“WHAT IS IN THE INITIAL INTERNATIONAL MARITIME ORGANISATION (IMO) STRATEGY? AND WHAT DOES THIS MEAN FOR THE PACIFIC?”
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tr>
<td>ABB</td>
<td>Asea Brown Boveri</td>
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<tr>
<td>ENGIE</td>
<td>French multinational electric utility company</td>
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<tr>
<td>CBDRRC</td>
<td>Common but Differentiated Responsibilities - Respective Capabilities</td>
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<tr>
<td>CO2</td>
<td>Carbon Dioxide</td>
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<tr>
<td>GHG</td>
<td>Greenhouse gas</td>
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<tr>
<td>HSBC</td>
<td>Hong Kong and Shanghai Banking Corporation</td>
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<td>ICAO</td>
<td>International Civil Aviation Organization</td>
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<td>IMO</td>
<td>International Maritime Organization</td>
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<tr>
<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
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<tr>
<td>ISWG</td>
<td>Intersessional Working Group (on GHG emissions reduction)</td>
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<tr>
<td>IUCN</td>
<td>International Union for the Conservation of Nature</td>
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<tr>
<td>LNG</td>
<td>Liquefied natural gas</td>
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<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships</td>
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<tr>
<td>MCST</td>
<td>Micronesian Center for Sustainable Transport</td>
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<tr>
<td>MEPC</td>
<td>Marine Environment Protection Committee</td>
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<tr>
<td>NMFT</td>
<td>No More Favourable Treatment</td>
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<tr>
<td>PIDF</td>
<td>Pacific Islands Development Forum</td>
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<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>RMI</td>
<td>Republic of the Marshal Islands</td>
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<tr>
<td>SIDS</td>
<td>Small Island Developing States</td>
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<tr>
<td>SDGs</td>
<td>Sustainable Development Goals</td>
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<tr>
<td>UCL</td>
<td>University College London</td>
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<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<tr>
<td>USP</td>
<td>University of the South Pacific</td>
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<td>WFP</td>
<td>World Food Programme</td>
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INTRODUCTION AND BACKGROUND

A deal was reached at the 72nd meeting of the International Maritime Organisations (IMO) Marine Environment Protection Committee (MEPC72). Countries agreed to at least a 50% reduction of international shipping emissions by 2050, compared to 2008 levels. It does not quite meet what the climate needed, but it is an important first step.

The Pacific countries with other climate ambitious nations had wanted a 70 – 100% reduction by 2050. Importantly, however, the deal leaves open revisiting the target as informed by science for it to align with the Paris Agreement. For more information on MEPC72 please visit greenbusiness.solutions/mepc72/

The purpose of this Post MEPC72 Talanoa was to elaborate on the decisions made at, and outcomes of MEPC72, particularly the Initial Strategy, and what these mean for Pacific member states. Further negotiations are expected at MEPC73 and it is imperative that the Pacific unite to address this important climate change related issue. The Programme for this Talanoa is attached as Annex 4 to this report.

The Talanoa comprised of presentations by four eminent shipping emissions professionals who have been instrumental in guiding Pacific delegations leading up to and during discussions at the IMO. The presentations were followed by discussions.

François Martel, Secretary General, Pacific Islands Development Forum (PIDF) welcomed everyone and briefly outlined the historic decision taken at MEPC72 to adopt a target to reduce emissions. He noted that the Pacific was relentless in pushing for high levels of ambition. A copy of his opening remarks are attached as Annex 1 to this Report.

Mark Borg, Team Leader Programme Management, PIDF, introduced the speakers and set the scene for the Talanoa. A copy of his remarks are attached as Annex 2 to this Report.

