

Decision time for the IMO on climate

The polarized struggle among states for ambitious climate policy on shipping

April 2018

Contents

Executive Summary	. 3
IMO Member States and Climate	.4
Appendix A: Climate Scoring Methodology	10
Appendix B: Engagment Intensity Data	11
Appendix C: IMO Funding Data	13



Executive Summary

- As IMO's critical meeting on climate change progresses, new research explores how around 25 key nations with a spectrum of positions jostle to influence the outcome. The IMO body responsible for climate policy, the Marine Environment Protection Committee (MEPC) meets in London April 9-13 to finalise its strategy. Crucially it will decide whether there will be binding greenhouse gas targets.
- Leading the push for ambitious climate reform are the Marshall Islands, Germany, France, Belgium, the UK and Sweden. Leading the opposition are China and Brazil and the very powerful influencing of Japan and South Korea. Saudi Arabia and Panama are also highly oppositional, but less active. The role of the US is not clear. Evidence suggests it was on the fence and has potentially moved towards the opposition. It could be a wild card this week and will be watched.
- Japan scores as by far the most actively engaged country on climate based on IMO data. It has taken over as MEPC chair from open registry state Panama for the current meeting and the two have a close commercial relationship on shipping and at the IMO. Japan is by far the largest owner of Panama-registered shipping (42%) and Panama is the IMO's largest funder. Panama registers 18% of the world's shipping tonnage yet accounts for less than 0.1% of global GDP. Of the eight delegates Panama sent to the key 2017 MEPC meeting it chaired, three were representatives of the company operating its shipping registry, the Panama Maritime Authority, of which Japanese shipping owners appear to be major clients.
- The research also assesses a country's economic exposure to shipping by aggregating metrics of ships registered and owned and the importance of trade in goods to their economy. Japan and China score highly on this metric with their export-orientated economies and shipping ownership. Brazil however lags with a very low trade-to-GDP ratio and comparatively low shipping ownership.
- Brazil's opposition appears largely driven by corporate vested interests. Mining giant Vale, one of the world's largest users of bulk shipping dispatched 13 delegates to the IMO's MEPC meetings between 2015 and 2017, the most for any single company. Denmark also has a low economic interest score. It is, however, home to the most important single private sector player in global shipping Moller-Maersk, a company known for its claims on fleet efficiency. Maersk sent the second highest number (11) of delegates from a single private company to the four meetings.
- The IMO's biggest source of income comes from the so-called open registry states of Panama (\$31mn) Liberia (\$18mn) and the Marshall Islands (\$13mn) over 2013-16. This represents nearly 40% of the IMO's budget with fees computed based on tonnage of shipping registered. Between them these three have close to 42% of the world's registered shipping yet contribute less than 0.1% of global GDP.



IMO Member States and Climate

The Process Underway at the MEPC Meetings

The IMO body responsible for climate policy, the Marine Environment Protection Committee (MEPC) meets in London April 9-13 to finalise the IMO's climate strategy for the future. Decision-making at the IMO is intergovernmental, with NGOs, trade associations and corporations granted observer status able to participate in discussions but without voting rights. Policy-making concentrates on the adoption of international conventions, or more commonly amendments ¹ and operates on a one state, one vote process ² with decisions made by majority. The frequency of voting is minimized as it is perceived as risking effective progress. ³ The final voting process largely confirms the consensus driven during the deliberations. This accords the chair of the MEPC meeting (which rotates with each new annual meeting) significant influence over the outcome.

The IMO imposes media reporting restrictions ⁴ during IMO committee meetings, preventing journalists from broadcasting the content of plenary discussions without permission from relevant member states and subsequently banning ⁵ any organization that breaks the rule.

The IMO will finalize its initial strategy on greenhouse gas emissions reductions at MEPC 72, held 9th-13th April 2018, making decisions on the following issues: (a) potential short-, mid- and long-term measures and (b) whether GHG emission reduction targets will be binding. The strategy will be based on suggestions reported to the MEPC by the Inter-sessional Working Group on Reduction of Greenhouse Gas Emissions from Ships, which aims to reach a consensus on the strategy at its third meeting held 3rd-6th April 2018.

