



**A comprehensive business  
commitment about circular  
economy and inclusive  
employment based on rejection  
plastic waste without any  
possibility of recycling**

SOLTECO “Circular Services”  
SITES IN LA RIOJA Y NAVARRA

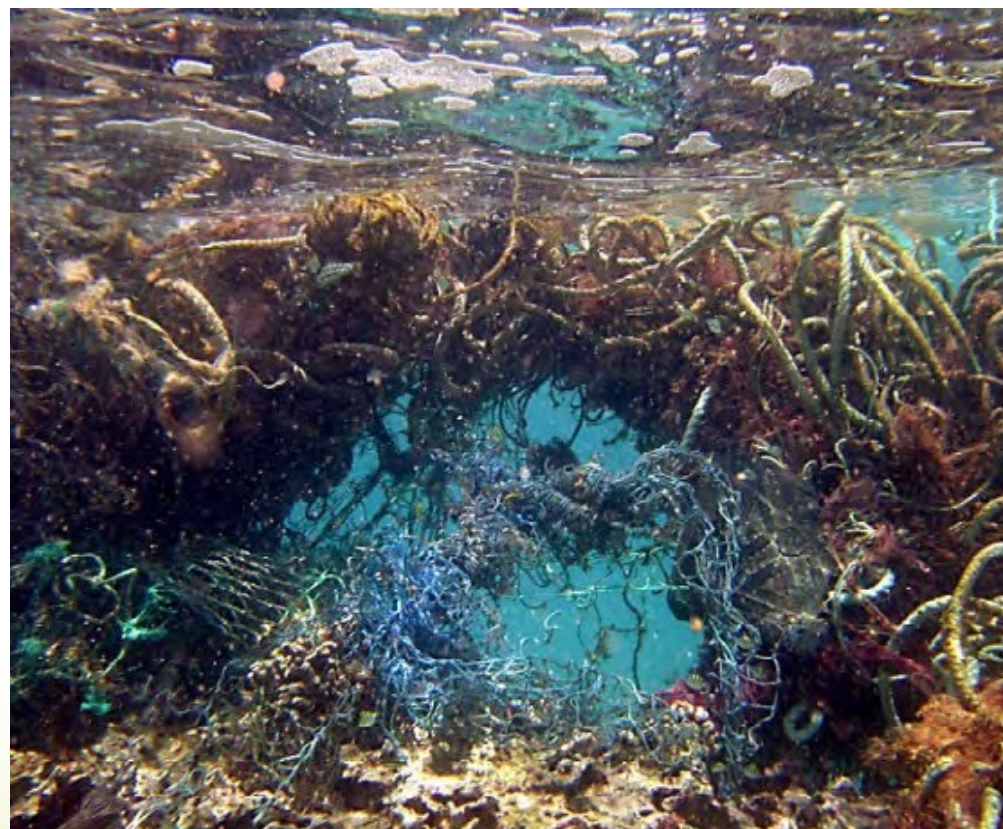


**Solteco is committed to innovation in a context of energy transition, valuing plastic rejection by a system of complete circularity differentiating us from the rest of Waste Managers**





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We use as **raw material** the remainder or reject plastic fraction (mixed plastic polymers) from **Urban Solid Waste, Industrial, Agricultural and Livestock**, which cannot be reused in other processes, their destination is, generally, incineration and burial in landfills





# solteco Agricultural Plastic Residue

madera plástica









## Urban Solid Residue







**WE DIFFERENTIATE**  
because only we can admit  
all **non-hazardous**  
**plastics** regardless of  
its **origin** and transform it  
into a useful product giving  
it a **high added value**,  
preventing it from being  
**cremated or buried**







**What the vast majority of recyclers or waste managers do:**

Only use those plastics that have **economic value**, clean and easy to select, such as the packaging from the yellow container in Spain to turn it into pellets and make new plastic items







Starting from plastics  
of rejection we get a  
**100% product**  
**reusable and recyclable**  
(Plastic Wood) through a  
**cycle productive dry**  
(without leachate)  
that does not generate **new waste**,  
maintaining the **life cycle indefinitely**,  
which are re-integrated into the system as  
a **non-polluting, finished product**







## COLLABORATIONS

ORHI CROSS-BORDER PROJECT (LA RIOJA, NAVARRA, PAÍS VASCO, SOUTH OF FRANCE)

