

**ENVIRONMENT, PUBLIC HEALTH AND FOOD SAFETY (ENVI)** 

## Key Issues at Stake at the 71<sup>st</sup> Session of the IMO Marine Environment Protection Committee (MEPC 71)

## **KEY FINDINGS**

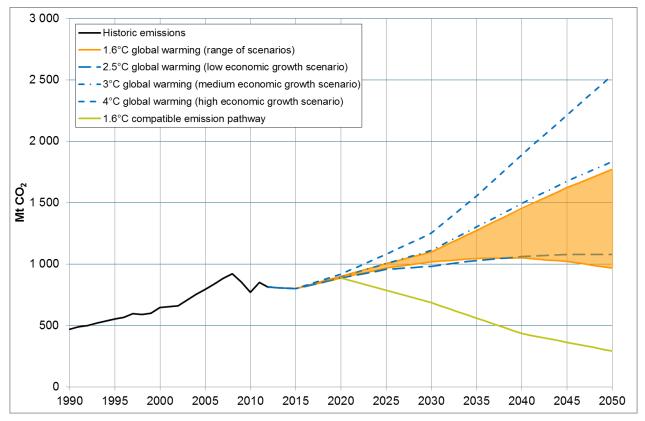
- Despite efficiency improvements, CO<sub>2</sub> emissions from international shipping are projected to be two to five times higher in 2050 than in 1990. At the Paris climate conference, countries agreed to limit climate change to well below 2°C. Without considerable contributions of the shipping sector to global mitigation efforts this goal will be much harder to achieve.
- In 2011, the IMO adopted two efficiency measures to address greenhouse gas (GHG) emissions: the Energy Efficiency Design Index (EEDI) sets compulsory energy efficiency standards for new ships built after 2013, and the Ship Energy Efficiency Management Plan (SEEMP) requires ships to develop a plan to monitor and possibly improve their energy efficiency.
- The main issue at stake at MEPC 71 is the development of the **Comprehensive IMO Strategy on reduction of GHG emissions from ships**. MEPC 71 will be preceded by a weeklong meeting of the GHG Working Group that will discuss issues relating to the Initial Strategy that should be adopted next year.
- It is recommended that the ENVI delegation uses opportunities such as **bilateral meetings** with delegations from other countries, **informal conversations** or the **side events** to discuss the **importance of emissions reductions in the maritime sector** and the pros and cons of regional measures.

# 1. Greenhouse gas emissions from international shipping – background

Historical emissions from international maritime transport increased by 80 % or 3.0 % per year from 1990 to 2010 (IEA 2014). In comparison, the total global GHG emissions only rose by 1.1 % per year during that period (van Vuuren, D. P. et al. 2011). In 2012, the latest year for which comprehensive data are available, international shipping accounted for about 800 Mt CO<sub>2</sub> emissions equalling 2.2 % of global manmade emissions (IMO 2015a).

Figure 1 shows the historical emission development as well as different projections up to 2050. The projections are based on a new study submitted to MEPC 71 (CE Delft & Lee 2017). The study shows that without further measures to address the GHG emissions of shipping, they will increase from 800 Mt in 2012 to 1,000 – 1,800 Mt in 2050 in long-term socioeconomic scenarios that are compatible with the Paris Agreement goals. If the world does not meet the Paris Agreement goals, emissions could increase to up to 2,500 Mt in 2050 because, amongst other things, there will be more transport of fossil fuels. Technological and operational improvements have a potential to reduce  $CO_2$  emissions by around 33 % in 2050 (IMO 2015a). If the world at large followed an emissions trajectory compatible with the Paris Agreement but emissions from international maritime transport were to increase as forecast, the maritime sector would use up 17 % of the global carbon emissions budget in 2050 (Cames et al. 2015).

## Figure 1: Historical, projected and permissible CO<sub>2</sub> emissions from international maritime transport under different economic forecasts



**Notes:** The projections are based on the expected demand for international shipping under the different economic scenarios and do not consider emission budgets. The green line shows a pathway for the shipping sector that would be compatible with the Paris Agreement (see Cames et al. 2015, the pathway shown here is based on constant share of RCP 2.6 CO<sub>2</sub> emissions).

