UK maritime technology firm paves the way for greener oceans with 'microbubble carpet'

A "carpet of micro-bubbles", developed by UK firm Silverstream Technologies, improves fuel efficiency in the shipping industry and has landed the business a £1 million deal with US shipping giant, Carnival Cruises.

The Silverstream® System, a type of Air Lubrication System (ALS), pumps tiny bubbles through vents on the hull to reduce friction between the vessel and the water, helping it glide through the ocean. The technology has been independently proven to reduce fuel consumption by 5-12%, which in turn cuts running costs.

The Department for International Trade (DIT) has been providing support and opening networks, enabling the company to experience significant international growth. This has led to deals being made with leading names in the maritime industry, including Carnival Cruises, Grimaldi Group and Lloyd's Register.

Silverstream Technologies Founder & CEO, Noah Silberschmidt, said:

Shipping is one of the 'hard to decarbonise' global industries so we have spent the last few years independently testing our system to support our claims. We want to become a standard on newbuild vessels in the industry and to be the 'new normal' for sustainable shipping.

By working with the best partners to help shipping improve its efficiency standards, Silverstream wants to have a positive and progressive impact on the industry and in doing so, the wider world.

Our trade advisor from the Department for International Trade has been instrumental in our recent success with this deal, as they know precisely the type of information that a business needs to tap into these key markets and reach these big companies.

The business has been operating at full capacity in line with Government guidelines throughout the Coronavirus pandemic and is finalising deals to supply an additional 15 ships in Europe and Asia by the end of the year. Supported throughout by DIT, this is expected to double Silverstream's overall turnover with the increased number of installations consequently reducing tonnes of fuel burn and carbon emissions every year.

Minister for Exports, Graham Stuart, said:

Silverstream Technologies is a perfect example of how maritime businesses can reduce carbon emissions through technological innovation.

The UK is a global leader in green transport solutions and the perfect place for companies like Silverstream to go global and contribute to our net zero 2050 ambition.

With the shipping industry facing a target to become carbon neutral by 2050, the maritime sector represents one of the UK's most important industries, facilitating 95% of all UK trade and more than one million jobs, according to Maritime UK.

Chair of Maritime UK, Harry Theochari, added:

Silverstream Technologies shows that innovative solutions are being found to help the maritime sector reach its net zero carbon emissions challenge — and then be exported around the world.

With 90% of all global trade moving by ship, the market opportunity is vast. By developing cutting-edge green technologies, our businesses are delivering sustainable solutions and real economic and societal benefits.

The UK maritime sector has committed to Net Zero by 2050 and it is vital that green, balanced growth, is placed at the heart of our recovery from Coronavirus.

In 2019, more than half of UK exports to the US were in services, with the total trade services almost doubling in the last decade to £125.3 billion.

The UK is currently negotiating a Free Trade Agreement with the US, which Government analysis shows could increase transatlantic trade flows by £15.3 billion, with businesses across the entire country set to benefit.