



Global Ocean
Commission

From Decline to Recovery **A Rescue Package for the Global Ocean**

Report Summary

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This is a summary of the complete report, available at www.globaloceancommission.org

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Global Ocean
Commission



Letter from the Co-chairs

24 June 2014

Dear Friends

It is no exaggeration that all life on Earth, including our own survival, depends on a healthy, vibrant ocean. Containing an almost unfathomable diversity of life, billions of us rely on it for food, clean air, a stable climate, rain and fresh water, transport and energy, recreation and livelihoods.

Our ocean is in decline. Habitat destruction, biodiversity loss, overfishing, pollution, climate change and ocean acidification are pushing the ocean system to the point of collapse. Governance is woefully inadequate, and on the high seas, anarchy rules the waves. Technological advance, combined with a lack of regulation, is widening the gap between rich and poor as those countries that can, exploit dwindling resources while those that can't experience the consequences of those actions. Regional stability, food security, climate resilience, and our children's future are all under threat.

Yet we are also inspired by the opportunity that exists for the high seas to play a regenerative role in restoring whole ocean health, and by the potential of a small number of bold proposals to stimulate a cycle of recovery. We believe that ocean degradation can be reversed and the current cycle of decline can be transformed into a cycle of recovery.

The independent Global Ocean Commission was launched in February 2013. It had one particular ambition: to bring the debate about the future of the high seas and the value of this immense area of our planet out from the margins of political debate and much closer to the mainstream. The Commission comprised a mix of public and private sector figures including former Heads of State, government ministers and business people, whose experience spans foreign affairs, finance, defence, education, development and the environment. Though not all were ocean experts, all were united in their commitment to helping reverse ocean degradation and address the failures of high seas governance. Over the last 18 months, supported by respected scientific and economic expertise, the commissioners have undertaken a journey of discovery about both the value and the abuse of the global ocean.

Conceived by The Pew Charitable Trusts, and supported in partnership by Pew, Adessium Foundation, Oceans 5 and the Swire Group Charitable Trust, as a fresh, dynamic and energising force to put forward bold, pragmatic, cost-effective, and politically feasible proposals, the Commission is independent of all while being hosted by Somerville College at the University of Oxford. McKinsey Global Center for Sustainability provided facts and analytic support.

At the heart of the Commission's endeavour through its four meetings since February 2013, in Cape Town, New York, Oxford, and Hong Kong, has been rigorous consideration of the latest science and analysis from ocean experts, combined with broad stakeholder engagement. Members of the public were also invited to participate via a worldwide survey comprising over 13,000 online questionnaires, revealing strong support for more effective governance of the global ocean.

What we found was cause for alarm. The ocean is under threat, and humanity's approach to it is uncontrolled. Benign neglect by the majority, and active abuse by the minority, have fuelled a cycle of decline. No single body shoulders responsibility for ocean health, and an absence of accountability is characterised by blind exploitation of resources and a wilful lack of care. We call this the cycle of decline.

Through consideration of the latest scientific and political analysis, we have identified proposals for action. These both sound a warning and indicate what needs to be done. While some are not new, all are pragmatic and possible, and should incentivise public and private sectors alike to take responsibility. We must now begin to turn the tide.

The task of saving the global ocean is one that no government or company or individual can achieve alone. Stopping the abusive and unsustainable exploitation of natural resources and freedoms, and restoring ocean health, requires a coalition for change with a clear mission. We are convinced that if the package of eight proposals that we now put forward is expeditiously acted upon, it is possible, within the next decade, to reverse the degradation of the global ocean.

The proposals here sound a warning, but they also offer a politically feasible way forward. As leaders and global citizens, as mothers and fathers, and as humble champions for the global ocean, we appeal to each and every one of you to join us. The riches of the global ocean are our common inheritance. The time to act is now, for ourselves and for future generations.

Mission Ocean is the name we have given our call for action. Join Mission Ocean and work with us to prove to the world that positive change is possible and that we can leave the legacy of a healthy, vibrant ocean system to future generations.

With deepest gratitude to our fellow commissioners and our secretariat, we commend these proposals to you.

José María Figueres

Trevor Manuel

David Miliband

The Global Ocean From Decline to Recovery



The first image taken by humans of the whole Earth. Photographed by the crew of Apollo 8 and showing the Earth at a distance of about 30,000 km. South is at the top. © NASA

The global ocean covers nearly three-quarters of the surface area of our planet. Comprising 1.3 billion km³ of water, it is the world's single largest ecosystem and plays a central role in supporting all life on Earth. It is also the provider of a wide range of services and resources that directly support human health, societies and economies.

The vastness of the ocean came sharply into focus nearly 50 years ago, when the Apollo missions produced the first images of our overwhelmingly blue planet from space. More recently, a number of United Nations reports and peer-reviewed scientific studies have underlined the interconnectedness between the planetary climate and ocean systems, and the central role that the ocean is playing in protecting us from the impacts of climate change. Yet, despite this heightened awareness, the ocean remains chronically undervalued, poorly managed and inadequately governed.

This is particularly true of the high seas, the 64% of the total surface area of the ocean that is beyond the jurisdiction of any State. The high seas also provides a critical life-support function for areas within the national jurisdiction of coastal States (exclusive economic zones or EEZs) and what happens on the high seas can and does have a significant impact on the ecological health and productivity of EEZs.

When the United Nations Convention on the Law of the Sea (UNCLOS) – the ‘constitution for the ocean’ – was negotiated, the high seas was protected by its inaccessibility. Today, there is virtually nowhere that industrial fishing vessels cannot reach, offshore oil and gas drilling is extending further and deeper every year, and deep sea mineral extraction is fast becoming a reality. The concept of the ‘freedom of the high seas’ guaranteed in the Convention once conjured up images of adventure and opportunity, but it is now driving a relentless ‘tragedy of the commons’, characterised by the depletion of fish stocks and other precious marine resources. The freedom is being exploited by those with the money and ability to do so, with little sense of responsibility or social justice.

People have lived near the ocean for millennia and maritime communities have always recognised the importance of the ocean and made it the centre of their economies and cultures. While it was living ocean resources that first drew people to the sea – and ocean fisheries and aquaculture today provide food for billions of people as well as livelihoods for millions – today we are increasingly aware of the less visible yet even more vital role the ocean plays in regulating the life-giving systems of our planet. It is the great biological pump at the heart of global atmospheric and thermal regulation and the driver of the water and nutrient cycles.

High seas ecosystems are estimated to be responsible for nearly half of the biological productivity of the entire ocean. The global ocean produces almost half of all the oxygen we breathe and absorbs more than a quarter of the carbon dioxide we emit into the atmosphere. More than 90% of the heat trapped in the Earth system by greenhouse gas emissions is stored in the ocean, providing a buffer against the full impacts of climate change on land; but this is having alarming consequences on ocean life and is perhaps the largest unseen environmental disaster of our time.

The ocean is, in essence, the kidney of our planet, keeping its systems healthy and productive. But the ability of the ocean to continue to provide these essential ecosystem services is being compromised as rising temperatures reduce its oxygen-carrying capacity. The increasing uptake of carbon dioxide is causing ocean acidification, and unprecedented changes in chemical and physical conditions are already impacting the distribution and abundance of marine organisms and ecosystems. The very life of the global ocean, from the smallest phytoplankton to the largest of the great whales, is being impacted.

The international community has expended a tremendous amount of political capital and diplomatic effort on establishing policy commitments aimed at reversing ocean degradation. Unfortunately, there remains a huge gap between the commitments expressed in various policy documents and the willingness or ability of States to implement them. For example, the Heads of State and Government at the 2002 World Summit on Sustainable Development (WSSD) said that they would establish a representative network of marine protected areas (MPAs) by 2012, but by the time of the 2012 Rio+20 Summit it was evident that little progress had been made towards meeting this target, especially beyond coastal areas. Today, MPAs cover less than 1% of the high seas.

The conclusion we have come to is that the current governance system for the management of human activities impacting the high seas is no longer fit for purpose and cannot ensure long-term sustainability or equity in resource allocation, nor create the conditions for maximising economic benefits from the high seas. UNCLOS has proven itself particularly slow in responding to new challenges, not least when it comes to improving the management of growing threats and risks to biodiversity, ecosystems and fishery resources in the high seas, a need that has been widely recognised since at least 2002.

By understanding the drivers of decline individually and together, we have come to understand that what is needed is an integrated rescue package which can deliver ocean restoration when undertaken as a whole. We have considered equity, development and sustainability, and economic as well as intrinsic values. We have thought about the roles of consumers, intermediaries and markets, politicians, direct users and indirect beneficiaries.

The Global Ocean

From decline to recovery

The central message we wish to highlight is that the global ocean is a key and constituent part of the life-support system of our planet, providing immense, and in some cases incalculable, value and benefits for humanity. We must accept it as our collective shared obligation and responsibility to ensure that we leave to future generations a planet that is productive and plentiful. The negative consequences of what is taking place beneath the waves must be brought to the forefront of international decision-making on sustainability, governance and development.

Moving Towards a Cycle of Ocean Recovery

The compelling evidence of ocean decline, in the high seas and as a result of high seas resource extraction, has fired our conscience and concern. The Commission was determined to identify solutions that will directly and effectively put us on track to shifting from a vicious cycle of decline to a virtuous cycle of high seas recovery. Our drive to turn things round – our imagination and our commitment – has been fired by good and sometimes inspiring examples of sustainable and even rejuvenating practice. We are confident about and encouraged by the availability of viable solutions stemming from the huge advances in marine science and understanding; the growing awareness and engagement of global citizens in ocean issues; and the new focus on the ocean within the global climate change and UN post-2015 global development debates. We believe that the opportunity and time to address the threats facing the global ocean is now.

In the following pages we set out our proposals for reversing the cycle of decline. The eight proposals provide a carefully targeted rescue package for the high seas. The proposals form a coherent whole. They specifically address the weaknesses in governance, the lack of equity and sustainability regarding the use of high seas resources, and the new and emerging pressures that need to be pre-empted before undue harm is caused. In each case, we have seen what works and have been inspired by it.

There are clear economic incentives for both the public and private sectors to take their responsibilities in the high seas more seriously. Without stronger governance and regulation, uncertainty will continue to pervade ocean-related industries and reduce profits. Without globally agreed standards and guidelines in the emerging sectors such as offshore oil and gas and deep sea mineral extraction, the risks and liabilities will be hard to assess and control. Most of all, without urgent global action to prevent climate change, and efforts to build resilience against its impacts, the cost to the global economy will rise exponentially. We can continue to lay cables and ship containers across a dead ocean, but without paying attention to sustaining the life within it, we put our own lives and those of every living thing in peril.

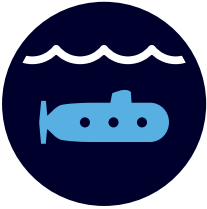
We all have a clear responsibility to act, as the current stewards of this planet. We have an obligation to leave future generations a healthy and productive ocean, able to continue to give life and value to all humanity. Implementing the Commission's package of proposals will allow us to meet this obligation head on and turn the tide towards a positive, productive ocean future.

