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PREVENTION OF AIR POLLUTION FROM SHIPS

An International Fund for Greenhouse Gas emissions from ships

Submitted by Cyprus, Denmark, the Marshall Islands, Nigeria and the International Parcel Tankers Association (IPTA)

SUMMARY

Executive summary:	This document elaborates further on the proposed International Fund for Greenhouse Gas Emissions from Ships. The document: 1) considers proposed changes of the basic proposal in MEPC 59/4/5; 2) examines central issues; 3) elaborates on the allocation of revenues for climate purposes in developing countries; 4) carries out preliminary evaluations called for at MEPC 59; and 5) examines compliance with the nine fundamental principles.
Strategic direction:	7.3
High-level action:	7.3.1
Planned output:	7.3.1.1 and 7.3.1.3
Action to be taken:	Paragraph 97
Related documents:	MEPC 60/INF.7; MEPC 59/24, MEPC 59/24/Add.1, MEPC 59/4/5; MEPC 58/4, MEPC 58/23, MEPC 58/4/22, MEPC 58/INF.14; GHG-WG 1/5/1; MEPC 57/21, MEPC 57/4/4 and MEPC 57/INF.13

Introduction

1 This document is submitted in accordance with MSC-MEPC.1/Circ.2, Guidelines on the Organization and Method of Work.

2 This document is without prejudice to the outcome of COP 15 and does not, in principle, rely on the outcome of COP 15. It has been drafted before COP 15. If the outcome of COP 15 in any way influences the content of this submission, any of the sponsors may submit a supplementing document according to the deadline relaxation for documents concerning the output of COP 15, cf. MEPC 60/1/Add.1.

3 MEPC 59, there was an in-depth discussion on the merits of the different approaches to market-based measures. The Committee agreed that the debate on market-based measures should be continued at MEPC 60 to further advance discussions and come to a conclusion on the evaluation of individual proposals and their applicability.

4 Recognizing that technical and operational measures alone would not be sufficient to satisfactorily reduce the amount of greenhouse gas (GHG) emissions from international shipping and in the view of projections that world trade would continue growing, the Committee agreed by an overwhelming majority that a market-based measure was needed and should be developed by the IMO to complement the technical and operational reduction measures as part of a comprehensive package of measures for the regulation of GHG emissions from international shipping, cf. paragraphs 4.92 and 4.106-4.107 of MEPC 59/24.

5 The Committee also noted that a market-based instrument could serve three main purposes: 1) the offsetting of growing ship emissions; 2) the provision of incentives for the maritime industry to invest in more fuel efficient ships and to operate ships in a more energy efficient way; and 3) the generation of considerable funds, which could be used for different climate-related purposes, such as mitigation and adaptation activities in developing countries.

6 At MEPC 59, a large number of the delegations speaking were in favour of the GHG Fund as its approach seemed pragmatic and easy to administer considering that the contributions would go directly to the GHG Fund and not to the countries involved.

7 The proposal for a GHG Fund is expected to balance the needs of the world economy by ensuring that eventually growth is still possible within the sector, while at the same time ensuring that shipping takes on its responsibility in addressing climate change. This is done by reducing or offsetting emissions through the Clean Development Mechanism (CDM) as described in paragraphs 62 and 63 of this document, and also by financing adaptation purposes in developing countries as described in paragraphs 64 to 67. Since the proposal builds on well-known approaches, it will be relatively easy to implement it efficiently in a short time frame and, consequently, the time cycle for the entry into force of the new convention should be kept within the average time, cf. paragraph 67, to benefit the global climate in the short as well as the long term. As stated in the basic proposal, it is considered to be the most suitable course to introduce the International GHG Fund via a new IMO Convention.

8 For the purposes of this submission, “States being party to the new IMO convention on an International GHG Fund for Greenhouse Gas Emissions from Ships” will be referred to as merely the “Party” or “Parties”, respectively. Correspondingly, “The International Fund for Greenhouse Gas Emissions from Ships” will be referred to as merely the “GHG Fund” and the basic proposal on a GHG Fund, described in MEPC 59/4/5, will be referred to as “the basic proposal”.

Objective

9 Based on the conclusions reached by MEPC 59 and building upon the basic proposal, the objective of this submission is to further demonstrate that the GHG Fund is an effective and efficient scheme to address the global climate change issue. On this basis, this paper further elaborates on, in particular, five main elements of the GHG Fund proposed by Denmark in the basic proposal. An additional objective of this submission is to address the issues raised by the Secretary-General in his closing statement at MEPC 59.

10 This document has been subject to an informal consultation process involving a number of interested Member States and industry stakeholders. Relevant comments are addressed in the document as far as possible either by direct incorporation in the text or by explanatory footnotes. As the consultation has been informal, the source of the various contributions is not stated in the following.

11 The five elements of this document are the following:

.1 Changes that might be needed:

.1.1 Possible strengthening of the robustness of payment through bunker fuel suppliers;

.1.2 Assessment of direct payment to the GHG Fund from shipowners;

.1.3 Who should be entrusted with administrating the GHG Fund?;

.2 Examination of central issues:

.2.1 Hypothecation;

.2.2 Meeting a global reduction target;

.3 Elaboration on the allocation of revenues for climate purposes in developing countries in the light of COP 15:

.3.1 Allocation of revenues for mitigation purposes;

.3.2 Allocation of revenues for adaptation purposes;

.4 Preliminary evaluation according to the work plan for further consideration of market-based instruments agreed at MEPC 59:

.4.1 Feasibility;

.4.2 Robustness;

.4.3 Environmental effectiveness;

.4.4 Administrative burdens, including costs of the administration of the GHG Fund;

.4.5 Impacts on international shipping and the overall impact on the maritime sectors of developing countries; and

.5 Preliminary evaluation of the system’s compliance with the nine fundamental IMO principles.

