



# Enabling Blue Economy Investment for Sustainable Development in the Seas of East Asia

Lessons on Engaging the Private Sector  
for Partnership and Investment

Report prepared by  
Ryan Whisnant and Stephen Adrian Ross for PEMSEA





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*Empowered lives.  
Resilient nations.*



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August 2019

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Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) is an intergovernmental organization operating in East Asia to foster and sustain healthy and resilient oceans, coasts, communities and economies across the region. Through integrated coastal management solutions and partnerships, PEMSEA works with local and national governments, international development organizations, companies, investors and research institutions towards sustainable development of coasts and oceans in East Asia.

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# Contents

Executive Summary	1
1. Introduction and Background	7
PEMSEA: 25 Years Building Healthy And Resilient Oceans, Coasts, Communities and Economies	8
Scaling Up Implementation of the Sustainable Development Strategy for the Seas of East Asia	9
Objectives and Approach for this Report	10
2. PEMSEA: Blue Economy and Private Sector Partnership in East Asia	13
Defining the Blue Economy	13
Advancing the Dialogue for Blue Economy Development	14
Engaging the Private Sector in Integrated Coastal Management for Blue Economy	17
Conclusions and Lessons Learned on Private Sector Partnerships	19
3. Pilot Business and Investment Cases	23
Pilot Business Cases	24
Business Case 1: Abalone Farming on Siargao Island, Philippines	24
Business Case 2: Community-Based Seaweed Aquaculture in Palawan, Philippines	25
Business Case 3: Sustainable Grouper Farming in Selayar, Indonesia	26
Business Case 4: Sustainable Tuna Fishery in Central Vietnam	27
Lessons Learned from Business Cases	28
From Business Case to Investment Case	29
Investment Case 1: Sustainable Seafood	29
Investment Case 2: Marine Protection and Sustainable Tourism	32
Investment Case 3: Wastewater as a Resource	35
Investment Case 4: Ocean Plastic Pollution	37
4. Ocean Investment in East Asia	41
Proper Governance as a Basis for Investment	41
Understanding the ICM Investment Landscape in East Asia	42
An Ocean Investment Facility for East Asia	46
Next Steps for PEMSEA to Continue Advancing Blue Economy Investment	50
Other Financing Mechanisms	56

5. Knowledge Management for Investment: Seas of East Asia Knowledge Bank	59
6. Conclusions and Recommendations	63
7. Appendices	73
Appendix A: Oceans Finding their Place on the International Agenda	73
Appendix B: The Blue Economy Concept Continues to Mature	75
Appendix C: Approaching Private Sector Partnership	79
Appendix D: A Growing Wave of Ocean Investment	81
Appendix E: The Importance of Blended Finance	90
Appendix F: Other Forms of Innovative Finance	93
Appendix G: Potential Fund Strategies for A Sustainable Ocean Investment Fund	96
References	101

## Figures

Figure 1:	Percentage Share of Ocean Economy to GDP in East Asia (by Country)	15
Figure 2:	East Asia Employment in Oceans by Country (in millions)	16
Figure 3:	Overview of Supply and Value Chain for an Integrated Cooperative Farming Model	24
Figure 4:	Seaweed Production History and Breakdown by Farmed Species in the Philippines	25
Figure 5:	Sample Assessment Scoring for Impact Potential and Business and Investment Risks	30
Figure 6:	Map of Targeted MPAs in North Oriental Mindoro, Philippines	32
Figure 7:	Conservation Investment Blueprint for MPA Public-Private Partnership	33
Figure 8:	Segments of the Plastic Value Chain	38
Figure 9:	Grant Funding and Investment Capital to ICM-Related Sectors in Select East Asian Countries, (2005-2015) By Donor Category, Estimates of Committed Funds (in US\$ million, % of total).	43
Figure 10:	Ocean Investment Facility Project Submission Form	49
Figure 11:	Levels of the ICM Investment Process	60
Figure 12:	Rapid Online Assessment of the Enabling Environment for Investment	61
Figure 13:	Results of Online Assessment of Investment Gaps and Opportunities	61
Figure 14:	Results of Online Assessment of Investment Readiness	61
Figure 15:	Blue Economy in East Asia	77
Figure 16:	Technical Assistance from INGOs to Entrepreneurs/Enterprises	88
Figure 17:	Blended Finance Definition	91

## Tables

Table 1:	Social Impact Goals and Objectives for Sustainable Grouper Farming Operation	31
Table 2:	Blue Economy Investment Ecosystem Players in East Asia	45
Table 3:	Recommended Actions for Countries to Advance Blue Carbon Initiatives in East Asia	57
Table 4:	Potential Roles for Development Organizations to Advance Blue Economy Investment	71
Table 5:	Resources for Partnerships with the Private Sector for Sustainable Development	80
Table 6:	Areas of Progress and Challenges for the Growth of the Impact Investing Industry	83



# Executive Summary

With decades of scientific research and policy dialogue, the issues confronting the sustainable health of oceans are well understood. The Global Environment Facility (GEF) and many organizations, including the United Nations Development Programme (UNDP), are now moving into a time of action, in support of the UN Sustainable Development Goals (SDGs).

The Seas of East Asia are especially significant to achieving SDG 14, which addresses the conservation and sustainable use of the oceans, seas and marine resources for sustainable development. East Asia is recognized as the center of marine biodiversity globally and is a center of economic growth. But the health of the oceans continues to deteriorate, in East Asia as much as anywhere, with loss of coral reefs and mangrove forests, declining fish stocks, nutrient and ocean plastic pollution, ocean warming and acidity and sea level rise threatening coastal ecosystems and communities worldwide. SDG 14 is one of the SDGs identified as most likely to miss its 2030 targets. Bold new solutions are needed, and one important intervention that has accelerated over the past five years is the application of financing and investment to drive the long-term health and sustainability of oceans.

Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), an international organization specializing in coastal and ocean governance, serves as a regional collaborative

mechanism for countries to implement a shared regional marine strategy, the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA). The SDS-SEA harmonizes relevant international and regional conventions, action programs and agreements and provides a framework for sustainable development of coasts and oceans in East Asia. PEMSEA's integrated coastal management (ICM) approach has proven its effectiveness over 25 years and has been applied across an estimated 29% of the region's coastline.

PEMSEA's partner countries have called for identifying and developing opportunities for environmental investments and facilitating sustainable financing mechanisms. In November 2018, Ministers from eleven countries adopted the Iloilo Declaration, recognizing PEMSEA's role at the forefront of developing knowledge and capacity to enable ocean-based blue economies and re-affirming a shared commitment to identifying and developing blue economy investments at the national and local levels.

In collaboration with other regional and international organizations, PEMSEA has undertaken a significant body of work to advance both the understanding and practice around blue economy and investment in sustainable development of coasts and oceans. This report provides an update on the current state of blue economy investment in East Asia, with lessons learned and recommendations for international development organizations to help advance blue economy investment.

