



BIOGEARS

Developing biobased ropes for use in mussel and seaweed and creation of biobased value chains and circular economy

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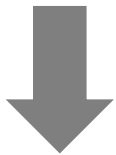


THE CHALLENGE



Farm to Fork
European Green Deal
Circular Economy

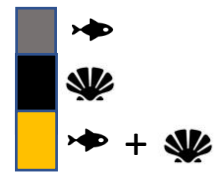
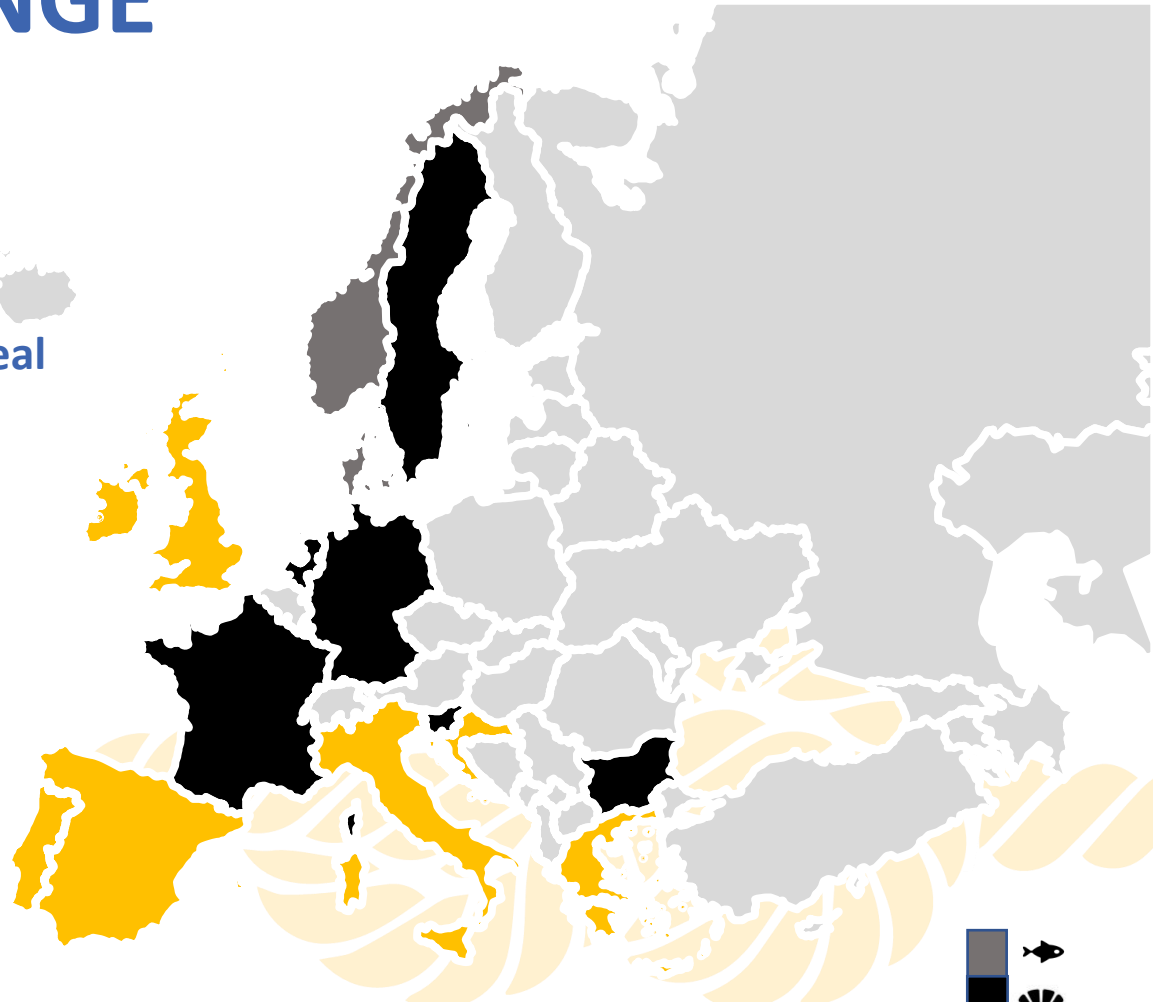
100% plastics-fossil source



Marine litter
Impact on ecosystems
Carbon Footprint
Climate Chance



Sustainable food systems?!




