



International Workshop
«Fostering Ocean Innovations»
Naples, September 4, 2023

KEYNOTE LECTURE: THE OCEAN ECONOMY TO 2045

OECD FORESIGHT WORK

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OECD STI Ocean Economy Group (IPSO)

Mission: Improve the measurement of ocean economic activities, and provide evidence on the role of science, technology and innovation (STI) as drivers of ocean sustainability



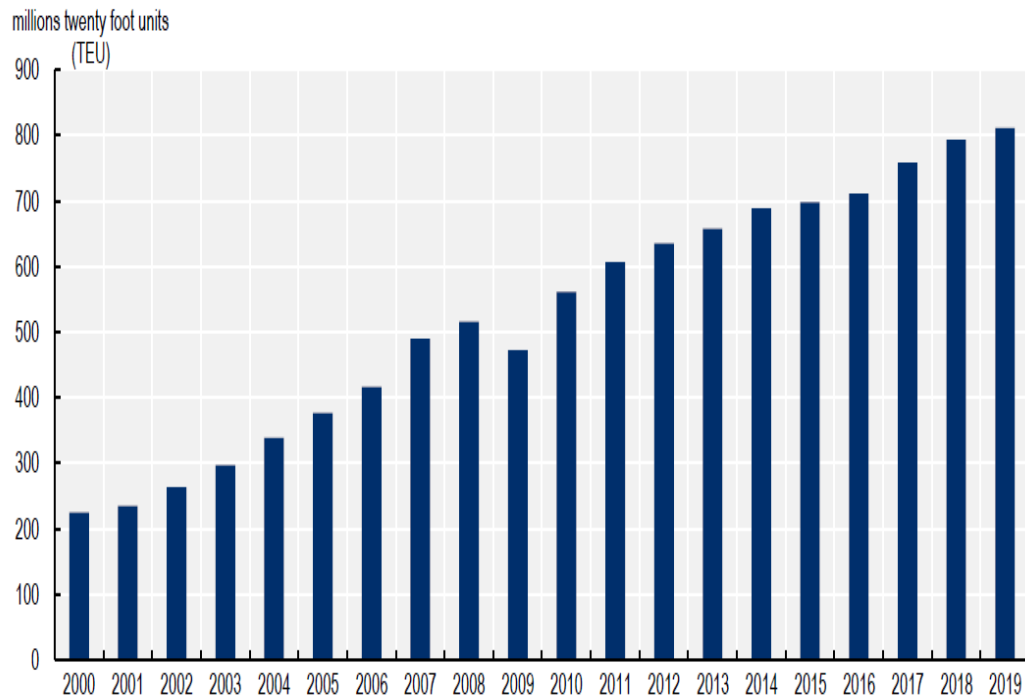
Other OECD hubs of expertise:

- Committee on Fisheries
- OECD Council Working Party on Shipbuilding
- Environment (plastics and other chemical pollutions, biodiversity)
- International Transport Forum
- Development with « Sustainable Ocean for All » (ODA, financing for developing countries)
- And the International Energy Agency

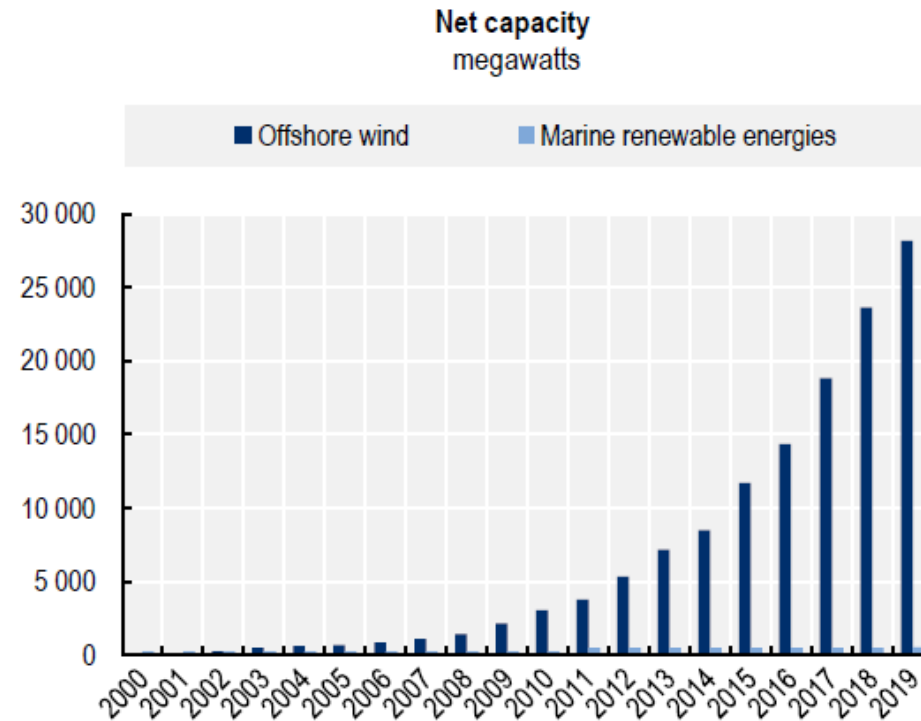
<https://www.oecd.org/ocean/>

Ocean economic activities are increasing globally

Maritime ports handled 811 million containers globally in 2019, around **four times more** than they handled in 2000