## PEMSEA blue economy investment

The need to access private capital for sustainable development has been well understood, but the means to do so has been less clear. Based on the interactions and networking undertaken as part of PEMSEA's program of work over the past 4 to 5 years, there appears to be no shortage of private capital available, and investors are looking for new opportunities to diversify and find growth in new asset classes with the appropriate risk and returns. But investment in sustainable development of oceans is often perceived as untested and risky, particularly in a region like East Asia. Investors may have concerns about ease of doing business, rule of law, local management and enforcement capacity, available infrastructure, clear zoning rules and property rights, which can all have severe consequences for an investment. Risks can be reduced by providing streamlined policy frameworks and stable governance. The application of ICM validates improved governance and management of ocean and coastal areas, reducing risk and encouraging investment.

In 2015, stakeholders from 8 PEMSEA countries identified more than 300 items for potential investment across 10 governance and management categories for oceans and coasts, including: ICM Development and Implementation; Coastal Transport; Energy; Fisheries and Food Security; Pollution Reduction and Waste Management; Ecotourism / Sustainable Tourism; Enterprise and Livelihood Development; Habitat Protection, Restoration and Management; Natural and Manmade Hazard Prevention and Management; and Water Use and Supply Management. Research conducted by PEMSEA that same year revealed that, of the more than US\$10 billion in funding flows under these various categories over ten years, investments with expectations of financial returns greatly outpaced donor funding, dominated by loans from foreign

direct investments. The report also found that impact investing remained largely unrealized in the region.

But ocean investments can be more complex in nature than the typical land-based infrastructure investment, and therefore require special expertise to source, evaluate, develop and profitably exit an investment. Improved capacity is needed at the local level to identify potentially investable projects and move them through the necessary steps towards successful investment. PEMSEA recognized the need for value-added services to help project proponents develop and package bankable investments that provide a financial return to capital providers, along with positive social and environmental impact on coasts and ocean.

To gain a better appreciation of the scope of such services, PEMSEA began developing pilot investment cases to improve capacity in and understanding of investment services, partnering with project developers to create full investment cases in four sectors—sustainable seafood, marine protection and sustainable tourism, wastewater and ocean plastic pollution. In addition to generating positive social and environmental impacts, the investment cases were designed to generate risk-adjusted financial returns, covering: a sustainable grouper farming operation, including vertically integrated hatchery, nursery and grow-out operations aiming to produce live and fresh products for the Philippines and regional Asian markets; a co-management scheme for marine protected area management based on a public-private partnership (PPP) between local government and a newly-created private operator; a pre-feasibility investment case for wastewater and resource recovery in a special economic zone in the Philippines; and a partnership with an investment management firm to channel financing to companies and infrastructure that prevent ocean plastic pollution.

## Lessons Learned

The pilot investment cases offer a number of valuable lessons.

### Establish good governance

Policy, regulation and enforcement play a critical role in setting the scene for investment, particularly for foreign investors. Lack of sound policy or enforcement represents a significant risk. For example, illegal waste collection and disposal practices and unscrupulous operators distort markets and generate far too much risk for investors' appetite. Government action is required to set the ground rules for markets.

PEMSEA's ICM Code and Certification System provide an internationally recognized standard to guide coastal management and validate performance excellence. Through certification, governments are able to validate that their system of governance and management, inclusive of institutional mechanisms, policies, regulations and enforcement capabilities, conforms to international standards for governance and management of coastal areas, thereby reducing risk and encouraging partnerships and investments with the private sector and other interested parties.

### Invest in building capacity of local entrepreneurs

Don't underestimate the need for capacity building at the local level. Overall, the blue economy investment pipeline in East Asia does not appear to be especially robust. A common characteristic identified with smaller, early stage companies is a need for technical assistance to develop their management skills, build networks and access technologies. Entrepreneurs are needed with experience creating and running businesses. Incubators and accelerators can help to build the needed management skills, networks and access to technologies.

While there is genuine desire by local governments to explore private investment, some may lack the skills

and expertise to engage with the private sector and therefore a gap remains between the desire and the ability to develop bankable projects. In several cases, it has been challenging to gather even the rudimentary data needed to make an initial assessment of a project to determine whether further pre-feasibility analysis is warranted. Providing basic capacity building on entrepreneurship, especially at the local level, is a necessity to help build a network of support even with the basic identification of potential 'investable' projects. Running one training workshop is not likely to build the capacity needed—and capacity development cannot happen overnight.

### Open doors with value-added partnerships

Localization is a critical element for executing investments. As investors move into what may be new geographies or asset classes, they need local partners they can trust that can help to de-risk their investments. Partners with the local knowledge and relationships are needed to navigate deals and build capacity on the ground, particularly in a region as diverse as East Asia. At the same time, organizations with a regional view, beyond a specific locale, can help to reach further across a region to open doors of opportunity for investors and project developers.

### Do not underestimate the time and resources needed to make meaningful progress

Development organizations should start with a realistic view of what it may take to develop projects able to attract private capital. It's important to recognize the runway of time and resources required and to build in the necessary funding and schedules up front. Even a small- to medium-scale investment may take a year or more to develop, prior to engaging in discussion with investors. The cost can be, at a minimum, 10% of the investment ticket size (i.e., a US\$2 million investment could cost at least US\$200K in fees for the right project development and financing expertise to develop a case). This can put a strain on resources available

for project development, particularly when the outcome of developing a case cannot be guaranteed. Creative partnership arrangements may be useful to mitigate development costs, e.g., a development partner taking an equity role in an investment.

### **Impact measurement for investment in coastal sustainable development needs to advance**

One of the most common challenges cited by all parties is the ability to monitor and evaluate the impact of an investment—a challenge that is not new to the development community. It's also not unique to oceans—the impact investment community has wrestled with it for years, and a lot of good work has been done to develop approaches for impact measurement. Greater effort is required by development organizations working on oceans to apply available performance metrics to measure and manage social, environmental and financial performance and evaluate deals (e.g., IRIS+, developed by The Global Impact Investment Network).

### **Work remains to address the perceived risks around ocean investment**

In general, investors still have a long way to go to be comfortable with oceans as a new asset class given its complexity and their lack of familiarity with it. Investors are certainly paying more attention, but they know very little about this space in general. There are a number of ways to help mitigate risks. Packaging investments together may create a stronger risk-return profile by diversifying risk. Introducing an anchor investor, particularly one requiring initial diligence, can give other investors more confidence. Finally, and most importantly, proper policy and regulatory frameworks are key at the local and national levels. There is a need to ensure that investors engage with the relevant government agency for the right purpose. Certainly, for conservation projects the local environment office and national Ministry are appropriate, but also

be aware of the mandate of the local Planning or Investment Office and relevant national Ministry.

### **Market investment projects proactively**

Over the past several years, the international development community has shown interest in creating online clearinghouses for sharing information and matching groups with each other, including matching projects with funders and investors. While these clearinghouses can be useful as repositories at the very least, significant effort is required to gain the visibility and critical mass needed for use of the platform to become self-sustaining. An “if you build it, they will come” strategy is generally not enough. The content in a clearinghouse must be of sufficient quality and volume to interest users, and then it must be supported by offline promotional activities and events to drive users to the platform. Projects need to build in the resources and time to account for these online and offline supporting activities.

