Template for IPWG 8 inputs

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

The co-conveners of the IPWG 8 kindly request its members to provide information relevant to the drafting of the concept paper on "Leveraging interlinkages between Sustainable Development Goal 14 and other Goals towards the implementation of the 2030 Agenda" including suggested key questions for the interactive dialogue on this topic and some key recommendations on how build on these interlinkages. Please use the following template for your input(s).

In preparing your responses, please keep in mind that the overarching theme of the 2020 UN Ocean Conference is: "Scaling up ocean action based on science and innovation for the implementation of Goal 14: stocktaking, partnerships and solutions". It is suggested that your input should accordingly highlight the theme of the Conference in its various aspects as necessary.

Kindly also note that issues related to means of implementation, in particular capacity-building and financial resources, are considered cross-cutting and therefore should also be discussed in your response to the extent possible.

Name of Member	
Agency/organization	UNCTAD
1. Give an analysis on what are some of the interlinkages between SDG 14 and other SDGs?	Sustainable and climate-resilient transport, including maritime transport, is key to sustainable development (a matter recognized inter alia by UNGA Res 69/213 (19 December 2014) and, therefore, is among the cross-cutting issues, of relevance for achievement of progress on several of the sustainable development goals and targets. These include not only Goal 14, but also, for instance, Goal 9, Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation; Goal 13, Take urgent action to combat climate change and its impacts; as well as Goal 1, End poverty in all its forms everywhere, in particular target 1.5, Build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.
2. What are some ways in which these synergies/interlinkages that can be leveraged?	Such synergies can be leveraged, among others, through enhanced international cooperation, multidisciplinary partnerships, increased statistics and data to support the 2030 Agenda, as well as capacity development coordination mechanisms for the various SDGs, at the national level.
3. What are some of the ways in which your organization has taken steps to leverage these	Climate change adaptation for coastal transport infrastructure - Interlinkages between Goals 9, 13, 14 As part of its work, UNCTAD has been analysing interlinkages between ocean issues, climate change mitigation and adaptation, and

interlinkages? What was the impact?

sustainable development. For people living on the coasts, the link between climate change and the ocean is clearly present, including in terms of sea-level rise and extreme weather events, changing weather patterns, rising ocean temperatures and related impacts on fisheries, tourism and coastal infrastructure. An important part of UNCTAD's related work focuses on the implications of climate change for maritime transport, with special emphasis on climate change impacts and adaptation for ports and other key coastal transport infrastructure.

With an estimated 80 per cent of the volume of world trade carried by sea, international shipping and ports provide crucial linkages in global supply chains and are essential to enable all countries, including those that are landlocked, to access global markets. Ports are likely to be affected directly and indirectly by climatic changes, such as rising sea levels, extreme weather events and rising temperatures, with broader implications for international trade and for the development prospects of the most vulnerable nations, particularly the least developed countries and small island developing States. Given the strategic role of seaports and of other key transport infrastructure as part of the global trading system and the potential for climate-related delays and disruptions across global supply chains, enhancing the climate resilience of key transport infrastructure is a matter of strategic economic importance and one in respect of which UNCTAD research and technical assistance work, as well as the outcomes of a series of UNCTAD expert meetings since 2008, have helped to raise awareness and advance the international debate (for further information, see unctad.org/ttl/legal).

