

ThermoMechanoChemical (TMC) fractionation of aquaculture by-products by twin-screw extrusion for the production of biobased fertilisers

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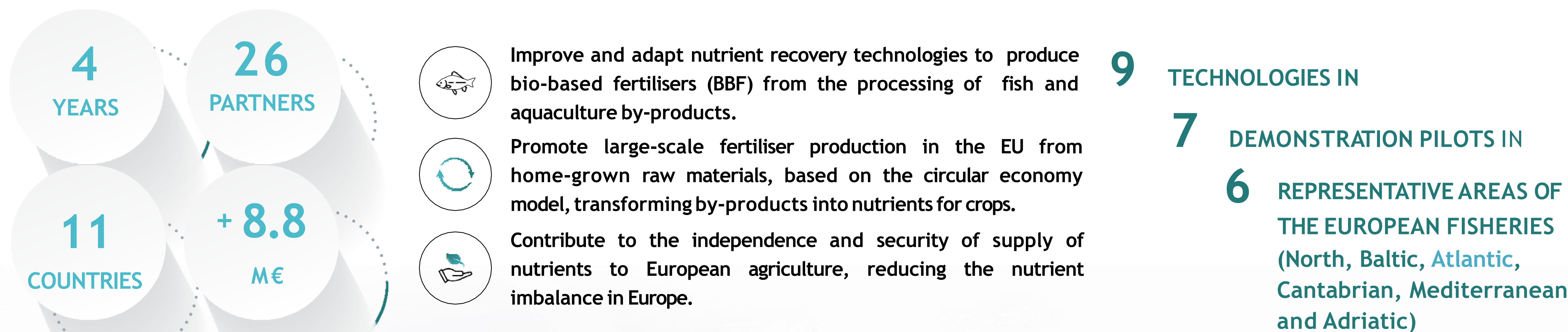
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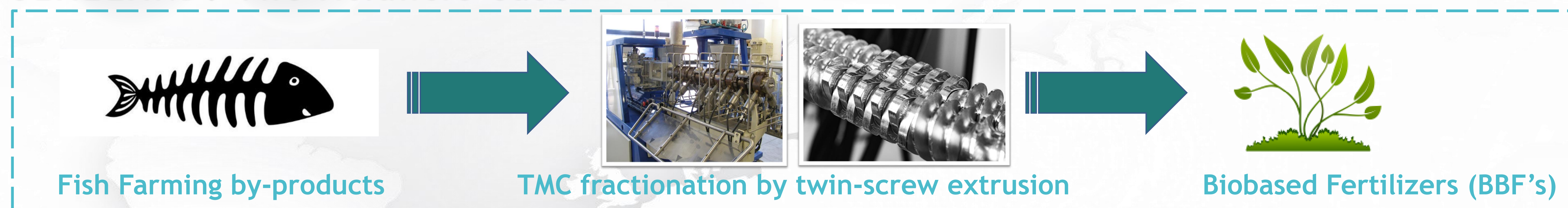
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SEA2LAND: Producing advanced bio-based fertilizers from fisheries wastes

The SEA2LAND project is a 4-year collaborative Innovation Action (IA) funded by the EU in the frame of the Horizon 2020 programme. Based on the circular economy model, SEA2LAND promotes the production of fertilisers in the EU from own raw materials. This solution is expected to reduce the soil nutrient imbalance in Europe.