A list of participants is attached as Annex 3.
SUMMARY OF PRESENTATION AND DISCUSSIONS

WHAT IS IN THE IMO STRATEGY? Dr. Tristan Smith, Energy Institute, University College London (UCL)

Dr. Smith thanked the University of the South Pacific (USP) and PIDF noting their impact on the IMO GHG debate, and that it has been a most rewarding cooperation because of the Pacific’s integrity and role in challenging accountability. He congratulated the effectiveness of the small team, noting that Taasi Pitoi from Tuvalu, Ruoikabuti Tioon from Kiribati, Jimmy Nuake from the Solomon Islands and Faranisese Kinivuwai from Fiji have been instrumental during discussions and turned the IMO on its head.

He described how the language in the initial GHG emissions reduction strategy is important in holding the IMO to account and honouring expression into concrete policy measures as it does not provide any detail. It is important to understand the language.

He went on to detail the three levels of ambition:

1. Objective is all about improving design efficiency – unlikely to drive the rate of CO2 change for the sector.

2. Carbon intensity must decline and that there is target to reduce 40% by 2030 and 70% by 2050 compared to 2008. This is considered underwhelming and there were not much debate on it as focus was more on the 3rd objective.

3. Absolute emissions must peak and decline as soon as possible by at least 50% - whilst pursuing efforts to achieve a more ambitious target. The hook is in the long winded text as the vague wording will allow tightening of this 3rd objective, i.e. full decarbonisation by 2050 is not fully compatible with 1.5°C but on a pathway.

Carbon intensity is useful for industry because it can be calibrated to a particular ship. Because world trade is set to increase, to achieve 50% reduction will need higher carbon intensity of 85% by 2050 on individual ship level. So clearly, neither the 40% nor 80% targets in the 2nd objective meet this. Shipping has already improved carbon intensity by 30% so the IMO has only committed to a very small target of an additional 10% on what has already been done.

Language in 3rd objective – a point on a pathway – is a crucial phrase that needs to be emphasized as the need is to be on a continuous decline to zero. How can this be communicated to ship owners and operators?

The Initial Strategy needs strengthening in terms of having a peak as soon as possible to have an impact on emissions in the next 10 years, and to get to zero by 2050.

This urgency of emissions’ reduction is missing and makes it very difficult to get changes made given the timeframe. There is language that stresses the urgency elsewhere in the strategy.
Initial Strategy has set of guiding principles to encompass other policy framing that needed to be added to reference what has already been written: MARPOL (No More Favourable Treatment) [NMFT] – cannot have policy measures specifying that certain flags have to do more than another group of flags. It is critical that there are no incentives for people to reflag as a result of policy. UNFCCC (Common But Differentiated Responsibilities – Respective Capabilities) [CBDRRC] – recognition that climate change has come about because developed countries have had industrial revolutions and made wealth – but if there are countries that have the capability they should play a role. There will continue to be major tension in regards to the above and this can be both good and bad for the Pacific. CBDR-RC – the Pacific does not have responsibility or capability at same scale as others. At the same time, this will create a resistance impact because it will lock parties into arguments as some countries will be against this position. Action Plan is very loosely defined and does not define timeframe and this too has pros and cons: Pros – there is a lot of scope to interpret it in various way; Cons – cannot use a timeframe to drive commitments and outcomes. These will be debated later in October this year (ISWG GHG 4 and MEPC 73).

A copy of Dr. Smith’s presentation is attached as Annex 5 to this report.

**Question and Answer Session following Dr. Smith’s presentation**

**Q:** How does decarbonisation of shipping happen in reality?

**A:** 1) improve energy efficiency; 2) switch to alternative fuels. Currently most international ships cannot improve energy efficiency further – however, this is not true for the Pacific and there are opportunities for Pacific shipping to improve efficiency e.g. hull coatings, propellers, cowlings, scheduling. Fundamental need is to use non–fossil fuels: batteries for electric, biofuels and synthetic fuels. Biofuels from waste products, etc. Most promising for global fleet is to use electricity from solar and wind and possibly nuclear to produce hydrogen which could be used to make fuel, e.g. methanol, hydrogen or ammonia for example, i.e. use renewable energy to make electricity which is stored in liquid fuel. This needs to happen within the next 10 years for most impact.

