

**European
Maritime
Day**

European Maritime Day

18-19 May 2016

Turku, Finland



Introduction

Blue growth is here to stay, concluded more than 1100 marine and maritime economy stakeholders, gathered in Turku, Finland on 18th and 19th May 2016 for the 9th edition of the European Maritime Day. Since the launch of the Blue Growth Strategy by DG MARE in 2012, significant achievements have been made and the blue economy has taken great strides towards increasing employment -and growth, while adding value in advancing sustainability. The boom in offshore wind energy, which is currently employing more than 75,000 Europeans, is but one example of this.

“The sustainable marine economy is not a dream, it is a reality”, said Commissioner Karmenu Vella in the Opening Session of the conference, continuing that “across Europe, people are working hard on innovations to push boundaries.” The importance of investments to further develop the sector was highlighted by European Commission Vice-President Jyrki Katainen, listing a number of blue economy projects already selected for EFSI support.

“ *The **sustainable marine economy** is not a dream, it is a **reality*** ”

Karmenu Vella
*European Commissioner for Environment,
Maritime Affairs and Fisheries*



“ *The **sustainable technologies** that we have developed will find **global markets*** ”

Jyrki Katainen
European Commission Vice President

Workshops

As part of the European Maritime Days, **more than 20 stakeholder workshops were held to discuss a wide range of topics including innovation, smart specialisation and sustainable solutions for blue growth, the potential and challenges for specific sectors** such as cruise tourism and ocean energy, clean shipping and environmental technologies, the role of ocean governance, Maritime Spatial Planning, and opportunities for multi-use of space, the importance of maritime/marine data and knowledge, and marine litter, the circular economy and other aspects of sustainability, the importance of digitalization and connectivity, as well as the role of business actors including SMEs and clusters.



The workshops were initiated by stakeholders in an interactive set-up. Industries and clusters shared their experiences and challenges, environmental NGOs presented initiatives which were undertaken, and local and regional authorities discussed how to improve cooperation in order to co-create new value chains. The Logomo conference centre in Turku, a remodelled former train factory, provided a congenial atmosphere for open dialogue and lively exchange of lessons learnt and ideas to progress forward.

A clear signal emerging from the workshops is that **there is a need to also look beyond Europe**. Many of the challenges of European seas are global (e.g. global warming and rising sea levels). We need to better understand how these trends evolve and what their impact is on our seas and coasts – for which we need improved data. There is a clear benefit in focusing on

valuable European experiences for addressing such challenges and exchanging these outcomes with others, in combination with exploring global market opportunities. Larger companies are often well-placed to lead on such exports, but SMEs can be engaged through their value chains. Regions and maritime clusters can also provide assistance in this area.

“ Waste is too valuable to be wasted ”

Veronika Mikos, Healthy Seas Initiative



Thematic sessions

I. Investing in Blue Growth

This session discussed:

1. What strategies can clusters apply to drive the blue economy ahead?
2. How to enhance the effective use of key enabling technologies?
3. What potential does digitalisation offer for the maritime economy?

This session shared experiences from a range of clusters from across Europe. This was done not only by highlighting the successes achieved, but in particular by means of explaining **the roles that different regional cluster organisations have played and the challenges they have faced while promoting blue growth:**

In Flanders, for example, it has shown to be crucial to take a forward-looking and trend spotting role that goes beyond sector specific developments, as well as serving to feed cross-fertilisation across the cluster.

In Western Finland, holding meetings in-person amongst stakeholders involved in blue growth is already seen as highly valuable for exchanging ideas and further developing trust, a basis for long term cooperation. In addition, this cluster stressed the need for effective data and highlighted the opportunity of the Baltics to function as the Arctic test bed.

For the Submariner network in the Baltic Sea Region, a key role lies in bringing together developers, investors and suppliers in order to develop good ideas to full market stage products.



