



# Ocean economy: sustainability and enabling policies for human security

2021-22 Executive Training Course for Policymakers on the  
2030 Agenda for Sustainable Development

Session Three: Life Below Water  
13 April 2022

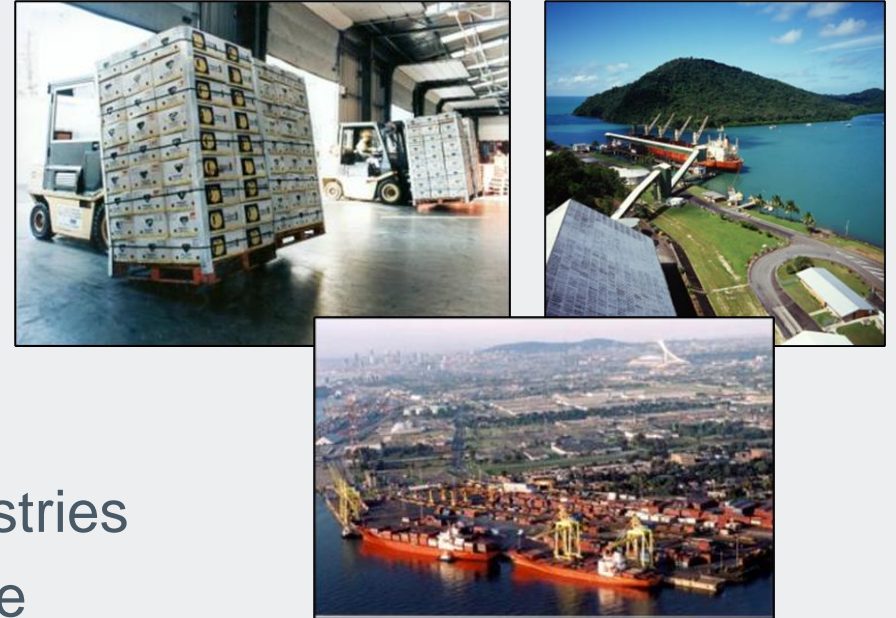
Dr. Andrew Birchenough  
Office for the London Convention/Protocol and Ocean Affairs  
Marine Environment Division





# Ocean Economy

- Ocean economy estimated to contribute more than \$1.5 trillion a year to the global economy
- Over 80% of world trade carried by sea
- Hundreds of millions direct employment
  - Fishing and aquaculture
  - Shipping and ports
  - Tourism
  - Energy production
  - Pharmaceuticals
- Economic activity expanding rapidly – emerging industries
- Ocean is essential to our future prosperity and welfare
- Economic activity is also characterised by a complex variety of risk foremost is *ocean health*





# Ocean Health

- **Climate change and greenhouse gas emissions**
  - Warmer more acidic oceans
  - Sea level rise
- **Marine pollution**
  - Marine plastic litter and microplastics
  - Contaminants, e.g. heavy metals, PCBs
  - Eutrophication
- **Habitat destruction, biodiversity loss**
- **Overfishing**



