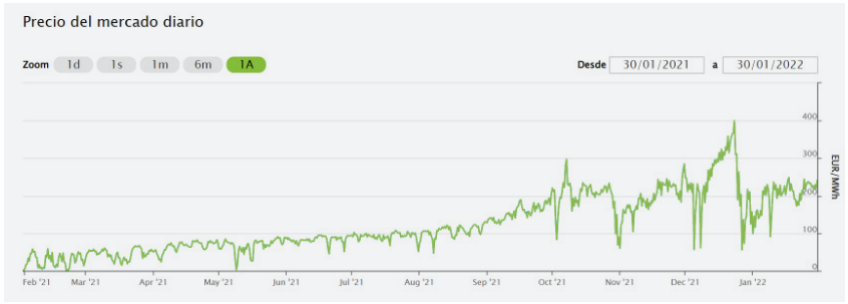
Photo: Pixabay



The Spanish market price for electricity the last year,

Investing in Renewable Energy Sources Has Never Been More Critical

IEA – The International Energy Agency – has stated that Europe finds itself at the heart of an international energy storm driven by turmoil in natural gas markets. Understanding the causes of this crisis – which is having serious repercussions for governments, businesses and households – and drawing the right lessons from it is essential for the transition to more sustainable, secure and affordable energy supplies in the future.

In recent weeks and months, natural gas and electricity prices have spiked to record highs – most notably in Europe and some major Asian markets – causing potentially significant economic impacts. These include multiple negative effects on power companies, other businesses and industrial sectors, and consumers – in some cases, resulting in government interventions to limit the damage.

Unfortunately, IEA notes, we are once again seeing claims that volatility in gas and electricity markets is the result of the clean energy transition. These assertions are misleading to say the least. This is not a renewables or a clean energy crisis; this is a natural gas market crisis. It is important to work from a sound evidence base on the causes of the current market turbulence. As IEA showed in their recent ***World Energy Outlook 2021,*** well managed clean energy transitions can help reduce energy market volatility and its impacts on businesses and consumers.

As you can read in this newsletter, we at Wavepiston are working hard to make wave energy a viable part of the mix of renewable energy sources and help the transition away from fossil fuels, whether in the form of natural gas, fuel oil or coal.

You can read about progress at our demonstration installation at PLOCAN off the coast of Gran Canaria in Spain on track to commission electricity and desalinated water in 2022. You can also read about our efforts to raise working capital for the next phases of maturing our technology. You can read about a significant award, and a number of initiatives to highlight Ocean Energy at the political level. You will also find a new report from USA which confirms the potential of Ocean Energy.

Enjoy your read.

WAVEPISTON

Power generation unit and desalination unit transported to the PLOCAN platform

Power generation unit and desalination unit on the PLOCAN platform


Construction work on the PLOCAN platform


Construction work on the PLOCAN platform

Installation started of power generation and desalination units, construction work on platform and pipe from system to platform

