



# Algae in the EU policy and research context

How algae can contribute to delivering EU policy objectives

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European Commission*



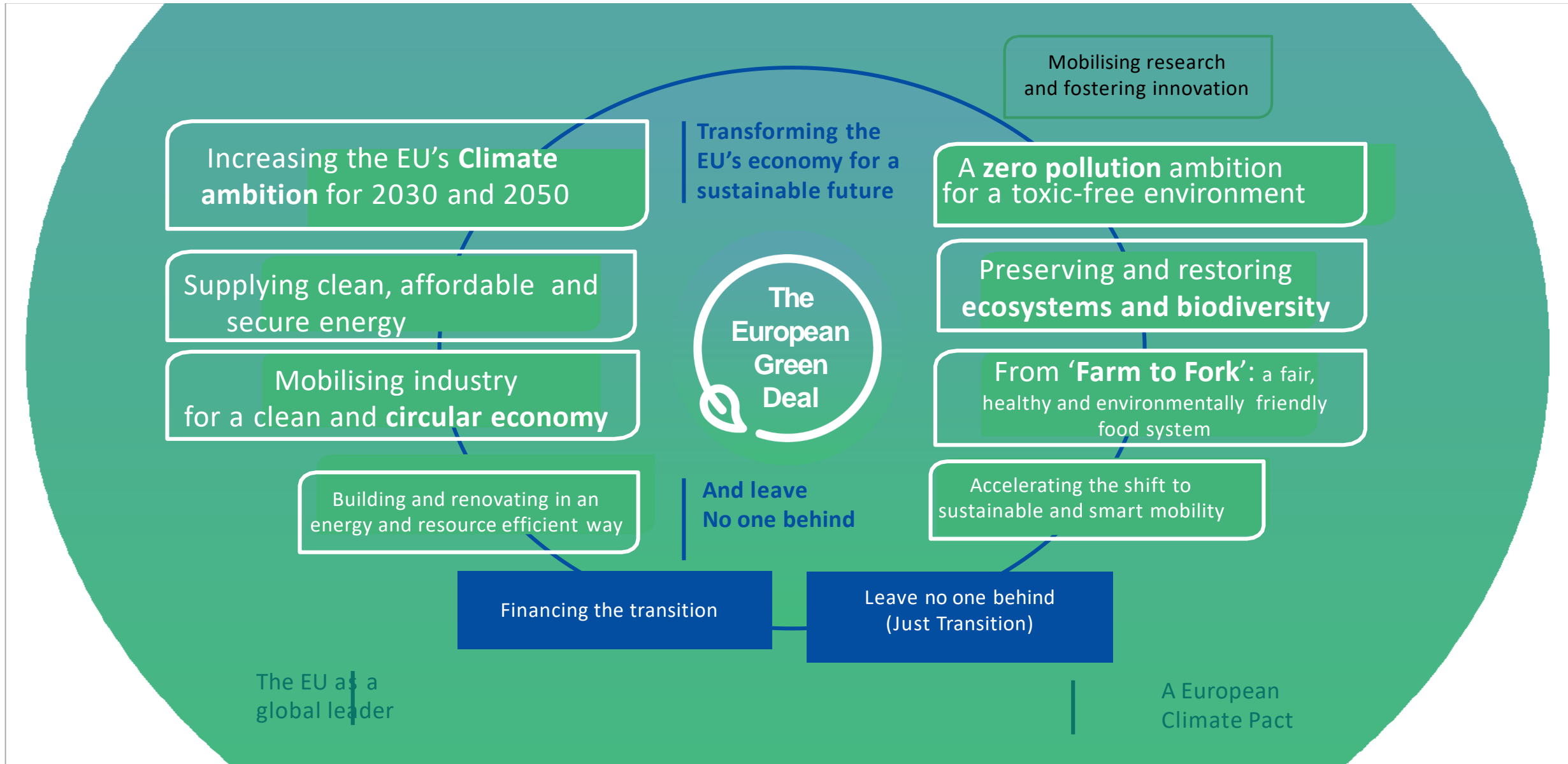


*We do not usually speak of oceans and forests in the same sentence, but what if you could reforest oceans?*

