



IMO

Low Carbon Marine - Future Challenges of IMO's Agenda : how rules can be applied?

*Brazilian Maritime Authority committed to a
sustainable future*

Vice-Admiral Alexandre CURSINO de Oliveira
Directorate of Ports and Coasts (DPC)

TOPICS

- ✓ Where is our future?
- ✓ Brazilian Structure for IMO matters
- ✓ IMO Strategy on Reduction of GHG emissions from ships
- ✓ International challenges
- ✓ Brazilian contributions
- ✓ Possibilities of cooperation Brazil & UK
- ✓ - . . .



Structure for IMO matters

**Brazilian Maritime
Authority**

**Brazilian Navy General Staff
(Brasília)**
**(Coordinator Committee for IMO
Matters – CCA-IMO)**
Representatives of 8 ministries

DPC (Rio de Janeiro)

Executive Secretary (Sec-IMO)

**Marine Safety, Seafares, Environmental
Superintendences**

Maritime Education

IMO Strategy on Reduction of GHG emissions from ships

□ Levels of Ambitions

1. carbon intensity of the ship to decline through implementation of further phases of the **Energy Efficiency** Design Index (EEDI);
2. carbon intensity of international shipping to decline to **reduce CO2 emissions per transport work**, as an average across international shipping, by at least 40% by 2030, pursuing efforts towards 70% by 2050; and
3. GHG emissions to peak and decline as soon as possible and to **reduce the total annual GHG emissions** by at least 50% by 2050.

International challenges

□ Short-Term Measures

- Develop technical and operational **indicators**;
- Adopt a rating mechanism for ships energy efficiency

□ Mid-Term Measures

- Update standards to incorporate **technological innovations**, operational checks, and certification;
- Do not cause major distortions in the markets

□ Long-Term Measures

- Develop low and zero-carbon technology for fuels
- Develop engine, hull and propeller technologies for better energy efficiency
- Avoid disproportionate **impacts** on Small Island Developing States (SIDS) and Least Developed Countries (LDCs)



Brazilian Contributions

□ Short-Term Measures

- Fourth IMO GHG Study (consortium (FIPE/USP), Steering Committee and Group of Experts);
- Lectures on low-carbon fuel technology (CENERGIA/COPPE/UFRJ);
- Joined the Steering Committee to evaluate UNCTAD's work on the impact assessment on the States.

□ Mid-Term Measures

- Integrates the working groups on carbon intensity; energy efficiency; and EEDI phase 4;
- ISWG-GHG 7/2/21 - Proposal for an operational carbon intensity rating mechanism as a mandatory goal-based measure to reduce the carbon intensity of international shipping (Brazil and China).

Brazilian Maritime Authority proposals

| | |
|---|--|
| | |
| Findings of the fourth IMO study. | Updates total shipping emissions. |
| Using Data Collection System. | Makes it unnecessary to request information from ships |
| Joint adoption of Technical and operational indicators. | Enables knowledge of the real energy efficiency of ships |
| Adoption of Rating Mechanism. | Contributes to the implementation and verification of the measures |

Brazilian Maritime Authority thinkings

Market-based measures.

Don't contribute to the use of zero- or low-carbon technology.

Adoption of measures prior to their assessment in terms of impact on the states.

May hide the unacceptability of adoption

Measures of absolute values rather than goal-based measures.

Don't allow flexibility in the adoption of the measures.



Brazilian oil and gas industry and low-sulphur fuel

□ VLSFO production

- Start of supply April 2019;
- Petrobras sold **5.6 million/t of VLSFO**;
- VLSFO supplied in 17 national ports.

□ Export 2020

- Marketed about **1.6 million tons of IMO bunker 2020 to Asia**;
- Exported about 8.7 million quality fuel oil to formulate the IMO 2020 bunker.

□ Letter N° 7/2019 DPC

Possibilities of cooperation Brazil & UK

✓ Oil and Gas Industry

- prospecting and production of crude oil
- knowledge about marine fuels

✓ Share of knowledge

- Carbon-neutral maritime fuels
- Modeling

✓ Efforts against environmental threats arising from maritime traffic

Environmental threats arising from maritime traffic

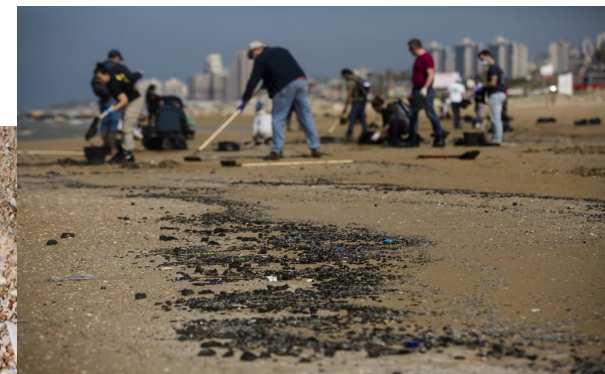
□ Oil spill incident on the Brazilian coast

- Unprecedented incident in the world
- 5,300 tons of oily waste collected
- Maritime Authority/regional environmental agencies
- **Proposed amendment to chapter V of SOLAS.**



Brasil, 2019 Source: BBC News

□ Oil spill over Israel



Israel, 2021. Source: Forbes

Conclusion

- ✓ **Blue Amazon.**
- ✓ The maritime commercial sector makes a **huge effort** to decarbonize.
- ✓ Brazilian Maritime Authority has an environmental commitment and intends to **continue participating** in this worldwide effort.
- ✓ **International Cooperation and Support.**





Mares e Rios seguros e limpos

Safe and Clean Seas and Rivers



IMO

Low Carbon Marine - Future Challenges of IMO's Agenda : how rules can be applied?

*Brazilian Maritime Authority committed to a
sustainable future*

Vice-Admiral Alexandre CURSINO de Oliveira
cursino@marinha.mil.br

THANK YOU!