UN ESCAP inputs to the Background Note for UN Ocean Conference 2020 DRAFT 29.10.2019

The protection of the ocean is in everyone's best interest and is everyone's responsibility. SDG14 and related activities are fundamental to the realization of the 2030 agenda, as it is one of the main components of the biosphere. The Pacific Ocean basin is the largest and deepest on earth, providing food and nutrition, connectivity, employment, biodiversity, economic development, and even identity to millions of peoples in the region. Nonetheless, the current patterns of human and corporate behavior, relying on the use and abuse of the ocean, critically jeopardizes the sustainability of marine ecosystems and the very existence of the ocean for future generations. Inaction hinders sustainable and economic development and will also have catastrophic consequences on small island developing states (SIDS), as they risk disappearing due to rising sea levels.

i. Activities, challenges and opportunities relating to the implementation of SDG14

- As climate change and its consequences continue to have more drastic effects on the ocean, the implementation of the 2030 Agenda becomes a steeper uphill struggle. The current absorption of CO2 by the ocean has resulted in more acidic water quality, causing destructive and disruptive effects on biodiversity and the overall balance of the ocean. Tackling climate change remains the most predominant challenge for the delivery of SDG14 and one of the most cross-cutting issues in the 2030 agenda.
- Marine pollution should be regarded and labeled as a crisis rather than as a challenge. Asia-Pacific is responsible for most of the litter that is funneled into the oceans through its rivers. Annually, rivers dump from 0.47 million to 2.75 million metric tons of plastic into the seas. Ten rivers in the world are responsible for 93 percent of that debris, eight of them are in Asia: Yellow, Hai, Pearl, Amur, Mekong, Yangtze, Indus and Ganges Delta. The Yangtze alone dumps approximately 1.5 million metric tons of plastic waste into the Yellow Sea. Thus, countries in the Asia-Pacific region are a big part of the problem, but also, part of the solution. Implementing interventions to reduce plastic waste leakage in the top-five ocean-polluting Asian countries could reduce global plastic leakage by up to 45 per cent over the next ten years. Accelerating actions to develop more sustainable cities and communities (SDG11) with their corresponding waste reduction, collection and management, while simultaneously fostering more responsible consumption and production (SDG12) are fundamental to tackle the problem of marine pollution, which also reduces the capacity of the ocean to bear CO2, as it affects the quality and chemical composition of the marine waters.
- Fisheries are a fundamental source of economic development in the region (SDG8), while also being crucial to the food security, nutrition and health of our populations (SDG2 and

SDG3), including the most vulnerable communities. Women disproportionally rely on jobs in the fishing and food-processing industry. Therefore, the interlinkage with gender equality (SDG5) cannot be ignored. Violations of human rights have been reported in the fishing industry, with different cases of forced work, human trafficking and slavery (Target 8.7). Furthermore, fish stocks and marine ecosystems are being jeopardized by overfishing and illegal, unreported and unregulated fishing (IUU). Additional efforts must be made to reach sustainability in the fishing industry and to secure adequate nutrition in our region. While some progress has been made to combat illegal, unreported and unregulated fishing, acceleration is needed. For instance, not all countries in the region signed the binding Port State Measures Agreement (PSMA) to combat IUU. Also, small-scale fisheries and overexploitation of coastal areas area regional challenges that must be addressed.

