# Algenergy

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# Introduction

There are many ways to obtain clean and renewable energy by using resources offered by nature. An example of these methods is taking advantage of the wave's power.

Not only the waves, but also the tides (tidal power), the sea currents and the temperature between the surface of the sea bottom (tidal energy) are some very useful ways of producing energy. According to APPA Marina, the sea has a great energy potential.

However, these technogies are in pre-commercial phase. This is because *"The hostile conditions of the sea, the force of the tide and the marine corrosion just like the the need to have mecanisms to transport the energy to earth, make these technologies very expensive to produce."*, affirms APPA Marina.

Asociación de Empresas de Energías Renovables



# Micro-algae

Micro-algae are some very small marine organisms that can transform sunlight into energy.

Some of these store energy in the form of natural oils. In the right conditions, the micro-algae can generate a great amount of these oils that can be transformed into biofuel.

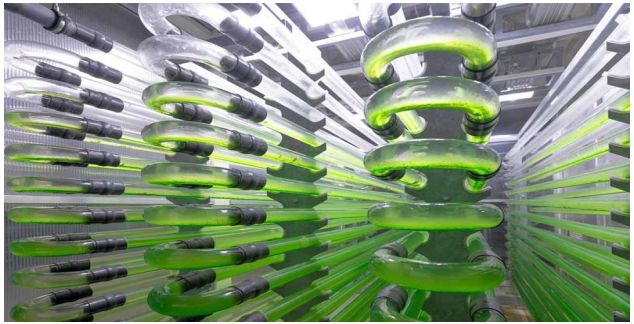


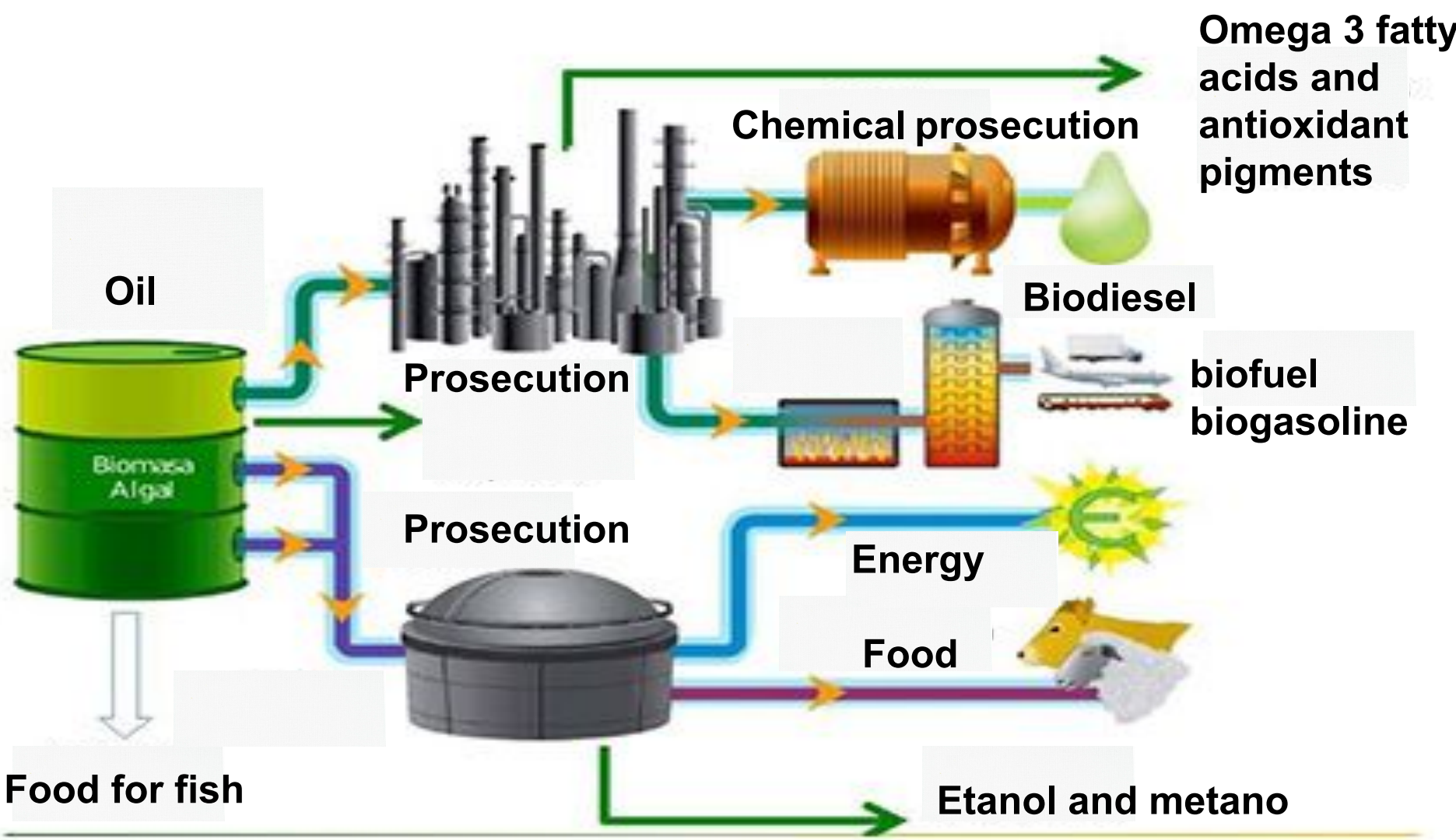


# Idea:

Our idea is to create a platform located over the sea, where there will be a plantation of micro-algae in photobioreactors. The micro-algae will be transformed into biofuel or energy. Then, this biofuel/energy will be transported in a boat to a distribution plant.