Recent UNCTAD work in support of climate change adaptation fo coastal transport infrastructure has included technical assistance an capacity-building with a focus on key coastal transport infrastructure i Caribbean small island developing States, using innovative methodological approaches (for further information and fu documentation, see https://SIDSport-ClimateAdapt.unctad.org). Ke project outcomes include the assessment of potential operational disruptions and marine inundation risk to eight coastal international airports and seaports of Jamaica and Saint Lucia under different climat scenarios, as well as a transferable methodology to assist in adaptation planning for small island developing States in the Caribbean and beyond. Some of the main substantive findings and technical details of the methodology developed under the project have undergon scientific peer-review and have resulted in the publication of an original research paper (Monioudi et. al, Regional Environmental Change 2018 which has informed the IPCC report on 1.5 degrees ("Impacts of 1.5 9 global warming on natural and human systems"), as well as the as we as the IPCC 2019 Special Report on Ocean and Cryosphere (Ch. 4 and 5) highlighting substantial increases in risk to critical coasta transportation infrastructure in Saint Lucia and Jamaica from climat changed-induced marine inundation as early as in the 2030s, unles further climate change adaptation is undertaken. Relevant substantiv findings are also reflected as part of the UN report World Economi Situation and Prospects 2019 (Ch. 2). In the absence of timely planning and implementation of requisite adaptation measures, the projected impacts on critical transport infrastructure may have broad economi and trade-related repercussions, which may severely compromise the sustainable development prospects of these vulnerable nations Against this background, better and more targeted data, furthe research, including detailed technical studies, human capacity building as well as collaborative concerted action at all levels are urgentl required to meet the challenge, as is a major scaling up of technical and financial assistance for SIDS. In this context, UNCTAD and UNEP, with the financial support of the Government of Germany, are currentl implementing a project on Climate resilient transport infrastructure fosustainable trade, tourism and development in SIDS'.

As illustrated by the findings of an UNCTAD <u>port industry survey on climate change impacts and adaptation</u>, designed in collaboration with global port industry associations and other experts, there are still important gaps in terms of information required for effective adaptation and resilience planning. The survey aimed to improve the understanding of weather- and climate-related impacts on ports, identify data availability and information needs, and determine current levels of resilience and preparedness among ports. Although the majority of respondents had been affected by weather - or climate-related events, including by extremes, the study revealed important gaps in terms of relevant information available to seaports of all sizes and across regions, with implications for effective climate risk assessment and adaptation planning.

The important trade-related implications of weather- and climaterelated extreme events were also highlighted by UNCTAD at COP 24, in an online article and as part of an interactive discussion that was co-organized with the International Trade Centre and the United Nations Office for Disaster Risk Reduction as part of the International Day for Disaster Reduction 2018, focusing on the need to reduce economic losses from disasters. Recent related work includes an UNCTAD ad hoc expert meeting on "Climate change adaptation for international transport: preparing for the future", held in Geneva, Switzerland, on 16 and 17 April 2019. The meeting brought together technical experts, key industry stakeholders and a number of international organizations, with an aim to identify effective ways to support climate change adaptation action, resilience- and capacitybuilding across closely interlinked transport modes and global supply chains, and to develop policy recommendations to help inform the United Nations Climate Action Summit of September 2019. It also aimed to contribute towards progress in advancing the 2030 Agenda for Sustainable Development and explore options for an informal international transport adaptation forum. Relevant recommendations have since been integrated into the thematic and cross-sectoral 'Climate Action Pathway' documents, prepared by the Marrakech Partnerships for Global Climate Action and launched in December 2019 at the UNFCCC COP 25 in Madrid (See Resilience pathway action table; Transport pathway action table).

Most recently, in 2020, UNCTAD published a report, <u>Climate Change Impacts and Adaptation for Coastal Transport Infrastructure: A Compilation of Policies and Practices</u>, to assist in the development of effective legal, regulatory and policy measures for adaptation and resileince-building for coastal transport infrastructure.