Five Drivers of Ocean Decline

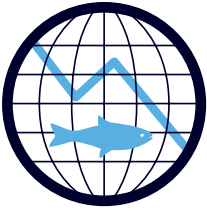
1
Rising Demand
for Resources



2
Technological
Advances



3
Decline of Fish
Stocks



4
Climate Change,
Biodiversity and
Habitat Loss

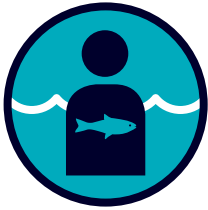


5
Weak High Seas
Governance



Eight Proposals to Advance High Seas Recovery

1
UN Sustainable Development
Goal for the Ocean – Putting
a healthy living ocean at the
heart of development



2
Governing the High
Seas – Promoting
care and recovery



3
No More Overfishing –
Ending harmful high
seas subsidies



4
Illegal, Unreported and
Unregulated Fishing – Closing
seas, ports and markets



5
Plastics – Keeping them
out of the ocean



6
Offshore Oil and Gas –
Establishing binding
international safety
standards and liability



7
Global Ocean Accountability
Board – Monitoring progress
toward a healthy ocean



8
Creating a High Seas
Regeneration Zone



The Global Ocean From decline to recovery

Drivers of decline

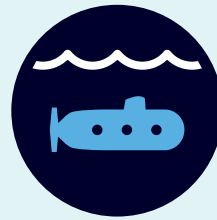
Rising Demand for Resources

- Minerals and energy
- Genetic materials
- Living marine resources



Technological Advances

- Deep sea access and exploitation
- Vessels (distance and depth)
- Increased (over)extraction
- Destructive fishing and other activities



Decline of Fish Stocks (both an effect and driver)

- Overfishing
- Overcapacity
- Subsidies



Climate Change, Biodiversity and Habitat Loss

- Climate change
- Acidification
- Pollution



Weak High Seas Governance

- Patchwork/sectoral/incomplete governance
- Weak compliance and lack of enforcement
- New and emerging uses



Degraded, unproductive
and exploited ocean



Sustainable
ocean

Drivers of recovery



Creating a High Seas Regeneration Zone

- Free from industrial fishing
- If insufficient action is taken and ocean decline continues within 5 years, according to what the Global Ocean Accountability Board reports
- With the exception of areas where RFMO action is effective
- Could be revoked if Commission's proposals for action are implemented
- Fish stocks replenished and equitably and sustainably shared, for present and future generations



Global Ocean Accountability Board – Monitoring progress toward a healthy ocean

- Independent
- To benchmark progress made towards achieving the Commission's proposals for action
- Sharing of this information with the global public



Offshore Oil and Gas – Establishing binding international safety standards and liability

- Binding safety and environmental standards
- Universal liability provisions
- Response-preparedness and capacity building



Plastics – Keeping them out of the ocean

- Coordination between governments, private sector and civil society:
 - land-based pollution sources
 - sea-based (i.e. fish aggregation devices) pollution sources



Illegal, Unreported and Unregulated Fishing – Closing seas, ports and markets

- IMO mandatory numbers to all high seas fishing vessels
- Banning at-sea transshipment
- Ratification and implementation of international fisheries treaties
- Remove flags, deny port entry, cut market access of catch from illegal vessels
- Collaboration between Port States, RFMOs and industry: a global information-sharing platform
- Retailers to commit to sustainable seafood sourcing and traceability
- Civil society organisations as independent performance watchdogs



No More Overfishing – Ending harmful high seas subsidies

- Full transparency of fisheries subsidies
- Distinguishing fisheries subsidies that are most harmful
- Immediately capping and phasing-out, within 5 years, high seas fuel subsidies



Governing the High Seas – Promoting care and recovery

- UNCLOS implementing agreement on high seas marine biological diversity
- Universal ratification and prompt implementation of existing agreements
- Regular independent assessment of RFMOs to improve their performance
- UN Special Representative for the Ocean
- Regional Ocean Management Organisations
- National ocean envoys or ministers



UN Sustainable Development Goal for the Ocean – Putting a healthy living ocean at the heart of development

- Detailed targets
- Specific indicators
- Ocean in the UN post-2015 development agenda



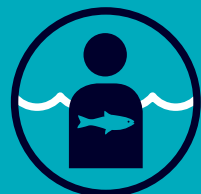
Proposals for Action

1

Proposal 1 A United Nations Sustainable Development Goal for the Ocean – Putting a healthy living ocean at the heart of development

To accelerate progress towards reversing ocean degradation and drive the global system for ocean governance, the Commission calls upon UN Member States and all relevant stakeholders to agree a stand-alone Sustainable Development Goal (SDG) for the global ocean, thus putting the global ocean front and centre in the post-2015 UN development agenda.

Given the importance of the global ocean to issues of environmental sustainability, social justice, equity and governance, the Commission strongly supports and wishes to add its voice to the proposals made at the UN Open Working Group on SDGs, which are aimed at a stand-alone Ocean SDG.



Why is this important?

UN Member States have agreed to develop a set of SDGs that will build upon the Millennium Development Goals (MDGs) and converge with the post-2015 development agenda.

We believe that a stand-alone SDG on ocean sustainability would provide the kind of focused and accountable attention that the ocean needs. It would help to put the ocean front and centre in the post-2015 development agenda and provide a framework to orient development of new measures to tackle existing governance gaps in relation to the high seas. An Ocean SDG alone is not enough to guarantee a secure future for the global ocean but it would do more than send a number of important messages, garner valuable recognition, and build momentum and resources: it would trigger the kind of action necessary for a recognition that the global ocean is an Earth system that needs to be addressed and managed as a single entity.

We must address the fragmented approach that is currently driving ocean decline. A concerted effort is required which should be framed in a specific Ocean SDG, underpinned by key reforms in global ocean governance and implemented by every government, by civil society and by the private sector so that the words on paper become action in the water.

What needs to be done?

We believe that 2014 presents a unique opportunity to leverage the SDG process to advance the global ocean governance agenda. Currently, a 30-member Open Working Group of the UN General Assembly, co-chaired by Hungary and Kenya, is preparing a proposal to be presented to the General Assembly by September 2014. A large number of countries support a stand-alone Ocean SDG, with proposals aimed at: healthy, productive and resilient oceans; conservation of biological diversity; reduction of marine pollution; protection of marine and coastal ecosystems; and elimination of illegal, unreported and unregulated (IUU) fishing and overfishing. To help progress towards a stand-alone Ocean SDG, the Commission, working with like-minded stakeholders, has developed a proposal for consideration, including specific metrics and potential targets that are consistent with its proposals in this report.



Sustainable fisheries management could increase food security and employment. © Michelle Taylor / University of Oxford

1

Proposal 1
A United Nations Sustainable Development Goal for the Ocean – Putting a healthy living ocean at the heart of development

High seas elements for a possible Ocean Sustainable Development Goal

Target 1
Ensure that all fish stocks are being fished sustainably

- Percentage of tonnage of fish landed within OSY.
- Percentage of commercial fish stocks operating under science-based management plans.
- Number of data-deficient stocks being fished.
- Fleet size and capacity of flag States.
- Percentage of total subsidies reduced for distant water/high seas fishing fleets.
- Number of flag States freezing, capping or reducing fleet size.

Target 2
Protect vulnerable marine areas

- Percentage of high seas in protected areas.
- International Seabed Authority requires environmental impact assessments (EIAs) prior to leasing for exploitation.
- Number of Regional Fisheries Management Organisations (RFMOs) effectively implementing the ecosystem approach and the precautionary principle.
- Percentage of bottom fisheries operating pursuant to EIAs.
- Number of national and regional agreements regulating and setting standards to prevent pollution.
- Number of countries having ratified the Minamata Convention on mercury.

Target 3
Reduce biodiversity loss

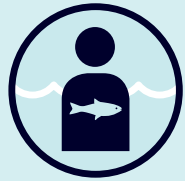
- Proportion of marine species assessed as threatened on the IUCN Red List.
- Proportion of threatened marine species effectively protected at the national, regional or international levels.

Target 4
Eliminate illegal, unreported and unregulated fishing

- Number of flag States and RFMOs requiring International Maritime Organisation (IMO) numbers and transponders for all fishing vessels fishing in the high seas.
- Number of RFMOs having established satellite monitoring programmes.
- Number of ratifications of the UN Food and Agriculture Organization (FAO) Port States Measures Agreement (PSMA) and number of port States with supporting domestic implementing legislation.
- Percentage of high seas covered by RFMOs.
- Percentage of high seas and straddling stocks under management by RFMOs.

Target 5
Reduce by 50% quantities of plastic debris entering the marine environment

- Number of countries with taxes and restrictions, including bans, on certain plastics uses.
- Number of local, national and other programmes to eliminate single-use plastics and increase circular use.
- Increase in the number of and improvements to ports' waste disposal facilities.



Why is this important?

An Ocean SDG would firmly position the ocean as a priority in the post-2015 development agenda, and help to provide resources at the international, regional, national and local levels to generate measurable action and initiatives.

A stand-alone SDG for the ocean should incorporate a set of clear targets and indicators

- Sustainable fishing
- Protection of vulnerable areas
- Reduce marine biodiversity loss
- Combat IUU fishing
- Eliminate plastics pollution



What needs to be done?

UN General Assembly to adopt a stand-alone Sustainable Development Goal (SDG) with detailed and specific targets and indicators to position the ocean as a key element of the post-2015 development agenda.

2

Proposal 2 Governing the High Seas – Promoting care and recovery

The Commission calls for:

- Strengthening UNCLOS through a new implementing agreement on the conservation and sustainable use of marine biological diversity beyond national jurisdiction in order to make it fit for purpose.
- Universal ratification of UNCLOS and the UN Fish Stocks Agreement (UNFSA) of 1995, and the establishment of an annual meeting of States Parties to UNFSA to provide a platform for greater accountability.
- Regular independent assessment of RFMOs to improve their performance.
- Prompt entry into force and implementation of the FAO Port State Measures Agreement (PSMA) of 2009.
- The appointment by the Secretary-General of the United Nations of a Special Representative for the Ocean, with a clear mission and sufficient resources to significantly improve ocean governance.
- Creating Regional Ocean Management Organisations (ROMOs) to promote ecosystem-based management of the ocean.
- The appointment of ocean envoys or ministers by Heads of State or Government.



Why is this important?

Current ocean governance arrangements do not ensure sufficient protection for high seas biological diversity, nor do they foster the sustainable and equitable use of marine living resources. Effective rules and agreed mechanisms to ensure the sustainable use and conservation of high seas biodiversity are missing. There is also inadequate implementation of already agreed instruments and commitments and coordination across sectors to ensure efficient, effective and comprehensive governance.

What needs to be done?

Strong domestic and international political leadership and engagement is needed to drive governance reforms that will enable the global community to break out of this vicious cycle. We believe that our carefully designed package of interconnected, tangible measures would serve to strengthen the global system of high seas governance and advance the more sustainable, ecosystem-based management of high seas resources. These are elaborated below.



Nation flags outside the United Nations building. © Joao Araujo Pinto/UN Photo



Secretary-General Ban Ki-moon with Trevor Manuel (Co-chair, GOC), May 2013. © Eskinder Debebe/UN Photo

2

Proposal 2

Governing the High Seas – Promoting care and recovery

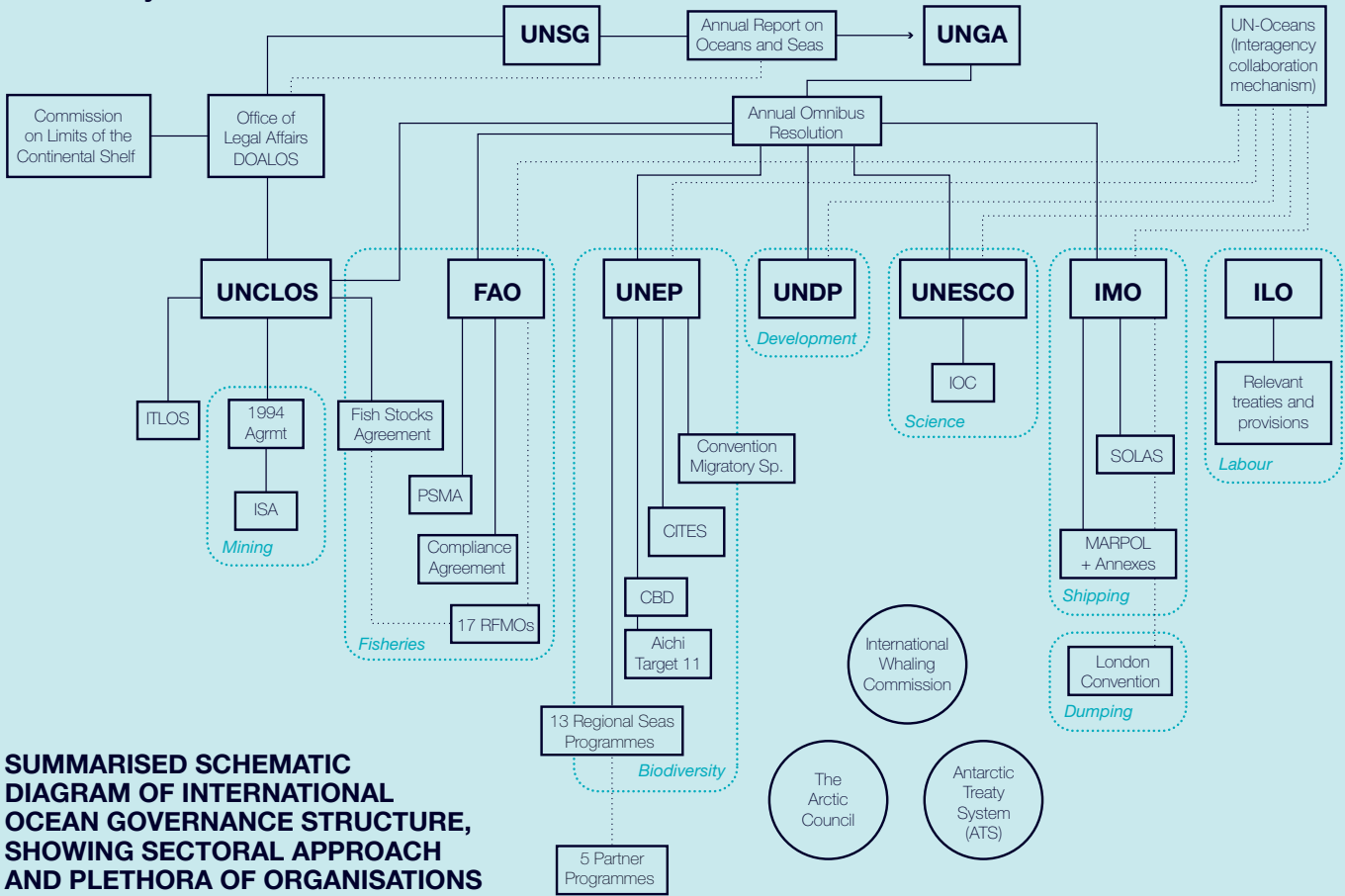
1 Strengthening UNCLOS through a new implementing agreement on the conservation and sustainable use of marine biological diversity beyond national jurisdiction

The Commission strongly endorses the need for a new UNCLOS implementing agreement to implement and update the environmental protection and conservation provisions of UNCLOS in the high seas. In our view, a third implementing agreement is an essential pre-requisite to bring UNCLOS up to date if we are to successfully address new threats and intensifying uses that are undermining the health, productivity and resilience of the ocean and marine biodiversity beyond national jurisdiction. The Commission is encouraged by the commitment to dialogue at the UN BBNJ Working Group with respect to the scope, parameters and feasibility of a new implementing agreement; but now that dialogue needs to be turned into action. We will continue to lend our support to the large majority of States and civil society that wish to see a decision taken at the 69th Session of the UN General Assembly to commence negotiations on an agreement without further delay.