Possible strengthening of the robustness of payment through bunker fuel suppliers

12 According to the basic proposal, a mandatory registration of bunker fuel suppliers eligible to sell bunker fuel in compliance with the scheme should be introduced. With that, bunker fuel suppliers should be required to collect and transfer GHG contributions to the GHG Fund as well as to collect information on all fuel sold on a ship-specific basic.

13 By requiring mandatory registration of bunker fuel suppliers, the GHG Fund should eventually register all bunker fuel suppliers worldwide, including suppliers within Parties through mandatory registration and suppliers in non-Parties through voluntary registration. Furthermore, mandatory and voluntary registration of bunker fuel suppliers implies that GHG contributions are collected as high as possible in the supply chain. This should make the scheme as efficient and effective as possible and minimize fraud. Finally, the scheme would involve a limited number of legal entities.

14 However, as bunker fuel suppliers transfer the GHG contributions to the GHG Fund the bunker fuel suppliers could accumulate large amounts of money and, in case of bankruptcy or fraud, the GHG contributions might be lost. To some extent these situations would be avoided by requiring a banker's guarantee from the bunker fuel suppliers as a prerequisite to registration. While control and enforcement of bunker fuel suppliers in Parties should be carried out by Parties and the GHG Fund, the responsibility of control and enforcement of bunker fuel suppliers in non-Parties should be left to the GHG Fund. The latter task would decrease as more Member States become Parties to the new IMO convention.

Assessment of direct payment to the GHG Fund from shipowners

15 At MEPC 59, some delegations suggested that GHG contributions should be paid by shipowners to the GHG Fund. The shipowner would then be required to pay the GHG contributions and provide information on the quantity of bunker fuel purchased. Records on bunkering are already kept on board all ships through the Bunker Delivery Note and the Oil Record Book.

16 To facilitate the Committee's considerations, the possibility of letting the responsible entity be the shipowner (and not the fuel supplier) is explored further. In this connection it is envisaged that it will be the shipowners who will be responsible for ensuring that the GHG contribution is paid to the GHG Fund. However, in many cases it will not be the shipowners who pay the bunker fuel, but the bunker fuel purchaser being the charterer or the cargo owner or other entities paying for bunker fuel. Ships can be operated in a number of different ways and fuel can be purchased in a number of ways. However, if the shipowners should pay the GHG contribution directly to the GHG Fund, the shipowners could be held accountable through Port State Control (PSC) regardless of who paid the bunker fuel and/or the GHG contributions. It is outside the scope of the new IMO convention to address the contractual relationship between a shipowner and a possible other entity purchasing the fuel.

17 If the GHG contributions should be paid directly by the shipowners (instead of through the bunker fuel suppliers), the payment of GHG contributions could not be documented by the Bunker Delivery Note which then would only document the purchase of bunker fuel. Moreover, the purchase of bunker fuel could be documented by the Oil Record Book, which is also kept on board as evidence for PSC purposes or other relevant authorities of the coastal and/or flag State according to MARPOL Annex I. The expediency of using the Oil Record Book along with the Bunker Delivery Note is that 150 Member States, representing 99.14 per cent of the world's

merchant fleet are Parties to MARPOL Annex I, while only 56 Member States are Parties to MARPOL Annex VI representing 83.46 per cent of the world's merchant fleet[1].

18 The basic proposal implied that the GHG contributions should be collected through bunker fuel suppliers in order to simplify enforcement and ensure that GHG contributions were collected as high as possible in the supply chain, cf. MEPC 59/4/5, paragraphs 20 to 28. If shipowners should pay the GHG contributions directly to the GHG Fund, the scheme would become more complicated and burdensome all together and in particular for shipowners and Parties. Consequently, the system would be less burdensome for the bunker fuel suppliers. If GHG contributions are paid to the GHG Fund by the shipowner, the obligations of Parties, shipowners and the GHG Fund, respectively, would be as follows:

Obligations of Parties

.1 Enforce the scheme through national regulation;

.2 Control and inspect ships;

.3 Conduct enforcement of the new IMO convention for correct implementation (PSC and/or port entry requirement);

Additional compared to the basic proposal:

.4 Ensure flow of information, e.g. the IMO number of ships under its flag, to the GHG Fund Administrator about ships under its flag and subsequently report any relevant changes[2].

Obligations of shipowners

.1 Keep the Bunker Delivery Note/Oil Record Book on board;

.2 Non-Party ships: Pay an enter-into-the-scheme contribution;

Additional compared to the basic proposal:

.3 Require a Bunker Delivery Note/a receipt when purchasing bunker fuel;

.4 Report bunker fuel purchases to the GHG Fund[3];

.5 Pay GHG contributions to the GHG Fund.

Obligations of the GHG Fund Administrator

.1 Receive, record and monitor information from ships;

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1 Source: IMO, 2 October 2009.

2 The specific time frame for when information should be given has to be decided.

3 It has been suggested to omit to report directly to the ship-specific register in the GHG Fund as it is the flag administration that has the ability to act in the event of non-compliance. However, if the GHG Fund Administrator gets this information, it would easily be able to identify if the reported quantities of bunkers from a specific ship match the received amount of GHG contributions. If there is a discrepancy, the GHG Fund would request the flag State to investigate the matter further.

