

Sustainable seaweed production in the North Sea realistic

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Moving sustainable production offshore can solve global environmental issues. Seaweed has the potential to deliver new biomass flows for animal feed, food, and non-food products. For instance, sugars and proteins from seaweed can form an alternative to soya and fishmeal. The use of seaweed for the production of chemicals and biofuels is a climate-friendly alternative to fossil raw materials. This is demonstrated in the report 'A Triple P review of the feasibility of sustainable offshore seaweed production in the North Sea' by Wageningen UR. This report examines the feasibility of seaweed production in the North Sea within the framework of people, planet and profit.

Seventy per cent of our planet's surface is made up of oceans and seas. Moving production offshore will eliminate competition for land use, the exhaustion of soil nutrients and the loss of natural forest. However, a disadvantage to [seaweed](#) is that it will not be possible to achieve production and use in the short term. One reason for this is current legislation.

From the standpoint of profits, seaweed is primarily attractive as a source of high-quality substances such as Omega 3 fatty acids, as a component in animal feed and as a raw material for chemical substances. The value of seaweed can be increased if various applications are intelligently combined and if biorefining is used. Currently, seaweed is mostly produced in China. The research team recommends the sustainable offshore production of seaweed in the North Sea in order to contribute added value and to offer a competitive product.

Organisation essential

In addition to adapting legislation in order to permit the establishment of offshore seaweed production, it is necessary that the various offshore disciplines communicate with one another. In order to successfully produce seaweed, the various knowledge areas, from plant knowledge and biorefinery knowledge to social science, must all be brought together. The development of large-scale, sustainable, seaworthy installations can be worked on in collaboration with various economic sectors, from marine technology to livestock feed production.

More information: [www.wageningenur.nl/upload_mm/ ...
f505d12e8aca_Rapport%2013-077%20vdBurg_DEF_WEB.pdf](http://www.wageningenur.nl/upload_mm/.../f505d12e8aca_Rapport%2013-077%20vdBurg_DEF_WEB.pdf)

Provided by Wageningen University

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