



# OECD perspectives on The Ocean Economy

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# Outline

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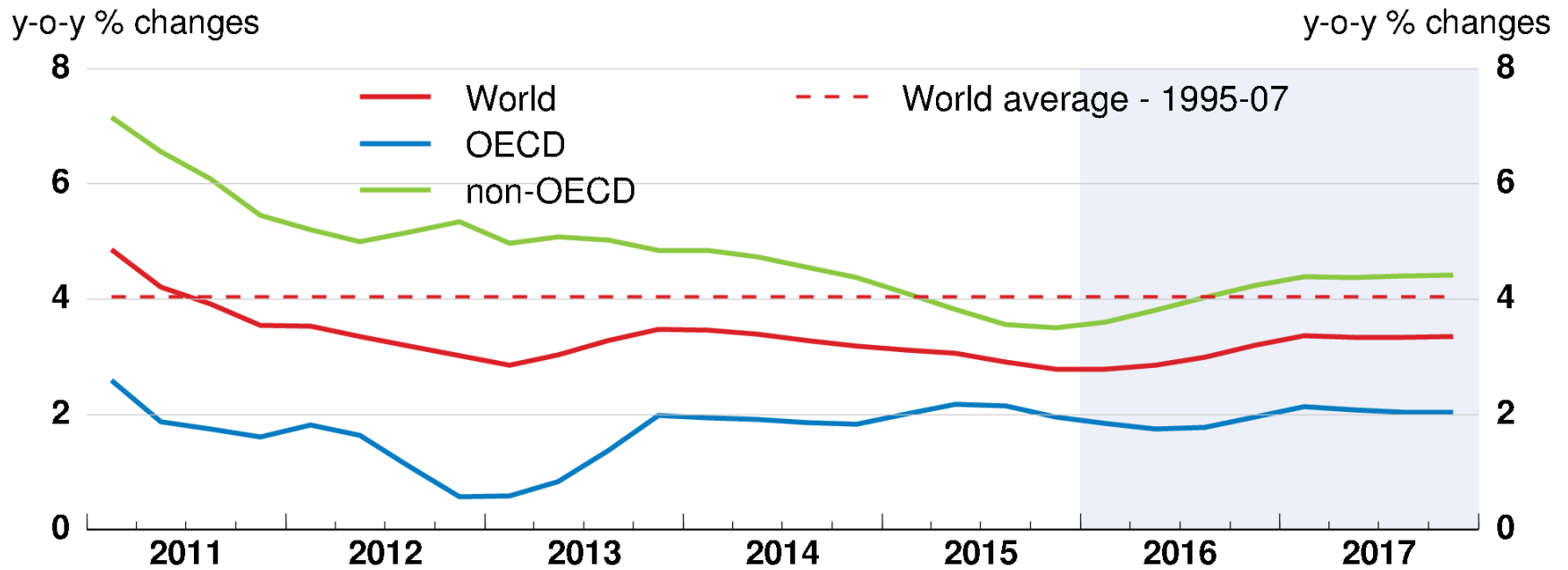
- Global challenges and implications for the ocean economy
- The Ocean Economy today
- Growth prospects for ocean-based industries
- The Ocean Economy in 2030
- Some Policy implications



# GLOBAL CHALLENGES AND IMPLICATIONS FOR THE OCEAN ECONOMY



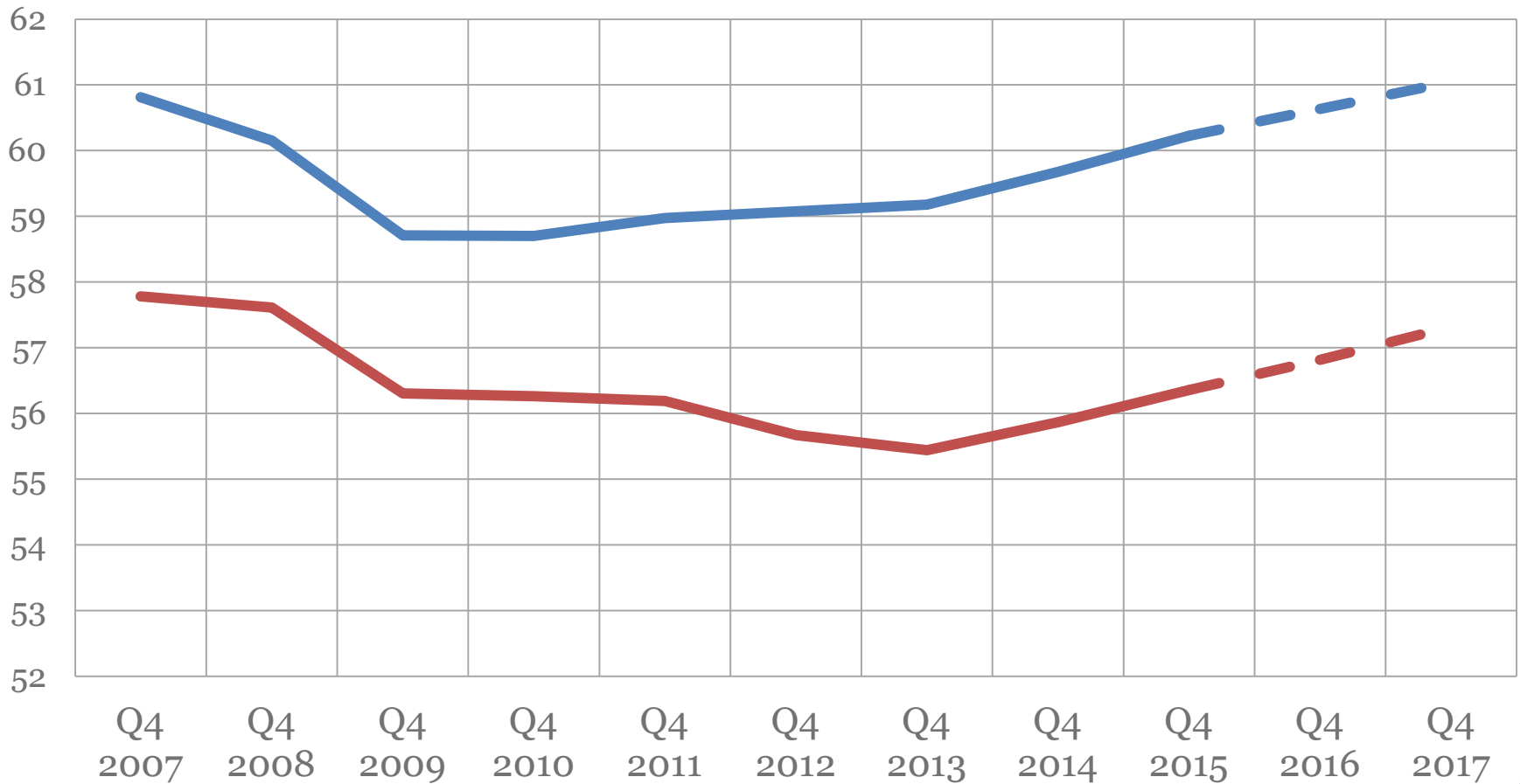
# Global Economy is stuck in a “low growth” trap