¹ Olaf Merk, The role of the International Maritime Organization, International Regulatory Cooperation and International Organisations, p 93

² International Maritime Organization, Convention on the International Maritime Organization, 1948

³ European Parliament Think Tank, Decision-Making Processes of ICAO and IMO in Respect of Environmental Regulations, 2016, p 14

⁴ International Maritime Organization, Terms and Conditions, September 2017

⁵ Ed King, Climate Home, Whiffs of Sulphur: UN shipping talks face climate dilemma, October 2016



Assessing the workings of the IMO on climate

Given the lack of transparency around the official IMO MEPC process on greenhouse gas emissions policy formulation, this research examines relevant data to understand the level of influencing by each IMO member state, the positions each brings to the table and potential motivations for these positions and levels of influencing. The research creates three metrics to assess the member states, as outlined below.

Climate Score	This is an assessment of the positions, statements and messaging of the country at the MEPC meetings and in other key forums on greenhouse gas emissions policy in shipping. Numerous pieces of evidence from comparable sources are assessed for support or opposition to Paris-aligned climate policy ⁶ in the context of shipping. The resultant metric is from 0 to 100 with the most supportive countries at 100. The data was obtained from assessment of IMO official transcripts of the MEPC meetings 68 to 71, with the Methodology in the Appendix.
Engagement Intensity	This is a measure of the efforts each country has expended in the IMO climate process based on an assessment of the last three MEPC meetings. It considers (a) number of delegates sent to the meetings (b) aggregate speaking time during each meeting and (c) number of consultation documents submitted during the entire process 2015-present. These three factors are blended and weighted via an algorithm resulting in a sliding scale from 0 (not engaged) to 100 (fully engaged). The data was obtained from IMO official transcripts of the MEPC meetings 68 to 71.
Economic Interest	This is an indicator of the economic stake each country has in global shipping, aggregated from data on (a) tonnage of trade in goods (b) country's trade in goods as a percentage of GDP (c) tonnage of registered shipping (d) tonnage of shipping owned. These three factors are blended and weighted via an algorithm resulting in a sliding scale from 0 (no economic interest) to 100 (the most interest). Data from (a) Worldshipping.org, 2014 (b) World Bank 2016 data (c) and (d) from the IMO, 2017
IMO Funding	This is an indicator of the amount each country contributes to the IMO's annual budget (\$41mn in 2017). Funding amounts are based on both assessed funding (based on a flat fee, ability to pay and registered fleet tonnage) and voluntary payments made by nation states, aggregated over the last four years. The resultant metric is from 0 to 100 with the country that has contributed the most over fours years at 100. Data from the IMO for the years 2013-17.

This research assesses data on over 175 state members of the IMO in an attempt to quantify which members are the most influential and what their positions are on climate in the run up to the April meeting. Full details on methodology and raw data used are in the Appendices.

⁶ Shipping is not part of the UN FCCC Paris Agreement with the IMO accorded responsibility for shipping's climate agenda



The Results

The metrics are tabled below for the 20 most active countries at the IMO's MEPC process on climate emissions over the last four years. ⁷ Ranked in order of Engagement Intensity the Economic Interest and Climate Scores are noted, along with the IMO Funding. All the scores are normalised out on a sliding scale with the highest Engagement Intensity, the highest Economic Interest, highest funding and highest Climate Scoring nations at 100 and lowest of each at 0.

Country ⁸	Engagement Intensity	IMO Funding	Economic Interest	Climate Score
Japan	100	23	73	24
South Korea	81	14	41	18
Denmark	80	10	23	76
China	79	24	100	12
Germany	78	14	45	88
Brazil	72	3	9	6
France	67	6	21	100
Norway	66	15	22	76
Netherlands	63	6	28	76
United States	61	19	50	41
Finland	58	1	9	80
Sweden	56	1	12	88
Marshall Islands \$	55	43	26	100
Russian Federation	53	5	12	24
Belgium	48	2	28	100
Argentina	48	0	2	0
United Kingdom	46	32	25	80
Canada	41	7	10	59
Singapore	40	31	81	53
Greece	37	19	90	59
Panama \$	15	100	24	18
Liberia \$	13	58	21	41
India	8	4	37	0
Saudi Arabia	6	1	33	0
Cook Islands \$	6	0	33	24
Bahamas \$	6	24	22	53

