



Shellfish farming:
A keystone in the
European Turquoise
Aquaculture Revolution

MAKING AQUACULTURE A VITAL PART
OF THE EUROPEAN SUSTAINABLE
FOOD SYSTEM

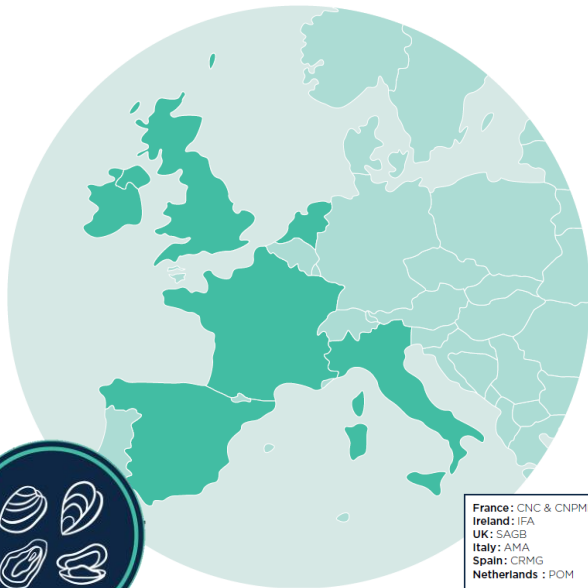
HUNATIP WORKSHOP

14/10/2024



EMPA & Molluscs production in Europe

EMPA Members



France : CNC & CNPME
Ireland : IFA
UK : SAGB
Italy : AMA
Spain : CRMG
Netherlands : POM

The European Mollusc Producers' Association (E.M.P.A.) brings **together national or regional associations and bodies representing mollusc producers** within the Europe and European Union.

90% of the companies or operators involved in the production and marketing of shellfish in Europe.

The mollusc production is **the biggest segment of Aquaculture in the EU and in Europe,**



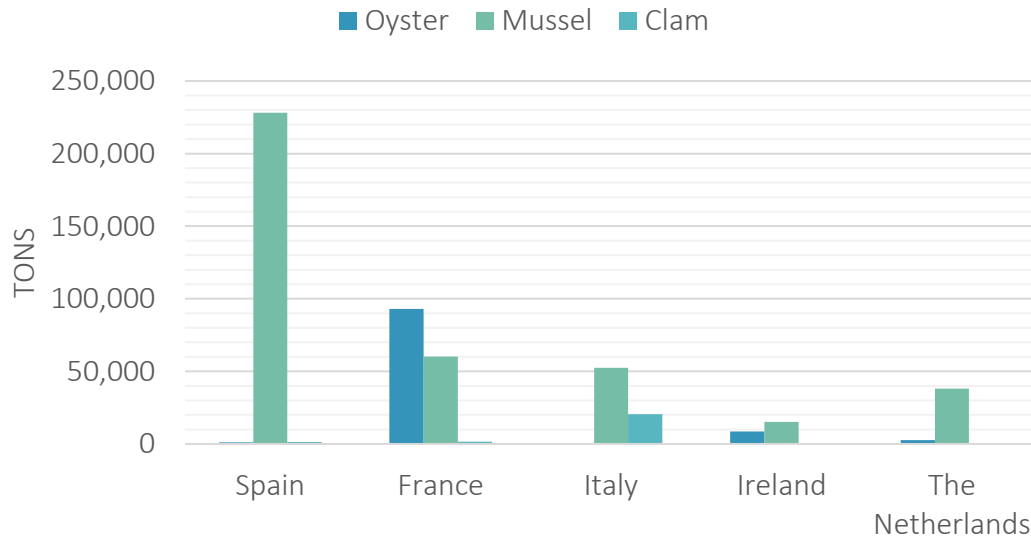
€ 1,051 Mrd
TURN OVER
30% OF AQUACULTURE