# OECD Employment will return to pre-crisis only in 2017

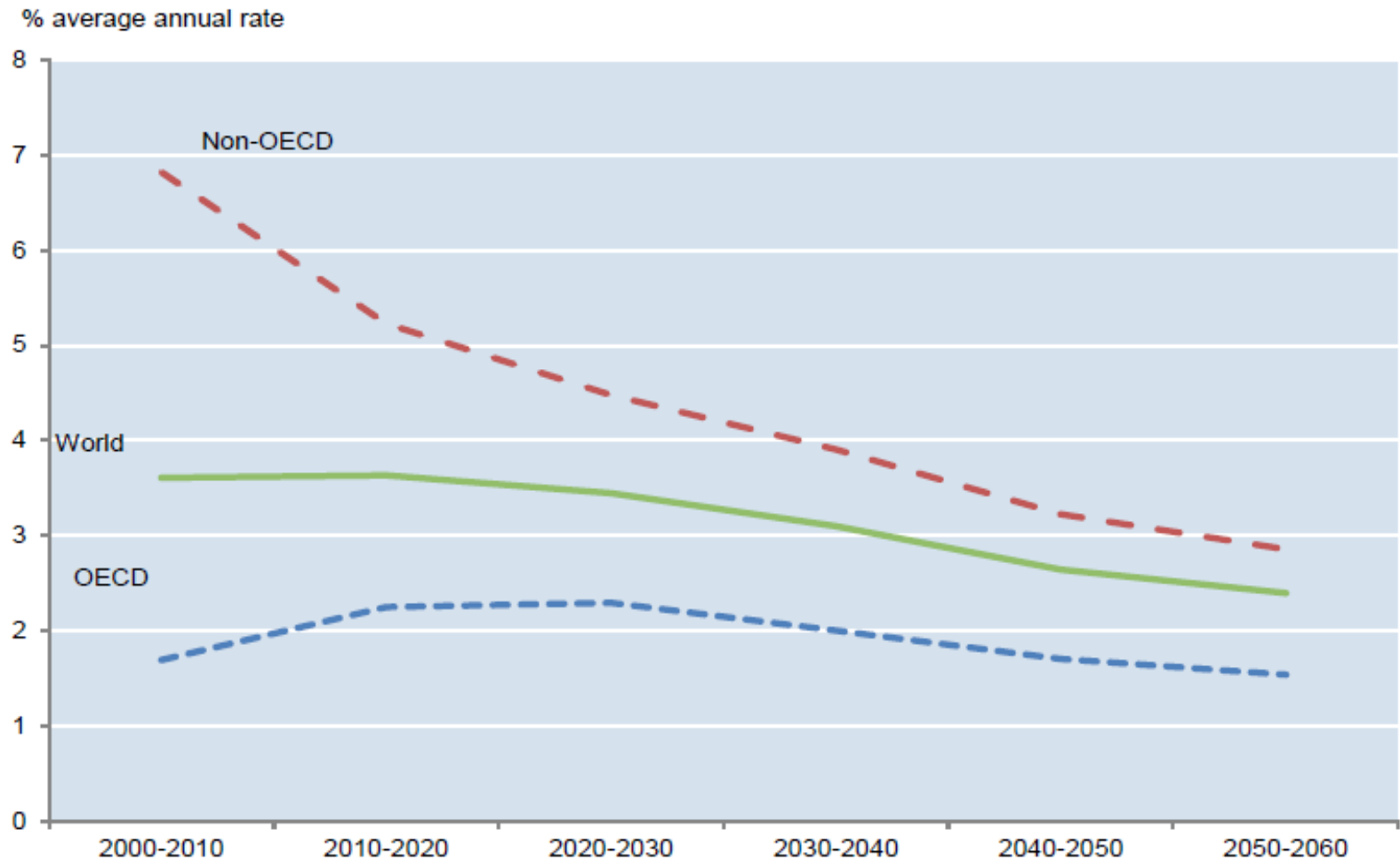
— OECD — Euro area



Source: OECD Employment Outlook 2016.



