



# **Empower Academia for Knowledge Transfer for Value Creation in the Atlantic Area**

## **International Bootcamp report**

*Partner: FCT/NOVA*

*Date: 10/01/2020*

## Introduction

EMPORIA4KT bootcamp methodology started to first listen the different stakeholders views on how academy-industry-government relate and what are the main obstacles. At the international bootcamp the Project consortium dig deeper on this study by selecting some previous stakeholders that participated in the national Bootcamp to consolidate a transnational strategy to boost opportunities and tackle common needs within the economic sectors of the blue economy.

After the presentation and discussion of the results obtained in the national bootcamps, different groups of stakeholders discussed in more detail the opportunities, needs and barriers to create innovation in their specific areas. At this stage we narrowed down and discussed specific issues in specific areas within the Atlantic Area, as well as build upon the national knowledge and opportunities to propose a European overview and future strategy.

A bottom-up approach was used to dig into more specific issues in specific areas. In a **round 1** of discussion, **Groups divided by Blue Economy Sector** brought together experts operating in similar market sectors. The questionnaire, presented with the results section of this report, was used as guideline for discussion about the needs and opportunities that could be jointly tackled and explored, respectively.

A second rearrangement of the experts' groups occurred, by swapping experts. **Mixed Groups** were formed considering people from different sectors. In this **round 2**, whose results are also presented below, it was performed within groups, a discussion about transversal limitations and potential synergies between sectors.

As a guideline to the preparation of the interview script it were considered the following topics:

- A. Growing/ emerging areas
- B. Opportunities for emerging areas (e.g. collaboration opportunities with mature industries)
- C. Market needs
- D. Policy needs

## ROUND 1

In round 1 participants of EMPORIA4KT International Bootcamp were divided into 3 groups, according to their profile, considering proximity in market sectors of experience and diversity in countries of origin and TH stakeholder profile (industry, academia, government or innovation manager), as presented in the 3 tables presented below.

Table 1 – Group 1 of Stakeholders in round 1 of EMPORIA4KT International Bootcamp

Group 1				
Name	Organization	Country	TH Stakeholder Profile	Background profile
<b>Participants</b>				
Ana Brito e Melo	WaveEC – Offshore Renewables	Portugal	Industry	Ana Brito Melo graduated in 1992 in Civil Engineering at the Instituto Superior Técnico (IST: Technical University of Lisbon) and initiated her carrier in the wave energy field in 1993, when a Portuguese team from IST started building an OWC pilot plant in the Azores, on the neighbouring island of where she was born. In 2000 she concluded her initial research activities on hydrodynamic modelling with a PhD in Mechanical Engineering, with the thesis entitled “Modelling and Design of Oscillating Water Column Devices: Application to the Wave Power Plant, at Pico, Azores”. In 2002 she was invited to be Executive Secretary of the Implementing Agreement on Ocean Energy Systems (OES) of the International Energy Agency, which she has been managing until present. In 2004 she integrated the team of the newly founded non-profit association – the Wave Energy Centre (WavEC), in Lisbon and has been responsible for the coordination work of services and R&D activities. In January 2012 she was appointed Executive Director of the Wave Energy Centre.
Máire Ní Einníú	Údarás na Gaeltachta	Ireland	Government	Accountant with the ACCA Qualification and a Chartered Tax Consultant along with a strong academic background developed through successfully completing a Bachelor of Business (honours) Degree and a Masters of Accounting (MAcc) and most recently a Masters of Economic Science in Natural Resource Policy & Economics at NUI Galway. She currently works for the Semi-State organisation Údarás na Gaeltachta as a project executive dealing with Natural Resource development and in particular the marine sector
Jose Alonso	CEIMAR	Spain	Academia	I am Full Professor in Applied Physics in the University of Cadiz. I teach general Physics in the first course of the Degree in Naval Architecture and Maritime Engineering. My research is focused on Applied Physics comprising numerical modeling and radionuclides (nuclear physics) and numerical modeling and Mathematical Morphology. I have coordinated projects related to offshore windfarms and computation of efforts in complex structures.
João Fernandes	Independent consultant	Portugal	Government	With a marketing background and a professional track record spanning 20 years in entrepreneurship, venture capital, automotive and pharmaceutical sectors, held several management, sales and tech positions in national and multinational companies, and started his first own company in 2007. Pertaining a good level of organizational and innovation awareness and an ability to put together, manage and motivate multi-disciplinary teams, currently heading the coordination of the Portuguese Government’s Entrepreneurship and Innovation Program (Programa +e+i). Holding a Master’s in Pharmaceutical Sciences from the Lisbon University, an MBA in Marketing from the Portuguese Catholic University, he is enrolled at a PhD in Management from ISEG – School of Economics and Management. As the majority of the people born in the 60’s flexibility, freedom and independence, are key positive words disliking rigid work requirements. Preferred leitmotiv - “I won’t be able to retire, because I won’t be able to afford it!”
Fabián Varas	Technological Corporation of Andalusia (CTA)	Spain	Innovation Manager	CTO in CTA MSc in Telecommunications Engineering and on ICT Innovation Management. He also has entrepreneurship education by Stanford University and University of California, Berkeley. Since 2015 he is CTO of CTA, previously, from 2006, he was the ICT Technical Officer. Before CTA he started his career in 2000 at British Telecom where he managed R&D projects and was responsible for transferring results to international technical standards and regulations. Within the ICT sector he has supported a large number of companies in identifying research areas and promoting projects for a number of regional, national and international funding programs
<b>Project Partners</b>				

