UNCTAD contribution to Part II of the Report of the Secretary-General on Oceans and the Law of the Sea 2023

I. Developments related to the implementation of General Assembly resolution 77/248, 30 December 2022

1. Conservation and sustainable use of living marine resources

UNCTAD contribution to the implementation of trade-related aspects of SDG 14, building of capacities and strengthening international cooperation

Responding to paragraphs 50, 164, 173, 178, 208, 217, 218, 237, 238, 243, 294, and 300 of the General Assembly resolution 77/248, UNCTAD has continued its contribution to the implementation of trade-related aspects of SDG 14 on biodiversity, sustainable ocean economy sectors development and response measures to the marine plastics pollution challenge, sustainable maritime transport and resilience ports in particular with reference to coastal developing countries and small island developing States (SIDS); as well as on strengthening international cooperation in these areas. Relevant work, including research, technical assistance, intergovernmental dialogue, and related capacity building activities, as detailed further below, also contributes to implementation of other relevant of Sustainable Development Goals such as 2, 3, 8, 10, 12, 13 and 17.

a. The Bridgetown Covenant (2021) and the role of UNCTAD on ocean-based capacity building

The Bridgetown Covenant calls for a continued support, through policy dialogue and cooperation mechanisms, international and regional transport networks, ensuring their sustainability and resilience, and promote the conservation and sustainable use of the oceans and their resources, and to support small island developing States, most notably in addressing their specific vulnerabilities, build resilience and promote structural economic transformation and productive capacities. UNCTAD also received a new mandate to address the discharge of plastic litter and other waste in oceans and significantly reducing marine pollution of all kinds and ensuring sustainable consumption and production patterns.

b. TDB event (decarbonisation) Governing board – GA

The high-level segment of the Trade and Development Board of UNCTAD, to be held on 19 June 2023, will examine the Decarbonization opportunities and challenges in the Blue Economy. The segment will examine the central role of decarbonization for the sustainability of the ocean economy. Expert panellists will address opportunities and challenges, good practices and lessons learned in selected sectors of export interest to developing countries namely: sustainable fisheries, sustainable maritime transport, sustainable coastal and marine tourism, and ocean energy production.

c. Oceans Economy and Trade Strategies (OETS)

During the reporting period UNCTAD continued the implementation of In the context of the UNCTAD-DOALOS Development Account project on oceans economy and trade strategies. In November 2022, UNCTAD launched the publication "Swordfish Market Analysis Report Barbados" (UNCTAD/DITC/TED/2022/3). The need for a market analysis was identified in the OETS Barbados and was selected by this country as a priority for implementation. The report documents the outcomes of the investigation of the market potential (both local and export) for swordfish (Xiphias gladius). The objective of this preliminary study is to expand sustainable production opportunities available within the Barbados quota allocations for swordfish under the International Commission for the Conservation of Atlantic Tunas (ICCAT). The OETS project, aimed at building capacity in identifying oceans-based products and services in light of SDG 14 was finalised in 2022.

d. Blue BIOTRADE

UNCTAD completed the implementation of the Blue BioTrade initiative in January 2023. The project aims to promote trade and investment in marine biological resources in line with social, economic and environmental sustainability criteria, known as the BioTrade Principles and Criteria (2017 and revised in 2020). In that framework, in 2021 UNCTAD started the implementation of a regional Blue BioTrade project "Seizing the trade and business potential of Blue BioTrade products for promoting sustainable livelihoods and conservation of marine diversity in selected OECS countries (Blue BioTrade project)," which is conducted in cooperation with the Organization of East Caribbean States (OECS) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and with the financial support of the European Union through the Regional Integration through Growth, Harmonisation and Technology (RIGHT) Programme. The project's overall objective is to empower small-scale coastal producers from OECS member states to produce and trade queen conch products in domestic, regional, and international markets under the Blue BioTrade environmental, social and economic sustainability criteria, including CITES. The project focuses on OECS Member States, particularly those producers of queen conch (Strombus gigas, an appendix II CITES-listed species): Grenada, Saint Lucia and St. Vincent and the Grenadines.

The activities of the project included the country study for each of the participating OECS Member States which benefited from national and international expert advice during the peer review and validation process. In October 2022, UNCTAD released the third country case study "Blue BioTrade in Saint Vincent and the Grenadines: Developing value for the sustainable trade and production of queen conch in the Eastern Caribbean" (UNCTAD/TCS/DITC/INF/2022/8). The case study presents a value chain analysis of queen conch production in Saint Vincent and the Grenadines. It builds on a 2021 stakeholder map of the queen conch value chain of Grenada, Saint Lucia and Saint Vincent and the Grenadines (UNCTAD/DITC/TED/INF/2021/4). It is the last of three country case studies to be produced under the Blue BioTrade Project.

In response to the recommendations of the Blue BioTrade initiative in Grenada country case study and the immediate and long-term need to enable legal, sustainable and traceable trade of queen conch

through Blue BioTrade concept in this country, the Grenada Fisheries Division (GFD) and project partners jointly organised a queen conch stock assessment exercise from 17-22 October 2022. The exercise considered a two-day queen conch stock assessment workshop, held in St. George's on 17 and 18 October 2022, and a queen conch stock assessment field survey, which was carried out in Carriacou and Calliste from 19 to 22 October 2022. A report with recommendations to trade queen sustainably and a draft national plan were prepared following the stock assessment exercise.

