

# *Collaboration among blue economy sectors for the promotion of sustainable aquaculture*

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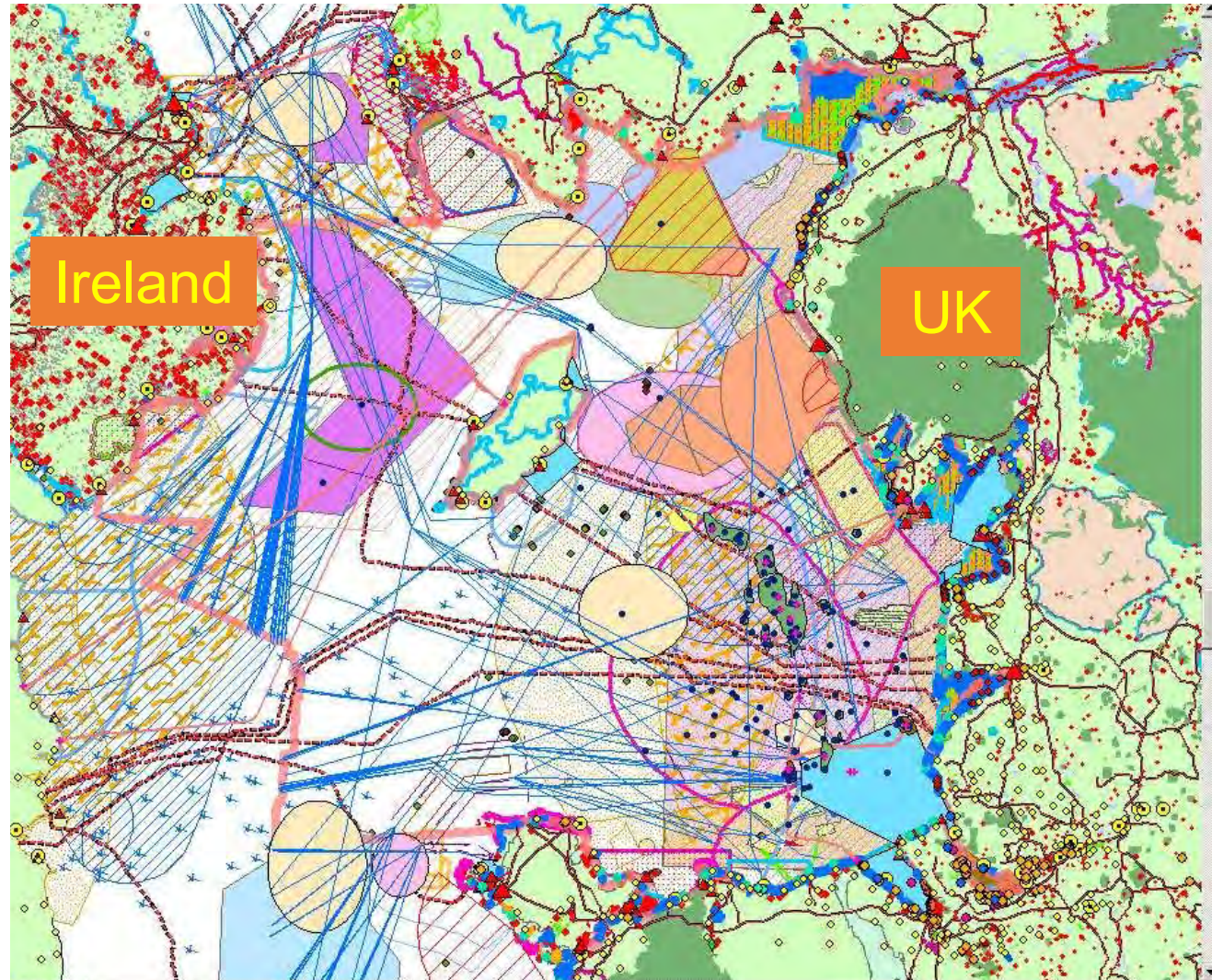