Sara Reis	Frontier IP	United Kingdom	Partner (FIP)	MODERATOR
Isabel Martín	CENTA	Spain	Partner (CENTA)	NOTE-TAKER
Vasco Barros	Sociedade Portuguesa de Inovação (SPI)	Portugal	Partner (SPI)	NOTE-TAKER
Alain Dinis	Strane Innovation	France	Partner (STRANE)	CONCLUSIONS PRESENTER

Table 2 - Group 2 of Stakeholders in round 1 of EMPORIA4KT International Bootcamp

Group 2				
Name	Organization	Country	TH Stakeholder Profile	Background profile
<b>Participants</b>				
Óscar Noguero	GHENOVA Engineering	Spain	Industry	Head of Operational Innovation in GHENOVA Engineering IQF7 Engineer with more than 10 years of experience in management positions, currently with a business focus after a long career in development and management of multidisciplinary projects, both national and international, in the naval, energy, aeronautical and offshore sectors. Outstanding projects: JP Frigate F105 (Navantia), JP Thermosolar Kaxu 100MW (Abengoa), Hywind (Statoil), EDM Drillship Ondina (Enseada Odebrecht), etc.
Carmen A. Girón	Technological Corporation of Andalusia (CTA)	Spain	Innovation Manager	Consultant in CTA University Degree in Biology with a MSc in Environmental, Industrial and Agrofood Biotechnology. She has developed her university thesis, 2015-2016, in the Ecology Department of the University of Seville, specialising in Ecology and evaluating survival of endangered species in Andalusia. During her MSc thesis, 2017-2018, she worked in the Institute for Agricultural and Fisheries Research and Training (IFAPA) Las Torres, developing Bioeconomy R&D studies in the Agrofood sector. In the middle of 2018 she joined CTA and works as a consultant in the business development department. She works with data bases and develops data mining associated with R&D&I activities.
James Brian SHARPLES	Liverpool combined authority	UK	Government	Government officer working for Liverpool combined authority
Marta Cerejo	NOVA.ID.FCT	Portugal	Innovation Manager	Marta is an Intellectual Property and Technology Transfer Officer, driven by projects that enhance well being, passionate in matching knowledgeable people for establishing successful and fruitful partnerships. With a previous 11-year research career in biotechnology and health sciences, developed at several institutions, national and international, from academic, public and private sectors, Marta takes advantage of her scientific background and industry insights to enable knowledge transfer and bring closer to market added-value technologies. Marta holds a BSc in Biology (2001), MSc in Sciences of Coastal Areas (2006), from Univ. Aveiro and a PhD in Bioengineering, field of drug discovery and development, from FCT NOVA, MIT-Portugal PhD program (2015). Previously Marta has worked at IPMA (Instituto Português do Mar e Atmosfera), at BIOALVO S.A (one stop-shop for natural products, drug discovery & development), and Tübingen University (drug discovery & development).
Majbritt Bolton-Warberg	National University of Ireland, Galway	Ireland	Academia	Research Project Manager, NUI Galway
<b>Project Partners</b>				
Ana Armada Brás	Liverpool John Moores University	UK	Partner (LJMU)	MODERATOR Ana Bras is a Civil Engineer, CEng FICE, with 16 years of experience in R&D and Consultancy on bio-based composites for durability and hygrothermal risks minimisation of retrofitting solutions for RC structures such as maritime. She is a Senior Lecturer (Associate Professor) at the Department of Built Environment at Liverpool John Moores University (UK).

