

PROCEEDINGS OF THE  
OCEAN LEADERSHIP ROUNDTABLE  
9th East Asian Seas Partnership Council



**Makati Diamond Residences**  
**Makati City, Philippines**  
**26 July 2017**





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## TABLE OF CONTENTS

	<b>Page</b>
1.0 Introduction	1
2.0 Opening	1
3.0 Blue Carbon	3
4.0 Green Bonds	4
5.0 Regional Ocean Investment Facility and Funds	5
6.0 Waste Water as a Resource: Clean Ocean Fund	6
7.0 Discussion	6
Annex 1: List of Resource Persons	10
Annex 2: List of Participants	11
Annex 3: Ocean Leadership Roundtable Programme	16

**Proceedings of the Ocean Leadership Roundtable  
at the 9th East Asian Seas Partnership Council Meeting**  
Makati Diamond Residences Hotel, Makati City, Philippines  
26 July 2017

**1.0 INTRODUCTION**

- 1.1. The Ocean Leadership Roundtable was organized as a special event at the 9<sup>th</sup> EAS Partnership Council Meeting on 26 July 2017 at the Makati Diamond Residences, Makati City, Philippines. The Roundtable was convened by PEMSEA and co-hosted by the Department of Environment and Natural Resources (DENR) Philippines.
- 1.2. The Roundtable was chaired by Dr. Antonio La Viña, Chair of the EAS Partnership Council. The 9<sup>th</sup> EAS Partnership Council Meeting delegates from eleven countries (Cambodia, China, Indonesia, Japan, Lao PDR, Philippines, RO Korea, Singapore, Thailand, Timor Leste and Vietnam) and from eleven organizations (ACB, CI Phils, IPIECA, IUCN-MFF, KOEM, MABIK, OPRI-SPF, OSRL, PML, YSLME and UNDP) were in attendance, together with the members of the PEMSEA Executive Committee. The PEMSEA Resource Facility served as Secretariat to the Roundtable.
- 1.3. The resource persons for the Roundtable were: Dr. Stephen Crooks, Principal, Silvestrum Climate Associates; Ms. Justine Leigh-Bell, Director Market Development, Climate Bonds Initiative; Dr. Veerle Vandeweerd, Entrepreneur, Former Director, UNEP and Former Director, Environment and Energy, UNDP; and Dr. Ger Bergkamp, President & CEO, ARCOWA. A brief profile of each resource persons is provided in Annex 1. The full list of participants is included in Annex 2. The Roundtable Programme is found in Annex 3.

**2.0 OPENING**

- 2.1. Dr. Antonio La Vina opened the roundtable by welcoming the participants and inviting Mr. Stephen Adrian Ross, PEMSEA Executive Director, to provide opening comments.
- 2.2. Mr. Ross indicated that over the past 25 years, the Global Environment Facility (GEF) and other donors have contributed billions of dollars globally to support: (1) the preparation of regional scientific assessments; (2) development of regional strategic plans, such as PEMSEA's sustainable development Strategy for the Seas of East Asia (SDS-SEA); and (3) establishment of regional institutional mechanisms to address transboundary issues and promote sustainable development of coasts and oceans shared by multiple countries.
- 2.3. As a consequence, we see improved governance of coasts and oceans at the regional, national and local levels. This has been well recognized in East Asia, with the establishment of the PEMSEA Partnership, and the application of ICM as a vehicle for delivery of the SDS-SEA action program, covering almost 18% of the

region's coastline, and on target to surpass 20% of the coastline by the end of 2017.

