

Canadian input on the 2020 UN Ocean Conference Interactive Dialogue concept papers

February 14, 2022

1. Addressing marine pollution (target 14.1)

Status and Trends

- Land-based activities continue to represent an estimated 80 per cent of the sources of marine pollution, highlighting the need for integrated source-to-sea approaches to protect the marine environment.
- Plastics continue to be the most prevalent debris item recorded, contributing an estimated 60 to 80 per cent of all marine litter. Plastics pollution has increased tenfold since 1980. Eight million tons of mismanaged plastic waste is estimated to be entering oceans annually. At such a pace, it is likely that the goal of a significant reduction in marine pollution by the year 2025 will not be achieved without transformative action.
- A large portion of marine debris is abandoned, lost or otherwise discarded fishing gear, also known as ghost gear, which can have significant negative impacts on marine species and ecosystems.
- Nutrient runoff is also a significant concern; however, to date it has received less public attention than plastics pollution.

Challenges and opportunities

- Global awareness of plastic pollution and the expectation for action has surged.
- The fight against marine plastic litter is going to require the combined effort of both the public and private sectors. There is an opportunity to create and build on public-private partnerships to advance action.
- As regards pollution from ships, as the volume of international trade increases, the risk of shipping-related marine pollution may increase. Recent initiatives include measures to address biofouling and the transfer of invasive aquatic species, and the discharge of sewage and marine plastic litter from ships. Anthropogenic underwater noise pollution is also an area of concern requiring further attention.

Existing and potential new partnerships

- The **Ocean Plastics Charter** is the only global framework that takes a comprehensive approach to fighting marine plastic pollution. The Charter brings together leading

governments, businesses and civil society organizations to commit to advancing a more resource efficient and sustainable approach to the management of plastics, adopting a lifecycle approach, which aims to avoid unnecessary use of plastics and prevent waste, and to ensure that plastics are designed for recovery, reuse, recycling and end-of-life management. Charter endorsees commit to ambitious action and aspirational targets in five areas: 1. Sustainable design, production and after-use markets; 2. Collection, management and other systems and infrastructure; 3. Sustainable lifestyles and education; 4. Research, innovation and new technologies; and, 5. Coastal and shoreline action.

- Endorsing the New Plastics Economy Global Commitment, which unites more than 500 businesses and governments committed to taking prompt action to reduce plastic pollution.
- Supporting the development of a new, ambitious, and legally binding global agreement on plastics at the United Nations Environment Assembly that takes a full lifecycle approach to addressing plastic pollution.
- The **Global Plastic Action Partnership (GPAP)** is a public-private collaboration platform that helps public, private and civil society leaders collaborate to tackle plastic pollution by improving linkages and alignment between initiatives to combat the global plastic pollution issue and creating national partnerships in global hotspots to that will substantially reduce the leakage of plastic into the environment.
- The **Global Ghost Gear Initiative (GGGI)** was founded in 2015 by the non-government organization World Animal Protection as a multi-stakeholder alliance, committed to finding solutions to the problem of ghost gear worldwide. GGGI includes participants from 18 national governments, fishing industry, private sector, academia, non-government organizations, and international organizations such as the United Nations Food and Agriculture Organization and UN Environment Program.

Guiding questions for the dialogue

- How can the problem of marine plastic litter be addressed more effectively through the partnering of the public and private sectors?
- What key sectors have potential for making major contributions to controlling marine plastic litter? Of these key sectors, where do responsibilities lie for addressing marine litter?
- What is the role of government and examples of effective incentives to mobilize change?

2. Managing, protecting, conserving and restoring marine and coastal ecosystems (targets 14.2 and 14.5)

Status and Trends

- The state of marine and coastal ecosystems has continued to deteriorate. Exploitation of resources has had the largest relative impact on marine ecosystems, followed by the many changes in the uses of the sea and coastal land.

Challenges and opportunities

- Challenges include the integration of the conservation and sustainable management of marine and coastal ecosystems into national development plans; mainstreaming the consideration of biodiversity in sectors such as fisheries and aquaculture; embracing gender equality and women's empowerment; lack of consistent, accessible data; insufficient data sharing; limited coordination and insufficient resources, particularly in developing countries; increases in risks to critical coastal transportation infrastructure; and inadequate cooperation and synergies in implementing biodiversity-related conventions.
- Supporting nature-based solutions (NBS), such as protecting and restoring wetlands, mangrove forests, seagrass beds and coral reefs – including by leveraging greater private investment – will advance multiple policy goals, including improving ocean health, combatting climate change, building resilience and enabling adaptation, protecting biodiversity, and supporting livelihoods in vulnerable communities. These efforts will also enhance implementation of the Paris Agreement and achievement of the Sustainable Development Goals.
- Marine spatial planning (MSP), which may include ecosystem and area-based approaches, offers opportunities for achieving target 14.2. More countries are now developing marine spatial plans to manage areas within national jurisdiction.
- Indigenous peoples and their traditional knowledge systems for the management of marine and coastal ecosystems could provide valuable models of stewardship, conservation and ecosystem-based adaptation.