Paula Urze	NOVA School of Science and Engineering	Portugal	Partner (NOVA)	NOTE-TAKER
Mícheál Ó Dubhain	Údarás na Gaeltachta	Ireland	Partner (UnaG)	NOTE-TAKER Business Graduate, currently undertaking a MSc in Business and Information Systems & also Associate Diploma in Community Development Practice and Youth Services. Former Project Executive in a large international cross-border digital fin-tech payments company. More recently and since 2015, Project Executive with Údarás na Gaeltachta, Government Administration (Semi-State).
António Grilo	NOVA School of Science and Engineering	Portugal	Partner (NOVA)	CONCLUSIONS PRESENTER

Table 3 - Group 3 of Stakeholders in round 1 of EMPORIA4KT International Bootcamp

Group 3				
Name	Organization	Country	TH Stakeholder Profile	Background profile
<b>Participants</b>				
Delia Demitriu	Connected Places Catapult	United Kingdom	Innovation Manager	Delia has background in infrastructure related projects, environmental management for business community, policy instruments and decision making process. She has particular interest in climate change related to aviation sector: EU/ETS, offset programmes, carbon footprint and fuel management. Delia was part of a team that won the 2007 Nobel Peace Prize for its work on climate change and is a member of the IPCC Fifth Assessment Report; WG3-Mitigation, Chapter 8-Transport (2010-2014).
Claire Bennett	National University of Ireland, Galway	Ireland	Academia	Research Support Office
Marta Martins	NOVA School of Science and Engineering	Portugal	Academia	Marta Martins is Invited Assistant Professor at DCEA and researcher at the Marine and Environmental Sciences Centre (MARE) and UCIBIO-REQUIMTE, (Dep. Chemistry), FCT NOVA, with a post-doc grant by FCT. She obtained a B.Sc. in Environmental Engineering (2002) at ULHT, a M.Sc. in Ecological Modelling (2007) and a Ph.D. in Environmental Sciences (2014) at FCT NOVA. The main research areas are Environmental Toxicology/Ecotoxicology, Environmental Risk Assessment and the study of the mechanisms and interaction of environmental toxicants on aquatic organisms. She holds technical skills in genotoxicity assessment, histopathological techniques, molecular and biochemical biomarkers, chromatography and mass spectrometry and in vivo and in vitro toxicological bioassays
Laura Valle	Andalusian Agency of Knowledge	Spain	Innovation Manager	Laura Valle Cerezo has been working for AAC since 2003, as Senior Technology Advisor in promotion of technology and knowledge transfer, assessment on IPR to SMEs and R&D Group, promotion of SME involvement in FPs, promotion of innovation and cooperation of Enterprise Europe Network (EEN) in AAC. She is also responsible for EURAXESS in Andalusia, from 2005. Msc in Innovation and Knowledge Management (2008), by Red de Espacios Tecnológicos de Andalucía, RETA, the Escuela Organización Industrial (EOI), and the Instituto Internacional San Telmo. Science and Technology Management Course (2005), by D.G. de Investigación, Tecnología y Empresa. Consejería de Innovación, Ciencia y Empresa. Junta de Andalucía. Course in Creating Technology Base Companies (2003), by Escuela Organización Industrial (EOI) University Expert in Prospective and Technology Management (2002), by University of Seville. Industrial Management Seminar by Faculty of Economic Fontys Hogescholen Eindhoven, Eindhoven (Netherlands) and Course in Industrial Management (2001), by CEA-Confederación de Empresarios de Andalucía Bachelor Degree in Business Management and Administration (2001), by University of Seville