.2 Acknowledge receipt of paid GHG contributions;

.3 Maintain and allocate revenues;

.4 Maintain a ship-specific registry;

.5 Control ships' purchase of bunker fuel and payment of GHG contributions and notify Parties of specific ships in cases of (suspected) non-compliance; and

.6 Submit an annual report.

19 Regardless of whether the GHG contributions are paid by bunker fuel suppliers or by shipowners, the GHG Fund should maintain a global ship-specific registry of GHG contributions received. Therein each individual ship should have its own account so that PSC officers or other relevant officers would be able to verify that the GHG contributions due have been received by the GHG Fund.

20 If the shipowner is responsible for payment of the GHG contributions, it should be decided at which point payment should take place. In this connection control efforts, for instance PSC, should be considered. One option would be to pay GHG contributions when receiving the bunker fuel, which would increase the number of transactions. Another option could be to consider introducing some flexibility and allow payment to be made for example within a month. In this case, larger sums would have to be transferred to the GHG Fund Administrator.

21 Furthermore, it would be preferable if GHG contributions could be paid electronically and the reporting obligations could be done electronically as well. This would significantly reduce the administrative burdens of shipowners or bunker fuel suppliers, respectively, as well as those of the GHG Fund Administrator.

22 Some of the concerns raised regarding control and enforcement in relation to registered bunker fuel suppliers located in the territory of a non-Party might be catered for in a system where the shipowners themselves will be responsible for paying GHG contributions to the GHG Fund. The consequence of introducing payment of GHG contributions by shipowners is that while control and enforcement of Parties' ships would be carried out by Parties and the GHG Fund, control and enforcement of non-Parties' ships would be carried out through the PSC system or by other relevant authorities of the coastal State when non-Party ships enter Party ports. Even though the PSC system is already globally in force, it is a potentially cumbersome verification process that they should undertake as ships may have the bunker delivery note but they would not necessary have the payment transactions on board.

23 Depending on the ability to handle payments and reporting obligations electronically, a drawback of introducing payment of GHG contributions by shipowners could be that more entities would be responsible for paying GHG contributions to the GHG Fund as up to as many as 60,000[4] ships above 400 GT in international trade would be included in the scheme[5].

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4 According to statistics from Lloyds Register Fairplay.

5 Some have argued that the direct payment by shipowners would result in more administrative burdens for the GHG Fund Administrator compared to payment through bunker fuel suppliers, while others have argued that this will not cause any problems as the reporting will be done electronically.

Who should be entrusted with administrating the GHG Fund?

24 According to the basic proposal, the GHG Fund should be established as a separate legal entity under the structure of a new IMO convention.

25 In the basic proposal, inspiration has been drawn from the IOPC Funds mechanism as that system carries out functions similar to those of the GHG Fund. The GHG Fund could benefit from modelling its structure in a fashion similar to that of the IOPC Funds, recognizing the increased scope and complexity in covering all sectors of the shipping industry and not only oil tankers.

26 The inherent differences in how the two funds should operate could preclude a rational consideration of a joint administrative secretariat between the IOPC Funds and the GHG Fund. It has been argued that it is premature to conclude that the IOPC Funds would be the appropriate administrative body for the GHG Fund and that the administration of a new IMO convention would be beyond the scope of the IOPC Secretariat.

27 It has also been argued that it would require significant additional functionality and administrative disciplines to integrate the new tasks of this scheme into the existing IOPC Funds Secretariat. Further, the addition of the GHG contributions would mean that the IOPC Secretariat would have to administer additional substantial revenues.

28 It could therefore be beneficial to consider the basic obligations of the GHG Fund Administrator. As stated in the basic proposal, the general principles for allocation of revenues should be decided by Parties. The general principles should ensure that revenues are allocated for purposes consistent with the primary objectives in the UNFCCC and are compatible with the financial architecture of a future global climate change agreement within the UNFCCC. In this respect, the Parties must appoint one or more trustees in order to manage this part of the revenues. The trustee function should be performed by an international financial entity, such as the World Bank.

29 In the light of the above-mentioned obligations of the GHG Fund Administrator, it might also be possible to envisage that a new division could be created within the IMO Secretariat to administer the GHG Fund. In this respect the revenues of the GHG Fund should be kept completely separate from the budget of the IMO, which also implies that the administrative costs of the GHG Fund should be borne from the revenues of the GHG Fund, and not from the IMO budget.

30 Another possibility would be the creation of a completely new body.

Hypothecation

31 GHG contributions should not be conceived as a tax/levy. The GHG contributions are all about offsetting some of the future GHG emissions from international shipping as a significant reduction of GHG emissions from international shipping in absolute terms is not foreseen. The GHG contributions would never be transferred to a national government and the GHG contributions will not be linked to the financial needs of national Governments.

32 Some have, nevertheless, argued that GHG contributions should be conceived as a tax/levy as the GHG contributions are imposed on all bunker fuel used for ships of a certain size in international trade. At the same time, it has been argued that any market-based instrument which includes collection of revenues, either directly by GHG contributions or indirectly by

auctioning in an Emission Trading Scheme (ETS) or in any other manner, should be considered as a tax/levy.