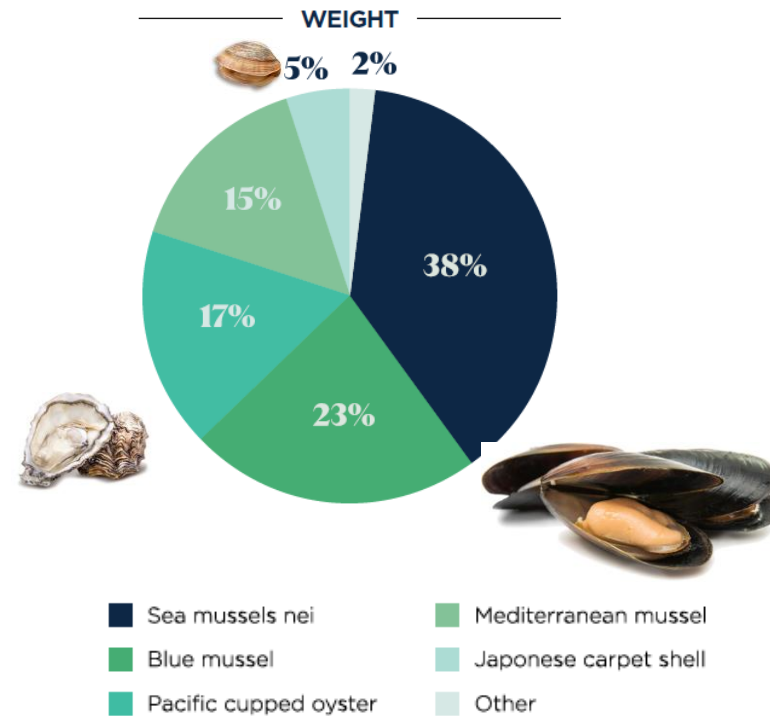
584,000 T
TOTAL PRODUCTION VOLUME (TONS)
OUT OF 1,157,000 T EUROPEAN AQUACULTURE

EMPA & Molluscs production in the EU

Volume of main farmed shellfish (2018)



COMPOSITION OF THE MAIN SHELLFISH SPECIES PRODUCED BY THE EU AQUACULTURE SECTOR (2020)



Sustainable aquasystems to support

To food security

Production of rich sane and safe food, while using less space and water inland

To climate change mitigation

Reducing the emission of GHG by 70% if people adopts a diet based on shellfish and algae, like a full vegan diet (*Brent F. Kim, and al. - 2019 - [Elsevier] Country-specific dietary shifts to mitigate climate and water crises*)



To human health

High level of natural important components, poor in salt, poor in calory

To sustainable development

Very low impact cultures, with with no need for feed or antibiotics
Coastal employment, balanced economical enterprises, and ecosystem services provider at same time
contributing to the 3 pillars of sustainability

Low trophic cultures: « exceptionnaly low carbon footprint »

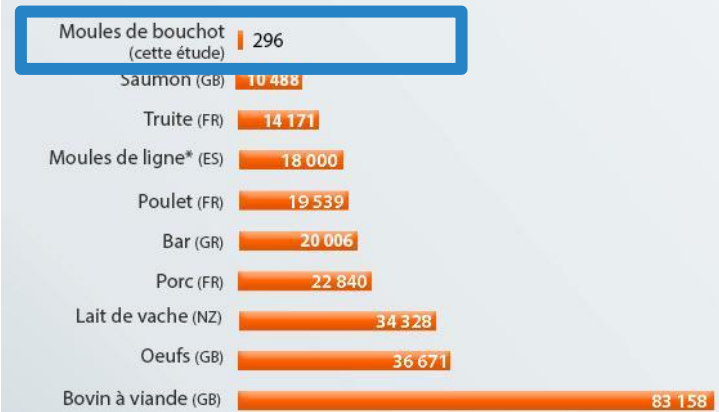
The GHG emissions :
rope grown mussel (Ir) : 107 kg CO2 eq./tonne
oyster (Ir) : 235 kg CO2 eq./tonne
bottom grown mussel production (Ir) : 824 kg CO2 eq./tonne



BIM (IR) Study

'Shellfish and seaweed aquaculture have exceptionally low carbon footprints'

IMPACT ENVIRONNEMENTAL DE DIFFÉRENTES PRODUCTIONS ANIMALES (kg CO₂ par tonne de protéines consommables)



* Stockage de carbone dans les coquilles non considéré
 D'après J. Aubin et al. Int. J. Life Cycle Assess. (2018) 23: 1030.



