

Producing hydrogen in “island mode”

Siemens Gamesa plans to have a “world first” system producing hydrogen directly from a wind turbine operating by next month, with the green H₂ used to fuel Denmark’s taxi fleet. It has signed a deal with local group Everfuel, which will distribute the hydrogen to refuelling stations where it will supply taxis in Copenhagen and elsewhere.

The wind OEM is linking a 3MW turbine directly to a 400kW electrolyser near its Danish headquarters in Brande, producing hydrogen in “island mode” with no connection to the grid, and according to Siemens Gamesa the first pilot of its kind globally.

Electrolyser provider GHS said earlier this year that the system would produce green H₂ at the “lowest levelised cost available, and on the way to cost parity with fossil-based hydrogen”.e Airbus Chief Executive said:

CEO Andreas Nauen said: “Green hydrogen has the potential to be a game changer in the quest to decarbonise the power supply and solve the climate crisis.

More info:

<https://www.rechargenews.com/wind/this-is-the-future-wind-turbine-to-fuel-taxis-with-green-hydrogen-in-world-first-siemens-gamesa-trial/2-1-923755>

The HyShip project

HyShip project has been granted EUR8m (\$9.44m) in funding from the EU’s Research and Innovation programme Horizon 2020.

The HyShip project involves 14 European partners collaborating on the design and construction of a new ro-ro demonstration vessel running on liquid green hydrogen (LH₂), as well as the establishment of a viable LH₂ supply chain and bunkering platform..

The ship, to be named Topeka, will be built for zero emissions through a combination of 1,000 kWh battery capacity and a three-megawatt proton exchange membrane hydrogen fuel cell..It will also distribute LH₂ to hydrogen hubs along the Norwegian coast.

“Hydrogen as a fuel enables opportunities for low, or zero-emission shipping. Topeka will be our first step towards scalable LH₂ fuelled maritime operations. We shall create a full LH₂ infrastructure and commercial ecosystem, while at the same time removing yearly some 25,000 trucks from the roads,” said Per Brinchmann, vice president of special projects at Wilhelmsen.

More info:

<https://splash247.com/hydrogen-fuelled-ship-project-secures-eu-funding/>

Finland has launched National Hydrogen Roadmap

Finland has set an ambitious goal to become carbon-neutral by 2035.

The important role in the achievement of this objective is set to increased use of hydrogen, which is reflected in the recently revealed National Hydrogen Roadmap. The roadmap has been developed by the VTT Technical Research Centre of Finland by order of Business Finland-Finnish government organization for innovation funding and trade, travel, and investment promotion..

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Overall, the report while accounting for the number of treats identifies the great potential of Finland in moving towards a hydrogen economy highlighting that it will not only support the achievement of environmental objectives but also facilitate economic and industrial development by creating numerous new business opportunities.

More info:

<https://huge-project.eu/finland/>