2 Universal ratification of UNCLOS and the UNFSA), and the establishment of an annual meeting of States Parties to the UNFSA

The primacy of UNCLOS and its two implementing agreements as the basic legal framework for ocean governance is well established. We urge those remaining States that are not yet party to UNCLOS, particularly the United States, to join the overwhelming majority of States in ratifying this important constitutional treaty.

Almost 20 years after its adoption, the UNFSA has attracted only 81 ratifications. While this number includes most of the high seas fishing nations (China, Chile and Mexico being notable exceptions), the relatively low number of ratifications is particularly striking when compared to UNCLOS. We urge all States to ratify the UNFSA and implement its provisions.



CBD: Convention on Biological Diversity; CITES: The Convention on International Trade in Endangered Species of Wild Fauna and Flora; DOALOS: Division for Ocean Affairs and the Law of the Sea; FAO: Food and Agriculture Organization [of the United Nations]; ILO: International Labour Organization; IMO: International Maritime Organization; IOC: Intergovernmental Oceanographic Commission; ISA: International Seabed Authority; ITLOS: International Tribunal for the Law of the Sea; MARPOL: International Convention for the Prevention of Pollution from Ships; PSMA: Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing; RFMOs: Regional Fisheries Management Organisations; SOLAS: International Convention for the Safety of Life at Sea; UNDP: United Nations Development Programme; UNEP: United Nations Environment Programme; UNESCO: United Nations Educational, Scientific and Cultural Organization; UNGA: United Nations General Assembly; UNSG: United Nations Secretary-General



The Commission also considers that convening an annual meeting of States Parties to the Agreement would help promote universal participation in the UNFSA. A key function of such a meeting is to provide a forum for the review and independent evaluation of the performance of RFMOs against a standard set of metrics. RFMOs are a critical component of the global governance architecture and it is simply unacceptable that they are largely unaccountable to the wider international community. In our opinion, a regular performance review is the best way to identify areas of improvement and to motivate RFMOs to modify their behaviour and comply with the key articles contained in the UNFSA.

3 Prompt entry into force and implementation of the FAO Port State Measures Agreement of 2009

The ongoing problem of IUU fishing on the high seas concerned the Commission greatly during the course of its work. One of the most significant developments to have taken place in the fight against IUU fishing was the adoption by the FAO in November 2009 of a legally binding Agreement on Port State Measures to Prevent, Deter and Eliminate IUU Fishing (PSMA). The Commission considers it vital that, as part of the suite of governance reforms required to reverse the degradation of the global ocean, this important Agreement is brought into force and implemented as soon as possible. We are encouraged that 11 Parties, including the US and the EU, have ratified the PSMA, but it requires ratification by 25 States before it can enter into force. We urge States to sign up without delay. We also strongly support efforts already underway both to implement the PSMA – particularly those by RFMOs – and to provide support to developing countries to enable them to participate effectively in the Agreement.

4 Appointment of a Special Representative for the Ocean

The Commission considers that a lack of top-level leadership on ocean affairs is one of the principal reasons for the failure of different efforts to improve coordination and coherence of policy between the various agencies and bodies that have, within the UN system, a mandate related to the ocean.

We propose the immediate appointment of a senior official as a Special Representative of the Secretary-General for the Ocean, with overall responsibility for the coordination of all matters relating to oceans and the law of the sea within the UN system, and with sufficient support staff to do so. This is more than just a symbolic appointment. The Commission believes that this post would help to provide the global ocean with the political profile and visibility it deserves as well as helping to provide the leadership needed to implement our other proposals.

5 Creation of Regional Ocean Management Organisations to promote ecosystem-based management of the high seas

One of the key issues for the Commission was how best to strengthen the regional bodies that will inevitably be essential to effective implementation of any new implementing agreement. Even with a comprehensive agreement in place, conservation and sustainable use will require effective regional implementation. Precautionary ecosystem-based management is best delivered at a regional scale in order to strike a prudent and pragmatic balance between global-scale commitments and the scale of individual ecosystems or bioregions. In the long term, therefore, the Commission recommends a move from RFMOs to Regional Ocean Management Organisations (ROMOs), where more integrated management can take place. ROMOs would break out of the sectoral approach by establishing best-practice ecosystem-based and precautionary management measures that would consider the impacts of all possible types of human impacts on the water column. They would align the objectives of UNCLOS and its implementing agreements (once the third has been agreed) into a coherent whole, with specific requirements for accountability, transparency and decision-making to include clear sanctions for rule breakers and free riders.

6 Appointment of ocean envoys or ministers by Heads of State or Government

The sectoral approach that characterises international governance arrangements also pervades national arrangements in many countries. Few States have developed, let alone implemented, national ocean policies. The Commission has observed that inter-departmental coordination on global ocean issues is often weak or lacking, with different ministries responsible for fisheries, biodiversity, seabed mining, ocean science or other relevant issues. For this reason, the Commission proposes the appointment by Heads of State or Government of ocean envoys or ministers (as may be appropriate) to create stronger inter-ministerial linkages within governments.

3

Proposal 3 No More Overfishing – Ending harmful high seas subsidies

It is imperative to address the main drivers of fishing vessel overcapacity, in particular, the issue of capacity-enhancing subsidies. The Commission asks WTO member States to urgently adopt a three-step approach to dealing with this problem and so remove the negative financial incentives that maintain a global fishing fleet which has too many boats chasing an ever diminishing supply of fish.

Step 1: Full transparency (disclosure) of fisheries subsidies.

Step 2: Classification of fisheries subsidies in order to identify and distinguish those that are harmful.

Step 3: Immediately capping and then phasing-out high seas fishing fuel subsidies within five years.



Why is this important?

The main drivers leading to overfishing on the high seas are vessel overcapacity and mismanagement. Fisheries subsidies have been the subject of discussions within the World Trade Organisation (WTO) for a very long time. The WTO Doha Declaration of 2001 committed WTO member States to:

“[...] aim to clarify and improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries.” (Abstract from Paragraph 28 of the WTO Doha Declaration)

On the high seas, it is largely only States that can afford to subsidise their fleets with public funds which have the opportunity to fish: high seas fishing is carried out by 10 nations that rely heavily on subsidies to remain profitable. Fuel subsidies are the biggest component at 15–30%.¹ Developed countries grant 70% of fishing subsidies, with Japan, China, the EU and the US the highest spenders.² The combined engine power of the global fleet has grown ten-fold since the 1950s. Although stock declines have led to smaller catches in recent years, this capacity continues to rise; boats need twice as much energy to catch a tonne of fish today as they did 60 years ago.³ Overall, too many vessels, using too much engine power, are competing for increasingly exploited stocks, creating a ‘race to the bottom’ and increasing the imperative to fish illegally.

These types of subsidies also disadvantage small-scale artisanal fishers and consumers. Industrial fishing gets the biggest share of the subsidies; the products of these subsidised high seas industrial fisheries constitute unfair competition, distorting the seafood market by artificially lowering the price of the fish caught in the high seas. Finally, consumers end up paying twice for every fish they eat: once at the market and again through their taxes.

Enshrined in the Johannesburg Plan of Implementation of 2002 and the Rio+20 Declaration of 2012, the need to eliminate subsidies that contribute to IUU fishing and to overcapacity has long been recognised:

“We reaffirm our Johannesburg Plan of Implementation commitment to eliminate subsidies that contribute to illegal, unreported, and unregulated fishing and overcapacity taking into account the importance of this sector to developing countries, and we reiterate our commitment to conclude multilateral disciplines on fisheries subsidies which give effect to the WTO Doha Development Agenda and the Hong Kong Ministerial mandates to strengthen disciplines on subsidies in the fisheries sector, including through the prohibition of certain forms of fisheries subsidies that contribute to overcapacity and over-fishing, recognising that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the WTO fisheries subsidies negotiation, taking into account the importance of the sector to development priorities, poverty reduction, and livelihood and food security concerns. We encourage States to further improve the transparency and reporting of existing fisheries subsidies programmes through the WTO. Given the state of fisheries resources and without prejudicing the WTO Doha and Hong Kong Ministerial mandates on fisheries subsidies nor the need to conclude these negotiations, we encourage States to eliminate subsidies that contribute to overcapacity and over-fishing, and to refrain from introducing new such subsidies or from extending or enhancing existing such subsidies.” (Paragraph 173 of the Rio+20 Declaration ‘The Future we Want’, June 2012)

What needs to be done?

Despite repeated commitments and ongoing efforts to address environmentally harmful subsidies in the fisheries sector through the WTO, there is clearly a lack of political appetite to tackle this issue.

While the prospect of a WTO agreement was and remains attractive given the legally binding nature of the WTO dispute settlement procedure, the WTO lacks comprehensive environmental expertise for the implementation and administration of such an agreement. The Commission is thus calling upon WTO member States to demonstrate their political commitment to tackling harmful subsidies adversely affecting the high seas by expediting their commitments to eliminating them through a three-step approach.

1. Sumaila U.R. *et al.* (2010). A bottom-up re-estimation of global fisheries subsidies. *Journal of Bioeconomics*. 12:201–225. Available at: <http://www.seaaroundus.org/researcher/dpauly/PDF/2010/JournalArticles/BottomUpRe-estimationOfGlobalFisheriesSubsidies.pdf>

2. Directorate-General for Internal Policies, European Parliament (2013). Global Fisheries Subsidies. Available at: [http://www.europarl.europa.eu/RegData/etudes/note/join/2013/513978/IPOL-PECH_NT\(2013\)513978_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/note/join/2013/513978/IPOL-PECH_NT(2013)513978_EN.pdf)

3. Watson, R.A., *et al.* (2012). Global marine yield halved as fishing intensity redoubles. *Fish and Fisheries* 14(4). Available at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-2979.2012.00483.x/abstract>

3

Proposal 3

No More Overfishing – Ending harmful high seas subsidies



Step 1: Transparency

WTO member States are under an obligation to report on specific subsidies. However, they do not all report on the details of their fisheries subsidies.

The Commission believes that this paradox should be urgently resolved. The enforcement of the existing WTO obligation should be expedited without delay. To do so, WTO members should disclose to the organisation, and to each other, the type and scope of subsidies that they provide to the fisheries sector, without prejudice to the outcome of further negotiations on fisheries subsidies within the WTO.