- The role of oceans in connecting economies through global trade, must be fully acknowledged and addressed from the sustainability perspective. 80% of the volume of international trade is carried by the international shipping industry, supporting countries' economic growth and offering an economic and social lifeline to small island and archipelagic developing states. Further economic growth of most developing countries is contingent on improving their maritime connectivity and this need is particularly acute in the small island developing States. At the same time, the advances in connectivity should not compromise the countries' environmental and social development goals. Currently, shipping is one of the most environmentally friendly modes of transport in some regions in the world. Yet, the volume of goods shipped by sea already makes it a significant cause of the air emissions and discharges to the oceans. This negative impact on oceans and related biosphere would grow, as the volume of global and regional trade increases, if no policy measures to green the shipping operations are put in place. There same logic applies to the social dimensions of shipping which are gaining prominence, globally and regionally, and under various forms, such as safety of shipping operations, labor concerns and gender equality.
- Resource mobilization and financing for sustainable development are major hurdles for many small island development states, especially if they are also least developed countries (LDCs). SIDS tend to be characterized by a high degree of economic vulnerability due to the small size of their economies, often with large public sectors and narrow economic bases heavily dependent on a few key industries such as tourism or fisheries. Moreover, SIDS's domestic capital markets are generally very small, the cost of capital is high and access to external private financing is limited. Furthermore, SIDS are very vulnerable to climate change and often suffer the devastating effects of extreme weather events such as cyclones, which can easily require considerable spending for reconstruction and/or rehabilitation. These characteristics translate to high fiscal volatility and high current-to-capital expenditure ratios, which entail very limited fiscal space for the large medium and long-term investments needed to implement the 2030

Agenda.¹ Climate-adjusted investment needs through 2030 have been estimated in the Pacific at 9.1% of GDP, higher than for any other sub-region of Asia-Pacific.²

- To tackle the sizeable financing for development needs of SIDS, some of the development finance flows that are currently important for them, such as remittances, can be further promoted through innovative technologies such as blockchain. This would contribute to make progress towards the SDG target for cost of remittances in the Pacific, which must decrease from 12% to 3%.³
- Furthermore, and as suggested by SDG target 14.7, the sustainable management of sectors such as tourism, aquaculture or fisheries can bring greater benefits to SIDS. For instance, in 2017 the Pacific SIDS saw a record of overnight visitor arrivals (3 million). While tourism receipts as a share of exports are already important for such countries as Fiji, other SIDS such as Kiribati or the Solomon Islands still have large untapped tourism potential which will require infrastructure development and better transport connectivity.
- While SDG14 includes a target on the implementation and enforcement of international sea law, we observe a gap in the implementation of this SDG in Areas Beyond National Jurisdiction (ABNJ). The outcome of resolution 72/249 on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ) could provide new opportunities for interactions and regional cooperation in the high seas. Further cooperation of this nature could be sought for restoration of the ocean in these areas.
- As regions have a more intimate connection with the basins they share, international cooperation at the regional level has been identified as one of the key elements to accelerate the implementation of SDG14. The 76th Commission Session of ESCAP, organized on the theme "Promoting economic, social and environmental cooperation on oceans for sustainable development." will provide Asia-Pacific countries with an opportunity to identify and agree on priority areas for regional cooperation and to prompt action on the implementation of SDG14. Regional cooperation has already demonstrated its potential to greatly enhance financing for development. For example, fishing license fees increased from USD 220 Million in 2012 to USD 470 Million in 2017,⁴ primarily due to the success of the parties to the Nauru Agreement (PNA), and fishing license fees have reached as much as 75% of Government revenue in such countries as Kiribati.⁵ Although substantial information exists on the ocean and its resources, (a) the countries with the greatest need have the least capacity to access and apply this information in their policy decisions and (b) the information is fragmented among numerous institutions nationally, regionally and internationally. There is no standard approach for integrating diverse data

¹ "Economic and Social Survey of Asia and the Pacific 2018" (ESCAP, 2018)

² "Meeting Asia's Infrastructure Needs" (ADB, 2017)

³ "First Quadrennial Pacific Sustainable Development Report 2018" (Pacific Islands Forum, 2018)

⁴ "First Quadrennial Pacific Sustainable Development Report 2018" (Pacific Islands Forum, 2018)

⁵ "Fisheries in the Economies of Pacific Island Countries and Territories" (Robert Gillett, 2016).

