



THE EAST ASIAN SEAS CONGRESS



Charting a New Decade of Healthy Oceans, People and Economies

1-2 DECEMBER 2021 • Hosted by the Royal Government of Cambodia

Collab 1

Ocean Roundtable Dialogue (RTD) *"Towards a Blue Economy Pathway for the East Asian Seas"*

8 June 2021, 9:00 AM – 12:00 PM (GMT+7)

Online via Zoom

ORGANIZER:



Partnerships in Environmental
Management for the Seas of
East Asia (PEMSEA)

Collab 1: Ocean Roundtable Dialogue (RTD)
“Towards a Blue Economy Pathway for the East Asian Seas”

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PROCEEDINGS

1. INTRODUCTION

The Ocean RTD entitled “Towards a Blue Economy Pathway for the East Asian Seas” was organized by Partnerships in Environment Management for the Seas of East Asia (PEMSEA). This online event was conducted on 8 June 2021 (World Ocean Day) and was the first of a series of collabs that will culminate in the East Asian Seas (EAS) Congress 2021 on 1-2 December 2021.

For many countries worldwide, the ongoing health crisis has disrupted many people’s lives, the Gross Domestic Product (GDP) plunged, and unemployment rates soared along with a host of environmental challenges as countries focus on response and recovery efforts, making it challenging to achieve international, regional and national commitments on climate change, biodiversity conservation, marine pollution, and other aspects of coastal and marine governance. The pandemic has resulted in the temporary shutdown or restriction of activities in many ocean-related industries such as fisheries, transport, manufacturing, and tourism. Negative environmental impacts such as the proliferation of plastic pollution and illegal, unreported, and unregulated fishing (IUUF) and the reduction of coastal monitoring and enforcement activities were also reported.

PEMSEA calls for the mainstreaming of sustainable, inclusive, and resilient ocean economy as an alternative development pathway for economic recovery and as a significant driver of economic growth and progress by creating employment and enhancing investment opportunities while at the same time protecting natural capital, enhancing resource efficiency, and reducing carbon footprint.

The RTD aimed to:

- a) Discuss the impacts of the global pandemic on the state of ocean and coastal economies in the EAS region;
- b) Explore the challenges and opportunities with case studies of best practices in accelerating the region’s transformation into a blue economy against the backdrop of national plans for post-pandemic recovery; and
- c) Present policy recommendations that will feed into the development of the EAS Roadmap to 2030.

The program and link to the group photos and Youtube recording can be found in Annexes 1 and 2, respectively. Presentation materials/speeches are embedded as links throughout the proceedings.

The event was participated by Dr. Chua Thia-Eng (Chair Emeritus of the EAS Partnership Council); other officers and members of the Council; and representatives from the youth sector, national and local governments, academe, research institutions, non-governmental organizations (NGOs), private sector, and other development partners from within and beyond the EAS region.

2. [OPENING REMARKS BY THE HOST GOVERNMENT AGENCY](#)

On behalf of the Royal Government of Cambodia (RGC) and as the host for the EAS Congress 2021, His Excellency **Mr. Say Samal**, Minister of Environment (MOE) in Cambodia, welcomed all the delegates and attendees to the RTD and formally opened the start of the EASC 21 preparatory events. He announced that the event was an important start in crafting the EAS Roadmap to 2030 that will be presented and adopted during the 7th Ministerial Forum in December 2, 2021. This roadmap will help secure the commitment and bolster more actions to achieve the goals and targets of the 2030 Agenda for Sustainable Development, the post-2020 Global Biodiversity Framework, the UN Framework Convention on Climate Change (UNFCCC), the UN Decade of Ocean Science, and other regional and international commitments.

He then acknowledged the contributions of fisheries, port and shipping activities, and coastal and marine tourism as the main constituents of ocean economy in Cambodia and highlighted that their coastal and marine resources also provide crucial non-market based ecosystem services (e.g., shoreline protection, climate regulation, and waste assimilation). However, these resources are on a path of decline/degradation given the threats posed by climate change, marine pollution, and other extractive/ unsustainable practices. These are further aggravated with the onslaught of the COVID-19 pandemic, and as a result, countries need to focus on COVID-19 response and recovery.

In response to these challenges, the MOE remains committed to implement their relevant core policies that focus on biodiversity conservation, pollution control, and resource efficiency as embodied in the National Strategic Development Plan, National Policy on Green Growth, National Environmental Strategy and Action Plan, and Cambodia Climate Change Strategy while ensuring economic growth, environmental and social balance in the context of the global pandemic.

As an ending note, the Minister emphasized that the global pandemic offers a timely opportunity for countries to review and recalibrate their respective policies and measures to emerge as a stronger and resilient EAS region. He also shared his expectation that the RTD can help in crafting the EAS Roadmap to 2030.

3. [MESSAGE ON THE GLOBAL ACTION TO PROMOTE SUSTAINABLE AND RESILIENT OCEAN ECONOMY](#)

Ambassador Peter Thomson, the UN Special Envoy for the Ocean, expressed his gratitude to PEMSEA for its great efforts as the coordinating institution for implementing the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), its work on fostering integrated coastal management (ICM) solutions across the region, and its firm adherence to principles of ecosystem-based management of coasts and seas.

In his role as the UN Special Envoy for the Ocean, he emphasized the importance of implementing SDG 14, the goal to conserve and sustainably use the ocean's resources, given the serious decline in ocean health due to destructive human activities. The situation is

expected to worsen as the planet is currently on track of going beyond 3 degrees Celsius more than pre-industrial levels by the end of the twenty-first century.