4. What gaps have you identified in the area relevant

In view of the long service life of transport infrastructure, effective adaptation requires re-thinking established approaches and practices early. Moreover, a good understanding of risks and vulnerabilities is needed for the development of well-designed adaptation measures

to the topic of this IPWG under your respective mandate?

that minimize the adverse effects of climatic factors. However, there are still <u>important knowledge gaps</u> about vulnerabilities, as well as the specific nature and extent of exposure that individual transport facilities may be facing. Technical risk-assessment, <u>Guidance</u>, <u>best practices</u>, <u>checklists</u>, <u>methodologies</u> and other tools in support of adaptation are urgently required, and targeted capacity building is going to be critical, especially for the most vulnerable countries. This includes SIDS, which depend on their ports and airports for food and energy needs, external trade and – crucially – tourism, which typically accounts for a major share of GDP. For further details regarding some of the related considerations, see eg. "Climate change challenges for sustainable transport, trade and tourism in small island developing States: the case of Saint Lucia", in <u>World Economic Situation and Prospects 2020</u> (Ch. 2) and <u>'Climate resilient transport infrastructure for sustainable trade, tourism and development in SIDS'</u>.

5. Please describe concrete examples where ocean action is scaled up based on science and innovation in to leverage these synergies.

For example, a recent UNCTAD technical assistance project in support of climate change adaptation for coastal transport infrastructure, focused on key coastal transport infrastructure in Caribbean small island developing States, using innovative methodological approaches (for further information and full documentation, see https://SIDSport-ClimateAdapt.unctad.org). Key project outcomes include the assessment of potential operational disruptions and marine inundation risk to eight coastal international airports and seaports of Jamaica and Saint Lucia under different climate scenarios, as well as a transferable methodology to assist in adaptation planning for small island developing States in the Caribbean and beyond. Some of the main substantive findings and technical details of the methodology developed under the project have undergone scientific peer-review and have resulted in the publication of an original research paper (Monioudi et. Al, Regional Environmental Change 2018) which has informed the IPCC report on 1.5 degrees ("Impacts of 1.5 °C global warming on natural and human systems"), as well as the as well as the IPCC 2019 Special Report on Ocean and Cryosphere (Ch. 4 and 5), highlighting substantial increases in risk to critical coastal transportation infrastructure in Saint Lucia and Jamaica from climate changed-induced marine inundation as early as in the 2030s, unless further climate change adaptation is undertaken. Relevant substantive findings are also reflected as part of the UN report World Economic Situation and Prospects 2019 (Ch. 2). In the absence of timely planning and implementation of requisite adaptation measures, the projected impacts on critical transport infrastructure may have broad economic and trade-related repercussions, which may severely compromise the sustainable development prospects of these vulnerable nations. For further related work, see also "Climate change challenges for sustainable transport, trade and tourism in small island developing States: the case of Saint Lucia", in World Economic Situation and Prospects 2020 (Ch. 2) and 'Climate resilient transport infrastructure for sustainable trade, tourism and development in SIDS'.

6. What kind of measures/interventions should be promoted to fill existing

Successful adaptation strategies need to be underpinned by strong legal and regulatory frameworks, that can help to reduce exposure

gaps and to assist Member States in scaling up ocean action based on science and innovation in relation to the topic of this theme? and/or vulnerability to climate-related risks of coastal transport infrastructure. Legal and regulatory tools may further provide economic incentives to fund climate change adaptation efforts, promote the transfer of adaptation technologies and contribute to the availability of accurate climate data and tools. At the same time, it is of major importance that legal and regulatory approaches do not – even inadvertently – foster 'maladaptation' that may limit or lockin future adaptation options. Appropriate policies and standards also have an important role to play, particularly in the context of infrastructure planning and coastal zone management.

For the purposes of risk-assessment and with a view to developing effective adaptation measures, generation and dissemination of more tailored data and information is important, as are targeted case studies and effective multi-disciplinary and multi-stakeholder collaboration.

Infrastructure inventories, higher resolution data, including better Digital Elevation Models (DEMs), as well as a better understanding of coastal processes under climate change are required for effective risk-assessment and adaptation planning; and detailed technical studies at facility level are needed to avoid maladaptation. Technical adaptation measures are widely needed, but these should involve innovative and efficient designs to avoid over-engineering; ecosystem enhancement can play a significant role in reducing risks.

Increased investment in human resources and skills (in particular skilled coastal scientists/engineers) at local/regional levels will be critical for successful adaptation and resilience building in the future, as will be the mainstreaming of climate change considerations into ordinary transport planning, operations, and management.