### **Involving investment expertise early has tremendous advantages**

Bringing in investment expertise early to provide ground-truthing of investment cases as they are developed is extremely helpful. Certain elements can be eliminated and clarifications gained early in the process rather than making it to the final case, only to bring up questions by investors at that point. Rather than a business case, the target for an output should be an investor memo, written in a format and language familiar to investors. The active participation by an investment expert can also provide links to investment funds for initial feedback by investors and to line up interested financiers early on.

### **Next Steps**

Building on the gains of the past four years and the current growing interest around oceans and

private sector solutions from the global community, PEMSEA is working to strengthen its pre-investment services to develop investible projects that are financially sustainable and that generate measurable social, economic and environmental benefits in support of the objectives and priorities of its regional strategy, the SDS-SEA.

PEMSEA's journey with blue economy investment has generated a robust set of lessons learned. But it has also raised as many new questions that beg further investigation. Given the exploratory nature of this work, chief among these questions, and one that has understandably been asked by PEMSEA's partners is "What role does PEMSEA want to play?" At this stage of learning, six key roles are being considered by PEMSEA for advancing blue economy investment. (see Table below).

The roles are overlapping and mutually reinforcing in certain areas. For instance, having strong technical capacity lends itself to serving as a Pipeline Developer. Given its unique profile and accumulated experience, along with the lessons from its recent blue economy investment efforts, PEMSEA is well positioned to operate as an Ecosystem Builder, Investment Enabler and Technical Advisor first, and secondarily as a Finance Catalyzer and Pipeline Developer.

As a Capital Provider PEMSEA would continue to plan and prepare development projects in support of SDS-SEA objectives and targets in collaboration with its Country Partners, development organizations and donors. However, an added value of such projects would be the inclusion of an investment component in the work program, which is designed to formulate, promote and realize "investments" in on-the-ground facilities and services that result in positive social, economic and environmental impacts.

To effectively provide an investment service, PEMSEA needs to address the following: a) the legal structure allowing for disbursement of grants that result in investments; b) access to investment and finance expertise to develop investible projects, either through its own in-house staff, by engaging the private sector on a case-by-case basis, or by forging a partnership with a private corporation that focuses on impact investments/blue economy growth in the East Asian region; and c) the willingness of PEMSEA Country Partners to move into an incubating stage of a new PEMSEA service.

These are indeed challenging issues for PEMSEA, but directly in line with its objectives and targets as a partnership organization for sustainable development of coasts and oceans and blue economy growth in the East Asia region.

**Potential Roles for Development Organizations to Advance Blue Economy Investment.**

<b>Role</b>	<b>Objective</b>	<b>Typical Activities</b>	<b>Best for organizations with...</b>
<b>Capital Provider</b>	Provide the organization's own capital to a project or enterprise as either a grant or an investment to help achieve development outcomes	<ul style="list-style-type: none"> <li>• Provide grants with no expectation of repayment</li> <li>• Make investments with an expectation of financial return, at a minimum, preservation of invested capital</li> </ul>	<ul style="list-style-type: none"> <li>• Legal structure allowing for disbursement of grants and investments</li> <li>• Sufficient on-staff finance expertise</li> <li>• Access to sufficient capital and willingness to risk it</li> </ul>
<b>Finance Catalyzer</b>	Utilize blended finance to de-risk investments or fund project development and investment readiness	<ul style="list-style-type: none"> <li>• Cultivate relationships and execute projects for donors (e.g., multilaterals, foundations)</li> <li>• Develop project concepts and proposals blending public, donor and private capital</li> </ul>	<ul style="list-style-type: none"> <li>• Relationships with international funders</li> <li>• Ability to access specific donor funding (e.g., as a GEF Implementing Agency) or close relationship with such partners</li> <li>• Track record of developing project proposals and accessing grant capital</li> <li>• Sufficient on-staff finance expertise</li> </ul>
<b>Pipeline Developer</b>	Leverage local knowledge and relationships to identify and develop potentially investable projects and enterprises	<ul style="list-style-type: none"> <li>• Identify potential pipeline investment opportunities</li> <li>• Provide accelerator, incubator or TA services to build investment-readiness of projects and enterprises</li> </ul>	<ul style="list-style-type: none"> <li>• Local relationships and understanding of local context</li> <li>• Track record of local capacity-building</li> <li>• Sufficient on-staff or outsourced business / finance expertise</li> <li>• Access to interested investors</li> </ul>
<b>Technical Advisor</b>	Deliver technical expertise on conservation, sustainable development and impact investment aspects of projects and enterprises	<ul style="list-style-type: none"> <li>• Provide technical expertise to development projects and/or investors supporting environmental and social impact and investment-readiness</li> <li>• Provide independent measurement and evaluation of impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Technical expertise and experience delivering services</li> <li>• Understanding of local context</li> <li>• Ability to collect data and track record of measuring and evaluating development outcomes</li> </ul>
<b>Ecosystem Builder</b>	Coordinate and promote relationships and knowledge to advance blue economy investment	<ul style="list-style-type: none"> <li>• Develop partnerships and establish linkages between organizations along the blue economy investment value chain</li> <li>• Produce knowledge products</li> <li>• Conduct local, national and regional convenings and dialogues to further knowledge sharing and relationship building</li> </ul>	<ul style="list-style-type: none"> <li>• Research expertise and track record of knowledge management</li> <li>• Experience designing and delivering successful workshops and conferences</li> <li>• Relationships and ability to convene government, NGO, private sector, multilaterals, etc.</li> </ul>
<b>Investment Enabler</b>	Serve as a policy-oriented advocacy and capacity-building platform for creating the right conditions for private investment	<ul style="list-style-type: none"> <li>• Advocate for policy reforms and public investment with local and national government</li> <li>• Facilitate proper governance, including regulatory and enforcement regimes needed for investment</li> <li>• Provide capacity-building, primarily of local stakeholders, on requirements for private investment</li> </ul>	<ul style="list-style-type: none"> <li>• Relationships and experience engaging local and national government and multilaterals on policy issues</li> <li>• Track record of local capacity-building</li> <li>• Sufficient on-staff or outsourced business / finance expertise</li> </ul>

# Introduction and Background

# 1

The issues confronting the sustainable health of our oceans are by now well understood. Building on decades of scientific research and policy dialogue, including processes such as the Transboundary Diagnostic Analysis (TDA) employed by the Global Environment Facility (GEF), a solid foundation of knowledge is available to understand the challenges. As expressed by the UN Secretary-General's Special Envoy for the Ocean, Peter Thomson, at the opening of the 2017 UN Ocean Conference, we are now in a time of action. UN Sustainable Development Goal (SDG) 14 was specifically created to address this need for the conservation and sustainable use of the oceans, seas and marine resources for sustainable development.