*Dr Brian von Herzen*



# European Green Deal





17 May 2021  
#EUGreenDeal  
#BeGreenGoBlue

# Putting the Blue into the Green

Sustainable Blue Economy

**4.5**  
million  
jobs

**€650**  
billion  
turnover

- » *Algae – a sustainable food and feed alternative*
- » *Microalgae – new animal feed source – to reduce reliance on wild stocks*
- » *Algae cultivation reduces excess C, N and P in water*
- » *New food and feed products from algae on EU market – an opportunity for sustainable food systems development and reduction of negative environmental impact from agri- and aquaculture and fisheries*
- » *The Commission will also explore the potential of cell-based seafood as an innovative and sustainable alternative.*



cost of inaction:  
**€350 billion**  
per year

**30%**

marine  
protected  
areas  
by 2030

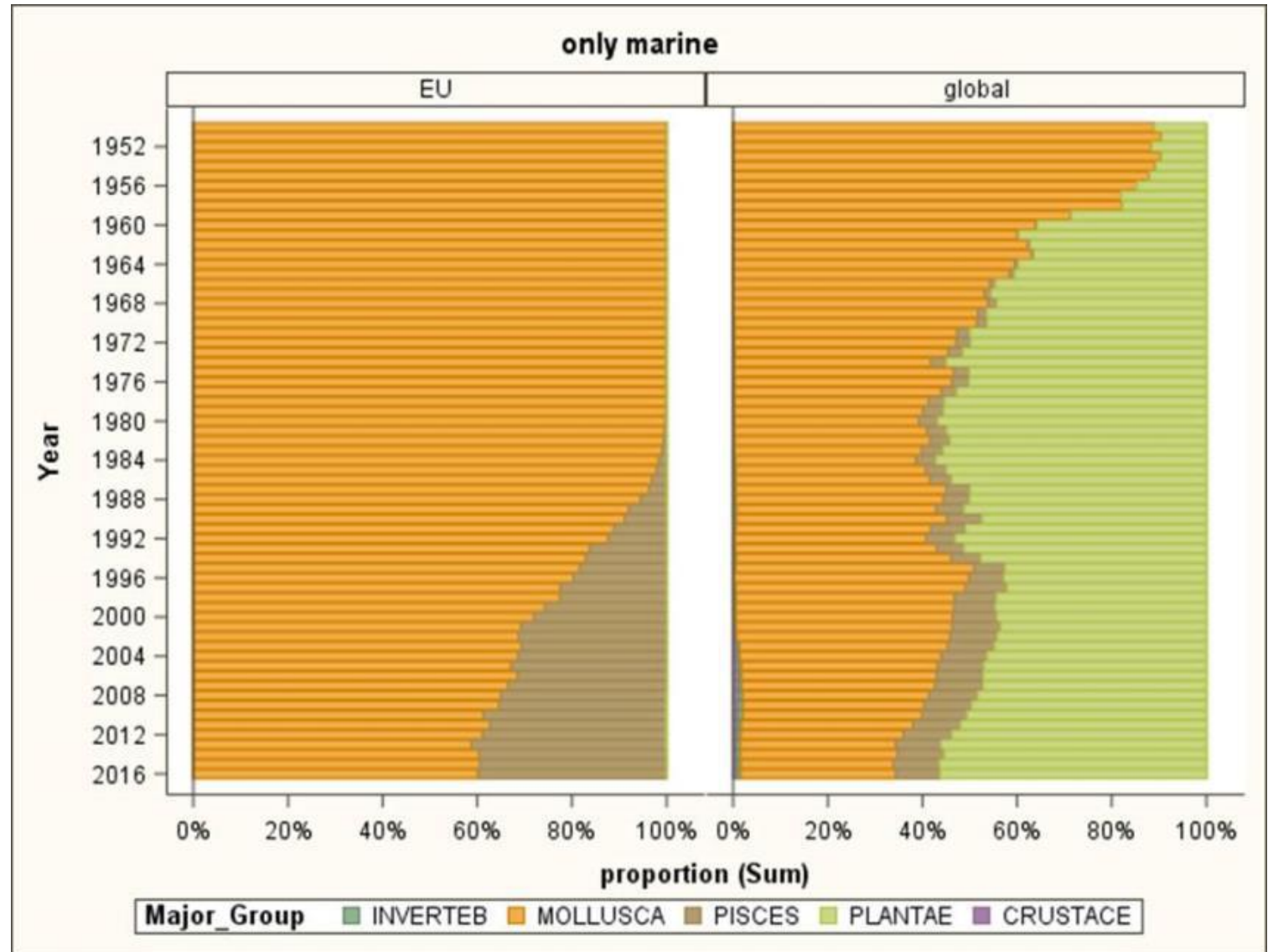
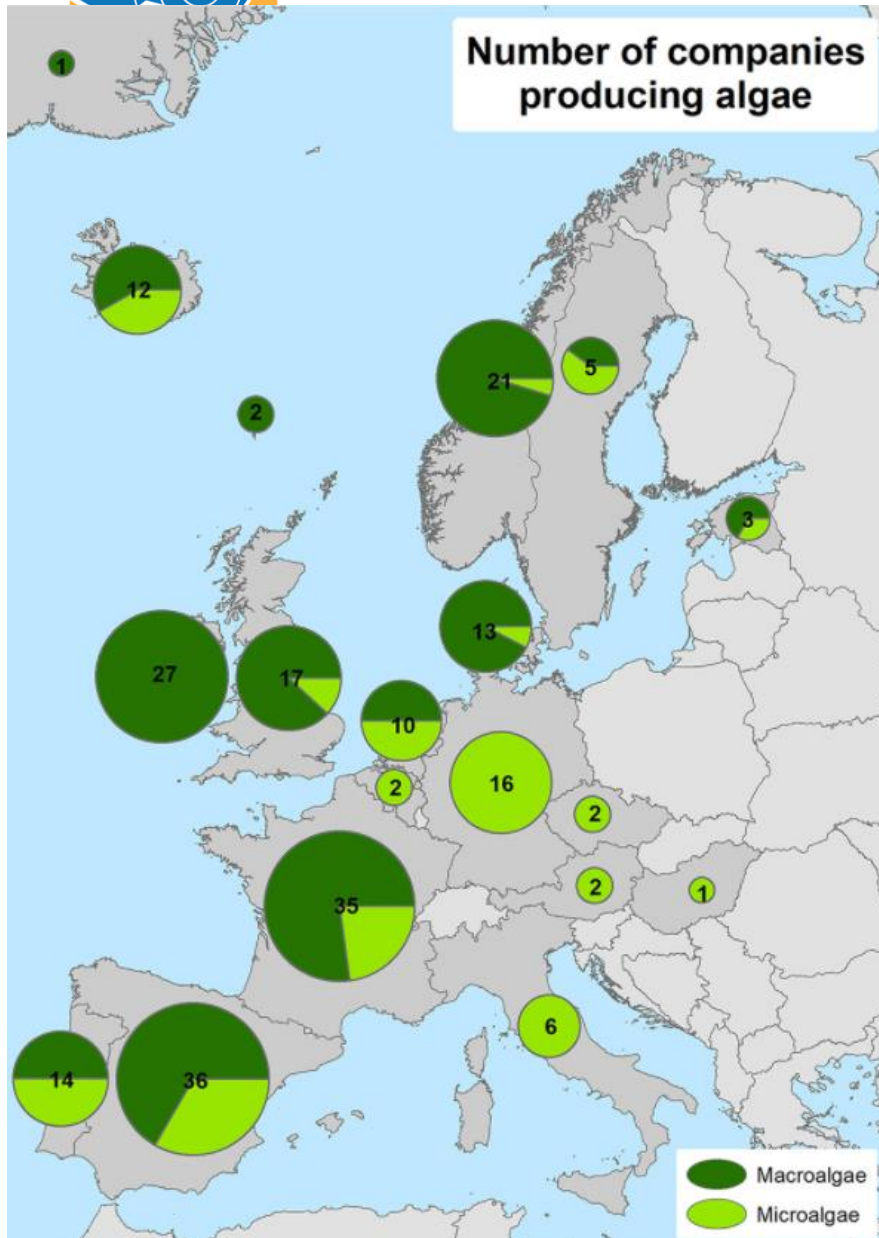