33 At this juncture it seems difficult to settle this issue. Discussions so far reiterate the general assumption that, even if the two schemes impose the exact same additional cost on the international shipping sector, it is the acceptability and the implementability of the two schemes that seems to be the real essence of the discussions.

34 Considering the gravity of the climate change issue, which is perhaps the greatest challenge to mankind, our common goal is to find the most effective and efficient solution for international shipping. This call for pragmatic deliberations, and discussions should be closely focused on productive and specific means to address the issue rather than debating core principles or pursue dogmatic discussions.

35 Regardless of which global market-based instrument is chosen in the IMO, the purpose of the specific scheme is to ensure that future GHG emissions from international shipping exceeding a global reduction target are offset. In other words, any market-based instrument should be conceived as a means of reducing total global GHG emissions that cannot be addressed through technical and operational measures only.

Meeting a global reduction target

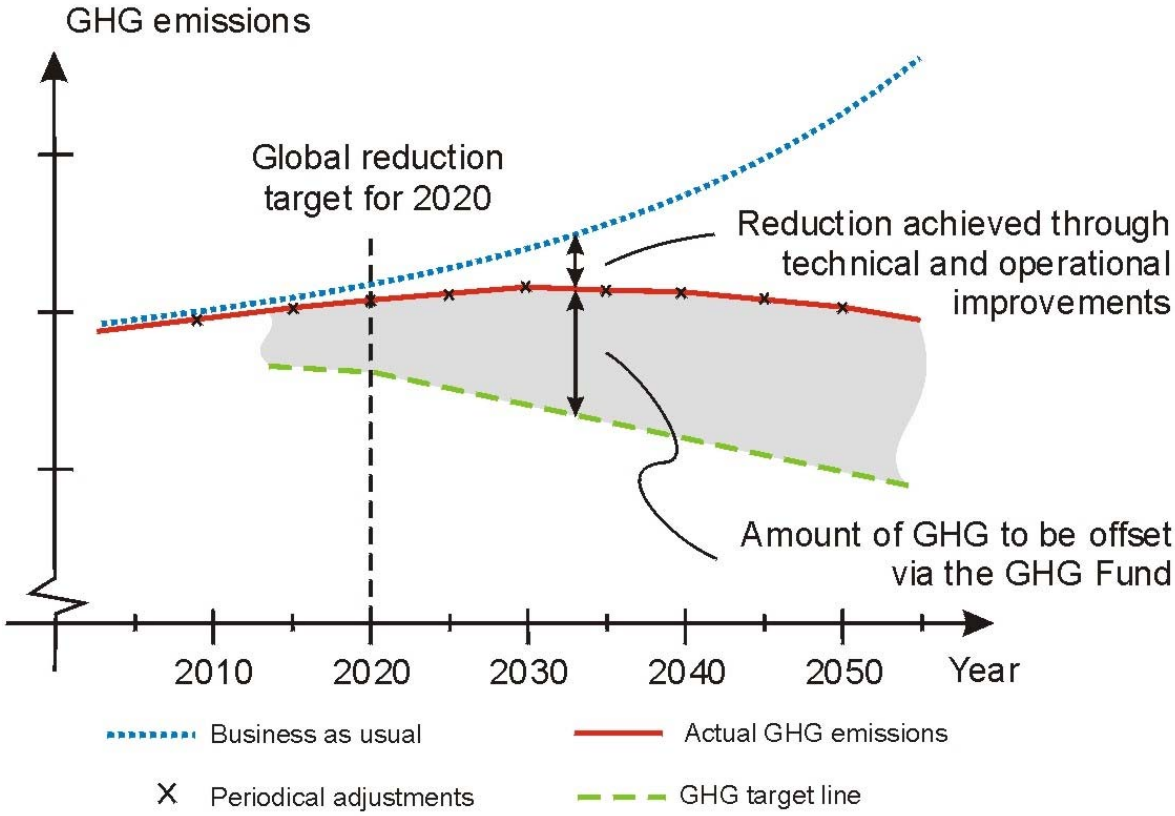
36 At MEPC 59, delegations emphasized that setting a global reduction target on GHG emissions was an important part of a market-based instrument, considering that the necessary GHG emission reductions could not be derived from technical and operational measures alone.

37 The GHG contributions should offset GHG emissions in accordance with an agreed global reduction target for the sector as a whole – not for individual ships or companies.

38 If a global reduction target on GHG emissions from international shipping is not agreed at COP 15 as part of a new global climate agreement within the UNFCCC, a global reduction target could be agreed in the IMO as part of the future considerations on developing a market-based instrument. By all means, a global reduction target should be set as a globally binding reduction target committing ships regardless of flag in accordance with the nine fundamental IMO principles. In this process, relevant UNFCCC goals and principles should be considered and addressed by the IMO.

39 As there is no expectation of a 100 per cent future offset of GHG emissions from international shipping, the system should offset only the future GHG emissions from international shipping that exceed a global reduction target line which can be drawn between the agreed base year and the future target year, cf. Figure 1. In this way, a cap mechanism should be included in the scheme, whereas GHG emissions above a certain level should be offset similarly to a cap mechanism in an open ETS.