NAVARRA AGRICULTURAL PROJECT TOGETHER WITH UAGN, UCAN AND AN

CEMOWAS PROJECT – MRSURAN

MRSURAN GOOD PRACTICES PROJECT – JOINING ALL TOWNHALLS BELONG TO IT

RECOVERY OF INDUSTRIAL PLASTICS PROJECT – MRSURBN

CEDERNA+IRATI AREA PROJECT TO RECOVER PLASTICS FROM THE CLEAN POINT

FARMERS COOPERATIVE GALICIA PROJECT (PENDING)

Ñ MEDITERRANEAN SEA PROJECT (WILL START IN APRIL/21)

WOODAPROOF INTERNATIONAL PROJECT (CANCELLED)





We collaborate and commit to  
**Environmental Foundations,  
Insertion Companies and Special  
Non-profit Social Initiative  
Employment Centers,**  
throughout Spain, for machining,  
final assembly and distribution of  
our product lines:  
Urban furniture, gardening and  
civil works.

This is called:  
**Inclusive employment**

**FEAFES,**  
Non-profit association of  
Spanish Special Employment  
Centers:

◆ **AFAUS** – Guadalajara

◆ **AFAEPS** – Albacete

◆ **SERVILAR** – Pontevedra

**Grupo SIFU** – Spain & France

**AMICA** - Santander & Valencia

**ISOL** – Murcia

**ELKARKIDE** - Noain

**GRANJA ILUNDAIN** - Pamplona

**GRANJA ULZAMA** - Ulzama

**JOSENEA BIO** – Lumbier

**APASCOVI** - Colmenarejo

**FUNDACIÓ MEDIOAMBIENTAL**  
Valencia



**The climate emergency** (UNO - ENVIRONMENT - GEO 6) forces us to rethink, from social, economic and environmental responsibility, the development model commits on comprehensive circular economy initiatives that are aligned with the 2030 strategy for sustainable development:

SDG 8 Decent work

SDG 9 Industry, innovation and infrastructure

SDG 11 Sustainable cities and communities





Sixth Global Environment Report (GEO 6): "**HEALTHY PLANET, HEALTHY PEOPLE**":  
Environmental impact on people's health

**8 million tons per year** of marine plastic garbage discharges of which 80% comes from land sources due to poor management of household plastics.

Presence and abundance of **microplastics** both in the oceans and in the landscape that are detrimental to the health of different natural environments and of humans.

Strong increase in the cost of cleaning beaches (**800 million euros per year in the EU**) and the effects on different ways of life and economic activity (agriculture, fishing, aquaculture, tourism, health ...).





01/21/2020 The "Spanish Council of Ministers" declares the climate and environmental emergency to safeguard the environment, health and safety of citizens:

This Statement includes the need to

**ACTIVATE THE CIRCULAR ECONOMY STRATEGY**

and a **WASTE LAW** that seriously addresses the problem of **PLASTICS**, to achieve "**ZERO WASTE**" by the 2050 horizon.

**IN A SHORT TERM:**

Improve the **MANAGEMENT** of **PLASTIC WASTE**, including recycling and reuse, lengthening the life cycle of products.



## **SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE OBJECTIVES**

- **Green Economy**
  - Reduce shipments to landfills and transport emissions (CO<sub>2</sub>)
  - Reduce burials and emissions from methane and carbon dioxide
  - Improve the efficiency of landfill wells
- **Circular Economy**
  - Reduce reuse recycle
  - Release of new materials from recycling in the production and consumption network
- **Proximity Economy**
  - Promotion of the zone economy (Local => Provincial => Regional)
  - Reduction of emissions from transport and improvement of the carbon / CO<sub>2</sub> footprint
- **Social economy**
  - Education and public awareness through seeing real examples of transformation of a problem (waste) into a solution (urban furniture)
  - Job creation in the most disadvantaged sectors (Learning and Assembly)
- **Sustainable and Responsible Purchase or Green Purchase**
  - In order to guarantee the Green, Circular and Proximity Economy it should be requested for certificates of origin of plastic waste (Traceability)





## WHY?

**The only company in Spain** that develops a process / product / service in integral circularity with the **plastic of rejection** encouraging inclusive employment, energetic transition and innovation.

