

Preliminary Report of MEPC 76

The 76th session of the IMO Marine Environment Protection Committee (MEPC 76) was held from 10 to 17 June 2021 by video conference, due to the pandemic of COVID-19. A summary of the outcome is given hereunder for your information.

Please note that this summary has been made based on informal information obtained from participants from ClassNK and Working Papers developed during MEPC 76 with priority given to disseminating the information as early as practicable.

1. Greenhouse Gases (GHG) emission reduction measures

Measures to reduce GHG emissions from international shipping have been deliberated at IMO, and so far, the Energy Efficiency Design Index (EEDI), the Ship Energy Efficiency Management Plan (SEEMP) and the Data Collection System for fuel oil consumption of ships (DCS) were introduced.

Further, at MEPC 72 held in 2018, Initial IMO Strategy on reduction of GHG emissions from ships, which includes emission reduction target and candidate measures to reduce GHG emissions, was adopted.

1.1 Short-term measures for reduction of GHG

Initial IMO Strategy on reduction of GHG emissions from ships, adopted at MEPC 72, specifies short-term target by 2030 and mid/long-term target by 2050.

At this session, amendments to MARPOL Annex VI were adopted to implement Energy Efficiency Existing Ship Index (EEXI), as a technical approach, and Carbon Intensity Indicator (CII), as an operational approach, to achieve the short-term target for improvement of transportation efficiency at

least 40% compared to 2008.

1) Energy Efficiency Existing Ship Index (EEXI)

- Regulations for existing ships to require the same level of energy efficiency as new ships
- EEXI will be applied to all ships^{*)} of 400 GT and above engaged in international voyage.
- Attained EEXI for each existing ship should be calculated using the similar formula to EEDI
- Required EEXI for each existing ship should be calculated using EEDI reference lines for each category of ships by multiplying reduction factor stipulated by ship size
- If the attained EEXI value cannot satisfy the required EEXI, the ship should implement a measurement to improve energy efficiency, such as shaft/engine power limitation etc.
- For ships already applied EEDI requirements and, if the attained EEDI value also complies with the required EEXI, the attained EEDI value as indicated in IEE Certificate or EEDI technical file can be used as an alternative to the attained EEXI
- Verification for EEXI shall take place at the first annual, intermediate or renewal survey of IAPP Certificate on or after 1 January 2023

*) Bulk carrier, Gas carrier (LPG carrier), Tanker, Containership, General cargo ship, Refrigerated cargo carrier, Combination carrier, Ro-ro cargo ships (Vehicle carrier), Ro-ro cargo ship, Ro-ro passenger ship, LNG carrier and Cruise passenger ship

(Except ships which have non-conventional propulsion such as diesel electric, turbine or hybrid propulsion system, but in this context, except LNG carrier and cruise passenger ship)

For more details of EEXI regulations such as presentation video and relevant information documents, please refer to NK website as follows. Based on the outcomes of MEPC 76, contents of the website will be updated in due course.

NK website>Products & Services>Statutory Services>EEXI

URL:<https://www.classnk.or.jp/hp/en/activities/statutory/eexi/>

2) Carbon Intensity Indicator (CII)

- Ships are rated on a scale of A to E based on annual operational energy efficiency (CII)
- CII will be applied to all ships**) of 5,000 GT and above engaged in international voyage
- By the end of 2022, each ship should indicate on SEEMP, how to calculate annual CII from 2023 and reporting procedure of CII
- After 2023, each ship should calculate its attained CII every year, based on the data of annual fuel consumption and annual distance travelled, which are collected under Data Collection Systems (DCS)
- Required CII is calculated using CII reference lines for each category of ships by multiplying reduction factor stipulated for each year
- Comparing the attained CII with the required CII, ships are rated as A to E, based on the gap between the attained CII and the required CII
- If a ship is rated as D for three consecutive year or rated as E, the ship should develop a plan of corrective actions, such as speed reduction or optimal routing etc.
- The reduction factor to be used for calculating the required CII will be enhanced every year as

follows. Reduction factor means reduction rates from CII reference lines, which is a curve representing the average CII for each category of ships in year of 2019.

Year	Reduction factor
2023	5%
2024	7%
2025	9%
2026	11%
2027-2030	To be decided later

- In case of flag change, CII should be evaluated by the flag Administration after the flag change based on the data throughout of the year

**) Bulk carrier, Gas carrier (LPG carrier), Tanker, Containership, General cargo ship, Combination carrier, Ro-ro cargo ships (Vehicle carrier), Ro-ro cargo ship, Ro-ro passenger ship, LNG carrier and Cruise passenger ship

1.2 Other measures for reduction of GHG

1) Work plan for mid/long-term measures

MEPC 76 developed work plan for development of mid/long-term measures, as a follow up of the initial IMO strategy on reduction of GHG emissions from ships. A summary of work plan is as follows:

Phases	Work item	Timeline
Phase I	Collation and initial consideration of proposals for measures	2021-2022
Phase II	Assessment and selection of measures to further develop	2022-2023
Phase III	Development of measures for statutory requirements	2023-

2) IMRF and IMRB

At MEPC 75 held in November 2020, it was proposed to establish International Maritime Research Fund (IMRF). MEPC 76 agreed to continuously consider this proposal at future session.

1.3 Requirements of minimum propulsion power and EEDI

At MEPC 65, *Interim Guidelines for determining minimum propulsion power to maintain the maneuverability of ships in adverse conditions* (MEPC.232(65)) were developed to avoid construction of extremely under-powered ships. At MEPC 71, it was agreed to extend the application period of the *Guidelines* towards phase 2 of EEDI regulation.

At this session, amendments to *Guidelines for determining minimum propulsion power to maintain the maneuverability of ships in adverse conditions* were adopted to incorporate the results of SHOPERA and JASNAOE projects.

MEPC 76 also agreed to further consider the concept of shaft/engine power limitation to comply with both EEDI and minimum propulsion power requirements at MEPC 77.

2 Others

2.1 Underwater noise

MEPC 66, held in 2014, adopted *Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life* (MEPC.1/Circ.833).

At this session, it was agreed to establish new work program to undertake a review of the *Guidelines*. The review will be started at SDC Sub-Committee next year.

3. Amendments to mandatory instruments

MEPC 76 adopted amendments to mandatory instruments as follows:

3.1 Short-term measures for reduction of GHG: EEXI and CII

Amendments to MARPOL Annex VI to implement EEXI and CII regulations to achieve short-term target by 2030, -i.e. 40 % improvement of energy efficiency of international shipping, were adopted.

Entry into force: 1 November 2022

Applicable from 1 January 2023

3.2 Heavy fuel oil in Arctic waters

Amendments to MARPOL Annex I to prohibit the use, and carriage for use as fuel of heavy fuel oil by ships in Arctic waters were adopted. This prohibition will be applied on or after 1 July 2024, although the application date is on or after 1 July 2029 for ships to which regulation 12A of this Annex or regulation 1.2.1 of chapter 1 of part II-A of the Polar Code applies. The carriage of heavy fuel oil as cargo will not subject to the prohibition.

Entry into force: 1 November 2022

3.3 Control of Harmful Anti-fouling Systems on Ships (AFS Convention)

Amendments to AFS Convention to prohibit the use of anti-fouling paints that contains cybutryne were adopted.

Entry into force: 1 January 2023

ClassNK External Affairs Department is pleased to provide international trends promptly

For any questions about the above, please contact:

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