Source: IEA 2014, IMO 2009, IMO 2015a, CE Delft & Lee 2017, Cames et al. 2015

## 2. EU legislation on reducing shipping emissions – an overview

For many years, the EU has been calling for global action to address GHG emissions from international shipping, both under the UNFCCC and more prominently under the IMO. In 2009, the EU suggested establishing a reduction target of -20 % by 2020 compared to 2005 levels (Council of the European Union 2009). Under the IMO, EU Member States have supported the establishment of market-based mechanisms (MBMs).

In the White Paper on transport, the Commission claims that the  $CO_2$  emissions of the shipping sector should be reduced by at least 40 % by 2050 compared to 2005 levels. The EU developed a stepwise approach to addressing these emissions:

- monitoring, reporting and verification (MRV) of CO<sub>2</sub> emissions from shipping,
- developing an emission reduction target for the shipping sector and
- establishing policies to reduce GHG emissions, including through MBMs.

The first step is considered as a 'no regret' measure since a sound data basis is a prerequisite for both of the following steps. The first step is implemented by EU Regulation 2015/757 (EU 2015). According to the impact assessment of this regulation the increased attention of ship operators alone may reduce  $CO_2$  emissions by 2 % and overall costs by  $\in$  1.2 billion.

The European Parliament has stated that "all sectors of the economy are required to contribute to the reduction of carbon dioxide emissions" and has been pushing for more ambitious action by IMO. Recognising the work carried out at the international level, the Parliament calls for the adoption of "clear targets to reduce international maritime emissions through the IMO" as a matter of urgency. If no such agreement is possible by the end of 2021, the sector should be included under the EU Emissions Trading System (EP 2017).

# **3. IMO** actions and measures geared to reducing international shipping emissions

To date, the IMO has adopted two efficiency measures to address GHG emissions (IMO 2015b):

- the **Energy Efficiency Design Index** (EEDI) sets compulsory energy efficiency standards for new ships built after 2013, and
- the **Ship Energy Efficiency Management Plan** (SEEMP) requires ships to develop a plan to monitor and possibly improve their energy efficiency.

Market Based Measures, including an ETS and a global GHG fund, have been discussed in the period of 2007 to 2010, but MEPC has not been able to reach consensus on this issue.

Despite efficiency improvements brought about by the EEDI, the SEEMP and market forces, emissions are, depending on global economic growth and fossil fuel demand, projected to increase by 20 % to 120 % in the period up to 2050 (IMO 2015a), assuming that the world economy develops in a way that is consistent with the Paris Agreement goals (otherwise, emissions may increase to up to 210 %). The increase in maritime emissions will make it harder for the world to reach net zero emissions in the second half of the century, as aimed for in the Paris Agreement.

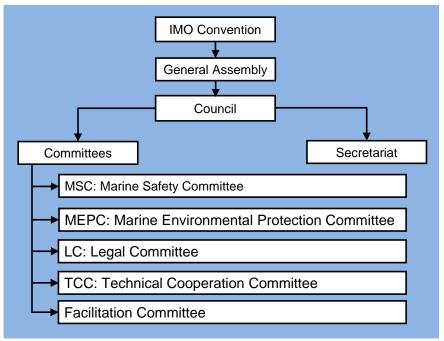
MEPC 70 has adopted a data collection system that requires ships to collect and report data on fuel consumption and proxies for transport work from 2019 onwards and report it to their flag state, who will forward the data to IMO. This will allow IMO to monitor the development of maritime GHG emissions.

MEPC 70 also approved a Roadmap for developing a comprehensive IMO strategy on reduction of GHG emissions from ships, which foresees an initial GHG reduction strategy to be adopted in 2018 and a revised one in 2025. The discussion on the IMO strategy should include topics like the level of ambition and guiding principles, emission scenarios, emission reduction options, etc. The initial strategy should include a list of candidate short-, medium- and longterm further measures, whereas the revised strategy should contain implementation schedules for these measures. The MEPC has increased the time allowed for discussions of the strategy by scheduling three intersessional meetings of one week in duration in 2017 and 2018. The first will be held in the week prior to MEPC 71.

