Marine biological resources



# DIESALG

## PRODUCING DIESEL FROM MICROALGAE

The DIESALG project sought to develop high-energy value microalgae to produce biodiesel. Several steps are required to achieve a viable process on an industrial scale. The work carried out during the project helped identify two new robust, industrial strains that produce significantly high levels of lipids of interest to biodiesel. DIESALG developed a new wet processing method of treating the biomass to recover intracellular lipids and optimised the protocols for cultivation in industrial photobioreactors.

The project also established new technologies directly applicable to industry, such as the covered raceway cultivation system that is now being commercialised by AlgoSource Technologies. DIESALG incorporated the WONDER programme (World Oilalg Network for the Design of processes and strains for the Elaboration of Renewable energy from microalgae), which brought together GEPEA, the University of Tsukuba, the University of Murdoch and the University of California San Diego.

Spin offs and future developments

- Two patents registered
- 24 international publications
- More than 60 papers presented at scientific symposiums



#### COM\_PROJECTS\_CATEGORIE\_PARTNER\_ ENTREPRISES

BRETAGNE ATLANTIQUE

Alpha Biotech, Asserac [Project Developer]

#### **Research centers**

Commissariat à l'Énergie Atomique et aux Énergies Alternatives CEA/LITEN, Grenoble Laboratoire de Bioénergétique et Biotechnologie des Bactéries et Microalgues - CEA, Cadarache Laboratoire GEPEA (Génie des Procédés-Environnement-Agroalimentaire), Nantes

### Funder

- Agence Nationale de la Recherche

Labelisation

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#### **Overall budget**

2 702 K€