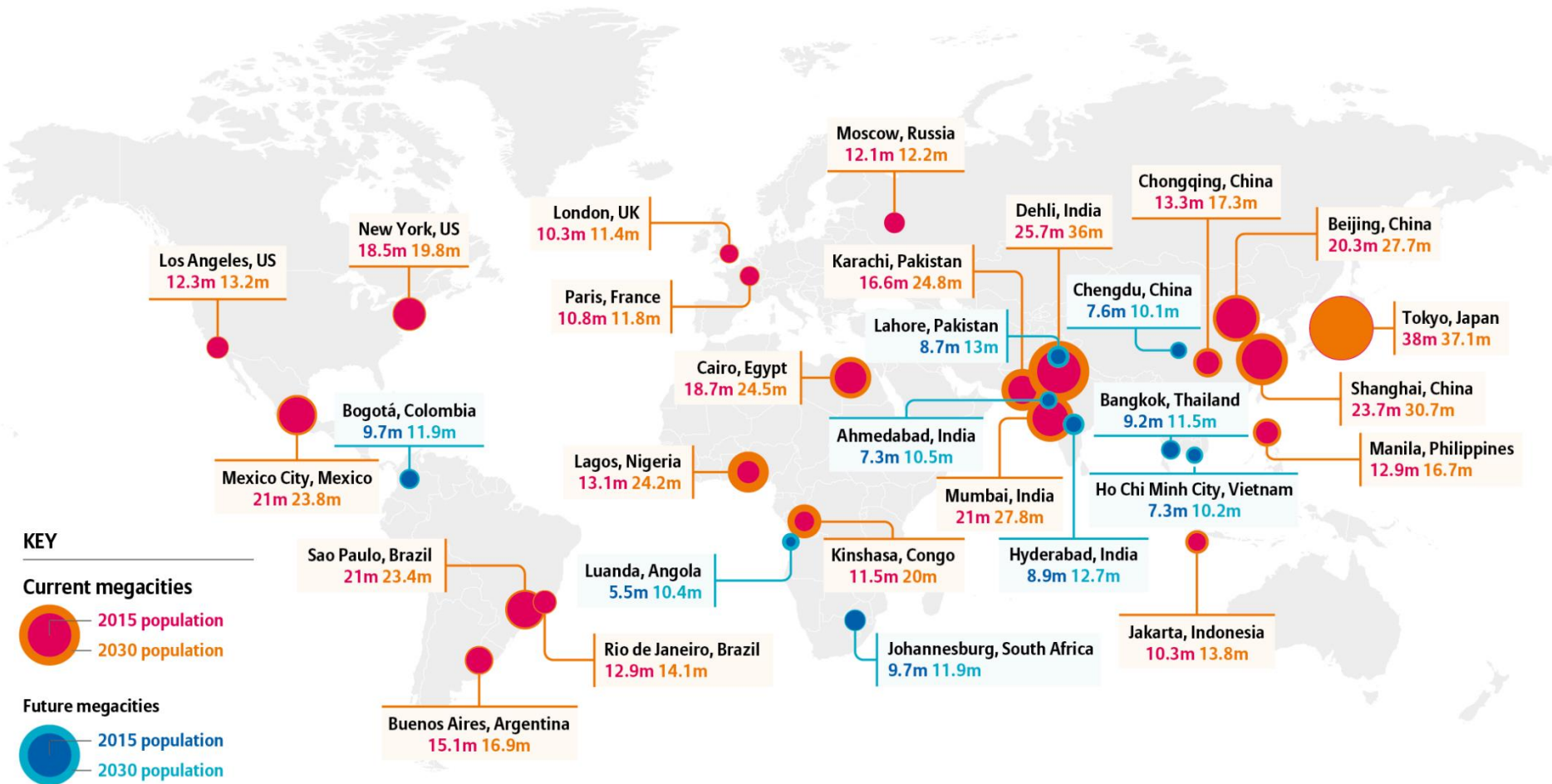
# Slowing long-term economic growth



Source: OECD Long-Term Economic Outlook, 2014

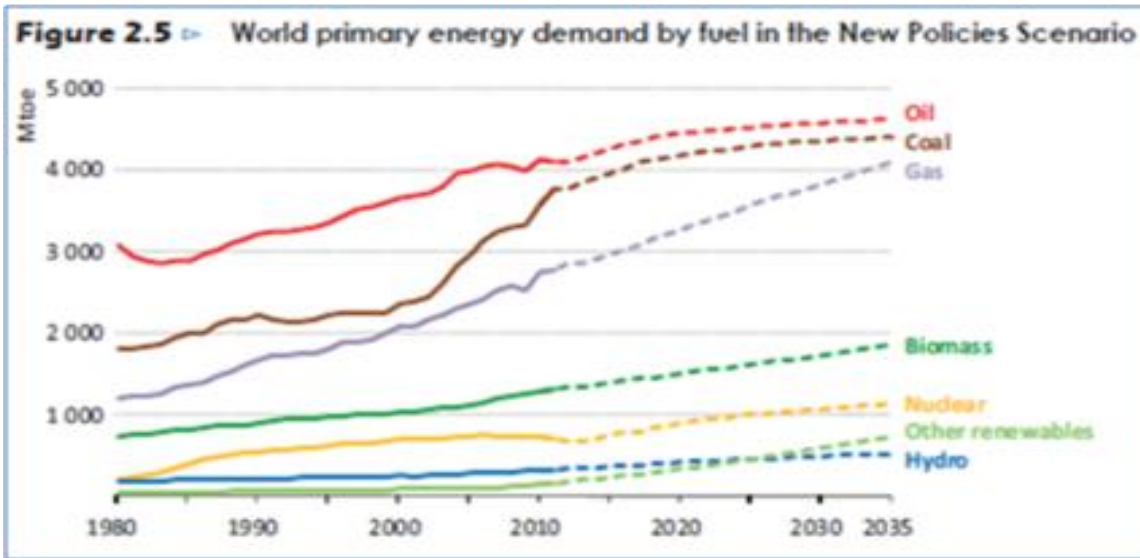


# Growing population, urbanisation, megacities



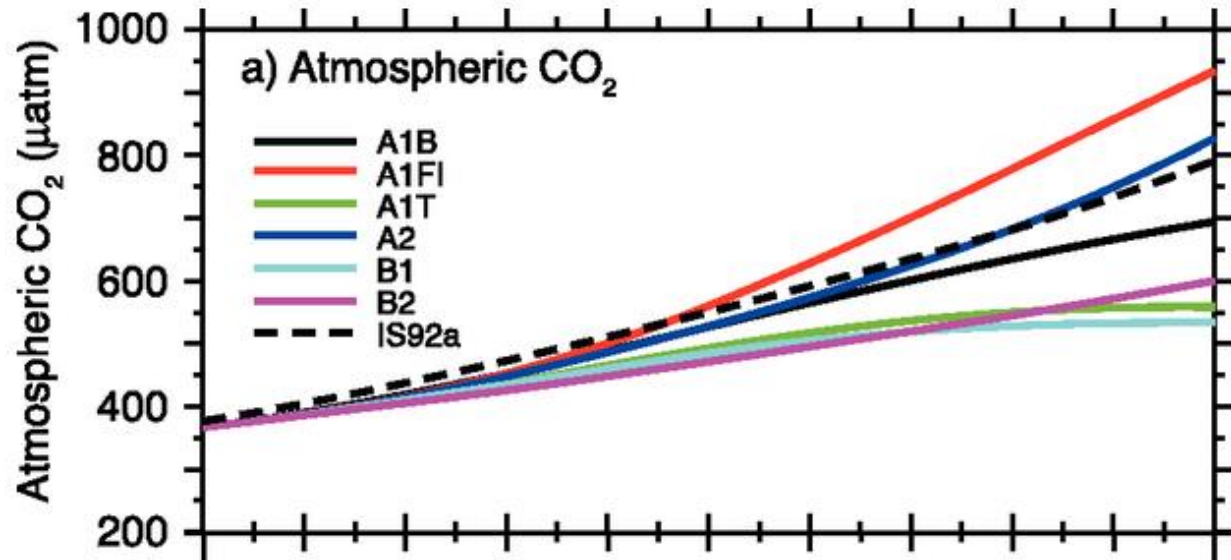


# Environmental issues



Increasing primary energy demand...

... and accelerating climate change







# Where do oceans fit in the global economy?

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- Ocean based assets and economic activities offer prospects for **new sources of growth, jobs, and innovation.**
- They also offer **solutions** to key environmental challenges
- While also being at **increased risk** from enhanced economic activity, demographic and environmental pressures



# OECD's flagship report on *The Ocean Economy in 2030*

- provides an original forward-looking assessment of the ocean economy to 2030 and beyond.
- places particular emphasis on the development potential of established and emerging ocean-based industries,
- as well as on the implications for the ocean environment and ocean management.

