Press Release For Immediate Release

Azra Advanced Materials AG gets support from the Technology Fund

A revolutionary technology to reduce CO_2 emissions in the maritime sector officially enters the federal fund's portfolio.

Lugano, 11 December 2025 – Azra Advanced Materials AG, a Lugano-based company specialized in high energy-efficiency marine coatings, has entered the Swiss Technology Fund's portfolio. This recognition highlights the potential of Azra's technologies to substantially reduce CO_2 emissions produced by the global maritime sector, which accounts for roughly 3% of total world emissions.

More than 90% of international trade relies on maritime transport, which in 2022 generated 858 million tons of CO_2. A significant portion of these emissions stems from biofouling - the accumulation of organisms on ship hulls - which can increase fuel consumption by up to 40%, with an economic impact estimated at over $30 billion per year. Furthermore, the continuous degradation of biocidal and silicone-based coatings throughout the vessel's operational cycle leads to an additional increase in toxic chemicals released into the seas.

Azra's durable, ultra-low-friction, biocide-free coating system—based on proprietary patented nanotechnology—reduces hull friction and eliminates the use of silicone oils, with proven zero release of toxic chemicals into the marine environment. It maintains high performance over time, lowering fuel consumption and CO_2 emissions.

Since 2021, the adoption of Azra's coating has already avoided more than 20,000 tons of CO_2 emissions, with results verified on worldwide commercial fleets.

The coating system also supports broader sustainability objectives. Fully aligned with IMO environmental requirements, Azra's biocide-free formulation contributes to several United Nations Sustainable Development Goals (SDGs), including SDG 14 – Life Below Water, as it contains no active substances that could harm marine ecosystems and helps preserve ocean health over the long term.

Backed by support from the Swiss Technology Fund, Azra Advanced Materials AG will be able to expand its presence in the international shipping sector and accelerate the development and deployment of a new generation of superhydrophobic coating systems that further reduce vessel's friction. This will support the global decarbonization efforts and help reduce CO2 emissions.

Azra Advanced Materials AG states: "With the support of the Swiss Technology Fund, we can further expand our presence in the shipping market and contribute to the decarbonization of the industry by reducing CO_2 emissions through sustainable, durable, high-performance coatings that improve vessel efficiency."

About Azra Advanced Materials AG

Azra Advanced Materials AG, based in Lugano, develops high-performance patented nanotechnology-based coatings. Its technologies, completely free of biocides and already adopted by international shipowners and charters~~,~~ help reduce emissions in the maritime sector by lowering fuel consumption, operational impacts, and environmental footprint. The company is part of Azra Tech Inc. group, a U.S.-based Industrial Intellectual Property and Technology Holding Company with a global presence in the United States, Europe, and Switzerland. Azra Tech develops advanced materials and additives based on proprietary patented nanotechnologies that enhance the performance of multifunctional coatings and polymers while reducing their carbon impact. Through its innovations, the group supports global decarbonization efforts and promotes more efficient and sustainable industrial practices.

About the Swiss Technology Fund

The Swiss Technology Fund provides loan guarantees to Swiss companies whose novel products contribute to a sustainable reduction in greenhouse gas emissions.
The Technology Fund is a political instrument of the Swiss government’s climate strategy.
The Climate Division of the Swiss Federal Office for the Environment FOEN is responsible for its strategic governance.

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