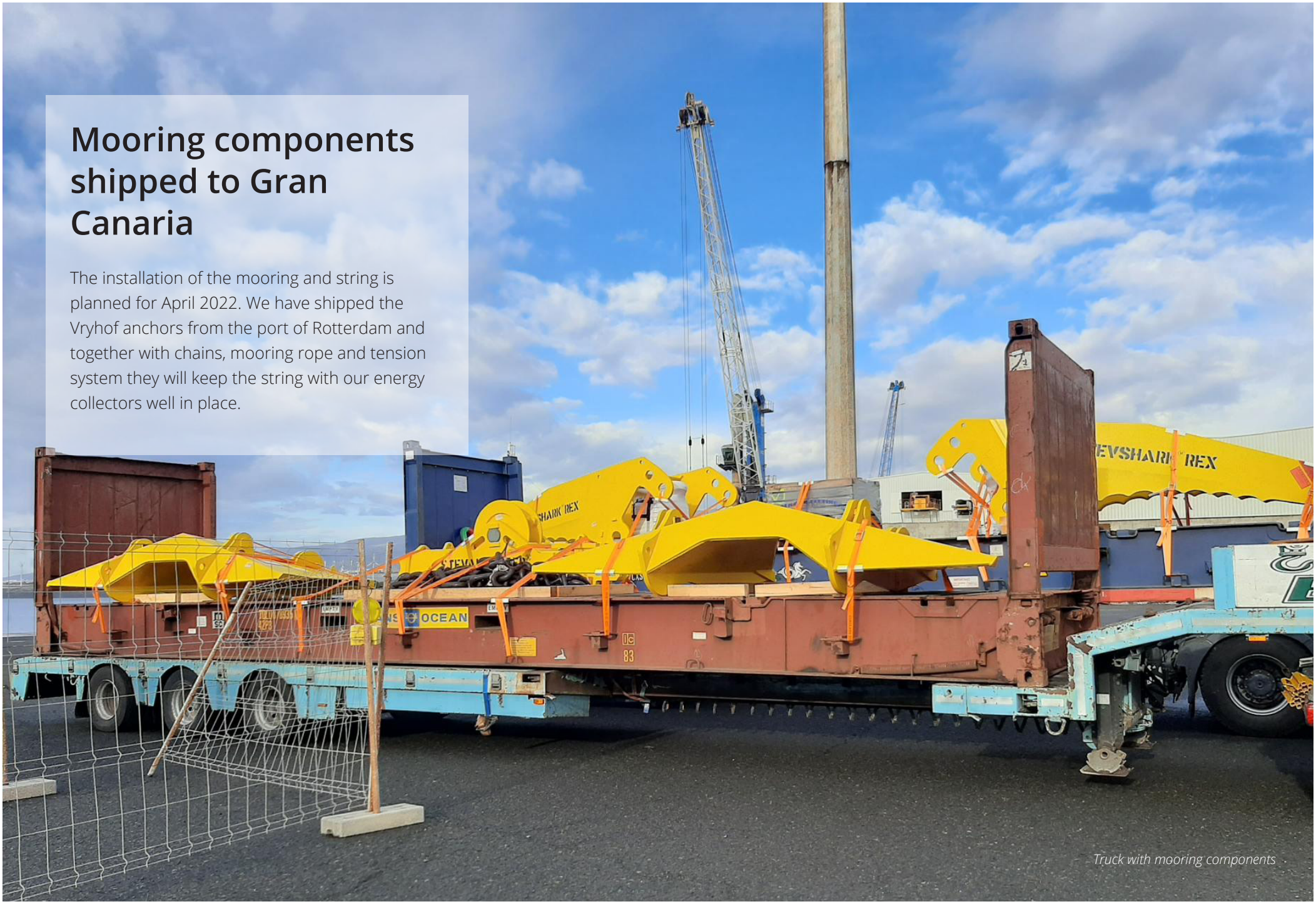
In mid-December 2021 the power generation and desalination units were transported and placed on the PLOCAN platform. Following that we are working with dedication to connect all relevant piping, so that the units in 2022 can receive pressurized water from the Wavepiston wave energy system.

The string parts of the system are currently being produced and we are in parallel requesting quotes for the production of the energy collectors.

The timeline is to be able to commission electricity and desalinated water by September 2022.

Mooring components shipped to Gran Canaria

The installation of the mooring and string is planned for April 2022. We have shipped the Vryhof anchors from the port of Rotterdam and together with chains, mooring rope and tension system they will keep the string with our energy collectors well in place.



Truck with mooring components

SDG Tech Awards Winner

Winner of the 3rd edition of the SDG Tech Awards November 12, the largest sustainability award in the Nordics and a tandem event to COP26. On the outset we were nominated to the award because of our impressive innovation of green technologies. Wavepiston was one of 5 finalists in the Energy Innovation award category of the SDG Tech Awards 2021. There were over 600 nominees with inspiring solutions!

New opportunity to invest in Wavepiston

New investors have a chance to become part of the Wavepiston journey - and existing investors can increase their stake - in a new equity issue where we are seeking €2m of working capital at a pre-money valuation of €15m.