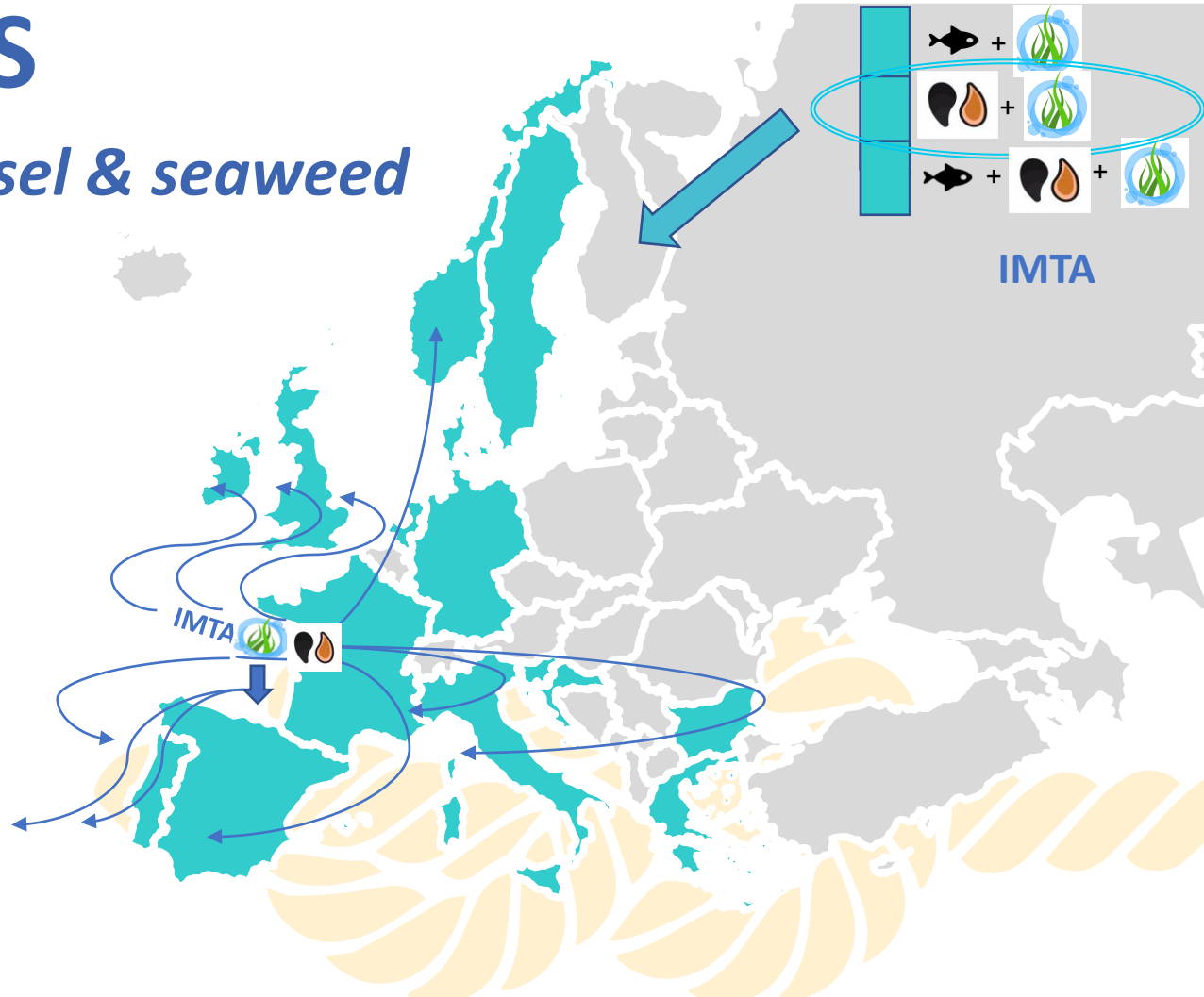
OBJECTIVES

Biogears for mussel & seaweed

BLUE LAB



- IMTA 
- Sustainable aquaculture
- Biobased products
- New value chain

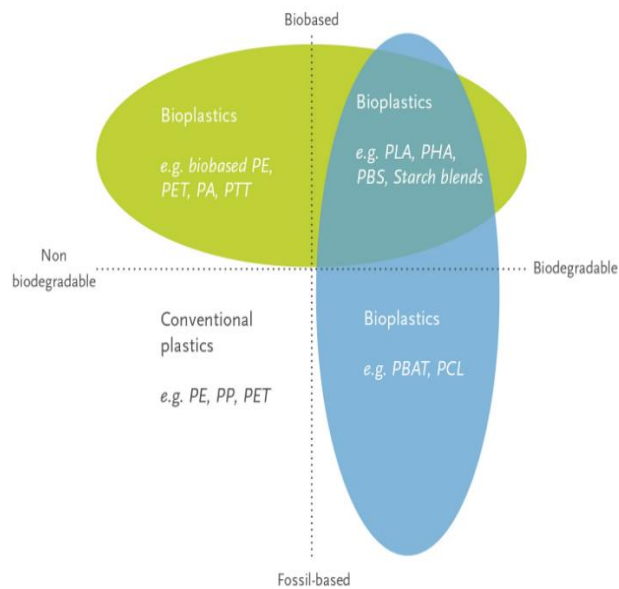


THE SOLUTION

BIOGEARS prototype development



Conventional ropes (GROPE)