Existing and potential new partnerships

- The Ocean Risk and Resilience Action Alliance (ORRAA) will advance private investment in coastal resilience and nature-based solutions. Canada has worked with AXA XL insurance, Ocean Unite, and other key private sector and civil society partners to develop the Alliance. ORRAA will: accelerate and drive research, analysis and modelling; plan, develop and support innovative finance projects for coastal resilience to help mitigate ocean risk and close the protection gap in developing countries; and, inform ocean resilience policy, governance and public understanding. The Alliance was officially launched at the UN Secretary General's Climate Action Summit in September 2019 and is expected to begin project activities in early 2020. All member states are able to join.

Guiding questions for the dialogue

- Are there oceans governance models/best practices that enable greater coherence between all levels of government across area-based management tools/decisions/measures?
- What efficiencies be made between various area-based management/planning tools (e.g., protected areas, spatial plans, environmental impact assessments) to realize greater overall outcomes?

3. Minimizing and addressing ocean acidification, deoxygenation and ocean warming (target 14.3)

Status and Trends

- Long-term observations of ocean acidification over the past 30 years have shown an average increase of acidity of 26 per cent since pre-industrial times. Ocean acidification affects calcifying organisms, such as corals, because their ability to build shell or skeletal material depends on the acidity of the water.

Opportunities and Challenges

- Target 14.3 can only be achieved if greenhouse gas emissions are significantly reduced.
- Further investment is needed in research on the impacts of acidification on biodiversity, as well as on ecosystem services and the economy, the regional variability of ocean acidification impacts and the impacts of acidification with other stressors, to determine the capacity of important species to adapt to changing ocean conditions.
- Many gaps in ocean acidification observation prevail. In that regard, the General Assembly, for example in its resolution 74/19, has repeatedly encouraged States, individually or in collaboration with relevant international organizations and bodies, to enhance their scientific activity to support continued coordination of scientific work to study and minimize the impacts of ocean acidification and develop ways and means of adaptation.

4. Making fisheries sustainable and providing access for small-scale artisanal fishers to marine resources and markets (targets 14.4, 14.6 and 14.b)

Status and Trends

- With respect to SDG 14.4, despite significant improvements in some stocks and overall catch stability, there is an overall decreasing trend in the proportion of marine fish stocks caught within biologically sustainable levels, especially in the least developed regions, from 90% in 1974 to 66.9% in 2015. In contrast, the percentage of stocks fished at

biologically unsustainable levels increased from 10% in 1974 to 33.1% in 2015, with the largest increases in the late 1970s and in the 1980s.

- Continued growth in fish production has been driven primarily by growth in the aquaculture industry. Globally, about 200 million people are directly and indirectly employed along the fisheries and aquaculture value chain, from harvesting to distribution. People dependent on fishing and aquaculture are often located in places that are at particularly high risk of extreme events.
- Small-scale fisheries globally account for 90 per cent of the 300 million fishers and fish workers and more than half of total production on average, in terms of both quantity and value.
- In June 2014, the Food and Agriculture Organization (FAO) of the United Nations (UN) endorsed the [Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries \(SSF Guidelines\)](#), which is the first international instrument dedicated entirely to the small-scale fisheries sector. The SSF Guidelines recognize the rights of fishers and fish workers, acting both individually and collectively, to improve their livelihoods through trade at global, regional and national levels, and by enhancing value chains and post-harvest operations. Chapter 7 of the SSF Guidelines (value chains, post-harvest and trade) contains recommendations for increasing market access, which contributes to SDG 14.b².
- The FAO has also named the year 2022 as the International Year of Artisanal Fisheries and Aquaculture.
- With respect to SDG 14.6, this is currently subject to negotiations at the World Trade Organization (WTO).
- The first binding international agreement developed expressly to combat illegal, unreported, and unregulated (IUU) fishing, the Agreement on Port State Measures (PSMA), entered into force in June 2016 and is a powerful tool that countries can use to prevent illicit products from entering supply chains.

