



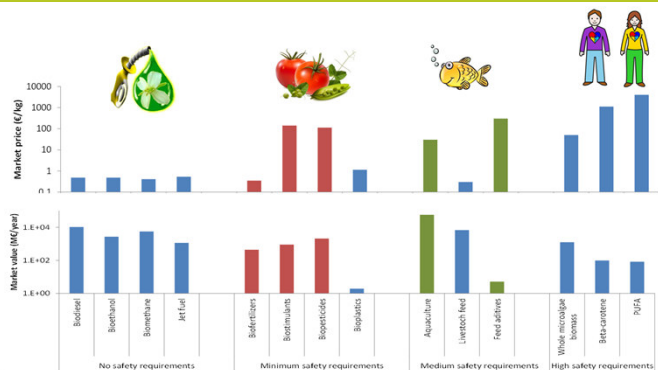
# Sustainable integrated algae biorefinery for the production of bioactive compounds for agriculture and aquaculture

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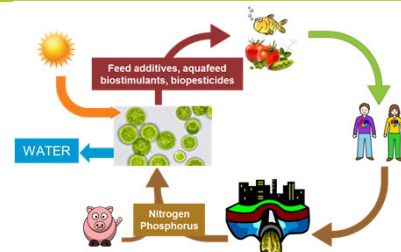


## REASONABILITY



Agriculture and aquaculture are large markets demanding new products from microalgae, these markets impose softer safety requirements

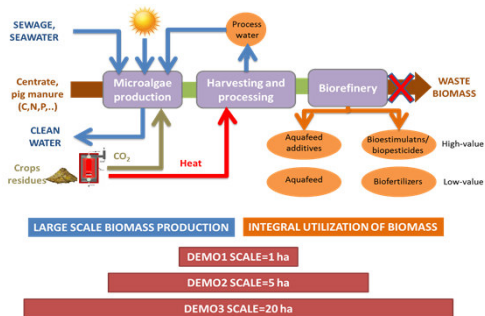
## OBJECTIVE



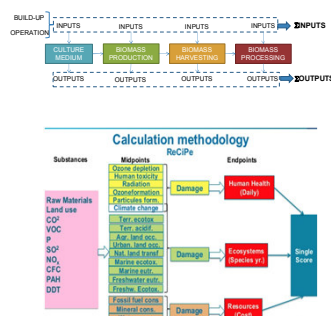
The objective of SABANA is to develop and demonstrate an integrated microalgae-based sustainable biorefinery to produce a range of value-added products (biostimulants, biopesticides and aquafeed additives) and low-value products (biofertilizers, aquafeed) for agriculture and aquaculture, using marine water and recovering nutrients from wastewaters (sewage, centrate and pig manure), accomplishing market (quality, price, regulations) and social (acceptance, capacitation, skills) requirements.

## CHALLENGES

### LARGE SCALE PRODUCTION



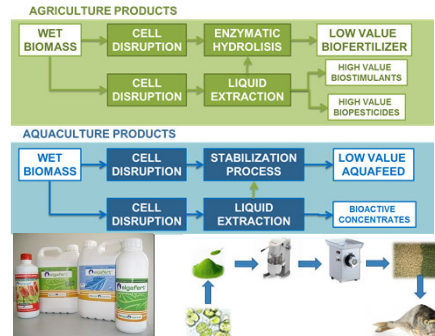
### SUSTAINABLE PRODUCTION



To develop robust and scalable technology for microalgae production (including harvesting and processing), in continuous mode all the year around, at minimum cost. Economic analysis must be used in decision making.

To integrate the treatment of wastes to increase the sustainability of the entire process. Life Cycle Analysis determines what is possible or not.

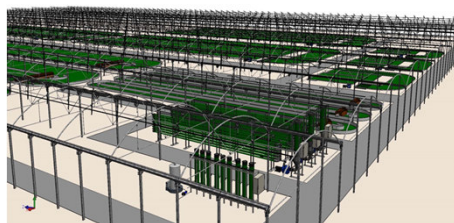
### MARKETS/COMMERCIALIZATION



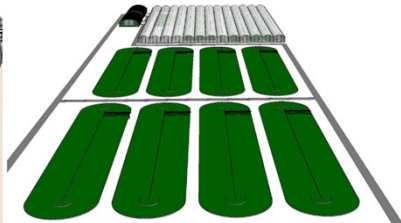
Only products now requested by the markets and that legally accepted are considered. Business plan is the driver of the project

## RELEVANCE

### DEMO 1 Ha



### DEMO 5 Ha



- Dissemination activities:** Organization of conferences, participation in meetings, workshops with industrial sector, newsletter, papers, etc.
- Training:** To establish a Training Center for teaching and collaboration with other institutions, organization of international courses, etc.
- Collaboration:** With other EU projects, with companies associations, Public bodies, etc.
- Share research:** Creation of a Data Center for online availability of real data from the reactors in operation, access to models developed during the project, simulation tools for different scenarios, etc.

## PARTNERS



## ACKNOWLEDGEMENTS



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## MORE INFO



[www.eu-sabana.eu](http://www.eu-sabana.eu)