# European Green Deal: Commission adopts strategic guidelines for sustainable and competitive EU aquaculture

- » **Algae initiative** will address the challenges and opportunities of algae farming and propose concrete actions
- » According to the **Farm to Fork Strategy**, the Commission will 'set out well-targeted support for the algae industry, as algae should become an important source of alternative protein for a sustainable food system and global food security'
- » Algae – **alternative source of protein** for sustainable animal/fish feed systems
- » Promoting lower environmental impact aquaculture (IMTA) on lower trophical species e.g. algae



# Marine Aquaculture production EU/globally: algae, molluscs and fish source FAO





# Algae file- synergies and collaboration

- EU Bioeconomy Strategy (RTD lead, several DGs)
- Algae based fertilisers and feed (DG AGRI, GROW and MARE)
- EMODNET, algae biomass data (JRC, KCB, MARE)
- CEN mandate on standardisation (DG ENER)
- Novel Food Regulation (DG SANTE)
- Biodiversity/environmental services (ENV, MARE)
- Funding under MFF 2021-2028: ESIF, HorizonEurope, LIFE, Climate Innovation Fund, etc. (several DGs)



## BBEF Roadmap: Bottlenecks for the EU algae sector

Policy, environment and Regulation	Finance and business development	Consumers and value chains	Science, technology and Innovation
Regulation/Licenses	Understanding finance	Consumer acceptance	Research-industry dialogue
Novel food	Funding mechanisms	Production costs	Research infrastructures
Ecosystem services	Skills and qualifications	Availability of raw material/scale	Access to data
		Logistics	



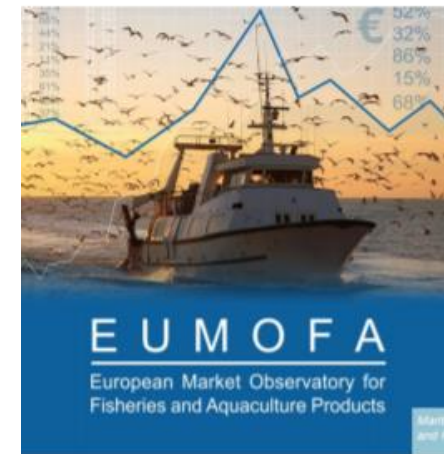
# Situation analysis and state of play

## BLUE BIOECONOMY

Situation report and perspectives



## BLUE BIOECONOMY REPORT



DECEMBER 2020

[WWW.EUMOFA.EU](http://WWW.EUMOFA.EU)

