Submission to the Special Rapporteur on the human right to a healthy environment to the call for inputs on "Oceans and Human Rights"

Opportunity Green, 29 October 2024

Opportunity Green is an NGO working to unlock the opportunities from tackling climate change using law, economics, and policy. We do this by amplifying diverse voices, forging ambitious collaborations and using legal innovation to motivate decision makers and achieve climate justice with particular emphasis on the aviation and shipping industries.

Opportunity Green welcomes the opportunity to respond to this call for inputs. We remain available for assistance and any further information; please contact Isabela Keuschnigg, Legal Officer, Opportunity Green at isabela@opportunitygreen.org or Blánaid Sheeran, Policy Officer, Climate Diplomacy, Opportunity Green at blanaid@opportunitygreen.org.

Introduction

Given the harmful impacts shipping has on the climate, environment and biodiversity[1] which in turn affect a range of human rights, the sector should be at the centre stage of addressing the sustainability challenges facing our oceans.

To illustrate, global shipping carries over 80% of world merchandise trade by volume[2] and accounts for approximately 3% of global greenhouse gas (GHG) emissions.[3] The emission of black carbon (BC) by the shipping industry is also concerning as the pollutant has the second highest greenhouse effect after carbon dioxide (CO_2), and is the second largest contributor to Arctic warming.[4]

As well as substantial climate impacts, the shipping sector contributes significantly to air pollution, accounting for 10–15% of global sulphur oxide (SO_X) and nitrogen oxide (NO_X) emissions.[5] The sector is also responsible for the emission of approximately 1.8 million tonnes of particulate matter (PM) per year.[6] Air pollution from shipping and ports has significant public health impacts.[7]

Further, shipping negatively affects marine ecosystems and species, such as through the discharge of toxic scrubber washwater in the sea,[8] vessel collisions with marine species[9] and underwater radiated noise.[10]

In 2023, the Special Rapporteur on toxics and human rights, Dr. Marcos A. Orellana, examined the impact of the shipping sector on human rights and the environment.[11] The report outlined, *inter alia*, the exposure to toxics of people working in the shipping industry, air and water pollution from ships affecting people in port cities and coastal communities, and the sector's climate impacts, concluding that the shipping industry impacts a wide range of human rights.

This submission seeks to build and elaborate on Dr. Orellana's work and highlight the importance of centralising shipping in a human rights framework for the oceans. While this response primarily focuses on shipping's air pollution impact in relation to oceans and human rights, it is important to note that shipping's air polluting emissions are intertwined with broader climate and biodiversity impacts that could not be detailed within the constraints of this response.

Response to question 1

Polluter pays principle

The polluter pays principle is generally accepted as a principle of international environmental law.[12] Measures, policies and laws based on the polluters pays principle place the burden for the costs of pollution with the entity that caused it, internalising the costs of impacts to third parties resulting from the pollution.[13] Although distinct from a human rights-based approach, applications of the polluter pays principle can be an effective method for the protection, conservation, and restoration of oceans and thus complementary to the realisation of related human rights.

In the context of international shipping, the International Maritime Organization (IMO) has previously recognised the polluter pays principle as a general principle of international environmental law.[14] However, the IMO has not applied this principle in the context of air pollution from ships. Nevertheless, it is often cited in relation to the ongoing discussion of an economic measure, on the basis of a GHG pricing mechanism, which is to be adopted as part of a basket of GHG emissions reductions measures in 2025. An ambitious price on all GHG emissions from international shipping, based on the polluter pays principle, could have co-benefits for air pollution reduction. Measures taken to reduce GHG emissions often result in a reduction of co-emitted air pollutants, bringing co-benefits for air quality and human health.[15]

At the domestic level, the Norwegian NO_X Fund is an example of a measure used to mitigate air pollution from ships. It is a mechanism making polluters pay for the harm caused by pollution to the environment while generating finance for additional pollution reduction measures. The NO_X Fund was established in 2008 by 15 business organisations based on the NO_X Agreement with the Norwegian authorities. Through the NO_X Agreement, the NO_X Fund aims to reduce NO_X emissions in Norway and contribute to fulfilling Norway's air pollutant reduction commitments. The NO_X Fund has an annual income of about one billion NOK and finances concrete NO_X reduction measures.[16] However, the practical consequences of the Norwegian NOx Fund in terms of fuel incentivisation evidence the importance of holistic thinking in the design and implementation of air pollution policy. As the NOx Fund solely deals with air pollution, rather than considering broader climate and environmental synergies, it has been noted to drive investment into LNG as a shipping fuel (see response to question 4).[17]

Response to question 2

Due to the constraints of this response, the following paragraphs consider only best practices and suggested solutions at the international level, specifically in relation to the development of regulation and decision making at the IMO.