“*There is no lack of **money**, but **innovators need help** to get access to it*”

Pierre Erwes, *Chairman BioMarine International Clusters Association*

Thematic sessions

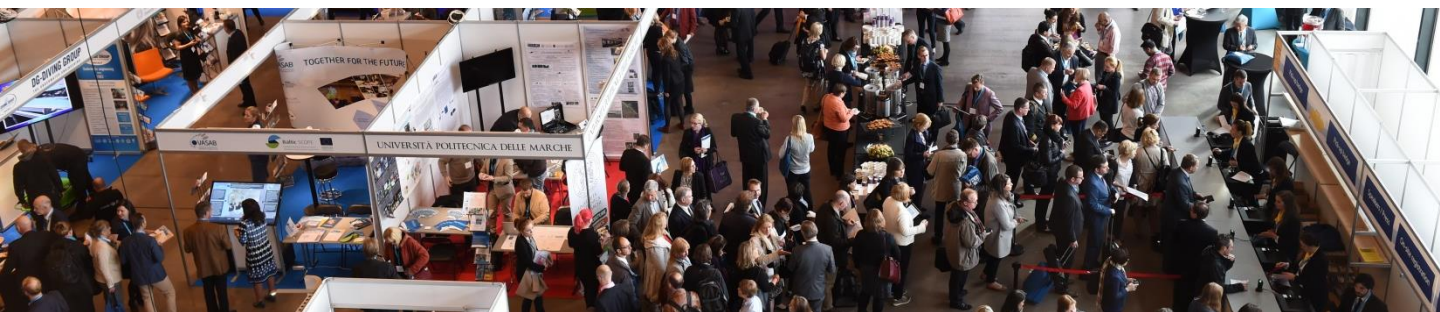
As a final example from this session, it was noted that regional cluster organisations of the North Sea benefit from exchanging experiences with other (non-maritime) clusters in the sea basin, resulting in strengthened bonding between maritime and non-maritime industries in the region. All examples displayed the need for an active cluster management or lead organisation investing in seeding and feeding the cluster activities to achieve results.

The panel discussion concluded that rather than an organisation, a cluster is to act as a service, to facilitate access, open doors and help drive ideas. In order for this to happen, critical mass is required, followed by the importance of public support and steering, but most essential is the industry lead. **Leadership is key!**

It was also concluded that enabling and disruptive technologies will drive the next revolution in the blue economy. The potential of bioplastics to provide 20% of all plastic demand is just one example for this. **Key enabling technologies (KETS) will drive change across value chains, transform entire industries and enhance global competitiveness.** Above this, digitalisation was identified as an essential enabler that will transform most traditional maritime businesses in disruptive ways and ways we cannot foresee.

Three key actions were recommended to boost investments in blue growth:

- (Maritime and marine) **clusters should be supported but also strengthened.** They should really focus on driving transitions to new activities and foster access to investment.
- **KETS are essential** in this aspect. Investment in new applications and demonstrators needs to be part of maritime smart specialisation. Forget about the specialisation of industry. Everything can become blue!
- **Digitalisation is in the DNA of blue growth.** It is not a choice, it is mandatory. It needs to be comprehensively used to rethink services and optimize the total value chain.



Thematic sessions

II Improving ocean governance

The need for better governance of the oceans as a prerequisite for sustainable blue growth was raised within many workshop discussions as well as in debates in the leadership panels. In a dedicated session on how to improve governance, viewpoints from industry, civil society and science were matched with actions already undertaken by governments. Legislation was advocated.



Reverting back to the Law of the Seas and Mare Librum dating back to the 17th century, **the value of EU actions in terms of setting MSFD and MSP directives and calling for stakeholder engagement were highly valued.** However, participants concluded that the current system for ocean governance is fragmented and complex at several levels. UNEP programme officer Takehiro Nakamura advised that coordination and cooperation should be possible using the Sustainable Development Goals (SDGs), identifying specific objectives and decisions to be made. Particular concerns were raised over the governance in Areas Beyond National Jurisdiction, where flag states and registered owner states do have responsibilities, and where EU industry is having current stakes (shipping, fisheries) as well as potential future opportunities such as deep sea mining, a field surrounded by concerns of many over its ecological impacts. A push for implementing and enforcing existing legislation was advocated.

*“Modern ocean governance will be effective only if the **business community** is involved”*

Christine Valentin, Chief Operating Officer, World Ocean Council



Thematic sessions



Donné Slangen, *Director of Spatial Planning, Ministry of Infrastructure & Environment, The Netherlands*

“ *We need data. But a lack of data should not be an excuse for inaction* ”

sharing. And as space is not unlimited, ~~multiple~~ **alternatives** should be considered more carefully. As one participant stated, **“Co-use of space should be the future default”**.