# Environmental risks from ships

- Operational discharges

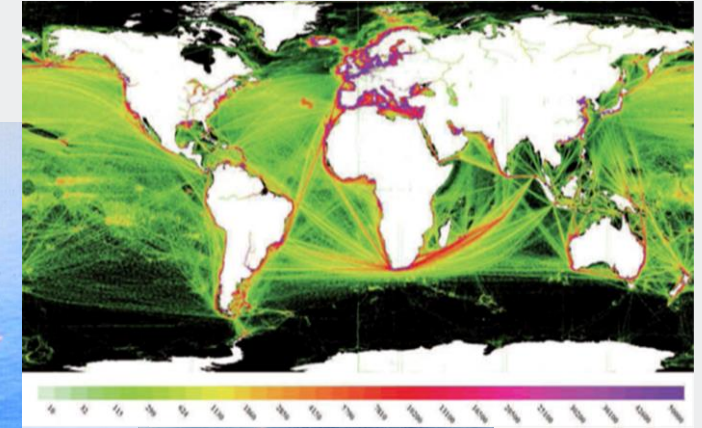
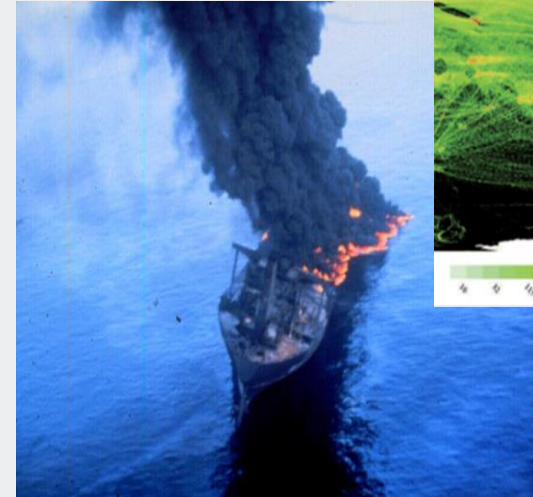
- Oil/oily mixtures ; Noxious liquid substances
- Sewage ; Garbage
- Anti-fouling paints ; Harmful aquatic organisms

- Accidental or intentional pollution


- Groundings/collisions
- Equipment or hull failure

- Physical damage to marine habitats or organisms

- Ship strikes – Cetaceans
- Anchor/ grounding damage



# The International Maritime Organization

- The United Nations specialized agency responsible for safe, secure and efficient shipping and the prevention of pollution from shipping
  - 175 Member States and three Associate Members, including all major ship-owning nations and all major coastal states
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- IMO's mandate covers a wide range of issues to prevent and control pollution caused by ships and to mitigate the effects of any damage that may occur as a result of maritime operations and accidents
  - IMO **develops global regulations** and adopts treaties and guidelines at intergovernmental level

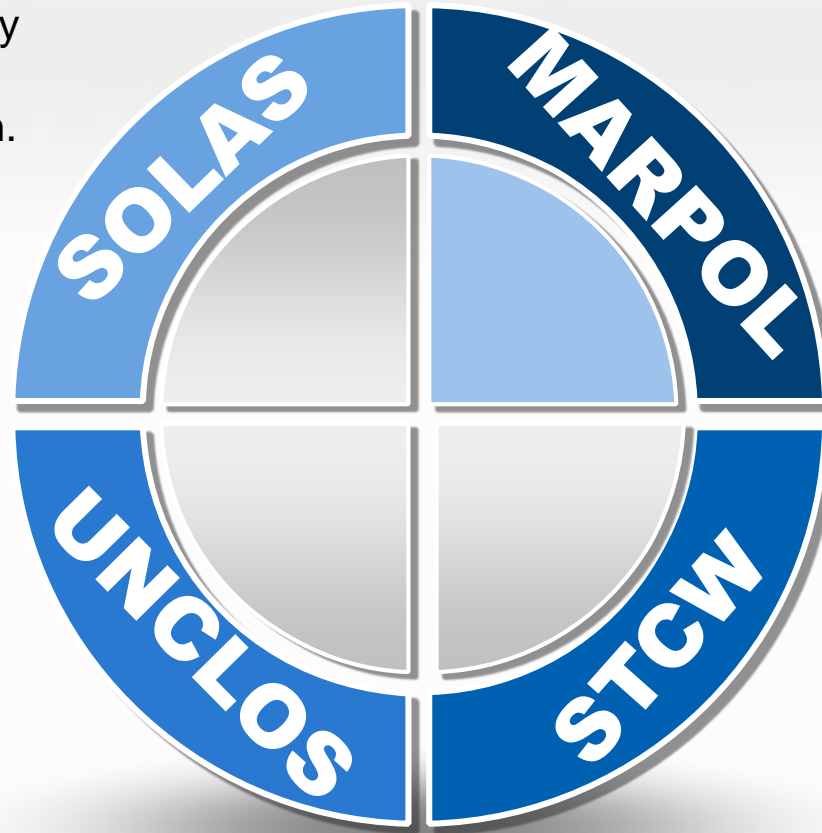
*“Safe, secure and efficient shipping on cleaner oceans”*

# The regulatory framework



## Interplay Safety – Environment - People and UNCLOS

Safety requirements apply to all ships which are subject to the Convention.