The Seas of East Asia are especially significant. Recognized as the center of marine biodiversity globally, they are home to over 30 percent of the world's mangroves, a third of seagrass beds and a third of the world's coral reefs. Countries of the region account for 80 percent of global aquaculture and around 60 percent of the world's capture fisheries supply and production. The region's seas also serve as an important conduit for world trade via shipping, with more than 90 percent of international shipping traffic transiting the Seas of East Asia. The region is a center of economic growth, home to the second and third largest economies of the world (China and Japan, respectively), and the combined economies of ASEAN, which represent the world's fifth largest

economy and the third largest global market with more than 630 million people.<sup>1</sup>

But the health of the oceans continues to deteriorate. Coral reefs are under threat; loss of mangrove forests and seagrass beds continue; fish stocks are in decline; nutrient pollution and coastal eutrophication continue to increase; ocean plastic pollution is a growing problem; ocean warming and acidity threaten the balance of life in the sea; and sea level rise, coastal erosion and changing weather patterns threaten coastal communities worldwide. Unfortunately, SDG 14 is one of the SDGs identified as most likely to miss its 2030 targets.<sup>2</sup> In this time of action, bold new solutions are needed.

One important intervention that has accelerated over the past five years is the application of financing and investment—the use of capital markets—to drive the long-term health and sustainability of our oceans. From the perspective of economics, it makes sense that finance must be an integral part of the solution. Globally, the market value of marine and coastal resources and industries is estimated at US\$2.5 trillion per year,<sup>3</sup> and over 3 billion people depend on the oceans as their primary source of protein and livelihoods.<sup>4</sup> If it were a country, as a whole the oceans would be the 7th largest economy in the world.<sup>5</sup> As the Organisation for Economic Co-operation and Development (OECD) points out in its report on “The Ocean Economy in 2030”, there is a need to improve

<sup>1</sup> PEMSEA. 2018. State of oceans and coasts 2018. *Blue economy growth in the East Asian Region*.

<sup>2</sup> DNV GL. [n.d.] Future of spaceship earth. *The sustainable development goals business frontiers*.

<sup>3</sup> Hoegh-Guldberg, O. et al. 2015. *Reviving the Ocean Economy: The case for action - 2015*. WWF International, Gland, Switzerland, Geneva, 60 pp.

<sup>4</sup> UNDP (United Nations Development Programme). 2018. *Blue Economy: Community solutions*. UNDP, New York.

<sup>5</sup> Kraemer, R. Andreas et al. 2017. *Sustainable ocean economy, innovation and growth: A G20 initiative for the 7th Largest Economy in the World*.



integrated approaches to ocean management to better harness technology and innovation, strengthen the information base and make better use of economic analysis and incentives.<sup>6</sup>

### **PEMSEA: 25 Years Building Healthy and Resilient Oceans, Coasts, Communities and Economies**

Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) is an international organization specializing in coastal and ocean governance. In 1993, PEMSEA began its operation as a regional project under UNDP, with funding support from the GEF. In 2006, eleven participating countries in the regional program resolved to transform PEMSEA from a project-based arrangement into a self-sustained, regional collaborative mechanism with the mandate to pursue the implementation of their adopted regional marine strategy, the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA, 2003).

The SDS-SEA is a shared regional strategy adopted by all 14 countries of the region—Brunei Darussalam, Cambodia, China, DPR Korea, Indonesia, Japan, Lao PDR, Malaysia, Philippines, RO Korea, Singapore, Thailand, Timor-Leste and Viet Nam—that harmonizes relevant international and regional conventions, action programs and agreements and provides a framework for sustainable development of coasts and oceans in East Asia. In 2015, the SDS-SEA was updated to address the changing context in ocean governance in light of new or amended international and regional agreements, including the United Nations Framework Convention on Climate Change (UNFCCC), Sendai Framework for Disaster Risk Reduction, Rio+20, the Aichi Biodiversity Targets and the UN SDGs. The updated SDS-SEA contains seven strategies for sustainable development of coasts and oceans in the region:

- **SUSTAIN** the use of coastal and marine resources by conserving, restoring and managing fisheries, coastal habitats and related resources, and overexploited and endangered migratory species to maintain the integrity of ecosystem services and the social, economic and environmental values and benefits derived to coastal communities and countries of the region.
- **PRESERVE** species and coastal and marine areas of ecological, social, economic and cultural significance by establishing integrated management regimes for efficient and effective management of marine protected areas (MPAs) and PA networks.
- **PROTECT** ecosystems, human health and economic activities from threats that occur as a consequence of land- and sea-based activities by preventing and significantly reducing pollutant discharges and accidental spills in river basins, coastal areas and sub-regional seas of the region.
- **ADAPT** to adverse effects of climate change and other natural and manmade hazards by strengthening capacities, promoting investments in green infrastructure, technology and management practices and mainstreaming climate change adaptation and disaster risk reduction and management into sustainable development programs and investment plans at national and local levels.
- **DEVELOP** coastal and ocean areas and sectors of the economy using infrastructure and technologies, innovative financing mechanisms and proactive institutional arrangements that support sustainable economic development towards a blue economy.
- **IMPLEMENT** international conventions and agreements relevant to the management of coasts and oceans by translating the respective principles and objectives of these instruments into desired management activities, outputs and

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<sup>6</sup> Jolly, Claire. 2017. "The Ocean economy in 2030." [presentation].



outcomes at the regional, national and local levels.

- **COMMUNICATE** ideas, information and knowledge to raise awareness and enhance understanding of coastal and ocean environmental and resource management issues and processes and to mobilize government, civil society and private sector participation in effective coastal and ocean governance and management.

In late 2015, Ministers and senior government officials from 11 PEMSEA partner countries signed the Da Nang Compact, which emphasizes the importance of PEMSEA achieving a self-sustaining organization capable of managing and coordinating a suite of products, services and financing mechanisms for advancing SDS-SEA implementation at the regional, national and local levels.

PEMSEA has applied ICM across an estimated 29% of East Asia's coastline, covering approximately 65,400 km of coastline and benefitting tens of millions of people living in coastal and watershed areas. ICM helps local governments to consider the various impacts of multiple uses of coastal resources; integrate ecological, social and economic information to ensure that management strategies are responsive to the multiple uses of coastal resource systems; and promote interdisciplinary approaches and cooperation among users. ICM, in effect, supports management of the ocean resources that all economic activity and livelihoods rely on.

While blue economy plays an important role as an organizing concept and approach, PEMSEA was seeking to push this work further to more practical applications. In the SDS-SEA 2015, the partner countries called specifically for “identifying and developing opportunities for environmental investments and facilitating sustainable financing mechanisms” and the “creation of self-sustained

financing mechanisms and investment opportunities for sustainable coastal and marine development”.<sup>7</sup> In addition to continuing to build capacity and advance knowledge on blue economy and investment, there was a desire to move towards tangible application, with an increased focus on the role of private sector investment.

At the Sixth Ministerial Forum held during the East Asian Seas Congress 2018, Ministers from 11 countries adopted the Iloilo Declaration, which reaffirms a shared commitment to support PEMSEA's efforts in identifying and developing blue economy investments at the national and local level, and welcomes opportunities to work with partners to develop, finance and implement blue economy projects.<sup>8</sup>

### Scaling Up Implementation of the Sustainable Development Strategy for the Seas of East Asia

While serving as a shared framework and agreement, the SDS-SEA is translated into action through the SDS-SEA Implementation Plan.