Micheal Cillian Ó Cinneide	Údarás na Gaeltachta	Ireland	Innovation Manager	Doctorate in Business Administration. Former Director of EPA Wexford, Former Director Marine Environment & Food Safety, Marine Institute, First Secretary & Vice Consul Department of Foreign Affairs Ireland
Project Partners				
Ana Sofia Esteves	NOVA School of Science and Engineering	Portugal	Partner (NOVA)	MODERATOR
Juan Vidal	CEIMAR	Spain	Partner (CEIMAR)	NOTE-TAKER Senior Lecturer at the Department of Maritime and Shipbuilding Engineering, Cadiz University Doctor of Marine Sciences, his lines of research are related to applied physical oceanography and numerical models. He is currently technical coordinator of the Campus of international excellence of the Sea
Macarena Ureña	Technological Corporation of Andalusia (CTA)	Spain	Partner (CTA)	NOTE-TAKER
Juliana Monteiro	NOVA.ID.FCT	Portugal	Partner (NOVA)	CONCLUSION PRESENTER

### Questionnaire to round 1 group discussion participants

To promote reflection and ignite discussion, participants were first asked to, individually, fill the questionnaire presented below.

#### 1. In your perspective what means “Create Value”?

#### 2. How the following topics are critical?

Innovate / Develop new solutions

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Differentiate from competitors

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Reducing costs

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Follow regulation guidelines

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Environmental concerns/impact

1	2	3	4	5	6	7
---	---	---	---	---	---	---

3. Discuss/identify what are the most relevant topics for the Group.

4. Having in mind your specific area, please make reference to up to 5 topics that will be **long-term trends and new promising technologies**?

1)

2)

3)

4)

5)

5. Based in your specific area prioritise up to 5 **short-term needs** (e.g. market, technological / R&D, resources, funding or policy needs).

1)

2)

3)

4)

5)

6. What external factors will affect your sector? (E.g. new regulation, competition, BREXIT, climate change)

7. In your sector(s) how R&D were important to the development of new products or processes?

8. To what extent do you think your sector could be **optimised** (e.g. optimised in terms of costs, energy use, response time, etc)

1: not at all to 7: completely

1	2	3	4	5	6	7
---	---	---	---	---	---	---

If you selected a rating of less than 6, please list two reasons on what could be more optimised.

9. Have you been working focused in one specific area vs you touched different areas?

10. To what extent do you think that **synergies** with other areas are relevant to the blue economy.

E.g. Synergies between different activities (e.g. energy efficiency and/or decrease carbon footprint in port, shipping and hinterland transport activities).

1	2	3	4	5	6	7
---	---	---	---	---	---	---

1: not at all to 7: completely

If you selected a rating of less than 6, please list two reasons on what could be more relevant.

11. Which new promising technologies (identified in question 2) could be used or commercialised within already existing markets? And what of them could be used for different sectors in the AA?

