

Energy Islands in focus



A broad majority of the Danish Parliament has agreed to initiate the realization of two energy islands. Recently, the parties behind the climate agreement decided on the ownership and construction type of the energy island in the North Sea, which will be built as an artificial or caisson island where the state will have the majority of the ownership.

The energy island will connect and distribute power from surrounding offshore wind farms. The island will have a minimum capacity of 3 GW, with potential for expansion to 10 GW offshore wind. The offshore wind farms in connection to the energy island in the North Sea will be tendered out at a later time.

"It is a bold and very exciting move from the Danish politicians", says Michael Henriksen, CEO of Wavepiston. "There is just the problem that wave energy is not mentioned anywhere in the agreement. The industry is simply not front of mind with the politicians, and we need to change this quickly", he points out.

Photo: Our CEO Michael Henriksen in front of the Danish parliament.

Wavepiston has taken a number of actions to change the situation and create more awareness of the potential of wave energy. We participated in the recent orientation meeting set to launch the second market dialogue on the procurement framework for the construction and co-ownership of the Energy Island in the North Sea. At the meeting we pointed out the need to include wave energy in the plans, and in this newsletter you can also read an interview with our new chairman, Jesper Højer, where he outlines the benefits of combining offshore wind with wave energy.

Before the information meeting at the Energy Agency, we decided on a new slogan: "No Energy Island Without Wave Energy". Photos showing the slogan printed as a poster mounted on a cargo bike, which we borrowed from the bike manufacturer Coh&Co, and which Michael Henriksen rode to the meeting at the Energy Agency.

We have also created the hashtag #bølgeenergiø. Do help us by using it in relevant posts.



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Power generation and desalination units arrives at Gran Canaria

The global supply chain is still suffering from the effects of the Covid-19 pandemic, so it has taken a while for our power generation and desalination units to arrive at Gran Canaria, where our test site is located. But they are here! Work can now commence in order to get the infrastructure installed and a system in the water in 2022.

Photo: Shipping of our power generation and desalination unit



Preparing for offshore installations

All parts for the offshore installations have arrived at Gran Canaria, so we can begin the assembly of the system. The parts include the pressure pipe, the riser hose, a riser base, cast iron shells and much more. In parallel with this work, we are progressing with the updated design for our energy collectors based on valuable information from the initial pre-installation at the beginning of this year.

Photo bottom left: Pressure pipe from SoluForce.

Photo bottom right: The new Vryhof anchors and StevAdjuster tested and ready for paint.

A winning concept with a bright future

In May 2021, Jesper Højer was appointed chairman of the Wavepiston board of directors and we introduced him briefly in the most recent newsletter. For this edition we sat down with him to learn more about his vision for Wavepiston, and how he intends to positively influence the future direction of the company.

He talks about **positioning Wavepiston in the marketplace, speeding up development, finding new investors and strategic partners** and continuing to be a **great place to work**:

- First of all, let me stress that I am convinced we have a winning concept on our hands with our decentralized and flexible solution producing both electricity and desalinated water. That's why I've accepted to become chairman.

- It is an exciting time! There is an overall focus on the environment today which

plays to our strengths. And alongside that focus there is funding available and a will to invest in green technologies. Denmark has built a leadership position in offshore based wind turbines, and with wave energy, we have a chance to repeat that success in a new field.

Image problems

- I am fully aware that the wave energy industry has some image problems to battle - and misconceptions to be corrected: Some people still believe that our industry is full of good ideas that will be washed ashore with the next storm. I admit there have been examples of that, but we and many in the industry have moved along. We have proved that our system is working in very harsh conditions through tests in the North Sea. So, our concept works. And that's why I have a firm belief that Wavepiston will be successful.

Photo: Jesper Højer



- Remember it took quite some time before wind turbines became a viable solution without the need for subsidies. We have learned from that experience and are convinced that we - and the wave energy industry in general - can speed up that process and reach a mature state faster than it happened with wind turbines. Note that the first offshore wind turbine was established in 1995 and yet - nearly 20 years down the road, we are still building test centers for the wind turbines to increase their efficiency.

Key to success

- So how do we become successful? It is my personal conviction that there are four key elements to Wavepiston's future success. I have shared my views with the rest of the board, and it has been very well received. The four key elements are about **positioning ourselves in the marketplace, speeding up development, finding new investors and strategic partners** and finally continuing to be a **great place to work**.