**Q:** Synthetic fuels – is ammonia synthetic?

**A:** Yes – with biofuels, the constraint is biomass availability globally (e.g. competing with food security).

**Q:** Which industry players are being most innovative?

**A:** Need to promote companies who do take lead. Good news is that Scandinavians working on biofuels and renewables and French e.g. ENGIE is working on alternative fuels and ABB on fuel cells and electrification. Problem is these companies are not mainstream in shipping and are up against globals such as Shell, BP, Total etc. who have large over supplies of oil and gas and who are looking to shipping as markets. Investment in LNG is a complete dead-end and will cause major impacts.
WHAT MADE IT INTO THE INITIAL IMO GHG STRATEGY AND WHAT DIDN’T? Alison Newell, MCST, USP

A copy of her presentation is attached as Annex 6 to this report.

Comments

- Funding is key, particularly investment finance. The IMO strategy is enough to send signals that major investment is needed in new technologies. Greeks are investing in LNG (Greeks represent significant proportion of ship owners globally) and are also saying that the shipping industry is being overly regulated by environmental regulations. The finance community that lends money to ship owners need to change their behavior – for example, the HSBC has close to USD $6 billion of its books on funding the shipping industry and if those ships are of the wrong type, then these will become toxic loans. Banks in general should be empowered to drive change through their lending.

- The Pacific team has grown in stature but needs to work exceptionally hard to keep its team up-skilled and maintain relationships as it is going to get more and more technical. The time for specialists to be brought forward is now and this requires dedicated long-term resourcing which is not currently available. What’s the long-term resourcing package? CBDR-RC & NMFT is going to be a tricky hurdle to negotiate and is also an area in which Pacific and other SIDS may be on a different side of the fence to traditional partners. It is important to have a mature debate. Pacific can play a significant role in bridging the gap between developed and developing countries but requires the luxury of time and capacity which it also currently lacks. There is a need to also make sure change is driven at the domestic level as well as internationally. If not, then the risk of stranded assets and increased costs from using fossil fuels, etc. will increase.

- World Food Programme (WFP) has been in Pacific for a while and appreciates the initiative of RMI & USP in establishing the Micronesian Centre for Sustainable Transport (MCST). WFP can attach weight to the MCST framework. Partnerships are going to be key moving forward and WFP is reaching out to assist and be a signatory partner to MCST.

- Resourcing that goes into UNFCCC is not being matched for ICAO & IMO debates. Domestic emissions from shipping and aviation make up proportionately larger part of national emissions. Pacific is behind the ball at national level and this issue needs to be of a higher priority within Pacific IMO states in order to defend its position. There’s a lot of work ahead.

- The reference in the Initial Strategy on impacts on States to socio-economic inclusion is problematic. The UNFCCC code for providing compensation for oil producing states for lost revenue from decarbonisation poses a danger in the way it is applied. In the IMO this can be used to turn it into economic argument. Pacific voices were listened to and had authenticity and leadership.

- Pacific is going to continue to attend IMO meetings. Moving forward, the focus must be on the bigger players in the commercial sector who can take this forward rather than just political. WFP can help build a strategic approach to big spenders in the commercial world.

- How is progress defined? How does this match with SDGs? Compensation for oil producing countries? They need to reinvest their income in other sustainable industries. IUCN has been working on a survey of shipping companies and found there is a complete lack of transparency. Three shipping companies out of 30 approached in Fiji responded and this showed an increase in shipping costs from Asia to Fiji and close to a 300% increase from Fiji to anywhere else.
PACIFIC IMO REPRESENTATIVES FEEDBACK

- It is good to have a collective Pacific voice and to have USP and UCL support the Pacific government delegations.

- It is sad to see that there were very few Pacific island representatives. Hopefully, the upcoming meetings have more Pacific island representatives. Immediately after IMO, Tuvalu briefed their Prime Minister who then brought IMO GHG emissions up at the Commonwealth Heads of Government Meeting in London, UK. There must be high level awareness within Pacific governments on this issue.

- There were some concerns over the wording of the strategy as it did not comprise all that the Pacific fought for. However, this is a starting point and the need to move towards more ambition is vital.