General observations

Despite the close interlinkages between shipping, the environment and humans, the 'IMO is largely unknown to the human rights community and there is little indication that the shipping industry considers human rights to be relevant to its work'.[18] While efforts have been made to reduce the environmental and human rights impacts of shipping, human rights are not sufficiently considered under conventions of international shipping. As best practice, there is therefore an urgent need to implement and enforce IMO conventions in the light of the human rights obligations of States.[19] In the 2023 report on shipping and human rights, Dr. Orellana issued a range of recommendations to States and businesses, which we respectfully draw to your attention.[20]

Access to information

Further, international cooperation should be leveraged to secure and promote access to information on climate change and human rights, to improve protection for affected communities and to ensure state and corporate accountability.[21] The Special Rapporteur on climate change, Dr. Elisa Morgera, has called on States to ensure that these obligations are upheld in the IMO, given the concerns which have been raised about limited access to information on decision-making and the underlying evidence base.[22]

Role and inclusion of Indigenous Peoples

Finally, there is a growing recognition of the importance of enhanced participation and leadership of Indigenous Peoples in decision making at United Nations fora, including the IMO.[23] The Inuit Circumpolar Council leads the initiative to advance Indigenous Knowledge and rights at the IMO and brings invaluable Indigenous perspectives to the development of global shipping policy.[24] Best practices in the development of global shipping policy must include the voice of Indigenous Peoples and align with the rights of Indigenous Peoples under the United Nations Declaration on the Rights of Indigenous Peoples and other international covenants.

Response to question 3

This is not an exhaustive list, rather a selection of examples that illustrate approaches to the issues raised in this document.

Access to remedy

At the Port of Seattle, the Port Community Action Team (PCAT) consists of members of nearby port communities which seek to remedy the current and historical impacts of port operations on humans and the environment. The Environmental Protection Agency has acted as a facilitator in discussions between the port and PCAT to identify the challenges the community faces and to identify priorities for the port. These discussions amplified the voices of local communities and catalysed mutually beneficial actions and programs.[25]

Role and inclusion of Indigenous Peoples

Maritime shipping distinctively impacts Indigenous Peoples. Ships may sail through traditional waters of Indigenous Peoples and take on and offload cargo on their lands. Increased shipping traffic and the associated GHG emissions and marine pollution can also disrupt traditional activities such as fishing and hunting, interfere with community vessel movement and transportation, and threaten pre-existing Indigenous coastal governance systems.[28]

As mentioned above, inclusion of Indigenous Knowledge and leadership in decision making related to maritime transport and the environment is key to addressing the particular impacts of shipping on Indigenous Peoples and protecting the marine environment. Examples of Indigenous Peoples leadership in marine environmental protection in Canada include the launch of self-declared Marine Protected Areas and Indigenous Protected and Conserved Areas under Indigenous law, such as Gitdisdzu Lugyeks (Kitasu Bay) Marine Protected Area and Gwaxdlala/Nalaxdlala marine refuge.[26,27]

Response to question 4

Some key challenges associated with the regulation of shipping's air polluting emissions, and therefore, the effective implementation of the human right to a healthy environment, include:

Black carbon

Regulatory gaps in the current global governance of Arctic shipping BC emissions present a notable challenge for the protection and prevention of damages to coastal areas in the Arctic region.[28]

In the Arctic, BC's climate-warming impact is fivefold compared to when it is emitted at lower latitudes.[29] It also damages the physical environment, negatively impacting the water[30] and marine ecosystems,[31] and affecting the human health of local communities.[32]

While most of the BC from ships impacting the Arctic is emitted from ships operating above 60 degrees North, BC also travels in the atmosphere to the Arctic from further south. This means BC emissions' Arctic impact is a global problem, not only attributable to ships sailing within the Arctic region.[33,34]

Indigenous Peoples depend on Arctic natural resources for spiritual, physical and other sustenance and are particularly vulnerable to BC pollution. The failure to effectively regulate BC emissions at global scale may infringe on a range of Indigenous Peoples' human rights, including their right to a clean, healthy and sustainable environment.[35]

Other air pollutants

Air polluting emissions from ocean-going ships and port activities contribute to ambient concentrations of air pollution in port cities and coastal areas around the world and are harmful to human health and the environment.