The International Business Alliance  
for Corporate Ocean Responsibility

**WOC – the Global “Blue Economy” Business Organization**

# The Sea is Becoming Increasingly Crowded

- Tourism
- Oil & gas
- Coastal defence
- Ports & navigation
- Military activities
- Culture
- Conservation
- Dredging & disposal



- Submarine cables
- Fishing
- Renewable energy
- Marine recreation
- Mineral extraction
- Mariculture



# Ocean Uses are Growing

- Cruise and coastal tourism
- Shipping
- Mariculture/Aquaculture
- Offshore oil and gas
- Mining / Seabed mining
- Fisheries
- Dredging
- Submarine cables/pipelines
- Offshore wind energy
- Wave/tidal energy
- Ports/marinas
- Recreational boating/use
- Desalination
- Navy/military use
- Carbon sequestration

• Diverse 'ecosystem'  
of support sectors

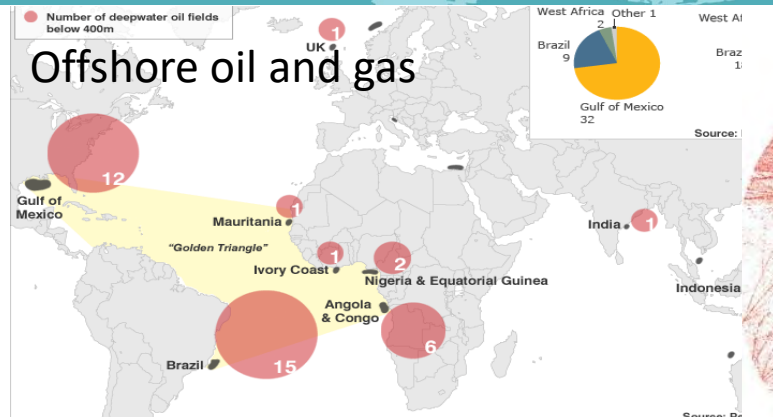
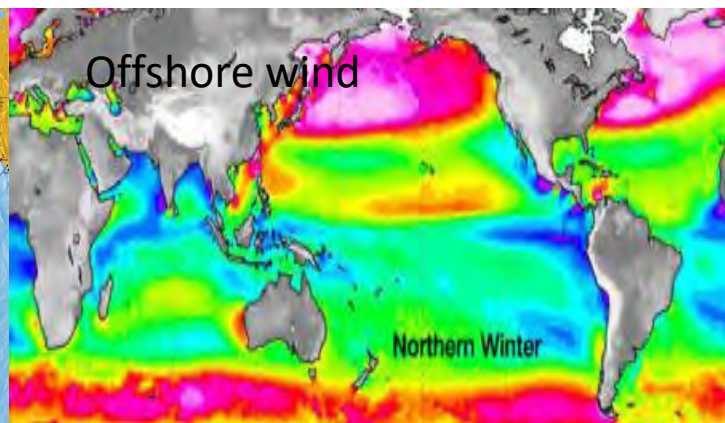
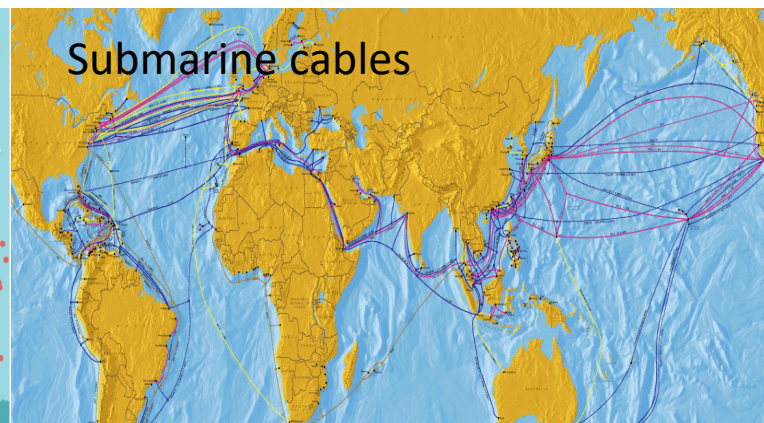
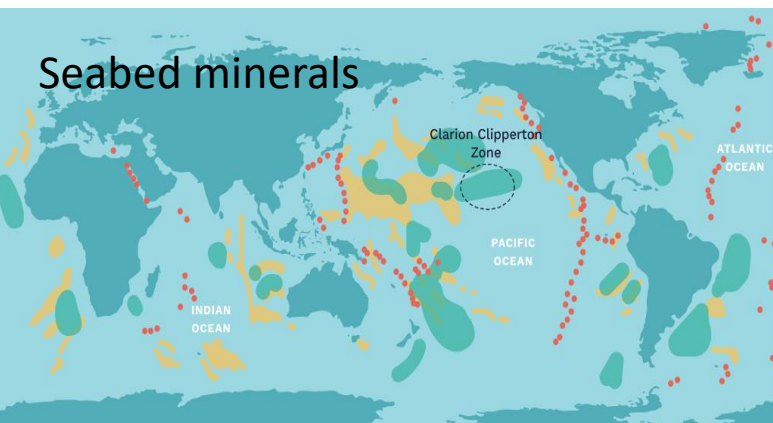
## Expanding