With coastal developing countries and SIDS particularly vulnerable to the direct and indirect impacts of climate variability and change, it is important to explore ways to raise and allocate the necessary financial resources for effective adaptation and resilience building and to consider how best to highlight and integrate relevant considerations as part of Nationally Determined Contributions (NDCs) under the Paris Climate Agreement and in National Adaptation Plans.

7. What kind of new partnerships/opportunities have you identified which could be showcased at the 2020 UN Ocean Conference in relation to this theme?

UNCTAD has been extensively collaborating with related industry and UN initiatives. This includes e.g. contributions to the GCA Transport and Resilience Pathway documents (see above); a UNFCCC WIM Excom-TEC policy brief on technologies for averting, minimizing and addressing loss and damage in coastal zones; and the Regional Climate Change Adaptation Framework for the Mediterranean Marine and Coastal Areas; as well as collaboration with PIANC, The World Association for Waterborne Transport Infrastructure, in the development of port industry guidance; and extensive collaboration with the UNECE Group of Experts on Climate Change Adaptation for International Transport Network and Nodes), which had been established in 2011, following a joint UNCTAD-UNECE workshop on the issue. UNCTAD work also benefits from close cooperation with a multidisciplinary network of collaborators who work in synergy, see e.g. https://SIDSport-ClimateAdapt.unctad.org.

8. Also, please articulate good practices and lessons learned in the implementation of partnerships relevant to the topic of this IPWG that you may wish to share?

Lessons learnt as part of UNCTAD's work over the past 10 years indicate that multifaceted approaches to adaptation and resilience building for coastal infrastructure assets will be required to effectively address the challenge. These include mainstreaming climate change considerations into coastal transport infrastructure planning/operations as well as pursuing policy coherence among transport, trade, and overall sustainable development decisionmaking. Innovative and mixed adaptation responses (regulation, management and technical measures) will be needed, including 'soft' and 'hard' adaptation measures. Collaboration and participation of a broad range of actors will be of particular importance, both in relation to the assessment of impacts and in the planning, development and implementation of effective adaptation measures. As already noted, successful adaptation strategies need to be underpinned by strong legal and regulatory frameworks that can help to reduce exposure and/or vulnerability to climate-related risks of coastal transport infrastructure. Appropriate policies and standards also have an important role to play, particularly in the context of infrastructure planning and coastal zone management.

Worth noting in this context is a recent UNCTAD report which was prepared to assist in the development of effective adaptation policies and response measures, see <u>Climate Change Impacts and Adaptation</u> <u>for Coastal Transport Infrastructure: A Compilation of Policies and Practices</u>

9. Please outline key questions you consider relevant to the panel discussions to be held at the interactive dialogue on the topic of this IPWG.

Which particular policy action can be taken at the national, regional and international level to advance the important issue of climate change adaptation and resilience building for transport infrastructure?

Developing countries, including the most vulnerable groups of countries, are likely to be particularly affected by the impacts of climate change. How can efforts at providing effective financial support and capacity building efforts be strengthened and accelerated?

10. Please identify any additional recommendations that should be put forward for consideration by the 2020 UN Ocean Conference relevant to the topic of this IPWG.

For SIDS, ports and coastal airports are lifelines for external trade, food and energy security, and tourism, often one of the main drivers of economic development and prosperity, as well as in the context of DRR. Compelling scientific studies (IPCC, 2014; IPCC, 2018; IPCC, 2019) project that climate change will increase the hydrometeorological hazards for the coastal transport infrastructure of SIDS, with potentially significant socio-economic consequences. Climate-related extreme events affecting coastal transport infrastructure, trade and tourism are also likely to exacerbate existing challenges, making resilience-building and effective adaptation action an urgent imperative. Accelerated collaborative efforts are needed to ensure that the required technical assistance, human capacity building and financing will be available.