Ocean renewable electricity generation is dominated by offshore wind, the capacity of which has **increased nine fold** since 2010








Source: OECD (2021), Blueprint for improved measurement of the international ocean economy: An exploration of satellite accounting for ocean economic activity, <https://dx.doi.org/10.1787/aff5375b-en>

Past projections of selected sectoral growth rates 2010-2030 (before COVID-19 crisis)

Sector	Compound annual growth rate in Global Value Added
Maritime and coastal tourism	+3.5%
Ports	+4.6%
Marine aquaculture	+5.7%
Fish processing	+6.3%
Offshore wind	+24.5%
<i>Average ocean economy</i>	<i>+3.45 %</i>

Past projections of selected sectoral growth rates 2010-2030 (before COVID-19 crisis)... some still growing fast

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Looking ahead... OECD examination of global trends

affecting ocean sustainability

Trends identified 10 years ago are still applicable

- Population growth and ageing
- High food demand
- Slowing long-term economic growth
- Shift eastwards of the centre of economic gravity including trade
- Continuing dominance of fossil fuels
- Ongoing improvements in science and technology in many domains

Recent years have also produced important and strong-impacting changes

- **Economic scarring from pandemic** and race against new variants
- Mounting evidence of **accelerating climate change**
- **Geopolitical tensions** and **wars**
- Record levels of **government debt**
- Restructuring of international **supply chains** and **re-shoring** of manufacturing (seeking greater supply resilience)
- **Economic scarring** in many sectors
- Unprecedented rises in **energy prices**, minerals etc. reflecting supply shortages
- **Inflation fears** are back after years of low price level increases

Important progress has been made in other areas

- **International co-operation and governance** in matters of the ocean (SDGs tracking, UN Decade of Ocean Sciences, COP26...)
- Surge in **renewable energies**, not least coastal and offshore
- Many **technological advances** on horizon and new ones coming on stream....

Moreover, **improved capacity to help policy makers better anticipate changes and their impact** – towards better **ocean science data and monitoring**, better **ocean industry data and ocean accounting**, better **analytical tools**....

A new beginning? Six selected international milestones to improve ocean sustainability in 2022

- ✓ UN environmental conference, launch of international negotiations for future treaty on **plastics**
- ✓ World Trade Organization (WTO) Ministerial Conference (MC12), 13-17 June – After 2 decades of negotiations, efforts to ban selected **fisheries' subsidies**
- ✓ Convention on Biological Diversity (CBD), 4th session, 21-26 June – aims for 1st global agreement to cover **all aspects of biological diversity** and protect 30% of the planet
- ✓ UN Ocean Conference to be held in Lisbon, 27 June-1st July – public and private commitments including **financing issues for ocean sustainability**
- ✓ Intergovernmental Conference on Marine Biodiversity of Areas Beyond National Jurisdiction, March-August - **biodiversity governance of the high seas**
- ✓ 27th Conference of the Parties on Climate (COP 27) in Charm El-Cheikh (Egypt), November – **key ocean and climate nexus**

Two selected challenges in the Mediterranean...

Strategic and economic importance of the passageways in the Mediterranean: Suez, Gibraltar and the Turkish Straits.

The key to valorization for the neighboring countries is the **network of connected ports (hub) and needed innovation**

- Mediterranean represents 25% of global maritime traffic
- The Suez Canal registers about 20,000 passages per year (10% of world trade) for EUR 5-6 billion (i.e. the equivalent of the additional cost of bypassing Africa for shipowners).
- The global trend towards the relocation of production could reduce the current role of these passages in the future without, however, removing their strategic value.



Managing climate change and environmental degradation

- The Mediterranean represents **0,66% of the global ocean** surface, but its marine ecosystems gather **18% of identified marine species** (+17,000 species) - still poorly protected (9% of MPAs, of which only 10% have management plans).
- Anthropogenic pressures are intensifying,
 - 360 million tourists in 2017;
 - only 2% of global fishing but 75% of fish stocks are overexploited;
 - habitat-destroying fishing (fleets are mainly made up of small boats (60,000 units) which fish a wide variety of species for markets with growing demand (Italy imports 78% of its consumption, France 71%); unsustainable aquaculture; urbanization pressures on low coasts.
- Region **more marked by climate change** than the rest of the world (on average): thus the temperature in 2040 could rise by 2.2°C against 1.5° worldwide.
- Far from implementing the recommendations of cooperation structures in the region such as the UfM, the Barcelona Convention, etc.



Way forward

- Pressures on the ocean are building up with major rendez-vous not to miss ---- dealing with accelerated climate change & tipping points
- Science and innovation will play a key role, bringing opportunities for researchers and the private sector – but also more responsibility on delivering results...
- Timely workshop today !
 - SESSION 1 - ENTREPRENEURSHIP AND TECHNOLOGY TRANSFER BETWEEN NORTHERN AND SOUTHERN SHORES OF THE MEDITERRANEAN LOOKING AHEAD TO 2045
 - SESSION 2 - MARITIME SPATIAL PLANNING IN THE MEDITERRANEAN: CURRENT STATE AND EXPECTED PROGRESSES BY 2045
 - FOCUS TALK: MARINE ROBOTICS & UNMANNED SURFACE VEHICLES: WHAT TO EXPECT
 - FOCUS TALK: BLUE ECONOMY on THE SOUTHERN MEDITERRANEAN SHORES: GAPS AND OPPORTUNITIES



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Thank you