Figure 1: Meeting a global reduction target from 2013 through offsetting (a graphic illustration only)



40 A global reduction target on GHG emissions from international shipping could be set for 2020 in line with the time frame of a new global climate agreement. The baseline for setting a global reduction target should be set at a recent year with available and reliable data on GHG emissions from the sector using figures of the Second IMO GHG Study 2009. A preferable year could be 2007 as this is the latest year included in the IMO Study. Alternatively 2005 could be used as 2005 is expected to be used for the reduction of GHG emissions from international aviation. In comparison, 1990 seems less feasible as a base year for reducing GHG emissions from international shipping due to the tremendous worldwide expansion in international shipping and the technical development within the sector during the last decade. Regardless of what specific market-based instrument would be implemented by the IMO, a global reduction target would be an important part of a future instrument. Even though specific considerations regarding a global reduction target to be part of the GHG Fund system is outside the scope of this document, 2007 is used as base year in the following assessment for illustration purposes only. Consequently, if another base year would be agreed upon, the outcome would differ and there would be either more or less GHG emissions to offset before 2020.

41 When deciding on a global reduction target for GHG emissions from international shipping, several elements should be taken into consideration. Firstly, the prospects for the growth in the global economy before 2020 should be taken into consideration as international shipping is the backbone of the global economy operating around 90 per cent of global trade. Secondly, the long life time of ships should be considered. And thirdly, the reduction potentials as well as the reduction efforts of other sectors should be reflected upon.

42 The revenues collected in the GHG Fund, the amount of GHG offset by the international shipping sector, and the specific size of GHG contributions will all depend on the level of an international global reduction target.

43 In the following examples, a global reduction target is set at 10 per cent, 15 per cent and 20 per cent, respectively, in 2020 compared to 2007. GHG emissions from international shipping are set at 870 million tonnes in 2007 and at 925-1,058 million tonnes a year, respectively, in 2020, depending on the expected growth in the shipping sector[6]. For the sake of simplicity, the examples presuppose that the revenue is used for offsetting or emissions reduction only, even though the scheme should also finance adaptation in developing countries, R&D, technical cooperation and administrative expenses.

44 Furthermore, a future GHG reduction potential through the implementation of technical and operational measures is estimated to account for a relative reduction of 15 per cent. On this basis, a future offset of 3-116 million tonnes GHG per year is required from international shipping in order to meet a global reduction target of 10 per cent, compared to 2007. Similarly, a future offset of 47-160 million tonnes GHG is required to meet a global reduction target of 15 per cent, and finally an offset of 90-203 million tonnes GHG a year is required to meet a global reduction target of 20 per cent in 2020, compared to 2007, cf. table 1.

Table 1. Expected growth and GHG emissions in 2020 (million tonnes GHG)

Growth in shipping	Low	High
GHG emissions in base year 2007	870	870
GHG emissions in 2020	925	1058
A 15% reduction in 2020 achieved through technical measures	139	159
GHG emissions in 2020 after implementing technical measures	786	899
Allowed emissions in 2020 at a 10% global reduction target compared to 2007	783	783
GHG emissions to be offset at a 10% global reduction target	**3**	**116**
Allowed emissions in 2020 at a 15% global reduction target compared to 2007	740	740
GHG emissions to be offset at a 15% global reduction target	**47**	**160**
Allowed emissions in 2020 at a 20% global reduction target compared to 2007	696	696
GHG emissions to be offset at a 20% global reduction target	**90**	**203**

45 The required offset of GHG emissions from international shipping should take place through the purchase of CDM project credits or other credit mechanisms on the market as described in paragraphs 62 and 63. Depending on the future price of CDM credits, which is estimated to amount to around 15, 30 or 45 USD per tonne GHG, a global reduction target on GHG emissions from international shipping of 10, 15 or 20 per cent could be met by the requisite revenues in the region of around 50 million to 9 billion USD per year in the GHG Fund, cf. table 2.

Table 2. Revenue to the GHG fund (million USD)

Growth in shipping	Low	Low	Low	High	High	High
Global reduction target in 2020 compared to 2007	10%	15%	20%	10%	15%	20%
GHG emissions to be offset in 2020	**3**	**47**	**90**	**116**	**160**	**203**
Revenue at a CDM price of 15 USD per tonne GHG	49	701	1,354	1,745	2,397	3,050
Revenue at a CDM price of 30 USD per tonne GHG	98	1,403	2,708	3,489	4,794	6,099
Revenue at a CDM price of 45 USD per tonne GHG	146	2,104	4,061	5,234	7,191	9,149

[6] Source: The Second IMO GHG Study 2009 using the middle base future scenarios B2 and A1F1. The base scenarios presuppose that the sector will become more energy efficient before 2020 and predict a 12 per cent reduction in 2020 achieved through a 5 per cent speed reduction, and improvements due to market-driven changes in technology and regulatory side effects affecting efficiency of the sector.

46 According to table 2, a global reduction target on GHG emissions from international shipping of 10, 15 or 20 per cent in 2020 compared to 2007 can be met by generating revenues in the region of 50 million to 9 billion USD per year in the GHG Fund. As indicated in table 2, the amount of required revenues will depend on the exact future price of CDM credits.

47 The actual size of the GHG contributions would be linked to the amount of future GHG emissions to be offset and the future price of CDM credits. The anticipated size of GHG contributions could differ between less than 1 USD to a little more than 30 USD per tonne GHG[7], depending on the global reduction target and the future price of CDM credits, cf. table 3.

