LOMARLABS' PORTFOLIO COMPANY SEABOUND DEMONSTRATES POTENTIAL OF CARBON-CAPTURE DEVICE FOLLOWING SEA TRIALS ON A LOMAR VESSEL

- Pilot results demonstrate potential of system to capture up to 95% of CO_2 emissions from a ship's exhaust.

London, 9th February: lomar**labs** has announced the successful completion of sea trials of a carbon capture system on board a Lomar vessel, with the Seabound technology capturing roughly one tonne of CO_2 per day. The pilot project used a prototype system to demonstrate the feasibility of reducing CO_2 emissions and introducing a new, cost-effective technology to the shipping and wider maritime industry.

lomar**labs** began its collaboration with the climate tech start-up last April and used the Lomar containership SOUNION TRADER as a floating lab to test the technology, which operates on recyclable consumables and doubles up as a Sulphur scrubber. This collaborative pilot proved that Seabound's unique system, which uses a second-generation carbon capture technology called calcium looping, could efficiently transform CO_2 emissions into solid calcium carbonate pebbles. The limestone pebbles are safe, inert and non-toxic, and can be easily stored on board before being offloaded in port for sale in pure form or turned back into quicklime and CO_2, for the quicklime to be reused onboard another vessel and the CO_2 sold for utilization or sequestration. This highlights the innovative and environmentally conscious approach Seabound is bringing to carbon capture in the maritime industry.

Seabound's team installed the device on the Lomar vessel during a scheduled drydocking at the Sefine Shipyard in Altinova / Yalova, Turkey, in June 2023. The prototype system was retrofitted on deck, aft of the ship's engine exhaust funnel. After receiving testing approval from the American Bureau of Shipping (ABS) and an additional risk assessment conducted by Lloyd's Register, Seabound's team then embarked on a two-month voyage to gain their first-ever operating experience of the system. Through a series of tests, Seabound recorded a progressive increase in the carbon capture rate, culminating in a carbon capture efficiency of 78% and Sulphur capture effectiveness exceeding 90%. Unlike scrubbers, which are designed to mainly remove Sulphur pollutants from exhaust gasses, Seabound's technology captures both Sulphur and Carbon Dioxide from the gasses with a single device, which is a noteworthy accomplishment, showcasing the effectiveness and innovation of Seabounds technology in addressing environmental challenges.

Overall, the test successfully captured roughly 1 tonne of CO_2 per day in the prototype system, demonstrating the feasibility of this novel Seabound technology, while also laying the foundation for full-scale installations in the future.

lomar**labs** Managing Director, Stylianos Papageorgiou, said: "Seabound's technology presents an attractive and viable solution for reducing carbon emissions on existing ships as well as new, with a system that is simpler to install, operate and maintain than others we

have seen. We are excited to join Seabound's mission and believe this technology could be instrumental in driving a cleaner future for maritime transport."

Seabound Co-Founder & CEO, Alisha Fredriksson, states: "Our pilot project demonstrates that capturing carbon emissions directly from ships is not only possible but also highly effective. This breakthrough puts us on track to achieve our ambitious goal of capturing carbon onboard 1,000 ships by 2030, making a significant impact on the global effort to curb climate change."

Lomar CEO, Nicholas Georgiou, added: “We are at a crucial turning point for ensuring an environmentally conscious future, mitigating carbon emissions and developing clean fuel solutions for our maritime industry. This successful sea trial represents a pivotal moment for Seabound, Lomar, and lomar**labs**, together with the broader maritime industry. We are proud to have collaborated with Seabound to pioneer this sustainable solution in our efforts to support maritime innovation and cleaner, safer oceans.”

Lomar and Seabound secured £1.2 million in grant funding from the UK Government as a part of the Clean Maritime Demonstration Competition Round 3 (CMDC3) to support the pilot.

Navigating The Future

lomar**labs** is a venture lab launched by Lomar in March 2023, that provides early-stage maritime tech companies with the physical infrastructure, support, industry insight, expertise and funding they need to responsibly test, prove and commercialise their solutions; catalysing their entry into a market that’s rapidly evolving.

It draws on nearly five decades of operational innovation at Lomar Shipping to catalyse the deployment of deep technological solutions, with a view to solving the maritime industry’s biggest challenges. lomar**labs** current catalogue of projects includes sea trials with tech start-up Seabound, to test a carbon capture device aboard one of Lomar’s vessels.

Lomar is a leading ship owner and ship management group with a diversified fleet of around 25 bulk carriers, container vessels, and chemical tankers. Lomar has nearly 50 years of industry expertise as a leading ship owner and operator, its fleets having moved millions of tonnes of cargo annually.

Seabound is a London-based climate tech startup that builds carbon capture equipment for ships. The equipment is installed adjacent to a ship's funnel to trap up to 95% of CO_2 from the exhaust, using patent-pending technology. Founded in late 2021, Seabound has to date built two working land-based prototypes, secured seven letters of intent from leading shipowners, and raised $5.7M in funding from world-class investors including Lowercarbon Capital, Y Combinator, Eastern Pacific Shipping, and the UK Department for Transport.

The American Bureau of Shipping (ABS) is an American maritime classification society established in 1862. Its stated mission is to promote the security of life, property, and the natural environment, primarily through the development and verification of standards for the design, construction and operational maintenance of marine and offshore assets.

Innovate UK is the United Kingdom's innovation agency, which provides money and support to organisations to make new products and services. It is a non-departmental public body operating at arm's length from the Government as part of the United Kingdom Research and Innovation organisation.

Lomar is a maritime subsidiary of Libra Group, a privately-owned global business group that encompasses 30 operating entities – 20 businesses predominantly focused on aviation, renewable energy (including solar, wind and waste-to-energy projects), maritime (including an infrastructure company and shipbuilding to support the offshore wind sector), real estate and hospitality, and diversified industries, together with 10 social initiatives housed under Libra Philanthropies. With assets and operations in nearly 60 countries, Libra Group applies the strength of its global network and capabilities to deliver cross-sector insights and growth at scale, while mitigating risk.

For further information about lomar**labs** visit: www.lomarlabs.com, or e-mail hello@lomarlabs.com. To stay up-to-date, follow lomar**labs** on Instagram and LinkedIn.