International Community Law Review

Oceans, IUU Fishing, and Climate Change: Implications for International Law

--Manuscript Draft--

Manuscript Number:	ICLR-1103
Full Title:	Oceans, IUU Fishing, and Climate Change: Implications for International Law
Short Title:	
Article Type:	Full Length Article
Corresponding Author:	Christina Voigt University of Oslo NORWAY
Corresponding Author's Institution:	University of Oslo
First Author:	Christina Voigt
Order of Authors:	Christina Voigt
Abstract:	Illegal, unregulated and unreported (IUU) fishing poses a significant threat to marine fisheries and biodiversity only outpaced by the projected impacts of climate change and greenhouse gas emissions. Ocean warming might affect fish stocks, their health and migratory routes. Ocean acidification and de-oxygenation are another two phenomena that might affect certain marine species as well as entire marine ecosystems. Rebuilding or overexploited and depleted fisheries and managing fisheries sustainably will require comprehensive governance structures for port, flag, coastal and markets states, which also address the causes and impacts of climate change. Addressing both concerns could open for opportunities for comprehensive and synergetic regulation. This article addresses potential synergies between oceans and climate governance; focusing on the role of oceans in addressing climate change and its adverse impacts. Suggestions to this end include (i) increasing ocean-based renewable energy, (ii) decarbonizing ocean-based transport, and (iii) pursuing integrated management of fisheries and aquaculture.
Keywords:	Climate change, due diligence, Nationally Determined Contributions, "blue carbon", protection of marine environment
Funding Information:	

Oceans, IUU Fishing, and Climate Change: Implications for International Law

Christina Voigt*
University of Oslo

Abstract: Illegal, unregulated and unreported (IUU) fishing poses a significant threat to marine fisheries and biodiversity only outpaced by the projected impacts of climate change and greenhouse gas emissions. Ocean warming might affect fish stocks, their health and migratory routes. Ocean acidification and de-oxygenation are another two phenomena that might affect certain marine species as well as entire marine ecosystems. Rebuilding or overexploited and depleted fisheries and managing fisheries sustainably will require comprehensive governance structures for port, flag, coastal and markets states, which also address the causes and impacts of climate change. Addressing both concerns could open for opportunities for comprehensive and synergetic regulation. This article addresses potential synergies between oceans and climate governance; focusing on the role of oceans in addressing climate change and its adverse impacts. Suggestions to this end include (i) increasing ocean-based renewable energy, (ii) decarbonizing ocean-based transport, and (iii) pursuing integrated management of fisheries and aquaculture.

Keywords: Climate change, due diligence, Nationally Determined Contributions, “blue carbon”, protection of marine environment

1. Introduction

Illegal, unregulated and unreported (IUU) fishing poses a significant threat to marine fisheries and biodiversity.¹ Yet the projected impacts of climate change on the oceans (and the crucial role of oceans in the global climate system) might outpace the stress put on marine life by IUU fishing. Increases in anthropogenic greenhouse gas (GHG) emissions and the consequential increase in GHG concentrations in the atmosphere have significant direct and indirect impacts on oceans and marine life. Ocean warming might affect fish stocks, their health and migratory routes. Ocean acidification linked to increased uptake of CO₂, as well as de-oxygenation due to increasing ocean stratification and less ventilation between surface and deeper waters, are another two phenomena that might affect certain marine species as well as entire marine ecosystems. Global biomass of marine animals as well as the maximum catch potential of fisheries are projected to decline. Rebuilding or overexploited and depleted fisheries and managing fisheries sustainably will require comprehensive governance structures for port, flag, coastal and markets states, which also address the causes and impacts of climate change. Addressing both concerns could open for opportunities for comprehensive and synergetic regulation. The current focus on the role of oceans in addressing climate change and its adverse impacts could open a “window of opportunity” for making headway on effectively addressing the challenge of IUU fishing.

2. Scientific background

* Professor, Department of Public and International Law

¹ Sjarief Widjaja, Tony Long, Hassan Wirajuda, et al., “Illegal, Unreported and Unregulated Fishing and Associated Drivers”, World Resources Institute (2019) <www.oceanpanel.org/iuu-fishing-and-associated-drivers>.