Maritime Affairs  
and Fisheries

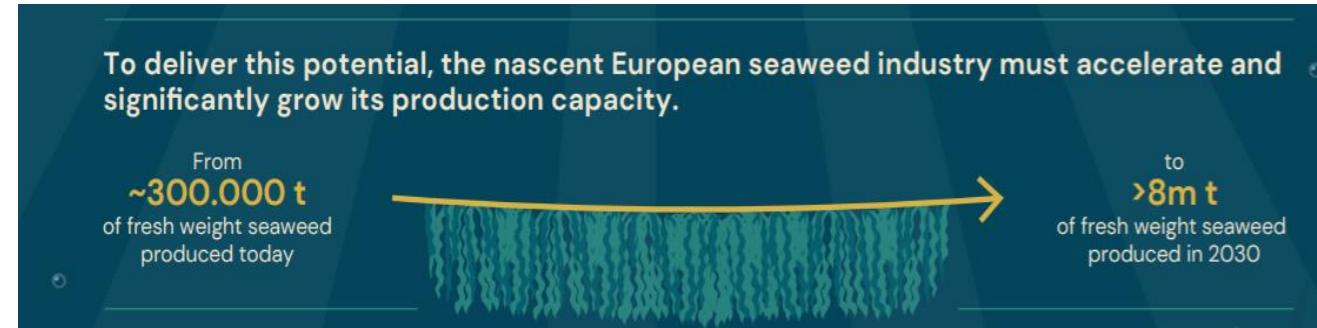
# Towards a strong and sustainable EU algae sector – conclusions from the public consultation



11/02/2021

The European Commission is preparing a comprehensive cross-sectoral EU algae initiative. The aim of the initiative is to increase the

## EU Algae initiative (1)



*Aim: to increase **regenerative** production, ensure safe consumption and boost innovative use of algae products in Europe.*

### **5 initial objectives (subject to the IA):**

- 1. Improving governance framework** e.g. guidelines, standards, recommendations etc
- 2. Support functioning of the market** – novel algae species, funding mechanisms, one-stop-shop/assistance mechanism

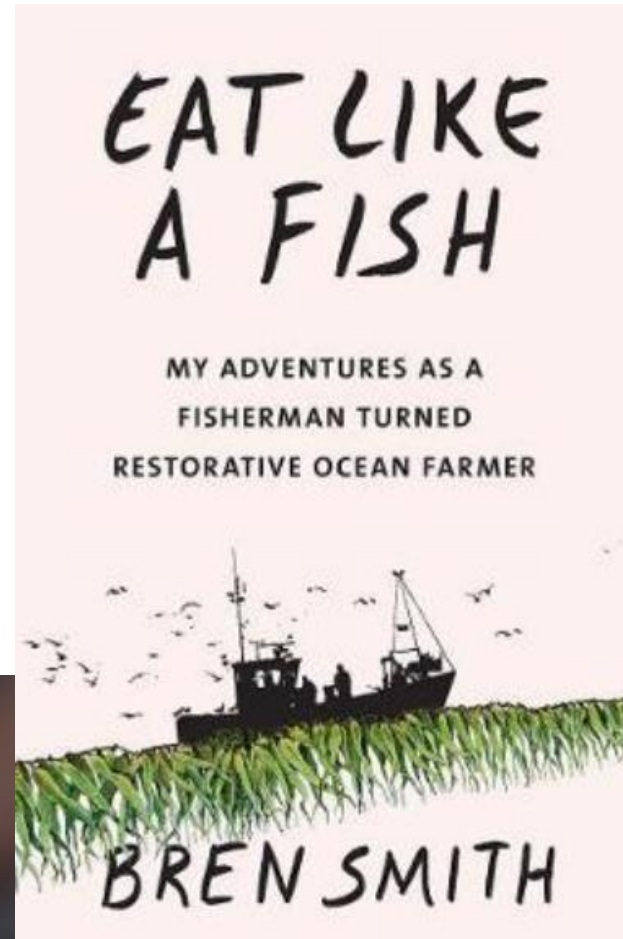
# EU Algae initiative (2)

**3. Ensuring sustainable development of the EU algae sector** – e.g. to develop regenerative and restorative algae farming, bioremediation