Furthermore, CITES-FAO-UNCTAD with the OECS organised a side event in the context of CITES COP19. The event entitled "CITES and Fisheries: Partnerships for legal, sustainable and traceable trade in commercially exploited aquatic species" showcased the best practices and lessons learned from the BlueBioTrade project.

This year's theme presents an opportunity to highlight the people and organizations who are making a difference – one of which is UNCTAD whose work on the implementation of the Convention and the promotion of legal, sustainable and traceable wildlife trade in developing countries through its BioTrade, Blue BioTrade and ASYCUDA eCITES BaseSolution initiatives, has spanned over two decades and counting.

On 3 March 2023, the main outcomes of the Blue BioTrade project were showcased in the event "Partnerships for Wildlife Conservation", organised in line with the World Wildlife 2023 Global Event. The event was organised by CITES, UNCTAD and other organisations to commemorate the work that CITES does and the collaborative work and partnerships for conservation that is going on at the local, national, and global level. UNCTAD, through its Blue BioTrade project contributes to the implementation of the Convention and the promotion of legal, sustainable and traceable wildlife trade in developing countries.

Phase 2 of the Blue BioTrade Project was officially announced by the Caribbean Biodiversity Fund (CBF) at the 2022 UNOC. CBF has pledged $600,000, which will ensure the implementation of priority actions under the UNCTAD-OECS BBT Action Plan for the queen conch as well as support the analysis of other potential value chains such as sargassum and sea moss.

e. Addressing marine plastic pollution and the role of plastic substitutes

Approximately, 76 per cent of all plastic produced becomes waste with – unfortunately, its global trade also continues to grow (valued at $1.2 trillion in 2020). UNCTAD has led policy and economic research on the identification of plastic substitutes, meaning nature abounds in sustainable materials (e.g., algae, bamboo, banana plants bagasse, and agricultural wastes) that could be used to make eco-friendly versions of the plastic products we consume daily. Plastics substitutes can reduce plastic pollution by around 17 per cent by 2040 whilst enabling local sustainable production. The world traded about $388 billion in plastics substitutes in 2020. While this is already a sizeable market, it's just one third the amount traded in plastics made from fossil fuels. So, there is huge potential for growth. Two thirds of global exports of plastic substitutes are in the form of raw materials that many developing countries have in abundance.

Dialogue and capacity building related to opportunities and the potential of plastic substitutes were presented in UNCTAD-WTO workshop titled "Workshop on sustainable and effective substitutes and

alternatives for plastics" in December 2022. The potential trade related measures to address plastic pollution was presented to UN Member States in a UNCTAD submission to the Second Session of the Intergovernmental Negotiating Committee on Plastic Pollution (IN-2) in January 2023. UNCTAD has also organised side events on the implementation of the so-called Basel plastic waste amendments at the Basel, Rotterdam, and Stockholm Conventions COPs and on the role of trade measures in the future instrument against plastic pollution at the INC 2 in May 2023.

f. Making available oceans trade knowledge and data

UNCTAD has developed a dataset on Ocean Trade which is now available in the UNCTADstat Data Center. The database includes data on trade flows on goods and services sectors of the ocean economy, as identified by UNCTAD's sustainable ocean economy (SOE) classification for tradable goods and services. The classification features three categories: goods, services, and energy. The classification and the dataset contribute to enhancing understanding on the ocean economy's reach and importance (including sizes and related trade flows) at the national, regional, and global level. The database was updated in 2022 to add 2020 trade flow data.

g. Strengthening international cooperation

UNCTAD has also cooperated in joint capacity building activities with an online course titled "Trade and the blue economy: Caribbean case studies" organised from 27 March to 1 April 2023 with the University of West Indies; the Shridath Ramphal Centre; International Trade Law, Policy and Services; Newcastle University; UNDP; FAO; UNEP; Joint SDG Fund; United Nations Barbados and the Eastern Caribbean.

h. Support to sustainable fisheries and mariculture development in the context of the Blue Economy support in Angola and in Haiti

UNCTAD has been providing support to the sustainable use of living marine resources in the framework of the EU-UNCTAD Joint Programme for Angola: Train for Trade II for Angola, and in the context of two complementary UN Joint Programmes (UNJPs) implemented in Haiti, namely the UNJP National SDG Financing Framework implemented jointly with UNDP, and the UNJP *Global Crisis Emergency support for Haiti: sustainable trade and value chain development for diversification of the economy, improved working conditions, rural employment creation and food security*, implemented jointly with the International Labour Organization (ILO).