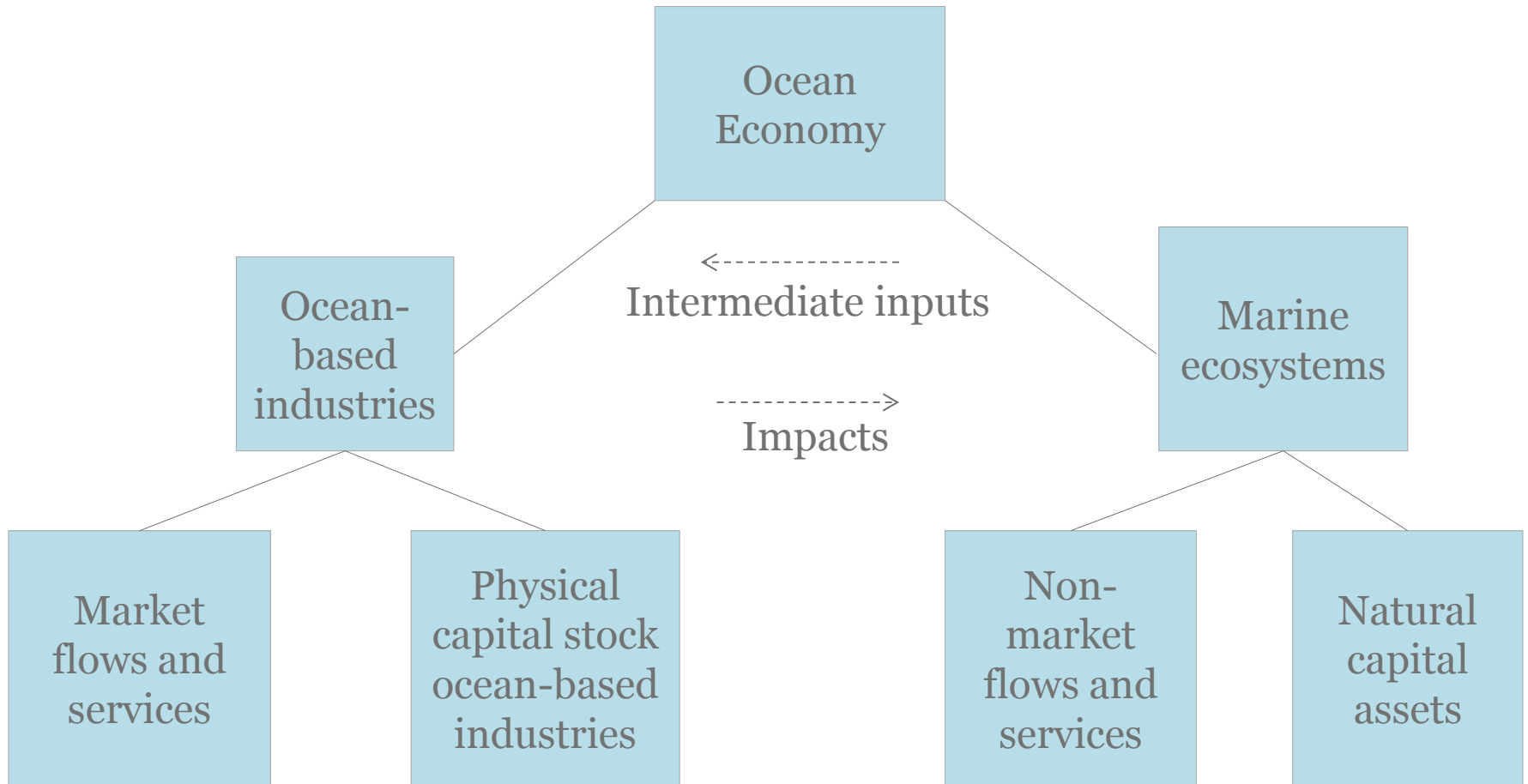




# THE OCEAN ECONOMY TODAY



# An original concept of the ocean economy





# The ocean-based industries in the Ocean Economy

<b>Established ocean-based industries</b>	<b>Emerging ocean-based industries</b>
Industrial capture fisheries	Industrial marine aquaculture
Industrial seafood processing	Deep- and ultra-deep water oil and gas
Shipping	Offshore wind energy
Port activities	Ocean renewable energy
Shipbuilding	Marine and seabed mining
Offshore oil and gas (shallow water)	Maritime safety and surveillance
Marine manufacturing and construction	Marine biotechnology
Maritime and coastal tourism	High-tech marine products and services
Marine business services	Others
Marine R&D and education	
Dredging	



# How was the ocean economy measured?

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Creation of **OECD Ocean Economy Database** at global scale:

- 10 major ocean-based industries so far (selected as proxies for the ocean economy);
- industry-specific contribution to the global economy (gross value-added and employment);
- drawn from official primary and secondary international (e.g. OECD, UN organisations, World Bank) and national sources, supplemented by industry and business data;
- breakdown by major geographic regions;
- partial sectoral coverage for 169 coastal states / economies.



