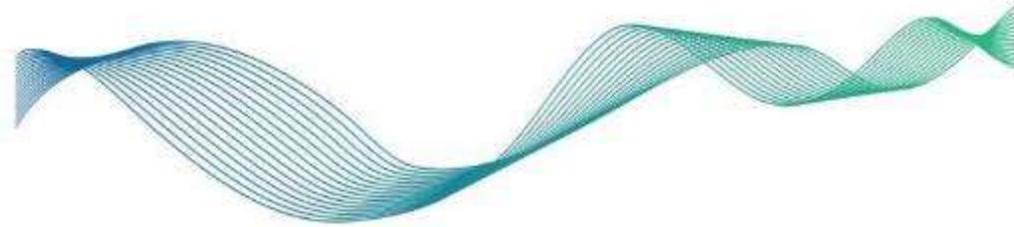


MarineBiotech



Interaction with industry

20 November 2017 in Oslo

Sigurður Björnsson, Rannís

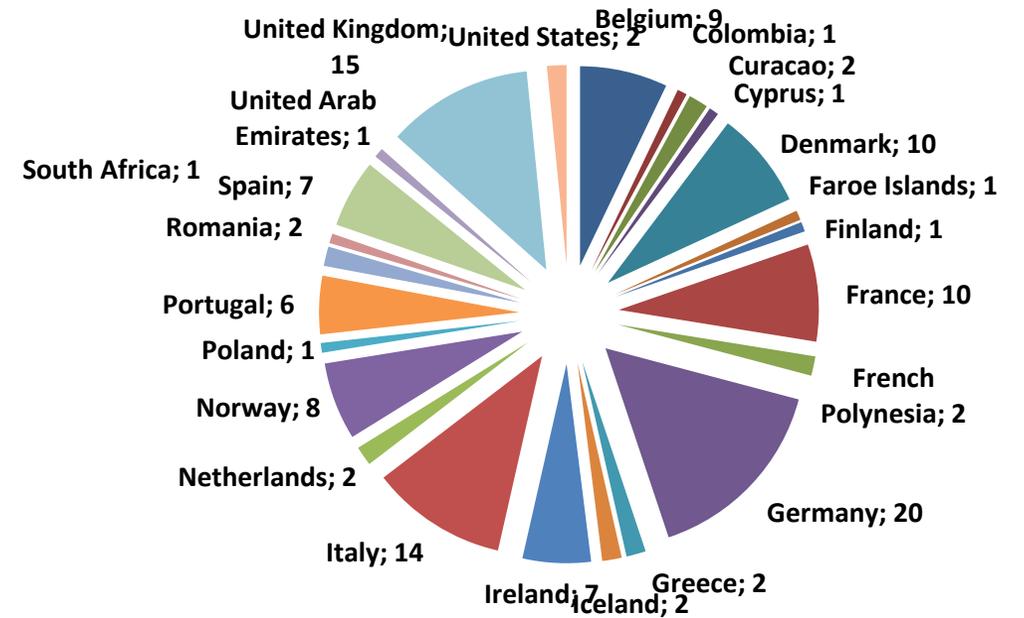


The ERA-MBT activities

- The overall objective of this part of the network is to explore and identify challenges on the road to develop marine biotechnology (MBT) into a sustainable and strong driver supporting industrial development and valorisation in Europe.
- ... in order to strengthen the contribution of marine biotechnology in the development of European bioeconomy.
- ... bringing together the science community, policy makers and industry

Survey conducted 2014

- Mapping of the MBT environment
- Needs for IPR/IPP legislation
- Tech-Transfer practice and policy
- Funding schemes and financing



Respondents – by type

Stakeholder type	Response Percent	Response Count
Larger industrial company (international)	4.7%	6
SME		29
Industry cluster		4
Industry association		2
Industry network		2
Consultant		6
Technology transfer organisation		11
Regional organisation		5
European organisation	5,1%	4
National organisation	28,3%	36
Funding agency/venture capital provider		5
Other (please specify, max. 2000 characters):		49
	answered question	127
	skipped question	5

Private sector about one third and majority identify themselves as SMEs (>80%)