It is therefore important to adopt transformative actions in line with a carbon neutral economy by 2050 to help achieve the target of the Paris Agreement of keeping global warming well below 2 degrees Celsius. Likewise, given that the ocean is a major climate regulator and that ocean health is in decline, then the 26th Conference of the Parties (COP) of the UNFCCC should include ocean-climate linkages as an integral part of its climate change negotiations. Due attention should also be given to nature-based solutions in terms of allocation of climate finance.

Mr. Thomson then concluded his remarks by turning to blue economy and its importance. A blue economy is ruled by the principle of circularity; it does not stand for a linear, excessive exploitation of finite planetary resources. It is a bedrock upon which a secure future for humanity can be built. He encouraged relevant stakeholders to familiarize themselves with and/or adopt the Sustainable Blue Economy Finance Principles, which serve as the first global guiding framework for banks, insurers, and investors to finance a sustainable ocean economy.

4. [OVERVIEW: PURSUIT OF SUSTAINABLE OCEAN ECONOMY DURING AND BEYOND THE COVID-19 CRISIS IN THE EAS REGION](#)

Ms. Aimee Gonzales, the Executive Director of PEMSEA, provided an overview of the pursuit of a sustainable ocean economy during and beyond the COVID-19 crisis in the EAS region.

She shared that the EAS region has not only been recognized as the center of global marine biodiversity but also as the center of ocean economy. In ten countries,¹ the ocean economy is estimated to be USD 1.4 trillion in value and that around 54 million people are employed in ocean-related industries.

As also shared by Minister Say Samal, coastal and marine resources provide ecosystem services crucial to people's well-being. Executive Director Gonzales shared in economic terms for instance that the carbon sequestration potential of mangroves and seagrass beds alone is already estimated to be USD 111 billion and USD 77–95 billion, respectively, in eight countries² in the EAS region.

However, as important as these resources are, they are subjected to exploitation, marine pollution, unsustainable industries and trade, and climate change. Should these trends continue, the region shall face increased loss/degradation of critical habitats as well as increased plastic pollution and eutrophication. The global pandemic has further aggravated the situation. Some of its negative impacts are felt such as lost livelihood and income and reduced research and monitoring and evaluation (M&E) efforts whereas positive impacts include, for example, reduced greenhouse gas (GHG) emissions, temporary relief of critical coastal habitats from destructive tourism activities, digitalization of maritime services, and increased need for maritime transport to help ensure the continuous operations of global trade despite limitations in travel and movement caused by the pandemic.

The region therefore has an urgent need to boost efforts to protect its coasts, waterways, related ecosystems, and biodiversity and move towards a blue economy as espoused in the

¹ Cambodia, China, Indonesia, Malaysia, RO Korea, Philippines, Singapore, Thailand, Timor-Leste, and Viet Nam.

² Cambodia, China, Indonesia, Malaysia, RO Korea, Philippines, Thailand, and Timor-Leste

Changwon Declaration 2012 while addressing crosscutting (interrelated) issues such as poverty and the lack of food, water, and energy security.

In encouraging all relevant stakeholders to transition into a blue economy, she stressed that:

- a) Doable and affordable solutions exist, including innovative and cost-effective technologies as well as financing modalities;
- b) Involvement of communities, academe, and private sector is crucial, along with the need to strengthen the partnership and delineate the individual and shared roles and responsibilities between all sectors and groups and mobilize interlinkages across the SDGs to create a ripple of benefits.

On the side of the PEMSEA Resource Facility (PRF), as the secretariat of PEMSEA, they have taken on the implicit challenge in this time of new normal to review, reset, and recalibrate their work by monitoring the impacts of the global pandemic and incorporating the country/local plans and strategic recommendations in response to the outbreak in the formulation of the EAS Roadmap to 2030 and SDS-SEA Implementation Plan 2023-2030.

5. COUNTRY PRESENTATIONS

A series of country presentations from senior government officials from nine PEMSEA country partners, namely: China, Indonesia, Japan, Lao PDR, Philippines, RO Korea, Singapore, Timor-Leste, and Viet Nam, then followed. In general, they shared the challenges and opportunities of their respective countries in transitioning to a blue economy against the backdrop of the new normal.

5.1 [CHINA: Engr. Zhanhai Zhang, Director General, Ministry of Natural Resources \(MNR\)](#)

Engr. Zhang stated that the gross value added (GVA) of China's coastal and marine sector reached CNY 8 trillion in 2020, reflecting a 5.3 percent compared to the previous year in light of the COVID-19 pandemic. Coastal tourism, which dominates the ocean economy in China, is the largest affected sector.

Government offices at all levels have taken a variety of measures to help rebuild enterprises and restore the ocean economy. For example, the MNR and Shenzhen Stock Exchange launched a series of activities to broaden the financing channels for small and medium-sized enterprises (SMEs). Coastal local governments have also introduced relevant policies and measures to help enterprises resume operations. Port and shipping enterprises are doing various efforts to help ensure a continuous flow of logistics between China and the rest of world through innovative models and creation of new business channels.

As a result, by the second half of 2020, ocean-related industries, with the exception of tourism, have recovered steadily with some achieving relatively rapid growth (as the case is for pharmaceutical, chemical, oil, and gas industries) while offshore wind industry continues to maintain its fast expansion trajectory even during the pandemic. In addition, for 2020, a total of 26 new National Marine Ranching Demonstration Areas have been established.