Step 2: Classification (scope of WTO fisheries subsidies prohibition)

Classifying fisheries subsidies in order to identify and distinguish those that are harmful is an essential step in the phase-out of negative incentives. The following categories of prohibition have been considered within the WTO:

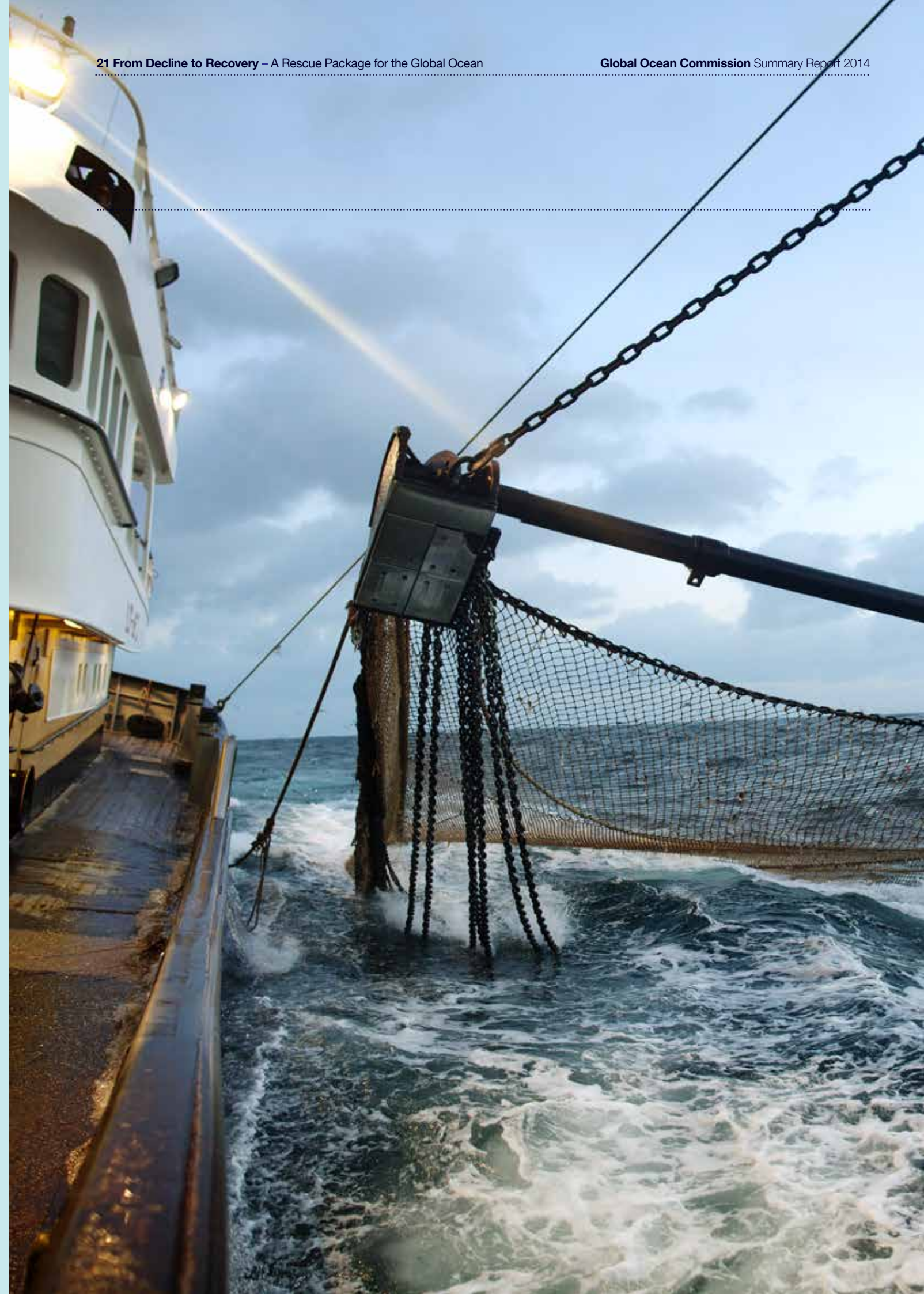
- Subsidies for vessel construction, repair and modification.
- Subsidies for operating costs of vessels and in- or near-port processing.
- Fuel subsidies.
- Subsidies for certain infrastructures, e.g. fish landing and storage facilities.
- Subsidies for fishers' income support.
- Price supports for products from marine wild-capture fishing.
- Subsidies that support destructive fishing practices e.g. trawling, driftnets, fish aggregation devices (FADs), etc.
- Subsidies for fisheries that are overfished.
- As well as:
 - subsidies for transfer of vessels i.e. subsidies for the transfer of fishing or service vessels to third countries, through for example joint ventures with third countries;
 - subsidies for vessels conducting IUU fishing; and
 - subsidies for foreign access rights under fisheries access agreements.

Exemptions:

- Exception for 'small-scale artisanal fishers' or the establishment of a *de minimis* threshold of subsidies to help poor communities.
- Exception in the event of 'natural disaster relief,' to be defined.

Step 3: Capping, reducing and prohibiting fuel subsidies

The Commission also calls upon WTO member States to reach a speedy agreement on the elimination of fuel subsidies for high seas fisheries, starting immediately with a cap and followed by a phase-out within five years.

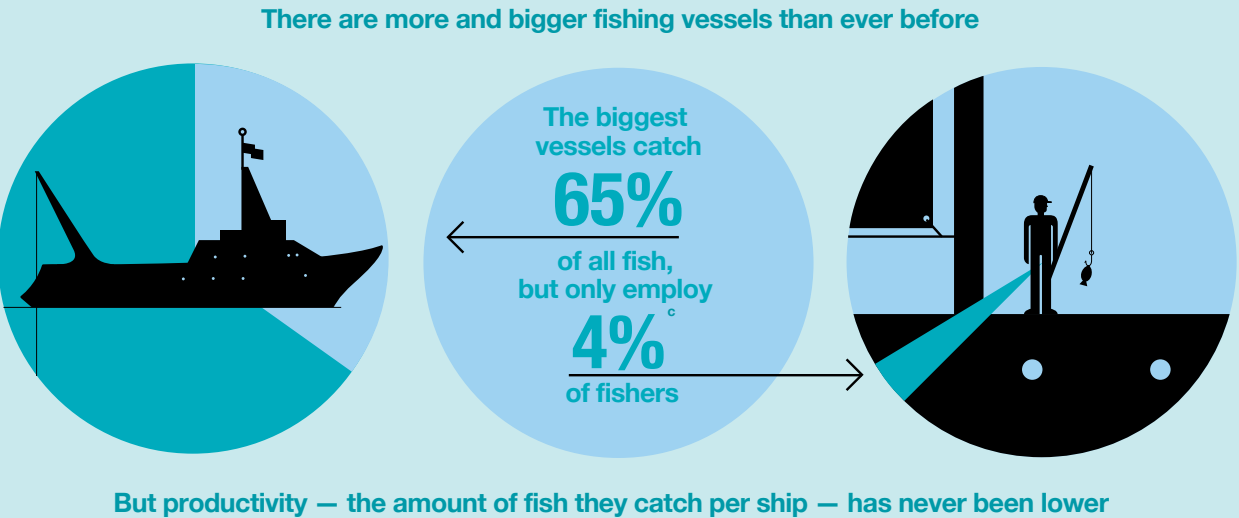


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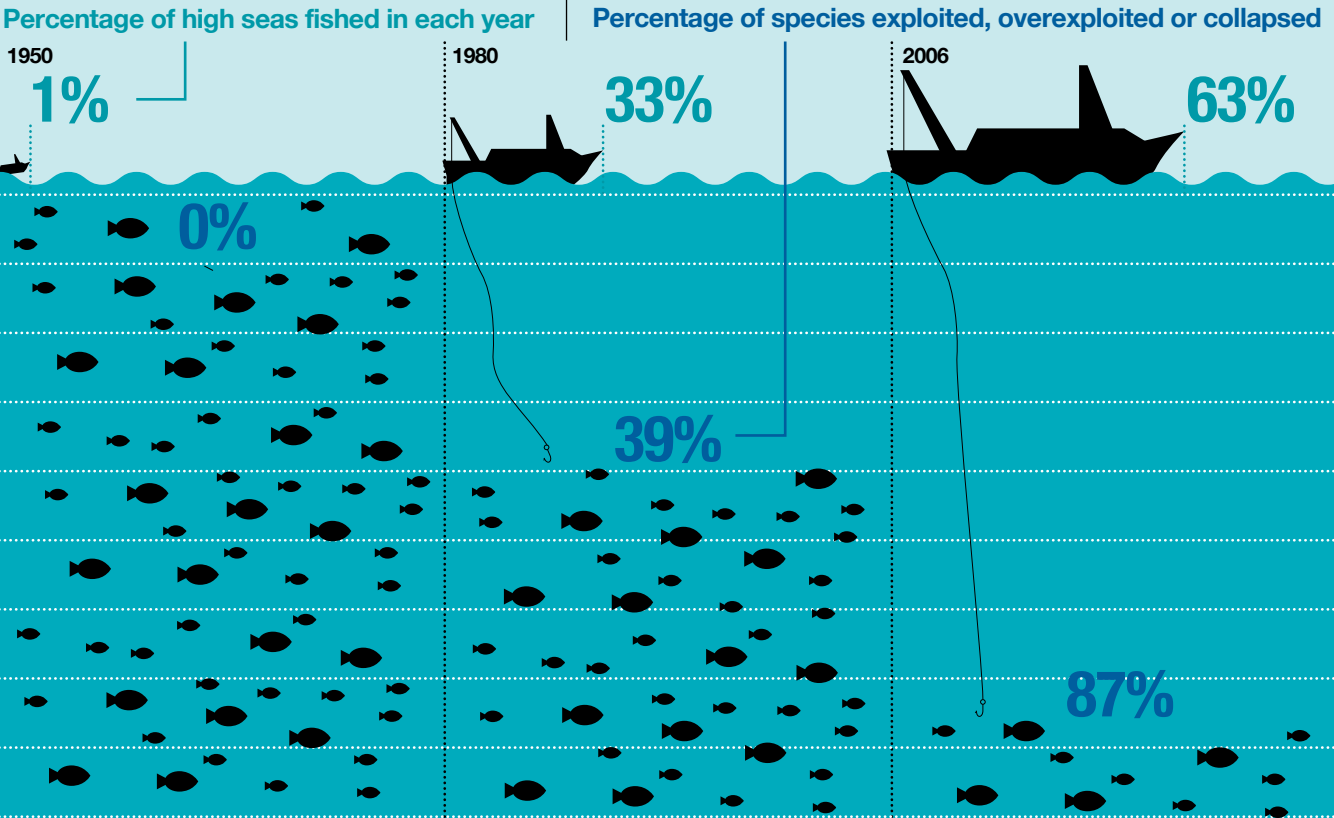
Proposal 3
No More Overfishing –
Ending harmful high
seas subsidies

Why is this important?

Overcapacity can be described as 'too many boats trying to catch too few fish'. The world's fleet is currently 2.5 times larger than is necessary to sustainably catch global fish stocks. This leads to the dangerous depletion of fish stocks. It deprives many of the world's poorest people of a crucial food source.



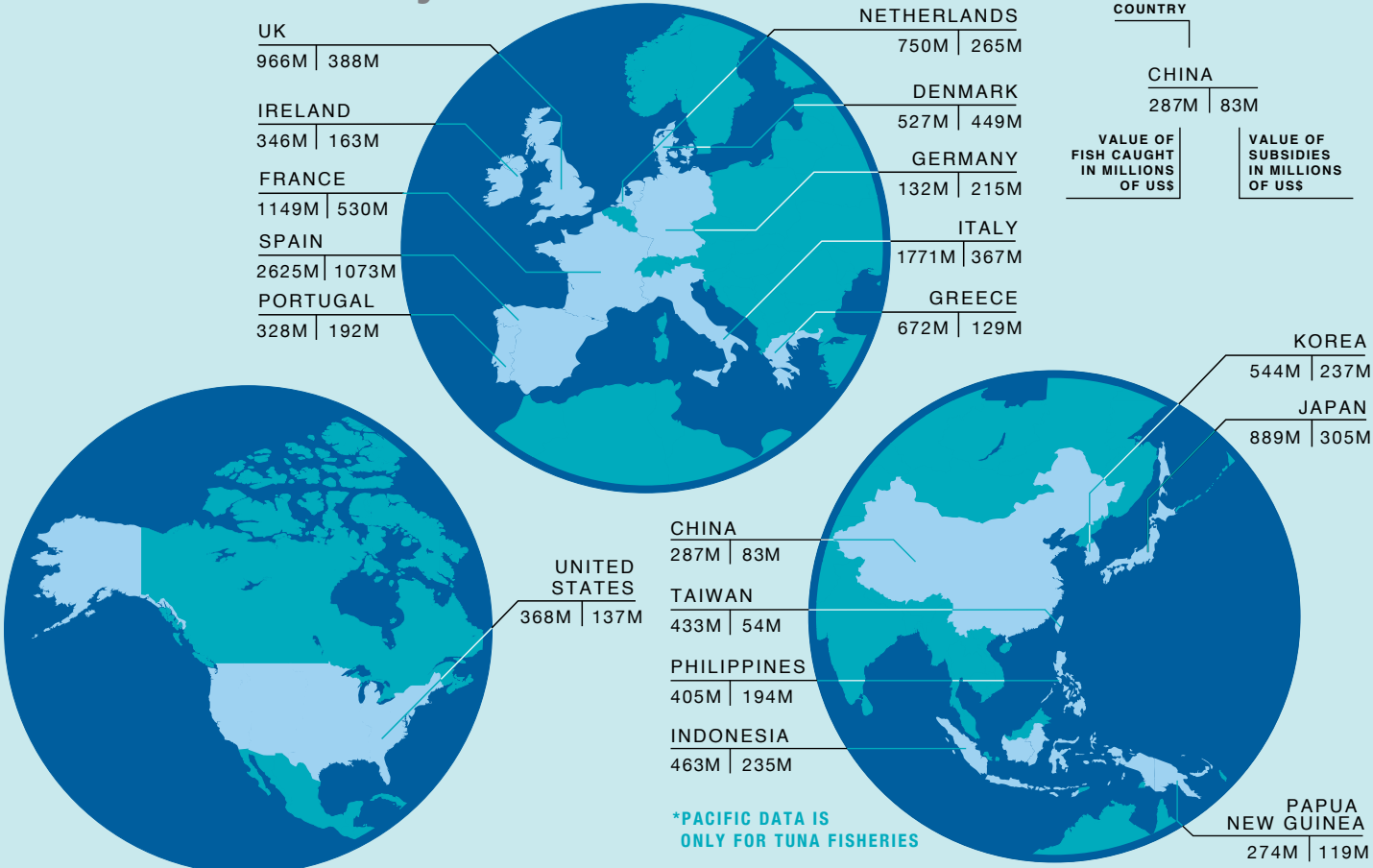
There are fewer fish in the sea than ever before



^c Calculations based on Pauly, D. 2006. Major trends in small-scale marine fisheries, with emphasis on developing countries, and some implications for the social sciences. Maritime Studies (MAST), 4 (2)

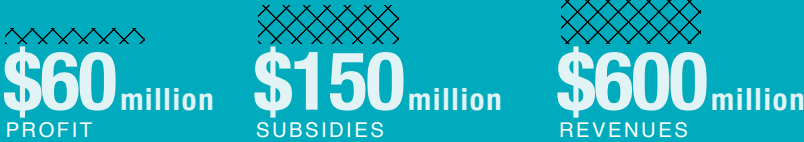


Where the subsidies come from and how much fish they catch^{a, b}



**THIS GRAPHIC IS INDICATIVE OF THE SUBSIDIES PROBLEM. FIGURES FOR EU COUNTRIES ARE TOTAL FISHERIES SUBSIDIES, WHEREAS FIGURES FOR OTHER COUNTRIES ONLY RELATE TO TUNA FISHERIES FLEET SUBSIDIES. THIS IS DUE TO LACK OF AVAILABLE DATA.

