

Macroalgae in Belgium

Licensing and Permitting

There is no specific legislation covering macroalgal production in Belgium. Aquaculture in Flanders is however regulated under the VLAREM regulations on permitting (see Section 1). According to the VLAREM, a Class 1 or 2 environmental licence is required depending on the degree of environmental impacts of the development. Class 1 (the most environmentally significant) activities licensed by the Provincial Council and Class 2 by the local mayor. Factors that may also be considered are whether the development requires an EIA and if, conducted offshore, it conflicts with articles in the Belgian Marine Protection Law. Here, a critical issue is whether non-indigenous species will be introduced as part of the production process as this requires authorization in order to protect local biota.

The contacts are provided here:

Main implementing legislation	Primary implementing agency	Permit types
VLAREM Master Plan – marine planning	Flanders Environment, Nature and Energy Department (LNE) – Environmental Licences Division http://www.lne.be/en/about/publications/brochure-environment-nature-and-energy-department	Environmental licence (Class 1 and 2)

Key Points to consider:

1. What is the size of the planned operation: marine and terrestrial footprint?
2. What services exist already on the site? Is this a new operation or change of use?
3. Is the site located environmentally sensitive areas / sites of special scientific interest?
4. What species of macroalgae will be grown in relation to what is already present in the ecosystem?
5. What are the offshore and onshore requirements?

First step:

- Contact Regional office Licensing division of LNE ((Departement Liefemileu, Natuur en Energie))

Key Points to consider:

1. What size is the facility?
2. Is the site located close to dwellings / environmentally sensitive areas / sites of special scientific interest?
3. Are any discharges produced by the site?
4. What services exist already on the site?
5. Is the site likely to cause nuisance - e.g. noise above levels of agricultural machinery / odour / light above dense street lighting?

First step:

- Contact LNE (Departement Liefemileu, Natuur en Energie)

Planning

The VLAREM is concerned with two main questions. Firstly, if the facility requires planning permission. For land based (terrestrial) facilities the answer to this question invariably rests on the individual project. In this case, the decision will be taken by the local planning authority in accordance with spatial planning. Secondly, if the facility conflicts with marine planning, then offshore facilities will have to comply with the marine plan. The Belgian approach employs zoning as a means of allocating activities, which are then subject to permitting. Specific areas are designated for energy production, i.e. wind farms, and mariculture that could potentially be used for macroalgal production.

Key Points to consider:

1. What inputs have gone into the production process: are any classified as waste?
2. What is the target end use of the algal biomass?
3. What further processing steps are required?

Regulatory Issues

Regulatory issues are very much dependent on end use of biomass. Please consult the relevant factsheet for further information.

Factsheet #15. Algae as Feedstock for Energy Generation - European fuel quality and other bioenergy legislation are explained

Factsheet #16. Algae as Feedstock for Chemicals - this covers REACH and other pertinent legislation

Factsheet #17. Algae as Feedstock for Food or Feed - FEMAS and other regulations for entering the food chain are described in more detail.