As an important platform for marine cooperation in the EAS, PEMSEA has played an active (coordinating) role in coordinating the implementation of the SDS-SEA and integrated coastal zone management. Engr. Zhang closed his speech urging PEMSEA continue to play this role, especially in strengthening regional cooperation in the following areas:

- a) Blue industry chain (e.g., ensuring a smooth and integrated network of maritime logistics channels);
- b) Marine scientific innovation and emerging industries such as seawater desalination, offshore renewable energy, marine pharmaceutical and other biological products, and marine information services in order to increase the number of available job opportunities; and
- c) Marine ecological protection and adaptation to climate change, especially in value realization of marine ecosystem such as blue carbon.

5.2 [INDONESIA: Mr. Dida Migfar Ridha, Director of Coastal and Marine Pollution and Degradation Control, Ministry of Environment and Forestry \(MoEF\)](#)

Director Dida Migfar Ridha gave an overview of the geographical and socioeconomic context of Indonesia, emphasizing that oceans are vital to Indonesia's prosperity through economic activities such as aquaculture, tourism, marine construction, and maritime transport. Indonesia is also the world's second largest fish producer.

He presented the impacts of COVID-19 on the Indonesian economy under three categories/manifestations, namely large-scale social restrictions, changes in tourism activity, and changes in international trade volume. The restrictions posed the most severe impact on the economy in terms of GDP.

In terms of sector, the GVA performance of almost every sector in the second quarter of 2020 declined compared to the previous year. Information and communications technology (ICT) is the only sector to record a positive performance despite the pandemic due to the mass shift to digital work operations as part of social distancing measures.

He also shared that the government developed the National Economy Recovery Program to mitigate the impacts of COVID-19 on the economy. The following are some of the coastal-related initiatives of the program which not only provide habitat restoration but offers employment opportunities, food security and nature-based solutions to combat climate change:

- a) **Labor intensive mangrove planting.** Involving 863 community groups in total, this initiative aims to provide economic stimulus for coastal communities and restore mangrove ecosystems. The accomplishments in 2020 include participation of 39,970 individuals and a total of 17,704 planted hectares (ha).
- b) **Peatland restoration.** This involves the construction of 663 canal blocks; survey and mapping of ecosystem functions of 97 peatland hydrological units (KHGs); construction of fish drying houses and procurement of fishing gear were implemented for marine fishers to enhance food security; and enhanced active participation of communities in the protection and management of peat ecosystems.
- c) **Coral reef gardens.** The creation of these gardens in 5 sites is intended to create additional jobs and tourist destinations and restock/rehabilitate coral reef areas. For 2020, a total of 10,171 individuals participated.

The Indonesian government also created several other programs in the form of conditional cash transfer and electricity consumption discounts since 2020 in response to the pandemic.

Aside from the coral reef gardens of the National Economy Recovery Program, there is a regular program called "*Community-Based Coral Reef Restoration*" from 2015 to 2020. Its goal is to increase the fish stock in the target sites and transform these places into tourist

attractions. To date, a total of 578 people from 30 locations have been directly involved in this initiative.

He also underscored the importance of having programmatic stages in the course of sustainable recovery: short-term actions for immediate crisis response; mid-term actions for economic recovery; and long-term actions to ensure sustainability of the adopted measures.

5.3 [JAPAN: Mr. Nobuhiro Hirashima, Director for International Ocean Affairs, Ocean Policy Division, Policy Bureau, Ministry of Land, Infrastructure, Transport and Tourism \(MLIT\)](#)

Director Hirashima's presentation focused on Japan's strategy for achieving carbon neutrality in 2050. In October 2020, Prime Minister Suga declared Japan's intention to aim for carbon neutrality by 2050 and announced in April 2021 the corresponding milestone of **reducing Japan's GHG emissions by 46 percent in 2030 in comparison to 2013 level.**

To achieve a carbon-neutral society:

- a) It is imperative to **adjust the country's mindset to support a paradigm shift across industries and the rest of society;**
- b) They will **accelerate the development of the needed R&D;** and
- c) They will **advance the use/adoption of digital technology in environmental management to allow for a more effective and efficient green transformation of society.**

Director Hirashima then introduced the Green Growth Strategy. Established in December 2020, the strategy lays out the national vision and goals to **motivate business players while at the same time serving as official reference on both the energy policy and outlook for achieving the carbon neutrality by 2050 target.** In particular, this contains a list of 14 sectors/industries with high growth potential for change, for which the government will provide corresponding policy measures.

The 14 industries are categorized into three fields as follows:

- a) Energy:
 1. Offshore wind power
 2. Fuel ammonia
 3. Hydrogen
 4. Nuclear
- b) Transportation/manufacturing:
 5. Automobiles and batteries
 6. Semiconductor/information and communication
 7. Shipping
 8. Logistics, people flow, and civil engineering infrastructure
 9. Food (agriculture, forestry, and fishery)
 10. Aircrafts
 11. Carbon recycling
- c) Household/office work:
 12. Houses and building industry or next-generation solar power
 13. Resource circulation (recycling/coprocessing)
 14. Lifestyle

Director Hirashima then presented the action plans for the ocean sector, specifically for these industries: offshore wind power; shipping (including alternative fuels); logistics, people flow,

and civil engineering; and food (agriculture, forestry, and fisheries) and hopes to collaborate with PEMSEA in achieving carbon neutrality.