The SDS-SEA Implementation Plan (2018–2022), identifies expected outcomes, indicators and targeted actions for priority governance and management programs that contribute to the sustainable development of oceans and coasts and blue economy growth in the region by 2022. “Blue Economy Investments and Sustainable Financing” was identified as one of the six priority management and governance programs. Its program objective is to “bolster blue economy investment and sustainable financing of the SDS-SEA by promoting improved access to sources of financing and development of financing mechanisms and partnerships”.

<sup>7</sup> PEMSEA (Partnerships in Environmental Management for the Seas of East Asia). 2015. *Sustainable development strategy for the seas of East Asia (SDS-SEA)*. PEMSEA, Quezon City, Philippines. Updated 2015.

<sup>8</sup> PEMSEA. 2018. *Iloilo Ministerial Declaration*.

By 2022, there are three expected outcomes for Blue Economy Investments and Sustainable Financing in the SDS-SEA Implementation Plan:

1. Improved access to sources of public and private sector financing, including sector-based ocean investment funds and other innovative investment mechanisms.
2. An “Ocean Investment Facility” established in the East Asian Seas region, identifying, developing and promoting blue economy investment projects.
3. Socio-economic and ecological benefits and changes in ecosystem health and resilience resulting from blue economy investment realized and shared with regional and international partners for further scaling up investments.

Actions in the SDS-SEA Implementation Plan have been tackled in parallel with, and largely through, the GEF/UNDP project on *Scaling up Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)* (“SDS-SEA Scaling Up Project”). Under this project, PEMSEA, in collaboration with other regional and international organizations, has undertaken a significant body of work to advance both understanding and practice around blue economy and sustainable investment for coasts and oceans. Likewise, the SDS-SEA Scaling Up Project is designed to generate benefits that include both public and private sector investments in activities that contribute to sustainable development and a blue economy at the regional, national and local levels.<sup>9</sup>

Whereas this report is focused on private sector investments, a number of public sector investments in blue economy growth have also been documented in PEMSEA’s 2018 publication entitled, *Local Contributions to Global Sustainable Development Agenda: Case studies in Integrated Coastal Management*

*in the East Asian Sea Region*.<sup>10</sup> The case studies cover a broad range of challenges and threats to sustainable development of coastal and marine areas and some of the approaches that are being applied to address them, including ecotourism, sustainable aquaculture, conservation and restoration of habitat, MPA networking, beach management, pollution reduction and waste management and disaster risk reduction and management.

Each case study provides insight into how local governments can effect change through investments in the protection and sustainable management of marine and coastal resources; investments which result in social, economic and environmental benefits.

### Objectives and Approach for this Report

This report seeks to shed light on the following:

1. How has the understanding and practical application of blue economy investment advanced for both PEMSEA and the broader ocean community over the past 4 to 5 years, and where does it currently stand?
2. What are the current gaps, challenges and opportunities to address in the application of blue economy investment?
3. What guidelines, best practices or recommendations can other projects, programmes, organizations and donors take from this work to strengthen their approach and accelerate their blue economy investment efforts?

The main body of the report provides an overview of PEMSEA’s role in advancing blue economy and impact investment in the East Asian Seas (EAS) region based on a synthesis of PEMSEA reports, business and investment cases, conference proceedings, case studies, assessments and other materials.

<sup>9</sup> PEMSEA. [n.d.]. *Project document : Scaling up the implementation of the sustainable development strategy for the seas of East Asia (SDS-SEA)*.

<sup>10</sup> Chua, T.-E., L.M. Chou, G. Jacinto, S.A. Ross, and D. Bonga, (eds). 2018. *Local contributions to global sustainable agenda: Case studies in integrated coastal management in the East Asian Seas Region*. Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) and Coastal Management Center (CMC), Quezon City, Philippines.

This is complemented by secondary research on the latest trends and practices related to ocean investment, blue economy and private sector engagement from leading NGOs, foundations, funds, multilaterals and consultancies and a set of interviews conducted with donors, funds and investment experts that PEMSEA has collaborated with to gather insights on the state of blue economy investment and how international development organizations like PEMSEA have contributed to accelerating these efforts in East Asia. The Appendices include an overview of the current

landscape and evolution of discussions on blue economy, private sector partnerships and impact investment internationally.

The two analyses (from the EAS region and international perspectives) lead to a set of lessons learned and recommendations for approaches to blue economy investment for the international development community, intergovernmental organizations and national and local governments and the gaps that need to be addressed to help advance blue economy investment.





Source: Lynda Richardson/TNC

# PEMSEA: Blue Economy and Private Sector Partnership in East Asia

## 2

### Defining the Blue Economy

Recognizing a clear need and opportunity, in July 2012 Ministers from ten PEMSEA countries including Cambodia, China, Indonesia, Japan, Lao PDR, the Philippines, RO Korea, Singapore, Timor-Leste and Viet Nam signed the *Changwon Declaration Toward an Ocean-based Blue Economy: Moving Ahead with the Sustainable Development Strategy for the Seas of East Asia*. The declaration marked a commitment by countries of the region to blue economy, defining it as “a practical ocean-based economic model using green infrastructure and technologies, innovative financing mechanisms and proactive institutional arrangements for meeting the twin goals of protecting our oceans and coasts and enhancing its potential contribution to sustainable development, including improving human well-being, and reducing environmental risks and ecological scarcities.”

While activities were certainly underway to promote blue economy development, it wasn't until 2015 that PEMSEA picked up its efforts to further define what blue economy meant for the region. That year, PEMSEA released a report on *Blue Economy for Business in East Asia*.<sup>11</sup> The discussion had remained largely the domain of government up to that point, so the report focused on the critical role that the private sector must play in the blue economy. As a global leader in several coastal and marine industries, East Asia relies on healthy ocean resources. But as natural

capital continues to erode, so too will the performance of these industries.

Companies are exposed to a number of operational, regulatory, reputational, market and financial risks and opportunities related to proper management of coastal and marine ecosystem services. Traditionally considered externalities, these impacts can cause a decline in ecosystem services and degradation of the natural capital that is the basis for all economic activity. The report examines important blue economy trends relevant to business across nine key industries: fisheries and aquaculture; ports, shipping and marine transport; tourism, resorts and coastal development; oil and gas; coastal manufacturing; seabed mining; renewable energy; marine biotechnology; and marine technology and environmental services. Some of the most common business risks and opportunities identified include:

#### Risks:

- Increased operating costs or lost revenue from resource volatility or degradation
- Disruption to business operations or legal action from social or environmental incidents
- Limitation or loss of license to operate imposed by local communities and/or governments
- Damage to company reputation from poor environmental performance
- Lost market opportunity from failure to meet customer environmental requirements

<sup>11</sup> Whisnant, R., and A. Reyes. 2015. *Blue Economy for business in East Asia: Towards an integrated understanding of Blue Economy*. Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), Quezon City, Philippines. 69p.

- Higher cost of capital due to poor environmental track record
- Changes to cost structure from unanticipated regulatory requirements
- Potential use conflicts with other industries
- Vulnerability of coastal infrastructure to sea level rise, storm surges, etc.