12. What do you believe to be the main needs in the markets where you develop your work? (describe 2 to 3 identified needs).

13. Your activities are influenced by market needs?

1: not at all to 7: completely

1	2	3	4	5	6	7
---	---	---	---	---	---	---

14. Should the market needs identified be looked with special attention from government and policy actors? Why? (e.g. due to funding/investment requirements, the potential impact in the environment, the need to support the development of new technological areas, etc)

## Results from round 1 groups discussion

To start the discussion, all participants were asked to define value creation, to check if this concept would follow a consensual interpretation to achieve conclusions about the main goal of this discussion which is to understand how to leverage value creation and innovation within the Blue Economy Sectors generated at Higher Education Institutions.

By doing so, it was established a base line and consensus achieved on the idea that, despite meaning different things to different stakeholders, in general terms, **create value means** to create some kind of impact in society, by solving a specific problem or leveraging on an opportunity. This impact is translated by the participants in economic as well as well-being and other types of value which can be created in the market. The concept of sustainability (in a long-term perspective) was also very much mentioned by the participants, that pointed out its importance for the process of value creation.

Considerations about **critical topics** are a bit different depending on the stakeholder profile (whether they are an innovation manager or any other type of stakeholder working at academia, industry or government. However, Innovation / Development of new solutions and environmental concerns / impact are the two more important topics among all participants. During the discussions within groups it was also clear that impact/relevance should consider the social, environment and business perspectives (sustainability).

Despite the division of groups by area / market of activity it was interesting to see that there was in fact some consensus regarding the **long-term trends and new promising technologies** within the blue economy. Among the most cited topics about trends and new promising technologies it was possible to identify decarbonization, renewable energy (offshore windfarms/ clean energy), big data/ digitalization / robotics, sustainable growth (ex: food production and specialization, desalination / Water access) and other forms of promoting sustainability (e.g. bioresources) and circular economy. Other mentioned trends also included environmental protection, ocean cleaning, hydrogen, integrating the blue economy into the territorial strategy/maritime strategy and circular economy. Participants considered that these new promising technologies could contribute and be used or commercialised, not only in new markets, but also within already existing ones.

Regarding **short-term needs** (e.g. market, technological / R&D, resources, funding or policy needs), participants of the groups identified the following 3 top needs:

- Funding (private investment, sustainable finance (ESG), the importance to fill the gap between public and private investment, funding for pilot projects / scale up and academic tech transfer specific funds);
- Regulations / legislation related with the previous identified trends (e.g. decarbonization, Desalinization, Hydrogen production, food production and specialization, CO2 Accounting systems – e.g. Sea Capture);
- Integrated vision and strategy for the blue economy (better organization of organizations with the same competences, better integration and collaboration among the TH stakeholders (including start-up businesses in the industry profile), R&D&I agenda per stakeholder group and Market driven R&D)

Participants also identified the infrastructure needs to be updated in order to create value and the need to increase the participation and knowledge of society in respect to the existing challenges and general knowledge about research and development activities.

In what regards the **influence of market needs** in the activities of the participants, there was a division in opinions, where for some market needs are very much considered and for others (e.g. academics) market needs are not so determinant and incorporated in the strategy of their activities. Also, participants were divided in relation if market needs should be identified by government and policy actors. While some think that this push by governments should definitely be done to decrease the time of development made by academia and industry and consequent implementation of new technologies, others mentioned that this market needs driven by the government could produce tensions between areas of same importance, such is the example of decarbonization and tourism activities.

Beyond needs it were also identified the **threats (external factors)** for the participants' specific sectors (e.g. new regulation, competition, BREXIT, climate change). Climate Change was undoubtedly the most frequent threat identified for the participants operating within blue economy sectors. Also, Regulations (not only governmental but also internal organizational regulations - e.g. IP policies within academic institutions) and funding were identified not only as a need but as a threat that could put at risk the development and potential positive impact to be created by some sectors within the blue economy. Participants from the UK, but also from other regions, identified Brexit as a threat, especially in what concerns the access to European funding and to a joint strategy of R&D&I, as well as, regarding competitiveness in the international trade.