- The MEPC72 was an emotional experience since other States put little regards towards survival of Pacific Islands as compared to their own economies.

- The team that represented the Pacific in IMO this year is to be congratulated. SIDS rely heavily on shipping for its economies and Pacific peoples but this does not mean that the sector itself should not be cleaner and have better delivery globally. Accolades must also be given to France for funding the Pacific Technical Officers Workshop in February, to PIDF for their phenomenal support and USP for its leadership in trying to connect us with science. The Initial Strategy being ...at least 50% and aligned with Paris Agreement are the hooks in the IMO Strategy. The Pacific's efforts in sending designers and ship builders scattering to better design the next ship is a major achievement. The Pacific has been and will be vociferous in these debates, and move out of comfort areas. The question to existing and potential partners now is what's the next steps? The Pacific needs to continue its momentum in these negotiations but there has not been any consistent support from partners.

- A key takeaway from the IMO meetings in April was the strength of Pacific leadership – a strong coordinated voice that requires support.

- In terms of the impacts of the Strategy, one of the key deliverables is to make sure that the Pacific does not pay for this action. Given what the Pacific was up against, the outcome was impressive but not enough. In achieving this, many bridges were burnt in getting those who opposed the Strategy to adopt it. Working with member states that were not supportive is crucial going forward. The CBDR in UNFCCC context can be used as a shield to not take action and delay action. The 2030 carbon intensity target is technically important but it is also important to recognize that the decarbonisation pathway will be sending signals and thus a review of clauses in line with latest science are imperative.
WRAP UP - Derrick Armstrong, Deputy Vice-Chancellor, Research, Innovation and International

Looking at the IMO progress from outside it wasn’t just the outcome, but was also mobilisation of partners and profound leadership in making such a difference for the future. The struggle is ongoing but stakes are really high.

USP is continuing its efforts to support the leadership shown by parties in this forum and will also continue in its efforts to mobilise others to work on what is possible for the Pacific and the whole world. USP thanks and acknowledges the PIDF for keeping this issue on the agenda.

Gratitude expressed also to Tristan and his team for their support, leadership and expertise.

USP is partnering with RMI government in the MCST and recently agreed to new developments for the centre.

There is commitment from RMI and USP for funding in developing the MCST.

Of particular note is the importance of research – to inform policy, change things, to make a difference; mobilisation of resources, people and communication of ideas and keeping these issues high profile to strongly engage the region.

Partnerships are critical.
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Annex 2 – Introductions and setting the scene by Mark Borg.

Annex 3 – List of participants.

Annex 4 – Programme for the Post MEPC72 Talanoa.

Annex 5 – Presentation material used by Dr. Tristan Smith.

Annex 6 – Presentation material used by Alison Newell.

Annex 7 – Talanoa Flyer.
OPENING REMARKS AT THE POST MEPC72 TALANOA SESSIONS - Secretary General François Martel

The outcome of the 72nd Marine Environment Protection Committee (MEPC72) of the International Maritime Organisation (IMO) was deemed a success by the IMO and its members. In a nutshell, after lots of deliberations and posturing, the meeting agreed to reduce shipping emissions by at least 50% by 2050 compared to 2008 levels.

This outcome, though less ambitious than what the Pacific would have liked, and what we need to save our Pacific peoples and their livelihoods, is a step in the right direction. It sends a signal to the industry that they need to make the changes necessary to move the maritime shipping sector towards eventual zero emissions. There is therefore a need for increased research in the use of renewable energy in shipping and zero carbon fuels and development of better efficiency ship designs.

The delegates from the Pacific Island nations at the MEPC72 were relentless in their efforts to seal a deal which ensures the international maritime sector will act responsibly in limiting the impact of its activities on the climate.

The Pacific would not have been able to achieve these results without the efforts of a number of other countries and organisations seeking targets for limiting shipping emissions.

The worst that could have happened for the industry was that we left MEPC72 without any targets set and without any indication that the industry must have a vision for a zero emission future. Many actors from within the industry have in the past supported ambitious reductions in light that the technology is already there to make this happen.