**Opportunities:**

- Cost savings from resource efficiency
- Access to expanded and premium markets through enhanced reputation and brand
- License to operate and policy influence from good relationships with governments and communities
- Access to areas and resources for business activities based on good environmental track record
- Continued availability of critical ecosystem resources required for industry
- New markets based on strong regional needs for environmental solutions
- Innovation emerging from environmental standards and sustainability trends
- Access to new forms of capital from socially and environmentally responsible investors

In sum, the *Blue Economy for Business in East Asia*<sup>12</sup> report identified four key elements that must be present in coastal and marine economic activities to be considered true “blue economy” development:

1. Protects, restores and sustains healthy coastal and marine ecosystem services
2. Generates sustainable, equitable economic benefit and inclusive growth
3. Integrates approaches between multiple industries and government
4. Innovates, informed by the best available science

**Advancing the Dialogue for Blue Economy Development**

To help develop and advance the understanding of blue economy, PEMSEA organized a number of forums beginning in 2015. The East Asian Seas Congress 2015 featured a session entitled “Blue Economy for Business: Building an East Asian Seas Sustainable Business Network” that brought together representatives from several sectors, including seafood, oil & gas, environmental services, tourism and heavy industry and included facilitated discussion with government representatives. Overall, the workshop concluded that new approaches, beyond business-as-usual, will be needed in the face of increasingly disruptive ecological and economic trends. Sustainable blue economy growth relies on good governance and sound, science-based decision making, which can only be achieved through the joint effort of the public and private sectors and scientific community.

The private sector welcomed the development of partnerships and investments aligned with specific business drivers, where it can offer input, technical expertise and investment. Businesses also saw value in the establishment of a regional network of companies committed to growing a blue economy to provide a unified voice to government. Such a network could improve knowledge sharing and explore innovative cross-industry approaches to coastal and marine sustainable development that address business needs.

The session produced an Industry Statement on Blue Economy that was presented to the Ministers from PEMSEA countries.<sup>13</sup> The statement emphasized the vital role that blue economy plays for the region’s

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<sup>12</sup> *Ibid.*

<sup>13</sup> PEMSEA. 2015. *Industry Statement on Blue Economy. From the Inaugural Meeting of the East Asian Seas Sustainable Business Network, Presented to the Fifth Ministerial Forum Danang, Vietnam 20 November 2015.*



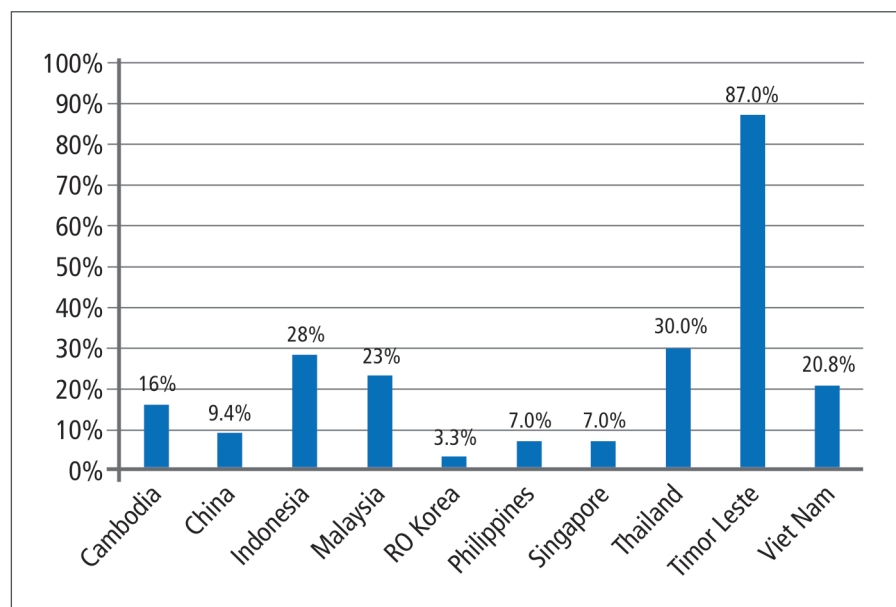
economy, the risks posed by the continuing loss and degradation of coastal and marine ecosystem services and the urgent need for practical action to address challenges, including biodiversity loss, degradation of habitats, unregulated and unreported (IUU) fishing, pollution, invasive species, and the cross-cutting impacts of climate change. Industry participants recognized the need for strengthening innovative partnerships and integrated collaboration between industry, governments, regional and international agencies, investors, donors and scientific and technical institutions and encouraged governments to help facilitate development of new investment mechanisms supporting blue economy.

Also in 2015, PEMSEA launched efforts to further define and quantify the blue economy through a series of National State of Oceans and Coasts (SOC) reports produced by Cambodia, China, Indonesia, Malaysia, the Philippines, RO Korea, Singapore, Thailand, Timor Leste and Viet Nam. The reports examine ocean-based economic activities conducted in marine waters (e.g., fisheries, marine tourism, ports and shipping, offshore oil and gas, desalination, ocean energy and marine construction), sectors that

use inputs from the oceans (e.g., seafood processing, and marine biotechnology) and those that produce outputs for ocean-based activities (e.g., building and repair of ships and boats, marine equipment, maritime finance and insurance). Blue economy activities across the 10 countries are estimated at US\$1.4 trillion in value added, with around 54 million people employed in ocean industries. For 8 of the 10 countries, the total estimated value of coastal and marine ecosystems is around US\$681 billion.

The SOC reports provide a comprehensive approach to evaluating the contribution of oceans and coasts to economies, the negative impacts that are a consequence of traditional approaches to ocean economy development and management, as well as new and emerging policies, technologies and practices that support blue economy growth in the countries of the region and elsewhere. The 10 National SOC reports provide a baseline for monitoring progress towards the SDGs, SDS-SEA and other international agreements through blue economy and ocean governance initiatives. The SOC reports serve as an important information source for advancing scientific support, raising

**Figure 1: Percentage Share of Ocean Economy to GDP in East Asia (by Country).**



public awareness, promoting good governance and partnerships for blue economy, and fostering the planning, development and application of synergies between the public and private sectors. The evidence base provided by the SOC reports is fundamental in informing policy- and decision-makers on ocean-related issues as well as best practices that can be replicated and scaled up. Supporting these efforts, it's critical to improve the statistical and methodological base at the national and regional levels for measuring the ocean economy and to harmonize the ocean economy-environment accounts of the countries in accordance with the System of Environmental Economic Accounting (SEEA) approach.

