WIER & WIND

PRESS RELEASE

WORLD FIRST: THE FIRST SEAWEED CULTIVATION WITHIN A WIND PARK AT SEA IN THE BELGIAN WIND PARK NORTHER

An INTERREG Flanders-The Netherlands project

Interreg
EUROPESE UNIE
Vlaanderen-Nederland
Europees Fonds voor Regionale Ontwikkeling

AtSeaNova
GEOXYZ
GEOMATICS ENGINEERING SOLUTIONS
SEAWEED HARVEST HOLLAND
UNIVERSITEIT GENT
Murre Technologies
Total solutions for food processing
NOORDZEE BOERDERIJ
UNIVERSITY OF APPLIED SCIENCES

World first: seaweed cultivation within a wind park at sea in the Belgian wind park Norther

By Interreg Flanders-The Netherlands project consortium 'Wier & Wind', 15 July 2020

The project consortium 'Wier & Wind' will test scalable seaweed cultivation within the offshore wind park Norther in the next 2 years as part of a unique collaboration. This is an absolute world first. In view of the intended roll-out of wind energy generation in the North Sea, this test will enable us to combine sustainable energy and food production: the so-called multi-use of space at sea. This test is therefore an important step towards sustainable food production in the North Sea.
With this test, the Flemish-Dutch project consortium demonstrates that we can bring about great innovations in the North Sea across national borders; a collaboration that can be extended to the other North Sea countries in the future.

Increasing demand for high quality seaweed

The current challenges of sustainable food production and climate change call for an innovative aquaculture sector in Europe. Seaweed is an indispensable part of this: it is full of proteins, minerals and vitamins, and growing this nutritious, sustainable food source does not require soil, fresh water or fertilizers. In addition, the global demand for seaweed is already high and will only increase by about 9% per year in the coming years. It is therefore imperative that the European seaweed sector becomes a sustainable and high-quality alternative to imported Asian seaweed and that smart solutions are developed to make the production process more efficient.

Scaling up seaweed cultivation to offshore

Close to home, in the border region Flanders/Netherlands, a lot of small seaweed growers have started in recent years, especially in sheltered areas or sometimes close to the coast. However, the availability of these 'nearshore' production sites is limited in the long term and there is already a challenge to meet the growing demand for seaweed.
To make more impact with seaweed it is therefore necessary to scale up and the best place to do this is at sea. But given the current state of production systems, scaling up at sea is not yet possible. The 'Wier & Wind' project responds to this challenge.
Project coördinator Bert Groenendaal of AtSeaNova, a Flemish company specialising in the design and installation of seaweed farms, is particularly pleased with the financial support from Interreg Vlaanderen-Nederland: *"Seaweed is the biomass of the future. It can be used for many large-scale applications, such as food, animal feed and biomaterials (e.g. bioplastics or biotextiles). With 'Wier&Wind' we can take the next step to achieve large-scale seaweed cultivation."*
Eef Brouwers of Stichting Noordzeeboerderij also underlines this: *"The joint effort in this project of different parties within the seaweed value chain is important. Lessons learned will be shared within the sector, which is crucial for it to be able to scale up towards operating on a European level."*

Multiple use of space at sea: a prerequisite

The project partners want to develop a large-scale and automated seaweed production system that is safe, sustainable, ecologically and offshore proof. In addition, it must be suitable for operation at sea within wind parks. In this way, the project will contribute to multiple use of space at sea, an idea that governments have been encouraging for several years and that has been included in various policy plans. These include the Belgian government's Marine Spatial Plan and the Dutch government's Knowledge and Innovation Agenda for Agriculture, Water and Food.

Between the turbines in wind parks there are large empty areas available that can be used for sustainable food production, solar energy production and nature development. But the offshore wind

parks are complex industrial areas with many regulations. In order to get multiple use of space off the ground here, close coordination with the wind park owners is therefore necessary. The unique cooperation with wind park Norther helps to work safely, to guarantee a viable commercial enterprise and to produce in a nature friendly way in balance with the North Sea. Thierry Aelens, executive director of Norther NV underlines these goals: *"Seaweed farms can contribute to a carbon neutral future for our planet. From Norther we therefore find it important to support this initiative and are also very curious about the commercial success of offshore seaweed farms because they are complementary to our activities at sea".*

'Wier & Wind' accelerates the energy transition

Eneco, one of Norther's shareholders, quickly recognised the complementarity and added value of a partnership. *"Multifunctional use of space is a prerequisite for the large-scale roll-out of offshore wind energy and the acceleration of the energy transition. A project like this contributes to this. We're proud to be a forerunner in this,"* says Ruben Dijkstra, Director of Offshore Wind at Eneco.

The project consortium is currently working on the development of a seaweed production and harvesting system. Automation can make the system economically viable: seaweed production per hectare can be scaled up, as can quality. At the end of 2020, the new production system will be installed in the Norther wind park.

'Wier & Wind' is a research project co-funded by Interreg Flanders- The Netherlands, which runs from July 2019 to June 2022. In this project companies AtSeaNova, Seaweed Harvest Nordsea, Murre Technologies and GEOxyz want to increase the production of
seaweed significantly. The sector organisation Stichting Noordzeeboerderij and knowledge institutions Ugent and HZ University of Applied Science will support them in this mission.

For more information about the 'Wier & Wind' project, go to www.WierenWind.eu or contact Bert Groenendaal, project coordinator:
Tel: +32 495 50 48 19
Email: bert.groenendaal@atseanova.com

For more information about Norther, visit www.norther.be or contact Mark Van Hamme, Communication Manager Norther:
Tel: +32 473 468 499
Email: mark.vanhamme@norther.be