A considerable health burden can be attributed to shipping and port-sourced emissions worldwide (up to 0.5% of global mortality).[36] Although most of an ocean going vessels' total emissions take place at sea, air polluting emissions from the sector are also released directly into harbour cities and coastal communities, exposing those communities to PM and gaseous pollutants that have negative effects on human health.[37] Industrial port regions are the most critical for health and pollution.[38]

Auxiliary engines and boilers usually run throughout a vessel's stay at port, and are responsible for most emissions at berth with substantial implications for portside communities.[39] Recent years have seen increased congestion at ports globally, with an abnormally high number of container vessels at anchor.[40] The resulting increase in emissions from auxiliary engine usage at berth has negatively impacted air quality in ports and for the surrounding communities, for example in California's port communities.[41]

In addition to human health effects, air pollution from shipping also causes broader damage with direct and indirect human rights implications. For example, SO_X emissions contribute to the occurrence of acid rain, which damages buildings and infrastructure as well as landscapes.[42] Similarly, atmospheric deposition of NO_X emissions contributes to the eutrophication and acidification of land and ocean ecosystems, which in turn can lead to the disruption of aquatic and terrestrial ecosystems.[43]

With respect to the emission of SO_X, NO_X and PM, there is some regulation in place, for example, Emission Control Areas (ECAs) in various geographic areas, which can result in positive human health benefits. However, their scope is neither global in terms of geography, nor consistent in terms of emissions covered (SOx and/or NOx and/or PM).

A global review of marine policies targeting air pollutants indicates that the number of global, national regional and port level policies is limited and that current policies are mostly focused on relative improvements not overall emissions caps. Given that current policies are unlikely to sufficiently achieve pollution reduction goals, domestic legislation should be adopted to counterbalance the lack of supranational ambition on air pollution.[44]

Justice and equity

Shipping pollution has highly inequitable impacts. Pollution's most harmful impacts on human health are typically borne by those who face pre-existing social and economic disadvantages, including children, people with pre-existing health conditions, elderly persons, persons with disabilities and those living in poorer socio-economic conditions.[45] Research in the United States further shows that port pollution has disproportionate health effects on Black population.[46]

Populations around the world that are closest to ports and high traffic shipping routes are burdened with the highest air pollution concentrations and thus the most significant health burdens. However, as most research on health impacts of global shipping is concentrated in the European geographic region and on European populations,[47] the majority of the world's population is inadequately represented in current analysis.

The risk of unintended consequences of regulation

Previous experience with the regulation of air pollution from shipping suggests that there are risks of unintended consequences. To remedy and avoid these unintended consequences, it is key that decision making adopts a holistic approach in tackling shipping's environmental footprint; encompassing climate, environment and biodiversity.

As an example of the unintended consequences of air pollution regulation, the use of exhaust gas cleaning systems (also known as 'scrubbers') as an alternative compliance mechanism for SOx limits effectively converts air pollution into water pollution.[48]

The use of liquefied natural gas (LNG) as a marine fuel is also counterproductive. While offering benefits with respect to air pollution, the fossil fuel is mainly composed of methane, a GHG over 80 times more powerful than CO_2 over a 20 year period.[49] When including the upstream GHG emissions of LNG including international transport, average LNG GHG emissions are 20% higher than conventional heavy fuel oil.[50]

The practical consequences of the Norwegian NOx Fund (see response to question 1) in terms of fuel incentivisation evidence the importance of holistic thinking in the design and implementation of air pollution policy. As the NOx Fund solely deals with air pollution, rather than considering broader climate and environmental synergies, it has been noted to drive investment into LNG as a shipping fuel.[51]

Response to question 5

The respondents do not have additional information to provide in response to this question, however, they note that the responses to the above questions are likely of relevance.

Appendix A - References

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