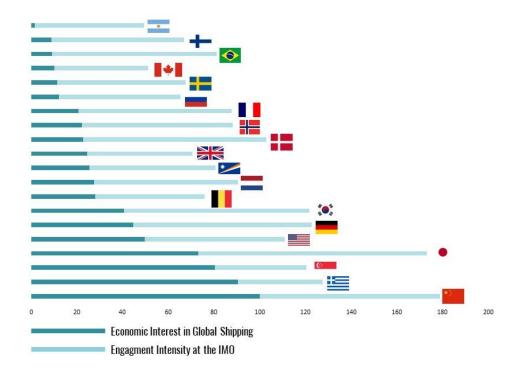
Note: Nations with the \$\$ symbol after their name are so called "open registry" states. An open registry refers to a state operating a shipping registry in which any ship can be registered no matter the state in which the ships owners are located.

⁷ Another six nations deemed to be of strong interest in the IMO-influencing agenda based on primary research have been added: Panama, Liberia, India, Saudi Arabia, Cook Islands and Bahamas.



Economic Analysis

There is some correlation between countries with high *Economic Interest* and high *Engagement Intensity*. That is, countries with significant "skin in the game" of global shipping (ships owned, registered, trade in goods) tend to be more involved in the IMO MEPC processes. This is certainly true of Japan and China with their export economies and shipping ownership. Both are opposed to ambitious climate reform at the IMO. This can be seen graphically below.

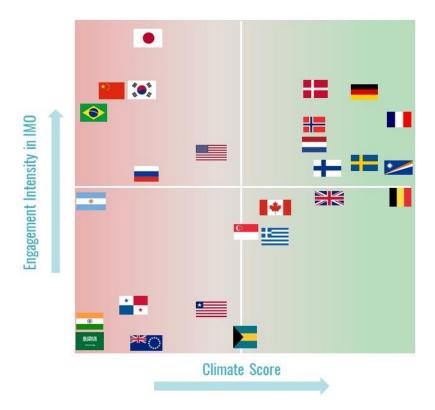


- There are notable exceptions to this correlation. Brazil *Economic Interest* score is low with in line with its small trade to GDP ratio and comparatively low shipping ownership. Yet it is highly active at the IMO's climate proceedings, ahead of nations like Singapore and Greece, countries to whom shipping is a vital part of the economy. Brazil's opposition appears largely driven by corporate vested interests. Mining giant Vale, one of the world's largest users of bulk shipping dispatched 13 delegates to the IMO's MEPC meetings between 2015 and 2017, the most for any single company.
- Denmark also has a low *Economic Interest* score. It is however home to the most important single private sector player in global shipping Moller-Maersk, a company known for advocating ambitious climate reform at the IMO and promoting its efficiency fleet. Maersk sent the second highest number (11) of delegates from a private company to the four meetings.



The Leaders, Laggards and the Rest

The countries can be placed in a quadrant chart, with the two metrics, the *Climate Score* and *Engagement Intensity* on the horizontal and vertical axes respectively. The countries most active on climate at the last four MEPC meetings are the ones with high *Engagement Intensity* scores, above the central horizontal axis. Countries that are highly active tend to have extreme positions either for or against. This is the case apart from one wild card - the US.



- Leading the opposition, Brazil has argued that GHG emission targets are undesirable, constituting limitations on trade growth that will create an un-level playing field for the shipping industry and contravening the common but differentiated responsibility principle that applies to the Paris Agreement. This position is backed by a group of countries including Panama, Argentina, India and Saudi Arabia. China has also advocated this position, opposing efforts to develop quantitative reduction targets in previous MEPC meetings, but is potentially moving towards a position that is, slightly, less negative.
- Japan appears by far the most active country in IMO MEPC climate processes and thus represents potentially the largest obstruction to ambitious climate policy. Despite backing a slightly less negative position as compared to Brazil, Panama and Argentina, Japan has opposed binding GHG targets, proposing instead a compromised set of 'aspirational' targets (amounting to 50% decarbonisation by 2060) which would not to be in line with a carbon budget for the shipping sector that matches the goals of the Paris Agreement.