For a further advancement of ocean governance, all stakeholders should participate, and in particular business/industry and civil society (consumers) should play an enhanced role. The need for effective data on the seas was repeatedly stressed, and at the same time participants agreed that a lack of data should not be an excuse for a lack of policy/governance decision-making. Rather, they signalled the joint responsibility of government, business and civil society alike in data

Three actions to strengthen ocean governance identified by the participants are:

- **Better implementation and enforcement** of already existing international, regional and national regulations and commitments. Within these, national, business and civil society targets and indicators will/could be set and monitored.
- **Identify and build on existing mechanisms and partnerships for SDGs** encompassing three pillars of sustainable development and considering land-ocean interaction.
- Marine spatial planning will function to involve various stakeholders and mobilise un-used and create data/information for cross sectoral policy decisions.



Thematic sessions

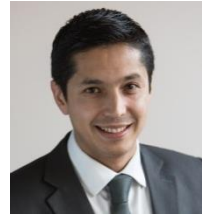
III Boosting skills development

A key question which was raised was how to reform the education system in such a way that it shapes the mind-sets of the youth towards future employment. The challenge here is that while we know what skills we lack today, we do not know what the specific skills demand for the future will look like.

One area that was identified was ICT and managing big data. Stakeholders shared the opinion that for a robust and needs-focused education system, continuous engagement between business, science and education is necessary and should take structural forms. For innovation in the blue economy to be truly effective, it needs to be accompanied by targeted investments in training and skills development in both traditional and emerging sectors.

And finally, a blue career should be effectively promoted as the opportunities of the blue economy are not yet well-known among young students. The **potential of female workers**, currently underused, requires additional attention.

Iván Pineda, Director
of Public Affairs,
WindEurope



“ How many of us have learnt coding? Our children will need to learn it ”



Tim Cornelius, CEO
Atlantis Resources Ltd
& Chairman of the
Meygen project

“ Females make better engineers.
And they certainly make **better decisions** ”

To bridge the gap between education and application, the need for structural collaboration but also the use of test-beds for educational purposes was raised. In order to achieve this, there was a call for

- Increased commitment from industry, including funding.
- Learning from other industries, not least the ICT sector on how to gather and manage big data.
- Boosting collaboration within and between clusters to enable a triple-helix.
- Management skills important for SME's.

Thematic sessions

IV Harnessing clean energy

The energy potential of the ocean is massive, with sea motion containing 10 times higher energy density than wind or sun. In this session, leading industry stakeholders shared examples of technology progress and deployment and discussed the challenges they are currently facing. **The ocean energy sector needs to further develop its reputation in dealing with harsh marine environments while at the same time deliver reliable returns so as to attract investors.** Meanwhile, impacts on local marine eco-systems are to be further investigated. If successfully moving to full deployment, however, a massive market is seen, including significant export opportunities with forecasts for a 700 GW market by 2050.

To achieve this, three things were identified as critical:

- **Access to private financing.** This has shown to be difficult for first of a kind (emerging) technologies.
- **De-risking of projects** throughout technology development (by public sector) is key .
- **A stable regulatory environment** is indispensable for facilitating continued investment.

“ We have great **indigenous resources**, not only the wave or tidal power, but also the **people**: skilled, motivated, pushing science and technology. We have **global export potential** if we use these assets ”



Sue Barr, External affairs manager, OpenHydro, Ireland

Thematic sessions

V Facilitating joint action

In this session, the needs and proposed solutions identified in all previous thematic sessions and in various workshops were brought together, as **joint action is broadly seen as an important strategy for success**. It can take a variety of forms, including the cooperation in clusters as outlined in the first thematic session, but also in achieving higher levels of ocean governance among the EU, its Member States and other nations around the world as highlighted in the session on ocean governance. The cooperation between industry, science and education is a third main area of joint action, while the collection and sharing of data between stakeholders is seen as key to connect geographically, thematically and between blue sectors. The use of horizontal skills and technologies, including ICT, and learning from land-based experiences, is another area.