All these needs and threats related with R&D arose considering that participants considered **R&D as very much important** to the development of new products or processes, as it was shown in the past.

Focusing now in more internal and factors (not only within specific sectors, but also within organisations), all participants in the EMPORIA4KT International Bootcamp, identified that their sectors of activity could be **optimised** (e.g. optimised in terms of costs, energy use, response time, etc).

Considering that the majority of the participants have a working experience where, rather than been focused in a specific area, they have been touching different areas, the existence of **synergies** was very much valued for the impacts that could be created. As examples of areas where synergies between sectors can have major impacts, participants referred to the circular economy, fishing, waste management, hinterland transport activities, ports, tourism, digitalization, ocean planning, energy and climate change combat, which can only be made through a joint effort and action plan.

## ROUND 2

In round 2 participants of EMPORIA4KT International Bootcamp were again divided into 3 groups, according to their profile, considering diversity in market sectors, countries of origin and TH stakeholder profile (industry, academia, government or innovation manager), as presented in the tables presented below.

Table 4 - Group 1 of Stakeholders in round 2 of EMPORIA4KT International Bootcamp

Group 1			
Name	Organization	Country	TH Stakeholder Profile
Ana Brito e Melo	WaveEC – Offshore Renewables	Portugal	Industry
James Brian Sharples	Liverpool combined authority	United Kingdom	Government
Claire Bennett	National University of Ireland, Galway	Ireland	Academia
Carmen A. Girón	Technological Corporation of Andalusia (CTA)	Spain	Innovation Manager
Marta Cerejo	NOVA.ID.FCT	Portugal	Innovation Manager
Project Partners			
Sara Reis	Frontier IP	United Kingdom	Moderator
Isabel Martín	Fundación Centro de las Nuevas Tecnologías del Agua (CENTA)	Spain	Note-taker
Vasco Barros	Sociedade Portuguesa de Inovação (SPI)	Portugal	Conclusions Presenter
Alain Dinis	Strane Innovation	France	Note-taker

Table 5 - Group 2 of Stakeholders in round 2 of EMPORIA4KT International Bootcamp

Group 2			
Name	Organization	Country	TH Stakeholder Profile
Oscar Noguero	GHENOVA Engineering	Spain	Industry
Marta Martins	NOVA School of Science and Engineering	Portugal	Academia
Fabián Varas	Technological Corporation of Andalusia (CTA)	Spain	Innovation Manager
Delia Demitriu	Connected Places Catapult	United Kingdom	Innovation Manager
Máire Ní Einniú	Údarás na Gaeltachta	Ireland	Government
Project Partners			
Ana Armada Brás	Liverpool John Moores University	United Kingdom	Moderator
Mícheál Ó Dubhain	Údarás na Gaeltachta	Ireland	Conclusions Presenter
António Grilo	NOVA School of Science and Engineering	Portugal	Note-taker
Paula Urze	NOVA School of Science and Engineering	Portugal	Note-taker

Table 6 - Group 3 of Stakeholders in round 2 of EMPORIA4KT International Bootcamp

Group 3			
Name	Organization	Country	TH Stakeholder Profile
Micheal Cillian Ó Cinneide	Údarás na Gaeltachta	Ireland	Innovation Manager
Majbritt Bolton-Warberg	National University of Ireland, Galway	Ireland	Academia
João Fernandes	Innovation Consultant	Portugal	Government
Jose Alonso	CEIMAR	Spain	Academia
Laura Valle	Andalusian Agency of Knowledge	Spain	Innovation Manager
Project Partners			

This project has received funding from the European Union's Interreg Atlantic Area programme through the European Regional Development Fund, project code: EAPA\_842/2018. This output reflects only the author's view and the European Union cannot be held responsible for any use that may be made of the information contained therein.