on the ocean and no forum for the regional exchange of information and best practices on integrated ocean statistics and policies. This prevents evidence-based programming and optimal use of resources. SIDS and coastal member States in Asia-Pacific look to ESCAP to strengthen their capacity to identify and meet needs and close data gaps to achieve SDG 14 and others. In 2018, ESCAP initiated a project to strengthen the capacity of member States to achieve SDG14. The project is enhancing partnerships among international, regional and national stakeholders focusing on an agreed statistical framework for the standardization of ocean-related statistics and their application to the sustainable management of oceans, enhancing the technical capacity of member States to regularly produce a coherent set of priority ocean statistics (ocean accounts), and enhancing the capacity of member States and partners to apply ocean accounts for policy analysis. The project is aligned with the Call for Action voiced at the 1st UN Ocean Conference in 2017, and directly responds to ESCAP resolutions 72/9 and 73/5.

ii. Scaling up ocean action based on science and innovation

- Scientific innovations could provide a key to accelerate the delivery of SDG14. This
 requires the design of sustainable packaging and product design within a circular
 economic model, which should include sustainable manufacturing practices and blue
 value chains. Developing cost-effective technologies that can influence demand and
 supply of plastic, for example, would significantly reduce the alarming amounts of plastic
 that end up polluting the ocean.
- Challenges to the ecosystem for the ocean also lie in the fragmentation of and limited access to ocean data, particularly with regards to the Pacific Ocean. While certain ocean data are available, they often exist within each sector without mechanisms for crosssectoral and cross-variable analysis of cumulative impacts on the ocean. Furthermore, data, including data generated through new technologies, have yet to be exchanged effectively across data holders and countries with harmonized standards. This would significantly enhance regional knowledge and evidence for integrated ocean governance. Pacific Islands countries and territories are home to some of the world's largest EEZ in the Pacific Ocean while also having the least capacity and limited institutions for collecting and analyzing ocean data. This results in fragmented and siloed existence of ocean data towards an open source and harmonized data ecosystem. To this end, UN ESCAP has been working to mobilize partnerships across the scientific communities and intergovernmental organizations to strengthen the data ecosystem for the Pacific Ocean.
- Technology and innovation in the energy supply sector can substantively improve the performance of shipping, harnessing opportunities from numerous new developments, including container terminal automation, artificial intelligence, electric stevedoring devices, container and vehicle tracking devices, e-navigation and the 'Internet of Things'.

The energy supply sector is the largest contributor to global greenhouse gas emissions. Thus, reducing the emissions in this sector will have a powerful impact mitigating climate change which would consequently benefit the ocean ecosystems. Options to reduce emissions from the energy sector include increasing the uptake of renewable energy technologies, improving energy efficiency and reducing fugitive emissions from fuel extraction processes. These developments applied to the shipping industry could lead to greener, more efficient and safer shipping, supporting future growth while minimizing the impact and footprint of marine traffic and port operations. Still, these opportunities can only be harvested through a systematic and proactive approach coupled with the right policy and regulatory environment, with due attention to the risks and costs of their deployment and to the adequate distribution of their benefits.

New technologies in information systems (satellite, sensors, radar, sonar, etc.) and data generation can help understand the behavior of extreme climate events in order to anticipate and manage their impacts on ocean ecosystems and livelihoods. Further opportunities for innovation may be provided through the application of geospatial data and its convergence with quantum computing big data analytics. More sophisticated information systems can also integrate solutions to bridge critical data gaps in monitoring indicators such as coastal infrastructure, disruptions of ocean related services, early warning and risk information services, that are required for measuring SDG targets that are related to SDG 14.2. It also helps to understand the science, statistics, and policy interfaces as well as highlights the linkages between oceanogenic disasters and other dimensions of ocean accounting, such as ecosystem conditions, services and degradation. The Asia-Pacific Disaster Report (2019)⁶ presents the exposure of economic stock and critical infrastructure as well as at risk communities in low-lying coastal areas and identifies Pacific SIDS as one of the region's four major disaster risk hotspots. It estimates that around 72 % of this subregion's population is exposed to earthquake and tsunami, 26 % to tropical cyclones; one third of airports and one guarter of ports are directly exposed to multiple coastal hazards. The need for investing in coastal protection and resilience building thus has brings both an economic as well as socio- environmental cobenefits.

