



The ERA-MBT Marine Biotechnology Research and Innovation Roadmap launch

EU policies and funding opportunities supporting marine biotechnology

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12 October 2016, Brussels

Disclaimer: This presentation shall neither be binding nor construed as constituting commitment by the European Commission

- * Why does the EU support marine biotechnology?
- * Strategies and policy framework
- * Funding opportunities across Horizon 2020



Marine biotechnology: why EU level action?

In order to benefit civil society, industry, and sustainably support economic growth and job creation =

to catalyse the union of national efforts of to achieve critical mass, stimulate synergies, and facilitate access to competitive niche markets.



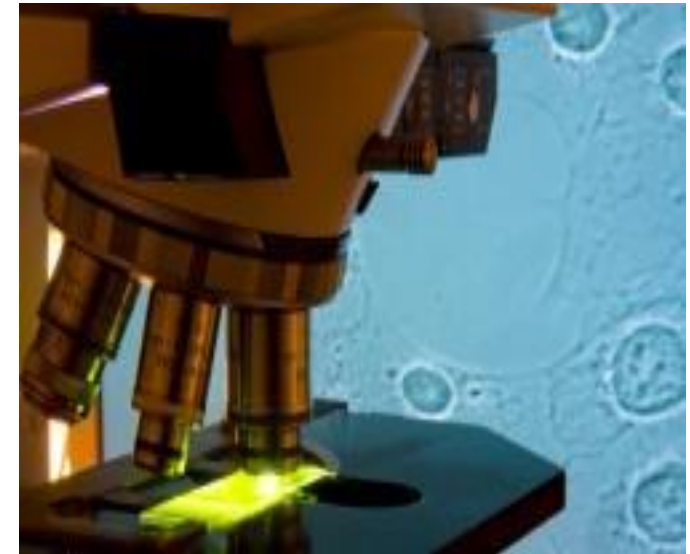
Sustainable and environmentally-friendly Fisheries and Aquaculture



Safe and healthy diet



Boosting marine and maritime innovation through biotechnology





Two key documents:

2011: Specific Programme implementing Horizon 2020,

2.3. Unlocking the potential of aquatic living resources,

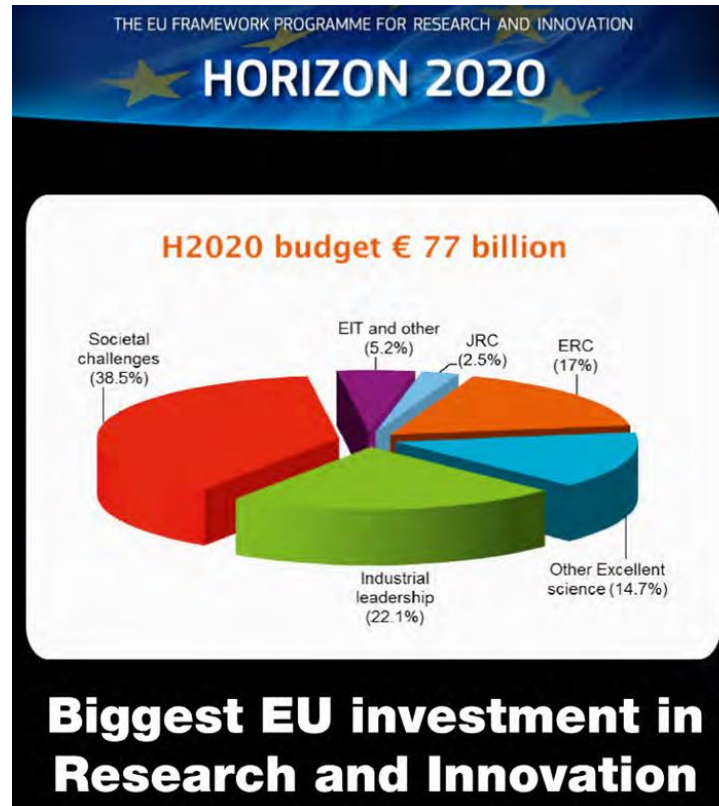
2.3.3. Boosting marine innovation through biotechnology and

2.4. Sustainable and competitive bio-based industries.

2012: Communication from the European Commission on Blue Growth: opportunities for marine and maritime sustainable growth.

One of the strategic areas is blue biotechnology.

Funding opportunities in Horizon 2020





1. Health, demographic change and wellbeing

2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the bioeconomy

3. Secure, clean and efficient energy

4. Smart, green and integrated transport

5. Climate action, resource efficiency and raw materials

6. Inclusive, innovative and reflective societies

7. Secure societies

FUNDING OPPORTUNITIES IN HORIZON 2020



Pillar 1: Excellent Science: ERC grants, Marie Skłodowska-Curie grants, etc.

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Pillar 3: Societal Challenges:

- SC2: Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy.

SC2 covers aquatic living resources and marine research, under Sustainable Food Security and Blue Growth calls.

Complemented by the Joint Technology Initiatives: the BBI JU (Biobased Industries Joint Undertaking).

Marine biotech in H2020 SC2 Work Programmes

WP 2014-2015: Among the 5 key priorities, topics addressed "valorising the diversity of marine life" (marine biomolecules, industrial biomaterials, enzymes, etc).



WP 2016-2017: Topics involving biotechnology included integrated algae biorefineries.