It is aligned with the LCSP 9/2017 which requires Public Administrations to set a percentage of **RESERVED AND AWARDED CONTRACTS** in exclusive to Insertion Companies and Special Employment Centers in view of the **NEED TO CONTINUE PROMOTING THE LABOR INCLUSION OF THE MOST DISADVANTAGED PEOPLE.**

It is aligned with the **CIRCULAR ECONOMY STRATEGY AND THE LAW OF RESIDUES** faced with the **NEED TO ADDRESS**, inevitably, the Problem of **REJECT PLASTIC AND SINGLE USE PLASTICS.**

It is aligned with the **2030 STRATEGY** for Sustainable Development and its SDOs: **"NOBODY LEAVES BEHIND".**



We have been researching and offering integral circular solutions in the area of plastic waste for almost **20 years**, and more specifically generating our own recycled and recyclable product called Solteco Plastic Wood, as well as offering operational consulting in circular economy "Circular Services"

## MISSION

We are committed to **a sustainable environment**, seeking to satisfy the expectations of our clients and the people who work with us under the principles of **Corporate Social Responsibility** and excellence in management.

In this context, we carry out conscious actions with our suppliers and collaborators in favor of the environment, through the use and recovery of resources and the implementation of clean technologies.





## OBJETIVES

We aspire to be a company that contributes directly and collaboratively to the implementation of a **sustainable development model**, in order to become a reference in **EUROPE** in the comprehensive management of rejected plastic waste and service to people, through respect for the environment and social commitment to the most vulnerable people.

## VALUES

Commitment to people.

Ethical behavior.

Commitment to the Circular Economy.

Teamwork and personal and professional development.

Excellent management that responds to the interests and needs of our stakeholders.

## OUR RAW MATERIAL

### **THE PLASTIC WASTE**

FRACTION REST OR REJECTION PLASTIC THAT  
COMES FROM DIFFERENT SOURCES

### **URBAN WASTE**

Green Container  
Contaminated plastics and difficult to manage

### **COMMERCIAL AND SMALL COMPANIES WASTE**

Clean Point  
Standard Pickup







**Industrial Waste**



**Agricultural&Farm Waste**



## CAUSE AND WHY

-**Strong increase** in waste and plastic in particular.

-Although there are European, national and regional **regulations**, the truth is that it is not sufficiently monitored. The **alternative solutions** exist, unfortunately only the economic one is understood:

1) Increase in **landfill rates** to promote more and better recycling and the separation of waste at source.

2) Strongly **penalize** the abandonment of waste in the landscape.

-**It does not make sense** that some Spanish landfills apply burial rates in sanitary vessels of **15 €/Tn** and another **150 €/Tn**, the only thing they achieve is that waste is displaced from one province to another, the same criteria should be applied to all landfills, regardless of whether they are public or private and throughout the national territory.

-**Lack of a comprehensive and unitary management strategy in the state**, (landfills, administrations, citizens, companies and also farmers) betting on the reduction and reuse of the product life cycle.

-**A plastics management system** would be necessary as is currently done with paper and glass.





**WE PROVIDE A COMPREHENSIVE CIRCULAR  
SOLUTION TO A SOCIAL, ECONOMIC AND  
ENVIRONMENTAL PROBLEM**







**There are 4 important varieties of reject plastics:**

- PEHD** (High Density Polyethylene)
- PELD** (Low Density Polyethylene)
- PP** (Polypropylene)
- PS** (Polystyrene)

Others that can also be recycled in our process:

- PET and Polyamides







## OWN SYSTEM AND COMPLETE PROCESS OF CIRCULAR ECONOMY PHASES

- 1- SELECTION AND PREPARATION OF THE PLASTIC MATERIAL FOR ITS TREATMENT.
- 2- FIRST MILLING AND FIRST EXTRUSION (POLYMERIC MASS).
- 3- SECOND MILLING AND SECOND EXTRUSION  
(homogenization, plasticization, compression, shaping of the material) AND  
OBTAINING THE FINISHED PLASTIC PROFILE (OWN KNOW HOW).
- 4- MECHANIZATION FOR THE PRODUCTION OF DIFFERENT KINDS OF PRODUCTS.

**PHOTO 1  
MILLED**



**PHOTO 2  
MOLTEN**



**PHOTO 3  
MILLED**



**PHOTO 4  
PROFILES**





## **FEATURES**

- Does not rot or splinter
- Does not rust
- Inert to water or humidity
- Easy to clean
- Not affected by sea salt
- Resistant to the action of animals (Horses, Pigs, Rodents ...)
- Resistant to insects, fungi, microbes or bacteria
- Thermal, electrical and acoustic insulation
- Flexible, adapts to the terrain
- Unslippery
- It works exactly like wood



Our Corporate Social Responsibility (CSR) is strategic in the development of our business model and we are aligned as a sustainable company committed to the environment and with a new model of economic and social development.

