

# CIRCULAR ECONOMY

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AUGUST 2020

# CIRCULAR ECONOMY SDGS CONTRIBUTION

The Circular Economy has direct impact on 80% of the SDGs with an extraordinary transformation capacity of **work creation and economic development**



# ACCIONA CIRCULAR ECONOMY CAPABILITIES

And ACCIONA capabilities are fully aligned with the **Circular Economy** Action Plan guidelines of the European Union



Green Infrastructure



Efficient Use of Resoruces



Integral Waste Mgmt



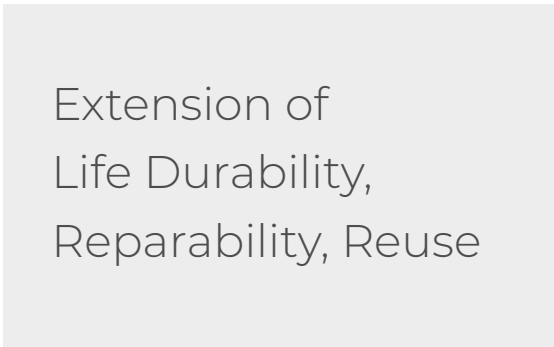
Mitigation & Resilience Mgmt



Restoration and Refurbishment



Resilience Mitigation Facilities



Integral Ecosystem Management





# ACCIONA CIRCULAR ECONOMY. CAPABILITIES

ACCIONA has more than **thirty years of experience** and **dozens of ongoing projects** in the five Circular Economy Business Lines



**SHARING**  
Green Mobility

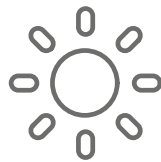


**WASTE AS RESOURCE**  
Valorization  
Innovative Materials

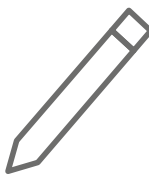


**LIFE EXTENSION**  
Renaturalisation  
Refurbishment

**CIRCULAR SUPPLIES**  
Renewable Energy  
Integral Water Cycle



**PRODUCT AS A SERVICE**  
Eco-design  
Special Machinery Management



CLICK TO DEPLOY

NEXT







PRODUCT AS A SERVICE

Eco-design

Special Machinery Management

# VALENCIA LIGHTHOUSE

Frist Lighthouse built with composite materials in the world.

32 meters in height, integrated with Renewable Energy technologies (10 solar PV panels) and L.E.D. technology with a 25 nautical mile reach

- 40% faster installation
- 50% of Construction cost
- Only 4% of the maintenance cost







**CIRCULAR SUPPLIES**  
**Renewable Energy**  
Integral Water Cycle

# PHOTOVOLTAIC PLANTS AND WIND FARMS

22.991 GWh  
Equivalent to almost 7 million households  
13.099.944 tons CO<sub>2</sub> averted

# EFFICIENT ENERGY SERVICES

Outsourcing  
Efficiency Integral Management  
System renewal







**CIRCULAR SUPPLIES**  
**Renewable Energy**  
Integral Water Cycle

# WATER TREATMENT & IDUSTRIAL SYMBIOSIS

Food, Agro, Chemical and other industries  
Integral Water Cycle Management

Valorization of fertilizers coming from the  
treatment process and integration in local  
supply chain.

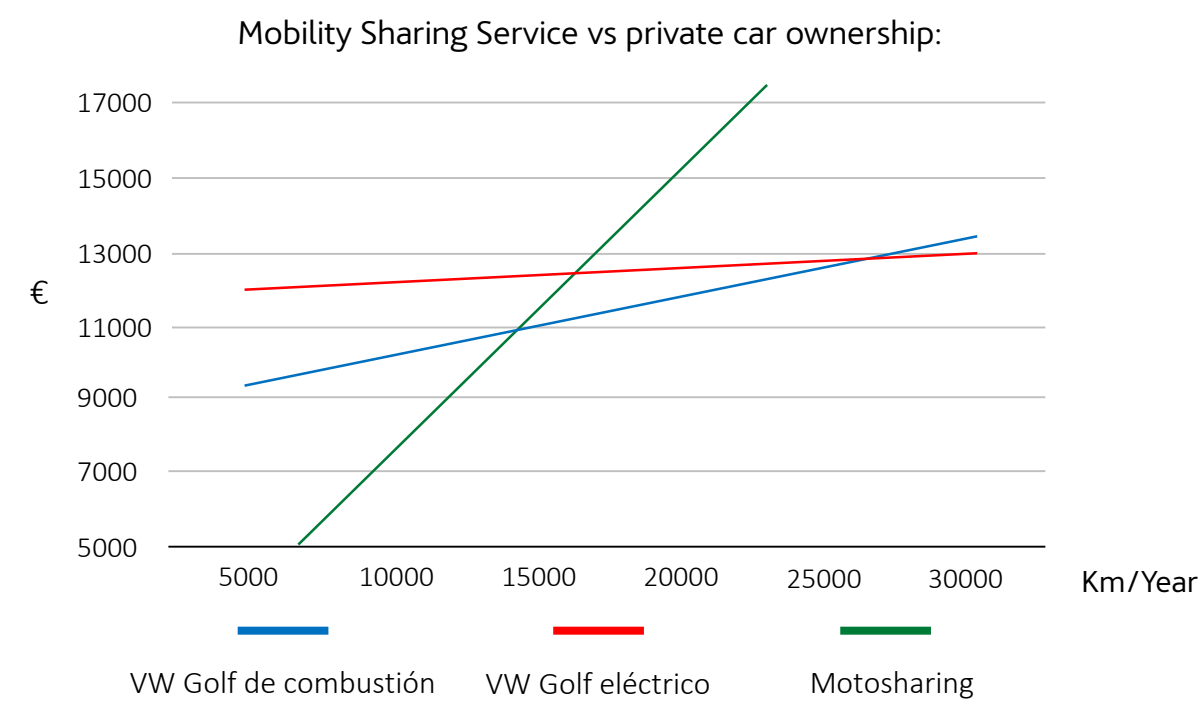
Anaerobic co-digestion system to meet own  
energy consumption needs and generate an  
energy surplus to the grid.





# CONSUMPTION PER SERVICE

Motocicletas eléctricas recargadas por energía 100% renovable. (544 toneladas de CO2 evitadas)







# NEW GENERATION OF WASTE TO ENERGY

Evolution of current Waste to energy technology to lower emission one including:

- Previous treatments higher on the waste hierarchy (i.e. anaerobic digestion of organic materials).
- Strategic site locations, including co-location with industry for feedstock, use of residual energy.



BACK

Innovative Materials







## INDUSTRIAL SYMBIOSIS

Use of paper industry ash residue as an alternative to lime and cement

Extra income for the waste producer through valuation

25% savings regarding traditional construction cost

Technology and process applicable to any road project in ACCIONA's portfolio.







LIFE EXTENSION

Renaturalisation

Refurbishment

# RENATURALIZACIÓN

Renaturalization of damaged landscapes by neutralized industrial waste landfill coming from mining and metallurgical operations, transforming two environmental passives in a renewed asset.

Mining landscape in restoration integrating stabilized metallurgical waste.