- Leading the pack and pushing for ambitious, binding regulation are the Marshall Islands, Germany, France, Belgium and Sweden. These countries are backing a 'zero by 2050' ambition (with Marshall Islands proposing 'zero by 2020') with quantified, binding targets to ensure this is achieved. The role of the United States on ambitious climate reform is not clear. Previously exhibiting broadly positive positions at MEPC 70 in October 2016, the country's preferred climate policy option has since become less clear and may potentially be moving to one oppositional to the measures and ambition of climate reform proposals. It could be a wild card at the crucial MEPC 72 proceedings this week and will be watched closely
- The IMO's biggest source of income comes from the so-called open registry states with three largest such funders Panama (\$31mn) Liberia (\$18mn) and the Marshall Islands (\$13mn) representing nearly 40% of the IMO's budget over the last four years. The reason these relatively small nation states provide such an outsize proportion of IMO's budget is that the latter is assessed in a large part on the tonnage of shipping registered in the nation. Between them these three have close to 42% of the world's registered shipping by tonnage yet contribute less than 0.1% of global GDP, according to World Bank/IMO data.
- The research on engagement at IMO MEPC meetings on climate (based on consultations submitted, speaking time and delegates sent) shows that despite their outsize amount of registered tonnage and contribution to IMO's budget the open-registry states of Panama and Liberia are not particularly active. Rather, based on these metrics the most active countries are Japan, Korea, Denmark, China and Germany. The table below shows the proportion of global shipping tonnage that these five influential nations own along with the amount each "flag-out" to the top three open registry nations.

	Global Shipping	Proportion of this	Beneficial owners	of each open regist	er's shipping, by %	
Country	tonnage owned,	"flagged out"	t" (data from L		ΓAD)	
	% (IMO)	(IMO)	Panama	Liberia	Marshall Islands	
Japan	12.1	78	41.7	6.0	4.3	
Korea	4.4	77	12.0	0.0	9.6	
Denmark	2.0	11	0.3	0.0	0.5	
China	9.0	17	6.3	1.3	0.5	
Germany	6.1	64	0.5	22.1	4.3	

It is likely that given Japan's (and to a lesser extent Korea's) very large portion of ownership of Panama-registered shipping, these two nations will have significant influence over Panama at the IMO MEPC meetings on climate. Panama is scored by this research to be oppositional to ambitious climate reform, in line with Japan and Korea. This Japan-Panama relationship is noteworthy in recent climate developments at the IMO as the MEPC chair (which rotates with each meeting) was held by Panama in 2017 and was subsequently handed on to Japan who chairs the crucial discussions currently underway. Close to 40% of the 22 delegates Panama sent to the last four MEPC meetings are direct representatives of the



Appendix A: Climate Scoring Methodology

Using a proven system for scoring influence and positions on key public policy areas, IMO member states are assessed on three climate policy areas. Evidence is collected and collated from 2015-17, covering the primary period in which GHG emissions policy has been discussed at the IMO. This scoring has been benchmarked against the IPCC Fifth Assessment Report alongside projections from the IEA on the role of international shipping meeting a sub-2°C global warming target. Each of these policies has been assigned weightings based on their level of importance in meeting climate benchmarks.

Climate disclosure query	Comment	Weighting
Q1: Binding GHG emissions targets	Has the nation actively supported binding GHG emission targets for the shipping sector?	10
Q2: Energy Efficiency Standards	Has the nation supported more/less ambition for energy efficiency standards through the EEDI?	5
Q3: Overall GHG trajectory	Whether the country is supporting an ambitious long-term GHG emissions reduction pathway	10

Each query is scored with a 5-point scale of -2 through to +2. These are then aggregated into overall and policy specific scores. To capture the range of activities that constitute influence at the IMO, a range of data sources have been assessed, a full explanation of which can be found below.