In early 2022, UNCTAD published a report entitled Harnessing fishery resources for socioeconomic development: Lessons for Angola and Haiti that serves in supporting the development of fisheries and aquaculture in developing countries more broadly, and learning from and providing recommendations for Angola and Haiti in particular. In the case of Angola, the publication supplements earlier findings and conclusions by examining the potential, opportunities and challenges facing the country in maximizing its fisheries and aquaculture resources. The publication particularly draws operational and policy lessons from the successful experience of Chile in developing an industrial-scale salmon sector and provides policy recommendations for action on how to develop fisheries and aquaculture. In the case of Haiti, the study calls for an improved public policy, legislative frameworks and their implementation, and incentives to

garner the potential of this industry to contribute to the livelihood of coastal communities while improving the food security of the Haitian population and generating export earnings.

In Angola, fisheries and aquaculture are seen as a sector of major potential for sustainable diversification of the economy and exports for the country, especially through increased value addition. The potential was highlighted in a National Green Export baseline study on various green sectors of Angola in 2018. To promote the Blue Economy's potential in Angola, in October 2022, UNCTAD organized a Training workshop on the Blue Economy, with a focus on fisheries sector development and meeting international standards for fisheries exports training workshop for over 100 Angolan fisheries and aquaculture sector stakeholders, basing on the UNCTAD Training Manual: Building capacity in the LDCs to fully harness the potential of fisheries and aquaculture, which was adapted to the Angolan context and translated into Portuguese, and provides key tools for the further development of fisheries and aquaculture in Angola. The training included ahead-of-the curve capacity building in fisheries and aquaculture development, with experts coming from UNCTAD, UNCTAD's Center of Excellence Nha Trang University in Viet Nam, ISO, Marine Stewardship Council and FAO. During the workshop, dedicated working groups discussed the key topics to allow for better value addition in the Angolan fisheries sector and came up with detailed recommendations for next steps in the areas of (I) Conducive Environment for Fisheries and Aquaculture Development and Exports; (ii) National Quality Infrastructure (including SPS, Technical Barriers to Trade (TBT), and food safety); (iii) Marine Spatial Planning as a tool to manage the Blue Economy; as well as (iv) International Sustainability Standards and Certification.

The rapid and comprehensive strengthening of the Angolan National Quality Infrastructure (NQI) to allow for improved food safety, quality and value addition in fisheries emerged as a major recommendation of the October 2022 training workshop. To help implement the recommendation, UNCTAD organized a Joint UNCTAD-ISO training workshop on National Quality Infrastructure for the Angolan agrifood sector, with a focus on fisheries, tropical fruits and coffee in May 2023. In addition to providing hands-on training and capacity building on the topic to the Angolan fisheries sector authorities, private sector entities, universities, industry associations and cooperatives, the workshop helped the participants to develop a SWOT analysis and a rapid assessment of the Angolan NQI focusing on the agrifood sector, as well as to prepare an action plan on how to strengthen the system such that safe and high quality fisheries products can be produced for the national market and for exports from Angola. These outcome documents will provide essential, substantive input to the ongoing process of developing a National Quality Policy for Angola. An article was produced to provide visibility for the Blue Economy support work done by UNCTAD in Angola, entitled Angola casts net wider to scale up fish exports.

In Haiti, UNCTAD prepared two studies focusing on the potential of the fisheries and aquaculture sector to generate revenues for SDG financing, once the sector's productive capacities have first been upgraded. UNCTAD also prepared a detailed gaps assessment of the gaps and potential in the policies, legal frameworks, institutions and productive capacities in three priority zones for fisheries development in Haiti. Based on this, a budgeted needs assessment was drafted, to provide the basis for the development of a comprehensive fisheries and aquaculture support programme in Haiti, in line with the holistic programme model. Technical support was provided for the establishment of a fisheries and aquaculture

sector coordination mechanism involving the key partners of the Government, private sector, universities and higher education institutes, as well as the civil society. In addition, a study on "*International fisheries access agreements: challenges and opportunities*" was prepared, showing that past and ongoing fisheries access agreements are very diverse, with modalities and outcomes that vary from case to case, depending on the parties to the agreement, their political and economic relations, the fish species, the fishery, and gear type. The study recommended ensuring that fisheries access agreements respect conservation and management measures; ensuring transparent and equitable fisheries access agreements; eliminating subsidies that enhance overcapacity and overfishing; eliminating unsustainable and illicit practices and trade; policy coherence between domestic and distant waters fisheries; aligning fisheries access agreements with the 2030 agenda for sustainable development and building institutional and technical capacity. The study will support the Haitian Government in future negotiations for international fisheries access agreements, with a view to ensuring an optimal balance of benefits deriving from such agreements.

2. Climate Change impacts and adaptation

UNCTAD contribution to the implementation of climate change-related aspects of GA resolution 77/248 and related SDGs

Responding to key issues highlighted in paragraphs 11, 20, 36, 212-223, 309 and 383 of the General Assembly resolution 77/248, and with special reference to para. 243, UNCTAD has continued its work on addressing the impacts of climate change and extreme weather events on seaports and other critical coastal transport infrastructure and assist in the development of adaptation response measures, in particular with reference to small island developing States (SIDS); as well as on strengthening international cooperation in the interrelated areas of DRR, Climate Change Adaptation and Development.