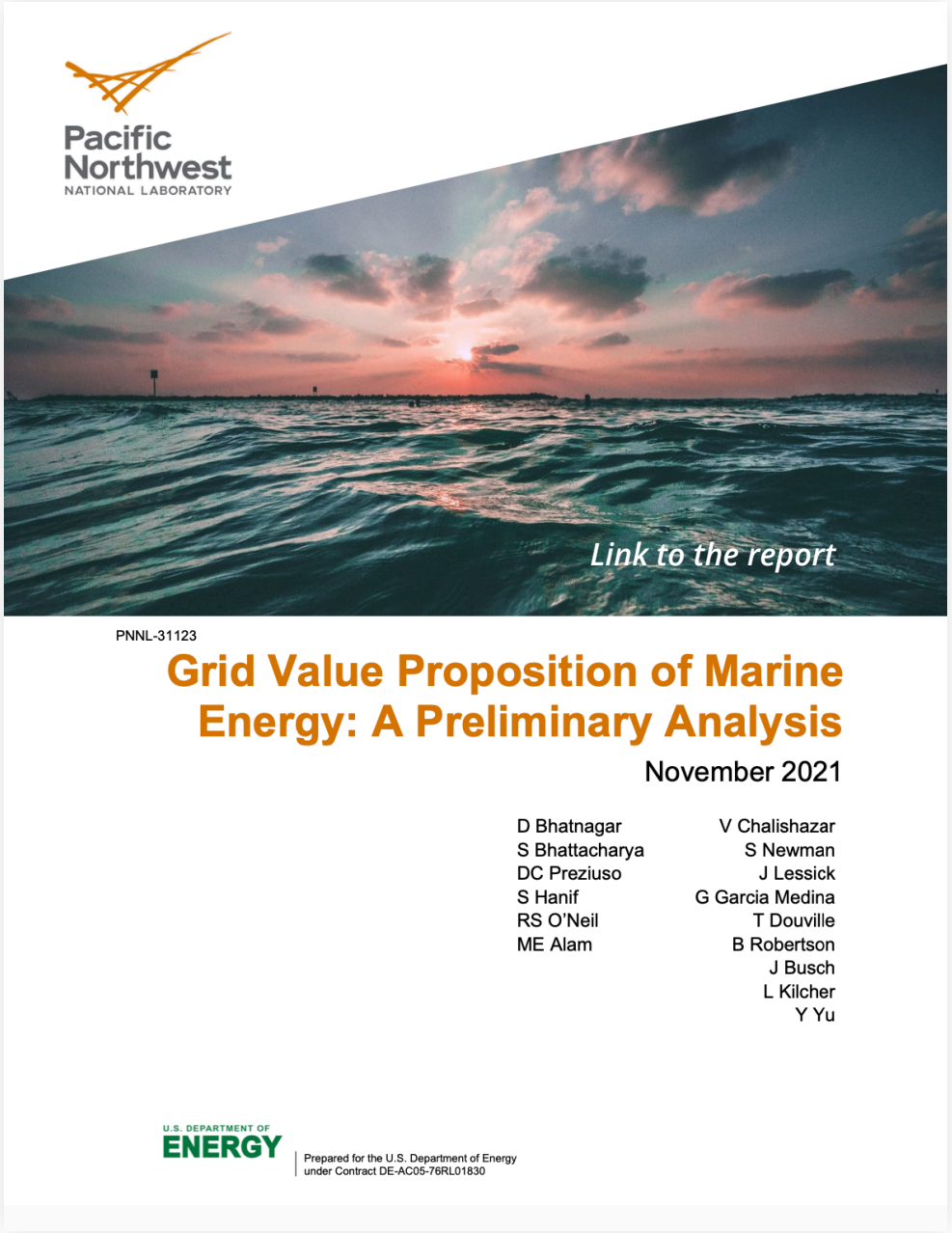
This raise follows +€9m of non-dilutive funding and founder and early-stage equity invested to date, which have been deployed in R&D and patent protection. This raise enables completion of the financial package enabling a transition from TRL 6 to TRL 7 and preparations for the TRL 8 step.

