

Sustainable Edification

Ciro Project



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Sustainable cities

Better quality of life.

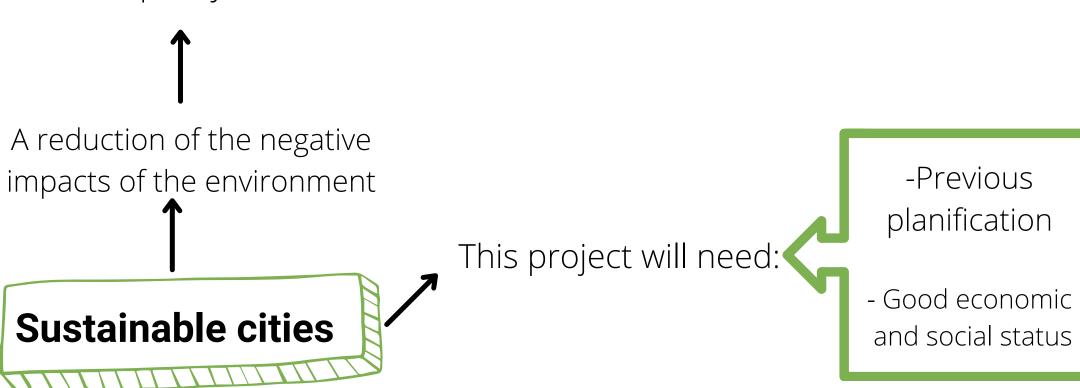


A reduction of the negative impacts of the environment



Sustainable cities

Better quality of life.

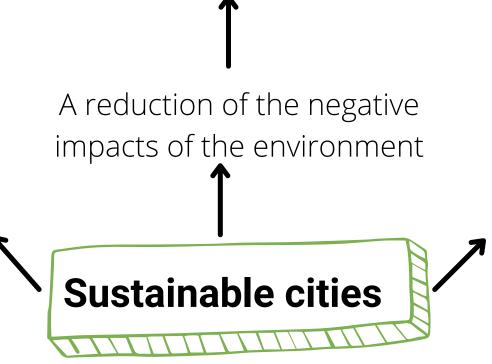


- The climate

- The area where it will be located

Important aspects

Better quality of life.



-Previous planification

This project will need:

- Good economic and social status

- The climate

- The area where it will be located

Important aspects

Better quality of life.

A reduction of the negative impacts of the environment

This project will need:

Sustainable cities

97% non sustainable cities 3% sustainable cities

-Previous planification

- Good economic and social status

- The climate

- The area where it will be located

will create less

Carbon emissions

Air pollution

Better quality of life. A reduction of the negative impacts of the environment This project will need: Sustainable cities

97% non sustainable cities 3% sustainable cities

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- Good economic and social status

- The climate

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Carbon emissions

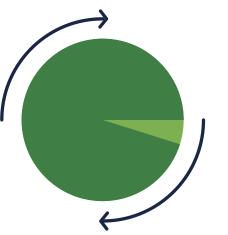
Air pollution

97% non sustainable cities Better quality of life. 3% sustainable cities A reduction of the negative -Previous impacts of the environment planification This project will need: - Good economic Sustainable cities and social status Main purpose

Acquire new knowledge of climate change, renewable energy and energy storage systems.

Better quality of life. A reduction of the negative impacts of the environment - The climate Important aspects This project will need: - The area where it will be located Sustainable cities will create less ideas: Air pollution Carbon emissions

- The installation of solar panels in buildings,
- Changing of lights and electrical appliances,
 - Installation of light and water sensors, waste separation and hydrogenerators to supply hydrogen.



97% non sustainable cities 3% sustainable cities

> -Previous planification

- Good economic and social status



Acquire new knowledge of climate change, renewable energy and energy storage systems.

Environmental background

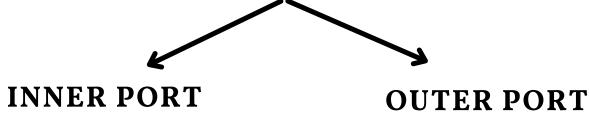
Our city will be located in **HUELVA**

Port of Huelva

Characteristics of huelva

- ✓ Port city located in the southwest of Spain
- Mediterranean climate
- ✓ Population of 146.318 citizens.
- Is divided into 48 neighborhoods.
- ✓ The economy: factories and service sector.
- ✓ Most active, competitive and growing ports.