UNCTAD has been working on implications of climate change for maritime transport since 2008, with increasing focus on climate change adaptation and resilience-building for seaports and other key coastal transport infrastructure, particularly in SIDS (https://SIDSport-ClimateAdapt.unctad.org). This work responds directly to UNCTAD's express related mandate in the Maafikiano (paras. 55 (l) and (k)) as reconfirmed in the Bridgetown Covenant (paras. 5 and 127 (v)(iii)) and contributes to implementation of a number of SDGs/targets (e.g. 1.5, 9.1, 9.a, 11.b, 13.1, 13.2 and 13.3, 14.1, 14.2, 14.5, 14.7, 14c, 17) as well AAAA, SAMOA Pathway, Paris Agreement (Art. 7) and Sendai Framework (all targets, especially (b)-(f)).[1]

a. Key issues, related capacity building for policymakers and stakeholders

Ports and related coastal transport infrastructure in SIDS are particularly affected by the impacts of climate variability and change. Rising mean sea levels, increased frequency and intensity of extreme storm

[1] For more information about UNCTAD's related work, see the UNCTAD website and UNCTAD contributions to the Report of the Secretary-General on Oceans and the Law of the Sea in 2020 (Part I and Part II), 2021 (Part II) and 2022 (Part II).

surges and waves, precipitation, droughts and/or river floods and increased mean temperatures as well as extreme temperature variability, constitute some of the climatic changes that pose serious threats to seaports and related coastal transport infrastructure and operations. Associated risks, vulnerabilities and costs may be considerable, in particular for ports and other key coastal transport infrastructure in developing regions, with low adaptive capacity, such as in SIDS. Critical coastal transport infrastructure in these countries, notably ports and airports, are lifelines for external trade, food and energy security, as well as tourism, and in the context of DRR. However, these assets are projected to be at high and increasing risk of coastal flooding, from as early as in the 2030s, unless effective adaptation action is taken.

With international shipping responsible for around 3 per cent of global GHG emissions, its decarbonization continues to be an urgent priority that needs to be addressed in order to achieve the ambitions of the Paris Agreement, which include 'pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels', by 2100 (Art. 2(1)(a)). However, as highlighted in the IPCC 6th Assessment Report (AR6), this threshold is likely to be reached by 2040, or earlier, if emissions are not slashed in the next few years, giving rise to rapidly growing risks of increasingly extreme heatwaves, droughts, and flooding that could have devastating consequences. By the end of the century, according to best estimates, global warming of 2.7°C is considered 'very likely' in the intermediate emissions scenario and could range from 3.3°C–5.7°C in the very high GHG emissions scenario. Implementation of existing policies and pledges will only reduce this to a 2.4-2.6°C temperature rise by 2100 (UNEP, 2022). Against this background, accelerated action on mitigation is becoming a matter of increasing urgency, as is effective action on adaptation, including for ports.

Weather and climate-related economic losses can be extensive both in terms of infrastructure damage but also – and maybe more importantly - in terms of operational disruptions and delays which have important knock-on effects throughout global supply chains and can jeopardize the development gains and prospects of those at greatest risk. According to one recent estimate (Verschuur, et al., 2023), port-specific risk from natural hazards at present totals US$ 7.5 billion per year, with 32% of the risk attributed to tropical cyclone impacts.[2] However, economic losses can be crippling, particularly in regions affected by tropical cyclones, related storm surges and waves, such as SIDS (Monioudi et al., 2018), with a single extreme event often causing damages and losses amounting to a significant share or a multiple of GDP. Hurricane Dorian (2019) caused estimated losses of US$3.4 billion for the Bahamas alone (IDB, 2020), with a large fraction of these damages/losses associated with transport infrastructure; and Hurricane Sandy (2012) caused over US$60 billion losses in New York, New Jersey and Connecticut (Strauss, et al., 2021), including extensive damage and a week-long shut-down of the US New York/New Jersey container port.

The costs of future damage, delay and disruption are difficult to quantify but could be uninsurable and have major implications for global trade and development, making averting, minimizing and mitigating future loss and damage a key priority. By 2100, global average annual storm damages to ports alone have been estimated at roughly US$ 3 billion, with additional annual damages and port disruption costs projected to be up to US$ 25.3 billion (EDF, 2022). Another recent study estimates that by 2100, the total

[2] An additional US$ 63.1 billion of trade is estimated to be at-risk every year, with trade risk as a fraction of total trade being particularly high in SIDS.

value of assets exposed to episodic coastal flooding could increase to 12 – 20 % of the global GDP, if no adaptation measures are taken (Kirezci et al., 2020).

In the light of long infrastructure lifespans and the cost of inaction, the need for effective response measures is becoming increasingly urgent; for developing countries - often at the frontline of impacts but with low adaptive capacity and facing a worsening debt crisis - better availability and access to infrastructure adaptation finance, including in the form of grants rather than loans will be critical. This issue has been highlighted by UNCTAD member States in the Bridgetown Covenant (at para. 87) and was the subject of a recent UNCTAD policy brief with a focus on ports and other key transport infrastructure assets.