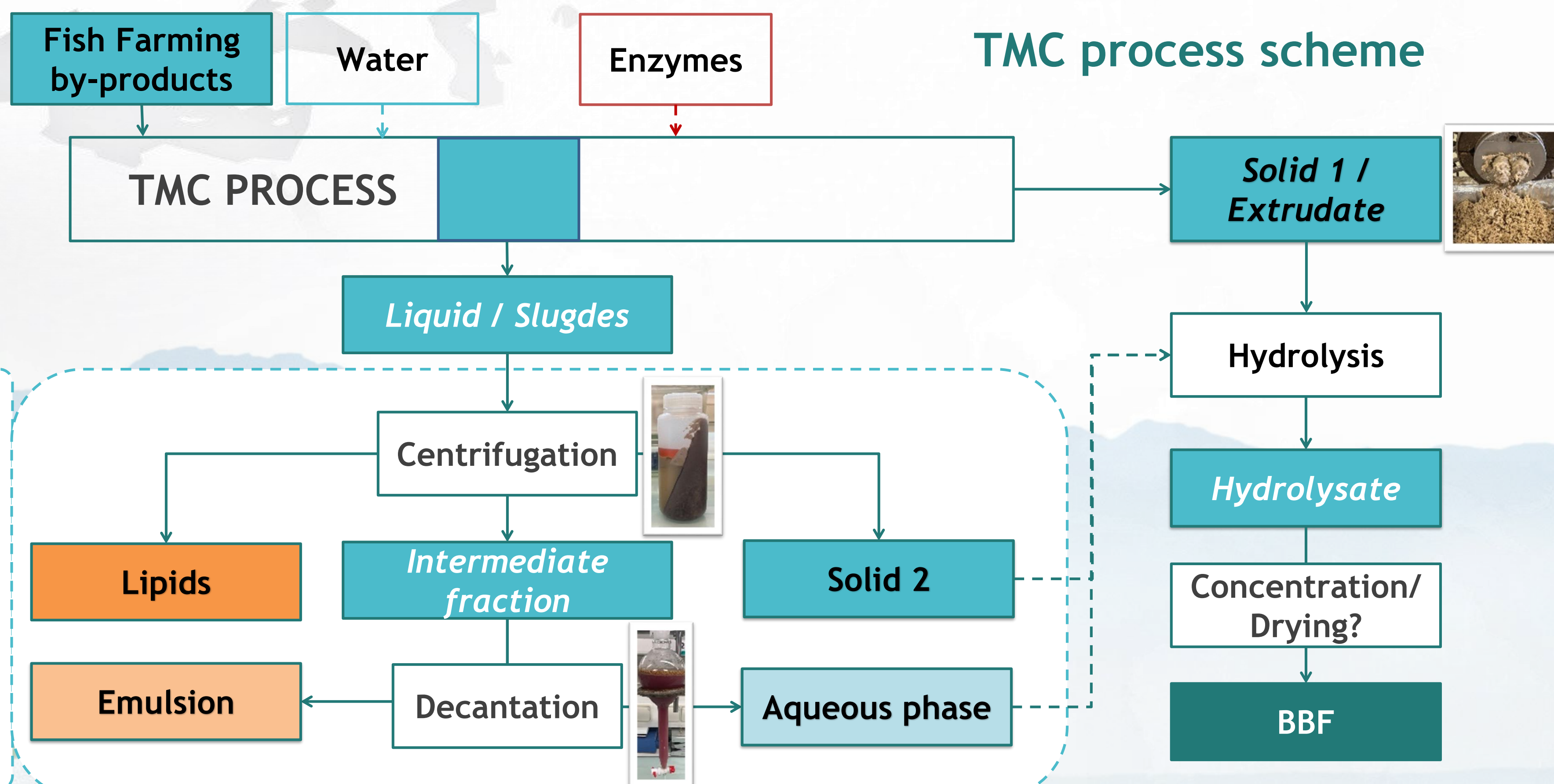
SEA2LAND: The Atlantic case



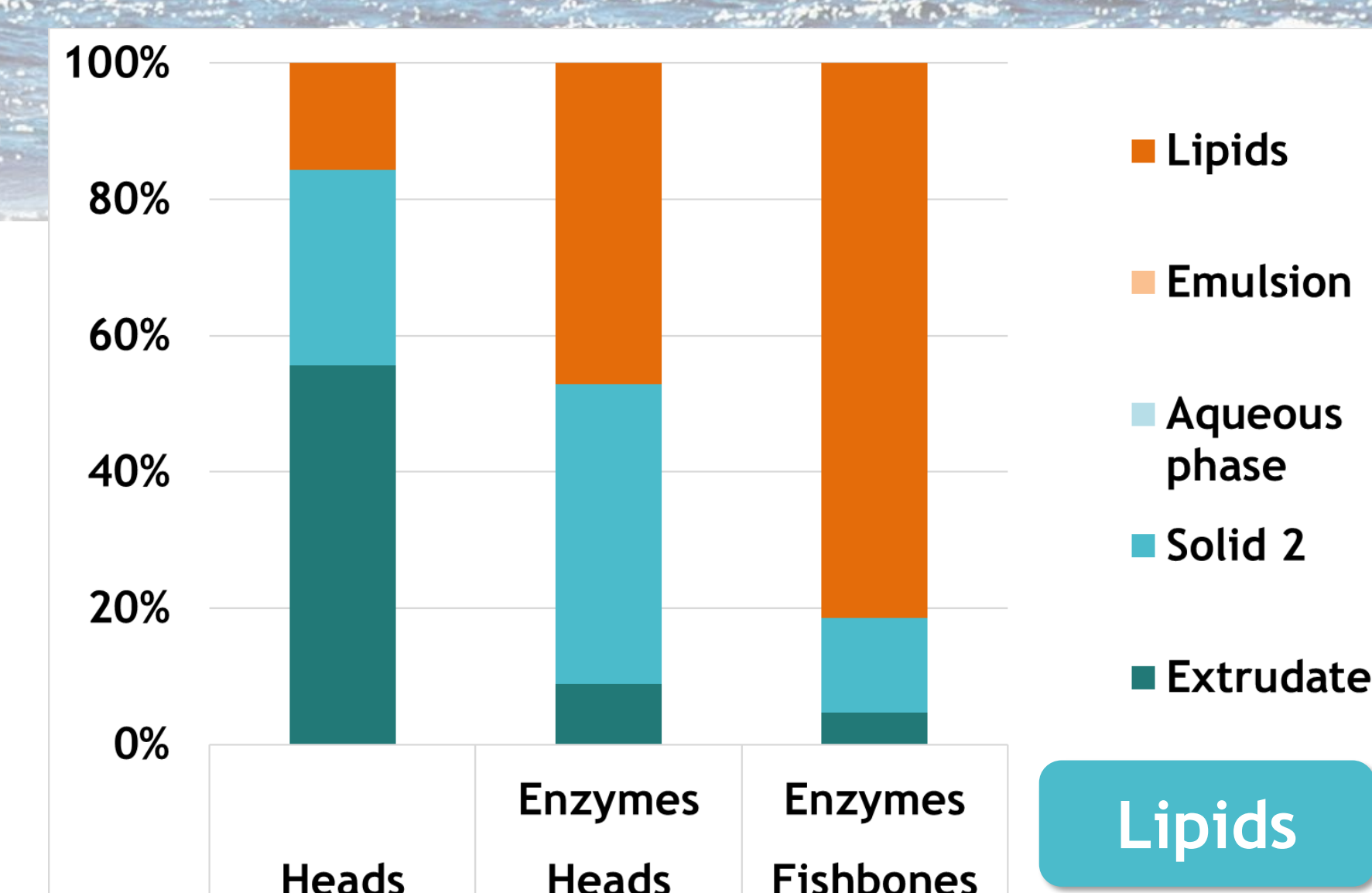
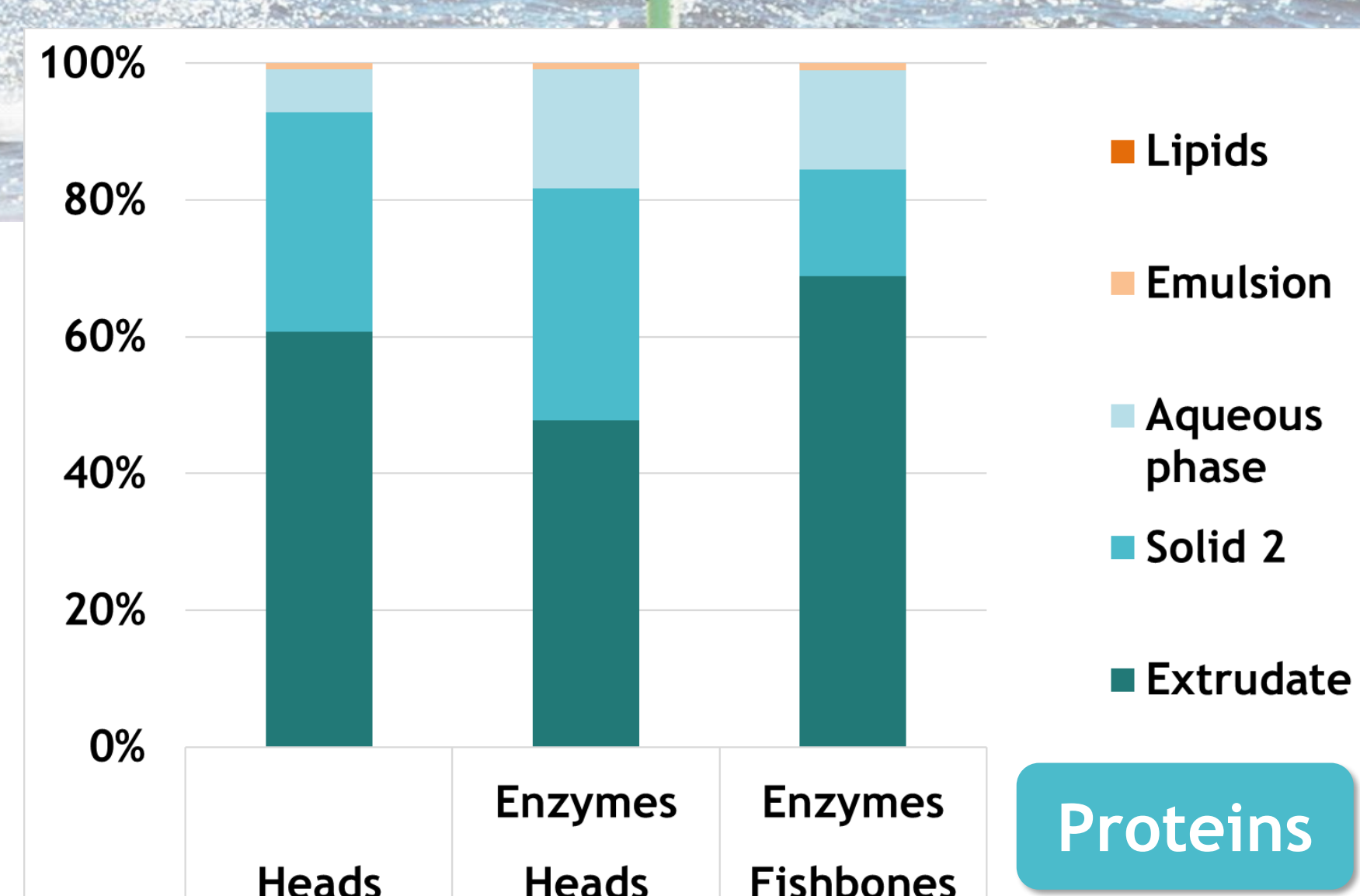