INRAE (FR) Study

Key socio-economic segment on the European Aquaculture scene



€ 1,051 Mrd
TURN OVER
30% OF AQUACULTURE



584,000 T

TOTAL PRODUCTION VOLUME (TONS)
OUT OF 1,157,000 T EUROPEAN AQUACULTURE

40,620

NUMBER OF WORKERS IN THE MS AQUACULTURE SECTOR IN 2020

(shellfish farmers = 51%)



9,993

women

Gender equality 24%

6,183

NUMBER OF ENTERPRISES
(47% of European aquaculture companies)

Average 2.4 FTE/ent.



Ecosystem Services



Water filtration
and clarification



Bloom algae
reduction



Nitrogen sink



Habitat creation
for biodiversity



Provisioning
services



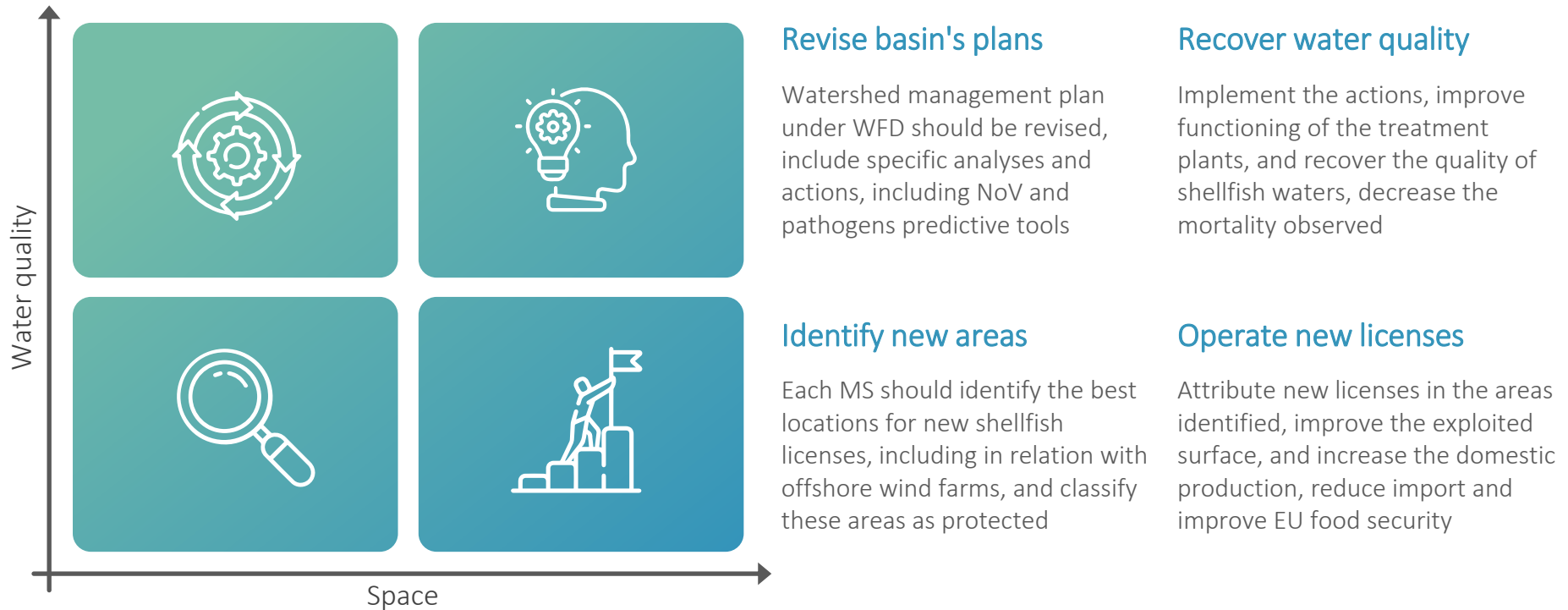
Recreation and
Aqua-tourism

And many others !