5.4 [LAO PDR: Mr. Kingkham Manivong, Deputy Director General, Department of Water Resources \(DWR\), Ministry of Natural Resources and Environment \(MONRE\)](#)

Deputy Director General Manivong focused his presentation on the water resource management in Lao PDR. He raised the importance of Lao's water resources to the country and surrounding region, emphasizing that 90 percent of the country is located in the Mekong River Basin and that 35 percent of the annual flow in Mekong is from Lao tributaries.

However, several challenges beset the sustainable use of these resources such as uncontrolled consumption of water resources, weak collaboration and coordination between relevant stakeholders, and impacts of climate change. These have negative repercussions on the supply and quality of water for various uses.

As such, a plethora of relevant laws, policies, and initiatives have been instituted to facilitate integrated water resource management (IWRM) in Lao PDR such as the creation and adoption of the amended Water Law, National Water and Water Resource Management Strategy and Action Plan, Groundwater Management Decree, guidelines on user fees related to natural resources, and water use permission system for companies; updating of the national groundwater profile; and monthly monitoring of water quality in river basins.

The National Water and Water Resource Management Strategy contains eight priority strategies/components:

- a) **Integrated river basin management (IRBM);**
- b) **Water resource database management system and water resource assessment;**
- c) **Protection and rehabilitation of water resources;**
- d) **Groundwater management;**
- e) **Water use infrastructure management and development;**
- f) **Financial mechanism for the water sector;**
- g) **Human resource development; and**
- h) **International cooperation.**

Since 2007, PEMSEA has been a key player in **shaping the water resource agenda in Lao PDR**. It has contributed in the development of several laws and policies/agreements and implementation of pilot projects. He looks forward to further collaboration with PEMSEA on the following areas:

- a) Support for building technical/professional capacity for IWRM;
- b) Implementation of the upcoming UNDP-GEF IRBM Project and other relevant initiatives under the ASEAN cooperation framework or other project opportunities; and
- c) Connection-building with other relevant partnerships and alliances.

5.5 [PHILIPPINES: Atty. Analiza Rebueta-Teh, Undersecretary for Finance, Information Systems, and Climate Change, Department of Environment and Natural Resources \(DENR\)](#)

Undersecretary Rebueta-Teh started her presentation by presenting the persistent environmental challenges faced by the coastal and marine sector in the Philippines. For instance, she stated that unsustainable fishing practices alone already result in a loss of

approximately USD 101.9 million annually. While several laws and policies exist on coastal management, their implementation remains fragmented due to inadequacies in institutional capacity and access to financing and technology.

Complicating the situation is the COVID-19 pandemic, which has resulted in the following:

- a) ***Closing of businesses and markets and severe loss of income in relevant coastal and marine sectors.*** For instance, revenue losses during the pandemic amounted to PHP 62 million within the National Integrated Protected Areas System (NIPAS), which have been largely dependent on ecotourism whose operations have been disturbed due to restrictions in travel and movement. Additionally, the total number of overnight travellers in ICM sites experienced a drastic decrease from 26 million in 2019 to 4 million in 2020. This affected as many as 2,949 accommodations/establishments.
- b) ***Increase in marine litter*** due to the lack of proper disposal of masks face shields and using other single-use plastic products as health safeguards required by the government.

On a positive note, the decline in economic activity has reduced some of the anthropogenic pressures on the environment, such as tourism hotspots, therefore allowing ecosystems to recover. It was also observed that some coastal and marine species have repopulated waters that they have previously deserted (e.g., otter species in Tganak Island, Tawi-Tawi). It is difficult however to provide conclusive remarks as a year of closure cannot show any significant changes in terms of biodiversity.

Moving forward, to address these challenges, the Philippine government is looking into the following measures:

- a) ***Nature-based job creation*** (related to restoration of seagrass, coral reefs, mangroves, and other coastal wetlands; management of MPAs; and monitoring of coasts).
- b) ***Digitalization of the coastal and marine sector*** such as the mapping and surveillance of resources and the market dynamics/channels between fishers and consumers.
- c) ***Further investments in sustainability upgrades*** in coastal tourism, fish ports and shipping such as the establishment, operation, and maintenance of wastewater and solid waste management (SWM) facilities, renewable energy systems, fish landing sites and post-harvest facilities, where applicable.
- d) ***Finalization and adoption/passage of relevant laws and policies*** such as the Integrated Coastal and Ocean Act, Philippine Action Plan for Sustainable Consumption and Production (PAP4SCP), and the National Plan of Action on Marine Litter (NPOA-ML).
- e) ***Scale-up of existing programs and projects*** such as:
 - 1) Establishment of integrated multi-species aquaculture and zero carbon resorts;
 - 2) Establishment of green ports that operate on renewable energy and energy efficient systems and have shore reception facilities to properly manage waste;
 - 3) Community-based mangrove planting;
 - 4) Adoption of electronic catch documentation and traceability system to combat IUUF;
 - 5) Implementation of tourism-related regulations based on carrying capacity studies
- f) ***Further investments in emerging industries such as renewable ocean energy and marine pharmaceutical products.***

- g) **Enhancement of the ocean economy accounts** by disaggregating the data further to account key industries such as small-scale fisheries, mariculture, coastal and marine tourism, and offshore wind power and assessing the backward and forward linkages and multiplier effects of the ocean economy.

Development interventions should adopt a climate lens; whole-of-government approach (e.g., vertical integration between national and local governments; ridge-to-reef effect); interface between science, policies, and economics; and international integration to address transboundary issues.