- Kinds of use
- Levels of activity
  - Duration
  - Intensity
  - Frequency
- Location of activity
  - Geographical Extent
  - Frequency
- Finance/Investment
- Insurance
- Maritime Legal

# Cross sectoral Impacts between Sectors



International Business Alliance  
Corporate Ocean Responsibility



# New Risks / Opportunities for Ocean Industries



## Precautionary Approach

- + Marine Protected Areas

- + Ecosystem Based Management

- + Marine Spatial Planning/Ocean Zoning

- + Marine Biodiversity/ Marine Mammal Concerns

- + High Seas/Deep Seabed Concerns

- + Ocean Governance Changes

- + Sustainable Development Goals (SDGs)

- + Climate Change/Sea Level Rise

- + Plastics

= an increasingly complex and challenging business environment for ocean industries



# World Ocean Council (WOC)



## International, Cross-Sectoral Business Leadership Alliance

- **Bringing ocean industries together**, e.g. shipping, cruise tourism, fisheries, aquaculture, offshore renewables, oil/gas, investment, etc.
- **Catalyzing private sector leadership, collaboration and action in:**
  - Advancing “Corporate Ocean Responsibility”
  - Communicating responsible ocean industry/economy
- **75+ members globally; 100’s of actively engaged companies; 34,000+ in global network**
- Research, scientific and academic institution members as well

**Goal:** Healthy, productive global ocean and its sustainable use and stewardship by responsible ocean business community

## **Creating business value for responsible companies**

- Access and social license for responsible ocean use
- Synergies and economies of scale in addressing issues
- Stability and predictability in ocean operations

# WOC: Industry Leadership, Collaboration, Action



## Cross-Cutting Framework for Leadership, Collaboration and Action:

### **Sustainable Development Goals (SDGs)**

- Coordinated, proactive business community efforts to develop ocean industry SDG targets and indicators

### **Ocean Investment Platform**

- A forum for industries, innovators, investors to accelerate investment in ocean sustainable development

### **Young Ocean Professionals Network**

- Bringing together future leaders in Corporate Ocean Responsibility from across the sectors worldwide

### **Regional Ocean Industry Leadership and Collaboration**

- Arctic, Mediterranean, W. Indian Ocean, etc.

