



Macroalgae in Germany

Licensing and Permitting

Both federal and Länder legislation exist for aquaculture but while federal exclusive competences extend to waters beyond the 12 nautical mile zone, the Länder have concurrent powers over activities in inland coastal waters and onshore. The federal body responsible for aquaculture is the Federal Ministry of Consumer Protection, Food and Agriculture (Bundesministerium für Verbraucherschutz, Ernährung und Landwirtschaft – BMVEL).

The contacts are provided here:

Main implementing legislation	Primary implementing agency	Permit types
Raumordnungsgesetz (ROG) – marine planning	Bundesamt für Seeschifffahrt und Hydrographie (BSH)	Approval by competent authorities
National and Lander fisheries laws	Bundesministerium für Verbraucherschutz, Ernährung und Landwirtschaft – BMVEL Lander fisheries agencies	Lander aquaculture licence

Planning

For developments on land and in coastal zones, state regulations on land use planning apply. Aquaculture facilities require a building permit and may be subject to an EIA. However, for offshore developments, macroalgal production will be subject to marine planning. Introduced under amendments to the federal Land Use Planning Act 1997 (the Raumordnungsgesetz (ROG)) planning, the German system of planning extends from 12 nautical miles offshore to the limit of the EEZ in both the Baltic and North Sea. Three types of zones are designated: 'priority areas' for activities such as shipping; 'reservation areas' which privilege specific use functions; and 'marine protected areas' designated under EU and national nature protection measures. Activities generally require approval which differs according to use function. Energy production, mostly wind farms, and aquaculture/mariculture is subject to assessment by the competent authority. Research facilities do not require a licence.

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 Lander / BMVEL

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 Lander, BMVEL or BSH

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.

Key Points to consider:

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