Undersecretary Teh remarked that many challenges concern the conservation and sustainable use of marine resources lie in the transboundary area. These include difficulty of completing SDG 14 related data due to insufficient global methodologies. **PEMSEA can help in this context by offering pathways/channels for the development of meaningful partnerships and sharing of experiences across stakeholders and countries.** Likewise, PEMSEA, through the PRF, can provide the required technical support.

5.6 [RO KOREA: Mr. Jeong-goo Kang, Director, Marine Environment Policy Division, Marine Policy Office, Ministry of Oceans and Fisheries \(MOF\)](#)

Director Kang focused his presentation on the state of marine litter in RO Korea as the use of disposal plastic products has drastically increased given the global response to the COVID-19 pandemic.

In particular, he presented the existing initiatives that the ROK is pursuing to address the foregoing problem, to wit:

- a) **Engagement of marine environment keepers.** These individuals are engaged to monitor illegal dumping of marine waste and to remove the same waste in coastal areas. The MOF plans to increase the number of keepers and is working on developing new technologies needed for the tasks (e.g., on surveillance/monitoring).
- b) **Adopt-a-Beach Program.** This aims to encourage individuals and corporations to adopt a beach of their choice to keep clean and healthy. The program was successfully piloted in Jeju Island in 2020 and is expected to launch in full nationwide by 2022.
- c) **Construction of two clean-up vessels and establishment of their operating group.** These have been facilitated to assist in the removal of marine debris such as plastics and discarded fishing nets from the ocean. Director Kang suggested to push through with the cooperation projects involving clean-up vessels with PEMSEA country partners.
- d) **Replacement of buoys.** As of 2020 year-end, 70 percent (39.4 million) of the total number of buoys used by fish farms across the country is made of polystyrene. When disintegrated, these contribute to the growing volume of microplastics in the sea. As a result, since 2015, the national government has been replacing these buoys with eco-friendly versions that are designed to generate less microplastics.
- e) **2021 Partnering for Green Growth and the Global Goals 2030 (P4G) Summit.** The MOF organized a special session on marine plastic litter on 26 May 2021 as part of the 2021 P4G Summit. The session aimed to share knowledge and experiences of successful partnerships to identify potential actions for scaling-up. All participating countries, private sector entities, and international government organizations were welcomed to engage in bilateral discussions with the MOF to discuss their interest in collaborative projects.

Director Kang concluded his speech by expressing his trust in PEMSEA's role in achieving sustainable ocean recovery and stated that RO Korea's intent to push for a tighter partnership with PEMSEA and its member states.

5.7 [SINGAPORE: Mr. Eugene Leong, Second Deputy Secretary, Ministry of Sustainability and the Environment \(MSE\)](#)

Second Deputy Secretary Leong reaffirmed the prevailing thought of the RTD on the urgent need to renew/revisit the region's commitment to sustainability and shared that climate change remains a long-term global existential challenge, with intensifying effects occurring in the EAS region.

Launched in February 2021, the Singapore Green Plan 2030 is a whole-of-nation master plan that aims to advance the country's national agenda on sustainable development and strengthen their ongoing efforts to fulfil the country's obligations under the Paris Agreement and support the achievement of the SDGs. The five key pillars of this plan are as follows:

- a) **City in nature.** Singapore will infuse greenery into the built environment to improve urban biodiversity and liveability and combat against the ill effects of climate change. More than one million trees will be planted across the country.
- b) **Energy reset.** In 2021, Singapore will complete one of the world's largest floating solar farms at one of its reservoirs. When ready, this farm will be sufficient to power all the local waterworks in the country and therefore in the process make Singapore one of the first countries in the world to accomplish this feat.
- c) **Sustainable living.** In line with the country's Zero Waste Masterplan, Singapore intends to close three major waste loops (electronics, plastics, and food) by applying circular economy approaches with the end goal of improving resource efficiency and reducing pollution. All waste will be collected and recycled or incinerated. The incinerated ash is stored in the offshore Semakau landfill, which despite of its nature, has become a thriving home to some of the richest marine biodiversity in the country. To extend the lifespan of the landfill, the amount of waste sent to the island shall be reduced by 20 percent by 2026.
- d) **Green economy.** Singapore intends to harness sustainability as the new cornerstone or engine for economic growth and job creation. For example, in its maritime industry Singapore facilitated the first ship to container ship liquified natural gas (LNG) bunkering operations in Asia in March 2021. In addition, a fully automated and electrified new Tuas Port is in the works for operation in 2040.
- e) **Resilient future.** Singapore intends to leverage science and technology to help build the country's climate resilience and ensure food security. Examples include adopting nature-based solutions to protect coastal ecosystems; and locally and sustainably producing 30 percent of the country's nutritional needs by 2030.³

Second Deputy Secretary Leong also underscored how the COVID-19 pandemic has shown the importance of collective actions in addressing serious global challenges and that within each country, inter-group cooperation is also needed to achieve any envisioned change. Likewise, there is a need to adopt the following approaches in development interventions:

³ Note however that less than 10 percent of the nutritional needs is being produced locally as of writing. To help achieve the 30x30 goal, Singapore is supporting the use of a floating closed containment aquaculture system, which is more productive than the traditional open net system. This system also protects fish stocks from environmental stresses; and reduces the risk of organic pollution (that may result from fish feed and waste) seeping into outside waters.

- a) Integrated (holistic) planning to achieve optimal outcomes and ensure balance between short- and long-term priorities; and
- b) Integrated coastal zone management to achieve sustainable coast and marine development.