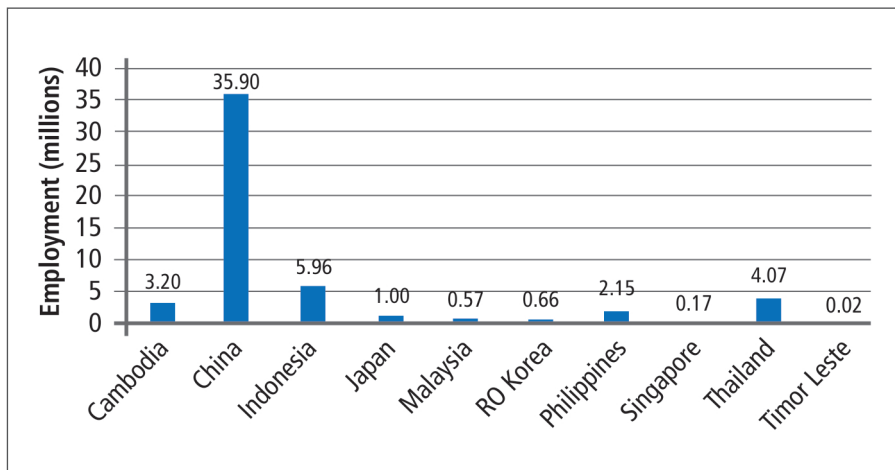
The SOC reports identify the need for more coherent and integrated policies, procedures, incentives and financing modalities to provide for the sustainable use of coastal and marine resources and protection of ocean health including:

- Identification of entry points, new business models, revenue streams and financing mechanisms that can be leveraged to accelerate blue economy investments.
- Science-economy-policy linkage: research, development and deployment support, testbed platforms and incentives for commercialization in emerging blue economy industries,

e.g., alternatives to plastics, cost-effective technologies in wastewater treatment to allow reuse and recovery of water, energy and nutrients.

- Assessment and demonstration of the blue carbon market potential.
- Knowledge management and capacity development of institutions at the national and local levels to enable adoption, implementation and sustainability of innovative blue economy initiatives.
- Connection of blue economy initiatives to the achievement of the SDGs: show the synergies to accelerate actions and achieve the targets of the SDGs, SDS-SEA and other international agreements, including the value add of blue economy and its contribution to income and jobs.
- Marine spatial planning, including a mix of regulations and economic instruments.
- Habitat restoration and conservation and marine protected areas that are more effectively managed and sustained through inclusive partnerships with coastal communities, biodiversity-friendly livelihoods and enterprises, and self-sustaining and affordable financial and economic instruments.
- Integrated approaches and solutions to environmental infrastructure needs of local governments, encompassing issues such as

**Figure 2: East Asia Employment in Oceans by Country (in millions).**





wastewater, solid and plastic waste management, water and food security, alternative energy sources and climate variability, including flooding and droughts.

- Climate-resilient development and green infrastructure in coastal areas.

The national and regional SOC reports are scheduled to be published and disseminated in the third quarter of 2019.

PEMSEA also convened two Blue Economy Forums to share the information and outputs from the national SOC, as well as an overall regional assessment of SOC and blue economy development.<sup>14,15</sup> Overall, the workshop participants recognized that the SOC reporting process served to convene government agencies with disparate roles and responsibilities in ocean economy development and management, resource development and management, environmental protection and management and social and economic development. This proved to be a useful undertaking, particularly for enhancing the appreciation and understanding of where and how the ocean economy contributes to GDP growth, employment and social and economic development opportunity for a country (i.e., blue economy opportunity). While challenges remain in the adoption and implementation of a uniform approach to measuring and evaluating the ocean economy and blue economy growth, the SOC process is a step in the right direction and is worth pursuing on a continuing basis.

### Engaging the Private Sector in Integrated Coastal Management for Blue Economy

Strong collaboration between government and business are critical for achieving the SDGs, including SDG 14. Achieving the SDGs opens new opportunities for companies while supporting the health of coastal ecosystems and communities. The potential of

effective public-private partnership for coastal and ocean management has been discussed for some time, but the reality of forging concrete, value-added partnerships has, in many cases, remained elusive.

PEMSEA has a number of examples of private sector partnership at the local level as an important element of ICM implementation. The Bataan Coastal Care Foundation (BCCF) in the Philippines, organized initially by the Petron Corporation, was established to act as a catalyst and provide counterpart funding for the Bataan Integrated Coastal Management Program and explore possibilities for sustainable public-private partnerships. Fifteen corporate members, subsidiaries of some of the largest companies in the Philippines, joined the BCCF, representing land development, oil & gas, shipping, manufacturing, energy and the local port authority. Members participated in the ICM program coordinating committee, consultations leading to policy reforms, resource mobilization and sponsorship of community-based projects. As of 2018, membership had grown to 18 companies. Over time, the BCCF has supported the planting of 45 hectares of mangroves, the implementation of alternative livelihood programs, annual cleanup of over 150 km of coastline, establishment of bird and fish sanctuaries and deployment of 600 units of artificial reefs.

While local efforts are critical, achieving national and regional goals for sustainable development require collaborative efforts with the private sector at the regional level. In response to the recommendations at the EAS Congress 2015, PEMSEA established the East Asian Seas Sustainable Business Network (EAS-SBN) to help provide access to the latest trends and scientific knowledge relevant to business and identify potential blue economy investments. In principle, companies joined the EAS-SBN not out of philanthropy, but as a means for generating value for the company. The network was intended to be

<sup>14</sup> PEMSEA. 2017. *Blue Economy Forum 2017 Proceedings*.

<sup>15</sup> Chua, T.-E. 2018. "Summary of the EAS Congress International Conference and Recommendations" [presentation].

highly interactive, with members driving the focus for initiatives, working groups, research, meeting topics and other activities. Members could benefit from their shared learning from multiple companies and industries, connection to a regional dialogue with local and national government, awareness of potential investment and business opportunities, access to science-based best practices and a resource for spotting emerging trends in ocean and coastal issues to align company strategy with ocean policy development.

The EAS-SBN was established on a foundation of a few important underlying principles:

- Increasing levels of public scrutiny and accountability for how complex sustainable development issues are managed by companies.
- Industry disruption is inevitable; emerging global trends will generate new market risks and opportunities, many in the coastal and marine context.
- Issues impacting companies are systemic in nature, cutting across resources, industries and geographies.
- Important linkages exist between industries, for example, aquaculture, if not properly zoned, can affect ship navigation routes and tourism sites; fisheries and tourism can both benefit from proper management of marine protected areas; pollution from coastal development and manufacturing can damage tourism sites; marine technology providers can help fisheries companies in combatting IUU fishing.

The EAS-SBN initially launched with a dozen members representing a cross-section of sectors and geographies—a tourism company based in China, a seafood company in the Philippines, an industrial company in Indonesia—among others. Partnerships with the USAID ECOFISH project and the World Ocean Council (WOC) further strengthened the link to companies in the region with an interest in sustainable development of coastal resources. The WOC partnership provided a useful potential two-way

exchange between regional and global platforms for ocean sustainable development.

Programming was rolled out including a monthly Blue Economy e-Bulletin with the latest news on blue economy topics and a quarterly blue economy webinar series covering topics including sustainable seafood, approaches to measuring ocean health, blue carbon, ocean plastic pollution, sustainable aquaculture and financing MPAs.

While the EAS-SBN provided a useful platform for sharing knowledge on blue economy and initial cross-sector dialogue with and between companies, it proved challenging to establish the critical mass needed for a sustained dialogue leading to concrete action on relevant issues. It was clear that the approach needed to adapt and evolve.

