

Bio-based and biodegradable nets could be the solution to 'ghost nets' jeopardizing sea life

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"Ghost nets" are nets that have been either accidentally or deliberately lost, abandoned or discarded in the marine environment. While these

nets and other derelict or abandoned fishing gear no longer serve any purpose for the fishing industry, the nets continue to entangle fish and other marine animals. This can have devastating effects on marine ecosystems.

Fishing [nets](#) have been identified as an item of particular concern as part of the European Directive on Single-use Plastics that will come into effect in July 2021. The Directive includes actions to target the collection and recycling of old [fishing nets](#). However, the collection of fishing nets that are lost accidentally at sea remains a challenge.

SEALIVE is working to address these issues by developing bio-based fishing nets made from green alternative materials such as micro-algae. Production of the nets is more sustainable compared to those based on traditional fossil fuel plastics. The nets will also be compostable at an industrial scale. This is particularly important because recycling infrastructure for fishing nets is currently not available in most countries and the recycling of traditional fishing nets can be both labor-intensive and financially non-viable.

SEALIVE's goal is to enable a transition to biodegradable, compostable nets, coupled with supporting infrastructure for the collection of old nets. This will create a market for otherwise useless fishing nets, providing an additional incentive for the [fishing industry](#) to move to sustainable methods of disposal. In addition, if biodegradable nets are lost or discarded in the [marine environment](#), they will degrade much faster than conventional nets, limiting their "ghost net" potential.

ISOTECH will work with Cypriot fishermen to test SEALIVE's biodegradable fishing nets in real-life conditions for 12 months. The results from this pilot test will help to evaluate the effectiveness and operability of the nets and contribute to the advancement of research and the development of more market competitive products.

Commenting on the event, Ms. Anna Tselepou, representing AKTI, said "We are proud to work with our local and international partners to develop better, more sustainable ways of protecting our oceans. Fishing has always been important to Cyprus and we are working to enable and support our fishermen to move to more environmentally friendly practices that will protect our marine heritage for generations to come."

Provided by CORDIS

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