**IT'S NOT JUST WORDS, IT'S A REALITY**



- **Promote and increase** employability among people with greater difficulties in their itinerary to come into a job and family insertion (women, people over 45 years of age, young people without training, ex-prisoners, people with disabilities, etc.) contributing to the energy transition and the economic efficiency from a responsible business model.
- **We support** inclusive employment by assembling and marketing of our products with social initiative entities (Insertion Companies and Special Employment Centers).
- **WASTE 0:** We do not generate new waste or leachate, since we do not use water in our manufacturing process.
- We manage the **REJECTION PLASTIC WASTE** (Authorized Manager) in the absence of an **INTEGRAL SYSTEM IN THE LANDFILLS** (Public Management), taking advantage of 100% of the plastic waste with our own KNOW HOW.
- **We do not use** this plastic waste to generate more single-use plastic (Example: Plastic Bags, which would be more Waste).



**180 kg residue**

=



**70 kg residue**

=







## OUR CONTRIBUTION TO SOCIETY AND THE PLANET

- Contribution to the **ENERGY TRANSITION** process from the **REUSE OF REJECTION PLASTIC AND THE REDUCTION OF ENERGY EXPENDITURE.**
- Contribution to the transformation of the Plastic Waste management models by the AA.PP. and to the increase in public awareness / sensitization regarding the **CLIMATE EMERGENCY** and the reduction of the use of Plastic and its reuse.
- WE PROMOTE A SUSTAINABLE MANAGEMENT OF FORESTS BY REDUCING THE FALLING OF TREES AND POLLUTION.**



The following results are obtained  
every 1,000 Tns / Year of Reject Plastic  
produced by SOLTECO:

**70 Kgs of Reject Plastic = 1 Tree of 10 Years.**

**1,000 Tns of Reject Plastic = 14,300 Trees.**

**Recycling 1 ton of plastic saves 1,033.4 Kg of Ethylene.**

**1,000 Tns x 1,033.4 Kgs = 1,033,400 Kgs of Ethylene.**

**1 Kg of plastic saves 39.26 liters of water.**

**1,000 Tns of plastic X 39.26 = 39,260,000 liters of water saved.**

**1 Kg of plastic = 2.506 Kg of carbon dioxide saved.**

**1,000 Tns Plastic = 2,506,000 Kgs of carbon dioxide.**





## DID YOU KNOW...?

- Only **1%** of plastic bags are recycled worldwide.
- A plastic bag has an average use time of between **12 and 20 minutes**, on the other hand, it can take between **15 to 400 years** to degrade.
- 20%** of the garbage collected from the beaches are bags.
- In **Spain**, 10,500 million plastic bags are consumed each year, and **only 11%** are recycled.
- 75%** of Spain's waste is sent to landfills.
- We could avoid the dumping of 90% of the waste** generated by carrying out good waste management.
- Although certain plastics are banned from now on, the problem remains **because there is no management system**.
- Recovering **2 tons** of plastic is equivalent to saving **a ton of oil**.
- Only single-product and clean plastic waste is treated and recycled, leaving the rest to bury.
- For the purposes of the population, the **ECOEMBES marketing campaigns** give the impression that Spain recycles **80%** of plastic waste, when in reality the yellow container only accounts for less than 5% of the plastic generated in Spain.
- Working together (ADMINISTRATION AND SOLTECO) we would be able to avoid burying plastics in landfills.
- SOLTECO CAN CONTRIBUTE THAT ADDED VALUE**



## AND THE FUTURE ...

### **I- DIVERSIFICATION OF OUR PRODUCT LINE BASED ON REJECTION PLASTIC:**

**Extrusion Line:** Current production line expanding the portfolio of clients and products.

**Injection Line:** New line for the development of other products. More specific sector (furniture) and industrial field.

**High Temperature Pressing Line** using previously selected recycled plastic materials, to obtain products different from the previous lines of business using a pantograph to shape the final product.





## **II- HUB INNOVATION AND OPERATIONAL CONSULTANCY FOR THE DEVELOPMENT OF NEW PRODUCTS / PROCESSES / SERVICES**

**-Design, drafting of R&D&I and social innovation projects** with other agents and companies to develop new products / services related to reject plastic.