## What are we measuring?

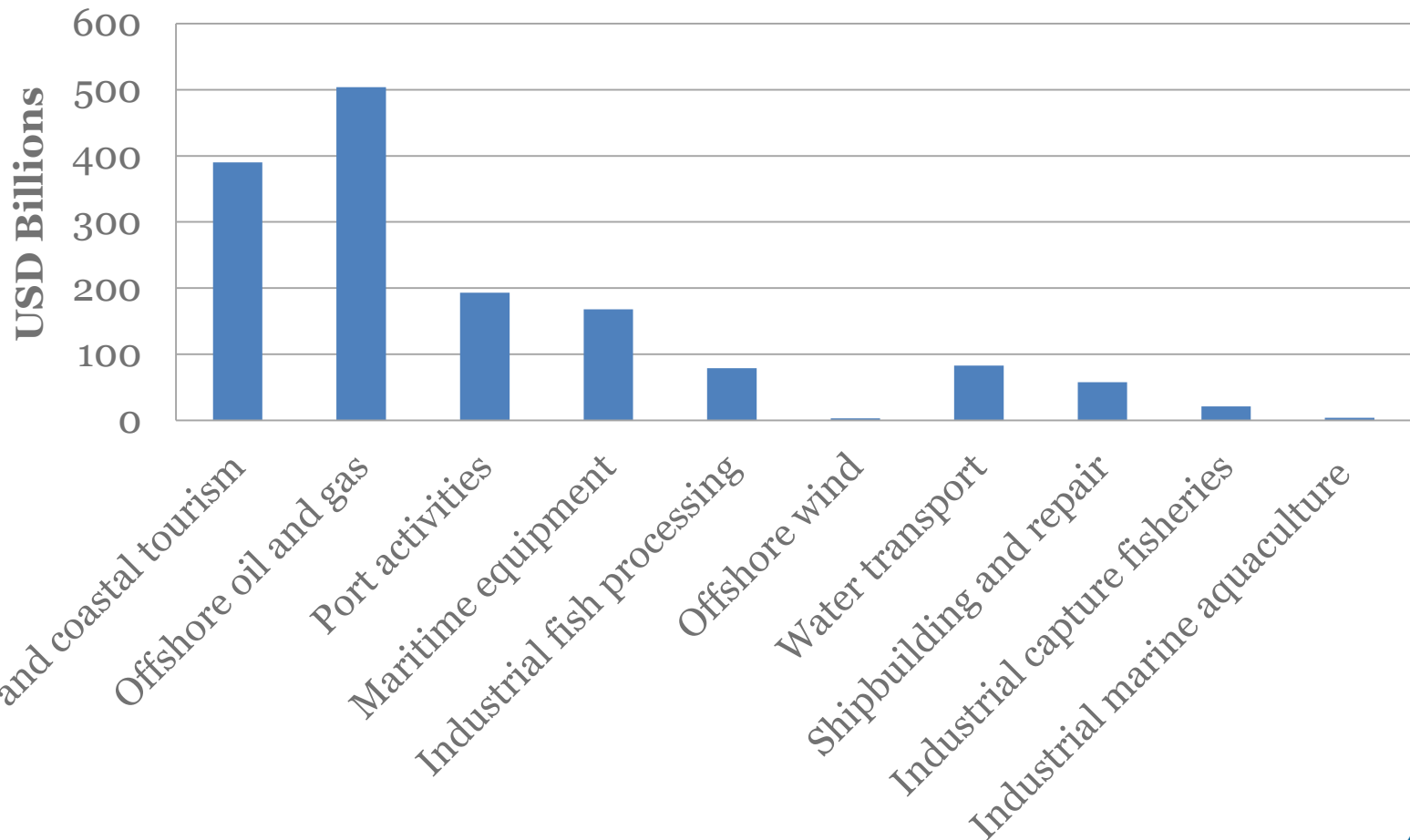
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- Not volumes (e.g. freight tonnes, gross tonnage/CGT....)
- Not turnover – involves double counting of inputs purchased from other industries
- **BUT Gross Value Added** – output of entire sector minus intermediate products purchased from other industries
  - the direct net economic contribution of an industry to the overall economy.



# Ocean-based industries generated more than USD 1.5 trillion in 2010

**Value-added of ocean-based industries in 2010 by industry**



Source: OECD (2016)





# THE OCEAN ECONOMY IN 2030



# *The Ocean Economy in 2030*

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- **Objective:** obtain a coherent projection of the growth of the ocean economy as a whole
  
- **Our approach**
  - Conservative ocean economy database, integrating country- and industry- specific data
  - Business-as-usual scenario and modelling: continuation of past trends, no major policy or technological developments.



# Growth prospects for ocean industries

## Prospects for modest growth

- Capture fisheries
- Offshore oil and gas extraction in deep water

## Prospects for high long-term growth

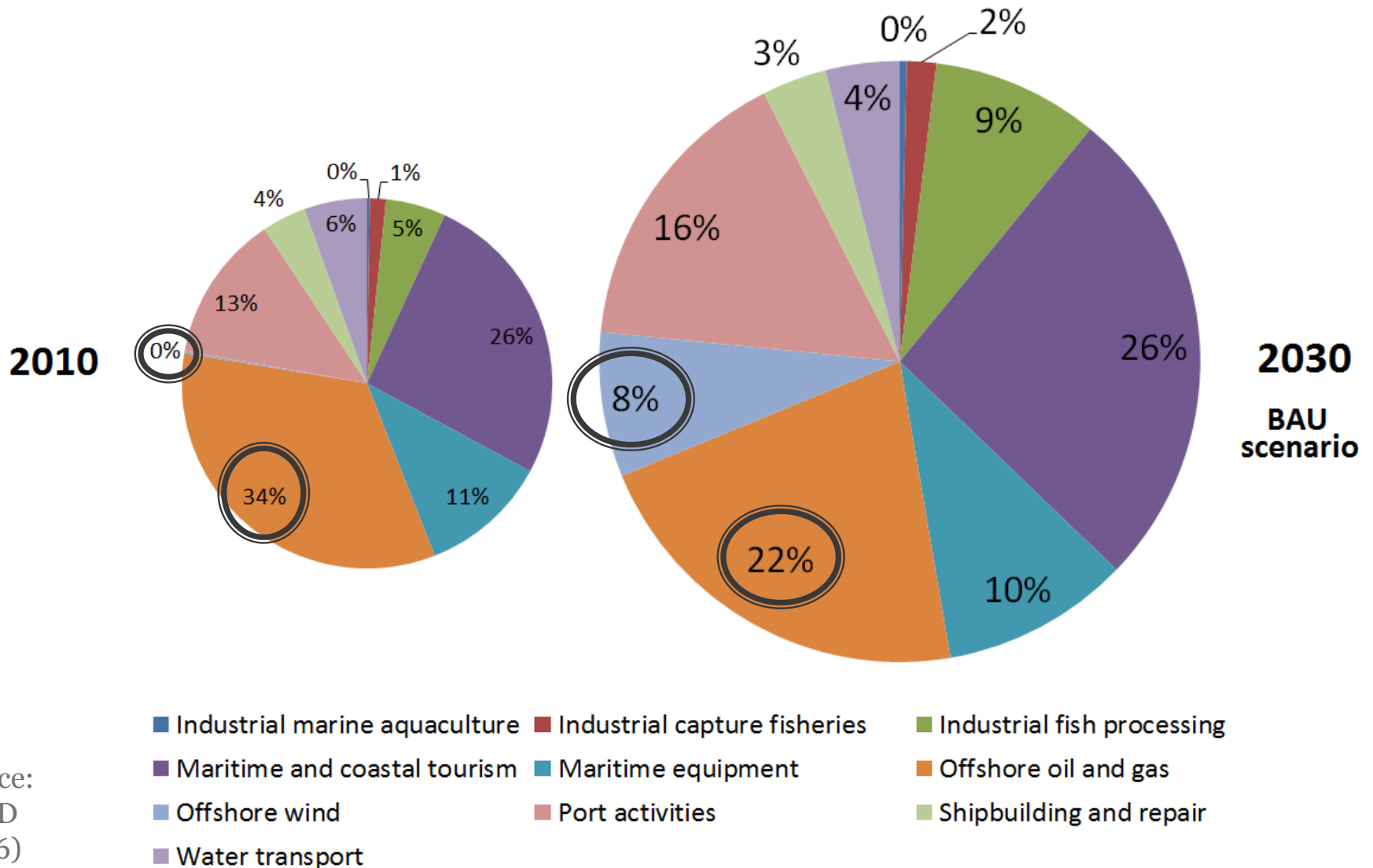
- Shipping
- Shipbuilding
- Offshore wind
- Marine aquaculture
- Tourism
- Surveillance and safety