Data Source	Comment
D1: IMO records	This is an assessment of the written submissions and statements of countries at the MEPC meetings.
D2: Media Reports	Here we search in a consistent manner (the organization name and relevant query search terms) a set of websites of representing reputable news or data aggregations. Supported by targeted searches of proprietary databases.



Appendix B: Engagment Intensity Data

Key Countries at the IMO: Engagement Intensity in IMO Climate Process and MEPC

Country	Aggregated data for II			Aggregated Engagement Score
	Delegates Attending	Consultations Submitted	Total Speaking Time (h:m:s)	
Japan	140	24	01:41:45	100.0%
Republic of Korea	103	6	00:38:52	81.0%
Denmark	76	17	00:10:11	80.0%
China	61	10	00:53:17	79.0%
Germany	61	18	00:15:52	78.0%
Brazil	68	5	00:44:04	72.0%
France	54	9	00:24:46	67.0%
Norway	57	6	00:34:45	66.0%
Netherlands	39	11	00:20:38	63.0%
United States	70	3	00:23:04	61.0%
Finland	35	6	00:36:06	58.0%
Sweden	43	8	00:15:23	56.0%
Marshall Islands	44	9	00:08:06	55.0%
Russian Federation	38	3	00:35:57	53.0%
Belgium	19	10	00:14:22	48.0%
Argentina	21	2	00:47:04	48.0%
United Kingdom	64	1	00:05:40	46.0%
Canada	41	2	00:15:28	41.0%
Singapore	50	1	00:08:12	40.0%
Greece	42	1	00:11:12	37.0%
India	13	5	00:22:28	37.0%
Saudi Arabia	23	1	00:23:04	33.0%
Cook Islands	7	0	00:43:01	33.0%
Indonesia	44	1	00:03:18	33.0%
Malta	27	1	00:15:06	30.0%
Turkey	27	2	00:10:03	30.0%
Italy	36	1	00:02:20	28.0%
Panama	22	1	00:09:23	24.0%
Bahamas	21	0	00:11:26	22.0%
Liberia	24	0	00:07:24	21.0%



Malaysia	24	0	00:03:25	18.0%
Cyprus	15	1	00:06:25	17.0%
Antigua and Barbuda	6	3	00:02:17	14.0%
Vietnam	7	1	00:00:00	8.0%
Bolivia	8	1	00:00:00	8.0%
Portugal	5	1	00:00:06	6.0%
Saint Kitts and Nevis	4	0	00:00:00	3.0%
Dominica	4	0	00:00:00	3.0%
Belize	3	0	00:00:00	2.0%
Sierra Leone	3	0	00:00:00	2.0%



Appendix C: IMO Funding Data

Key countries at the IMO: voluntary and assessed funding, aggregate 2013-16 USD

The funding amounts are assessed funding (based on a flat fee, ability to pay and registered fleet tonnage) and voluntary payments made by nation states, aggregated over the last four years. Data from the IMO.

Country	Voluntary	Assessed	Total	Proportion of IMO total Budget ⁸
Panama		31,367,136	31,367,136	18%
Liberia		18,216,409	18,216,409	11%
Marshall Islands		13,511,844	13,511,844	8%
United Kingdom	2,352,316	7,907,957	10,260,273	6%
Singapore		9,876,174	9,876,174	6%
Bahamas		7,791,120	7,791,120	5%
China	837,129	6,873,546	7,710,675	4%
Japan	1,432,545	5,980,837	7,413,382	4%
Malta	54,421	7,101,167	7,155,588	4%
Republic of Korea	4.64 m	2,231,538	6,866,994	4%
United States	1,407,941	4,802,582	6,210,523	4%
Greece		6,102,306	6,102,306	4%
Norway	2,363,648	2,475,241	4,838,889	3%
Germany	1,257,783	3,216,640	4,474,423	3%
Italy		3,570,395	3,570,395	2%
Denmark	1,387,703	1,973,505	3,361,208	2%
Cyprus	39,395	2,993,641	3,033,036	2%
Canada	1,460,977	884,878	2,345,855	1%
Indonesia		2,207,236	2,207,236	1%
Netherlands	288,878	1,696,622	1,985,500	1%
France	24,599	1,915,676	1,940,275	1%
Russian Federation		1,755,133	1,755,133	1%
India		1,507,504	1,507,504	1%
Antigua and				
Barbuda	18,612	1,460,151	1,478,763	1%
Malaysia	51,476	1,175,285	1,226,761	1%