With estimated adaptation costs in developing countries five to ten times greater than current public adaptation finance flows (UNEP, 2022),[3] ensuring related investment and funding is adequate will require a major collaborative effort by policymakers and development partners and a shift in focus. According to OECD, 2022, in 2020, total climate finance provided and mobilised by developed countries for developing countries amounted to US$ 83.3 billion in 2020, over 70% of which in the form of loans. Of this total, just US$ 28.6 billion (34%) was for adaptation, and only a fraction of this amount will have been targeting climate change adaptation for ports and other critical coastal infrastructure. In the light of what is at stake, resilience-building, adaptation and DRR for ports and other critical transport infrastructure assets should be considered a most valuable investment for a sustainable future. According to WB estimates (Hallegatte et al., 2019), overall net benefits of investing in resilient infrastructure in developing countries could amount to US$ 4.2 trillion over the lifetime of new infrastructure – a US$4 benefit for each dollar invested in resilience.

Related issues were also discussed at UNCTAD's Multiyear Expert Meeting on Transport, Trade Logistics and Trade Facilitation in July 2022, as part of a dedicated session focusing on Strengthening legal, policy and collaborative approaches to keep trade flowing during the pandemic and beyond, where a number of important technical guidance by the European Commission, as well as by the World Association for Waterborne Infrastructure (PIANC) and the recent OECS CCASAP were presented and discussed. In response to a request by the OECS Commission, reiterated at this meeting for technical assistance based on earlier project on Climate change impacts on coastal transport infrastructure in the Caribbean: enhancing the adaptive capacity of Small Island Developing States (SIDS) (UNDA 1415O), collaboration on a related project has been included in the OECS-UN joint workplan for 2023. Related funding, however, remains to be secured.

Also worth noting in this context is the upcoming Global Supply Chain Forum with a special focus on SIDS, in May 2024, organized by UNCTAD in collaboration with the Government of Barbados, which among other key issues will address climate change adaptation, resilience-building and DRR for ports. Relevant outcomes are expected to inform, among others the discussions at the SIDS Conference to be held later in 2024, as well as a number of other intergovernmental meetings.

[3] Estimated annual adaptation needs are USD 160-340 billion by 2030 and USD 315-565 billion by 2050.

b. Strengthening international cooperation

UNCTAD work on issues related to climate change adaptation, resilience building and DRR for transport infrastructure, benefits from close cooperation and synergies with a wide range of partners, and with a multidisciplinary network of collaborators, including international and regional academic experts, among others (see e.g. https://SIDSport-ClimateAdapt.unctad.org).

UNCTAD collaborates with other UN Agencies in the context of UN-OCEANS, UN-DRR (including in the development and implementation of recommendations of the SLG on DRR for Resilience), as well as in the context of the UNFCCC (eg contributions to the *6th Workshop, Glasgow–Sharm el-Sheikh Work Programme on the Global Goal on Adaptation*, and the 1st workshop on loss and damage) and the ongoing work of the Marrakech Partnership for Global Climate Action. Relevant engagement in support of dialogue and consensus building on oceans and climate action during the UNFCCC COP 27 in Sharm El Sheikh and SB 58 (Bonn) include contribution to and co-organization of a number of side events including:

- The power of inter-agency cooperation to scale up ocean-climate action: Case studies, challenges and opportunities, organized by UN-Oceans Members including IOC-UNESCO, UN/DOALOS, UNEP, UNFCCC in partnership with IAEA, FAO, UNCTAD, UNESCAP and WMO, on 12 November 2022 (online and in Sharm el Sheikh, Egypt);
- Producing future marine fuels - Opportunities for scaling up renewable energy production in developing countries, organized by IMO, UNCTAD, IRENA and the World Bank, on 10 November 2022 (online and in Sharm el Sheikh, Egypt);
- Promoting resilience and sustainability of transport systems in Landlocked Developing Countries, organized by UNCTAD, UN-OHRLLS and the Republic of Botswana, on 9 November 2022 (online and in Sharm el Sheikh, Egypt)
- How combatting plastic pollution and illegal traffic in plastic waste can help reduce carbon emissions?, organised by UNCTAD, BRS Conventions Secretariat, UNODC and UNEP on the 10 November 2022 in Sharm El-Sheikh, Egypt.
- A blue transformation to achieve Paris Agreement goals, organised by UNCTAD, FAO and AU-IBAR, at the virtual Ocean Pavilion 2022, live day on aquatic food on the 14 November 2022 (online and Sharm El-Sheikh, Egypt)
- Cutting transport emissions and adapting to climate change with infrastructure: Insights from building the Trans-European Transport Network, EU Side event at COP 27, 17 November 2022, Sharm El-Sheikh, Egypt
- Bonn Climate Change Conference (SB58) side event: Options for Scaling Climate Finance – Exploring Article 2.1c, the NCQG and JETPs, 6 June 2023 - 6 June 2023

In addition, UNCTAD continues to collaborate extensively with the UNECE Group of Experts on Climate Change Impacts and Adaptation, which had first been established in 2011, following a joint UNCTAD-UNECE workshop on the issue.