- 2.4. What is unique to PEMSEA is its use of integrated coastal management (ICM) to transform the region's SAP into an on-the-ground action program. Over the years, PEMSEA's work has demonstrated, replicated and scaled up ICM applications, starting with two local governments back in 1993, focusing on marine pollution prevention and management, and scaling up to cover over 17 percent of the region's 234,000 km coastline.
- 2.5. In 2015, PEMSEA Country Partners agreed to scale up ICM coverage to 25 percent of the region's coastline by 2021. Specifically, climate change and disaster risk reduction, biodiversity conservation and food security, clean water, nutrient management and micro-plastic pollutants have been identified as priority programs by the 11 Country Partners over the next 5 years of ICM programs, with cross-cutting support programs focusing on ocean governance and partnerships, knowledge management and capacity development and investments in blue economy.
- 2.6. In a recent review of ICM sites across East Asia, more than 300 investment projects were identified as a priority of local governments, covering a wide range of sectors including water supply, pollution reduction and waste management, fisheries and aquaculture, ecotourism, ports and climate smart infrastructure.
- 2.7. Previous experience indicates that relying entirely on public funding to achieve the objectives of the SDS-SEA is unlikely to succeed at the scale and pace that are needed to achieve the vision and objectives of the SDS-SEA and other regional and international instruments, including the targets identified in UN SDG 14.
- 2.8. The Da Nang Compact confirmed countries commitment to develop and implement a sustainable financing mechanism assisting PEMSEA Partners to accelerate and secure long-term financing for implementation of the SDS-SEA. This commitment was reinforced at the UN Oceans Conference in June 2017, with a Call for Action that included greater effort and investment in: environmental infrastructure; restoration and rehabilitation of habitats; sustainable fisheries, aquaculture and tourism; climate change adaptation and mitigation; and disaster risk reduction and management; etc.
- 2.9. Building on these activities, PEMSEA is partnering with international experts to exploring a variety of mechanisms for channeling public and private financing to SDS-SEA implementation, specifically (1) Blue Carbon, (2) Green Bonds and (3) development of a regional Ocean Investment Facility & Funds.
- 2.10. PEMSEA's experience indicates that, in most countries in the region, there is a substantial gap between what is needed in terms of technology, infrastructure and financing and the capacity to develop and package bankable investments that provide an attractive financial return along with positive social, economic and environmental impacts.
- 2.11. The objectives and design of an ocean investment ecosystem in the region must therefore simultaneously address the development of a pipeline of investable

projects, and improved access to existing investment mechanisms, or the establishment of new investment mechanisms, that are business-focused, but with the mandate to identify and direct targeted investment capital to investments that result in positive social, economic and environmental impacts.

- 2.12. This Ocean Leadership Roundtable is an opportunity to learn from and interact with a panel of experts, and further develop and demonstrate this region's leadership on ocean governance and management to the world.

### **3.0 BLUE CARBON**

- 3.1. Dr. Stephen Crooks from Silvestrum Climate Associates provided an overview of blue carbon ecosystems, which include mangroves, sea grasses and salt marshes. In addition to their carbon benefits, these ecosystems provide a range of services including support of healthy fisheries, water quality, flood vulnerability reduction, aesthetic and ecotourism value and cultural and spiritual benefits. These ecosystems are found all over the world, but East Asia is a hotspot. Approximately 1% of blue carbon ecosystems are destroyed every year.
- 3.2. Silvestrum Climate Associates authored a report with PEMSEA, Conservation International and The Nature Conservancy on *Strategic Coastal Blue Carbon Opportunities in the Seas of East Asia*, providing an assessment of the status of blue carbon ecosystems in the region, the rate of loss and scale of emissions, how blue carbon fits within national climate commitments and policies, actionable next steps to advance blue carbon management and opportunities for blue carbon finance mechanisms.
- 3.3. There is a growing interest in applying climate finance to blue carbon opportunities. The Paris Agreement has helped to drive blue carbon efforts and attract financing. More blue carbon ecosystems can be included in the next round of Nationally Determined Contributions (NDCs). Landscape projects (such as blue carbon) come with a certain level of complexity. We can build on work already being done, e.g., layering on top of marine protected area (MPA) and fisheries management efforts already underway. Every country has different opportunities.
- 3.4. An 80 million Euro Blue Natural Capital Facility and Fund, led by Luxembourg and IUCN, could provide a good model for the East Asian region. It looks to address the challenge of developing projects that can offer market returns. The facility will help develop a pipeline of investable blue carbon projects, providing support, guidance and technical assistance. Support will first be deployed in small island developing nations and other blue carbon rich countries (including in East Asia). This work is also well aligned with the SDS SEA.
- 3.5. The report offers several recommendations for managing blue carbon ecosystems in East Asia, including:
  - Improving tracking of gains and losses of blue carbon ecosystems and associated greenhouse gas emissions.
  - Including blue carbon ecosystems within policies under commitments to the Paris Agreement.

- Considering the significance of blue carbon ecosystems across policy and planning, including on trade, aid and ICM.
- Promoting blue carbon ecosystems as a vehicle for adaptation and resilience, including sustainable environmental infrastructure.
- Building public-private initiatives and support international financing for blue carbon ecosystem conservation and restoration.