Public sector about two third

Other - Almost all from governmental agencies, research institutes and universities

Overview

- Conclusions from stakeholders survey
 - Some 5% of responses are outside Europe
 - The MBT environment is dominated by national and research institutions
 - The MBT industry is relatively immature, most companies are SMEs
 - About a half of the SMEs produce directly from marine biomass, others are in marine related services
 - The market is mainly food/feed and health/cosmetic

Large industrial companies

- Conclusions from stakeholders survey
 - Raw material:
 - Four out of six base their production on macroalgae
 - Two base their production on fish and bacteria
 - The main market:
 - Food and Feed
 - Pharmaceuticals
 - All regard their market as global



SMEs

- Conclusions from stakeholders survey
 - Raw material:
 - Half of the utilise marine biomass directly
 - The other half is in MBT related services
 - The main market:
 - Cluster of Food and Feed
 - Cluster of Cosmetics, Health and Pharmaceuticals
 - Environment and Monitoring
 - Their market is more regionally based



Conclusion on individual fields

- IPR/IPP
 - “uncertainty in IPR/IPP questions”, “unclear legal aspects”, “fuzzy rules concerning the property of the bio-resources”
- Tech-Transfer
 - Lack of cooperation between academia and industry. Lack of bridge funding
- Main source of funding
 - Domestic Public funding and EU funding
- Main bottlenecks
 - Access to Public funding and EU funding



Projects funded by ERA-MBT

- Participation of industry:

– 1st call	27%	11 out of 40 partners
– 2nd call	15%	6 25
– 3rd call	9%	3 24



- The Marine Biotech Economy is dominated by academia and public research institutes



Future Vision

Building a sustainable approach to ocean exploitation is no easy task. The European Commission and its partners across the continent are responsible to ensure their citizens can benefit from this environmental treasure for generations to come.

Blue Growth Strategy EU Files June 2017

The Global Market

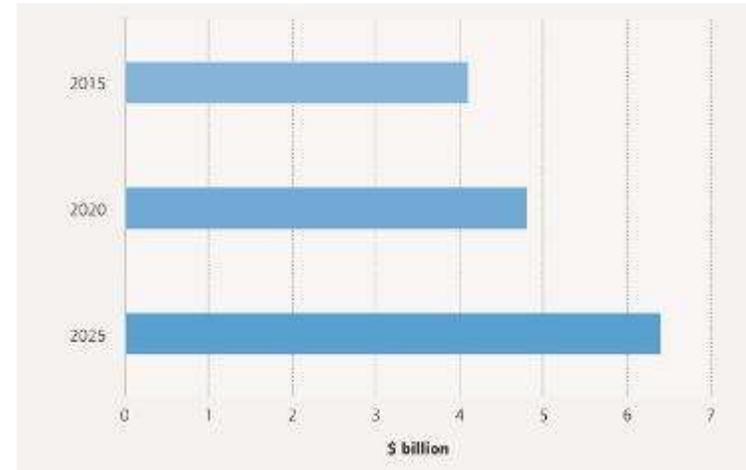
- ... has the potential to reach 6.4 bn US by 2025

(<https://www.smithersrapra.com/news/2015/october/market-for-marine-biotechnology>)