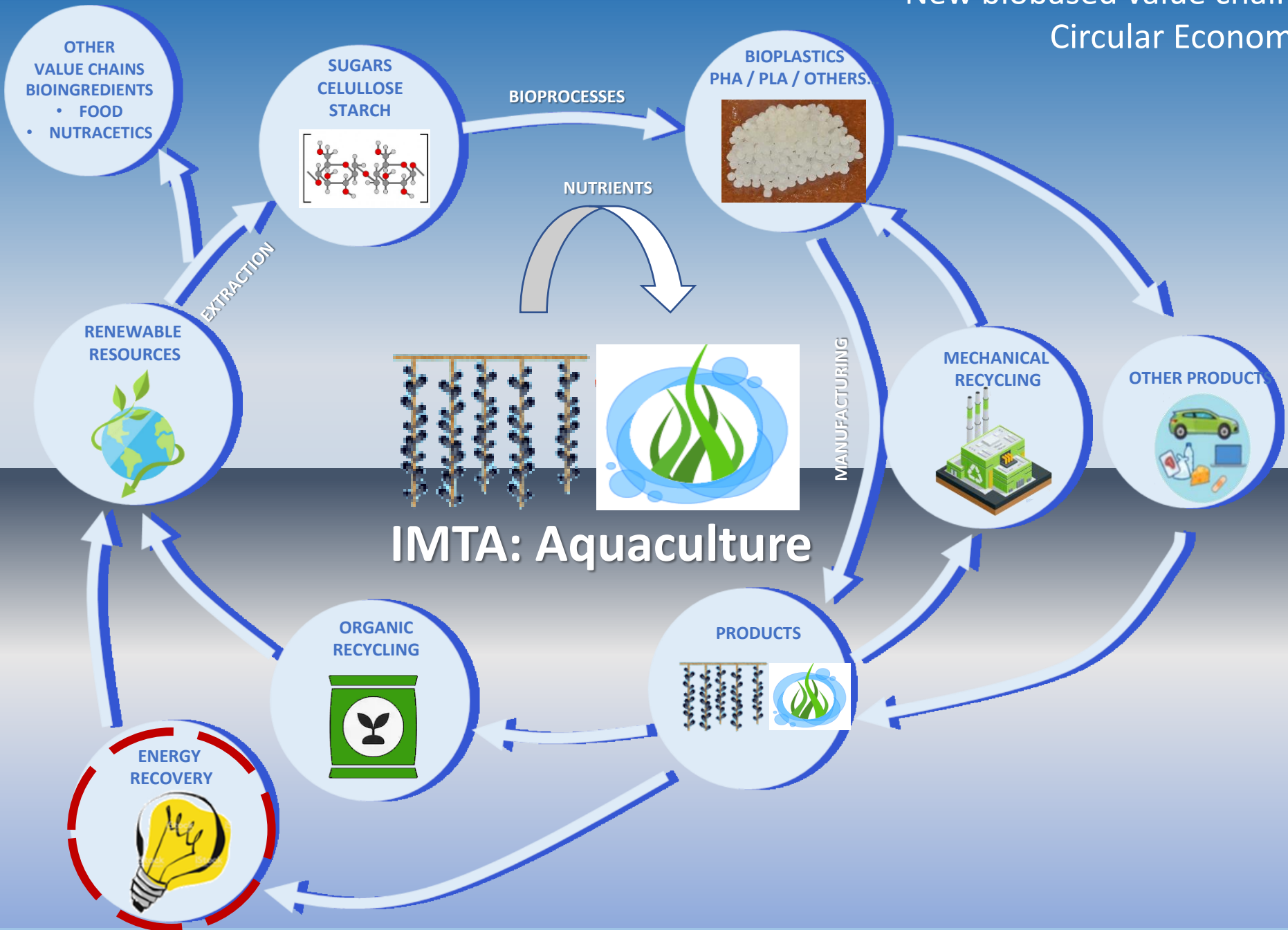
**MUSSEL
PROTOTYPES**



**SEAWEED
PROTOTYPES**

Figure: Classification of bioplastics (covered by the areas green and blue) in the axes defined according to source based (up and down) and the biodegradability character (left to right). Source: European Bioplastics.eu