Provides the mandatory environmental protection level with zero discharge requirements in some areas.

Legal framework governing the rights and responsibilities of nations in their use of ocean space.

Guidance and recommendations for training and competency of officers and masters on ships.





21 out of 53 international treaty instruments adopted by IMO so far are directly environmentally related

In the marine environment, IMO deals with issues regarding:

Shipping related pollution [prevention](#) and [response](#)

Dumping of Wastes and Other Matter

Offshore oil and gas platforms



# Marine Environmental protection Committee - Current topics



## IMO's work on environmental issues

- Ballast water management
- Anti-fouling systems and biofouling
- Air pollution
- Energy efficiency
- Greenhouse gas (GHG) emissions
- Action Plan to address marine plastic litter from ships
- Use and carriage of HFO in the Arctic
- Special areas and PSSAs
- Pollution prevention, preparedness and response
- Technical cooperation activities
- **London Convention and Protocol**



# London Convention and Protocol



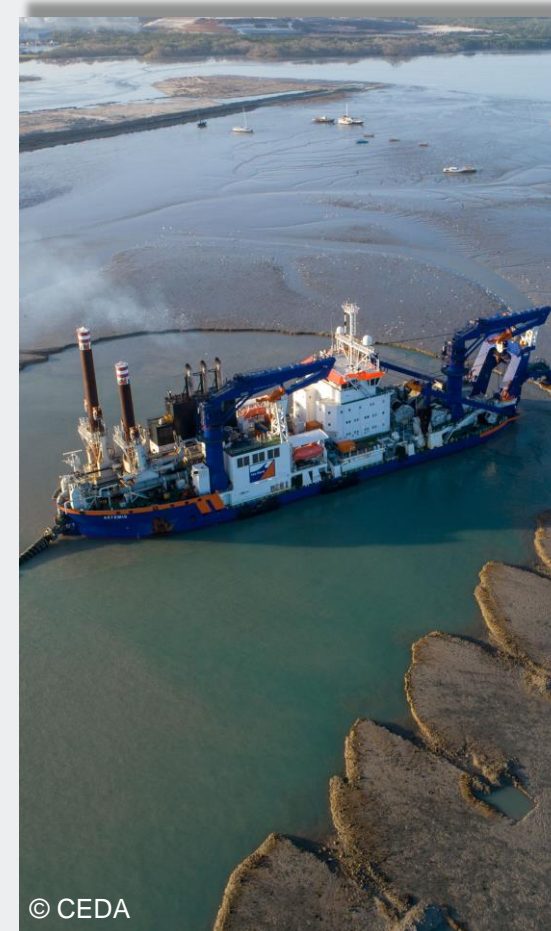
**Global treaties that regulate the prevention of pollution from dumping of wastes at sea**

## **The London Convention 1972 (LC)**

- One of the first global conventions to protect the marine environment from human activities.
- In force since 1975
- Currently **87** Contracting Parties

## **The London Protocol 1996 (LP)**

- More modern and comprehensive global treaty
- Will eventually replace LC
- In force since 2006
- Currently **53** Contracting Parties



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# Wastes considered for dumping at sea