He also informed the meeting that Singapore has developed an Integrated Urban Coastal Management (IUCM) Framework and that he looks forward to learning more from the PEMSEA community as the region collectively moves towards a sustainable pathway post COVID-19.

5.8 [TIMOR-LESTE: Mr. Celestino da Cunha Barreto, National Director of Marine Spatial Planning, Capture Fisheries, and Aquatic Resources Management, Ministry of Agriculture and Fisheries \(MAF\)](#)⁴

Director Celestino da Cunha Barreto shared select points on the state of coastal and marine development in Timor-Leste, including the role of PEMSEA and the local State of the Coasts reports in this regard, to wit:

- a) That Timor-Leste has been promoting ICM for the past 25 years and will continue to replicate ICM in other municipalities as the country pursues decentralization of its national government. The country has also developed local State of the Coasts reports in order to provide the baseline status of coastal resources in the municipalities of Dili, Manatuto, and Liquica and to facilitate the monitoring and evaluation of ICM in these sites in the succeeding years. that have been realized three coastal municipalities in Dili, Manatuto and Liquica. The existing and future reports will be crucial in resolving pressing concerns such as the marine pollution threat in Atauro Island, Dili.
- b) That a cross-sectoral, multi-agency approach that works at various geographical scales is needed to promote blue economy.
- c) That despite the shift in government focus to health, economy, and tourism in line with COVID-19 response and recovery, the government has been allocating sufficient manpower and resources to address coastal and marine-related issues.
- d) That PEMSEA secretariat has made significant contributions in terms of sustainable coastal and marine governance for Timor-Leste.

He expressed hope that PEMSEA and its ICM Learning Centers will continue to provide support in scaling up ICM in order to help the transition of local governments to blue economy in Timor-Leste.

5.9 [VIET NAM: Mr. Nguyen Que Lam, Deputy Director General, Viet Nam Administration of Seas and Islands \(VASI\), Ministry of Natural Resources and Environment \(MONRE\)](#)

Deputy Director General Nguyen Que Lam shared that the COVID-19 crisis has set off an unprecedented ripple and multiplier effect that permeates all layers of society worldwide. In the case of Viet Nam, this has significant economic impacts, especially in tourism, transportation, retail trading, and manufacturing and as such, the country intends to successfully control the outbreak and move towards safe reopening, stabilization, and resilience building of the economy. He then shared the economic recovery measures that have been implemented to date.

⁴ Director Celestino da Cunha Barreto represented Mr. Acacio Guterres, the Director General of Fishery, Aquaculture and Marine Resources in the Ministry of Agriculture and Fisheries (MAF), as the final designated speaker of Timor-Leste for the RTD.

He also shared several existing policies that support the advancement of blue economy in Viet Nam, such as the master plan for implementing Viet Nam's Marine Economy Sustainable Development Strategy. The said strategy aims to successfully develop the country's marine economic sectors, listed below in order of priority:

- a) **Tourism and marine services;**
- b) **Maritime industries;**
- c) **Offshore oil, gas, and other mineral resources;**
- d) **Aquaculture and capture fisheries;**
- e) **Coastal industries; and**
- f) **Ocean-based renewable energy and new/emerging marine economic sectors.**

6. OPEN FORUM

The floor was opened for questions from the attendees of the session. The attendees' interest in blue economy spurred a series of discussions as summarized below:

QUESTION 1. As the host country for the EAS Congress 2021, what outputs do you expect from the event that could help chart the blue/green development path of the region in the succeeding years?

His Excellency, Minister Say Samal: I expect that the event will help give us a clear direction on how the region can recover from the pandemic.

QUESTION 2. What kind of natural disasters and climate change impacts are more frequent in Lao PDR in the recent years? – Dr. Jae Ryoung Oh, Korean Institute of Ocean Science and Technology (KIOST)

Deputy Director General Manivong: These are mostly flash floods as seen for example in the provinces of Luang Prabang and Khammouane. We are working with the Ministry of Energy and Mines (MEM) to address this given their mandate on dam control and other relevant responsibilities.

QUESTION 3. The SDS-SEA has been the key regional framework document of the EAS region in its pursuit of sustainable coastal and ocean management. With the changing times and considering the new normal, how will the SDS-SEA and ICM programs support the countries' blue/green recovery plans? – Ms. Katherine Rose G. Aguilang, UNDP/GEF Arafura and Timor Seas Ecosystem Approach Phase II (ATSEA-2) Project Team

Director Dida Migfar Ridha: The SDS-SEA and ICM program will serve as our guide in the development/implementation of the recovery plan of each country in the EAS region. In Indonesia, for example, they are integrated into the national planning process. In fact, they form part of the guiding principles for the mangrove plantation and coral restoration aspects of the National Economy Recovery Program.

Executive Director Gonzales: The SDS-SEA will just need to be reviewed and updated to take into account innovative tools and technologies. Integrated coastal management serves as the foundational tool from which we will build a blue economy. The institutional and inclusive stakeholder mechanisms which are strong components of ICM will be necessary to help us achieve a new paradigm of economic growth. This will for example,

provide investors' confidence in the ability of local governments who have embraced ICM to be open to tackle complex challenges in a collaborative manner.

QUESTION 4. How can Japan help other PEMSEA country partners avail offshore wind generation and carbon neutral ports?

Director Hirashima: The Green Growth Strategy for Japan was adopted just last year so concrete collaboration may be premature and better suited as a point for future collaboration.