#### **4.0 GREEN BONDS**

- 4.1. Ms. Justine Leigh-Bell opened by defining green bonds. The “green” label indicates that the proceeds go to funding environmentally and climate beneficial projects and assets. An external review/certification is applied and the issuer commits to annual reporting on the environmental performance of the asset(s). Unlike traditional bonds, green bonds provide reports on the performance of the invested assets. There have been no tax benefits for green bonds yet, but concepts are under development.
- 4.2. There has been exceptional growth in green bonds since 2012 with US\$200B outstanding over five years. As one example, strong demand for IFC renewable energy bonds encouraged private institutions and local governments to enter the market. Previously, activity centered in Europe and the US, but in 2015 countries like China, India and Malaysia started to show much more activity in green bonds.
- 4.3. US\$100T in assets globally remain untapped. Green bonds allow issuers to tap into this new market base. It also allows for a price premium for issuers.
- 4.4. It is becoming a fiduciary duty to address the risks of climate change in the long term and investors can begin to address climate change in their portfolio through green bonds. Environmental benefits are becoming increasingly important to investors.
- 4.5. Interest in green bonds comes primarily from insurance funds, pension funds, sovereign wealth funds and a mix of fund managers, mutual funds and foundations. Sectors seeing the most green bond activity include renewable energy, energy efficiency/low carbon buildings, transport, water, waste management and adaptation.
- 4.6. A number of guidelines are available, including the Green Bond Principles, Climate Bonds Standard and Certification, National Green Bond Guidelines, ASEAN Green Bond Framework and Moody’s/S&P green assessment tools.
- 4.7. There is potential for an “ICM Bond” that could leverage the same mechanics as green bonds, but targeting marine assets specifically, in an integrated manner. Management of ICM Bond proceeds would need to be clear and transparent, as with green bonds. The issuer could be a public-sector body (including regional development banks). Buyers can be international and local, primarily institutional.
- 4.8. An ICM Bond Framework would leverage the best practices and existing frameworks, including the international climate bonds standard, criteria for marine



assets being developed by the Climate Bonds Initiative (CBI) and PEMSEA's ICM system certification, to assure investors that the bond will deliver environmental performance.

- 4.9. CBI developed an options paper for PEMSEA identifying Indonesia, the Philippines and Vietnam as high potential target countries for developing an ICM bond, based on a number of factors: advancement in ICM development and implementation, the state of domestic capital markets and green finance and a strong coastal management programs. Potential issuers include the central government, local government and national/regional development banks.
- 4.10. Ms. Leigh-Bell suggested exploring the development of a bond issuance with PEMSEA partners, where PEMSEA and CBI could provide technical support. The investment community would need to be engaged to assess their appetite and expectations for such a bond.
- 4.11. A representative from the State Oceanic Administration (SOA) of PR China intervened to express interest in exploring such a bond. CBI has been working with the People's Bank of China to mobilize green bond financing in China. China is seen as a leader in green finance on the global stage.

## **5.0 REGIONAL OCEAN INVESTMENT FACILITY AND FUNDS**

- 5.1. Dr. Veerle Vandeweerd opened her presentation by emphasizing that we are past the time for more research papers and academic studies, now is the time to implement. The heart of the regional Strategic Action Plans is investment. We need to move from action planning to implementing investments. Equally important, donor exit strategies must be addressed for coordinating mechanisms like PEMSEA.
- 5.2. Opportunities lie in the technological knowledge and financial resources already available. The challenge is a lack of large-scale, bankable projects. Locally, the knowledge, capacity and expertise to develop bankable, sustainable projects that contribute to the implementation of government approved action plans are not available. It takes time to shift mindsets and do something new. Coasts and oceans are standing at a critical point as a new asset class. For the first time, there are scientifically-based planning and action frameworks that provide fertile ground for sustainable investments for an economically-viable transition to more sustainable economic development models.
- 5.3. The time to start is now. Finance is available in the trillions of dollars, key partners have been identified by PEMSEA and new sustainable development funds are launched every day. What is needed? Innovative financial instruments, pipelines of bankable projects in different asset classes, capitalization of the funds by local, national and international investors and a first investment round to establish the asset class, reduce risks and build confidence. There is an opportunity to leverage GEF financing, and the GEF is increasingly interested in supporting such financing and investment efforts involving the private sector.