High seas bottom trawl fleets in 2000 (US\$):



Without subsidies, the high seas fleets wouldn't make a profit. Citizens of countries providing subsidies to their high seas fleets pay twice for their fish: as tax payers and as consumers/shoppers.

What needs to be done?

Remove fishing vessel overcapacity by:

1. Achieving full transparency (disclosure) of fisheries subsidies.
2. Classification of fisheries subsidies in order to identify and distinguish those that are harmful.
3. Immediately capping and then phasing out high seas fishing fuel subsidies within five years.

^a Sumaila, U.R. *et al.* (2010). Subsidies to high seas bottom trawl fleets and the sustainability of deep-sea demersal fish stocks, *Marine Policy* 34(3): 495-497.

^b Schroeer, A. *et al.* (2011). The European Union and Fishing Subsidies, http://oceana.org/sites/default/files/reports/EU_Subsidies_Report_FINAL_FINAL-1.pdf

4

Proposal 4 Illegal, Unreported and Unregulated Fishing – Closing seas, ports and markets

Illegal, unreported and unregulated (IUU) fishing on the high seas has significant negative ecological, economic and social impacts, and disproportionately affects developing countries. To effectively combat IUU fishing, the illegality of the practice needs to be uniformly established, the likelihood of being caught needs to be increased and market access for IUU fish needs to be cut off.

In order to combat, and end, IUU fishing:

- The Commission calls on members of the International Maritime Organization to require that the mandatory requirements for IMO numbers and tracking already in place for merchant vessels are extended to all fishing vessels fishing in the high seas.
- The Commission furthermore calls upon States and RFMOs to ban the at-sea transshipment of fish.
- All commissioners are committed to using their influence and to act in order to help fast-track the entry into force of the PSMA by urging all States who are not yet Party to the Agreement to expedite their instruments of adherence or ratification.
- The Commission calls on all stakeholders to work together to build a global information-sharing platform for real-time sharing of data on high seas fishing vessels and their activities so as to deter IUU fishing and promote traceability.
- Seafood retailers and processors must commit to sourcing sustainable seafood, including by adopting effective traceability systems.
- In order to support these goals, the Commission encourages civil society organisations to step up their role as independent RFMOs, flag States and Port States performance watchdogs, and calls upon local, national and international authorities to cooperate with such independent watchdogs.



Why is this important?

One of the biggest obstacles to the effective management of high seas fish stocks is the prevalence of IUU fishing caused by economic incentives which in turn were enabled by a lack of regulation and enforcement resulting from global governance deficiencies. Each year that it is allowed to thrive, illegal fishing on the high seas is progressively stripping oceans of fish stocks and further threatening the food security of over a billion people, mostly in the developing world. The overall extent of IUU fishing on the high seas is very difficult to estimate, largely because much of it is unreported or illegal. The most reputable estimate suggests that IUU fishing on the high seas is worth US\$1.25 billion annually. However, IUU fishing also affects areas within national jurisdiction. If EEZs are included, the estimate increases to a sum between US\$10 and US\$23.5 billion annually. Linkages between IUU fishing activities and other forms of criminality are widely recognised, including fishing vessels used for smuggling migrants, drugs and weapons, and for committing acts of terrorism.

What needs to be done?

Tackling IUU fishing on the high seas requires large-scale international cooperation and commitment, in terms of both providing resources to implement agreed measures and coordinating efforts between relevant national and international authorities.

To eliminate IUU fishing, all high seas fishing vessels should be registered with a unique identification number, which makes them readily identifiable and provides a common reference point from which to tell whether they have been duly authorised to fish by their flag States. Their beneficial (real) owners should also be made clear. All flag States should be Party to UNCLOS and the UNFSA, and so comply with their treaty obligations to participate in regional management arrangements for high seas fish stocks and to monitor the activities of their nationals and fishing vessels. RFMOs should share information on potential illegal activity with law enforcement agencies and with other RFMOs, maintaining coordinated lists of suspected IUU fishing vessels. Information on the location and activities of all vessels fishing on the high seas should be monitored and shared with fisheries management, law enforcement and security agencies. Those engaging in illicit activity should have their flags removed, be refused access to ports and not be allowed access to markets for the fish that they have caught. Port States should cooperate with RFMOs, monitor all fishing vessels entering their ports and deny entry to suspected illegal operators and their catch. Lastly, retailers should refuse to accept fish and seafood products that cannot be traced to their point of origin, while consumers should demand that retailers provide them with legal, 'ethically caught' seafood.

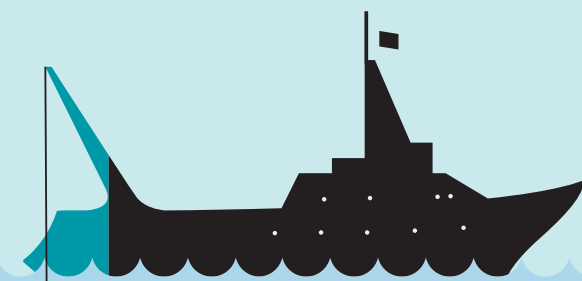
It is possible to end IUU fishing. Through concerted action, we can remove one of the key drivers of ocean decline over the next decade.

4

Proposal 4 Illegal, Unreported and Unregulated Fishing – Closing seas, ports and markets

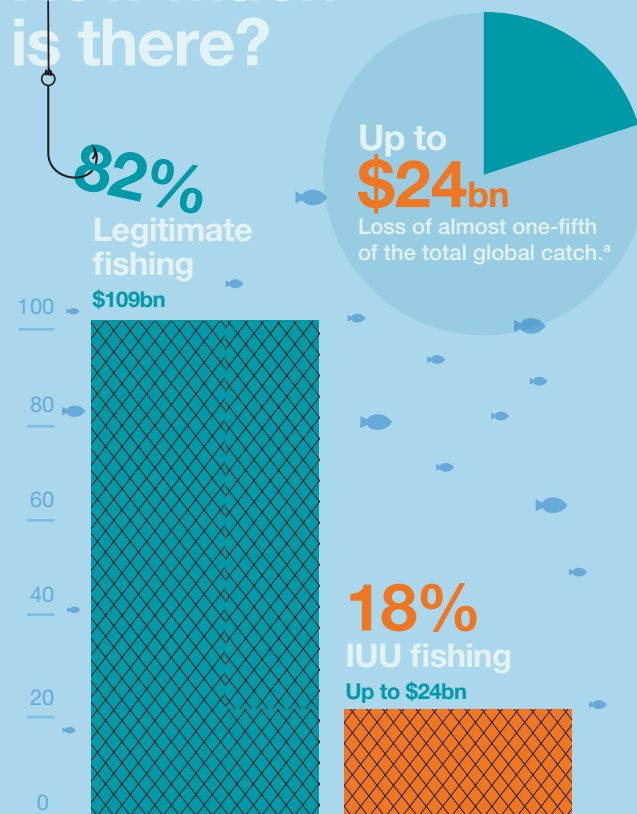
Why is this important?

IUU fishing on the high seas has significant negative ecological, economic and social impacts, especially in developing countries. It represents a serious threat to food security and sustainability, and is a problem that could be solved.



Of 185,600 fishing vessels over 100 GT or 24m, less than 15% have a unique identifier.

How much is there?



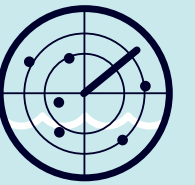
^a Estimated maximum value of illegal and unreported fishing activities.

What is IUU fishing?

- Fishing out of season
- Harvesting banned species
- Using banned gear
- Catching more than allowed quota:
 - without a licence
 - without a nationality
- Flying a 'flag of convenience' to escape scrutiny

How is it allowed to happen?

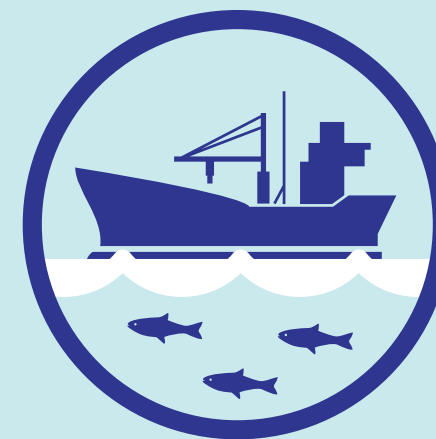
- Countries not sticking to international agreements
- Countries reluctant to get involved
- Untracked vessels
- Lack of punishments
- Flag States not acting responsibly
- Port States ignoring their responsibilities
- Links between IUU fishing and other forms of criminality are also widely recognised, including fishing vessels used for smuggling migrants, drugs and weapons



What needs to be done?

Ending IUU

In order to combat and end IUU fishing, the Global Ocean Commission recommends the following actions.



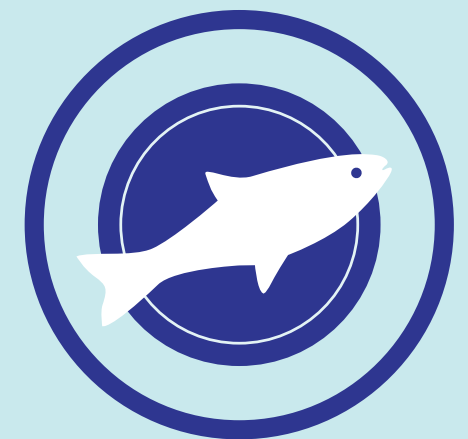
At sea

- Mandatory IMO numbers and tracking already in place for merchant vessels to be extended to all fishing vessels fishing in the high seas.
- Ban at-sea transshipment.
- All flag States should be party to UNCLOS and the UNFSA and participate in their mandatory regional management arrangements for high seas fish stocks and to monitor the activities of their nationals and fishing vessels.
- RFMOs to maintain coordinated lists of suspected IUU fishing vessels and share with law enforcement agencies and with other RFMOs.



In port

- Ratify and implement the Port State Measures Agreement.
- Illegal fishing vessels should have their flags removed, be refused access to ports and not be allowed access to markets for the fish caught.
- Port States should cooperate with RFMOs, monitor all fishing vessels entering their ports and deny entry to suspected illegal operators and their catch.



Fish to table

- Stakeholders to work together to build a real-time global information-sharing platform on high seas fishing vessels and their activities, so as to deter IUU fishing and promote traceability.
- Seafood retailers and processors to commit to sourcing sustainable seafood, including by adopting effective traceability systems e.g. seafood processors and retailers could require that all fish purchased comes only from vessels that have IMO numbers and AIS (automatic identification system) tracking in place.
- Civil society organisations to step up their role as independent performance watchdogs for RFMOs, flag States and Port States. Local, national and international authorities to cooperate with such independent watchdogs.

5

Proposal 5 Plastics – Keeping them out of the ocean

Plastics are a major source of pollution on the high seas and a health threat to humans and the environment. This reflects poor handling and waste management practices on land and requires a combination of political and regulatory action supported by an increase in consumer awareness.

It is important to intensify efforts to address the variety of sources of marine pollution (persistent organic pollutants, hydrocarbons, heavy metals, nitrates, radioactive substances, marine debris, etc.). In particular, the Commission calls for coordinated action by governments, the private sector and civil society to eliminate plastics entering the global ocean including by:

- Minimising single-use plastics by direct government intervention and consumer incentives.
- Creating incentives to promote recycling, including single polymer products and extended producer responsibility.
- Establishing time-bound, quantitative reduction targets.
- Achieving improved waste management.
- Promoting consumer awareness.
- Replicating local initiatives to restrict or ban certain unsustainable uses of plastic materials (i.e. bans on disposable plastic bags, polyurethane packaging, etc.) and clean-up programmes.
- Addressing lost and discarded fishing gear, in particular FADs, to avoid abandonment.
- Encouraging XPRIZE-like innovation around substitution, waste avoidance, recycling and clean-ups.
- Exploring taxation and other levies to establish a Global Marine Responsibility Fund to build waste management capacity, coordinate action to combat marine plastics, grow sustainability initiatives, and change the behaviour of industry and consumers.