It is important that the industry starts shifting to and incorporating these technologies now to allow for a gradual adjustment, rather than a rapid adjustment at a later point in time which would certainly be more disruptive for the shipping industry. Those in the industry capable of long-term vision know this and want to act now.

Pacific people needed the IMO to set more ambitious targets for the Initial Strategy for reduction of GHG emissions in the international maritime transport sector.

They should not accept anything less than what the world is required to do to meet targets set in the Paris Agreement. However the agreement left a window open for the target to be adjusted according to the scientific information available, so it remains in line with the Paris Agreement.

It is expected that all countries that have ratified the Paris Agreement would abide by the words and spirit of that agreement.
SETTING THE SCENE—Mark Borg, Team Leader, Programme Management

Our Talanoa today comprises of presentations/discussions by four eminent shipping emissions professionals who, amongst many other accolades, have been instrumental in guiding Pacific delegations leading up to and during discussions at the IMO. The next session will be delivered by Dr. Tristan Smith and Isabelle Rojon and they will present and lead discussions on the IMO initial strategy.

Widely recognised as the leading independent expert on shipping emissions, Dr. Tristan Smith Heads the University College London’s Energy Institute’s Shipping Efficiency and Emission Research Program. Tristan has two principal fields of research interest:

(1) Low Carbon Shipping and all aspects of shipping economics, logistics and operation,
(2) The development and implementation of technologies and operational practices for the reduction of CO2 emission from shipping.

Tristan regularly engages with the International Maritime Organisation (IMO) based in London, and also collaborates with the University College London’s Global Governance Institute on the topic of science to policy translation-execution and strategy, focused on the role of academics in informed public debate and how academics can most effectively engage the science policy and practitioner community.

Ms. Isabelle Rojon is a research associate at the University College London and part of the UCL and USP team who have been providing technical support to Pacific delegations. Her research focuses on maritime greenhouse gas policies and the diffusion of technological innovation in shipping and environmental management. Before joining UCL, she was a Senior Research & Editorial Executive at Fathom Maritime Intelligence, writing publications on environmental regulations and energy efficiency in the maritime industry, and has previously worked in the Energy & Environment Department of the research and consultancy company Ecorys in the Netherlands.

Following these, Dr. Peter Nuttall and Ms. Alison Newell will take us through the session titled “Priorities for ISWG GHG 4 and MEPC 73”.

Dr. Peter Nuttall is the Scientific and Technical Advisor for the Micronesian Center for Sustainable Transport at the University of the South Pacific and his research on low carbon shipping have been published and presented widely.

Ms. Alison Newell’s research focuses on maritime emissions and the relationship between shipping and sustainable development for SIDS. Both Peter and Alison have been intimately involved in discussions at the IMO and are advocates for high ambition shipping emissions reductions.
## ANNEX 3

**List of participants**

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<tr>
<th>NAME</th>
<th>ORGANIZATION &amp; TITLE</th>
<th>CONTACT DETAILS</th>
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**ANNEX 4**

Programme for Post MEPC72 Talanoa 7th June 2018 | USP ICT Video Conference Room, Suva, Fiji

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<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:00pm</td>
<td>Welcome and opening remarks</td>
<td>François Martel, Secretary General, PIDF</td>
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<tr>
<td>5:05pm</td>
<td>Workshop objectives</td>
<td>Mark Borg, Team Leader Programme Management, PIDF</td>
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<td>1. What’s in the IMO Strategy?</td>
<td>Dr. Tristan Smith, Head of University College London Energy Institute’s Shipping Efficiency and Emission Research Program</td>
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<td>2. Feedback from Pacific IMO delegates on April IMO meetings</td>
<td>Pacific IMO delegates</td>
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<tr>
<td>5:10pm</td>
<td>What’s in the IMO Strategy?</td>
<td>Dr. Peter Nuttall, Scientific and Technical Advisor for the Micronesian Center for Sustainable Transport University of the South Pacific (USP)</td>
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<tr>
<td>6:10pm</td>
<td>Priorities for ISWG GHG 4 and MEPC 73</td>
<td>Alison Newell, Research Associate, Institute of Marine Resources - USP</td>
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<tr>
<td>6:40pm</td>
<td>Question and answers session</td>
<td>Derrick Armstrong, Deputy Vice-Chancellor, USP</td>
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<td>6:55pm</td>
<td>– 7:00pm Wrap up and close</td>
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The IMO’s 2018 climate agreement explained