## 4. Role and structure of IMO and MEPC

## IMO

The IMO was established in 1948 by the IMO Convention, which entered into force in 1958. Currently the IMO has 171 Member States plus three Associate Members. Its main purpose is to facilitate cooperation among governments on issues relevant for ships engaged in international journeys. Once every two years an Assembly is held in which the most important decisions are taken or signed off. A Council supervises five Committees, one of which is the Marine Environmental Protection Committee. These committees conduct technical work with a view to elaborating draft decisions which can then be agreed in the Assembly.





Source: CEESE-ULB 2007

Most decisions can be taken with a majority, certain decisions with a two-thirds majority of the IMO Member States present and voting. Decision-making by consensus is generally preferred. Assembly decisions are applicable to all IMO Member States, though national circumstances are reflected in some decisions in specific provisions such as delayed implementation.

## MEPC

The Marine Environment Protection Committee (MEPC) was established as a permanent subsidiary body of the IMO in 1973 and formally entered into force through an amendment of the IMO convention in 1982. All 172 IMO Member States and the 3 associate members are members of MEPC, although not every State participates at every MEPC. In addition, the IMO has 65 Intergovernmental Organisations in consultative status and 77 NGOs with an observer status. NGOs range from industry associations like the International Chamber of Shipping to professional bodies such as the Royal Institution of Naval Architects and to environmental organizations like the Clean Shipping Coalition. Within the MEPC, IMO Member States can propose and discuss any issues related to the prevention and control of environmental impacts from international shipping. The MEPC meets three times between the Assembly meetings. In addition, MEPC regularly establishes correspondence groups or convenes intersessional meetings to address and advance specific issues. The MEPC can make decisions on items on its agenda and especially on issues relating to the MARPOL Convention. MEPC decisions do

not need to be approved by the General Assembly or the Council. There is a strong preference in MEPC for making decisions by consensus.

## Role of the EU

Usually the EU position is coordinated prior to the MEPC session at several meetings in Brussels and during the MPEC session at shorter coordination meetings before and after the daily MEPC sessions. In general, EU Member States can act independently unless there is European legislation. In the subjects covered in this note, this only applies to the DCS which is related to the EU MRV, and for which all EU Member States have sponsored a submission together with the Commission. The European Commission is an observer and therefore has no vote.

## 5. MEPC 71

MEPC 71, which will take place from 3 to 7 July 2017, has three agenda items relating to greenhouse gas emissions:

- Agenda **item 5, Air pollution and energy efficiency**, will mainly cover technical aspects with regards to the EEDI.
- Agenda item 6, Further technical and operational measures for enhancing the energy efficiency of international shipping, will cover the IMO data collection system.
- Agenda **item 7, Reduction of GHG emissions from ships**, will cover the development of the GHG reduction strategy.

The potential HFO ban in the Arctic will be covered under agenda **item 14, Any Other Business** and under agenda **item 16, Work Programme of the Committee and Subsidiary**.

The subsections below will discuss the submissions regarding agenda items 7, 6, and the potential HFO ban in the Arctic in more detail.

#### Main issues at stake

#### GHG Reduction Strategy (Agenda item 7)

MEPC 70 approved a *Roadmap for developing a comprehensive IMO strategy on reduction of GHG emissions from ships*, which foresees an initial GHG reduction strategy to be adopted in 2018 (MEPC 72) and the adoption of the revised strategy at MEPC 80 (spring 2023).

The development of this GHG Reduction Strategy will be discussed at MEPC 71 under Agenda item 7, **Reduction of GHG emissions from ships**. The week before MEPC 71, the Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG) will meet intersessionally on terms of reference adopted by MEPC 70 (any IMO Member State, IGO or NGO can participate in the Working Group). Its task is to "consider how to progress the matter of reduction of GHG emissions from ships and advise the Committee as appropriate."

Fifteen papers and one information document have been submitted to MEPC 71 under Agenda item 7. Several of these papers/documents have also been submitted to ISWG-GHG1. Moreover, 7 papers have been submitted to ISWG-GHG1 only. ISWG-GHG1 will report to MEPC 71. This report will become available just before MEPC 71. EU Member States have submitted four documents together with Pacific Island states and NGOs and in one case with a Caribbean Island State.

