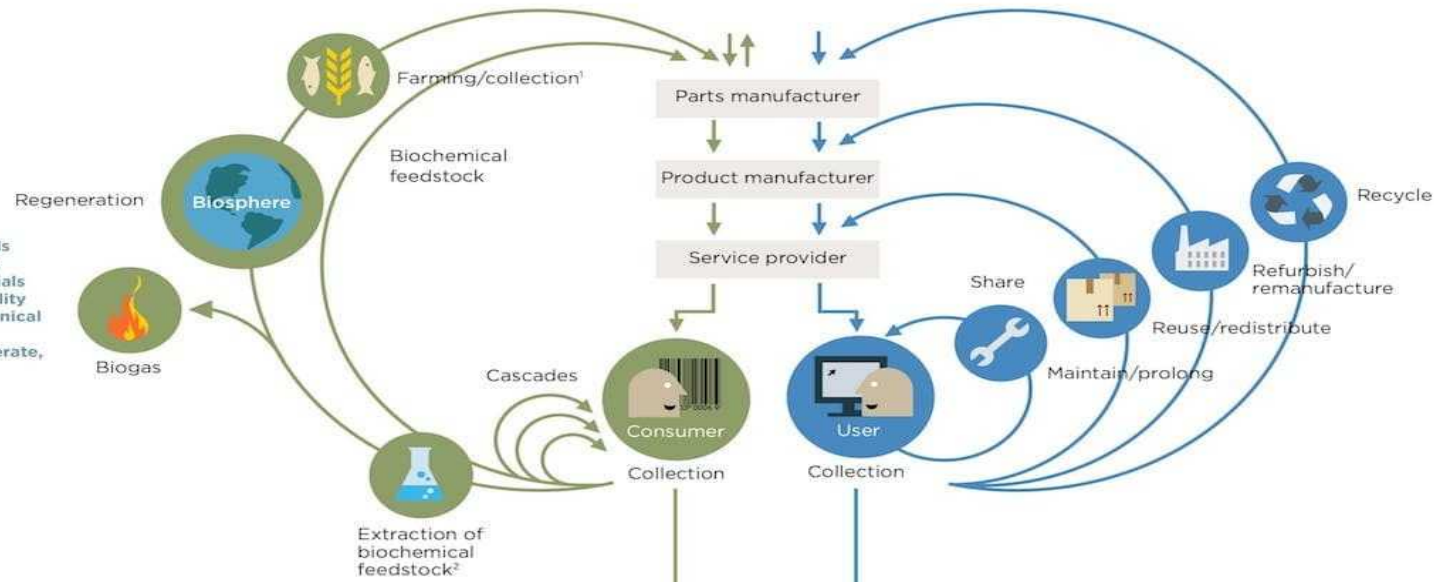
Preserve and enhance natural capital by controlling finite stocks and balancing renewable resource flows
ReSOLVE levers: regenerate, virtualise, exchange



PRINCIPLE

2

Optimise resource yields by circulating products, components and materials in use at the highest utility at all times in both technical and biological cycles
ReSOLVE levers: regenerate, share, optimise, loop



PRINCIPLE

3

Foster system effectiveness by revealing and designing out negative externalities
All ReSOLVE levers



1. Hunting and fishing
2. Can take both post-harvest and post-consumer waste as an input
Source: Ellen MacArthur Foundation, SUN, and McKinsey Center for Business and Environment; Drawing from Braungart & McDonough, Cradle to Cradle (C2C).

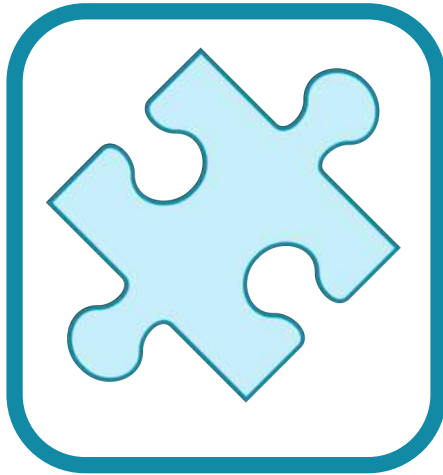
Ideas

- ❖ Promote the collection of large waste (monsters) once a week
- ❖ Assess the possibility of collecting municipal waste separately
- ❖ Assess the possibility of creating a temporary waste storage area on the island in a location that has already been intervened, in order to no longer affect the island's protected areas.
- ❖ Include unused fishing gear at this waste delivery point.

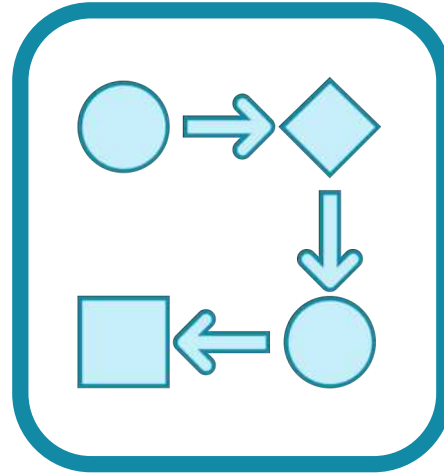
Ideas

- ❖ Evaluate the creation of a delivery point for reused of “forgotten” material on the beach and houses - parasols, toys, beach chairs, etc. - against symbolic payment, to revert to the Culatra Residents' Association
- ❖ Eliminate the burn of any type of leftovers/residues
- ❖ Promote the development of an asbestos waste management plan
- ❖ Disclose the amount of waste produced by the island's population on a quarterly basis

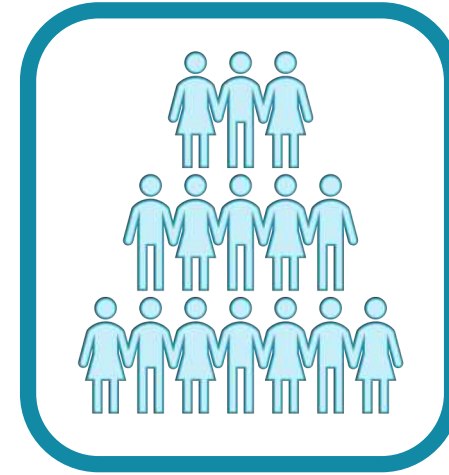
CULATRA'S WASTE TRANSITION



GIANT
challenge



Multi-stage
process



**Commitment of all
stakeholders**

(residents, municipality,
companies, university, etc.)

CULATRA'S WASTE TRANSITION

- ❖ Will we voluntarily join?
- ❖ Will we voluntarily reduce CO₂ levels?
- ❖ Will we voluntarily promote the reduction of energy consumption?
- ❖ Will we reuse products voluntarily?

With the involvement of all stakeholders, we will be able to tackle this challenge!

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Thank you very much

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