Challenges and Opportunities

- Measures are needed to stop the decline of fish stocks and begin the rebuilding process.
- IUU fishing continues to pose one of the greatest threats to the sustainability of global marine ecosystems, accounting for approximately 20 per cent of the world's total catch and a value of approximately US \$26 billion annually. Coordinated efforts to counter this global threat are increasing in regional fishery management organizations (RFMOs) through the implementation of strengthened frameworks designed to curb IUU fishing activities, including through enforcement activities such as high-seas boarding and inspection. Increased participation in regional cooperative monitoring, control, and surveillance operations amongst multilateral partners, such as the "Operation North

“Pacific Guard” which occurs in the North Pacific Ocean, can increase the effectiveness of efforts to tackle IUU fishing, as cooperative efforts may address capacity constraints, improve partnerships, and increase intelligence sharing in the fight against IUU fishing.

- Efforts to detect IUU fishing activities are often inhibited by the inability to effectively monitor vast oceans with limited resources. This challenge is exacerbated for developing countries lacking the capacity and resources required for effective monitoring, control and surveillance activities. In response to these challenges, many innovative and advanced technologies are being developed, such as for the detection of “dark vessels”, to improve the monitoring and surveillance of fishing activities.
- Some of the most innovative provisions in free trade agreements (FTAs) for fish and fishery products are contained in the environment chapters of agreements such as CETA, CPTPP and more recently, CUSMA. In CPTPP for example, with respect to capture fisheries, Article 20.16 acknowledges that inadequate fisheries management, together with IUU fishing and certain forms of fisheries subsidies, can have significant negative impacts on trade and sustainable development. Parties commit to prevent overfishing and overcapacity; reduce bycatch of non-target species and juveniles; and promote the recovery of overfished stocks. They also commit to support monitoring, control, surveillance, compliance and enforcement systems; deter IUU fishing; implement port state measures; and strive to act consistently with management measures adopted by RFMOs of which they are not a member. CPTPP was the first FTA to contain a binding prohibition of subsidies for fishing that negatively affect overfished stocks, and to any fishing vessel listed for IUU fishing by the flag State, a relevant RFMO or arrangement. These provisions work to support SDGs 14.4 and 14.6.
- The trade of fish and fishery products is becoming more sophisticated in terms of the information required for the products – traceability and sustainability certification are increasingly becoming a market access requirement. The ability to adhere to import requirements that are constantly in evolution can be a challenge for most exporting countries. Many developing countries and small-scale fishers are facing multiple problems in complying with these market requirements leading to challenges in keeping existing markets or expanding into new ones. In addition, concerns about the social responsibility in fisheries and aquaculture value chains continue to rise. These factors can contribute to challenges in achieving SDG 14.b.
- Import requirements include areas such as quality and safety but are also increasingly related to technical standards and labelling, gear marking requirements and, more recently, to voluntary certification. Capacity building, training and transfer of experience and know-how are needed to support countries in meeting these requirements.
- Many factors will influence the evolution and dynamics of the world’s fishery and aquaculture sectors. For production, these include environmental degradation and habitat destruction, overfishing, IUU fishing, climate change, transboundary issues concerning natural resource utilization, poor governance, measures to address abandoned, lost or

otherwise discarded fishing gear, invasion of non-invasive species, diseases and escapes, accessibility and availability of sites and water resources, as well as to the availability of technology and finance.

- From the perspective of market access, issues include those related to food safety and traceability, the need to demonstrate that products are not derived from illegal and prohibited fishing operations, the growth of protective and non-tariff measures, and uncertainties around the international trade environment in the short to medium term. Furthermore, recent global developments such as the spread of COVID-19 demonstrate that the fish and seafood sector, amongst others, are also subject to economic volatility related to external shocks.
- Information and communication technologies (ICTs) are increasingly being used to overcome challenges related to resource assessment, capture, processing, documentation, and commercialization in small-scale fisheries.
- Technical solutions, such as the development of global data exchange standards, can help to improve fisheries management. The Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels presents an opportunity towards the implementation of target 14.4.
- During the World Trade Organization (WTO) negotiations on fisheries subsidies, members agreed on an intensified programme of work leading up to the twelfth WTO Ministerial Conference, to be held from 8 to 11 June 2020 (MC12). Given that MC12 has yet to occur, there remains a need to accelerate the pace of the WTO negotiations on to address harmful fisheries subsidies that contribute to illegal, unreported, and unregulated fishing, overcapacity and overfishing, and address cross-cutting issues, which include special and differential treatment, disputes, remedies for non-compliance, and transparency and notifications
- Many regional trade agreements have started implementing environmental rules, including specific clauses dealing with fisheries subsidies.
- To promote the access of small-scale artisanal fishers and fish workers to marine resources, services and markets, most countries have developed targeted regulatory and institutional frameworks. However, the effectiveness of their implementation varies.
- Developing countries need assistance in creating and implementing a policy and regulatory environment that allows small-scale artisanal fishers to realize their full economic potential. The full implementation of the FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication also presents opportunities to contribute to the implementation of target 14.b.