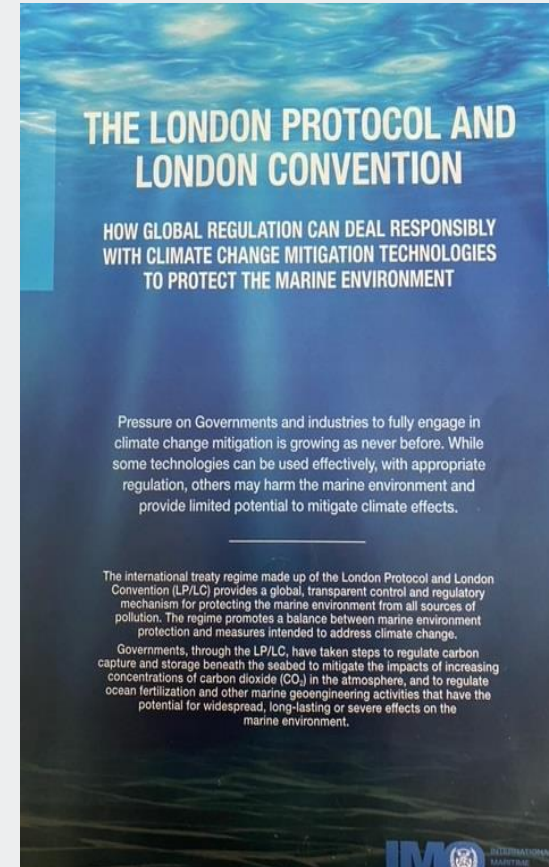
- Dredged materials
- Inert, geological materials
- Decommissioned vessels
- Fish waste
- Sewage sludge
- Industrial waste - **banned**
- Incineration at sea - **banned**
- Radioactive waste - **banned**





# Climate change mitigation

- Elevated levels of atmospheric CO<sub>2</sub> due to emissions from the combustion of fossil fuels contribute to climate change
- Severe consequences for biodiversity, ecosystems and human life (ocean warming & acidification)
- Ocean-based mitigation options to reduce or sequester and store emissions offer significant potential to contribute to global efforts to limit global warming and for achieving the goals of the Paris Agreement:
  - Carbon capture and storage
  - Marine geoengineering



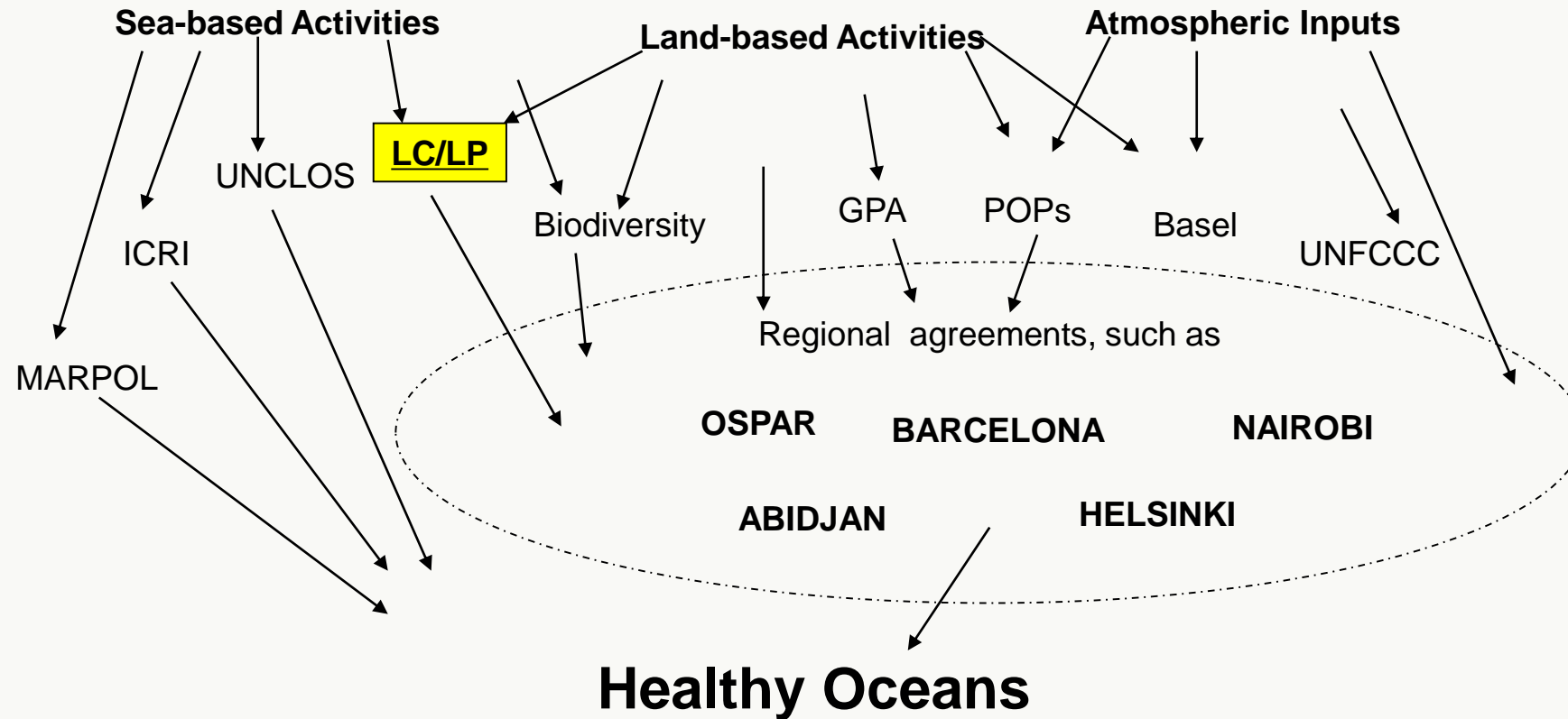
# Climate change mitigation: role of the LP/LC