Our ocean-based technology is harvesting the energy in the waves, and we will deliver solutions for the critical energy and water challenges representing a +€300 billion marketplace.

To learn more click on below material:

- 2-page teaser document
- Pitch deck
- Video presentation

Pitch Deck



A new report from Pacific Northwest National Laboratory

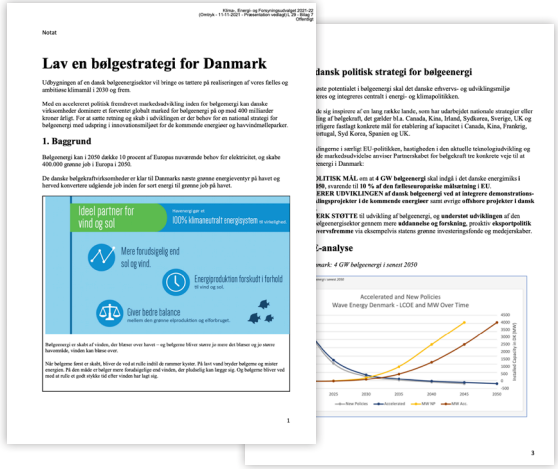
Report stresses the potential of Marine Energy

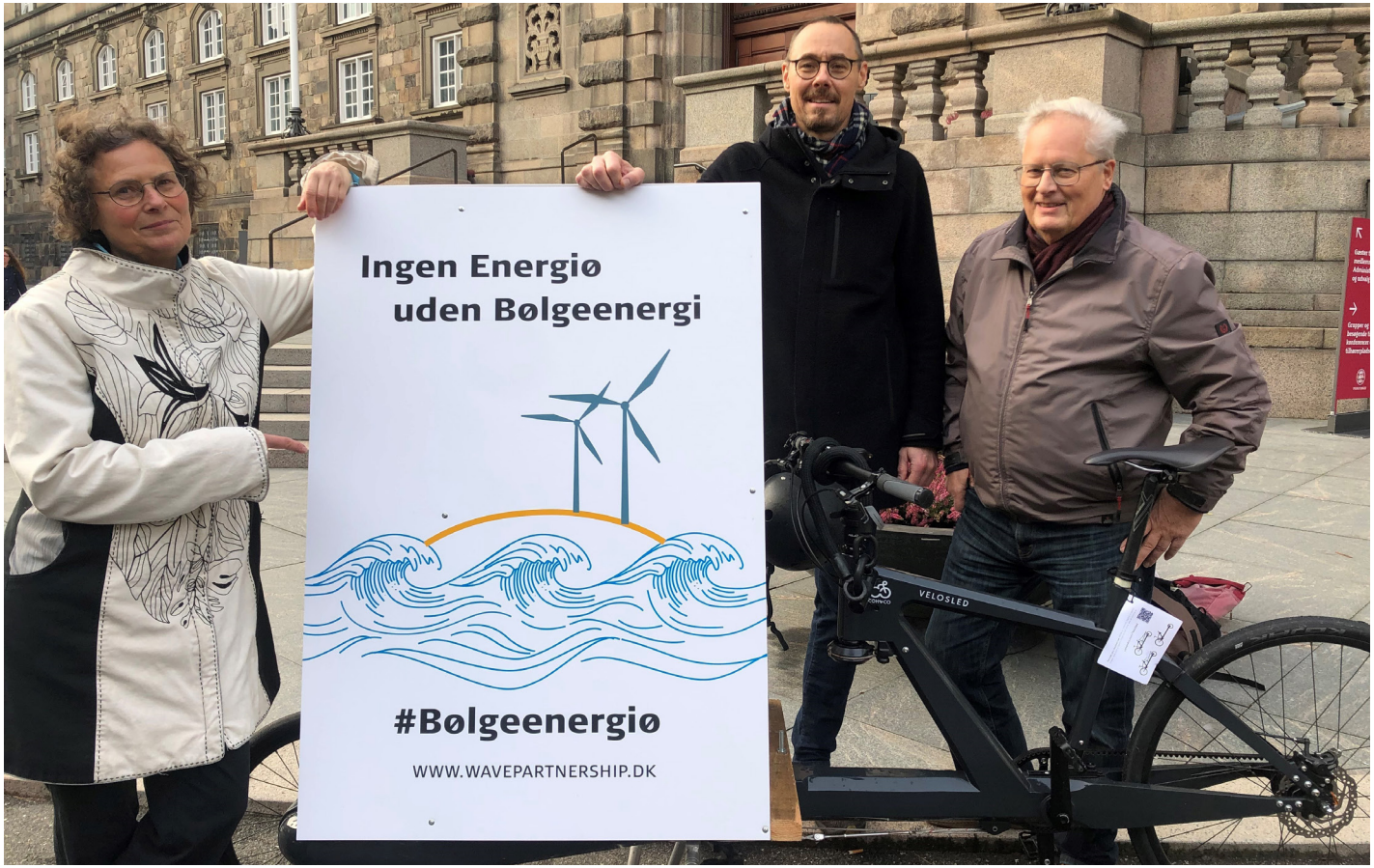
A new report from Pacific Northwest National Laboratory shows the importance and potential of marine energy. U.S. Department of Energy estimate that the nation's annual marine energy potential is approximately 2,300 TWh/year across the 50 states, or greater than 57 percent of U.S. electricity generation in 2019.