Also, worth noting is UNCTAD's ongoing research and capacity-building on legal and regulatory issues including a recent report on COVID-19 and International Sale of Goods: Contractual devices for

commercial risk allocation and loss prevention and a dedicated chapter as part of UNCTAD's annual Review of Maritime Transport, as well as its engagement in a range of different fora. This includes collaboration with the IMO, including in respect of work at the MEPC on greenhouse gas emissions mitigation and control, as well as at the Legal Committee on combating fraudulent registration of ships (including through active participation in a related study group), as well as bunker oil pollution and liability issues (see paras. 182 and 257 of GA resolution 77/248); collaboration with ILO, IMO and WHO on a broad range of seafarers' issues, in particular on the crew change crisis, including as part of the UN inter-agency Task Force on the impact of COVID 19 on seafarers; as well as cooperation with UNCITRAL in relation to work at UNCITRAL Working Group VI on the preparation of a new legal instrument on 'Negotiable Multimodal Transport Documents'.

3. Other important developments and issues with regard to ocean affairs and the law of the sea

Relevant developments in trade-related aspects of SDG 14

a. The Trade and Environment Review 2023: Building a Sustainable Ocean Economy

The UNCTAD's Trade and Environment Review (TER 2023) launched at the UN Trade Forum on 08 of May 2023. The TER 2023 offers a state-of-the-art compendium of current international trends, regulatory developments, their trade and development impact and significance in the achievement of SDG 14 (Life below water), especially for coastal developing countries and Small Island Developing States (SIDS). Key messages of the TER 2023 for UN Members and the ocean economy community include:

- In 2020, the **export value of ocean-based goods and services was $1.3 trillion**, which represented about 6 per cent of global trade (total global trade in 2020 was $23 trillion) and demonstrates their importance as a key tradable cluster. COVID-19 impacted ocean-based services much more negatively than ocean-based goods, but recovery is expected despite multiple subsequent and overlapping global crises.
- **Interconnected global crises** – in the environment (climate change, biodiversity loss and plastic pollution); health (COVID-19) and geopolitics (war in Ukraine) has shown the potential and resilience of some ocean economy sectors (particularly in goods) in the face of crises as well as the extreme vulnerability of others to such shocks, directly impacting the lives of those depending on it.
- **The years 2022-2023 were a pivotal for the ocean** as it kicked off key multilateral action on ocean governance and conservation including a WTO Agreement on Fisheries Subsidies, a new mandate, and the beginning of negotiations for a legally binding instrument to end plastic pollution, as well as agreement on a draft text for a treaty on Biodiversity beyond National Jurisdiction, which, as noted by UNCTAD could provide major benefits for the protection and sustainable use of marine biodiversity, including access and benefit sharing for developing countries, if and when it becomes

effective. Ensuring that these agreements are adopted, ratified, and commitments are kept and implemented will contribute towards the reversal of the ocean's declining health and promote sustainability in the use of its resources.

- Resilience-building efforts coupled with institutional capacity-building initiatives could lower impacts from shocks and speed up recovery from the negative effects of the COVID-19 pandemic, particularly in coastal developing countries and SIDS. Two growing sectors, **seaweed trade and plastic substitutes**, were identified as levers for innovative and sustainable ocean economy recovery and for the creation of opportunities for sunrise investment, blue jobs, and supply-side diversification.
- Conceptualised from about 75 recommendations from the 4th UN Oceans Forum and the 2nd UN Ocean Conference in 2022 (UNOC2022), the UNCTAD-led coalition [4] recommends urgently bridging the gap in ocean finance through a Blue Deal that benefits all. This will enable (e.g., through the Official Development Assistance) dedicated long-term investment for the creation of scientific capacities, development of ocean-based innovations and bridging the digital divide that could enhance production and distribution of sustainable ocean economy goods and services.

b. Phasing out harmful fisheries subsidies

After more than 20 years of negotiations, WTO members finally reached an agreement to prohibit certain forms of fisheries subsidies at the 12th WTO Ministerial Conference (MC12) on 17 June 2022. The WTO Agreement on Fisheries Subsidies is a standalone landmark treaty (inserted to Annex 1A [5] of the Marrakesh Agreement Establishing the WTO) that seeks to address the depletion of marine resources caused by the public financing unsustainable fishing practices. The core obligations of the agreement are a set of prohibitions to subsidies that contribute to:

- Illegal, unreported, and unregulated fishing (IUU) fishing;
- Fishing and related activities on stocks recognized as in overfished status;
- Fishing in unregulated high seas beyond the jurisdiction of coastal or non-coastal states and of relevant Regional Fisheries Management Organizations or Agreements (RFMO/As).

These prohibitions are subject to certain exceptions and limitations as well as special and differential treatment for implementation by developing countries and LDCs. While the agreement bans the most outrageous forms of fisheries subsidies, a crucial area where consensus was not reached was the need to discipline subsidies that contribute to overcapacity and overfishing. Lack of regulation on this type of subsidies is a significant gap as they can include support to certain operational and capital costs that directly enhances fishing capacity.

[4] UNCTAD with the Food and Agriculture Organization (FAO), the UN Environment Programme (UNEP), the Commonwealth Secretariat, the Organisation of African, Caribbean and Pacific States (OACPS), the Development Bank of Latin America (CAF) and the International Ocean Institute (IOI).