Table 3. Size of GHG contribution per tonne bunker fuel (USD per tonne bunker fuel)

Growth in shipping	Low	Low	Low	High	High	High
Global reduction target in 2020 compared to 2007	10%	15%	20%	10%	15%	20%
GHG emissions to be offset in 2020	**3**	**47**	**90**	**116**	**160**	**203**
GHG contributions at a CDM price of 15 USD per tonne GHG	-	3	5	6	8	10
GHG contributions at a CDM price of 30 USD per tonne GHG	-	5	11	12	16	21
GHG contributions at a CDM price of 45 USD per tonne GHG	1	8	16	18	24	31

48 According to the basic proposal, the size of the initial GHG contributions should be set at a given level per tonne bunker fuel in the new IMO convention. However, also when determining the initial size of GHG contributions, there should be a clear link to the global reduction target (and thereby the amount of GHG emissions to be offset), the price of CDM credits and the GHG emissions from international shipping.

49 The actual size of subsequent GHG contributions should be decided and set by the Parties in the light of the actual amount of GHG emissions from international shipping which should be offset via the GHG Fund in order to meet the global reduction target.

50 According to the basic proposal, subsequent adjustments could be made every fourth year. The exact time span between subsequent adjustments of the size of GHG contributions should also be set in the new IMO convention. The time span should neither be too long nor too short, and the purpose of ensuring that the global reduction target is met within a certain period of time should also be considered.

51 In deciding the length of the time span, it is obvious that a fairly long time span of a few years between subsequent adjustments of the GHG contributions would provide a high level of predictability and certainty for the benefit of the industry and those that benefit from the revenues. A shorter time span, for instance once every year, would ensure that the actual size of GHG contributions to a larger extent reflects the actual market price of GHG emissions. A short interval would increase the linkage to a market prize for GHG reductions. Such a time span would eventually have to be decided upon. The final decision will depend on how to balance the two objectives.

[7] The conversion factor used for calculation of CO2 emissions from one tonne of bunker fuel emits is 3.06.

Elaboration on the allocation of revenues for climate purposes in developing countries in the light of COP 15

52 At MEPC 59 it was agreed that discussions at MEPC 60 on market-based measures should build upon the outcomes of COP 15 in Copenhagen in December 2009, taking full account of the relevant outcome made for its further deliberations.

53 Furthermore, at MEPC 59 a number of delegations inquired about additional detail on how the GHG contributions could be effectively used for mitigation and adaptation purposes in developing countries and suggested that potential linkages with the UNFCCC funding mechanisms should be further developed. There was a general preference for the greater part of the revenues, generated by a market-based measure under the auspices of the IMO, to be used for climate change purposes in developing countries through existing or new funding mechanisms under the UNFCCC or other international organizations.

54 According to the basic proposal, the revenues of the GHG Fund should primarily be allocated for climate purposes in developing countries and in particular in the most vulnerable developing countries, i.e. the Least Developed Countries (LDCs) and the Small Island Developing States (SIDSs). Apart from being particularly vulnerable to the negative effects of climate change, SIDSs are also in many respects dependent on maritime transport. Given this, the needs of SIDSs have to be given special consideration. The remainder of the revenues should be allocated for purposes regarding R&D, technical cooperation within the IMO framework, as well as administrative expenses in connection with the GHG Fund.

55 For the maritime community it is of the utmost importance that the shipping industry is recognized and credited for the sector's contribution to addressing the climate change issue through financing mitigation and adaptation purposes.

56 The specific procedures to ensure that the sector is recognized and credited for its contribution to mitigation purposes in developing countries should start from the amount of CDM credits bought by the GHG Fund. As the price of future CDM credits per tonne GHG would be well-known, the total contribution from the sector and the amount of GHG offset by the sector would be calculated easily.

57 It is true that financing of adaptation purposes does not in itself reduce GHG emissions. Therefore it would be necessary to ensure that the international shipping sector is also recognized for financing adaptation purposes. A procedure by which to recognize, register and record financing for adaptation purposes should be arrived at after further consideration by the UNFCCC and the IMO.

58 The GHG Fund should annually report on the amount of GHG emissions offset through financing mitigation activities and the share of revenues spent for adaptation activities. The recognition should be considered in cooperation with the UNFCCC and the report should be sent to the UNFCCC, for example annually.

59 Parties to the new IMO convention could appoint one or more trustees to manage the revenues for financing mitigation and adaptation purposes, including annual reporting to the IMO and UNFCCC on the climate purposes enabled by the revenues received. Neither the Parties to the new IMO convention nor the GHG Fund Administrator should interfere with operational issues on mitigation and adaptation activities. The Adaptation Fund or other relevant entities entrusted with these tasks in a new global climate agreement should take its guidance from the UNFCCC.

60 The GHG Fund's contribution to finance climate purposes should be a predictable source of income as required by the Bali Action Plan under the UNFCCC. At the same time, the financing should be measurable, reportable and verifiable.

Allocation of revenues for mitigation purposes

61 Offsetting through financing mitigation purposes should be done by purchasing CDM credits or other mechanisms agreed within the framework of a new global climate agreement. CDM credits stimulate sustainable development globally, while giving, in this case, the international shipping sector the flexibility to meet a global reduction target more cost-effectively through financing GHG reductions in developing countries.

62 The global carbon market is expected to expand and include even wider opportunities as new market mechanisms may be established that allow for sector-wide actions. If new mechanisms are agreed by the UNFCCC, further elaboration on modalities and procedures will be made over the coming years. The international shipping sector should then be able to use reduction credits from such new mechanisms in the same manner as for the existing CDM credits and the options for buying offsets will thus be further increased.