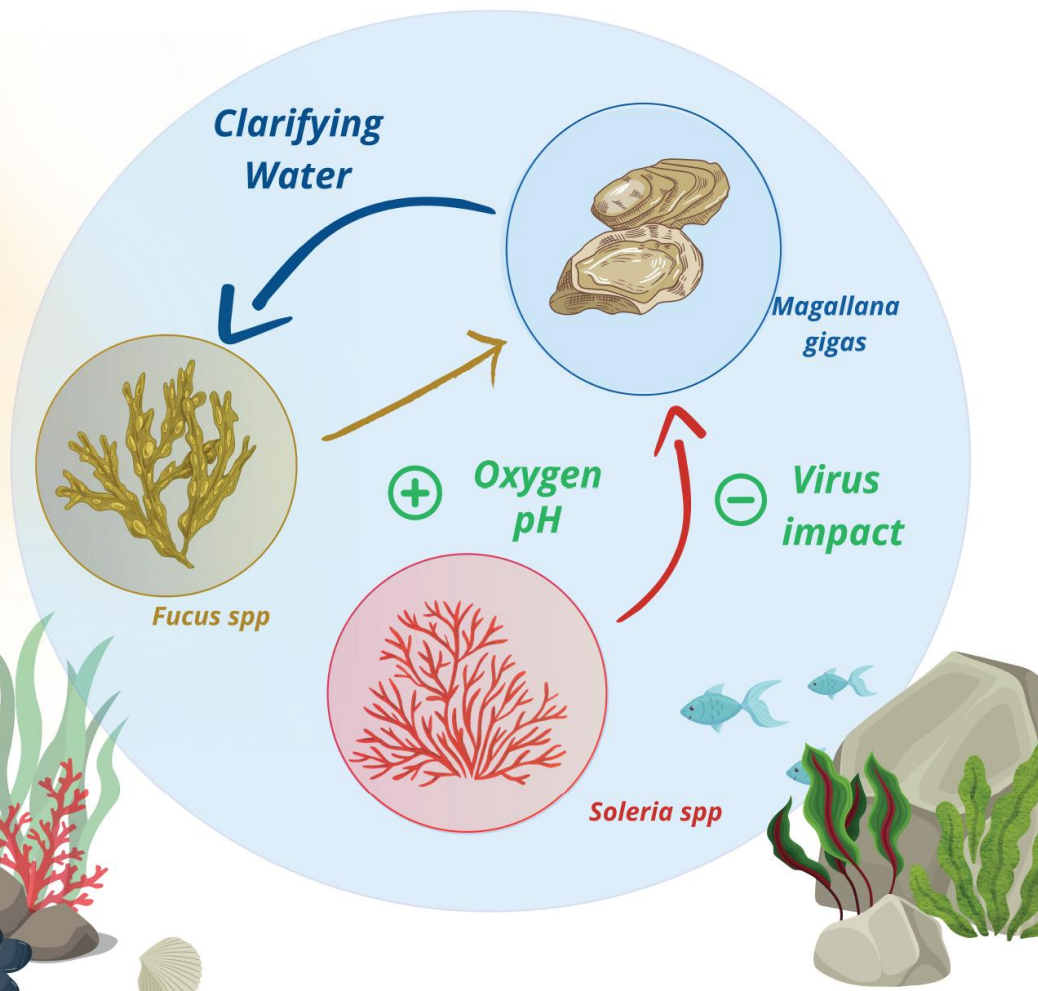


EU Shellfish priorities

Cependant, de multiples défis ont conduit à la diminution de deux des productions en 20 ans.



Extensive systems compatible with AMTI systems and tomorrow systems



Positive synergies between Algae and Oysters productions

Other EU Shellfish needs



RDI

Horizon Europe should publish a call on shellfish farming feasibility and supporting innovative systems to face global changes



Communication

Ecosystem services provided by, and benefits of shellfish should be recognized and disseminated to citizens



Planification

Decision makers should allocate more space to shellfish farming in EU costal planification documents

3 principal needs to unlock the potential

Shellfish farming is welcomed in the Green Deal as a part of the Vision, a better recovering of the water quality and more space offshore are identified as key objectives, 3 tools at least are now necessary to reach this objectives, and make the dream true...

As outlined in the “Strategic guidelines for more sustainable and competitive aquaculture in the European Union 2021-2030”, shellfish farming is a sector with a promising future for food production, offering solutions to many environmental and climatic challenges.

Thank you for your attention



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General Secretary

*You can now find all these
information in our new
EMPA Manifesto !*