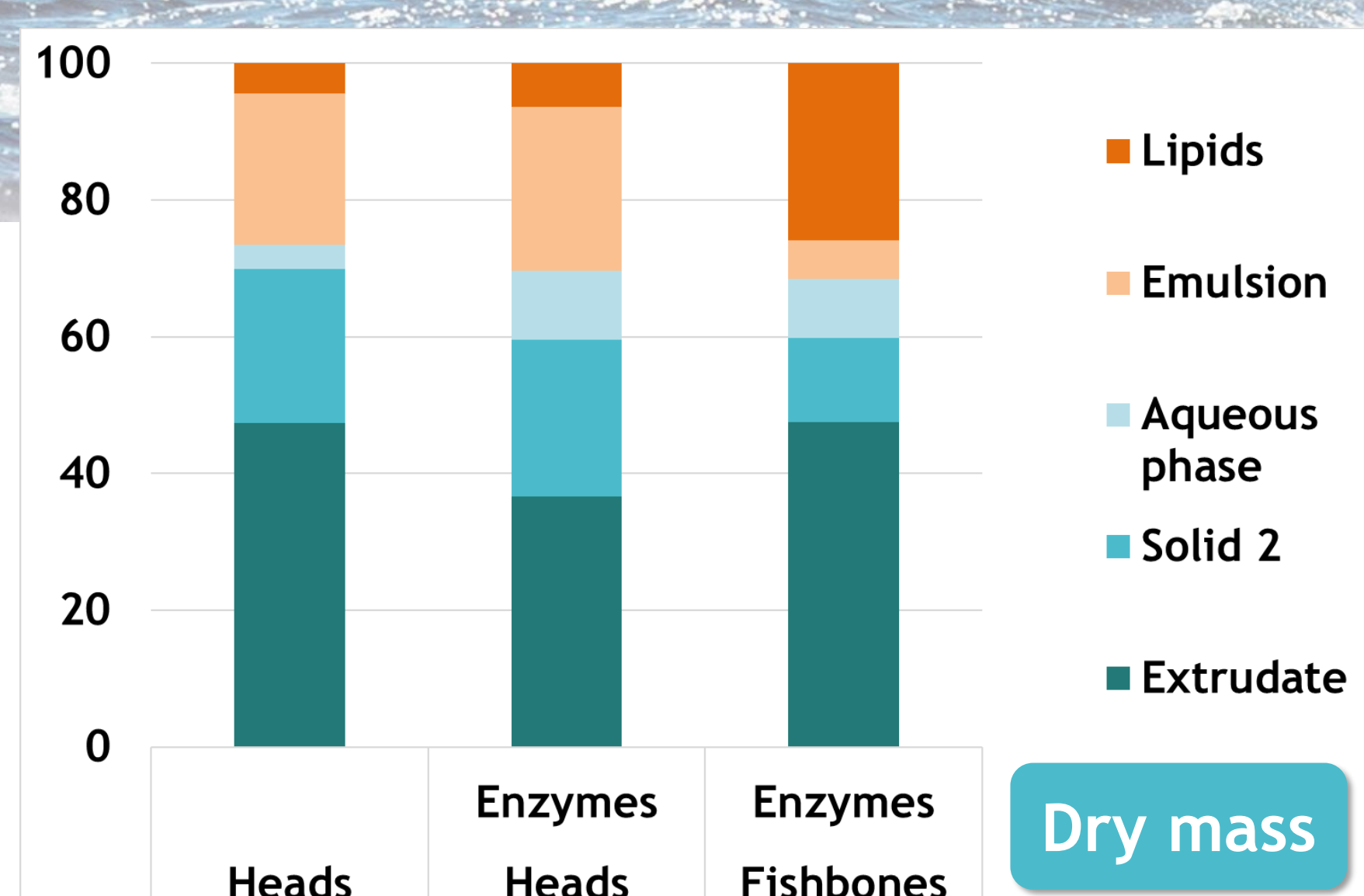
Fish farming by-products characterization

Fish Farmer = Pisciculture d'Ispeguy
(Sincere acknowledgments for the supply of the by-products)

	Viscera	Heads	Fishbones
Dry matter (%)	35.0	34.0	36.0
Lipids (%/DM)	76.9 ± 0.5	38.8 ± 0.2	38.1 ± 0.2
Proteins (%/DM)	23.1 ± 0.2	37.5 ± 1.4	41.9 ± 2.1
Ashes (%/DM)	3.0 ± 0.3	11.2 ± 1.2	8.2 ± 0.8



Influence of enzyme's introduction in the TMC process on the repartition of dry mass, proteins and lipids



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