Allocation of revenues for adaptation purposes

63 According to the basic proposal, the international shipping sector should also finance adaptation purposes. This should be done by supporting the Adaptation Fund, including purchasing the 2 per cent share of proceeds credits issued for a CDM project, or other entities or fund mechanisms for adaptation to be decided in a new global climate agreement.

64 The Adaptation Fund was established to finance concrete adaptation projects and programmes in developing countries Parties to the Kyoto Protocol being particularly vulnerable to the adverse effects of climate change. The Adaptation Fund is financed from the share of proceeds of the CDM project activities and other sources of funding[8].

65 An adaptation project is defined as a set of activities aimed at addressing the adverse impacts of and risks posed by climate change. The projects can be implemented at regional, national and transboundary level. An adaptation programme is a process, a plan or an approach for addressing climate change that is broader than the scope of an individual project. The Adaptation Fund Board is responsible for strategic oversight of projects and programmes implemented by the Adaptation Fund, and for a developing country to access the sources of the Adaptation Fund several requirements have to be fulfilled.

66 Even though adaptation purposes are means of addressing the consequences of negative impacts through reducing vulnerability, financing for these purposes through the GHG Fund should be taken into account when the international shipping sector is recognized and credited for its contribution to address the global climate issue. Thus, when financing adaptation purposes in developing countries, the sector should be recognized and credited for its contribution to addressing the climate change issue and the financing should be measurable, reportable and verifiable.

[8] For example the Adaptation Fund works under the guidance of the Parties to the Kyoto Protocol and is supervised and managed by the Adaptation Fund Board (AFB). The AFB is composed of 16 members and 16 alternates and it meets at least twice a year. Upon invitation from Parties, the Global Environment Facility (GEF) provides secretariat services to the AFB and the World Bank serves as a trustee of the Adaptation Fund on an interim basis. These interim institutional arrangements will be reviewed in 2011.

Preliminary evaluation on the feasibility of the system

67 Latest statistics on the time cycle for the entry into force of IMO conventions suggest that it takes 7.3 years on average from the decision to develop a new convention is taken until the convention enters into force[9]. The average time elapsing from the decision to develop a new convention until adoption is 4.2 years. A further 3.1 years is the average time from adoption until entry into force of the new convention.

68 In order to ensure that the new IMO convention will achieve its objective, i.e. to offset some of international shipping's GHG emissions, it is necessary to ensure that a critical mass of countries and ships are under the scope of the IMO convention before it enters into force.

69 The entry-into-force criteria are always difficult when adopting a new convention. The criteria should reflect the substance of the convention. Further it is important that:

.1 the convention becomes globally applicable;

.2 the convention enters into force rapidly; and

.3 the end-users contribute to the increased transportation costs.

70 It is of primary importance that the criteria are kept simple in order to facilitate the swift entry into force of the new convention.

71 Further, in order to ensure that the new convention becomes globally applicable as soon as possible, provisions should be included to ensure that only Parties to the new convention will be eligible to receive revenues for adaptation and mitigation purposes.

72 As shipping operates around 90% of world trade, and as there are no real alternatives to trans-ocean transport, it is fair to assume that the additional costs of shipping transport will be borne by the end-users (consumers). This could also be viewed as a way in which the end-consumers pay for their part of the GHG emissions from shipping transport. As is set out in this document, the additional cost is expected to be negligible. This should be kept in mind when determining the entry-into-force criteria.

Preliminary evaluation of the robustness of the system

73 According to the basic proposal, the GHG contributions should be paid to the GHG Fund by the bunker fuel supplier. In this paper, the possibility of letting the shipowner be responsible for payment of GHG contributions has been further explored. Both possibilities would, on a continuous basis, allow PSC officers or other relevant authorities of the coastal State to inspect ships' compliance with the new convention.

74 The GHG Fund Administrator should notify the relevant Party of any suspected infringements, i.e. if the GHG contributions have not been received within the specified time frame.

[9] Document CWGSP 10/2(a), Annex I, Performance Indicator 16.

75 Furthermore, the Party should, through national legislation, ensure that bunker fuel suppliers or ships under its flag are required to continuously report and pay the GHG contributions to the GHG Fund. If this requirement is not fulfilled, adequate sanctions should be provided for in national legislation.

Preliminary evaluation of the environmental effectiveness of the system

76 A mechanism ensuring that global GHG emissions are reduced through financing climate purposes in developing countries should be developed in order to ensure that GHG contributions are spent in accordance with the provisions of the GHG Fund scheme and that the expected reductions in global GHG emissions are achieved.

Preliminary evaluation of the administrative burdens and costs of the administration of the system

77 As set out in the basic proposal and this document, the proposed scheme would be based on already well-known approaches. At the same time, the additional administrative burdens on shipowners are considered minimal, and the same is true in case of bunker fuel suppliers and the GHG Fund Administrator. It is further envisaged that in many instances the transfer of information and GHG contributions could be made electronically.

Preliminary evaluation of the system's impact on international shipping and the maritime sectors of developing countries

78 GHG contributions should be paid for all bunker fuel purchased for use on Party ships above 400 GT in international trade regardless of their flag. Whereas this will imply an extra cost for the industry the GHG contributions will be a driver for saving measures by giving the industry an economic incentive to save bunker fuel and consequently encourage shipowners to employ new and more advanced technologies in order to increase fuel efficiency. For shipping segments not competing with other transport modes, each competing shipowner will face exactly the same additional cost as the scheme is global. Generally speaking for the industry as such, this would probably mean that the shipowner's costs in the longer run, depending on the market situation, eventually will be passed on to the end-consumer. However, this does not in any way hamper market competition between competing shipowners.

