



ABOUT THE AUTHOR

MINGLEE HOE is a technical analyst for the IMO GreenVoyage2050 project, supporting developing countries in their efforts to reduce greenhouse gas (GHG) emissions from ships. She assisted the IMO Global Maritime Energy Efficiency Partnerships (GloMEEP) project, which also developed low-carbon strategies for the maritime industry.

PERSPECTIVE IMO PORT INTERFACE GUIDE

Practical guidance for ports

As the connection between ships and shore, ports form an integral part of the supply chain and have the power to shape the reduction of GHG emissions from ships. Decisions on the provision of onshore power supply (OPS), bunkering of alternative zero and low-carbon fuel, and more will have a major impact on emissions both now and in the future.

IMO is committed to assisting all member states such that no country is left behind in the transition to a decarbonized future. Knowledge sharing is an important aspect to leveling the playing field.

Free practical guidance

Earlier this year, the Global Industry Alliance to Support Low Carbon Shipping (Low Carbon GIA), a public-private partnership established under the IMO-Norway GreenVoyage2050 Project, released its free-access Ship-Port Interface Guide. The guide outlines eight practical measures to support GHG emissions reduction at the ship-port

interface (see boxout). Unlike other solutions that may be longer term and require deep capital investment, the guide focuses on measures that can be implemented with relatively limited capital.

Therefore, the guide may have application not in just large ports, but also in smaller ports in developing countries.

The measures mainly focus on optimizing existing operations, thereby reducing the time a ship spends in port, and in some cases, the need to transit to another location to complete other operations.

Individual approaches

Since the release of the guide, further consultations have been taking place with various ports to delve deeper into the successes and challenges to implement these measures. Recognizing that every port is different, and that a one-size-fits-all approach is unsuitable for the global ports sector, these dialogues have been very useful in highlighting different experiences and circumstances

faced by different ports, and how specific challenges might potentially be addressed.

The outcomes of these dialogues are expected to feed into further work being undertaken by the Low Carbon GIA to support implementation of these measures and ensure that any future guidance developed is as practical as possible, and addresses the various challenges faced by different ports.

IMO-Norway GreenVoyage2050 project

The guide is the work of the Ship-Port Interface Workstream of the Low Carbon GIA. The Low Carbon GIA brings together key maritime industry stakeholders with the aim to collectively identify and develop innovative solutions to address common barriers to the uptake and implementation of energy efficiency technologies, operational best practices, and alternative low- and zero-carbon fuels.

The IMO-Norway GreenVoyage2050 project is a technical cooperation initiative to support shipping's transition toward a

Pictured: Wind turbines power electricity generators in Antwerp port in Belgium at sunset.

low-carbon future. The project is a cooperation with developing countries on the reduction of GHG emissions from shipping by supporting effective implementation of the Initial IMO Strategy and Resolution MEPC.323(74), which also encourages voluntary cooperation between the port and shipping sectors.

IAPH is a strategic partner to the GreenVoyage2050 project. The IAPH and GreenVoyage2050 are working together on the development of two new workshop packages on sustainable ports and OPS.

It is envisaged that these workshop packages will provide some guidance on measures to reduce GHG emissions from ships in ports, and support decision-makers in assessing cost-effectiveness of OPS. Once finalized, the workshop packages will be publicly available, free of charge, on the project website. ■

Interested ports, particularly those in developing countries, are invited to share their experience on the implementation of these measures with the Low Carbon GIA and should contact the GIA secretariat via:

@ greenvoyage2050@imo.org

🌐 greenvoyage2050.imo.org

The eight measures

The eight practical measures presented in the Global Industry Alliance to Support Low Carbon Shipping Ship-Port Interface Guide suggest that port authorities:

- 1. Facilitate immobilization in ports**
This will allow maintenance and main engine repairs to take place at berth and during cargo operations.
- 2. Facilitate hull and propeller cleaning in ports**
With this taking place at the same time as cargo operations, vessels will experience a reduced port stay and improved energy efficiency – via a reduction in hull and propeller friction.
- 3. Facilitate simultaneous operations in ports**
Allows for operations to happen in parallel, rather than in sequence.
- 4. Optimize port stay by pre-clearance**
This will reduce unnecessary waiting times on arrival at port.
- 5. Improve planning of ships calling at multiple berths in one port**
Optimization for cargo operations can be achieved through just-in-time shifting of ships between berths.
- 6. Improve ship/berth compatibility through improved port master data**
This ensures that the right ship and berth size are utilized.
- 7. Enable ship deadweight optimization through improved port master data**
Better optimization of deadweight capacity will be achieved by this.
- 8. Optimize speed between ports**
This can be achieved through implementation of just-in-time arrival.