An analysis of the submissions to MEPC 71 and ISWG-GHG1 suggests that the following issues will be discussed under agenda item 7 at MEPC 71:

### 1. The level of ambition

The first issue to be discussed regarding the level of ambition is the type of ambition that the IMO Strategy will set. Proposals range from a global cap/global emission pathway (Belgium et al., MEPC 71/7/8; Marshall Islands et al., MEPC 71/7/3; Greenpeace et al., MEPC 71/7/14), an efficiency target (Norway, MEPC 71/7/1), a combination of a global cap and an efficiency target (Japan, MEPC 71/7/11; ICS et al., MEPC 71/7/12) to national action plans comparable to NDCs under the Paris agreement (China and India, MEPC 71/7). As explained under 'Guiding principles' below, national action plans may not be very effective from an environmental point of view.

Several submissions argue explicitly against an emissions target because it would be incompatible with the volatility of transport demand (Argentina et al, MEPC 71/7/6; China and India, MEPC 71/7). Other submissions argue that a global emissions cap is necessary for reaching the goals of the Paris Agreement. Several others point out that the level of ambition should be ambitious but achievable/realistic/evidence-based (e.g. Singapore, ISWG-GHG 1/2/7), which is why there could be a discussion on whether and when decarbonisation could be achievable for international shipping and how this could be determined.

There are also different views on whether a target should be binding (e.g. Marshall Islands et al., MEPC 71/7/3 and Greenpeace et al., MEPC 71/7/14) or aspirational (Japan, MEPC 71/7/11; ICS et al., MEPC 71/7/12) and whether, when, and how often a target should be reviewed.

### 2. Guiding principles

On the guiding principles, the discussion is likely to focus on whether the Strategy should be developed on the basis of "no more favourable treatment" (NMFT), as is common in IMO; on the basis of "common but differentiated responsibilities and respective capabilities" (CBDR&RC), as is common under UNFCCC; or both. In the latter case, the issue is how the two principles can be combined.

Two submissions stress that the CBDR&RC principle should be the basis of the strategy (China and India, MEPC 71/7; Argentina et al, MEPC 71/7/6), whereas two stress that IMO should stick to the NMFT principle (Canada, MEPC 71/7/10; Japan, MEPC 71/7/11). Two other submissions seek a compromise (Korea, MEPC 71/7/2; Singapore, ISWG-GHG 1/2/7). EU Member States and Pacific States do not explicitly discuss the issue, but their MEPC 71/7/9 submission intends to show their willingness to discuss the impacts of policies on states and mitigate undesired impacts.

It is important that policy instruments apply to all ships in the same way because otherwise ships could avoid the impact of a policy by changing flag and this would undermine the effectiveness of the strategy. A route-based differentiation could be difficult to implement, with the exception of remote island states, because it could increase the scope for avoidance by making additional port calls. This does not necessarily mean that differentiation cannot be applied to shipping. The proposal of Korea to shift the burden of funding technological development to developed countries (MEPC 71/7/2) could be one way to implement some form of CBDR&RC. The need for technological development is also recognised by China and India (MEPC 71/7), BIMCO et al. (MEPC 71/7/4), Canada (MEPC 71/7/10) and Japan (MEPC 71/7/11). Analysing the impacts on developing countries, as called for by Argentina et al. (MEPC 71/7/6), could open the way

for targeted measures to mitigate the impacts on states as discussed by Belgium et al. (MEPC 71/7/9).

The suggestion of China and India (MEPC 71/7) to accommodate CBDR&RC by developing national action plans (and to let LDCS and SIDS submit national plans at their discretion) risks having little effect because States only have jurisdiction over emissions in their national waters and over ships flying their flag.

#### 3. Specific measures

A number of measures have been proposed:

- The establishment of an International Maritime Research Board to coordinate the technological development required for low-emission ships and fuels (BIMCO et al., MEPC 71/7/4);
- 2. The development of National Action Plans (China and India, MEPC 71/7);
- 3. Measures to improve the fuel-efficiency of the existing fleet, such as an "Existing Fleet Improvement programme" (BIMCO et al., MEPC 71/7/4); an "innovative approach" similar to the Norwegian NOx fund (Canada, MEPC 71/7/10); and "transparency of the energy efficiency of ships" (Greenpeace et al, 71/7/14);
- 4. Measures regulating the operational efficiency of ships (Norway, MEPC 71/7/1);
- 5. Regulated speeds (Greenpeace et al, 71/7/14);
- 6. Removal of barriers to the uptake of fuel-efficiency measures (Greenpeace et al, 71/7/14); and
- 7. Unspecified "policy actions related to the promotion of energy switching to alternative low carbon energy" (Japan, MEPC 71/7/11).