79 On the other hand, shipping segments competing with other transport modes could experience a relative loss in competitiveness, compared to a situation without a market-based instrument. However, in many countries around the world, land-based transport and national shipping are already obliged to pay some kind of environmental cost on the fuel consumed.

80 Around 2/3 of seaborne trade are imports to developed countries. According to MEPC 60/INF.7, the introduction of the GHG contribution will potentially have none or very limited impact on the price of commodities transported by sea. The freight rate by sea consists of fixed and variable costs and the GHG contribution will only affect part of the variable costs. This means that for a containership, a GHG contribution of for instance 45 USD per ton bunker fuel will potentially only increase the freight rate by 5 per cent. According to MEPC 60/INF.7, the potential impact on the price of commodities by introducing a GHG contribution of 45 USD per ton bunker fuel will, for a number of commodities, be less than 1 per cent. Even for commodities with high freight rate shares of the price, the GHG contribution will only potentially increase the price by 1.9 per cent.

Preliminary evaluation of the system's compliance with the nine fundamental IMO principles

81 A market-based instrument must meet all the nine fundamental IMO principles for future regulation on GHG emissions from international shipping. A preliminary evaluation indicates that the GHG Fund will be able to meet the principles, which are as follows:

Principle 1: Effective in contributing to the reduction of the total global greenhouse gas emissions

82 The scheme contains an incentive for the industry to reduce GHG emissions by using less bunker fuel. As the cost of bunker fuel will rise due to the GHG contributions, shipowners will have an interest in saving costs for the GHG contributions by ensuring that ships become more energy efficient and therefore use less bunker fuel per tonne mile.

83 Apart from the assumption of a reduction in the use of bunker fuel, the scheme will further contribute effectively to reductions in global GHG emissions through purchasing of CDM credits. By purchasing CDM credits, investments in climate projects that reduce GHG emissions in developing countries and thereby contribute to reduce total global GHG emissions will be ensured by this scheme.

Principle 2: Binding and equally applicable to all flag States in order to avoid evasion

84 The GHG Fund requires the establishment of a new IMO convention to ensure that the Parties to the convention would be bound by equal and binding requirements. Furthermore, it is foreseen that the fundamental IMO principle of "*no more favourable treatment*" would apply to non-Party ships through the PSC system. In this way, the GHG Fund scheme is equally applicable to all flag States and at the same time the scheme ensures environmental integrity and practical application.

Principle 3: Cost-effective

85 The GHG Fund requires only minimal administration costs due to the system's simplicity and the fact that it builds upon already existing IMO approaches such as the well-established systems of PSC and the Bunker Delivery Note.

86 The GHG Fund scheme would also be easy to administer for shipowners as the added tasks would be to pay and (electronically) transfer the GHG contributions directly to the GHG Fund. The scheme does not imply administrative tasks and potential additional costs related to entering into business with brokers and verification bodies as within an ETS.

Principle 4: Able to limit – or at least – effectively minimize competitive distortion

87 All ships in international trade that would want to trade on ports in Parties' territories would have to pay GHG contributions to the GHG Fund. Thus, the GHG contributions would not be applicable to ships only under certain Member States' flags, and would therefore not be competitively distorting or destroy the environmental integrity.

88 Furthermore, because of the large volume of goods transported by sea, and the long distances covered, the added cost of bunker fuel caused by the GHG contributions would be borne by the end-users in the longer term as there is no real alternative to trans-ocean sea transport.

Principle 5: Based on sustainable environmental development without penalizing global trade and growth

89 The GHG Fund is based on the premise that sea transport is the backbone of global trade, and therefore it must not be restricted. The GHG Fund will encourage more efficient usage of bunker fuel, while at the same time allowing the international shipping sector to grow as any growth in GHG emissions that exceeds an agreed global reduction target within the sector will be offset.

Principle 6: Based on goal-based and not prescribe specific methods

90 The system does not require shipowners to reduce their bunker fuel use in a specific way. It is left to the shipowner to decide on measures to increase efficiency, and thereby reduce the contribution, or pay the full contribution.

Principle 7: Supportive of promoting and facilitating technical innovation and R&D in the entire shipping sector

91 As the system will introduce an additional cost consisting of the GHG contributions to be paid by purchasing bunker fuel, the system will incentivize optimal use of bunker fuel.

92 Furthermore, part of the revenues from the GHG Fund should be used for R&D projects developing more energy efficient ship designs and propulsion systems in order to accelerate continuing improvements in this field.

Principle 8: Accommodating to leading technologies in the field of energy efficiency

93 As explained in the immediately preceding paragraphs, the GHG Fund stimulates the use of new and cleaner technologies.

Principle 9: Practical, transparent, fraud free and fairly easy to administer

94 Because the GHG Fund is based on already developed and well-functioning approaches, the system will be practical and fairly easy to administer for shipowners/bunker fuel suppliers, Parties, PSC officers and the GHG Fund Administrator itself.

95 Depending on the decision on who will contribute to the GHG Fund – shipowners or bunker fuel suppliers – the necessary safeguards will be in place to ensure the transfer of revenues to the GHG Fund.

Preliminary evaluation of the system *vis-à-vis* the objective and principles of the UNFCCC

96 To be developed.

Action requested of the Committee

97 The Committee is invited to consider the information in this document and take action as appropriate.

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