- 5.4. PEMSEA, in collaboration with regional and international partners, can establish an Ocean Investment Facility & Funds (OIFF). The private sector has the expertise to manage funds, but PEMSEA can help build the pipeline of investible projects. Doing so will also support PEMSEA's self-sustainability.
- 5.5. Vietnam shared that they have attempted investment work engaging the private sector, but success was limited due to a lack of capacity. The countries welcome help in this area. Dr. Vandeweerd responded that learning the terminology and mechanics of investment takes time, and environmental professionals would benefit from a basic understanding and should commit to learning.

## **6.0 WASTE WATER AS A RESOURCE: THE CLEAN OCEAN FUND**

- 6.1. Dr. Ger Bergkamp presented the latest work being conducted to develop waste water as a resource. UN Sustainable Development Goals (SDGs) 6 and 14 are both related to improving waste water management globally. To catch up, a 600K-person-equivalent treatment facility would need to be built and operated every day between now and 2030. There is a massive gap that needs to be addressed.
- 6.2. There is an enormous opportunity to develop waste water as a resource. It can generate clean water (post-treatment), energy, fertilizer from nutrients and rare earth minerals. But this requires the right technology, financing and appropriate regulation. Dr. Bergkamp shared different examples from around the world of wastewater being converted into useful resources: in Australia, USA, Denmark, China and Mexico.
- 6.3. A Clean Ocean Fund is being established, identifying investment opportunities in waste water as a resource in six countries in SE Asia. The pre-feasibility phase of the fund will demonstrate the viability of the approach. The implementation of the Clean Ocean Fund requires country level diagnostics, project pipeline scoping in selected countries, assessment of project level technologies and fund modalities and resource mobilization for the full feasibility phase.
- 6.4. Dr. Bergkamp emphasized that there must be consideration for cash flows from wastewater projects. Depending on the project characteristics, payback periods can be anywhere from 5 to 15 years. This requires appropriate contract arrangements. It also requires a shift in mindset—these are not donor projects that spend money, there needs to be a stable business with different streams of income, e.g., tariffs, but also revenue from selling energy. There needs to be a product or service that others are willing to pay for.
- 6.5. Vietnam shared an interest in learning more about such an approach to wastewater management, including in rural areas, where rivers and canals are polluted. Rural areas may need more decentralized systems. While the technology and approach may differ from dense urban areas, opportunities are still available.

## **7.0 DISCUSSION**

## **Application in the EAS region: Challenges, Needs and Opportunities**

- 7.1. Developing or engaging in new and innovative financing/investment mechanisms for sustainable development of coasts and oceans is relatively new, and countries in the East Asian Seas region are still largely unaccustomed to the concept. While this endeavor presents significant opportunities for the EAS region, there is still lack of understanding and buy-in on such financing/investment mechanisms.
- 7.2. PEMSEA plays a significant role in facilitating better understanding and in setting a new mindset for this innovative initiative to take off. PEMSEA Partners have been working in oceans for decades and can fill the gap between capital supply and demand. But prior to developing pipeline projects, it is crucial for PEMSEA Partners to agree on moving in this new direction and taking some risks.
- 7.3. PEMSEA is currently in the best position to start doing the necessary research and laying the preparatory work while GEF funding is still available up to 2019. This will enable PEMSEA to set in place the necessary mechanisms prior to end of current GEF funding.
- 7.4. There is great potential and opportunity in the EAS region, but such opportunities come with challenges. So far, the necessary pipeline of bankable projects does not exist, lack of data hinders understanding viability of projects and capacity is limited for developing viable projects. Each country has different opportunities. Policy is needed to bring everything together. Learning from and building on successful initiatives/practices in different parts of the world is one way to move forward.

## **How can sustainable financing for ocean economy work? How can the private sector and policymakers be engaged to address risks?**