2.1. The role of oceans in the global climate system

Oceans are crucially important for regulating the global climate, weather, redistributing heat, supporting unique habitats and ecosystems and services provided to people, such as food, water supply, renewable energy, tourism, trade, and transport. Oceans also serve as the most important and biggest sink of anthropogenic CO₂, which is the biggest driver of climate change. They have over millennia been absorbing and storing CO₂ from the atmosphere, including about 30 per cent of emitted anthropogenic CO₂.²

Ocean water absorbs large quantities of energy (i.e., heat). Ocean waters have absorbed more than 90 per cent of the excess heat in the climate system accumulated between 1971 and 2010, with only 1 per cent stored in the atmosphere. Yet, even with oceanic heat absorption, scientists have already witnessed about 1 degree C of atmospheric warming.³ Oceans also redistribute (transport) heat from tropics as part of thermohaline circulations (the “global conveyor belt”).

2.2. Impacts of climate change on oceans

The impacts of climate change on the oceans can already be observed. Oceans properties are changing due to climate change, especially temperature, pH, oxygen content, salinity, carbon, ice sheet and albedo. The IPCC in its 2019 special report on oceans notes with virtual certainty that oceans are warming and that rate of warming has doubled since 1993.⁴ Oceans have been absorbing about 30 per cent of anthropogenic CO₂ since 1980, which in turn is causing increasing surface acidification (decrease in pH). Moreover, de-oxygenation is occurring due to increasing ocean stratification, i.e. reduced vertical exchanges of heat, salinity, oxygen, carbon and nutrients. The conveyor belt of the Atlantic Meridional Overturning Circulation (AMOC) has started to weaken.⁵

Global sea level is rising due to climate change due to increasing ice loss from the Greenland and Antarctic Ice Sheets, as well as glacier loss and ocean thermal expansion. From 2007 to 2016 the mass loss from Antarctic Ice sheet tripled compared to the previous decade, the loss from Greenland Ice Shield doubled, and it is accelerating. Ice loss from Antarctica has the potential to lead to sea-level rise of several meters within a few centuries. The Intergovernmental Panel on Climate Change (IPCC) warns that these changes may be the onset of irreversible ice sheet instability.

Ocean warming contributes to an overall decrease in maximum catch potential, compounding the impacts from illegal and overfishing. This phenomenon also impacts biodiversity and ecosystem functioning, including impacts on catches, economic benefits, livelihoods, local and indigenous culture.⁶

2.3. Projections

The observed impacts, however, are outpaced by projected impacts of climate change under business-as-usual scenarios. Projected glacier and ice sheet mass reductions are projected to

² IPCC, “Summary for Policymakers”, in H.-O Poertner et al. (eds.), *IPCC Special report on the Ocean and Cryosphere in a Changing Climate* (2019).

³ IPCC, “Summary for Policymakers”, in V. Masson-Delmotte et al. (eds.), *Global Warming of 1.5°C: An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* (2018) pp. 3-24. See also Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services IPBES, *Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* (2019)

⁴ IPCC 2019 (supra note 2).

⁵ Ibid., A 2.7.

⁶ Ibid.

continue at increasing rates during the second half of the 21st century. Over 21st century, the ocean is projected to transition to *unprecedented* changes with increasing temperatures, greater upper stratification, further acidification, oxygen decline and altered net primary production. The global biomass of marine animals across the food web and the maximum potential of fisheries are projected to decrease.⁷ Moreover, the impacts of climate change on the oceans are projects to change the geographical range of marine species. The range of Arctic species is projected to contract, while some sub-Arctic fish communities might expand, further increasing pressure on high-Arctic species. The projected redistribution of fish resources increases the risk of conflict among fisheries, authorities or communities, with regional hotspots such as the Arctic and tropical Pacific Ocean.⁸

2.4. *IPCC recommendations*

The IPCC offers a number of strong suggestions for responses to the current and projected scenarios. Primary among them are strong GHG emission reductions in the coming decades and ambitious adaptation of low-lying areas.

A central aspect, re-iterated in all the latest IPCC, as well as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) report on biodiversity, is that such rapid and unprecedented reductions in emission need transformative governance changes.⁹ The temporal scales of climate change impacts exceed time horizons of most governance arrangements, which in most cases lack the ability to prepare for and respond to long-term changes. Governance arrangements such as marine protected areas, spatial plans, and coastal management systems are largely ineffective, as they are too fragmented across administrative boundaries and sectors to provide integrated responses to the cascading risks from climate change.