 $^{^{8}\,\}text{Total}$ IMO budget for 2013-2016 is \$173, 270, 000

13



Turkey		1,115,468	1,115,468	1%
Brazil		1,009,147	1,009,147	1%
Belgium	7,199	813,808	821,007	0.5%
Sweden	57,008	597,814	654,822	0.4%
Portugal		565,941	565,941	0.3%
Saudi Arabia		525,201	525,201	0.3%
Finland	129,937	390,579	520,516	0.3%
Belize	12,694	281,383	294,077	0.2%
Argentina		226,728	226,728	0.1%
Sierra Leone		202,410	202,410	0.1%
Saint Kitts and Nevis	15,592	175,989	191,581	0.1%
Cook Islands		176,795	176,795	0.1%
Dominica		132,596	132,596	0.1%



Appendix C: Country climate scores

Country	Score	Explanation
Japan	24	Japan has not supported GHG binding targets, instead proposing a compromised 'aspirational' set of targets, although these do not appear to be in line with a carbon budget for the shipping sector that matches the goals of the Paris Climate Agreement. Japan has promoted a response based on energy efficiency improvements, although appears not have supported proposals to increase the stringency of reduction rates under the EEDI framework.
South Korea	18	South Korea appears to only support the IMO's current approaches to emission reductions, rather than the implementation of any new measures. Korea appears to have not supported proposals to strengthen energy efficiency standards under the EEDI framework, also backing a loosening of standards for certain types of ship, for example, existing ships that need re-fits.
Denmark	76	Denmark is part of the "high ambition coalition for shipping" which seeks to ensure that the shipping industry reduces emissions in line with the well-below 2C ambition of the Paris Agreement. Although seemingly not active in negotiations concerning tightening the EEDI framework, or binding emission targets, Denmark has more broadly communicated support for a more immediate implementation of a GHG emission workplan.
China	12	China has opposed quantitative emission reduction targets, arguing reduction efforts should focus on data collection processes, as well as other 'appropriate' improvements such as energy efficiency. China appears not to support further ambition with regards to the EEDI framework, supporting delaying in a decision on the early implementation of phase 2 and phase 4 requirements. Despite this, certain reports, in particular by trade association The International Chamber of Shipping, has suggested that China's position on CO2 reduction goals may have softened, although the extent of this is unclear.
Germany	88	Germany is part of the "high ambition coalition for shipping" which seeks to ensure that the shipping industry reduces emissions in line with the well-below 2C ambition of the Paris Agreement. It has supported careful consideration of more stringent standards for some types of ships but not others with regards to the EEDI framework. Germany has supported submissions proposing quantified GHG emission goals for the shipping industry.
Brazil	6	Brazil opposes GHG emission targets as undesirable limitations on trade growth that will create an un-level playing field for the industry and contravene the common but differentiated responsibility principle that applies to the Paris Agreement. Alternatively, it has advocated support for a route that focuses on energy efficiency improvements, although its positions on proposals to increase the ambition under the EEDI framework appear unclear.
France	100	France is part of the "high ambition coalition for shipping" which seeks to ensure that the shipping industry reduces emissions in line with the well-below 2C ambition of the Paris Agreement and has called for IMO GHG emission caps in line with this. France has supported an increase in EEDI ambition on container ships, gas carriers and bulk carriers.
Norway	76	Norway position on IMO GHG emission targets is unclear, however, it appears to have focused its engagement in negotiations on support for increased energy efficiency standards for container, cargo and bulk carrier ships.
Netherlands	76	Netherlands is part of the "high ambition coalition for shipping" which seeks to ensure that the shipping industry reduces emissions in line with the well-below 2C ambition of the Paris