Existing and potential new partnerships

- Often fishing communities in different areas around the globe face similar problems. Fishery learning exchanges (FLEs) bring together representatives from different communities to share knowledge and expertise and build capacity around a specific topic. FLEs have demonstrated the ability to translate acquired knowledge into the adoption of successful practices in multiple small-scale fisheries. The FAO, together with partners, developed *Fisheries Learning Exchanges: A short guide to best practice*, which provides guidance on the development, implementation, and evaluation of the FLEs.
- Global Fishing Watch (GFW), an independent, international non-profit organization dedicated to promoting ocean sustainability through greater transparency, contributes to supporting SDG 14.4 by using science and cutting-edge technology to gather and share data about global fishing activities.

Guiding questions for the dialogue

- What role can markets and consumers play to support the sustainability of global fisheries?
- What role do traceability and certification play in supporting markets and consumers in their consumption decisions?
- Recognizing the challenges associated with addressing market access and certification requirements, how can meaningful participation of developing, least developed countries and small-scale artisanal fishers dependent on fisheries be facilitated within the fisheries sector?

5. Promoting and strengthening sustainable ocean-based economies, in particular for small island developing States and least developed countries (target 14.7 and other relevant targets)

Status and Trends

- The world's oceans are under threat from over-fishing, marine pollution, and coastal erosion, the effects of which have been exacerbated by climate change. To address such global and domestic threats to our oceans, countries should consider developing sustainable ocean plans that integrates environmental, social and economic objectives. The sustainable blue economy represents a crucial paradigm shift in our current approach based purely on resource extraction to one that promotes the sustainable use of ocean resources for economic growth, ecosystem health, and improved livelihoods, and better and more inclusive jobs. It considers the role of oceans in addressing environmental issues such as climate change, while looking at new and innovative ways to promote sustainable economic development and mitigate the impact of human activities on the marine environment.

- The global ocean economy, measured in terms of ocean-based industries' contribution to economic output and employment, is significant. According to the Organization of Economic Co-operation and Development (OECD), extractive industries such as fisheries, oil and gas, seabed mining and aquaculture, as well as non-extractive uses such as shipbuilding, marine transportation, tourism and construction accounted for nearly US\$1.5 trillion, or 2.5% of world gross value added in 2010. This value is expected to double by 2030 under a normal growth scenario.

Challenges and Opportunities

- Ecosystem goods and services provided by oceans are numerous; however, they must be harnessed in a sustainable way.
- Defining the blue economy, then articulating how to piece together the enabling legal, governance, investment and financing arrangements—and implementing these—will be a major challenge.
- Properly planned and managed ocean spaces should mobilise public- and private sector investment and generate strong returns and ecosystem benefits. The advantages of such an approach mean that a diversity of activities, from traditional ocean sectors to new businesses focused on ocean health, can be managed in a co-ordinated way, within a comprehensive framework of ecosystem-based management (based on balancing growth with the capacity of the ocean for it).
- SIDS are among the most vulnerable to climate change-related shocks and they also have the most to lose from the degradation of marine resources. However, there are also significant opportunities. Relative to their land mass, SIDS have vast ocean resources at their disposal, which can boost economic growth and allow them to tackle unemployment, food insecurity and poverty.
- Current approaches to valuing the ocean economy could underestimate its contribution, particularly in the value of non-market goods and services, such as ecosystem benefits: protection offered by coral reefs or carbon sequestration. Improvements have been made in accounting methods and techniques, but there remain gaps in data and information required to price ecosystem benefits accurately, and at the level where the information can be used to better inform policy and investment decisions.
- Globally, the adoption of a gender equitable approach to the blue economy represents significant potential to build more stable, resilient and sustainable communities and to help address immediate food security issues and foster long-term economic growth.

Guiding questions for the dialogue

- What innovative approaches exist to foster blue economies? What more can be done?