However, both reports stress that this can only be achieved through the fundamental system-wide reorganization across economic, social and technological factors, including paradigms, goals and values. The IPCC specifies that these systems transitions are unprecedented in terms of scale, but not necessarily in terms of speed.

Both reports call on strengthening the global response and enhancing international cooperation. Climate change and global biodiversity loss as collective action problems can only be effectively addressed through a system of international cooperation, management and implementation support. In other words, there is a crucial role for international law, not only in creating a global level playing field that avoids free riding, but in creating the legal structure for a coordinated response commensurate with these global challenges.

3. **Implications for International Law**

With respect to ocean governance, what is needed is a profound economic and institutional transformative change to enable Climate Resilient Development Pathways in the oceans. The IPCC calls for intensifying cooperation and coordination among governing authorities across scales, jurisdictions, sectors, policy domains and planning horizons in order to enable

⁷ Under one scenario, the decrease in maximum catch potential of fisheries is projected to decrease by 20.5-24.1 per cent by the end of the 21st century relative to 1986-2005. Other scenarios project the decrease to be three to four times larger. *Ibid.*, p. 25.

⁸ *Ibid.*, p. 31.

⁹ IPCC 2018 (supra note 3) and Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), *Report of the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on the work of its seventh session* (Report, IPBES/7/10/Add.1, 29 May 2019).

effective responses to changes in the ocean¹⁰. Regional cooperation, including through treaties and conventions, can support effective action. Institutional arrangements that provide strong multiscale linkages would be beneficial in this situation. The coordination between national and transboundary regional policies and measures can address risks to resource security and management, such as for fisheries. Such arrangements should include a strengthening of precautionary approaches, such as rebuilding of overexploited or depleted fisheries and the responsiveness of existing fisheries management strategies to reducing negative climate impacts on fisheries.

Such a call for governance transformation provides a welcome possibility and window of opportunity for incorporating, expanding and strengthening the international framework for IUU fishing.

3.1 *Climate change and the Law of the Sea*

Climate change impacts will affect marine life and biodiversity, fisheries, shipping routes, and maritime zone. It is therefore opportune to assess to what extent climate change has been addressed within the legal framework of the law of the sea.

The UN General Assembly has successively reiterated its serious concern over the current and projected adverse effects of climate change on the marine environment and marine biodiversity, including coral reefs as well as the vulnerability of the environment and the fragile ecosystems of the Polar Regions, emphasizing the urgency of addressing this issue.¹¹

However, the UN Convention on the Law of the Sea (UNCLOS) was negotiated during a period where concerns of climate change were not known. Consequently, despite the importance the Convention gave in Part XII to protection and preservation of the marine environment, understandably it does not refer to the adverse impacts of climate change on the ocean and the marine environment.

This situation does not mean that UNCLOS is not of relevance with respect to climate change. Under Article 192, states have the obligation to protect and preserve the marine environment. This applies to all areas of the oceans. This is a direct obligation, which arguably also includes the duty to protect against climate change impacts.

The Permanent Court of Arbitration in the South China Sea Arbitration stated clearly that the obligation to “protect” the marine environment under UNCLOS includes also the protection from any future damage, while “preserve” means to maintain or improve the existing condition of the marine environment. The Tribunal stated that these two elements included the obligation to take active measures and to prevent the degradation of the existing marine environment.¹²

Such an approach would, at the very least, be applicable to the increased uptake of anthropogenic CO₂ leading to ocean acidification. Pollution, as widely defined in Article 1(1)(4) of UNCLOS, is “the introduction by man, directly or indirectly, of substances or energy into the marine environment, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health”. Anthropogenic CO₂ fits the definition in UNCLOS and therefore would come within its scope of application.

¹⁰ IPCC 2019 (supra note 2) p. 41.

¹¹ UNGA, A/RES/64/71, 'Oceans and the law of the sea', Sixty-fourth session, Agenda item 76(a), 12 March 2010; UNGA, A/RES/66/231, 'Oceans and the law of the sea', Sixty-sixth session, Agenda item 76(a), 5 April 2020; UNGA, A/RES/71/257, 'Oceans and the law of the sea', Seventy-first session, Agenda item 73(a), 20 February 2017.

¹² *South China Sea Arbitration (Philippines v. China)*, Award, PCA Case No. 2013-19, 12 July 2016.