Jan Larosse, Senior Policy Analyst, Directorate General for Regional and Urban Policy, European Commission

“ The EU is the glue ”

Key lessons from the discussion are the need to connect, to align and to commit, by using the complexity and investing in capacity for BG partnerships to deliver.

- **Connect:** instruments for co-creation, for instance to create dynamic cells that are connected to Sea Basin Strategies and that can leverage 'crazy ideas' from SMEs and others. Road mapping, value chain & capability mapping may be supportive vehicles to this.
- **Align:** between EU-level, regional and industry strategies, in order to avoid duplication and to address fragmentation. The important role of cluster organisations and of smart specialisation is already highlighted above. Would perhaps a Blue Growth SSP, a Blue KIC or a Blue EIP be helpful to this? In any case a new value chain approach with a strong policy-research interaction is advocated.
- **Commit:** joint vision, increased motivation & incentives require leadership and determination, for which the EC can act as a 'glue', supporting piloting and demonstration.

Leadership exchange sessions

Vice-Admiral Mark Mellet, Chief of staff of the Irish Defence Forces, set the scene in his keynote speech. He gave a broad overview of the maritime economy and maritime governance, dating back to 1609 with the Mare Librum that was the forerunner to the Law of the Seas Convention now guiding much of current maritime activities. Governance, however, goes beyond just that. As Mellet noted, it is an interplay between governments and law, institutions, civil society and industry, and it needs to adapt to changes in how the seas are being used. Especially taking stock of the concerns over the World's environment that was initiated by the Brundtland report in 1987 and now reflected in the United Nations' 17 Sustainable Development Goals, and learning of past experiences, getting the governance right becomes crucial.

“Day to day threats to the sea are primarily anthropogenic”, he said. He also explained that **external factors like geopolitics, security and migration are affecting the blue economy** and thus need a response from ocean governance. This also offers opportunities for the blue economy, building on maritime cluster strengths in places like Cork and next years' European Maritime Day host Poole, to name a few. The address of Vice-Admiral Mellett served as a backdrop to an inspiring debate during the first 'Leadership Exchange' debate, in which he highlighted the need for international governance for viable and long-lasting blue growth.



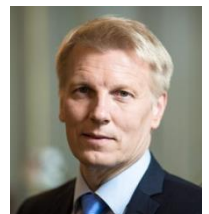
“*The obligation of **states to protect and preserve the marine environment is unlimited in geographical scope***”

Mark Mellett, Vice Admiral, Chief of Staff, Defense Forces Ireland,
Co-founder Irish Maritime Research Cluster

“How to marry sustainability and economic growth?” asked moderator Karen Coleman to the panel. This is not a trade-off, said Commissioner Vella, but more along the lines of integration. Indeed, Finland's Environment Minister Kimo Tillikanen, noted that ‘we should be boosting the economy by making better things for the environment’. Concerns over the environmental impacts of the cruise sector or of aquaculture, among others, were reiterated as areas where policy intervention would be necessary for achieving such integration.

“*We should be **boosting the economy by making better things for the environment***”

Kimo Tillikanen, Minister of Agriculture & Environment, Finland



Leadership exchange sessions

Moreover, the importance of the oceans as CO2 sinks and as an oxygen source cannot be underestimated. As Minister Tillikanen mentioned, although the atmosphere above the sea is the same as the one above the land, significant regulations have been put in place where it comes to the land, while at sea this is much less the case.



Lasse Gustavson,
*Executive Director
Europe, Oceana*

“Healthy marine eco systems are the foundation of all we do”

To enable sustainable blue growth, action should occur on the ground, by mobilising bottom-up initiatives. As President of the Committee of the Regions, Markku Markkula said, “Jobs will come from local activities.” The environmental dimension was taken centrally in many of the leaders’ interventions, particularly because “healthy marine eco-systems are the foundation of all that we do”, as stated by Lasse Gustavson, Oceana’s Executive Director for Europe. Being at the forefront in sustainable operations also provides Europe with the chance to remain ahead and export its strengths, since, as CEO of Meyer shipyards Bernard Meyer noted: “the ocean is our market”.