[5] Annex 1A on the WTO's Multilateral Agreements on Trade in Goods. For full text, see https://www.wto.org/english/docs_e/legal_e/05-anx1a.pdf

UNCTAD is supporting with analysis on the implications and implementation challenges of the WTO fisheries subsidies agreement, particularly for developing countries in the Trade and Environment Review (TER 2023).

Relevant developments in maritime transport

Maritime transport and trade are thus evolving in complex global economic environment and being buffeted by cascading disruptions. But they are also being reshaped by other global factors that can trigger structural shifts. These include climate change and the energy transition, the need for sustainability and resilience, as well as increasing role of digitalization and e-commerce.

As reported in the UNCTAD Review of Maritime Transport 2022 and 2023, maritime trade recovered in 2021 but faced complex operating environment fraught with risk and uncertainty in 2022 and early 2023. After a recovery of 3.2 per cent in 2021 with volumes returning to 11 billion tons in 2021, international maritime trade is estimated to have contracted marginally in 2022. In 2022, shipping and trade continued to be confronted to the challenges arising from the prolonged COVID-19 pandemic, the unprecedented logjam in global logistics caused by a large upswing in demand and acute shortages of capacity on the supply, particularly in the first half of 2022, and the disruption, especially for grain and energy trade caused by the war in Ukraine. Other factors have also exacerbated uncertainty and dimmed growth prospects spanning from increased inflation, a slow-down in China's economy, weaker global demand and macroeconomic. While container shipping and dry bulk trade normalized since 2022, oil and gas trades picked up speed, reflecting the post-pandemic recovers in demand for fuels and changing energy trade patterns triggered by the war in Ukraine. Trade in ton-miles increased as the Russian Federation, faced with economic and other restrictive measures, sought alternative markets, while European importers looked for other sources of supply. For 2023, UNCTAD projects maritime trade growth to recover moderately and expand by 2.1 per cent over the previous year.

On the supply side, the global commercial fleet grew by 3.2 per cent in 2022, a lower rate compared to historical average of over 5 per cent between 2005-2023. The age profile of the global fleet is an important trend to monitor given related implications for fleet renewal, recycling patterns, and consequently, the ability to comply with global environmental regulations such as the IMO's Energy Efficiency Existing Ships Index (EEXI) and Carbon Intensity Indicator (CII) requirements which came into force on 1 January 2023. At the start of 2023, the world shipping fleet averaged 22.2 years of age. The global fleet was two years older in 2023, on average, compared to a decade before with more than half being over 15 years of age. The EEXI and CII aim to reduce maritime greenhouse gas emissions and the environmental impact of ships. The most immediate way to reduce emissions is slow sailing. But ship owners can also retrofit their ships with energy-efficient technologies, or to use alternative fuels such as LNG, methanol, ammonia, or electricity, or make operational changes. This will drive up costs and affect insurance coverage, as well as future access to investment and capital. Alternative fuels currently cost two to five times as much as conventional fuel so are not yet commercially viable. Fleet owners can, however, keep their options open with dual-fuel vessels. At the start of 2022 one third of the orderbook by gross tons was alternative fuel capable, and the trend continued with this share exceeding 47 per cent in April 2023. The alternative fuel capacity on order increased since the pandemic and by March 2023, over 40 per cent of the orderbook

consisted of ships capable of running on one or more fuels. To scale up the use of alternative fuels, low-emission energy supply infrastructure will be required including at ports.

Shipping cannot decarbonize on its own. Action across an ecosystem involving shipping and the energy sector and bringing together the broader industry that includes not only carriers but also ports, manufacturers, and shippers, investors, energy producers and distributors is crucial. This is recognized in the Clydebank Declaration of COP26 pledging to establish green shipping corridors, i.e., routes that leverage collaboration across multiple stakeholders operating or involved in activity between two ports. The aim is to offer bunkering options for vessels running on low or zero-carbon fuels, test various solutions and support first movers in their efforts.

The outlook for maritime transport and trade is challenging as the sector remains at risk in a stressed economic and geopolitical climate with many risks interacting in complex ways and across different timeframes and horizons. Efforts to implement sustainable, low-carbon, smart and resilient maritime logistics including shipping and ports is of the essence. UNCTAD has a critical role to play in supporting countries to achieve their energy, decarbonization and digitalization transport. UNCTAD's work on sustainable and resilient shipping and ports articulated around its three pillars of work, namely research/ analysis, consensus building/intergovernmental machinery and capacity building/technical assistance should be continued and strengthened.