**4. Increasing social awareness and acceptance** – e.g. communication, EU campaigns etc



**5. Closing knowledge, research and innovation gaps** - developing new systems/methods, algae innovation etc





## EU algae initiative (3)

- Impact assessment study (ends 16/01/2022): interviews, surveys, 5 webinars
- PC roadmap: 79, and OPC (closed 11 August) – 108 replies
- *Refined policy options with impacts – environmental, social and economic*
- Commission Communication + action plan: mid-2022

# Blue funding opportunities

- BlueInvest initiative (BlueInvest Events + Community), with a 3-monthly Investment Readiness Support calls
- MARE and EMFF Funding opportunities
- EU life
- Bio-based industries joint undertaking
- Horizon Europe and its Healthy oceans mission
- Funding and tender opportunities – Europa search engine
- Interreg Europe Next funding period 2021-2027
- JPI Oceans – have occasional calls linked to blue bioeconomy
- AquaLit project compilation of funding sources
- External funding alerting websites e.g. Euroalert

## Current – future algae calls/studies

*A study to create European Algae Stakeholder Forum (EU4Algae) and to bring more novel algae species to the EU market*

*EASME call Algae and Climate – to examine costs, impact and benefits of scaling up production of marine algae through aquaculture in the EU*

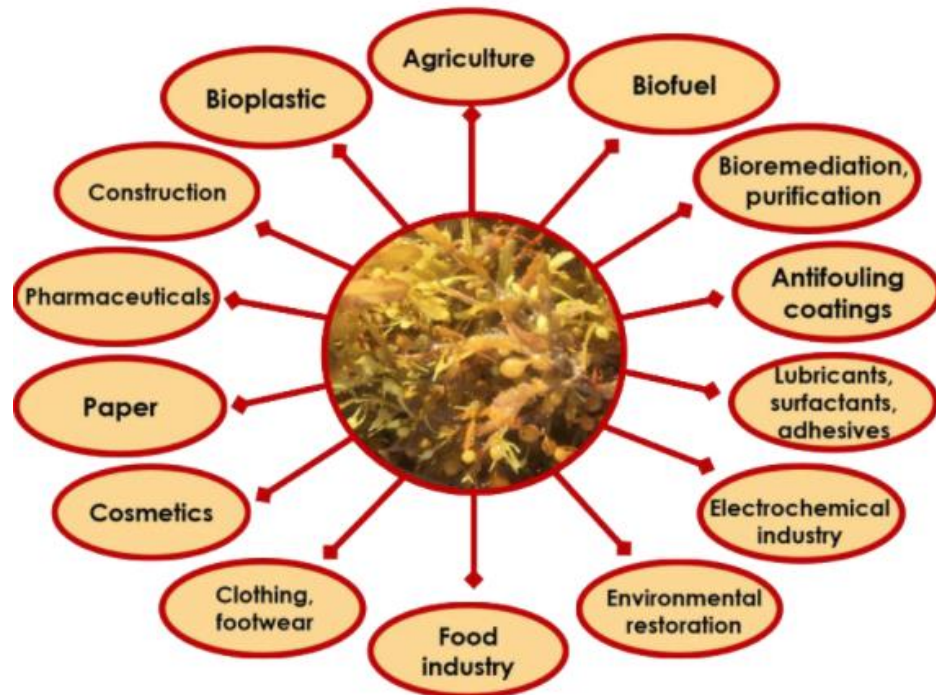
*Study to support EGD: Lot 1 'Shellfish and Algae' — assessing the potential of shellfish and algae to recycle nutrients – selection procedure about to finish*



# Algae potential

*Ronald Osinga (Wageningen University) found that growing “sea-vegetable” farms totaling 180,000 km<sup>2</sup> (18 mio ha) — could provide enough protein for the entire world*

## Potential uses of Sargassum



**“When you look at how we are going to feed the world population by 2050 in a way that doesn’t harm the environment, there is only one pathway,” says Carlos Duarte, a researcher and professor in biological oceanography and marine ecology. “To scale up seaweed farming.”**