## Long-term potential but not yet at commercial scale

- Ocean renewable energy
- Marine biotechnology
- Deep-sea mining
- Carbon capture and storage



# Ocean industry value-added to double (from 1.5 to 3 trillion USD) by 2030



Source:  
OECD  
(2016)



## Conservative estimates!

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- Still need to advance discussions to include crucial marine **ecosystem valuation**.
- Some important maritime sectors missing due to **data gaps** or early stage of development.
- Only measuring **direct economic contribution and direct FTE employment** (no spill overs effects, etc.)
- Only **industrial-scale activity**, no artisanal sector.

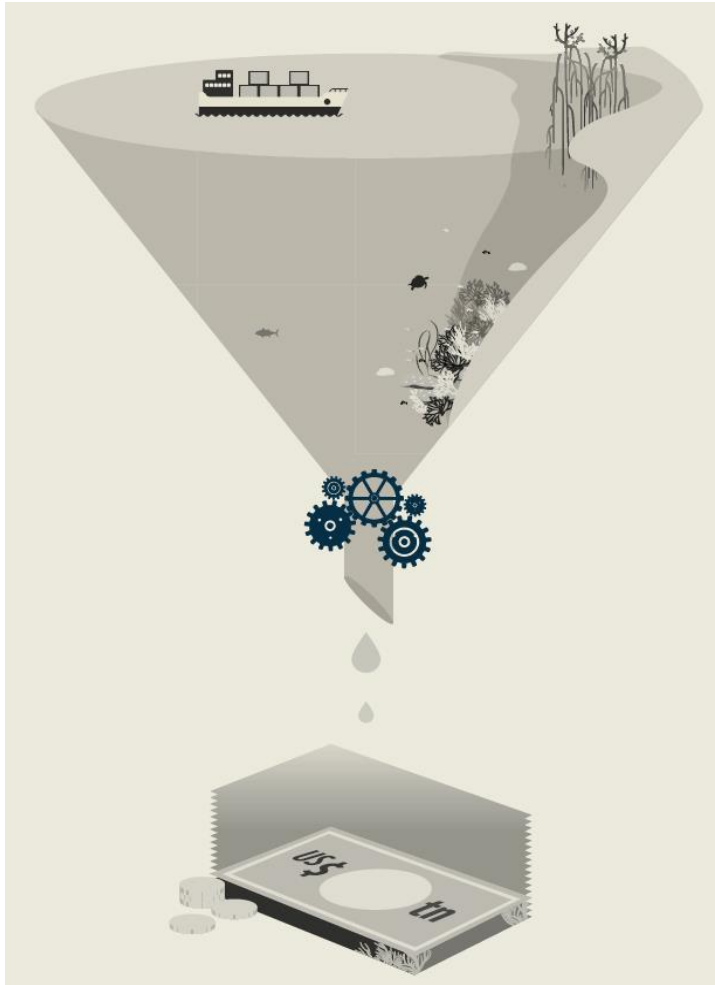


# SOME POLICY IMPLICATIONS



A growing ocean economy relies on a **healthy** marine ecosystem...