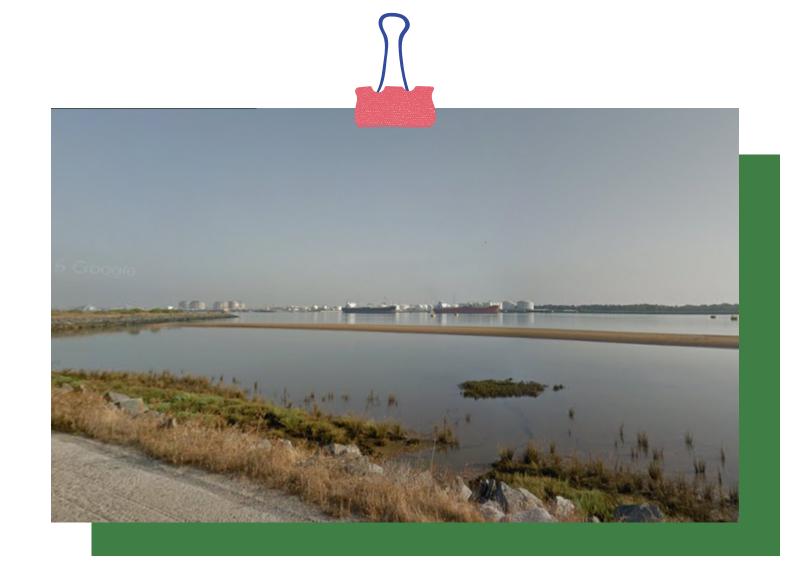
Is divided into two sectors:









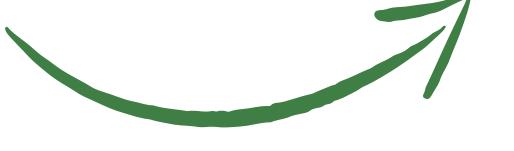


Juan Carlos I Breakwater

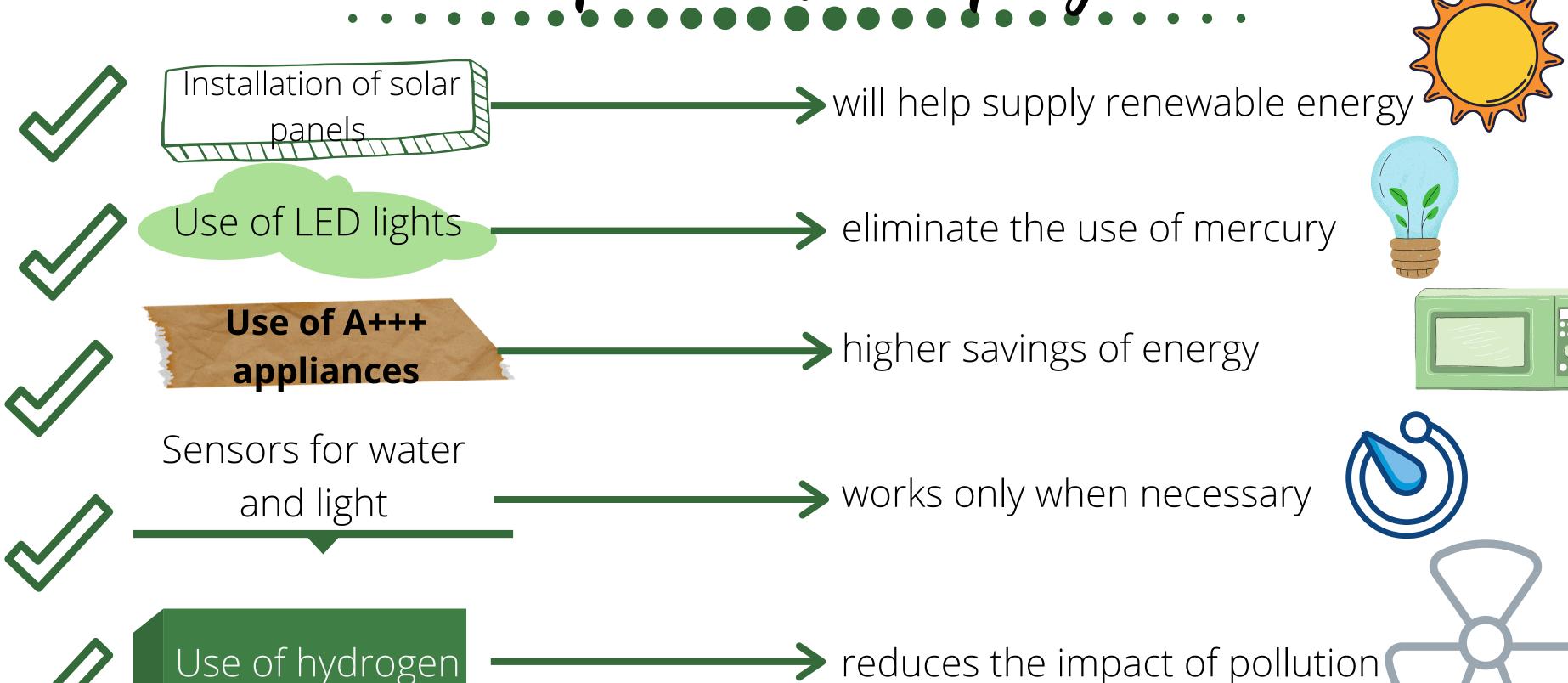


Phospho-gypsum waste





Description of the project

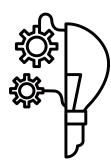


































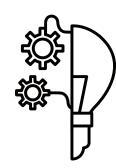


Contribute to the reduction of polluting gases.

















