



# Novel Automated System for farming of European lobster (EL) – (AUTOMARUS)

Norwegian Lobster Farm is the first and only true lobster farming company in the world. The AUTOMARUS Phase 2 project aims to prototype and pilot a revolutionary process for land-based farming of European lobster (EL, *Homarus gammarus*) based on RAS (Recirculating Aquaculture System) to later commercialize EL. The goal is to deliver the first fully automated RAS enabled large-scale production facility of EL.

European lobster is among the most exclusive shellfish products worldwide, but stocks collapsed in the 1950s and have not recovered in the decades since. The global demand for lobster far exceeds supplies, and neither EL nor capture production of lower-quality American lobster (*Homarus americanus*, AL) can fill the market gap. With the price of EL at €35-50/kg, the European seafood industry is missing out on a clear market opportunity. The project is run by a strong management team with a proven track record in lobster aquaculture, engineering and robotics/automation as well as managing and scaling R&D-intensive companies.

Land-based aquaculture is the remaining alternative, but current aquaculture methods are practically, technologically, and commercially unviable as lobsters are highly cannibalistic and cannot be reared in groups but must be cultured in individual cages necessitating unfeasibly high personnel costs.

The aim of the AUTOMARUS project is to mature, prototype, pilot and implement the first Recirculating Aquaculture System (RAS) based EL farming solution in individual cages using fully automated feeding and real-time monitoring and robotic lobster handling to produce European Lobster. Our innovative solution will thus enable profitable and sustainable large-scale production of high quality EL for the first time to fit the market gap and create a novel value chain for farmed EL. With a production target of 1,000 tonnes by year 5 after project end, NLF will be the sole supplier of farmed EL and expect to take a 16% share of the European lobster production market and 8% the total market for EL and AL across EU and Asia