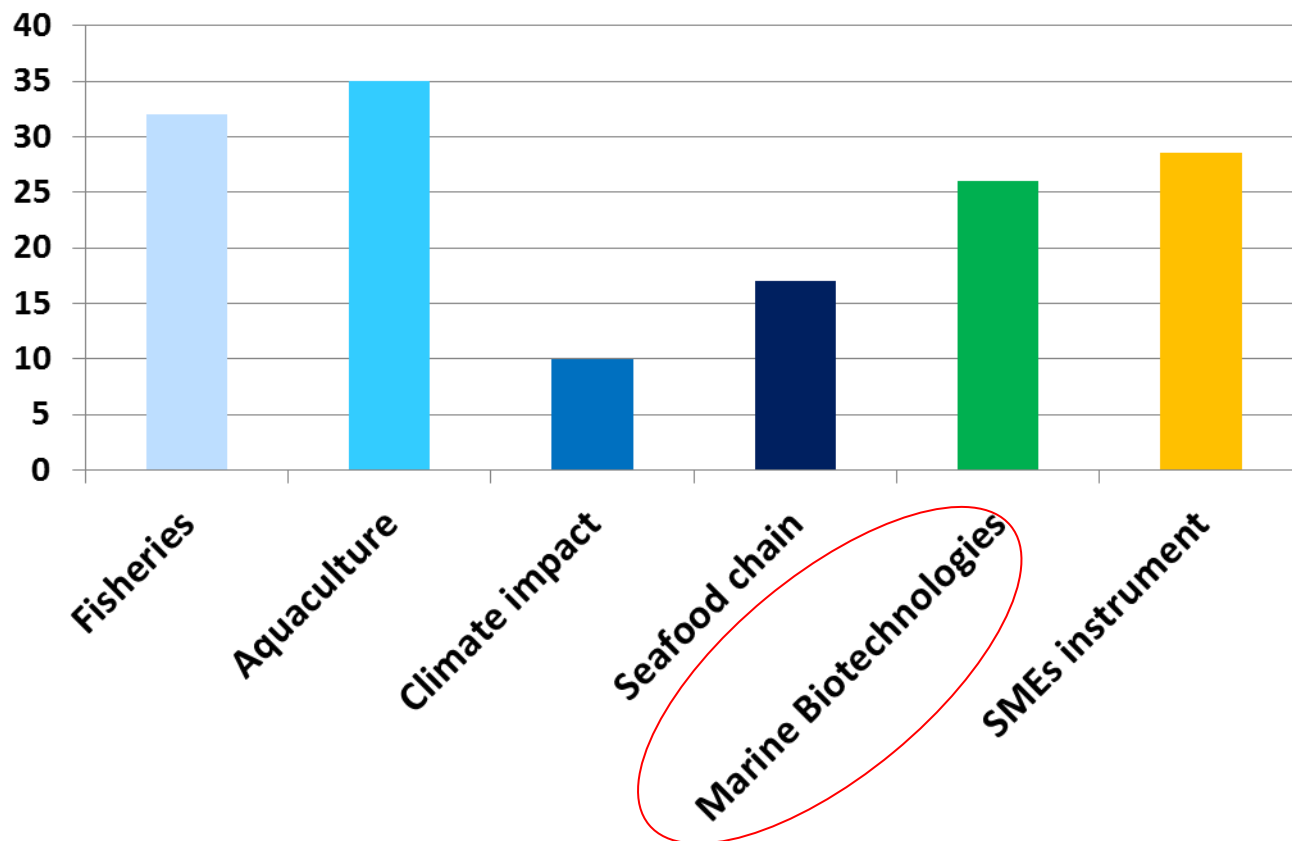
2.3 Aquatic living resources



2014/2017

2014-2015	86
2016-2017	62,5
TOTAL	148,5 M€

2.3 EU Contribution (M€)



The BBI & its aquatic component



BBI JU (June 2014) aims to increase investment in the development of a sustainable bio-based industry sector in Europe.

The Bio-based Industries Consortium (200 companies, tech platforms, etc) includes:

- sectors which traditionally use biological resources as their main feedstock (forest-based sector, starch, sugar, biofuels/bioenergy),
- sectors which are increasing the biomass share in their raw materials portfolio (e.g. chemical industry),
- technology providers (biotechnology) and newly developed bio-industry (e.g. bioplastics),
- biomass suppliers in agricultural and forestry sectors.

The BBI & its aquatic component



Its updated Strategic Innovation and Research Agenda will include the **integration of new marine value chains** (marine biomass from seaweed, microalgae, shellfish aquaculture residues and wastes) **and sustainable development of new marine-derived products.**

The EC contributes with €975 million in cash.

BIC matches the EC contribution in calls for proposals, plus contributes 1.7 billion in additional activities.

In the 2016 call (deadline 8 Sept 2016): 1 RIA on valorisation of aquatic biomass.



CoBioTech aims to better use synergies between mechanisms of biotechnology research funding in Europe, to highlight the benefits of a bio-based economy for society, and to thus maintain and strengthen Europe's global lead in modern biotechnology.

The co-funded call will focus on application-oriented research in:

- a) Synthetic biology approaches to design and construct new biological parts, devices and systems
- b) Systems biology approaches to metabolic engineering and optimisation of biological processes
- c) Identification and use of the metabolic potentials of genomic data
- d) Chemical and biotechnological approaches to transform bio-based molecules into molecules with high added value.



HORIZON 2020

**Thank you for your
attention**

Useful links:

Horizon 2020: www.ec.europa.eu/research/horizon2020

Participant Portal:

<https://ec.europa.eu/research/participants/portal>

Bioeconomy : <http://ec.europa.eu/research/bioeconomy>