Further, Article 194 sets out the duty to adopt necessary measures to prevent, reduce and control pollution from any source, including transboundary pollution. This is a duty upon all states to adopt measures to prevent transboundary pollution from sources or activities under their jurisdiction or control. Article 194(5) includes the duty to protect rare or fragile ecosystems, habitat or depleted, threatened or endangered species and other forms of marine life.

In sum, the argument is that anthropogenic CO₂ is a transboundary source of pollution and that Articles 192 and 194 include the duty to protect the marine environment against climate change impacts. The standard of conduct under Article 194 was elaborated by the International Tribunal for the Law of the Sea, which recognized that the use of the language “to ensure” creates an obligation of due diligence.¹³ Such standard means that states need to adopt the appropriate rules and measures, exercise vigilance in their enforcement, and monitor the activities of private and public operators. It is an obligation to “take all appropriate measures to enforce its relevant regulations on a public or private operator under its jurisdiction”¹⁴ and to “deploy adequate means, to exercise best possible efforts, to do the utmost, to obtain [the required result]”.¹⁵

It remains, however, somewhat uncertain how far such duty obliges. For example, do states have a due diligence obligation under Article 194 to regulate and control activities such as carbon dioxide emitting installations that use oil or coal, oil extraction industries, coal-mining if such activities are carried out under their jurisdiction or control? Moreover, it is unclear exactly which obligations are contained in Articles 207 and 212 with respect to climate impacts.

In sum, UNCLOS contains no reference to the adverse impacts of climate change on the ocean and the marine environment and it is a matter of interpretation and implementation of the Convention to clarify the scope of existing duties. While a further normative clarification (or development) could be obtained through jurisprudence, it also remains a possibility to work on an implementing agreement, which could focus in particular on climate change relevant aspects of the Convention.

Finally, the recent developments of a new implementing agreement under UNCLOS to protect and conserve biological diversity beyond national jurisdiction (BBNJ) does (yet) foresee a particular role of area based management and environmental impact assessment in addressing climate change. The current draft negotiation text sets out as one of the guiding principles an approach that builds ecosystem resilience to the adverse effects of climate change and ocean acidification and restores ecosystem integrity.¹⁶ In this context, area-based management tools, such as marine protected areas should be established, inter alia, in order to rehabilitate and restore biodiversity and ecosystems (including with a view to enhancing their productivity and health and building resilience to stressors, such as those related to climate change, ocean acidification and marine pollution).¹⁷ Climate impacts might also be considered part of “cumulative impacts” on the same ecosystem and could fall under the scope of environmental impact assessments. Still, it remains to be seen to what extent

¹³ *Request for Advisory Opinion submitted by the Sub-Regional Fisheries Commission, Advisory Opinion*, 2 April 2015, *ITLOS Reports 2015*, p. 4.

¹⁴ *Ibid.*, para 131.

¹⁵ *Responsibilities and obligations of States with respect to activities in the Area, Advisory Opinion*, 1 February 2011, *ITLOS Reports 2011*, p. 10 paras 110–112.

¹⁶ “Revised draft text of an agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction”, 27 November 2019, art. 5(h)

<https://www.un.org/bbnj/sites/www.un.org.bbnj/files/revised_draft_text_a.conf_.232.2020.11_advance_unedited_version.pdf>.

¹⁷ *Ibid.*, art. 14(e).

Parties will be willing to integrate adequate responses to climate change and its impacts in the agreement.

3.2 *International climate change law and the oceans*

By contrast, the Framework Convention on Climate Change was negotiated when information on the impacts of climate change on the oceans was not as well understood and studied. However, we are facing the dilemma that on the one hand, UNCLOS provides a comprehensive framework that is intended to cover all matters related to the ocean, but does not expressly refer to climate change. On the other hand, we have an international regime – consisting of the UNFCCC, the Kyoto Protocol, and the Paris Agreement – which is intended to cover matters related to climate change but which is very terrestrial and atmospheric in its scope, with very limited application to the ocean.

The Paris Agreement recognizes in its preamble the importance of the conservation and enhancement, as appropriate, of sinks and reservoirs of the greenhouse gases referred to in the Convention, and notes the importance of ensuring the integrity of all ecosystems, *including oceans*, and the protection of biodiversity. Its main goal is set out in Article 2, according to which the increase in the global average temperature should be limited to well below 2°C above pre-industrial levels, while pursuing efforts to limit the increase to 1.5°C.¹⁸ Oceans play a significant part in the global climate system, as described above. However, the measures which Parties will take under the agreement and which will be accounted for, remain within the territorial jurisdiction of Parties. It is therefore unclear, how oceans – especially the High Seas – fit into the scope of measures under the Paris Agreement. Can, for example, ocean warming or deoxygenation or the acidification balance be assessed within the atmospheric temperature framework of the Agreement? Or is there a need for another benchmark for ocean temperatures or pH-levels?