In addition, several submissions argue that studies should be conducted that analyse policy measures. Japan wants a study to analyse policy options to increase the use of low-carbon fuels (MEPC 71/7/11) and Singapore proposes studies that analyse the enhancement of existing measures like the EEDI and the SEEMP; options to reduce emissions; promotion of cleaner fuels; and MBMs and their impacts (ISWG-GHG 1/2/7).

Considering that the initial strategy should contain "a list of candidate short-, mid- and long-term further measures", it is surprising that the proposed measures have not been further elaborated by this stage. It is clear, however, that most focus on fuel-efficiency of the existing fleet (either technical or operational) and on research. Market based measures, on which agreement has proven difficult to reach in the IMO context, are not making a comeback yet.

MEPC 71	Title	Co-sponsors	Sub- mission
7	Proposal on the development of the comprehensive IMO Strategy on reduction of GHG emissions from ships	China, India	
7/1	Consideration of a timeline for the three-step approach	Norway	
7/2	Developing the guiding principles for the comprehensive IMO strategy on reducing GHG emission from ships	Republic of Korea	
7/3	The need for a high level of ambition within the comprehensive IMO strategy on reduction of GHG emissions from ships	Marshall Islands, Solomon Islands	2/2

#### Table 1: Relevant agenda items and documents

7/4	A proposal to consider in developing the IMO GHG strategy	BIMCO, IPTA, WSC	2/6	
7/5	Update of maritime greenhouse gas emissions projections (see also INF. 34)	BIMCO	2/3	
7/6	Guiding principles for the IMO Strategy on reduction of GHG emissions from ships	Argentina, Brazil, China, Ecuador, India, Nigeria, Saudi Arabia, South Africa, Turkey		
7/7	Possible emissions scenarios and a method for quantifying an emissions pathway for shipping (+ INF. 35)	BE, DK, FR, DE, Marshall Islands, NL, Solomon Islands, Tonga, Tuvalu, ICHCA	2/12	
7/8	The level of ambition of the comprehensive IMO Strategy on reduction of GHG emissions from ships	Antigua and Barbuda, BE, DK, FR, DE, Kiribati, Marshall Islands, Solomon Islands, SE, Tonga, Tuvalu, IAPH, ICHCA	2/13	
7/9	Impacts of GHG reduction measures on transport costs and on States	BE, FR, DE, Kiribati, Marshall Islands, NL, Solomon Islands, Tonga, Tuvalu, ICHCA	2/14	
7/10/ Rev.1	Proposal of key measures to reduce GHG emissions from shipping	Canada	2/11	
7/11	Comments on document MEPC 71/7 and other documents under agenda item 7 $$	Japan		
7/12	Elements for inclusion in the IMO Strategy	ICS, BIMCO, INTERTANKO, INTERCARGO	2/9	
7/13	Comments on document MEPC 71/7 on a proposal on the development of the comprehensive IMO strategy on reduction of GHG emissions from ships	BE, DK, FR, NL, Solomon Islands, SE		
7/14	Important first steps for a successful Interim GHG Strategy	Greenpeace International, WWF, Pacific Environment, CSC		
INF.23	Methane emission from LNG carriers	Republic of Korea		
ISWG-GHG 1				
2	Existing IMO activity related to reducing GHG emissions in the shipping sector	Secretariat		
2/1	Input to the Roadmap – Technical evaluation and further process on the indicators on energy efficiency in the three step approach	Norway		
2/4	Development of the comprehensive IMO strategy on reduction of GHG emission from ships	Japan		
2/5	Promotion of energy switching to alternative low carbon energy in international shipping under the comprehensive IMO strategy on reduction of GHG emissions from ships	Japan		
2/7	Proposal on elements in the IMO strategy	Singapore		
2/8	Comments on the current estimates and projections of international shipping GHG emissions	Brazil		
2/10	Calculated EEOI improvements using ship energy efficiency methods	IMarEST RINA		
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**Source:** Author's compilation