- How do we ensure that the environmental and social objectives are incorporated into economic planning? What are some best practices of doing so?
- How do we increase our ability to conduct green accounting and ecosystem valuation to match with the current demand to produce it?
- Where are the knowledge gaps for governments, businesses and other stakeholders in making the transition to a blue economy?

6. Increasing scientific knowledge and developing research capacity and transfer of marine technology

Status and trends

- Ocean science enables us to understand the current state of the world's oceans and to detect and predict changing marine conditions that may affect human safety, the global economy, food security, and the sustainability of aquatic resources.
- Reliable and accessible scientific data, information, and technology provide an essential foundation for policy and decisions related to sustainable ocean development, as well helping to address ocean challenges related to climate change, ocean health, marine habitat loss, declining biodiversity, and growing demands for access to ocean space and resources.
- Barriers to equitable participation in ocean science must be identified and redressed to ensure meaningful engagement of all members of the global ocean community. Only then will we be able to unlock opportunities and foster a much-needed transformation in ocean science that is more diverse, equitable, and inclusive.

Challenges and opportunities

- Although there are generally ample opportunities for established governments, academic institutions, and larger non-governmental organizations to collaborate scientifically and to build and exchange capacity, opportunities for local, Indigenous, remote coastal and small islands communities, as well as civil society are lacking. Engagement of these groups at all levels of ocean science is necessary to foster effective and innovative solutions to improve the health of our ocean.
- Many developing coastal states and SIDS lack the scientific capability and technical experience to establish and operate ocean science programs, which is leaving these States unaware of the extent of, and vulnerable to, the impacts of changing ocean conditions.
- The UN Decade of Ocean Science for Sustainable Development 2021-2030 (“Ocean Decade”) is a global effort to generate the knowledge, information, and capacity necessary to develop transformative solutions to support sustainable development in alignment with the 2030 Agenda. This initiative aims to increase scientific knowledge,

facilitate capacity building and exchange, and contribute to ensuring that information and technologies are widely accessible.

Guiding questions for the dialogue

7. Implementation of international law, as reflected in the United Nations Convention on the Law of the Sea (target 14.c)

Status and trends

- Full and effective implementation of the international legal framework for the oceans, with UNCLOS at its core, is essential to achieving the conservation and sustainable use of the oceans and their resources.
- Steps have been taken at all levels to strengthen the implementation of international law, as reflected in UNCLOS, including through programmes and activities to enhance institutional and human capacities, initiatives to support the development and strengthening of national legal and governance frameworks for the oceans and their resources, and raising awareness of relevant instruments to promote their ratification and full implementation.

Challenges and Opportunities

- Data to be collected based on the approved methodology for indicator 14.c.1 will provide, for the first time, a baseline of the current state of implementation of the Convention and its implementing agreements with respect to the conservation and sustainable use of the oceans and their resources.
- Increasing participation in relevant instruments, addressing challenges of implementation, including resource and capacity constraints, strengthening intersectoral cooperation, coordination and information-sharing at all levels and developing new instruments to address emerging challenges in a timely fashion will be key elements in accelerating the implementation of efforts to achieve that target.
- Efforts to strengthen the international legal framework through the elaboration of new instruments include, in particular, the Intergovernmental Conference convened by the General Assembly to elaborate the text of an international legally binding instrument under the Convention on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. The International Seabed Authority is also developing exploitation regulations, which will provide a framework for regulating and managing exploration and exploitation of mineral resources in the Area in a sustainable manner.

8. Leveraging interlinkages between Sustainable Development Goal 14 and other Goals towards the implementation of the 2030 Agenda

Status and trends

- Gender disparities must be recognized and addressed in order to unlock innovative ideas and solutions that will support sustainable ocean use. Advancing progress on SDG5 (Gender Equality) will support SDG14 by ensuring that a diversity of views, representative of the whole ocean community, contribute to long-lasting and impactful ocean science and policy initiatives.

Challenges and opportunities

- The UN Decade of Ocean Science for Sustainable Development 2021-2030 (“Ocean Decade”) is a global effort to generate the knowledge, information, and capacity necessary to develop transformative solutions to support sustainable development in alignment with the 2030 Agenda. Canada is an active supporter of the Ocean Decade and has also established itself as a leader in advancing gender equity in ocean science and maritime sectors.

Guiding questions for the dialogue

- How can we improve the incorporation of gender considerations into science and policy initiatives supporting sustainable ocean development?
- What is the role of government in advancing gender equity in the context of sustainable ocean use?
- What are the most important gaps to address in order to advance gender equity in ocean science and policy?