		Agreement. However, does not appear to have been active in negotiations around binding GHG emission targets.
United States	41	At MEPC 70 (Oct 2016), the US supported increased ambition with regards to phase 3 of the EEDI standards and supported a long-term emissions strategy for the industry. However, recent reports suggest the nation may have shifted positions, towards one more oppositional to GHG emission targets.
Finland	80	Finland believes that there is an urgent need for the shipping sector to contribute to the overall global aim to reduce CO2 emissions and supports 70-100% CO2 reduction by 2050. It supports strengthening the EEDI framework.
Sweden	88	Sweden is part of the "high ambition coalition for shipping" which seeks to ensure that the shipping industry reduces emissions in line with the well-below 2C ambition of the Paris Agreement. Sweden does not appear to have clearly set down positions on EEDI ambition but has welcomed the implementation of GHG emission targets for shipping.
Marshall Islands	100	The President of the Marshall Islands is a leading advocate for the IMO setting an ambition binding GHG emissions target.
Russian Federation	24	Russia supports the EEDI as a mechanism to reduce GHG emissions, although has opposed the implementation of higher EEDI standards specifically for ice ships. It has consistently opposed attempts by countries within the IMO to consider the implementation of GHG emissions targets.
Belgium	100	Belgium is part of the "high ambition coalition for shipping" which seeks to ensure that the shipping industry reduces emissions in line with the well-below 2C ambition of the Paris Agreement. Belgium has also supported greater ambition with regards to EEDI reduction rates, as well as the development of a methodology to specify long-term and intermediary GHG emission reduction targets.
Argentina	0	Argentina opposes a GHG emission target that it believes will create an un-level playing field for the industry and contravene the common but differentiated responsibility principle that applies to the Paris Agreement. Argentina has also supported lessening the ambition of the EEDI framework, in particular standards for existing ships.
United Kingdom	80	The UK is supporting an ultimate goal of cutting emissions by 70%-100% of their 2008 levels by 2050. It has stated support for increased EEDI standards for ro-ro cargo ships and passenger ships, although not for other types of ships.
Canada	59	In April 2016, Canada supported aspirational targets, with mandatory measures to ensure they are reached. However, Canada has since stated support for the IMO establishing a quantified IMO-determined contribution for the international shipping sector, which should be a high ambition, in light of capabilities, with the intent of enhancing the level of ambition over time.
Singapore	53	Singapore appears not yet been active in negotiations concerning the ambition of IMO's GHG emission reduction strategy, or binding GHG emission targets, however does appear to support the IMO process on energy efficiency through the EEDI. Singapore has supported increasing some EEDI requirements, but not others.
Greece	59	Greece has stated support for an increase in EEDI standards for container ships and a reconsideration of the standards for ro-ro ships. It appears not yet been active in negotiations surrounding the ambition of IMO's GHG emission reduction strategy, or binding GHG emission targets
Panama	18	Panama has emphasised the economic and safety risks of GHG measures and appears to be aligned with the positions of countries that have opposed mandated reduction targets. It does



		not yet appear to have been active in negotiations surrounding increasing the ambition of the EEDI framework.
Liberia	41	Liberia does not yet appear to have been active in negotiations surrounding increasing the ambition of the EEDI framework, however, has communicated a position that does not appear to be supportive of ambitious action on GHG emissions.
India	0	India argues that its INDC does not bind it to any sector-specific obligation or action and has supported submissions opposing mandatory GHG emission targets, advocating instead for a focus on energy efficiency. Despite this, India appears to have supported Korea's submission on the EEDI, proposing the removal of efficiency standards for existing ships.
Saudi Arabia	0	Saudi Arabia is a signatory to a IMO submission suggesting an overall cap to GHG emissions would represent an undesirable hindrance to world trade and the development of all countries.
Cook Islands	24	The Cook Islands has opposed early action on GHG measures and has stressed technical concerns around increasing the ambition on energy efficiency standards for certain ship classes.
Bahamas	53	Despite communicating the need for the shipping industry to send a signal following the Paris Agreement, Bahamas does not appear to have been active in negotiations concerning GHG emissions targets and routes, or the EEDI.