However, the marine energy industry still faces hurdles to commercialization. While high costs relative to wind and solar remain a key challenge, other hurdles relate to marine energy's value streams not being well characterized and not captured by traditional energy comparison metrics like the levelized cost of energy.

Although the technology remains in a development stage, the authors find many potential opportunities for the deployment of marine energy technologies both in the near term and within typical utility planning timeframes (i.e. up to 20 years).

From a resource and technology perspective, marine energy resources can deliver distinct and valuable benefits to different configurations of the grid, whether the bulk system, isolated distribution systems, or remote communities, islands, and microgrids. Marine energy resources can be valuable in increasing technology diversity in a generation portfolio, providing energy where it is otherwise difficult to come by, supporting local resiliency, complementing and being complemented by other resources including solar, wind, and energy storage, and avoiding land constraints.





Ruth Bloom, Erik Friis Madsen and Michael Henriksen at the Danish Parliament

The Danish Parliament's Committee for Climate, Energy and Utilities

On behalf of Danish Partnership for Wave Power we presented wave energy, the status and potential including the large opportunity in relation to the Energy Island in the North Sea. There is a lot of wind and there are a lot of waves in the North Sea – we need both renewable energy sources since energy from the waves will ensure a larger power production window and help balance the grid. Wave energy can also deliver desalinated water, which will be crucial at the Energy Island for production of power-to-x fuels through electrolysis.

Together with the partners in the sector we will continue to lobby for also having wave energy in relation to the Energy Island. This is a unique opportunity for Denmark and for the sector.

Click on the presentation and document above left to read more (in Danish).

Ocean Energy Europe Conference 2021

In December 2021 Wavepiston was speaking at the Ocean Energy Europe conference 2021 – on the theme of "Net-zero powered by the ocean". This was in support of EU and national efforts to highlight wave energy on the political agenda. The conference featured attendance from ministers from Wales and Portugal as well as Two EU Commissioners.

Kadri Simson, EU Commissioner for Energy and Former Estonian Minister of Economic Affairs and Infrastructure spoke of significantly ramping up renewable power generation, estimating that 40 GW of ocean energy capacity should be installed in Europe by 2050.

The conference also featured a keynote from Virginijus Sinkevičius, who has held the position of the European Commissioner for Environment, Oceans and Fisheries, since December 2019. Before taking up this post, he was Minister of the Economy and Innovation of the Republic of Lithuania and a Member of the Lithuanian Seimas (Parliament).

Presentation on OEE 2021 - Technology Showcase: Wave energy


Kadri Simson, European Commissioner for Energy


Virginijus Sinkevičius, European Commissioner for Environment, Oceans and Fisheries

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