- Signals end of fossil fuels in shipping by mid-century
- Deal will be reviewed in light of IPCC 1.5°C report
- Broad industry support for decarbonisation *UN has under 5 years to deliver initial GHG reduction plan

How ambitious is this agreement?

The IMO deal reached in London represents a significant shift in climate ambition for a sector that accounts for 2-3% of global carbon dioxide emissions. It sets an emission reduction pathway of “at least” 50% on 2008 levels by 2050 with a strong emphasis on increasing the cut towards 100% by 2050 if this can be shown to be possible. This is approaching the ambition of the UN’s 2015 Paris Agreement.

While we can say this deal puts shipping on course for a 2C pathway, it’s important to remember Paris targets “well below” 2C and aims for 1.5°C, so this is no time for complacency. Full decarbonisation by mid-century remains the minimum course for 1.5°C, an object which if missed, creates existential threats for some countries and environmental and socio-economic threats for all.

Critically the deal signals to the industry - and particularly investors - that a clear switch away from fossil fuels is now on the cards. From the 2030s, it is highly unlikely that new ocean-going vessels will be dependent on fossil fuels. Rather we will be looking at zero carbon renewable fuels to power the world’s fleet. If you are building a ship or planning to build a ship in the 2020s it will likely need to be able to switch to non-fossil fuels later in its life, a factor insurers and shipping financiers will need to consider in their business plans through the next decade.
Is a 1.5°C pathway for shipping still on the table?

The Strategy does not alone secure 1.5°C or clearly show that efforts have been pursued to achieve this. The Strategy increases the possibility of being able to keep global average temperature increases within this limit. Immediate measures to implement the Strategy will be required to urgently peak and reduce GHG emissions in line with 1.5°C. The Strategy will be reviewed in light of the UN’s IPCC 1.5°C report in September, which will likely be helpful for strengthening it.

Critical to the viability of 1.5°C, is whether the Strategy is converted into significant GHG reductions before 2023, and this is dependent of the outcome of future IMO meetings and their ability to agree and then rapidly deploy policy measures.

What does the at least 50% figure mean?

It refers to at least 50% GHG cuts by 2050 on 2008 levels, which is the agreed baseline year for shipping GHG. Under the below 2C Paris temperature goal, 50% cuts mean shipping’s share of net CO2 emissions is likely to grow from its current 2-3% to around 10% by mid-century. This could still help achieve the below 2C temperature goal if other sectors and countries are able to reduce emissions faster. Further strengthening of the Strategy using evidence arising over the next 5 years could see the sector’s commitment increase to 100% reduction by 2050.

Which country’s proposed target ‘won’ at MEPC72?

As you’d expect in a multilateral negotiation, the decision reached is a compromise. The outcome is not as ambitious as the 70-100% targeted by Pacific Islands and European countries, but is more ambitious than the 50% by 2060 initially proposed by Japan and other parties. The final decision received almost unanimous support from the IMO’s member states and from industry.

How will the sector deliver the at least 50% goal?

Now that the Initial Strategy is adopted, IMO is expected to start developing GHG reducing legally binding measures, which could include measures to increase ships’ technical and operational energy efficiency, a low and zero-carbon fuels implementation programme, national action plans and market-based measures. These measures would be in addition to the existing IMO measures on energy efficiency.

A new IMO data collection system for fuel oil consumption of ships has come into force on 1 March 2018, which will mean the fuel consumption of all major vessels is reported and totalled.