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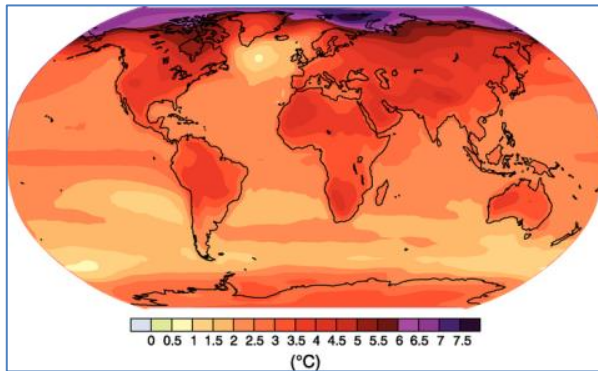
... which is already under pressure on various fronts

Source: WWF (2015)

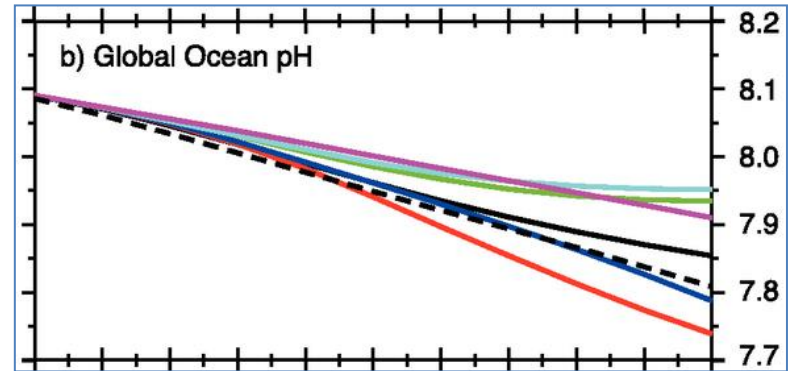


# *“Business-as-usual growth of economic activities in the ocean is not an option for the future”*

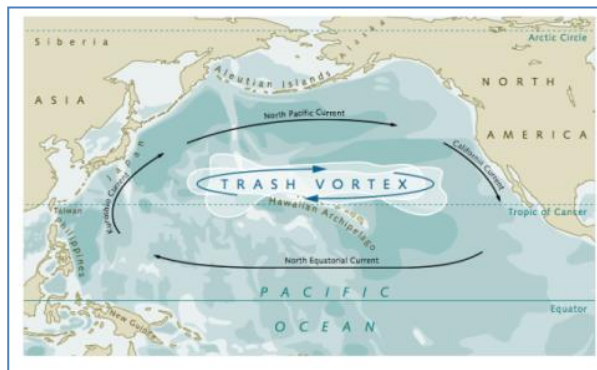
## Climate



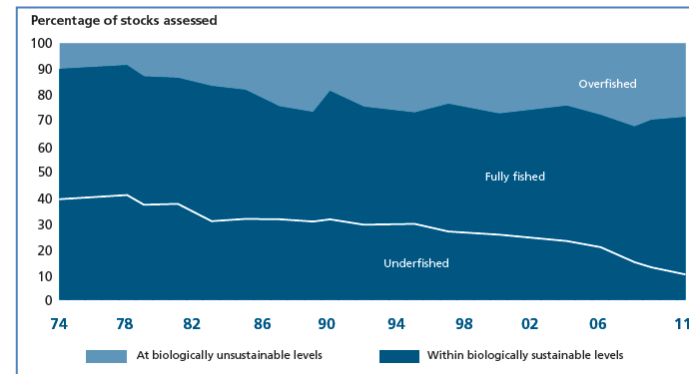
## Acidification



## Pollution



## Overfishing







# Need to strengthen integrated and more strategic approach

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... to management of marine / maritime activities

1. **Strengthen information base:** data on marine resources very fragmented and hard to locate, limited information on interactive effects of different uses and users of the ocean
2. **Use of economic analysis and incentives :** Better economic valuation of marine ecosystems and services, integrating such information in decision-making, greater use of economic instruments to internalise environmental externalities
3. **Better harness technology and innovation** for the sustainable development of the ocean economy



# OECD / STI programme of work in 2017-18: A focus on innovation

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**Objective:** provide decision-makers with an improved toolbox to foster innovation for harnessing the ocean economy's potential in a responsible and sustainable way.

## Four themes:

1. Explore the role of **scientific advances and enabling technologies** in driving innovation in the ocean economy
2. Investigate **emerging patterns and platforms of collaboration in innovation** among different marine and maritime actors in ocean R&D around the world
3. Extend the frontiers of the **use of economic valuation, analysis and tools** further into areas of ocean-related activities
4. Analyse the **role of the public sector and the impacts of policy mix** in boosting innovation in the ocean economy

<https://www.innovationpolicyplatform.org/ocean-economy-and-innovation>



# The first OECD Ocean Economy Week

## 20-23 Nov. 2017 - OECD, Paris

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In your calendar:

- ✓ 20 November – Workshop on Green Ships
- ✓ 21-22 November – Greening the Ocean Economy
- ✓ 22-23 November – **New Approaches to Evaluating The Ocean Economy** - 3<sup>rd</sup> International Symposium on the Oceans in National Income Accounts



# Conclusion

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- ✓ The Ocean Economy makes a **significant contribution** to the economy and in meeting global concerns. By 2030, the Ocean Economy is likely to more than double.
- ✓ Increasing ocean-based activities add to already existing **pressures** on the health of the marine ecosystems.
- ✓ **Innovation holds the key** to the economic success of the Ocean Economy and can help in reducing ocean health issues.
- ✓ Governmental role in **fostering science, innovation and strengthening integrated ocean management** towards a more sustainable approach to managing the Ocean Economy is essential.