Low or zero carbon shipping and ports requires a realignment of the shipping fleet and operations to ensure that the industry can meet the carbon reduction targets. Carriers are facing the need to renew the global and transition to a low carbon path amid high uncertainty and lack of visibility about the best future fuel and green technologies for ships. Today, vessels can be too old to retrofit and too young to scrap while winning alternative propulsion systems, engines and fuels remain elusive. Therefore, achieving timely and meaningful progress requires that the ongoing uncertainty among shipping actors be mitigated including by clarifying as soon as possible the shipping decarbonization regulatory framework while bearing in mind that the transition will entail changes in shipping, trade and energy. For instance, a recent UNCTAD report assessing the impact of the short-term measure agreed in 2021 at the International Maritime Organization (IMO) found that this measure could translate into potential changes affecting ship costs, ship travel distance, fleet distribution, routing patterns, use of different types of vessels and may lead to increases in maritime logistics costs. In 2023 and at the request of the IMO secretariat, UNCTAD carried out a preliminary expert review of the technical and economic elements, and their possible combinations, of the proposals for IMO candidate mid-term GHG reduction measures. The review and the simulation model used to predict the potential impacts on the economic output and trade have shown that, on a global level, the three transport cost increase scenarios i.e. low, median and high scenarios exhibit changes in trade flows, with a slight increase of over 1 per cent on average, corresponding to a smaller real GDP impact of less than 0.1 per cent. Larger increases in maritime logistics costs are found to result in larger reductions in both trade and GDP. GHG reduction measures in shipping are expected to translate into higher fuel charges which in turn, translate into higher trade costs. These results offer a glimpse of the potential impact of decarbonization measures on trade and GDP, provided the measures' impact on maritime logistics costs can be estimated.

a. Capacity building and consensus building activities

UNCTAD is already carrying out a range of activities aiming at supporting developing countries address the many challenges hindering the sustainability and resilience of their maritime transportation systems including shipping and ports. Underpinned by its three pillars of work, namely Research and Analysis (including data compilation and statistics), Consensus Building/intergovernmental machinery/forum for policy debate and expert discussions, Technical Assistance and Capacity Building, UNCTAD contributes significantly to advancing the sustainable, low-carbon and resilience maritime transport agenda.

Main findings of relevant research work focusing on maritime transport issues are disseminated through regular reports, such as the UNCTAD annual Review of Maritime Transport (RMT), the UNCTAD Quarterly Transport Newsletter, which is received by thousands of subscribers from government, industry, academia and relevant IGOs, including from within the UN-system as well as non-recurrent topical reports and publications. UNCTAD's research on maritime transport and logistics issues taps into synergies and collaboration with academia and research institutions.

UNCTAD participates actively in relevant events and fora to advance sustainable and resilient shipping. These includes dedicating pre-events/side events to this important topic during its quadrennial ministerial conference (e.g., UNCTAD XIII in Doha, UNCTAD XIV in Nairobi, UNCTAD XV in Barbados); global policy debates such as the UNFCCC Conferences of the Parties. UNCTAD has dedicated various expert meetings over recent years to the topic of sustainability and resilience maritime transport and related implications for developing countries, in particular the SIDS. These include sessions of the UNCTAD Multi-year expert meeting on transport, trade logistics and trade facilitation (2014, 2015, 2017, 2018, 2019, 2020, and 2022).

b. Coordination and cooperation

UNCTAD has been strengthening its partnerships and network to leverage expertise, knowledge, data, and support to inform work on sustainable and resilient shipping. It enhanced collaboration and partnerships with varied partners (e.g. UN agencies such as UNDESA, UNESCAP, UNESCWA; UNECA, UNECLAC, IMO); Academia and research institutions (e.g., World Maritime University, Korea Maritime Institute, University of Antwerp, University of South Pacific); Think-tanks and multi-stakeholder grouping (Global Maritime Forum and Getting to Zero Coalition; SLOCAT, ICS, IAPH, Sum4All); and development banks (e.g., World Bank and Islamic Development Bank).

For example, UNCTAD has been collaborating with other like-minded organization through, inter alia: the World bank Sustainable Mobility for All (SuM4All) and more specifically the efficiency stream which includes energy efficiency. UNCTAD has also been collaborating with World Bank to develop a joint global transport costs database for public use, compiling and estimating transport mode-specific trade data and leveraging the recent upgrade of the United Nations Commodity Trade Statistics database (UN Comtrade Plus). This includes data relating to SIDS. Maritime transport costs have gained further relevance in view of on-going debates at the IMO on greenhouse gas reduction measures. As data on maritime transport costs needed for impact assessments of such measures is often incomplete, compiling and estimating

these data especially for SIDS can enable better informed impact assessments and support the decision-making process at the IMO.

In 2022, a new joint UNCTAD-ESCAP project entitled "Analysis of maritime connectivity in ASEAN and Pacific SIDS" was launched with the objective of analysing global and regional trends in maritime connectivity with a view to providing valuable inputs to policy discussions at national and sub-regional levels. The ultimate goal is to improve maritime connectivity in ASEAN and Pacific SIDS. An analytical paper has been prepared and several meetings have been held, including for the Pacific SIDS.

In 2023, UNCTAD continued its work with the IMO and carried out another assessment of the potential implications of the medium-long term decarbonization measures being negotiated at IMO. In 2020 and 2021, as mentioned earlier, UNCTAD contributed expert advice and substantive input into IMO's mandated assessment of the potential impact on States of the proposed short-term IMO GHG reduction measure. This entailed carrying out a thorough evaluation of the potential impact on States of the proposed IMO short-term GHG measure before the adoption of relevant amendments by the IMO Marine Environment Protection Committee (MEPC) in June 2021. Guidance and expert knowledge provided by UNCTAD has helped inform deliberations under the IMO MEPC which, in 2021, approved short-term measures aimed at curbing carbon emissions from shipping while bearing in mind the special needs of vulnerable economies in particular SIDS.