QUESTION 5. The pursuit of a blue economy with or without the pandemic requires an integrated and holistic approach to policy-making and implementation. It requires government agencies and other key stakeholders to work together on a whole-of-government approach. What is your advice on the successes and lessons in delivering a cross-sectoral, multi-agency approach for blue economy?

Ms. Gonzales: Partnership is key. For instance, climate change is a complex issue that should naturally bring all government agencies. Another example would be the case of Indonesia's National Economy Recovery Plan. Looking at the actions needed from restoring ecosystems to supporting SMEs, it is evident that an intergovernmental and holistic approach is needed to take into account the cumulative impacts of developing a blue economy.

QUESTION 6. What is the likelihood that Japan's neighbouring Asian countries will replicate its hydrogen economy program? – Adam Christopher Maraya, Philippines

Director Hirashima: We need to engage not just Japan but also Australia in any plan to replicate the project since we are working on the hydrogen economy program, actually importing hydrogen from Australia.

QUESTION 7. As long-term restoration of mangroves, coral reefs, and seagrass beds cost extensive resources, what do you think are efficient global financing mechanisms available for developing countries from the UN Convention on Biological Diversity (CBD) and UNFCCC? – Ms. Sharifah Nora Syed Ibrahim, Regional Secretariat of the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF)

Director Dida Migfar Ridha: Indonesia and the other countries have allocated budget and resources to develop blue/green activities, such as mangrove plantation, peatland restoration, and coral reef restoration. Based on the budget allocation, implementation of the programs could be accelerated, but it will also be useful if there is cooperation with international agencies and donors to support these activities that aim to improve the environment and promote collaboration within stakeholders.

Executive Director Gonzales: The Green Climate Fund (GCF), Global Environment Facility (GEF), ASEAN trust funds, bilateral grants, and foundations are examples of funding windows that can be tapped to support the coastal and marine sector. The 8th replenishment cycle of GEF has blue economy implementation as one of its focal areas for funding. Note that not all these funding windows are established within the frameworks of the UN CBD or UNFCCC.

QUESTION 8. With international travel restrictions, how has the aquaculture sector in Lao PDR adapted to the temporary shutdown caused by the ongoing health crisis? How has Lao PDR maintained the protection of its aquatic resources and river basins?

Deputy Director General Manivong: Digital technology played a key role to maintain connectivity and collect information and data needs on water resources within government offices and especially within and among the business sector.

QUESTION 9. Given the lack of modern infrastructure, technologies, and equipment here in the Philippines to manage coastal and marine resources, would it still be possible for the country to be globally competitive in relation to first world neighboring Asian countries during these times of pandemic? If so, what modern strategies do we have to promote and sustain a blue economy? – Dr. Aliasgar Mimbalawag, Philippines

Executive Director Gonzales: The issue is not about competition. We go with nature-based solutions that are appropriate for the Philippines. PRF can assist by collecting and providing examples of best practices to advance the transition towards blue economy.

Undersecretary Rebuelta-Teh: I am confident that we will also be able to reach what other countries have achieved eventually in terms of ocean management such as the use of digital tools. Involving and engaging communities and local government units are our strengths, but we need to better harness the Philippine experiences so we can properly sustain and manage our coastal resources and ecosystems.

QUESTION 10. How much time and delay are expected for the Philippines to materialize its blue/green recovery measures considering that the 2022 national elections is fast approaching?

Undersecretary Rebuelta-Teh: So far, the Inter-Agency Task Force on Emerging Infectious Diseases (IATF) has identified three priorities in terms of recovery: wildlife conservation and protection, hazardous waste management, and water security. These should still remain in place even in the aftermath of the national elections as these priorities will already be taken into account in the 2022 budget deliberations.

QUESTION 11. What has been done so far in order to tackle the issue of microplastics pollution? – Mr. Chandara Phat, Royal University of Phnom Penh

Deputy Director Shim: In RO Korea, buoys are the most common marine debris and this has been the for a long time. Specifically, these are expanded polystyrene (EPS) buoys, which undergo rapid fragmentation once deployed in the marine environment. About 2 million buoys are deployed every year but only 28 percent of them are retrieved. This led to the recent decision of the national government to ban EPS buoys by 2025 and replace them with more eco-friendly buoys.

QUESTION 12. Where are we in terms of accounting for the Philippines' blue economy? We need baseline information to formulate the country's blue economy related policies. – Mr. Ray Talento, Philippines

Undersecretary Rebuelta-Teh: Yes, as mentioned a while ago, we need to establish the baseline data. So far, the Philippine Statistics Authority (PSA), together with the National Economic and Development Authority (NEDA) and the Department of Environment and

Natural Resources (DENR), have already developed the ocean economy accounts and are now in the process of identifying the priority sites where we can pilot the System of Environmental-Economic Accounting (SEEA) and training DENR staff where needed.

QUESTION 13. Is there any recent study or information as to the impacts or contribution of the pandemic to the burgeoning level of marine pollution? – Mr. Joel Capalit, City Government of Mati, Davao Oriental, Philippines

Executive Director Gonzales: You may refer to the [August 2020 report](#) of GA Circular, as commissioned by Circulate Capital. This provides several insights on the impacts of the COVID-19 pandemic on the plastic recycling value chain in South and Southeast Asia.