Contribute to the reduction of polluting gases.

Promote initiatives that contribute to the implementation of renewable energies.















Contribute to the reduction of polluting gases.

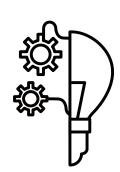
Promote initiatives that contribute to the implementation of renewable energies.



Develop activities to inform and raise awareness among the population.















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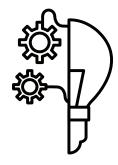


Develop activities to inform and raise awareness among the population.



Objectives of the project





Turn our city into an example of sustainability.









Contribute to the reduction of polluting gases.

Promote initiatives that contribute to the implementation of renewable energies.

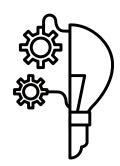


Develop activities to inform and raise awareness among the population.



Objectives of the project





Turn our city into an example of sustainability.



Improve the quality of life of citizens.







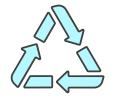
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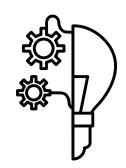




Objectives of the project



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Improve the quality of life of citizens.

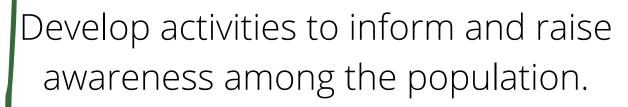






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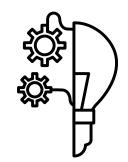
Promote initiatives that contribute to the implementation of renewable energies.





Objectives of the project





Generate and store energy in urban areas.

Turn our city into an example of sustainability.



Improve the quality of life of citizens.







Contribute to the reduction of polluting gases.

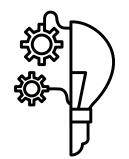
Promote initiatives that contribute to the implementation of renewable energies.

Develop activities to inform and raise awareness among the population.



Objectives of the project





Generate and store energy in urban areas.

Turn our city into an example of sustainability.

Offer citizens a guarantee of performance and greater investment in sustainable appliances.



Improve the quality of life of citizens.







Contribute to the reduction of polluting gases.

Promote initiatives that contribute to the implementation of renewable energies.

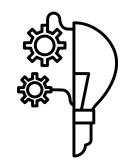


Develop activities to inform and raise awareness among the population.



Objectives of the project





Generate and store energy in urban areas.

Turn our city into an example of sustainability.

Public transport



Improve the quality of life of citizens.







Contribute to the reduction of polluting gases.

Promote initiatives that contribute to the implementation of renewable energies.

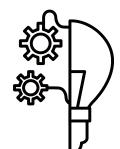
Develop activities to inform and raise awareness among the population.



Objectives of the project



Convert our city into a 100% sustainable city



Generate and store energy in urban areas.

Turn our city into an example of sustainability.

Public transport



Improve the quality of life of citizens.

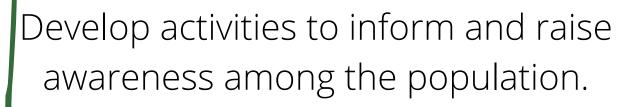






Contribute to the reduction of polluting gases.

Promote initiatives that contribute to the implementation of renewable energies.



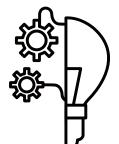
Improve the efficiency of batteries



Objectives of the project



Convert our city into a 100% sustainable city



Generate and store energy in urban areas.

example of sustainability.

Turn our city into an

Public transport



Improve the quality of life of citizens.







Contribute to the reduction of polluting gases.

Promote initiatives that contribute to the implementation of renewable energies.

Install a greater number of energy storage sources



Develop activities to inform and raise awareness among the population.

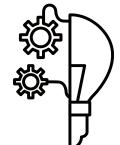
Improve the efficiency of batteries



Objectives of the project



Convert our city into a 100% sustainable city



Generate and store energy in urban areas.

Turn our city into an example of sustainability.

Public transport



Improve the quality of life of citizens.





Innovative aspects

Ecological buildings

Solar panels
Rooftop gardens
Reduces CO2 emissions
Regulates the temperature



Application for parking

Reduces CO2 emissions Informing of free spaces



Solar road

Wireless charging Made of 3 layers





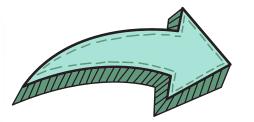
SUSTAINABLE CITIES

-Ensure access for all to acquire housing and basic services -Favor the creation of green areas and public spaces.



Hydrogen will be of great importance in the future

EXPANSION OF ICT



generate sustainable cities and improve the lifestyle of citizens





If these sustainable goals are followed through, cities will continue to be an economic and progressive engine, without destroying or deteriorating the natural resources that the environment offers us.



Corporativa, Iberdrola. "El Hidrógeno Verde: Una Alternativa Para Reducir Las Emisiones y Cuidar

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CIRO courses notes