### **Sustainable Ocean Summit (SOS)**

- The only annual global, multi-industry gathering developed by and for the business community, focused on sustainable development  
(8th SOS, Online, 9-11 Dec, 2020)



# WOC Programs: Priority Areas for Action

- **Improving Ocean Governance, Policy and Planning**
  - UNCLOS/BBNJ, UNFCCC, SDGs, Convention on Biological Diversity ...
  - Marine Spatial Planning
    - Inter-industry Conflicts/Synergies
- **Reducing Anthropogenic Impacts**
  - Biofouling/Invasive species
  - Marine sound
  - Port Reception Facilities
  - Marine mammal 'Ship strikes'
- **Improving Ocean Knowledge (SDG14a)**
  - SMART Ocean - SMART Industries: "Ships/Platforms of Opportunity"
- **Reducing Disaster Risk/Addressing Climate Change**
  - Port/coastal infrastructure adaptation and resilience





# Innovation needed in Technology for Aquaculture



- **Challenge :**
  - Developing sustainable biofouling management solutions for aquaculture
- **Solution:**
  - Copper Alloy Mesh (CAM)



Proven benefits include:

- Reduced environmental impacts (no plastics)
- Reduced maintenance and higher profit for farmers
- Adaptability to climate change and oceanic storms and currents
- Reduced fish loss to predators and better fish health
- Opportunities for investors

Successful case studies in Australia, China, Chile ...

# Innovation needed in Practices for Aquaculture



- **Challenge:**
  - The rapid development, throughout the world, of intensive marine fed aquaculture (e.g., carnivorous finfish and shrimp) is associated with concerns about the environmental, economic, and social impacts
- **Solution : Integrated Multitrophic Aquaculture (IMTA)**
  - Combining the farming of multiple, complementary species from different levels of the food chain.



Proven benefits include:

- environmental viability: biomitigative services for improved ecosystem health
- economic stability: improved output, lower costs, product diversification, risk reduction, and job creation
- societal acceptability: better management practices, and appreciation of differentiated and safe products

# Capitalizing: WOC Ocean Innovation and Investment



- Catalysing interaction among ocean users, solution providers and investors
- Facilitating synergies and economies of scale among investors, innovation initiatives and challenge competitions to more effectively address ocean sustainable development needs and opportunities
- Providing a common process to identify, articulate and evaluate ocean industry priorities for investment in innovative sustainability solutions





# Marine Spatial Planning needed for Aquaculture

- **Challenge:**

- Overcoming the sectoral and intergovernmental fragmentation of resources management efforts and developing institutional mechanisms for effective coordination among various sectors active in the ecosystems in which aquaculture operates (and between the various levels of government)

- **Solution: Ecosystem Approach to Aquaculture (EAA)**

- « An ecosystem approach to aquaculture is a strategy for the integration of the activity within the wider ecosystem such that it promotes sustainable development, equity and resilience of interlinked social-ecological systems » (FAO)



# Capitalizing: MSP initiative for Ocean Business



- **Ensure ocean business community is informed** of ocean planning process and plans
- Examine how ocean planning has worked and review the role of industry
- Define and examine **the potential business impacts and benefits of ocean planning**
- **Determine how industry can optimize potential ocean planning benefits** and minimize the impacts
- **Develop coordinated business community engagement** in ocean planning
- Ensure that ocean planning takes into account the viability of responsible ocean economic activities



# For a more sustainable aquaculture in the MED:



## Engage in cross-sectoral industry collaboration :

- Bringing together the range of marine industries at the regional scale to create cross-sectoral business collaboration on sustainable development, science and stewardship
- **Identify priority issues including:**
  - Collaborating with inter-governmental bodies
  - Marine Spatial Planning
  - Reducing water pollution, protecting biodiversity
  - Avoiding the introduction of invasive species
  - Reducing/cleaning up marine debris
  - Engaging Innovators and Investors





# WOC 8th Sustainable Ocean Summit (SOS)

## Online 8 – 11 December 2020

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