Ana Sofia Esteves	NOVA School of Science and Engineering	Portugal	Moderator
Juan Vidal	CEIMAR	Spain	Note-taker
Macarena Ureña	Technological Corporation of Andalusia (CTA)	Spain	Conclusions Presenter
Juliana Monteiro	NOVA.ID.FCT	Portugal	Note-taker

### Questionnaire to round 2 group discussion participants

To promote reflection and ignite discussion, participants were asked to, individually, ready the questionnaire presented below, and write down some ideas to be discussed within the groups.

1. The interference of policy regulators limits the development of your sector(s)? I.e. is regulation an obstacle?
2. The interference of policy regulators boosts positively your sector(s)?
3. Please indicate with yes or no if your policy making process takes into account the societal needs from multiple groups of stakeholders (e.g. public, industry, NGOs)?  
  
If **yes**, what is/are the measure(s) to ensure its success?
4. From your experience what were the types of public policies that supported collaborative innovation initiatives between academia and the private sector?
5. What would be your advice on initiatives that would promote blue economy sector(s)?
6. How scientific-technological entrepreneurship can be effective in your sector(s)? How can it be strengthened as an instrument to break the gap between research and commercialization?
7. What are the main barriers to public policies to promote the Blue Economy?
8. Does the academy and industry play an important role in policies and programmes for funding innovation initiatives?
9. How can research results developed in the industry and academia be used for evidence-based policy making?
10. What do you think are the main barriers to cooperation between academia and industry in this type of initiatives? how would you solve them?
11. Do you know about any public-private collaboration initiative in your region that promotes the execution and investment in R&D&I projects?
12. How do you think the results of innovative initiatives can contribute to the design of new policies to support R&D&I in the Blue Economy sector?

## Results from round 2 groups discussion

On round 2, EMPORIA4KT consortium was looking for an informed discussion and opinions about policy-related and regulation needs, in order to increase the competitiveness and impact created by the sectors belonging to the blue economy.

All participants see policy regulators and **regulations as an obstacle** rather than an helpful hand which should boots positively their sectors. This obstacle created by regulations, and in some cases an absence of regulations, is considered to be as very critical to the development of the sectors and the reasons behind it can include a lack of knowledge among policy making in what regards the specificities, requirements and limitations of the sectors, as well as the speed of actualization of policies and regulations that is considered not to be as fast as industry needs and transformations. Participants consider that policy making actors are not so well informed about some specific sectors, what has huge negative impacts to these activities, and it is not clear for the participants that policy making process is actually **taking into account the societal needs from multiple groups of stakeholders** (e.g. academia, industry, NGOs, etc). However, participants also aware us to the difficulty to find a balance between the different perspectives and needs of the various stakeholders.

However, there are also good initiatives in terms of public policies that support collaborative innovation activities between academia and the private sector. For this, participants identified the following main initiatives / public policies:

- Co-promotion funding (academia and industry)
- Interface centres
- Colabs
- EIT networks
- EEN

To improve public policies and initiatives that would promote and benefit blue economy sector(s), participants in the international bootcamp are asking for more long-terms initiatives, a better definition of the long-term strategic sectors, the integration of regional needs at a national level, as well as a higher involvement of academy and industry in the design of public policies and funding instruments.

Participants also ask for more incentives to scientific-technological entrepreneurship related initiatives and funding, which could be used to break the gap between research and commercialization.

In order to promote the participation of academia and industry in the public policies design, and have research results (developed industry and academia) informing and being used for evidence-based policy making, participants of the international bootcamp suggest the development of pilot plants, interface agents, policies and other interface entities and find ways how to align the different stakeholders' motivations and procedures for collaboration. It would also be important to establish and disclose the correct KPI to assess value creation and impact, and promote a better use and implementation of EU projects results.