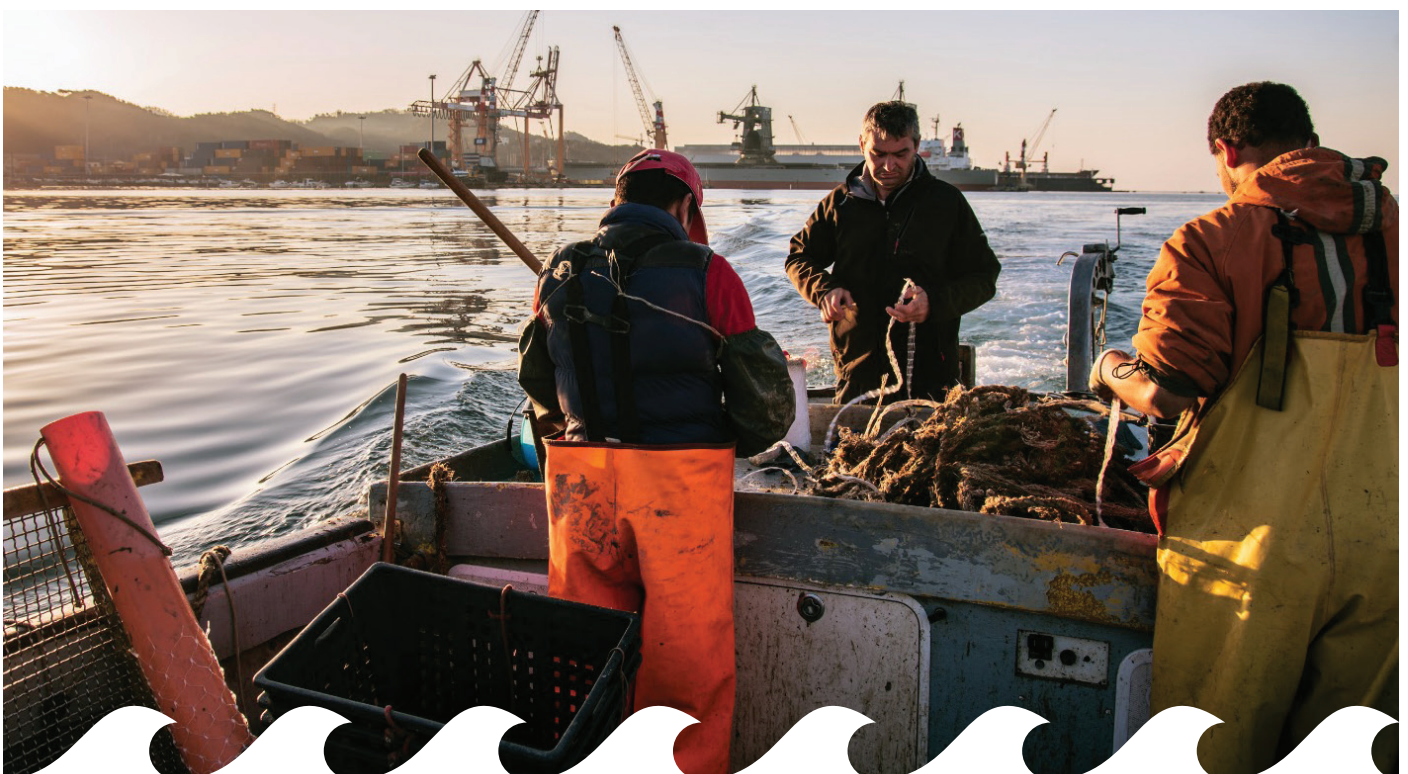


## > The Project

The aim of LIFE MUSCLES is to reduce the environmental impact caused by the dispersion of the polypropylene (PP) socks used in mussel farming at sea.

There are two pilot areas where the LIFE MUSCLES actions are concentrated, in the Italian zones where mussel farming is the most widespread – North Gargano and the La Spezia area. The promotion of good practices to be experimented with in Apulia and Liguria, will then be aimed at mussel farmers in other Italian and European areas.

We wish to change mussel farming into a more sustainable and more virtuous practice, introducing a circular supply chain model among mussel farmers essential for the health of our seas and the sector's economy.





## > Why LIFE Muscles?

According to FAO data, mussel production in Italy is estimated to be at about 80,000 tons per year, corresponding to the use of about 700/1000 tons of polypropylene socks, that are replaced at least once during the mussel life cycle.

Being fundamental to mussel farming, the PP socks, however, are one of the most present marine litter on Italy's seafloor, with an annual dispersion accounting for between 7.88 and 9.45 tons. \*



\* (Data from the international project of transnational cooperation, DeFishGear, concentrated in Italy's Adriatic Sea and Ionian Sea).







## > Specific objectives

- Promote the transition towards a circular economic model for the mussel farming sector through the recovery and recycling of polypropylene socks used in mussel farming.
- Increase the sector's sustainability thanks to the replacement of the PP socks with biodegradable and compostable biopolymer (BP) socks, demonstrating the feasibility of their mechanical and organic recycling.
- Provide mussel farmers with a mobile Recycling Plant able to operate directly at their facilities.
- Classify the recycled materials to ensure their applicability within the mussel farming supply chain and other production chains or sectors.
- Promote the development of new business models amongst the sector's companies.
- Raise the awareness of and inform the key stakeholders (farmers, distributors and consumers) on the sustainability of the mussel production sector.
- Define and transfer good practices to reduce the dispersion and abandoning of the socks at sea.





COORDINATING BENEFICIARY



LIFE20 ENV/IT/000570



**LEGAMBIENTE**

ASSOCIATED BENEFICIARIES



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA



**SAPIENZA**  
UNIVERSITÀ DI ROMA



**UNIVERSITÀ**  
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**Ittica Del Giudice**  
SOCIETÀ AGRICOLA





**Mitilicoltori Associati**  
SOCIETÀ COOPERATIVA

**The LIFE Programme** It is the EU's funding instrument for the environment and climate action, created in 1992 to support measures and projects to safeguard our biodiversity and nature, to strengthen environmental policies and raise awareness of environmental issues.

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-  Legambiente Lab
-  Legambiente Onlus