The Paris Agreement further encourages in Article 5.1 Parties to take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases as referred to in Article 4, paragraph 1(d), of the Convention, including forests. Article 4, para 1(d) of the UNFCCC refers to the conservation and enhancement of sinks and reservoirs, including oceans, coastal and marine ecosystems. Accordingly, there is a recognition of the important role of oceans as carbon sinks and reservoirs, but the challenge is how to link the extra-jurisdictional scope of oceans to the nationally determined contributions by parties and to the atmospheric levels of GHG as recognized in the context of the Convention and the Paris Agreement.

3.3 *The oceans as a solution to climate change: Some suggestions*

Several suggestions have been made for how the oceans can contribute to the solution of the climate challenge. Several options have been recently put forth by civil society,¹⁹ which together could save the world 4Gt CO₂ emissions per year from 2030, and more than 11Gt in 2050.

3.3.1 *Ocean-based renewable energy*

While recognizing that most emission reductions must happen from deep decarbonization of terrestrial-based activities, ocean-based activities can and should be included in the NDCs of parties to the Paris Agreement. While some parties already have included some marine activities and policies, more could follow suit when updating or submitting a new NDC in

¹⁸ Paris Agreement (2016) art. 2.

¹⁹ Ove Hoegh-Guldberg et al., “The Ocean as a solution to climate change: Five Opportunities for Action”, World Resources Institute (2019) <http://oceanpanel.org/sites/default/files/2019-10/HLP_Report_Ocean_Solution_Climate_Change_final.pdf>.

2020.²⁰ Examples could include fixed and floating offshore wind and solar installations and ocean thermal energy conversion installations. This would help addressing the significant gap between the aggregate effect of parties' mitigation efforts and emissions pathway needed to holding temperature increases to well below 2°C above pre-industrial levels and pursuing efforts to limit temperature increases to 1.5 °C. Moreover, parties to the Paris Agreement are expected to reflect their highest possible ambition in their NDC²¹ – a due diligence requirement, which means taking all appropriate measures, including ocean-based activities.

3.3.2 *Decarbonizing Ocean-based transport*

Decarbonization of ocean transport is another way by which ocean-related aspects might contribute to solutions. Ocean transport currently stands for 3 per cent of global GHG emissions, with a rising trend.²² Increase energy efficiency, maximization of overall operational efficiency of new and existing ships, and the promotion or prescription of low and zero carbon fuels could mitigate this contribution. International work through the IMO and regional organizations might be necessary, which should also increase possibilities for enforcement of norms.

3.3.3 *Coastal and marine ecosystem protection*

Coastal and ecosystem protection is necessary to protect and enhance the sink and reservoir capacities of oceans. This could include enhancing protection measures for mangroves, kelp forests, seaweed beds under the CBD, and inclusion of such “marine-based natural solutions” in Parties NDCs.

Moreover, providing incentive for “blue carbon” similar to “green carbon” under REDD+ could be a necessary tool to engage more states in ocean based natural protection for climate purposes. This might require enhancing carbon accounting for mangroves and other oceans sinks within national GHG Inventories, and the improvement of monitoring technologies and capacities for “blue carbon” (under the UNFCCC and Paris Agreement).

National and global mapping of blue carbon ecosystems (especially seaweed) and development of legal mechanisms for long-term preservation of blue carbon are significant steps necessary to include the conservation and enhancement of ocean sinks and reservoirs in the scope of nature-based solutions in NDCs.

3.3.4 *Management of fisheries and aquaculture*

Another, important aspect, which the report points out, is the elimination of harmful subsidies²³ and the strengthening of tools to eliminate IUU fishing.²⁴

This aspect brings us back to the beginning of this article. The climate challenge is significant and the role of oceans as the real “lungs of the Earth” crucial in maintaining a carbon balance. This understanding, while being backed-up by science, is only slowly moving its way into political decisions and adequate legal responses. One principal way in which ocean-based foods can contribute significantly to climate change mitigation is the reduction of the carbon footprint of ocean-derived food production,

²⁰ UNFCCC, Decision 1/CMA.2, “Chile Madrid Time for Action”, FCCC/PA/CMA/2019/6/Add.1, 16 March 2020, para 7.