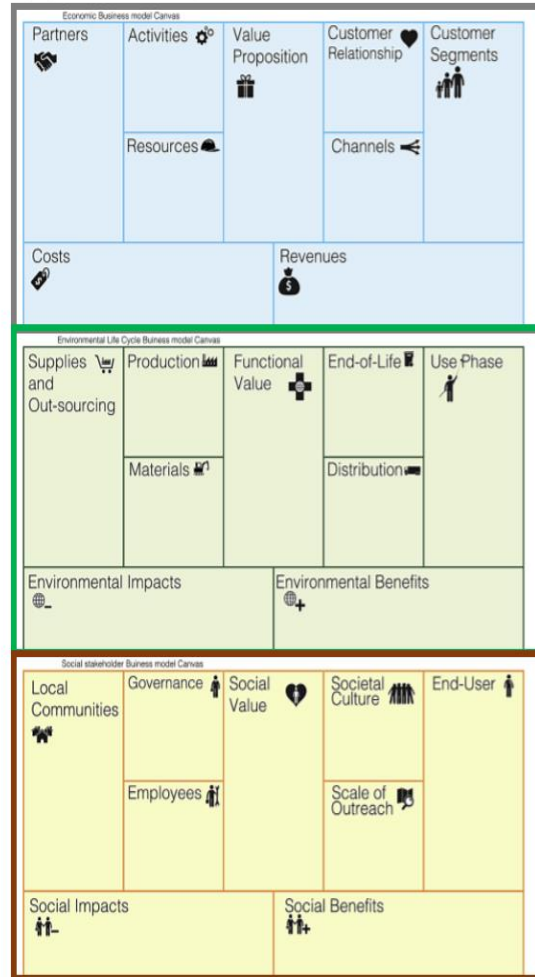
New biobased value chains Circular Economy



Circular Triple BOTTOM line Business Model (CBM)



ex 1. Triple layered business model canvas (TLBMC)



BIOGEARS PRODUCER

ENVIRONMENTAL

SOCIAL

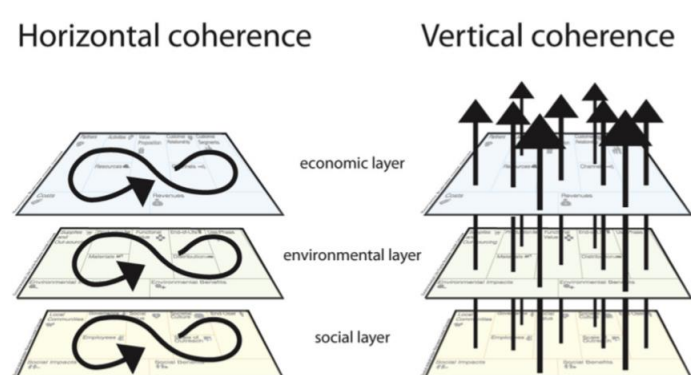


Fig. 4. The triple layered business model canvas creates two new dynamics: horizontal and vertical coherence.

RESULTS & IMPACTS





BLUE LAB

SUSTAINABILITY

BIOBASED ROPES
 IMTA TECHNOLOGY
 ECO-FRIENDLY
 AQUACULTURE

ECONOMIC

AQUACULTURE GROWTH
 NEW BIOBASED PRODUCTS
 NEW BIOBASED VALUE CHAINS

SOCIAL

POLICY ON PLASTIC IN SEA
 NEW EMPLOYMENT
 QUALITY PRODUCTS
 RESPONSIBLE CONSUMPTION



THE TEAM



MEMBER OF
BASQUE RESEARCH
& TECHNOLOGY ALLIANCE

AQUACULTURE



GAIKER

COMPUNDING



TEXTILE



KNOWLEDGE TRANSFERENCE



ROPE MANUFACTURER





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Thank you!

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GAIKER



ERINN
INNOVATION

itsaskorda



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