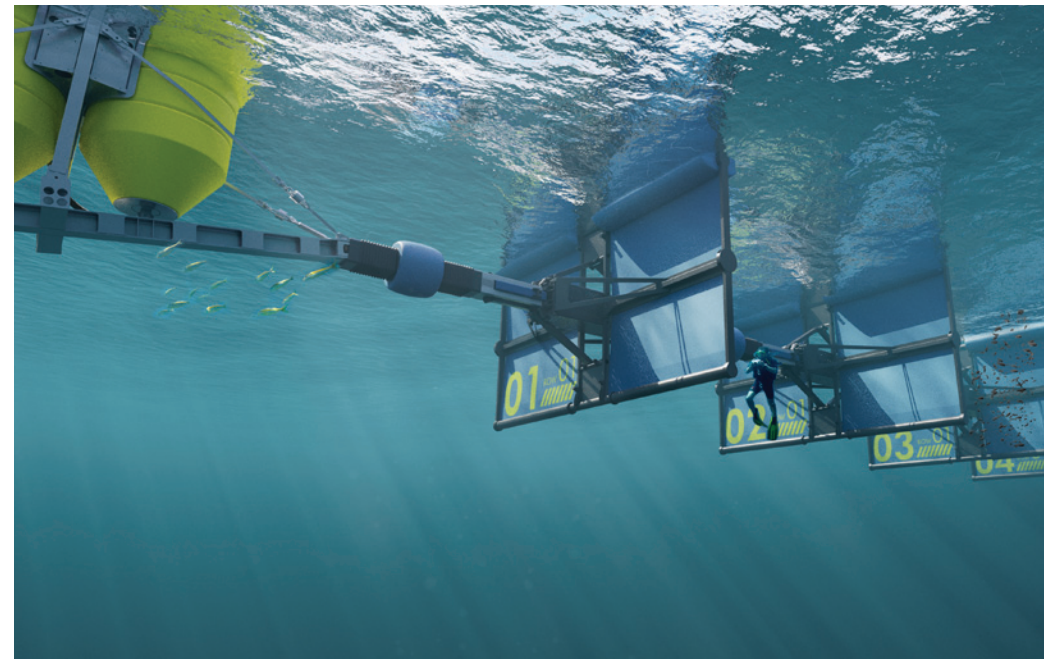
- **Market position.** In order for us to succeed we need to position ourselves stronger in the marketplace. This with potential customers in mind, but particularly with potential strategic partners in mind. Denmark has become a world leader in offshore wind turbines,

and we have an important role to play in that success, given that we can help make a wind turbine farm more efficient. The Wavepiston technology offers a unique flexibility because we can deliver both electricity and desalinated water - simultaneously or at different times. In that way, we can help to balance the load on the electricity grid. But more importantly, we can deliver desalinated water cheaply and efficiently for the Power to X installations that will become an integral part of offshore wind farms in the future.

- Further to that our grid connection costs will decrease dramatically if we are setting up operations alongside the construction of an offshore wind turbine field. That again means a dramatically improved business case: We project that we can increase the efficiency with double digit percentages, where the industry today is chasing improvements in the single digit percent range! This for a marginally higher investment.

Innovation and new investors

- **Speed of innovation.** We need to become more efficient at developing our technology - and at a lower cost. This means clearer choices between developing things ourselves and buying technology



elements that are available in the marketplace. And also a consideration if we should bring in development partners. There is a sharp deadline for us around 2030, where the Danish government plans to make significant technology choices. If our technology is not mature then, we will miss a huge opportunity.

- **Finding new investors.** This far Wavepiston has succeeded in getting the necessary funding - including "soft money" in the form of government grants. But we need to look to strategic investors who - over time will be willing to invest in taking the technology to maturity and into the marketplace. These strategic investors need to understand the technology and the risks

associated with developing it, to ensure that our mutual expectations are aligned.

- If we succeed with the above three points, we will have a solid platform to make Wavepiston **an attractive place to work**. We can offer a workplace with a strong element of purpose, and a place that is also fun and rewarding to work. It is crucial for us to be able to retain the talent we have and to be able to attract new people with the right skills and mindset.



SDG Awards

The 3rd edition of the SDG Tech Awards is back on November 12, the largest sustainability award in the Nordics and a tandem event to COP26. We are delighted to announce that Wavepiston has been nominated for our impressive innovation of green technologies!

PLEASE ALL GO IN AND VOTE FOR WAVEPISTON VIA THIS LINK:
<https://bit.ly/SDGPeoplesChoiceAward>



Photo: From left to right: Helene Liliendahl Brydensholt, Torsten Gejl, Michael Henriksen and Morten Hvidberg Greve.

Political action

We got political attention in September, when the party Alternativet (The Alternative) visited Wavepiston. Member of the Danish parliament, Torsten Gejl, listened with interest to Wavepiston's story and strategy, and he shared valuable insights from his work on climate and energy policies. Together with him were local candidates for the upcoming municipal elections in Denmark, Helene Liliendahl Brydensholt, and Morten Hvidberg Greve. As a follow-up, we are working on establishing a

meeting with The Climate, Energy and Utilities Committee in the Danish Parliament, as well as stepping up the dialogue with Danish members of the European Parliament.

