

# Notes

## MARPOL Annex VI Roundtable Energy Efficiency

DATE/TIME	Thursday 3 December 2020, 1:30 pm – 3:30 pm
LOCATION	Ministry of Transport, 3 Queens Wharf, Wellington – or remotely via MS Teams

### Welcome, introductions, expectations for today

- Following on from earlier roundtables for Annex VI, today's meeting is about exploring its provisions relating to energy efficiency (Regulations 19-23) in greater detail.

### Annex VI overview

- The focus of Annex VI is to address the impact of air pollution from shipping activities on human health and the environment, as well as the impacts of emissions from shipping activities on climate change and ozone layer depletion.
- Following public consultation, New Zealand decided to accede to Annex VI in 2019. We are now in the process of aligning domestic regulations to enable accession by the end of 2021.

### Summary of current Annex VI energy efficiency provisions

- Under Annex VI, an *attained* Energy Efficiency Design Index (EEDI) must be calculated for most new ships. Each applicable ship's attained EEDI must exceed the *required* EEDI set out in the Annex. Over time, the required EEDI will be raised.
- Ships 400 GT and above travelling outside of New Zealand waters must have a Ship Energy Efficiency Management Plan (SEEMP) in place.
- Ships of 5,000 GT and above must record and report on fuel consumption.
- An International Energy Efficiency Certificate will verify a ship's compliance with these requirements.
- New Zealand must ensure that New Zealand flagged ships travelling domestically comply with these requirements as far as possible. This is an area where New Zealand has some discretion, and stakeholder feedback is especially welcome.
- Additional information about energy efficiency requirements can be found in a dedicated one-pager on the MNZ website.

### Summary of potential incoming Annex VI energy efficiency provisions

- IMO member countries have committed to specific emissions reductions targets in the 2018 Initial IMO Strategy on reduction of GHG emissions from ships.
- In line with the Strategy, short-term measures have been agreed for implementation in 2023. This includes the creation of an Energy Efficiency Existing Ship Index (EEXI) and a rating system (A-E) for ships, based on reductions to their carbon intensity index (CII) which factors in both ship design and the human elements of operations. The detailed

guidelines are still to be drafted, and the measures will be adopted at a future IMO meeting for implementation in 2023.

- Also in line with the strategy, medium- and long-term measures are being developed and debated. This includes the potential use of market-based measures (e.g. a levy on fuel purchases.)
- Current and proposed requirements reflect a focus internationally on both technical (design and retrofit) and operational measures to reduce emissions.
- There are many existing and potential technological solutions being discussed, and there is a recognition that every ship and operation is different and will have a different combination of solutions needed to meet targets.

## **Discussion**

- It was acknowledged that there is increasing political attention and pressure on energy efficiency across all sectors, including shipping, both domestically and internationally.
- There was agreement that operators have many non-regulatory incentives to improve energy efficiency of their operations, as fuel is generally one of their highest costs. Many operators make efforts to turn off equipment when not in use, plan efficient routes, choose fishing gear with minimal drag, etc.
- Some at the meeting expressed the view that most “low hanging fruit” solutions for energy efficiency were already implemented, and that the remaining barriers included technological limitations and fuel availability. Further energy efficiency gains would be increasingly difficult to achieve (due to the 80/20 rule.)
- A question was raised about the potential for use of biofuels. There is a lot of discussion internationally relating to what are the best fuels for decarbonisation, but there is no consensus. A further challenge is making sure that preferred fuels are available in New Zealand.
- It was noted that alternative fuel options may also create emissions (e.g. during production) or have other negative externalities, so comparisons should be holistic.
- There was a lively discussion on the practice of cold ironing – where ships plug into land-based power infrastructure while in port. While very few ports in the world can support very large vessels (e.g. cruise ships) for cold ironing, most New Zealand ports currently cannot support even smaller vessels. There may also be a need for transformers to step up or down the power frequency. There was also an impression by some that ports would charge too much for the electricity. Again, it was noted that the land-based power would need to be lower emission than the regular ship fuel for this to be beneficial/worthwhile.
- Reference was made to difficulties currently being experienced in securing wharf-based charging facilities for electric vessels.
- It was suggested that slow steaming is difficult because of the nature of New Zealand coastal shipping (and the nature of New Zealand exports).
- It was also suggested that New Zealand biosecurity/biofouling rules should be considered in the context of hull cleaning having high potential for improving efficiency. Current settings may be making keeping a clean hull difficult for some operators.
- In terms of design, some operators tend to purchase vessels from areas where energy efficiency rules were strict/up to the Annex VI standard (e.g. the Baltic or UK).
- It came up a few times that a potential barrier to progress on energy efficiency is the way ports engage with each other and with their customers, specifically in an environment of competition/negotiation. Further work could explore potential ways to overcome this challenge to develop a formal or informal understanding/plan amongst ports and port users.

## **Additional opportunities to engage**

- MNZ is interested in hearing more from any stakeholders who have developed a SEEMP and are willing to share the details of that experience with us.
- MNZ and MoT are looking at what data will be necessary or helpful to implement Annex VI's current and future requirements (e.g. information on which ships use which fuels and how many ships have SEEMPs).

### **Next steps – continuing engagement**

- We are currently engaging with stakeholders through a series of focussed roundtables like this one. Notes on each meeting will be posted to our website.
- We will be consulting on draft rules to implement Annex VI around the middle of next year.
- New webpage, one-pagers and roundtable notes are located at <https://www.maritimenz.govt.nz/rules/marpol-annex-vi>.
- If you have any questions or wish to provide further feedback email [MARPOLAnnexVIProject@maritimenz.govt.nz](mailto:MARPOLAnnexVIProject@maritimenz.govt.nz).

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