**-"Ad hoc" Operational Consultancy** on reject plastic with demonstrable results in the form of design and implementation of projects and/or pre-commercial results (RESPONSIBLE AND INNOVATIVE PUBLIC PURCHASE).

**-Generation of replication projects** of the model throughout the State, managing waste where it is produced, reducing the carbon footprint of inadequate and unsustainable logistics processes, while firmly committing to the generation of employment, especially inclusive, supporting the local development especially in rural areas.

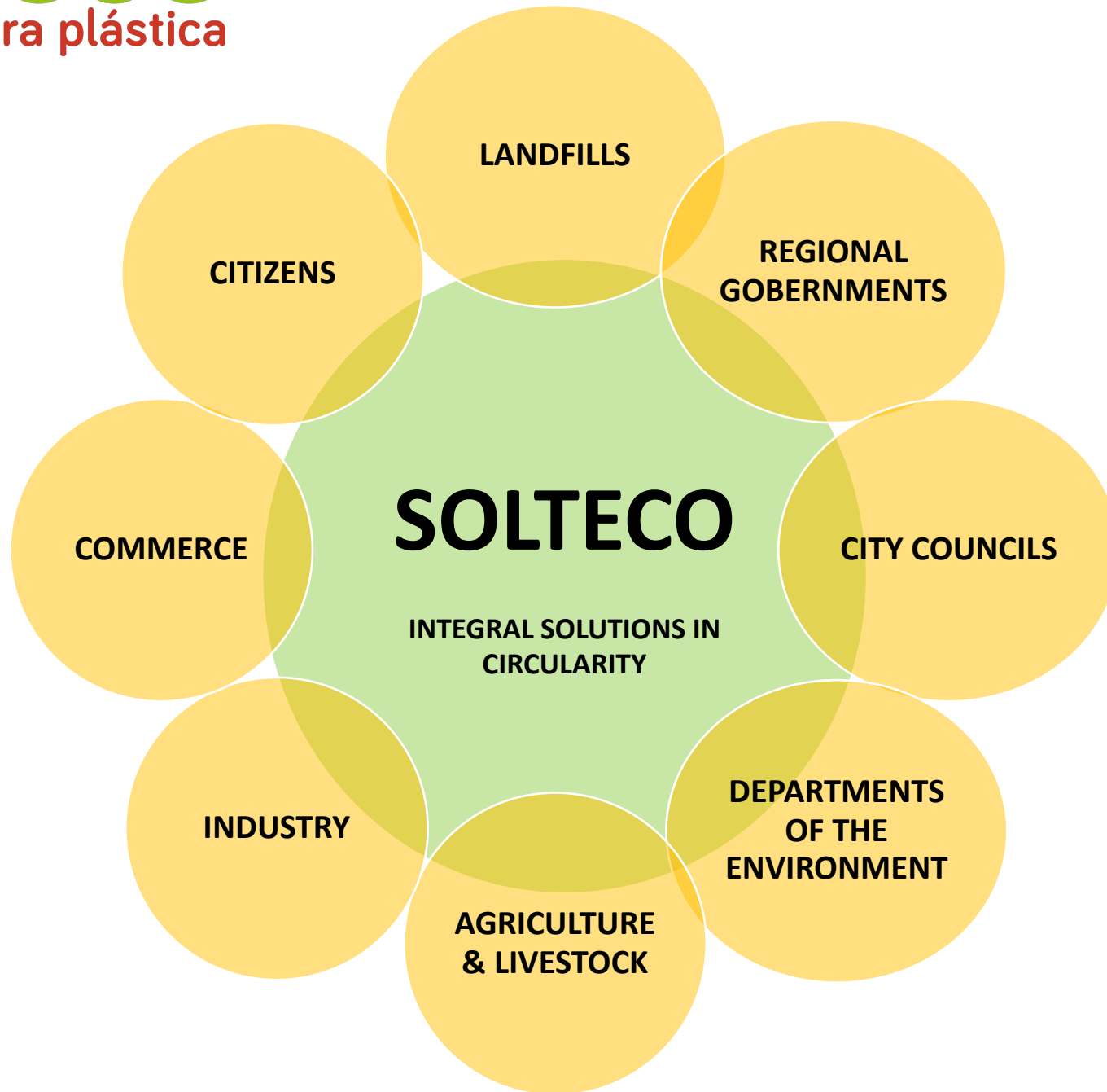


-**Didactic commitment** at the state level, generating public awareness projects and public administrations, ultimately responsible, to drive a structural change towards the integral management of waste.