- 7.5. It is important to emphasize that such initiatives are not like the traditional grant or donor projects, rather, they are projects that should generate income. There needs to be a viable business model that can pay back the financing. Investments in the ocean context are viewed as riskier than land-based investments. Thus, it is important to pay attention to various risks and how they can be reduced. The multilateral development banks (MDBs), bilaterals and national development banks can play a role in reducing risks, through mechanisms like first loss capital.
- 7.6. The NDCs under the Paris Agreement have had a catalytic effect. Ten years ago, the private sector would have been absent at a climate conference. Now, they are awake and engaged. How quickly the private sectors come to the table depends on what countries can offer. An ability to present concrete deals enables the private sector to respond.
- 7.7. There are two levels of risk: project risk, which banks are good at addressing, and policy risk. To engage investors, it is crucial to address policy risk, both at the local and national level. PEMSEA and its partners can play a role here.
- 7.8. In some countries, particularly China, it was cited that while there is already a growing recognition of the importance of blue economy, it is evident that most banks lack understanding of the ocean economy and tend to stay away from

financing ocean economy/industries as they are considered higher risk and longer term. The SOA of China has agreements with banks to develop financing of the ocean economy. SOA recommends projects to the bank for financing. Investors are paying more attention to ocean / blue economy, but they know very little.

- 7.9. Incorporating ecosystems valuation as part of project design and highlighting cost-benefit can help address some concerns. That said, many ecosystem services (PES) projects have seen large discrepancies in the actual payments versus the estimated valuation. It is crucial that such discrepancies be addressed and valuations are brought more in line with real payments.
- 7.10. Only in learning by doing can we build the experience needed. It may be useful to experiment with concrete, on-the-ground pilot projects, knowing that there may be failures. But that is how we learn, and investment experts need something concrete to react to.
- 7.11. We have the tools now to take advantage of opportunities. For example, an US\$80M carbon credit project had to be declined in the past due to lack of tools and understanding. Now, the tools are available. The challenge is not the science, it is the stability of policy.
- 7.12. One example cited for reducing risks is aggregating small projects into a larger portfolio, thus making it more attractive to investors as the overall returns of the portfolio will not depend on one single project. This has been applied in European markets, but experts are also looking at how this can work in India and Southeast Asia for emerging products and industries.
- 7.13. Apart from emerging industries, there is a need to pay more attention to reforming traditional ocean industries (e.g., fisheries, waste management, marine transportation, etc.) and existing assets. For example, a new waste treatment plant may not be needed, rather, it can be made more sustainable through retrofit or refurbishment (and refinancing). It is not just about new technologies, projects can utilize a mix of “gray” and “green” infrastructure.
- 7.14. In Indonesia, a system for green loans is in place. The Ministry of Environment has an existing MOU with the central bank for evaluation of loans based on an environmental rating system, which can impact the interest rate or even approval of a loan. The difficulty, however, is limited capacity for properly evaluating all the industries and companies using the program.
- 7.15. Proper social and environmental safeguards must be applied. A number of countries do not have guidelines/framework or institutional capacity to assess social and environmental risks and optimize cost-benefit for different stakeholders. It is crucial for national governments and regional and international institutions to facilitate operationalizing guidelines for conduct of social and environmental safeguards.
- 7.16. Local governments also play a significant role and should have some incentives for facilitating stakeholder dialogues and project formulation for coastal resource use and management.

## The Way Forward

- 7.17. Countries are encouraged by the call to move forward, but recognize that there are risks. To take advantage of this opportunity, it is important to hire the best expertise who can help the countries in the EAS region to conduct the necessary research and help identify investable projects that would be beneficial to the region in line with the implementation of the SDS-SEA. Waste water projects are a good entry point, but there are many ocean sectors to investigate.
- 7.18. There is a need for more discussions to understand and improve the feasibility of the various innovative financing concepts presented in the EAS region. It may be useful for national governments to allocate resources to conduct prefeasibility studies and scoping work, which can be used by PEMSEA to evaluate the potential bankability of projects.
- 7.19. Over the past 10 years, it has been a challenge for PEMSEA to engage the private sector. However, with the growing attention and mainstreaming of blue economy in the overall sustainable development agenda, it opens new opportunities. Thus far, PEMSEA is one of a few similar organizations globally that has been bold enough to initiate a move towards new investment mechanisms in support of blue economy development. It is important to set a strategic plan, engage agencies in investments and financing and bring in the necessary specialists to demonstrate success. The East Asian Seas Congress 2018 will be an important milestone for PEMSEA to set in place a work program and launch an innovative financing mechanism.
- 7.20. Countries were encouraged to consider how their work links to the NDCs and SDGs. Countries were invited by the speakers to engage in pilot work in the region on blue carbon, green bonds, waste water as a resource and overall development of pipelines of bankable projects for an Ocean Investment Facility. Some up-front investment is needed to reap the longer-term benefits.