#### Data Collection System, agenda item 5

MEPC 70 adopted mandatory MARPOL Annex VI requirements for ships to record and report their fuel oil consumption in resolution MEPC.278(70), also referred to as data collection system (DCS). Next to fuel oil consumption, a proxy for transport work will also have to be reported. Note that the main differences between the DCS and the EU MRV for shipping are:

- The EU MRV requires ships to submit data on voyages to and from EU ports, whereas the DCS is global in nature.
- The DCS requires ships to report to their flag state, which will verify the data, whereas under the EU MRV shipping companies have to submit a report to the European Commission that has been verified by an independent, accredited third party verifier.
- The DCS requires ships to report *transport work proxies* such as dwt-miles, whereas the EU MRV requires ships to report actual cargo carried.

Regarding the data collection system, 5 papers, including 1 information paper, have been submitted to MEPC 71. The submissions are technical; they concern the architecture of the IMO Database, guidelines for the development of the database and for Flag State verification, and transport work proxies for non-cargo ships.

The outcome of the Secretariat's review of technical and security issues identified with regard to the establishment of the IMO Ship Fuel Oil Consumption Database are presented in MEPC 71/6.

MEPC 71/6/1 is the report of the Correspondence Group to MEPC, with INF. 3 as a supplement. The Correspondence Group has developed draft Guidelines for Administration data verification procedures, draft Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database and a draft MEPC circular to address non-Party ships submitting data to the database.

In MEPC 71/6/2 (Challenges of attempting to define transport work proxies for offshore and marine vessels) IMCA explains why the concept of "transport work" is not appropriate for offshore and marine contracting vessels and proposes to exclude these ship types from the discussion on suitable proxies at least at that stage.

In MEPC 71/6/3 (Passengers as proxy for cargo) CLIA proposes to work with passenger nautical miles as a proxy for the transport work of cruise passenger ships that do not carry cargo which would be in line with the EU MRV approach.

#### HFO ban in the Arctic

Since August 2011, the carriage in bulk as cargo as well as the carriage and use as fuel of heavy fuel oil has been banned in the *Ant*arctic Area (MARPOL Annex I, chapter 9). The Polar Code (in force since January 2017) prohibits in the waters surrounding the two poles the discharge of oil or oily mixtures from any ship into the sea and sets structural requirements to category A and B ships constructed on or after 1 January 2017, but a ban comparable to the one in the Antarctic Area has not been implemented in the Arctic yet.

There are two major concerns with regard to HFO use in the Arctic: First, an oil spill could have severe impacts on marine and coastal ecosystems and could also endanger Arctic indigenous food security (oil spills are difficult to clean up due to harsh conditions and darkness); oil has a slow rate of degradation, especially in colder regions; lack of infrastructure to respond to the spill), and second, the global warming effect and health effect of black carbon emissions (BC emissions are expected to be higher for HFO than for other fuels).

Due to the 2020 global sulphur cap, use of distillate fuels is expected to rise, but since ship activity in the Arctic is also expected to increase as ice dwindles, the use of HFO might still rise.

Five submissions to MEPC 71 are related to a potential HFO ban, showing divergent views amongst the submitters.

MEPC 71/INF. 36 and MEPC 71/INF. 37, both submitted by CSC, FOEI, Pacific Environment and WWF, summarize a recently published ICCT report. The reports estimate the costs for ships to switch from HFO to distillates and LNG in the Arctic and estimate the use and carriage of HFO in the Arctic.

MEPC 71/16/4 (Current and projected vessel traffic in the Arctic: heavy fuel oil use and its alternatives; submitted by CSC, FOEI, Pacific Environment and WWF) illustrates the risk of oil spills in the Arctic with examples, analyses current and projected shipping in the Arctic, and summarizes literature on alternative fuels and associated costs.