## Summary

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- LP provides a policy framework to allow proposals for marine-based climate change mitigation technologies to be scientifically assessed
- LP provides a global, transparent and effective regulatory and control mechanism to govern:
  - Carbon capture and storage in the sub-seabed
  - Ocean fertilization activities; and
  - Other marine geoengineering activities within scope that have the potential to cause harm to the marine environment!

# Relationship between Global and Regional International Agreements



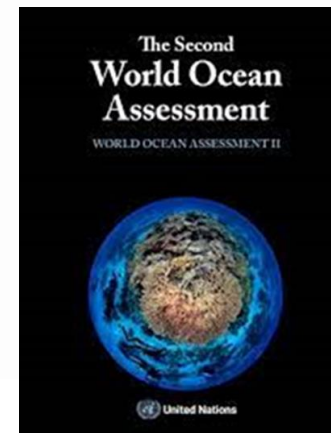


# Ocean governance

- UN-Oceans
- United Nations Environment Management Group (EMG)
- Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-economic Aspects (Regular Process)
- United Nations Environmental Assembly (UNEA)
- Global Partnership on Marine Litter (GPML)
- UN Informal Consultative Process on Oceans and Law of the Sea (ICP)
- **2030 Agenda for Sustainable Development and SDGs**
- Marine Biodiversity Beyond National Jurisdiction (BBNJ)
- UNEP Regional Seas
- CBD
- GESAMP
- Etc...



**2021  
2030** United Nations Decade  
of Ocean Science  
for Sustainable Development



# UN Sustainable Development Goals

The Sustainable Development Goals provide a blueprint for the transition to a healthier planet and a more just world — for present and future generations

While SDG 14 is central to IMO, aspects of the Organization's work can be linked to all individual SDGs,



# Sustainable blue economy

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- Health and state of our ocean and its resources is critical to our future
- IMO is responding to the call for synergy between UN agencies, regional and global bodies and governments in the area of the blue economy
- Ocean based industries are increasing, they will need to do things better, smarter and in closer collaboration and communication to ensure the sustainable development of activities in our ocean



# Thank you for listening

**[www.imo.org](http://www.imo.org)**



email: [olcp@imo.org](mailto:olcp@imo.org)