The IMO’s regulations are likely to be supported by voluntary action in the sector and by governments on their domestic shipping, which can help drive technology and infrastructure developments required for the Strategy’s objectives.

When does this deal kick in?

The IMO has agreed to achieve GHG reduction before 2023. This will require rapid development of policy measures, and deployment as soon as possible. The IMO’s 4th greenhouse gas study is due to be completed in 2020 and may be used to define what immediate policy action is required.
Is everyone on-board?

An overwhelming majority of countries at the IMO fully support this deal. Saudi Arabia, USA, Brazil were the only ones to raise specific objections as the talks closed, but the decision was adopted by the IMO’s Marine Environment Protection Committee, which means it is now an official decision.

Will we see carbon pricing in the near future?

The Strategy mentions market-based mechanisms as one of the policy options that will be discussed in the coming years. These have promise for both making a business case for the switch to more expensive fuel/technology, and raise funds for R&D, deployment and infrastructure development, and potentially addressing economic impacts if these arise in certain states. Other policy measures that could achieve similar outcomes will also be explored, so a carbon price is not certain.

What will the ships of 2040 look like?

They will look very different to today’s ships. It’s hard to predict exactly what the next 20 years will bring, but we could see a diverse shipping fleet powered by hydrogen, ammonia, batteries, sustainable biofuels and sail.

There are a range of innovative technologies being rolled out by market leaders already and we can expect the curve of technological development to only increase with this decision.
What does it mean for the sector?

The deal moves the debate on action on GHG from just talking about energy efficiency. The shipping industry will now have to confront the very real and imminent prospect of following other transport sectors in decarbonising and investing in new technologies that radically cut emissions.

It’s clear there is a massive investment opportunity for the sector to bring itself up to speed with this set of Objectives. This opportunity could be both for technology and fuels, as well as for companies in the maritime industry that can show that they are prepared for and managing this period of change.

Will this hurt world trade?

It’s unlikely we are going to see an immediate shift in transport costs. On average globally, prices are unlikely to increase to as high as they did when the price of oil soared in the 2000s. There is also the potential that the move to new energy sources and higher standards of environmental governance could reduce volatility in shipping and transport costs. However, there needs to be further work to confirm this assessment, especially on specific countries with strong links between maritime transport cost and their economies.

But if shipping can manage its decarbonisation in an equitable and coordinated manner, then trade there is a good opportunity for trade growth to continue and to assist globally with economic development and the fulfilment of Sustainable Development Goals.

Developing countries - is this a deal that will hurt them?

If there are increased costs in transport, these are most likely to be significant in the poorest and most remote SIDS and LDCs, due to their often remote and poorly serviced trade routes, high dependency on imports, already disproportionally high per capita transport costs, and low ability to absorb increased prices without significant social welfare impacts. Discussions for how these economic impacts could be assessed and, if necessary, addressed will be a critical part of discussions through to 2023.

For further information, please contact:

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For further underpinning published research, please see:

www.lowcarbonshipping.co.uk
www.shipmap.org
www.ucl.ac.uk/energy
What made it into the Initial IMO GHG Strategy and what didn’t

**Priorities for ISWG GHG 4 and MEPC 73**

**Levels of Ambition**

**Pacific Asked For:** Full decarbonisation (to zero GHG emissions) by 2035

**Initial Strategy:** GHG emissions from international shipping to peak and decline - to peak emissions from international shipping as soon as possible and to reduce the total annual GHG emissions by at least 50% by 2050 compared to 2008 whilst pursuing efforts towards phasing them out as called for in the Vision as a point on a pathway of CO₂ emission reduction consistent with the Paris Agreement temperature goals

**What did the Pacific ask for and what made it into the Initial IMO GHG Strategy?**

**Vision**

Pacific Asked For: Decarbonisation of international shipping by the second half of the century

Initial Strategy: IMO remains committed to reducing GHG emissions from international shipping and, as a matter of urgency, aims to phase them out as soon as possible in this century

**Levels of Ambition**

Pacific Asked For: Rapid decline in GHG emissions starting as soon as possible, but no later than 2025