²¹ Paris Agreement art. 4 para 3; see also Decision 1/CMA.2 *ibid.*, paras 6, 7. See also Christina Voigt and Felipe Ferreira, “‘Dynamic Differentiation’: The Principles of CBDR-RC, Progression and Highest Possible Ambition in the Paris Agreement”, 5(2) *Transnational Environmental Law*, pp. 285-303.

²² Widjaja et al. (supra note 1) p. 38.

²³ UNGA, A/RES/70/1, “Transforming our world: the 2030 Agenda for Sustainable Development”, Seventieth session, Agenda items 15 and 16, 25 September 2015, Goal 14.6.

²⁴ *Ibid.*, Goal 14.5.

1 especially fisheries. For example, changing fuel sources in vessels and technological
2 advances in production techniques can alter the emissions associated with seafood from both
3 fisheries and ocean-based aquaculture. However, reducing emissions by improving fish
4 catch efficiency as well as increasing fishery yields will require significant governance
5 changes, including the design of appropriate international and regional legal frameworks. In
6 this context, the exiting tools within the international framework to address IUU fishing
7 should be strengthened and streamlined into a global framework.²⁵
8
9

10 **4. Conclusions**

11
12
13 Oceans are under threat from climate change, and the question is whether international law
14 can provide the necessary collective framework to address this pressing concern of the
15 international community. So far, there is no clear legal regime under international law
16 addressing climate change and the oceans, including fisheries management. The UN climate
17 change regime is very limited in its capacity to address oceans issues because it is terrestrial
18 and atmospheric in its focus. The UN regime for the Law of the Sea already has certain
19 components and established obligations for its Parties, including for land-based source
20 activities which cause ocean pollution.
21

22
23 One aspect of this question is if and to what these two regimes can be coordinated
24 and integrated to fully address the critical issue of ocean and climate change. Another aspect
25 concerns which legal developments in international law (i.e., law-making, jurisprudence) are
26 necessary and feasible to adequately reflect the important role of oceans in the global
27 governance framework, in order to address climate change and its impacts. The current
28 BBNJ negotiations could provide a part of this framework by setting out criteria for the
29 identification of areas for area-based management, which take into account the carbon
30 density and climate relevance of certain marine ecosystems, such as kelp forests and
31 seaweed beds.
32

33
34 An alternative avenue is the consideration of a new implementing agreement under
35 UNCLOS, which provides for a clarification and specification of states' duties with respect
36 to climate change and its impact on oceans. This duty also needs to address the question of
37 how to more effectively and sustainably manage fisheries with a view to reducing their
38 impacts on the oceans and the climate system. In the absence of such development, or in
39 addition to it, it is possible to seek an advisory opinion from, for example, ITLOS on the
40 obligation of states with respect to climate change impacts on the oceans.
41

42
43 In any case, the current situation calls for a diligent revisiting of the current
44 governance framework, and – in turn – a possibility for extending the global debate on IUU
45 fishing and for comprehensively addressing IUU fishing with global, regional and national
46 legal frameworks, including for their implementation and enforcement.
47
48
49
50

51 ²⁵ Currently, this framework consists of both binding agreements and voluntary instruments which facilitate the
52 management of fisheries at the global, regional and national level. Within this framework, a number of
53 provisions and requirements specifically address IUU fishing, with provisions and guidance relating to port
54 state measures, flag state performance, coastal state responsibilities, market state measures, or a combination of
55 all or some of these. (e.g. UNCLOS, FAO Compliance Agreement, UN Fish Stocks Agreement, Code of
56 Conduct for Responsible Fisheries, IPOA-IUU, Agreement on Port State Measures (PSMA), Voluntary
57 Guidelines for Flag State Performance, Voluntary Guidelines for Catch Documentation Schemes, and the
58 Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels). For an overview, see
59 Food and Agriculture Organization of the UN (FAO), "International Framework" <[http://www.fao.org/iuu-](http://www.fao.org/iuu-fishing/international-framework/en/)
60 [fishing/international-framework/en/](http://www.fao.org/iuu-fishing/international-framework/en/)>.
61
62
63
64
65