-Launch based on SOLTECO plastic material, of **decentralized management models** for organic waste composting based on manufacturing, installation of community composters. Generation of inclusive employment throughout the process, training composting masters throughout Spain to enhance the fraction of organic waste.

-**Plastic rest and organic rest**, fundamental **axes** of priority action in the European directives and in SOLTECO's commitment.





## **CLIENT TYPOLOGY**

**Regional and Provincial Governments**

**City Councils**

**Department of Coasts, Department of Roads**

Campings,  
Golf Courses  
Horse Riding  
Nautical Logistics  
Construction

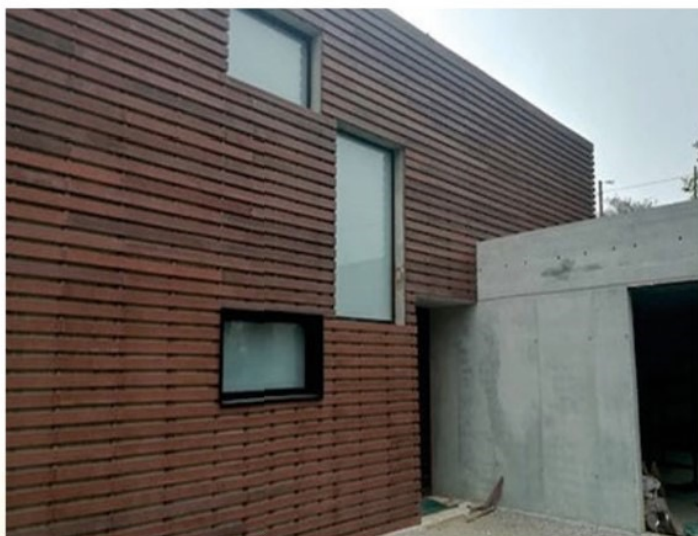
Zoos  
Fleets  
Theme Parks  
Aquariums  
Agriculture and Livestock

**Large companies to develop circular economy:**

FCC, FERROVIAL, COCA-COLA,  
TRAGSA, SAICA, VITALDENT



## Architecture





-Agriculture  
-Livestock





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-Gardening  
-Composting







- Seaports
- Nautical Clubs
- Shipping companies





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-Urban furniture

Fairs





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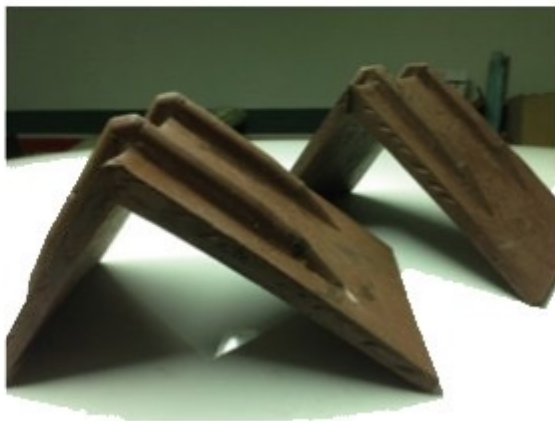


-Signage  
- Enclosures



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Logistics



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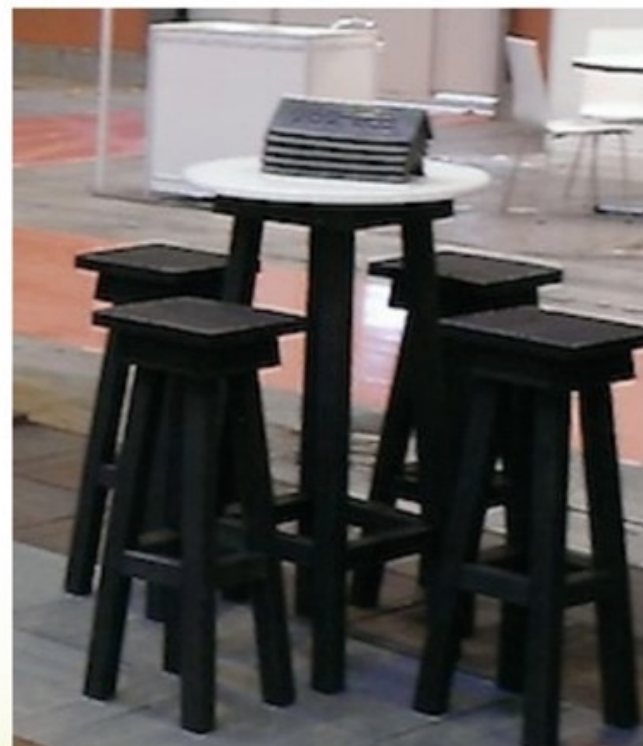
# Hostelry