iii. Developing partnerships for the implementation of SDG14 through voluntary commitments

 2020 provides a key regional opportunity for scaled-up action on Oceans through the seventy-sixth session of the Commission of ESCAP. The session of the Commission will be held from 18 to 22 May 2020 in Bangkok and will be used to enhance understanding and deepen political commitment to transboundary issues related to oceans with a focus on

⁶ Asia-Pacific Disaster Report 2019, ESCAP Publication

marine pollution, sustainable fisheries and sustainable transport. Two Coalitions are under development to convert the political momentum into action: an Asia-Pacific "coalition of the willing" to combat marine pollution and other challenges in the protection of the ocean (with the United Nations Environment Program); and the Pacific Ocean Data Coalition, which serve to foster fast-track solutions to the challenges to the Pacific Ocean through (i) the joint promotion of open data sharing, building an accessible and harmonized data platform across sub-regional, regional and global level; and (ii) sharing of good practices and capacity building on ocean data for Asia and the Pacific.

- Partnerships with the private sector and civil society: Engaging the private sector in the delivery of the SDG14 is essential. As governments can provide regulations, the end-users of the ocean will be citizens and companies that must comply with the regulatory framework. For example, regulating marine transport requires commitment and partnerships with shipping companies. Reaching sustainable fisheries demands appropriate regulation, enforcement and compliance by fishing companies and fishermen. Achieving successful partnerships will facilitate achieving SDG14. This includes the support and guidance from the UN Global Compact though its regional networks, but also, the support from governments to captivate corporate responsibility and financing to catalyze action. Promoting the engagement of civil society in decision-making though participatory and consultation mechanisms is also vital.
- In this regard, ESCAP's Sustainable Business Network Taskforce on Climate and Disaster Risk Reduction (ESBN) is working on three ways in which the private sector can help augment ocean data. One, it has engaged commercial ships, operating in Pacific waters around South-East Asia. By leveraging on precise Global Navigation Satellite Systems (GNSS), these ships can detect and report sea surface motions. The provision of such data in real time is vital especially for tsunami monitoring and timely early warning. Second, the ESBN Task Force is studying the possibility of using stationary oil and gas platforms as "passive" markers for vertical sea-surface motions, once again vital information for tsunami monitoring. Third, ESBN is supporting the Joint Task Force led by three UN agencies (ITU/WMO/UNESCO-IOC), to turn future submarine telecommunication cables into ocean-spanning observation networks by equipping them with sensors that could also provide real-time data for ocean and climate monitoring including for seismicity related sea-level movements. A central feature of the smart cables concept is that it brings together and addresses the two key challenges of the 21st century: the increasing pressure for global connectivity and the urgent need for coherent concerted global effort

on climate change and ocean management⁷.

- We have observed that many of the voluntary commitments submitted within the context
 of the 2017 UN Ocean Conference have not been honored. Many parties have not
 submitted their progress reports on time, or not at all. Some parties are either
 unresponsive or inexistent at this point. A review of registered voluntary commitments is
 necessary at this point, to understand why some of them are not working, along with a
 call for delivery and acceleration. Understanding what has delayed or obstructing their
 delivery could provide ideas on how to facilitate this process.
- Acceleration actions: Beyond fulfilling the goals set out in their voluntary commitments, we will encourage member States to submit specific acceleration actions that can boost the delivery of SDG14. So far, out of the 126 acceleration actions submitted, only 22 address SDG14, this is the lowest number out of all SDGs. Further acceleration actions are needed, this should be highlighted in the background note for the 2020 Ocean Conference (A/RES/73/292/par.22).

⁷ Peer-reviewed article in journal "Frontiers in Marine Science" - SMART Cables for Observing the Global Ocean: Science and Implementation (August 2019)