Bernard Meyer, *CEO
Meyer Shipyards and
president of CESA*

“Shipyards are working hard to improve the safety of cruise vessels. It is because **the ocean is our market** that our ships must be clean and safe”

In order to have local actions flourish, effective ocean governance is crucial. **Policy strategies and legislation initiated at the EU level are important contributors** to streamlining the interplay between governments, industry and other relevant stakeholders. MEP Gesine Meissner added to this that “Maritime Spatial Planning is an important tool.” Besides more firm implementation and enforcement of existing rules, the EU can be – and already is – pushing further advancement at international level. Commissioner Vella referred to a G7 environment ministers meeting earlier in the week where he advocated global action.



Gesine Meissner, *MEP,
Chair Intergroup Seas,
Rivers, Islands and
Coastal Areas*

“It is important that different sectors work together. **Maritime Spatial Planning is the right way forward**”

Leadership exchange sessions



João Aguiar Machado,
*Director General,
Directorate General for
Maritime Affairs and
Fisheries, European
Commission*

“ *Clusters and other networks and centres of excellence are important to connect actors, drive transitions to new activities and foster access to investment* ”

A cross-cutting issue touching upon all challenges for integrating economy and sustainability is the need for skills and data. While the amount of data grows rapidly, a coordinated exchange is lacking and data access restrictions hamper full use of the data potential. The lack of data hampers the development of sustainable approaches.

As Commissioner Vella mentioned, **“data sharing is as important as data gathering.”**

On the second day, findings were discussed and reported back to a second 'Leadership Exchange' panel involving, in addition to the European Commission, representation from Member States and regional governments, industry, civil society and European Parliament.



Concluding messages

Key messages emerging from the intensive 2-days discussions will inform the EU's future blue growth policy and actions :

- Activities of maritime/marine clusters should be supported but also **strengthened. Clusters should focus on driving transitions** to new activities. They should also foster access to investment connecting valuable ideas – from SMEs and others – to industry partners and finance providers.
- **Digitalisation and Key Enabling Technologies are part of the blue growth story.** They need to be comprehensively integrated to rethink services and optimise the total value chain. Investment in new industrial applications of smart and sustainable solutions and related demonstration projects needs to be part of maritime smart specialisation across different value chains. **Everything can become blue!**
- Sectors such as ocean energy provide massive opportunities for growth, jobs and global environmental gains. The **Ocean Energy story shows how important it is to prioritise strategic and long-term investments** that provide returns not only in economic terms but also in terms of innovation, climate and environmental objectives.
- **Access to finance continues to be a challenge across the board.** Policy makers have an important responsibility to strengthen risk guarantees, remove bureaucracy and help with scaling up new technology and applications. European Investment platforms could be of help for smaller investments in different thematic areas and should be actively pursued.
- Action across regions has a huge role to play in boosting blue growth. The most advanced of regions are systematically developing their transnational partnerships to maximise their potential and bundle strengths. This **sharing and cooperation could be further facilitated through wider blue growth platforms** to turn the ambitions of these actors into concrete and joint investments.
- **Developing skills is critical** for reaping the benefits of our investments into innovation and infrastructure and for strengthening the blue economy. This is challenged by the fact that to some extent we do not know what exactly future needs will be, so it is important to also educate for the 'unknown'.
- It is essential to remember that **the skills gap in the maritime economy is not only qualitative, but also quantitative.** Maritime careers will attract more young talent if they enable them to see their future not only as maritime professionals in a purely technical sense, but also as stewards of the oceans, which should be emphasised in skills-related initiatives.

Concluding messages

- We can only succeed with a strong and reliable international ocean governance system, for which **intensive cooperation and stronger implementation and global enforcement is needed**. The EU should play a leading role on this. Litter and plastics as symbols for oceans under pressure are a case in point: this problem cannot be solved without the engagement of all those who have an interest.

During the conference, it was emphasised by many that economic growth and sustainability are not tradable, but they do go hand in hand. Integration of the two, through innovation and effective ocean governance, but also through having clear sustainability targets and buy-in from industry, as well as global enforcement of high environmental standards, will be the key to achieving healthy and prosperous oceans. And, as one participant stated, “the more diverse, the more effective the blue economy can be”.

“ Now we need to **move to the next level**, and encourage blue growth more systematically ”

Karmenu Vella
European Commissioner for Environment,
Maritime Affairs and Fisheries