Omega 3 fatty acids and antioxidant pigments
Chemical prosecution
Oil
Biodiesel
Prosecution
biofuel
biogasoline
Biomasa Algal
Prosecution
Energy
Food
Food for fish
Etanol and metano

## Location:

In the Mediterranean Sea, coordinates - 38.482619, 5.861160



## Size:

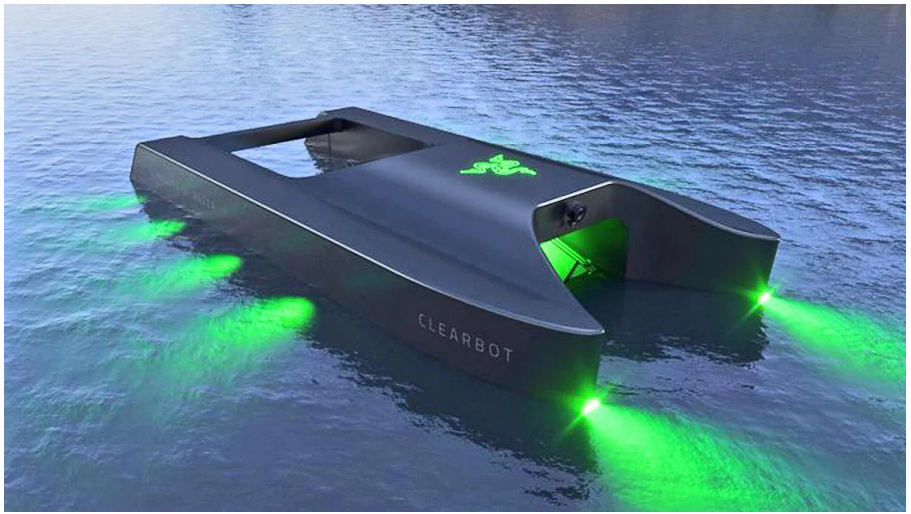
65m length, 30m width and 3 floors high

## Price:

The price oscillates between 75 or 100 millions euros. It’s very expensive because the scientific instruments, the photobioreactors and a structure of this size in the sea it’s very expensive

# AlgBot

This boat-submarine will be 20 m long and 5 m wide with a hatch that will suck in the algae. It will have a capacity of 750 kg and will then be transported to the platform.It will be made of high-strength alloy steel and will run on our biofuel produced from the algae the boat-submarine-collects.The submarine will cost around 300,000 euros, excluding maintenance costs.



# Prototipes:

1- https://www.tinkercad.com/things/2HIqcdLusck/edit?title=Algenergy

2-https://www.tinkercad.com/things/7McaGFdoOxB-submarino-recogealgas/edit?sharecode=uZ8ep3nC81vXyVjAr7s81QMYIEx_VI4UALgLwEDOq_w

# Bibiliografía

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Las algas y las medusas se convierten en fuente de energía ...

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