Initial Strategy: Carbon intensity of international shipping to decline - to reduce CO₂ emissions per transport work, as an average across international shipping, by at least 40% by 2030, pursuing efforts towards 70% by 2050, compared to 2008

**Impacts on States**

Pacific Asked For: - Geographic remoteness and connectivity to main markets - Cargo value - Cargo type - Transport costs - Transport dependency - Food security - Disaster response

Initial Strategy: - Geographic remoteness of and connectivity to main markets - Cargo value and type - Transport dependency - Transport costs - Food security - Disaster response - Cost-effectiveness - Socio-economic progress and development
**Action Plan**

Pacific Asked For: With a view to achieving further reduction of GHG emissions from international shipping and to start work on mid and long-term measures prior to 2023, an action plan should be an integral part of the initial strategy to structure this work.

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<th>Time</th>
<th>Action</th>
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<tr>
<td>Autumn 2018 (MEPC 70)</td>
<td>Identification of short-term measures with short-term impacts</td>
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<tr>
<td>Summer 2019 (MEPC 74)</td>
<td>Initiation of development of candidate measures with likely short-term impact on shipping’s GHG emissions including assessment of possible impacts on SIDS and how these could be addressed</td>
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<tr>
<td>Spring 2020 (MEPC 75)</td>
<td>Conclusion of development of candidate measures with likely short-term impact on shipping’s GHG emissions including assessment of possible impacts on SIDS and how these could be addressed</td>
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<tr>
<td>Autumn 2020 (MEPC 76)</td>
<td>Decision on measures with likely short-term impact on shipping’s GHG emissions, taking into account assessment of possible impacts on SIDS and how these could be addressed</td>
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<tr>
<td>Summer 2021 (MEPC 77)</td>
<td>Adoption of legal framework for measures with likely short-term impact on shipping’s GHG emissions</td>
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<tr>
<td>Spring 2022 (MEPC 78)</td>
<td>Conclusion of assessment of other candidate measures including possible impacts on SIDS</td>
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<tr>
<td>Autumn 2022 (MEPC 79)</td>
<td>Preparation of revised IMO GHG Strategy</td>
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Initial Strategy: A programme of follow-up actions of the initial strategy should be developed.

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**Priorities for the Pacific for ISWG GHG 4 & MEPC 73**

- Action Plan to achieve actual GHG emissions reductions prior to 2023
- Procedures for assessing measures
- How to determine impacts on SIDS
- What mechanisms could be used to address disproportionately negative impacts of measures on SIDS?

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**Key Challenges**

- Another ISWG GHG 4 that hadn’t been planned for
- 6 years of IMO work on GHG Strategy ahead
- Increasingly technical
- Followed by implementation & review of GHG Strategy (incl. flag & port state responsibilities)
- CBDR-RC and/or NMFT is a focal point of debate

Requires immediate and longer-term institutional strengthening:

- political capacity
- human capacity
- financial capacity
A deal was reached at the 72nd meeting of IMO Marine Environment Protection Committee (MEPC72) where countries agreed to at least a 50% reduction of international shipping GHG emissions by 2050, compared to 2008 levels.

It does not quite meet what the climate needed, but it’s an important first step.

The Pacific countries with other climate ambitious nations had wanted a 70 – 100% reduction by 2050 but importantly, however, the deal leaves open revisiting the target as informed by science for it to align with the Paris Agreement. It is essential that Pacific member states know what the decisions at MEPC72 mean for them and their countries.
Pacific maritime Officials, advisors and negotiators at IMO MEPC 72 meeting in London after adoption of IMO Initial Strategy.

ADDITIONAL READING

PIDF PACIFIC POSITION PAPER ON SHIPPING EMISSIONS

PACIFIC TECHNICAL OFFICERS’ WORKSHOP ON SHIPPING EMISSIONS REDUCTION REPORT

SIDE EVENT ON THE HIGH AMBITION COALITION FOR SHIPPING EMISSIONS REDUCTION REPORT