

## DAPHNE TECHNOLOGY ACHIEVES SIGNIFICANT MILESTONES IN EXHAUST GAS PURIFICATION EFFORTS WITH EU HORIZON 2020-FUNDED PROJECT

Lausanne, Switzerland 6<sup>th</sup> of July 2023 - Daphne Technology, a leading climate deep-tech company, announces significant achievements in its technology development. Through a successful EU Horizon 2020 - funded project<sup>1</sup>, the company has achieved important milestones in reducing toxic emissions and promoting a circular economy.

As part of the project, Daphne Technology has successfully scaled up to a commercial-size unit and tested its Containerised SulPure® Prototype, a post-combustion solution designed to reduce toxic emissions while generating valuable by-products effectively. This ambitious endeavour, now completed, has been made possible through the support of the EU Horizon 2020 program<sup>2</sup>.

Installed this autumn, 2022, at the Maritime Center of the University of Applied Science in Flensburg, Germany, the Containerised SulPure® Prototype has undergone rigorous testing and has been witnessed and confirmed by Bureau Veritas, a leading maritime classification society. It has demonstrated remarkable efficacy in removing sulphur oxide (SO<sub>x</sub>) pollutants from exhaust gas. This prototype represents a significant milestone as Daphne Technology's first real-scale SulPure® prototype, designed to purify exhaust gas produced from a 1.5 MW engine combusting Heavy Fuel Oil.



*"We are pleased to announce that our prototype has successfully achieved the targeted 99% reduction in SO<sub>x</sub> emissions,"* stated Dr William Ramsay, Chief Technology Officer at Daphne Technology. *"The support we received from the EU Horizon 2020 program has played an important role in our journey towards reaching these significant milestones. With the successful completion of the project, we are now well-positioned to advance our technology and contribute to meaningful reductions in global emissions."*

Daphne's SulPure® technology can efficiently remove sulphur oxide (SO<sub>x</sub>) pollutants from exhaust or flue gases and convert them into ammonium sulphate, a valuable by-product for applications in agriculture. By effectively curbing sulphur dioxide emissions, which pose risks to human health and contribute to acid rain formation and

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<sup>1</sup> This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 946288.

<sup>2</sup> Horizon 2020 was the EU's research and innovation funding programme from 2014-2020 with a budget of nearly €80 billion. The programme has been succeeded by [Horizon Europe](#).



ecosystem damage, Daphne Technology addresses the urgent need for emission reduction across various industries.

In an exciting development, the Containerised SulPure® Prototype is now on its way to the United States for the first industrial deployment.

As Daphne Technology progresses towards a circular economy and renewable energy systems, it plays a pivotal role in combatting the escalating threat of greenhouse gas (GHG) emissions and toxic pollutants. The company's innovative solutions pave the way for substantial GHG emissions reductions while generating valuable fertilisers.

Global fertiliser prices increased by 80% due to a worldwide fertiliser shortage in 2022, threatening global food supply security and are forecasted to be higher by the end of 2023.

### **About Daphne Technology**

Daphne Technology is a Swiss climate deep-tech company, focused on solving the greenhouse gas challenge in tough-to-decarbonise industries. The company develops technologies and scales innovative products to measure and reduce GHG emissions from industrial sources, with a portfolio approach to decarbonisation targeting GHG emission inefficiencies in power generation and energy conversion across the globe.

Daphne's high-tech, innovative approach has attracted global industrial leaders, including Shell Ventures, Saudi Aramco Energy Ventures, Trafigura, AET, Swisscom and JP Morgan, who are committed to enabling an economically sustainable energy transition.

The company has received multiple awards and recognitions, including the Horizon 2020 EU grant, Vaud Innovation Fund SPEI, Swiss Ministry of Environment Award, VentureKick 2020, Climate-KIC 2020, and Venture Business Idea. Daphne has also been featured as a top Swiss Clean Tech and Top 100 Swiss Start-up by VentureLab five times. The company has won several awards, including the Envirotech Maritime Innovation Award in 2021, the inaugural Nor-Shipping Ocean Solutions Award in 2022, and voted the top deep-tech company in Switzerland honoured with the prestigious Deep-Tech/Life Science Award at the 25th edition of the Swiss Economic Forum 2023.

*For more information:*

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