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Hostelry



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- Horse squares
- Dog park
- Multiple assemblies





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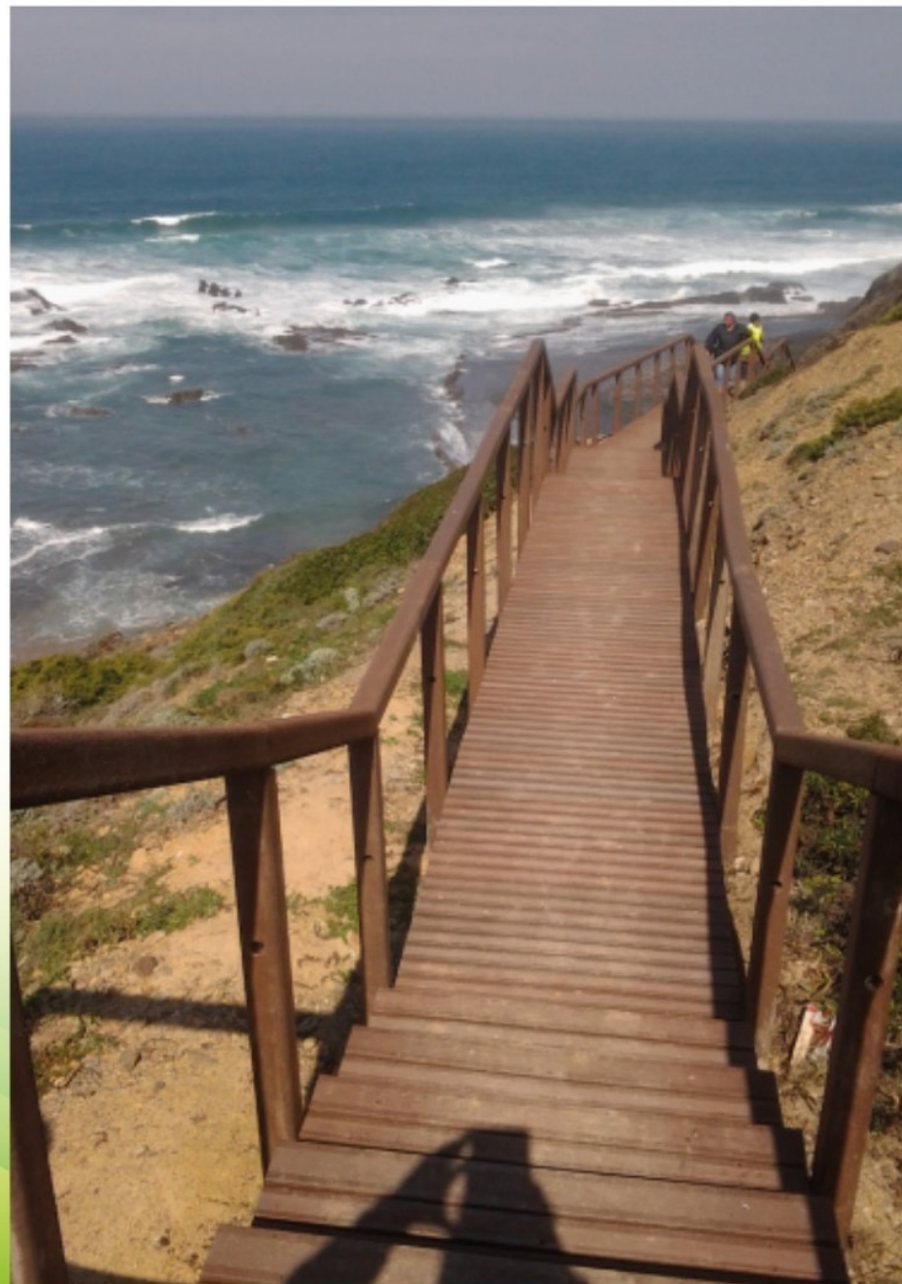
Public work





# Public work

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Thank you very much for your attention

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