QUESTION 14. With reference to Singapore Green Plan 2030, is there any foreseen negative impacts arising from the installation of floating solar panels on dam water quality? – Ms. Haslina Binti Amer, Selangor Waters Management Authority (SWMA)

Second Deputy Secretary Leong: Pilot studies were done on the floating solar panels. Singapore's National Water Agency (PUB) carried out environmental impact studies and reported only minimal negative impacts on water quality and the reservoir. During this process, PUB also engaged various stakeholders. In addition, the contractor executing this particular initiative was required to develop a comprehensive environmental management and mitigation plan covering different aspects such as biodiversity, water and air quality, noise levels, and microclimate for guiding the activities before, during, and after the implementation of the project. However, while the negative impacts appear minimal, PUB will nonetheless continue to monitor the target site closely and mitigate these impacts when necessary.

7. CLOSING REMARKS

Mr. Arief Yuwono, Chair of the EAS Partnership Council, started by reminding the participants that 2020-2021 was expected to be the start of a new decade of action to accelerate the global pace to achieve the Sustainable Development Goals. Instead, the challenge now is to prevent another lost decade of development, with the world on the brink of a major developmental setback that threatens to reverse the hard-fought progress of recent years.

He pointed to the fact that PEMSEA countries face different political, socio-economic, institutional and development resources and challenges and how the speakers provided insightful information on how their respective countries are taking action to address the threats of climate change, coastal and marine biodiversity decline, marine pollution, and seizing opportunities to create blue/green jobs and moving along the path of building circular economy and sustainable consumption and production .

He expressed his gratitude to all the guest speakers for sharing insightful information on blue economy and the ways forward, especially in light of the global pandemic.

He stressed that the region's transformation to a blue economy is doable given the availability of innovative and cost-effective technologies and practices as well as existing programs and projects that can be scaled up further. Meanwhile, to help ensure evidence-based policy-making, it is important to measure the contributions of blue economy to socioeconomic development and the environment.

Mr. Yuwono also mentioned that the information shared during the RTD will help inform the development of the EAS Roadmap to 2030, which will serve as PEMSEA's post-pandemic playbook in consideration of the guiding principles behind blue economy and the countries' plan on economic recovery. This will also form an integral part of the 7th Ministerial Declaration.

He also emphasized that the success in building back better will depend on the joint decisions and actions taken by all levels of stakeholders in the EAS region.

He shared that today's event is just the beginning of the year-long activities in the run up to the EAS Congress 2021 on December 1-2 and encouraged attendees to actively join the Congress activities.

ANNEX 1. PROVISIONAL ANNOTATED AGENDA.

Moderator: Ms. Reggie Olalia, Communications Specialist, PEMSEA

Time (GMT+7)	Session	Speaker/s
9:00 AM – 9:15 AM	Opening remarks/ welcome to first event of EAS Congress 2021	Mr. Say Samal Minister of Environment, Cambodia
9:15 AM – 9:25 AM	Message on the global action to promote sustainable and resilient ocean economy	Mr. Peter Thomson Special Envoy for the Ocean, UN
9:25 AM – 9:35 AM	Overview: Pursuit of sustainable ocean economy during and beyond the COVID-19 crisis in the EAS region	Ms. Aimee Gonzales Executive Director, PEMSEA
9:35 AM – 10:15 AM	Country presentations on the challenges and opportunities of accelerating blue economy against the backdrop of the new normal and post-pandemic recovery with examples of best practices	Senior officials from PEMSEA’s partner countries (10 min per country): <ul style="list-style-type: none"> • CHINA: Engr. Zhanhai Zhang, Director General, MNR • INDONESIA: Mr. Dida Migfar Ridha, Director of Coastal and Marine Pollution and Degradation Control, MoEF • JAPAN: Mr. Nobuhiro Hirashima, Director for International Ocean Affairs, Ocean Policy Division, Policy Bureau, MLIT • LAO PDR: Mr. Kingkham Manivong, Deputy Director General, DWR, MONRE
10:15 AM – 10:30 AM	Open forum	
10:30 AM – 10:40 AM	Break	
10:40 AM – 11:30 AM	Continuation of country presentations	Senior officials from PEMSEA’s partner countries (10 min per country): <ul style="list-style-type: none"> • PHILIPPINES: Atty. Analiza Reuelta-Teh, Undersecretary for Finance, Information Systems, and Climate Change, DENR

Time (GMT+7)	Session	Speaker/s
		<ul style="list-style-type: none"> <li data-bbox="1160 234 1966 304">• RO KOREA: Mr. Jeong-goo Kang, Director, Marine Environment Policy Division, Marine Policy Office, MOF <li data-bbox="1160 344 1966 383">• SINGAPORE: Mr. Eugene Leong, Second Deputy Secretary, MSE <li data-bbox="1160 422 2020 525">• TIMOR-LESTE: Mr. Celestino da Cunha Barreto, National Director of Marine Spatial Planning, Capture Fisheries, and Aquatic Resources Management, MAF <li data-bbox="1160 564 1984 635">• VIET NAM: Mr. Nguyen Que Lam, Deputy Director General, VASI, MONRE
11:30 AM – 11:45 AM	Open forum	
11:45 AM – 12:00 PM	Closing remarks	<p data-bbox="1099 676 1330 708">Mr. Arief Yuwono</p> <p data-bbox="1099 713 1935 777">Chair, EAS Partnership Council, and Senior Advisor to the Minister for Foreign Cooperation, MoEF, Indonesia</p>

ANNEX 2. SUPPORTING FILES.

- Photodocumentation of the event: <https://tinyurl.com/OceanRTD-EventPhotos>
- Video recording (in Youtube): https://www.youtube.com/watch?v=s2_gkvk0xFs
- Media uptake of the Ocean RTD:
<https://eascongress2021.pemsea.org/category/news/published-articles/>