



## Energy under the sea: biomass made out of microalgae as a green alternative to fossil fuel

LOCATION: Chiclana de la Frontera (Cádiz)

DURACIÓN VTR: 2'00"

**SUMMARY:** An enterprise located in Cádiz is the Spanish representation in a European project that intends to produce biomass from microalgae. The objective is offering an alternative to fossil fuel, responsible for most of the contaminant gasses emissions. With these algae we can obtain biodiesel and natural gas. The University of Cádiz collaborates in this study that is being performed in a plant of the Andalusian town of Chiclana de la Frontera.

### VTR:

Contamination and climate change are serious problems for our planet. To fight them the European project All-Gas has found in biomass obtained from microalgae a green alternative to fossil fuel, responsible for most of the contaminant gasses emissions.

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Responsible for the pilot  
plant

*"Microalgae cultivation is a sustainable technology because it can produce energy with a very low cost."*

With these algae we can obtain biodiesel and natural gas.

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*"From a gram of biomass, a gram of algae, we can obtain almost half a litre of methane."*

These microalgae just need sunlight to grow, they also feed from CO<sub>2</sub> and substance contained in waste water. That's why with its exploitation...

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*"We would take care of the environment, limiting the excess of nitrogen in rivers, riverbeds or the sea."*

It is a project financed by the European Union in which six European countries are collaborating, among them Spain. From this plant in Chiclana de la Frontera, the Aqualia Company is leading the Spanish participation with the support of the University of Cádiz. This study, that has an estimated duration of five years, is now on its first stage.

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*"We are figuring out which algae are more suitable, which is the best cultivation method and we are also studying the concentration strategies."*

As it happens with fossil fuel, the fuel obtained with biomass produces CO<sub>2</sub>, however, this contaminant gas is the same that was previously absorbed by the algae.

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*"We are not introducing extra CO<sub>2</sub> in the biosphere, we are just renovating the carbon cycle."*

A renewable alternative for a cleaner future.