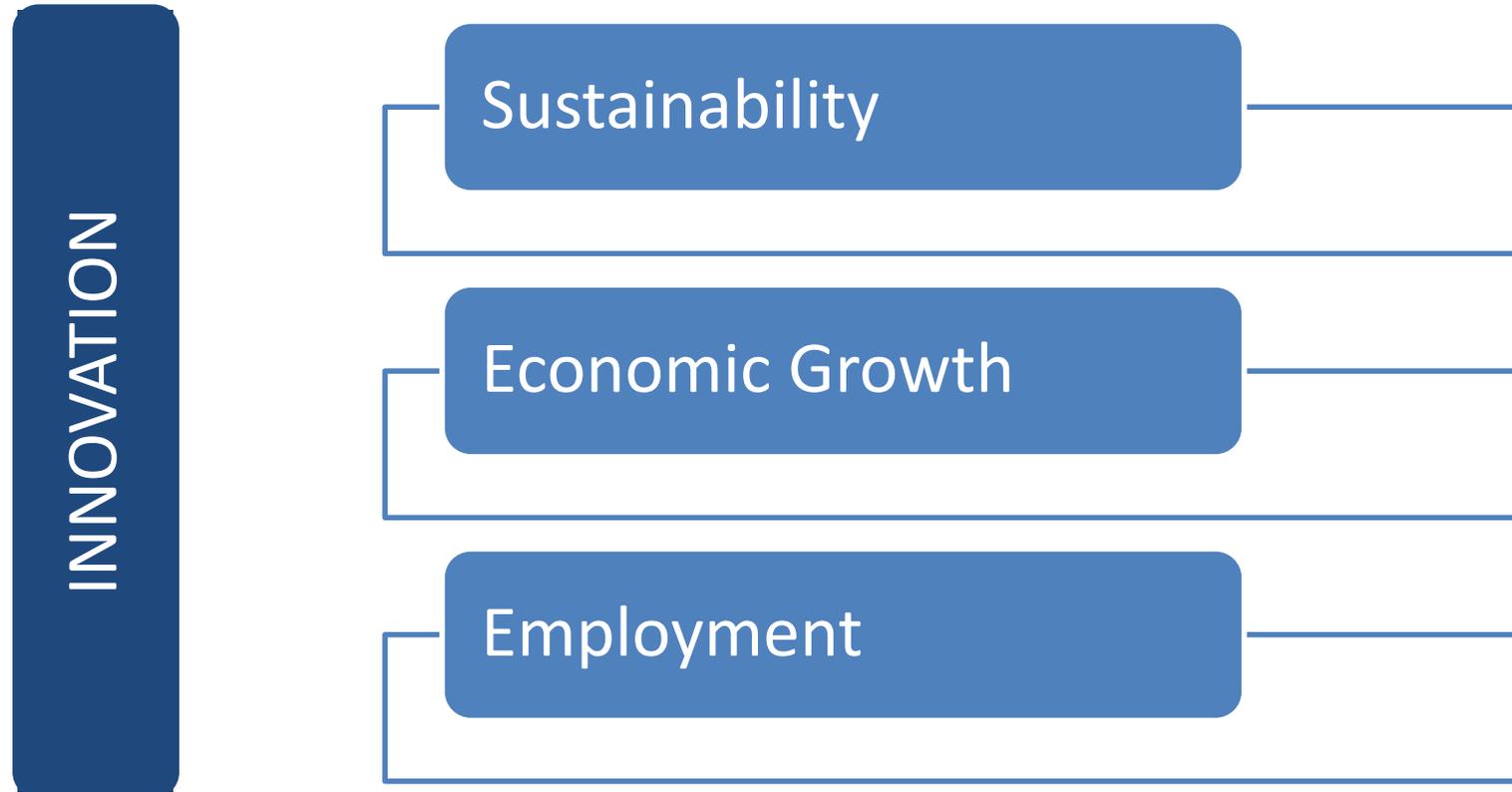
- Revenue from MBT in Europe is predicted to reach:
 - EUR 1 billion by 2020
 - and to create 10k new jobs

(ECORYS and partners, 2014)

- Global Market Value



Blue Growth – the pillars



The Blue Biotechnology

- Some characteristics
 - Relative young sector
 - Access to finance
 - Effort required to reach critical mass and knowledge
 - Insufficient level of cooperation between the research community and the SMEs
 - Key technological gaps
 - Strong synergies with other sectors

A NEW ERA OF BLUE ENLIGHTENMENT

LAUNCHING THE EUROPEAN UNION – BRAZIL – SOUTH AFRICA
ATLANTIC OCEAN RESEARCH AND INNOVATION COOPERATION

12-14 JULY 2017 | LISBON





SUSTAINABLE DEVELOPMENT GOALS



biotech

The opportunities that lies in our oceans will not be realised by themselves. But we can seize the opportunities through cooperation and interaction between government, researchers, commercial actors and industry. Together we can create a bright blue future.

Per Sandberg former Norwegian Minister of Fisheries