Why is this important?

Given its mandate and its focus on the high seas, the Commission debated long and hard as to whether we should seek to address the problem of marine pollution at all, bearing in mind that it is estimated that 80% of all inputs of marine pollution come from land-based activities.

Nevertheless, we could not ignore that plastics are by far the most abundant and problematic type of marine debris in terms of the number of items. The amount of plastic in the ocean has risen sharply since the 1950s, with a tenfold increase every decade in some places. Scientists expect this trend to continue, given the increasing use of disposable plastic packaging and containers. In addition, the projected massive growth in plastic production is enhanced by the falling cost of plastic resin, which has become cheaper with the expansion of natural gas production.

What needs to be done?

Given that the vast majority of plastic entering the ocean is from land-based sources, which reflects poor handling and waste management practices on land, tackling these problems requires a combination of political and regulatory action supported by an increase in consumer awareness. The Commission is therefore calling for more coordinated action by governments, the private sector and civil society to stop plastics from entering the global ocean in the first place. Plastics pollution does not respect borders or boundaries, it affects everyone and needs to be addressed collectively.

Lost or Abandoned Fishing Gear

While the Commission recognises that emphasis needs to be given to land-based sources of marine pollution, we have also paid particular attention to the problem of lost and abandoned fishing gear, in particular the tens of thousands of FADs used by the tuna fishing industry, many of them made from plastic parts.

The Commission suggests the following solutions to the problem of FADs:

- Require that States and RFMOs adopt or implement, as appropriate, regulations that require both that FADs be constructed in a manner that minimises bycatch and ghost fishing by setting a maximum mesh size in netting used, and that no subsurface netting is used in the composition of FADs (i.e. only ropes).

- Incentivise the use of natural biodegradable materials in the construction of FADs through subsidising these materials and/or taxing non-biodegradable materials.
- Promote research into alternative construction materials for FAD floats, perhaps through programmes that encourage the development of less destructive fishing gear.
- Amend MARPOL Annex V to include specific quantitative and qualitative standards for port reception facilities. This could include port disposal programmes that allow for free, safe disposal of used fishing gear.
- Require documentation of all deployed FADs, and require each new FAD to be equipped with a tracking device.
- Ensure the enforcement of mandatory reporting of accidentally lost gear, as required under MARPOL Annex V.

5

Proposal 5 Plastics – Keeping them out of the ocean

Why is this important?

Plastics are polluting the high seas. Microplastics enter the food chain, threatening ocean life and human health.

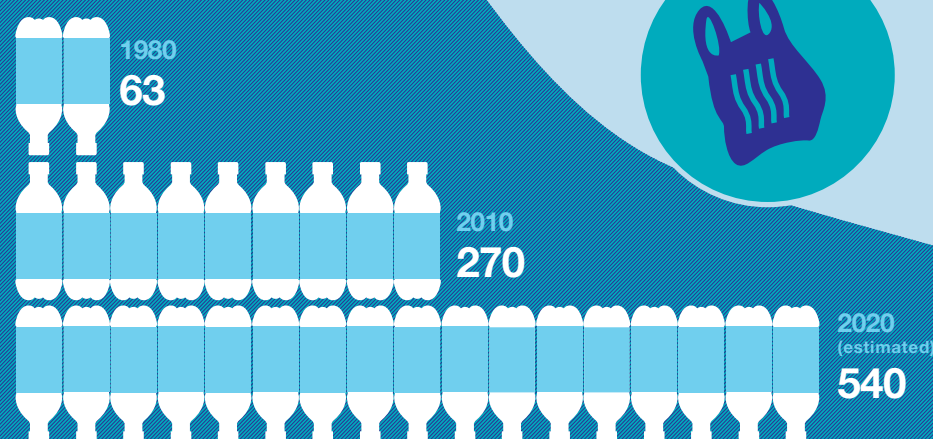
More plastics are being made than ever before

80%

Of all marine debris comes from land, and ends up in the ocean through winds and currents.

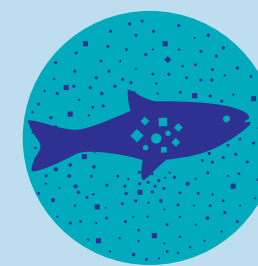
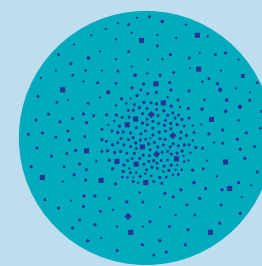
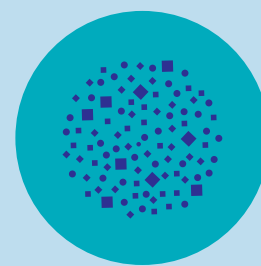
World Plastics Production

in million tonnes



Up to 33 billion tonnes will accumulate by 2050, a percentage of which will end up in the ocean

A significant share of the growing amount of plastics used by humans ends up in the ocean,



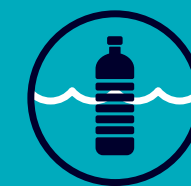
and breaks up into microplastics over time, posing a threat to fish, wildlife and humans.

What needs to be done?

Coordinated action by governments, the private sector and civil society to address both land-based and sea-based (i.e. fish aggregation devices) pollution sources.

Where are the garbage basins?

There are plastic garbage patches in all 5 basins of the ocean, not just the Pacific. However, the Pacific Gyre has been documented more than the others and is known as the 'Great Pacific garbage patch' due to the mass of marine debris that has accumulated there. It is often referenced as being twice the size of Texas.



15%

According to UNEP it is estimated that 15% of marine debris floats on the sea's surface...

15%

...remains in the water column...

...and 70% rests on the seabed

70%

6

Proposal 6 Offshore Oil and Gas – Establishing binding international safety standards and liability

The Commission supports efforts to adopt and improve international safety and environmental standards for offshore drilling on the continental shelf, including regional protocols to establish and implement such standards, with provisions for response-preparedness and capacity building in developing countries. In line with the polluter-pays principle, the Commission also supports the development of an international liability convention to cover damage to the marine environment from offshore oil and gas installations.



Why is this important?

Offshore oil and gas production is expected to increase in the coming years. Drilling more and deeper increases the threats to the environment and natural resources. The potential impacts of offshore drilling on the environment are numerous, including the disturbance of fish stocks and marine mammals during seismic surveys; carbon dioxide and methane emissions through gas flaring and venting; and pollution of the marine environment through the loss and discharge of various substances, drilling fluids, and cuttings in particular. Fixing a problem in the midst of an accident in deep waters is particularly complex.

National legislation regulating offshore oil and gas activities varies greatly from one country to another. In addition, the effective implementation of national legislation also varies greatly from country to country. A lack of capacity in many developing States prevents them from effectively controlling and monitoring the development of offshore activities and enforcing regulations, when they exist. More broadly, national administrations often have poor knowledge of the offshore industry, which is a very technical and opaque sector. This is a considerable obstacle to the effective control of offshore drilling activities.

A further problem is that there are no universally agreed international standards for offshore drilling on the continental shelf. As far as the high seas are concerned, this is problematic. The water column above the continental shelf beyond 200 nautical miles from the baseline and up to the maximum extent of 350 nautical miles is part of the high seas, even if that outer shelf area has been claimed by a coastal State. Thus, ensuring that marine life in the water column is protected falls under the remit of the global community. This means that there have to be internationally agreed rules and regulations governing any conduct that could impact on the high seas water column above the continental shelf.

What needs to be done?

There is a strong case for the development of international agreements pertaining to environmental and safety standards for offshore drilling in the continental shelf. International guidelines defining what constitutes an acceptable risk would provide industry with a standard to meet, regardless of where in the world it was drilling. All affected interests would benefit from more-uniform standards dealing with consideration of risk in operations globally.

The Commission supports the elaboration of an international convention regulating liability and compensation. Such a convention should, among other things, (i) cover both economic losses and ecological damages; (ii) provide for a strict liability of operators; (iii) include provisions for a shared liability between all licence holders and their subcontractors; (iv) bind States to ensure that operators have adequate financial capacity to pay for possible compensation; (v) set a liability cap at a level that can ensure the recovery of costs associated with environmental remediation and compensation and losses born by public and private entities, as well as a compensation fund to address major disasters that are likely to exceed the liability cap.⁴

4. Rochette J., *et al.* (2014). Seeing beyond the horizon for deepwater oil and gas: strengthening the international regulation of offshore exploration and exploitation. IDDRI.



The fishing vessel *Demares* fights through heavy waves in stormy weather in the North Sea near the Beryl oil rig, 160 miles north east of Aberdeen. © Philip Stephen / Naturepl.com

6

Proposal 6 Offshore Oil and Gas – Establishing binding international safety standards and liability

Why is this important?

A significant amount of the oil and natural gas consumed today comes from underwater areas. Offshore oil and gas production is expected to increase in the coming years, and both exploration and exploitation is moving further and deeper offshore.



33%

of oil

consumed in the world comes from underwater areas

25%

of natural gas

consumed in the world comes from underwater areas

Where offshore drilling is growing

- The Arctic
- Mediterranean Sea
- East Africa

13%

of world's oil reserves

30%

of world's natural gas

Increased threats

- Threats to fish and marine mammals from seismic surveys
- CO₂ and methane disturbance from gas flaring and venting
- Increased pollution
- Hard-to-fix spills in deep and remote waters:
 - 2009 Montara rig leaked for 74 days
 - 2010 Deepwater Horizon rig released nearly 5 million barrels over 87 days
 - Arctic extreme environment

West Africa

Oil: 8-10 billion barrels
Gas: 3 trillion cubic feet



Gulf of Mexico

Oil: 5-7 billion barrels
Gas: 10 trillion cubic feet

Deepwater Golden Triangle

Estimate of Deepwater Proven and Probable Reserves through 2012

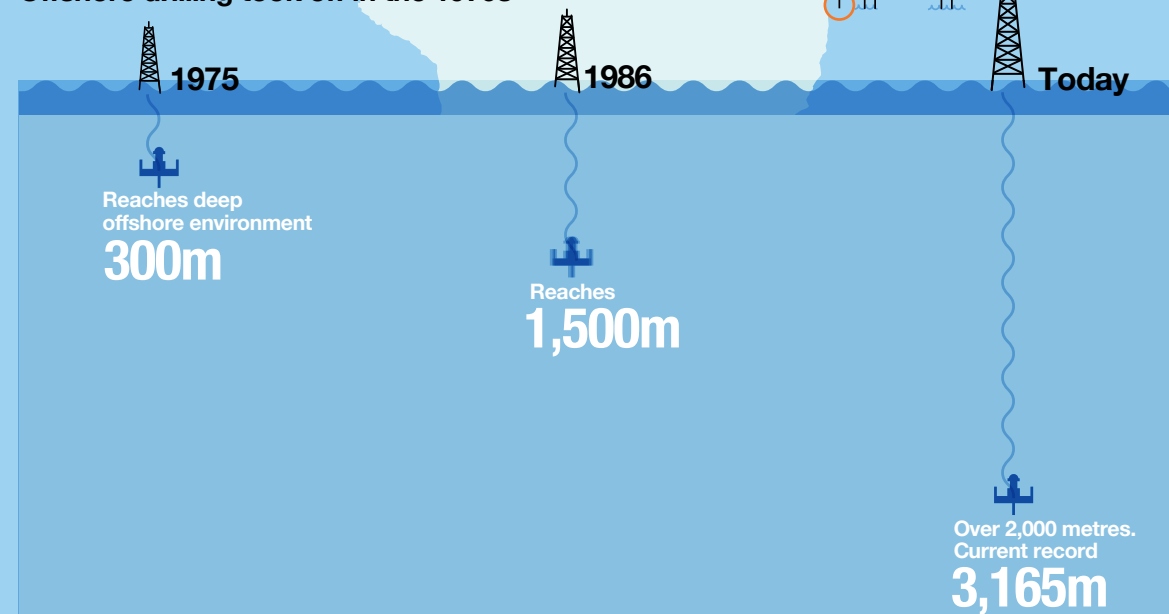
Brazil

Oil: 10-15 billion barrels
Gas: 5-8 trillion cubic feet



How we got here

Offshore drilling took off in the 1970s



What needs to be done?

Establish binding safety and environmental standards for offshore industry including response-preparedness, capacity building, and universal liability provisions.