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## ANNEX 1 LIST OF RESOURCE PERSONS

### **Dr. Stephen Crooks**

#### **Principal, Silvestrum Climate Associates**

Dr. Crooks is regarded as one of the top global experts on blue carbon. He has 20 years' experience in the science and practice of wetland restoration and has served in roles bridging academia and the private sector to deliver scientifically credible and practicable best-practice solutions for coastal management. His work has focused on defining best-practice climate mitigation and adaptation strategies, authoring and advising for institutions including the IPCC, NASA and IUCN, and he is co-founder of the International Blue Carbon Initiative.

### **Ms. Justine Leigh-Bell**

#### **Director Market Development, Climate Bonds Initiative**

Ms. Leigh-Bell has provided expert and advisory services for a number of global institutions and governments across Europe, Africa, India, Indonesia and Latin America. Her areas of focus include sustainable development in emerging economies, climate change mitigation/adaptation strategies, climate finance, economic valuation and market based instruments for managing natural resource assets. Her primary focus is emerging markets, where she works closely with both public and private sector actors in developing national policy guidelines and roadmaps that will enable access to green bond financing. Currently, she leads Climate Bonds Initiative's efforts in Nigeria and the Latin American region, where market development programs are underway in Brazil, Mexico and Colombia.

### **Dr. Veerle Vandeweerd**

#### **Entrepreneur, Former Director, UNEP, Former Director, Environment and Energy, UNDP**

Dr. Vandeweerd has over 25 years of experience in global, national and local environmental and sustainability policy setting and programme implementation. Her work spans diverse fields from integrated sustainability assessments, inclusive green economic transformations and global environmental norm setting to financial, regulatory and institutional capacity building in over 160 countries. She has over 20 years' experience in the United Nations, including the UN Environment Programme and UNDP, where she directed the Environment and Energy division, UNDP/GEF and Montreal Protocol divisions. Dr. Vandeweerd served as the Special Advisor to the UN Global Compact, the UN leadership platform for responsible corporate policies and practices, and serves on the boards of several international and national organizations, including the China Council for International Cooperation on Environment and Development.

### **Dr. Ger Bergkamp**

#### **President & CEO, ARCOWA**

Dr. Bergkamp is a recognized leader in water and environment issues with over 25 years of experience in sustainable development focusing on solutions for world-wide water challenges. He has supported colleagues in over 40 countries, previously serving as Executive Director of the International Water Association, Director General of the World Water Council and Head of the Water Programme at IUCN. Currently, he is President and CEO of ARCOWA, an advisory company focusing on strategic investments to address water scarcity, resource recovery from waste water and using green infrastructure for water security. He is the author of several books and reports and speaks and facilitates regularly at international events focusing on transitions and innovations in the water sector.

**ANNEX 2  
LIST OF PARTICIPANTS**

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**ANNEX 3  
PROGRAMME**

<b>Time</b>	<b>Activity/Presentation</b>	<b>Speaker/Panelist</b>
<b>900 – 910</b>	Welcome remarks and overview of PEMSEA's work developing innovative financing mechanisms for SDS-SEA implementation  Introduction of papers on innovative financing and investment concepts	Mr. Stephen Adrian Ross Executive Director, PEMSEA
<b>910 – 930</b>	Strategic Coastal Blue Carbon Opportunities in the Seas of East Asia	Dr. Stephen Crooks Principal, Silvestrum Climate Associates
<b>930 – 950</b>	Green bonds for debt financing of coastal and ocean sustainable development	Ms. Justine Leigh-Bell Director Market Development, Climate Bonds Initiative
<b>950 – 1010</b>	Establishing a Sustainable Ocean Investment Ecosystem in East Asia: Ocean Investment Facility & Funds	Dr. Veerle Vandeweerd Entrepreneur, Former Director, UNEP, Former Director, Environment and Energy, UNDP
<b>1010 – 1030</b>	Investing in Water and Wastewater Systems in Coastal Areas	Dr. Ger Bergkamp President & CEO, ARCOWA SA
<b>1030 - 1045</b>	Coffee break	
<b>1045 - 1115</b>	Country and Non-Country Partner reactions and suggestions on innovative financing and investment mechanisms supporting SDS-SEA implementation	
<b>1115 – 1200</b>	Open discussion: Opportunities, needs, gaps and action plans for pilot testing innovative financing and investment mechanisms in the East Asia region	