MEPC 71/16/8 (Comments on the use of heavy fuel oil in the Arctic (71/16/4), submitted by the Russian Federation): stresses that the share of shipping BC emissions is, compared to other sources, minor, that there have been only 5 oil spill incidents during the last 46 years in the Arctic as defined in the Polar Code; it also questions the suitability of an example given in 71/16/4, states that distillates would be more harmful to the environment than heavy Mazut-100 (as spilled in the example given in 71/16/4), calls attention to the fact that the Russian Arctic settlements mostly rely on HFO for heating and cannot switch in the short run. Future work to mitigate risks associated with the use and carriage of HFO would be required and not banning HFO.

MEPC 71/14/4 (Measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters; submitted by Canada, Finland, Germany, Iceland, Netherlands, Norway, and the United States): proposes to consider different measures ("including ship design and equipment for new and existing ships, operating constraints, restricting or phasing out the use of particular types of fuels in all or parts of Arctic waters") to reduce environmental risks of use and carriage of HFO as fuel by ships in Arctic waters and specifies (under 12) elements that should be considered when developing the measures. It stresses the urgency to act quickly.

## 6. Conclusions and recommendations for the ENVI delegation

MEPC 71 is an important meeting, particularly because a considerable amount of work will need to be conducted to prepare the initial IMO strategy on the reduction of GHG emissions from ships, which should be adopted at the next MEPC in spring 2018 with two intersessional meetings to make progress in between. While it is not foreseen that decisions will be taken at this session, the main elements of the initial strategy will be discussed, which should give some idea of what will be achievable.

Three main issues are at stake:

- 1. The level of ambition of the initial (2018) and the revised (2023) strategy;
- 2. The guiding principles for the development of the strategy; and
- 3. The measures that will be studied further.

The positions of the various parties that have submitted documents on the issue are far apart on fundamental issues such as what the aim of the strategy should be and on which principles the strategy should be based. Moreover, the measures that the initial strategy should contain are not yet clear.

The ENVI delegation could aim to convey the position of the European Parliament (EP 2017), including conditions under which it would consider to call for regional measures, to key Parties. Table 2 shows some suggestions for meetings with Parties. In addition to the subjects mentioned in the table, the ENVI delegation may want to use the opportunity to discuss how parties see the relation between the EU MRV and the IMO DCS.

Countries / NGOs	Positions	Possible topics for discussion
Brazil, China, India (Argentina, Ecuador, Nigeria, Saudi Arabia, South Africa and Turkey)	Have argued against unilateral measures in MEPC 71/7 and MEPC 71/7/6. Have traditionally emphasized the need to take CBDR&RC into account.	<ul> <li>Argue for CBDR&amp;RC. How do they see this work in practice? Is KOR proposal attractive? Or the Belgium et al. proposal? Do they think a route- based differentiation (like ICAO) is conceivable in shipping?</li> <li>Support Paris Agreement but argue against an emissions cap. How do they see the relation between maritime emissions and other emissions? Would an emissions pathway be conceivable and if so, under which conditions?</li> </ul>
Singapore	Has traditionally held the middle ground between the developing and developed countries. Proposes a ban on unilateral measures as one of the principles.	- Wants to accommodate both NMFT and CBDR&RC. How do they see this work in practice? Is KOR proposal attractive? Or the Belgium et al. proposal? Do they think a route- based differentiation (like ICAO) is conceivable in shipping?
Japan, Canada	Have traditionally emphasized the need for NMFT. Have not supported absolute caps up to now.	<ul> <li>Argue against differentiation. Still, there may be a need for some differentiation in order to reach consensus on the strategy. Are there options that could be acceptable?</li> </ul>
Norway	There seems to be a disconnect between Norway proposing operational efficiency targets and other submissions that do not mention this option anymore.	<ul> <li>Are operational efficiency targets an essential element of a strategy and if so, why?</li> </ul>
Marshall Islands and Solomon Islands	Have traditionally argued for stringent caps.	<ul> <li>How can the EU assist them in making their voice heard?</li> </ul>
BIMCO, ICS, WSC (shipping industry)	Have traditionally argued for NMFT and against unilateral measures.	<ul> <li>If some kind of differentiation were needed, how could it be implemented?</li> </ul>
Clean Shipping Coalition (environmental NGO)		- Where do they see the possibilities to reach consensus?

## Table 2: Party positions

Source: Authors

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