7

Proposal 7
Global Ocean Accountability
Board – Monitoring progress
toward a healthy ocean

The Commission recommends the establishment of an independent Global Ocean Accountability Board. This independent body would monitor and assess whether sufficient progress is being made towards achieving the proposals recommended by the Commission through which to reverse the degradation of, and then regenerate, the global ocean and to secure effective and equitable governance. The Board would benchmark, on a regular basis, the progress being made by the international community towards meeting the specific proposals contained in this report and make this information public.

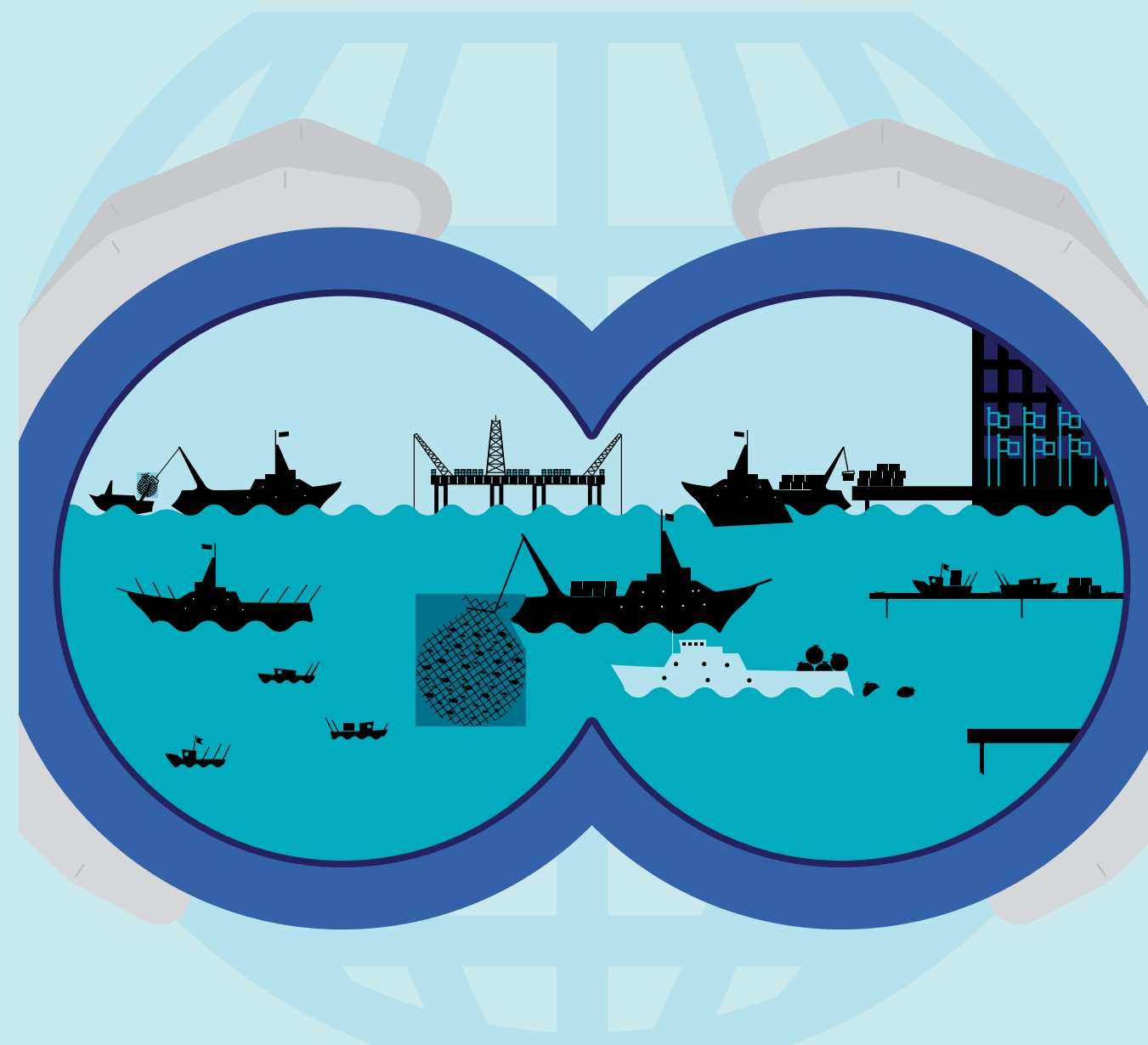


Why is this important?

The Commission's recommendations for the reform of existing global ocean governance institutional arrangements all depend, to a greater or lesser extent, on the functioning of multilateral agreements at the global level. Each of these in turn depends on the engagement and commitment of the member States that are Parties to such agreements. Others depend upon action by existing institutions such as the UN or by different sectors of society. What has become clear to us is that adopting or implementing the suite of proposals for action contained in this report requires immediate attention if we are to shift into a more virtuous circle of regeneration and restoration.

What needs to be done?

The Commission asked itself the question: if we reconvened 10 years from now and looked back at what we had proposed, would we be able to measure what had been done and whether it had made a clear difference? Would we be able to see the direct benefits to humankind from increased scientific research and knowledge? The Global Ocean Accountability Board provides a mechanism to do just that, but also to hold those who are currently exploiting the high seas to account; to measure whether their activities meet with the stewardship demanded of the global community for keeping this global commons healthy and vibrant; and to assess whether the mechanism is equitable and whether it serves the needs of this generation and of generations to come.



8

Proposal 8
Creating a High
Seas Regeneration Zone

In this report the Commission is proposing an array of necessary actions essential to reversing the degradation of the global ocean, building resilience to change, and restoring ocean life. It is our hope and expectation that timely implementation of these proposals will neutralise and then eliminate the main drivers of ocean decline, and trigger the drivers of recovery. In so doing, the legacy that we can leave for future generations will be an ocean that is resilient and productive and which no longer suffers untold degradation and overexploitation.

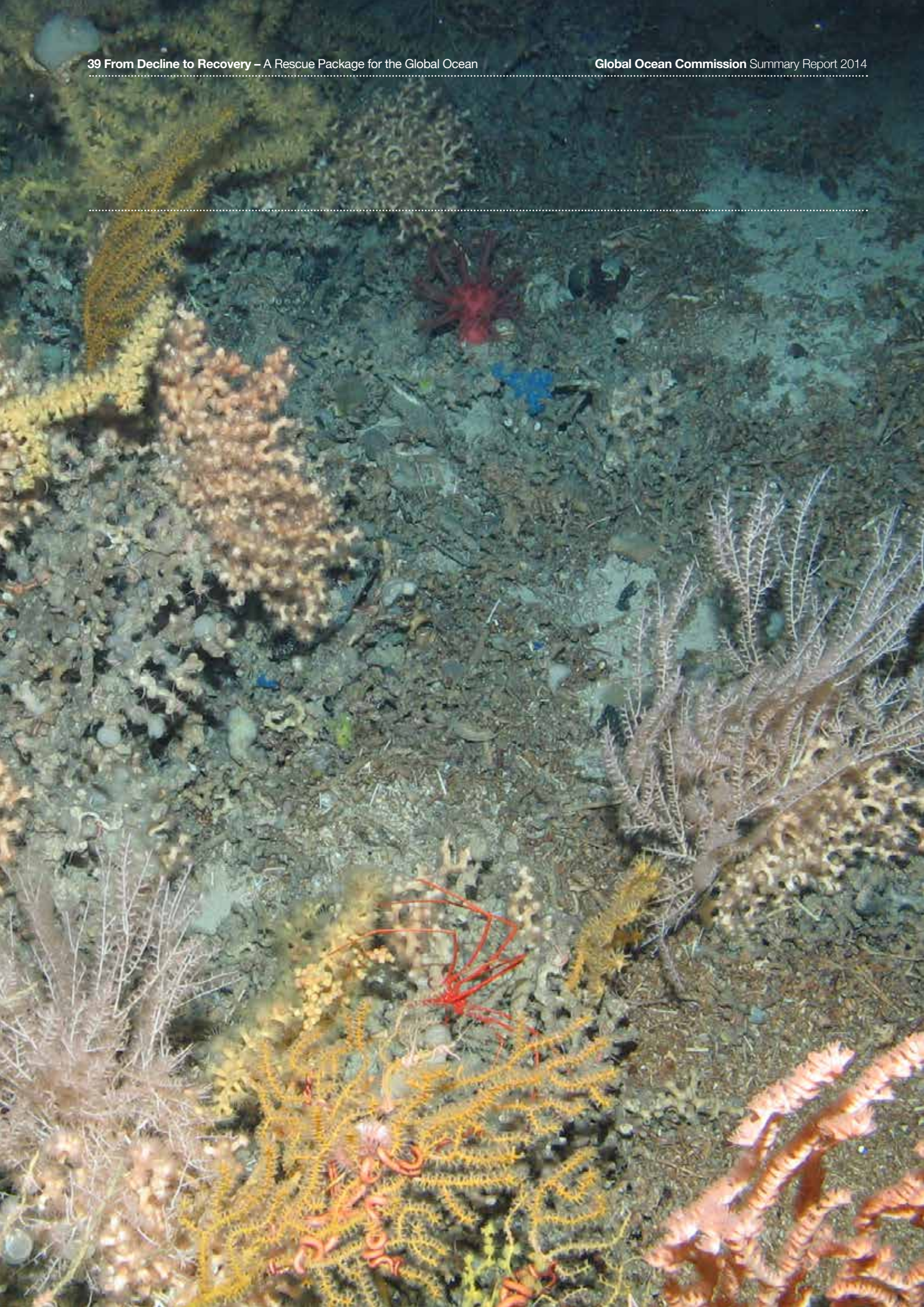
The Commission recognises that continued scientific research is necessary to evaluate the cumulative impacts of human activities on the high seas so that informed decisions can be made about reversing the degradation of the global ocean. This said, the precautionary principle tells us that a lack of scientific information cannot be a reason for inaction by the international community if we are to ensure the health of the global ocean. The work of the Commission coincided with the emergence of new scientific and economic data and analyses on the interaction of high seas fish stocks and fish stocks within EEZs. Based on this new information, closing the high seas to fishing could not only benefit fish stocks, but also make economic sense, improve global equity and build resilience to climate change.

We are convinced that our proposals, if implemented, would reverse the cycle of degradation. But there is a long history of good proposals not being implemented. If this happens, and the result is the continued decline of the high seas, it will impact the whole ocean and people and systems across the planet because of the specific regenerative capacity of the high seas.

We are concerned to ensure that if the health of the global ocean does not improve, then consequences should follow to save this vital natural resource. The Global Ocean Accountability Board should provide independent monitoring of progress. If it reports continued decline after a period of, say, five years or similarly short period of time, then the world community of States should consider turning the high seas – with the exception of those areas where RFMO action is effective – into a regeneration zone where industrial fishing is prevented. Such action would need to take account of RFMO functions within EEZs, and would need to include provision for the ban to be lifted as effective proposals for resource management are put in place for the conservation and management of living resources in the respective areas. The objective of this trigger mechanism and the associated regeneration zone concept is to make fish stocks sustainable for present and future generations, and to replenish ocean life equitably to secure the wellbeing of this global commons for the health of the planet, its people and its biodiversity.



The Anton Dohrn Seamount is comprised predominantly of corals, including large gorgonian species, small bamboo coral, soft coral *Anthomastus* sp. and the antipatharian *Leiopathes* sp. © JNCC /2009



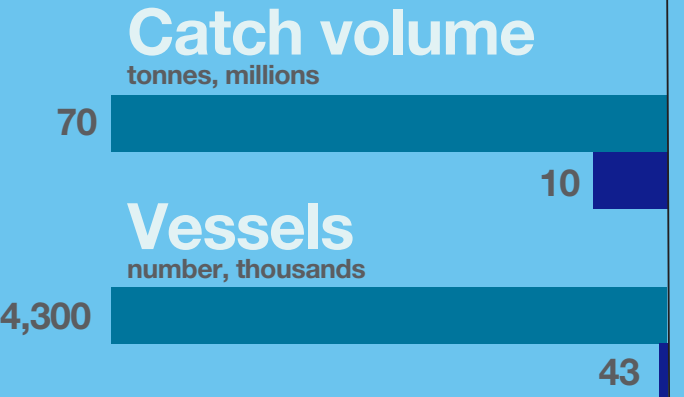
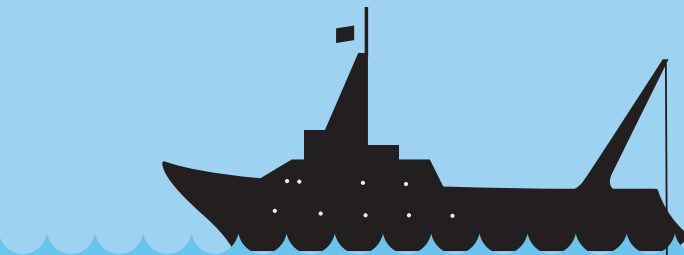
8

Proposal 8
Creating a High
Seas Regeneration Zone

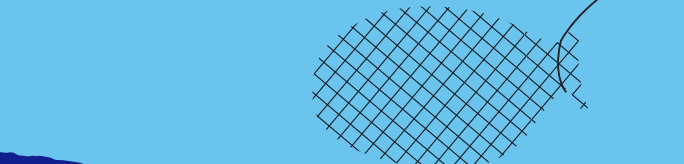
Why is this important?

A high seas regeneration zone would help ocean life and health to be replenished and protected for the benefit of coastal fisheries.

Protecting the high seas would have a big environmental impact, a small economic cost and a large economic benefit.



EEZ fisheries
High seas fisheries



Protecting the high seas would only affect a small share of the global fishing industry

1%

of fish species are caught exclusively on the high seas

57%

are caught exclusively within EEZs

42%

are caught both within EEZs and on the high seas

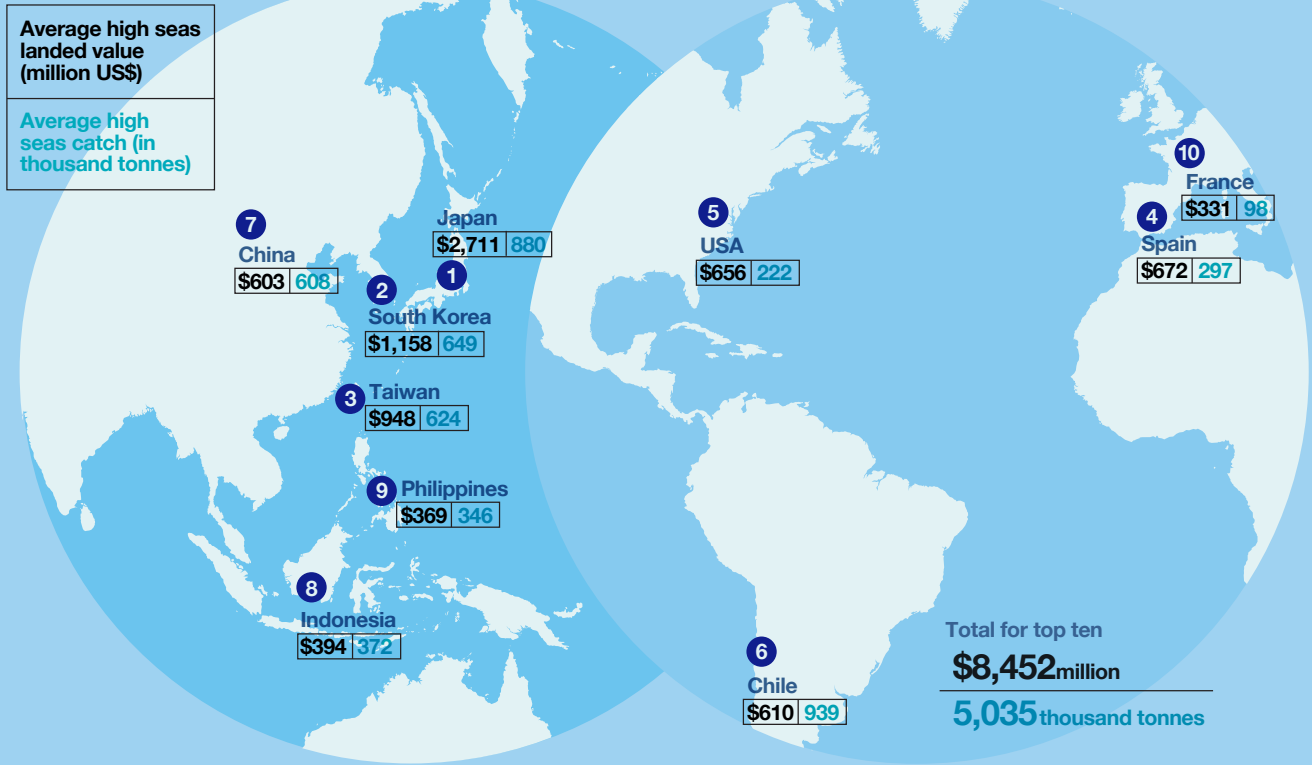
EEZs are those waters that are within 200nm of a coastline. Fish caught from EEZs are a combination of what we call 'straddling stocks' (which means they spend some of their time in both EEZ waters and the high seas) and those stocks that are fished exclusively within EEZs.

SOURCES:
For vessels: www.fao.org/fishery/topic/1616/en and FAO, 2010, State of the World Fisheries and Aquaculture, http://www.fao.org/docrep/013/11820e/11820e00.htm.
For catch data: Sea Around Us Project, 2014.
http://www.seaaroundus.org/trophiclevel/percenteezs.aspx?Eez=000&fao=0&typeout=0&country=eez%20(global%20catch)



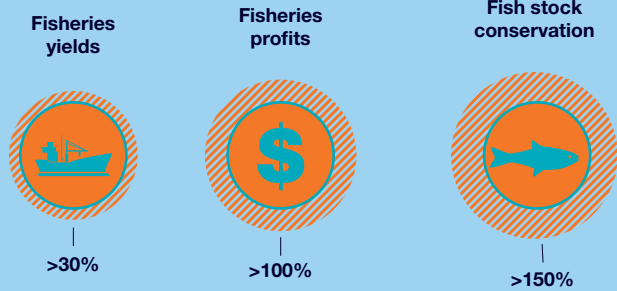
Who fishes the high seas?

Top five countries share 50% of the total global revenue



If the high seas were protected, what could happen?

Completely closing the high seas to fishing would simultaneously give rise to large gains in...



SOURCE: CLOSE THE HIGH SEAS TO FISHING?, WHITE AND COSTELLO (2014)

23m tonnes

The gain in the global catch if you protect the high seas

What needs to be done?

If in the next five years insufficient action is taken by RFMOs to achieve these proposals then the world community of States should consider declaring the high seas - except where RFMO action is effective - a regeneration zone, free from industrial fishing.

The Commissioners of the Global Ocean Commission



José María Figueres (Co-chair)
President of Costa Rica from 1994 to 1998; President of the Carbon War Room



Trevor Manuel (Co-chair)
Minister in the South African Presidency responsible for planning; former Finance Minister



Luiz Fernando Furlan
Former Minister of Development, Industry and Foreign Trade of Brazil; board member of BRF Foods



Vladimir Golitsyn
Judge on the International Tribunal for the Law of the Sea



Paul Martin
Former Prime Minister and Finance Minister of Canada; inaugural Chair of the Finance Ministers' G20



Christina Narbona
Former Environment Minister of Spain; currently a member of the country's Nuclear Safety Council



David Miliband (Co-chair)
President and CEO of the International Rescue Committee; former UK foreign secretary



Carol Browner
Former head of the US Environmental Protection Agency (EPA)



Victor Chu
Chairman of First Eastern Investment Group; co-chair of the World Economics Forum International Business Council



Obiageli 'Oby' Ezekwesili
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Yoriko Kawaguchi
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Pascal Lamy
Former Director-General of the World Trade Organisation



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**Commissioner in 2013*



Ratan Tata
Former head of the India-based Tata business conglomerate, and a leading philanthropist



Foua Toloa
Member of the Council of the Ongoing Government of Tokelau and Minister of Energy; former Head of Government



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Former Finance Minister of Chile; Professor of Professional Practice in International Development at Columbia University

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Executive Secretary



Rémi Parmentier
Deputy Executive Secretary



Clare Brennan
Director of Operations



Kristian Teleki
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Justin Woolford
Director of Communications 2014



Inés de Águeda
Communications Officer



Philip Burgess
Director of Policy and Research



Jennie Dean
Senior Policy Associate



Richard Black
Director of Communications 2013

Key Global Ocean Commission Documents

Global Ocean Commission Policy Option Papers (2013)ⁱ

A sustainable development goal for the global ocean
Climate change, ocean acidification and geo-engineering
Elimination of pollution that affects the high seas
Bioprospecting and marine genetic resources in the high seas
Strengthening deep seabed mining regulation
Elimination of harmful fisheries subsidies affecting the high seas
MPAs: Protecting high seas biodiversity
Illegal, unreported and unregulated fishing
Improving accountability and performance in international fisheries management
Modernising ocean governance

Addenda to Policy Option Papers (2014)

Memorandum pursuant to the meeting of the SDG Open Working Group
High seas elements for a possible Ocean SDGⁱⁱ
Supplement to climate change, ocean acidification and geo-engineering
Climate change, ecosystem resilience and marine protected areas
Supplement to pollution: relationship between offshore activities on the continental shelf and pollution of the high seas
Towards international regulation of offshore oil and gas activities: pragmatic directions to be considered by the Global Ocean Commission (Paper prepared for the Global Ocean Commission by IDDRI)
Market-based instruments to address marine debris
State of fish aggregation devices (FADs) disposal options
Examples of international bio-repositories from other sectors that may be applicable to marine genetic resources
Supplement to seabed mining
Outcome of Global Ocean Commission workshop on subsidies
Should high seas areas not covered by RFMOs become closed areas?

State of knowledge of potential high seas marine protected areas – Ecologically and Biologically Significant Areas (EBSAs)
Options to raise IUU fishing as a security issue
Operational aspects of vessel tracking and transponders
Eradicating the market and demand for IUU fish
Status of the Port State Measures Agreement (PSMA) ratification and the resource implications of implementation
Accountability and performance of RFMOs, UNFSA review conference, sanctions
From Regional Fisheries Management Organisations to Regional Ocean Management Organisations?
Convention on Biological Diversity (CBD) jurisdiction in the high seas
A Global Ocean Stability Board: Possible mandate, membership and structure
Appointment of a Special Representative of the Secretary-General for the Ocean and improved UN-system coordination on oceans
Outline of a new governance structure under UNCLOS

Other Global Ocean Commission documents

Lodge, M. (2010). Why some commissions succeed and others fail – lessons and review.
Lodge, M. and Sack, K. (2012). Global ocean governance primer: What we choose to do now will define us for generations.
Global Ocean Commission, (2012). Charting the Right Course for the High Seas in the 21st Century
Rogers, A.D., Sumaila, U.R., Hussain, S.S. & Baulcomb, C. (2014). The High Seas and Us: Understanding the Value of High Seas Ecosystems. (Report commissioned by the Global Ocean Commission)

Other reports and papers relevant to the work of the Global Ocean Commission have been listed in an online ‘Reading Room’ at www.missionocean.me/learn/readingroom. This is not an exhaustive list.

i. Available at: <http://www.globaloceancommission.org/policies/>
ii. Available at: <http://www.globaloceancommission.org/wp-content/uploads/SDG-Global-Ocean-targets-and-indicators-Global-Ocean-Commission-High-Seas.pdf>

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Glossary of Acronyms

AIS	automatic identification system
BBNJ	Ad Hoc, Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction
CO₂	carbon dioxide
EEZ	exclusive economic zone
EIA	environmental impact assessment
FAD	fish aggregating device
FAO	Food and Agriculture Organization [of the United Nations]
IMO	International Maritime Organization
IPSO	International Programme on the State of the Ocean
ISA	International Seabed Authority
IUU fishing	illegal, unreported and unregulated fishing
MDG	Millennium Development Goal
MPA	marine protected area
OSY	optimum sustainable yield
PSMA	Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing
RFMO	Regional Fisheries Management Organisation
ROMO	Regional Ocean Management Organisation
SDG	Sustainable Development Goal
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	United Nations Environment Programme
UNFSA	United Nations Fish Stocks Agreement
WSSD	World Summit on Sustainable Development
WTO	World Trade Organisation

Global Ocean Commission Partners



The mission of **The Pew Charitable Trusts'** environment work is to strengthen policies and practices in ways that produce significant and measurable protection for terrestrial and marine ecosystems worldwide. In doing so, they work to advance scientific understanding of the causes and consequences of environmental problems, design policy solutions to these problems and mobilise public support for implementation. Current marine work includes projects to establish large, highly protected marine reserves, create shark sanctuaries and reduce demand for shark fin, ensure sustainable fisheries in US and European waters, secure international science-based rules to regulate some of the world's largest tuna fisheries, prohibit destructive high seas bottom trawling and end illegal fishing.



Adessium Foundation aspires to a world in which people live in harmony with each other and with their environments. The Foundation is working to create a balanced society characterised by integrity, justice, and a balance between people and nature. The name Adessium is inspired by the Latin phrase ad esse, literally 'into being'. It signifies help, support and participation that bring about positive change.



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Somerville College is one of the constituent colleges of the University of Oxford. Founded in 1879 as one of the first women's colleges, it is named after Mary Somerville (1780–1872), the best-known female scientist of her day. Somerville became a mixed college in 1994. Its undergraduates, postgraduates and fellows study and research a wide range of subjects spanning the arts, sciences, medicine, engineering and the humanities. Alumni include former Prime Ministers Margaret Thatcher and Indira Gandhi, and Dorothy Hodgkin, the only British woman scientist to have won a Nobel Prize.



Oceans 5 brings together a number of philanthropists committed to ocean conservation. The group collectively targets its investments and support on projects and campaigns aimed at protecting biodiversity and constraining overfishing. It supports focused projects with limited timeframes that have the capacity to produce clear and measurable returns.

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