### **The Evolution of a Regional Network: A Sustainable Ocean Business Alliance**

Based on its lessons from the EAS-SBN and a recognition of other conservation groups' efforts (and similar challenges) to engage the private sector, PEMSEA reached out to other groups in the region to join efforts. In addition to its standing collaboration with WOC, PEMSEA found a valuable partner in the International Union for Conservation of Nature (IUCN) regional program office, which had similar goals to strengthen understanding of the best approaches for engaging the private sector in coastal management. PEMSEA and IUCN commissioned a study to develop a Sustainable Business Roadmap for engaging the private sector.

The research and interviews of over 20 organizations focused on five sectors with potential to further explore partnerships and establishment of a collaborative platform:

- Solid Waste Reduction, Management and Recycling
- Ecotourism / Sustainable Tourism
- Sustainable Seafood

- Ecosystem Restoration
- Sustainable Livelihoods and Small-scale Enterprise Development

The study affirmed that development partners like PEMSEA and IUCN are well positioned to help companies advance the agenda on sustainable development and blue economy, supporting institutional change backed by policy, research, intergovernmental relations and grassroots engagement. Other findings included:

- The need to focus on solutions addressing concrete issues, e.g., habitat loss, biodiversity conservation, local economic development, pollution reduction (e.g., ocean plastics), etc.
- The benefit of joint development of case studies that demonstrate positive impact and make the business case relevant to specific sectors.
- A reality that companies may be hesitant to get directly involved with government partners. Development organizations can serve as an intermediary, bringing needs of companies to government, prioritizing the sustainability agenda and helping with policy change.
- Companies' appreciation of policy updates relating to coastal and marine management and a desire for partners to help them understand policies relevant to their business, as well as assistance in setting science-based targets in program design.

Based on the findings from the research, PEMSEA convened a session at the East Asian Seas Congress 2018 examining the role of business and its needs and expectations for collaborative coastal and ocean management.<sup>16</sup> The session featured representatives from Coca-Cola, El Nido Resorts, Meliomar and Net-Works sharing their successes, challenges and opportunities for contributing to the SDGs and sustainable blue economy in the region. Development partners including PEMSEA, IUCN, World Ocean Council and Philippine Business for Environment

discussed their challenges and the opportunities they see for private sector collaboration.

Discussion in the session revealed that companies indeed recognize their reliance on the ecosystem services provided by healthy coasts and oceans. There is significant upside potential in partnerships to develop new models, and partnership models can work if all stakeholders are fully committed, aligned with their strengths and agreed on their purpose. Development partners in the region, including PEMSEA, can support companies in better coastal and ocean management in ways that strengthen business, with opportunities for concrete partnership activities.

The session recommended the establishment of a joint regional Sustainable Ocean Business Alliance between development partners and companies in the region, focused around a specific topic relevant to companies across multiple sectors, such as ocean plastic pollution. The session also suggested that a full workshop on private sector partnership, business leadership and blue economy in East Asia, focused around identifying concrete pilot initiatives, be organized and conducted in the near future.

## Conclusions and Lessons Learned on Private Sector Partnerships

### Conclusions

PEMSEA's activities on blue economy and private sector engagement have taken some important steps forward for the region, but there is still a long way to go. Some conclusions garnered from the experience of establishing value-added partnerships with the private sector in East Asia include:

- With some exceptions, there remains a dearth of awareness and/or acknowledgement by

<sup>16</sup> PEMSEA. 2018. *From potential to reality: Business leadership for a Blue Economy in the Seas of East Asia. Proceedings.*

much of the business community in East Asia of its dependency on healthy coastal and ocean ecosystems. There is also limited capacity within companies to incorporate and manage sustainable development issues in a business context.

- While there is an expressed desire by development organizations and governments to engage in meaningful discussions with the business community and investors, there is a gap in their ability to speak the language of business and articulate the business case for partnership to the private sector. More time and effort are required to develop and understand the business context and how to integrate social, economic and environmental objectives and priorities with business objectives.
- There are disparities in systemic drivers for change, e.g., proper regulation and enforcement and consumer and investor demand across countries of the region. This creates deficiencies in having a “level playing field” for the private sector, making it difficult for progressive companies to compete with sustainability laggards, putting them at a disadvantage.
- There is limited access to data and information for assessing, managing and reporting on risks and impacts of business-oriented activities, including PPPs, to improve, scale-up and/or replicate good practices. Projects involving private business are seldom open to public review, evaluation and information- and knowledge-sharing. Thus, lessons learned from such investments may benefit only a limited group of project partners, primarily in the private sector.

### Lessons Learned

#### **Ensure that some important baseline factors for success are in place**

Cases of successful private sector partnership exhibit a handful of factors for success that development partners should be mindful of, including the following:

1. *Formalized through a memorandum of understanding or agreement.* There must be a

clear statement of objectives of the partnership, with roles, responsibilities and accountabilities. An appropriate arrangement for the partnership should be clearly defined, including legal structure, along with a roadmap for agreed outcomes for the partnership and steps to achieve them.

2. *Wide range of stakeholders involved.* Mobilizing stakeholders from various sectors may take a longer time to organize, but it is the best path to systemic and sustainable change. Long-term success may require action, resources and commitment from government, civil society groups and the academe, along with the private sector.
3. *Benefits for all parties that are significant and sustainable.* For partnerships to be nurtured and sustained, all parties must receive benefits, whether they are in the form of income, positive brand association or assistance in fulfilling national or local policy objectives.
4. *Long-term strategy with sustainable financing mechanisms.* To ensure that outcomes are sustained and impact is maximized, financing mechanisms should be identified and secured before project cycles end.
5. *Initiatives are replicable and scalable.* Partnerships should be designed so they can be expanded beyond the pilot phase to involve more stakeholders or adapted to other locations.
6. *Strategic communications.* For initiatives to bring in resources, inspire replicability and scalability and build constituency, success must be shared through stories. Showcase successful and inspiring stories to a broad audience, through various platforms.

#### **Understand what companies are looking for**

Development partners can act as neutral, multi-stakeholder conveners with the ability to bring sectors together, but they must understand how companies view partnerships through the realities of their business. PEMSEA research and experience has revealed and validated a handful of criteria that companies look for in a public-private partnership. The good news is that these are well aligned with

what development partners can help to deliver:

- Must be regional in scale to have impact and justify the efforts
- Include value chain partners and competitors to tackle shared problems
- Must focus on impacts, not merely exchanging information. Share practical support getting financial and logistical resources, technology and people together for successful pilot projects
- Develop tangible cases, ensuring genuine action is taken with measurable impact
- Facilitate access, understanding and political support with local stakeholders, helping with local know-how and community and employee engagement
- Tap into research base for policy tools and knowledge products providing technical assistance relevant to business
- Building capacity through trainings, workshops and other educational channels
- Assist with institution-building and establishment of effective governance mechanisms
- Ensure that resources go to the core programs, i.e., cost efficiency
- Put time and effort into identifying and managing business risks (e.g., governance; climate change) and understanding new market opportunities
- Apply innovative financing models (e.g., non-grant instruments; credit guarantees) to lower risk of investment

**Focus on a single, tangible issue relevant to multiple stakeholders**

PEMSEA’s work emphasizes breaking down barriers between sectors through integrated coastal management, which includes the private sector. But scaling private sector partnership to a regional, cross-sectoral level has proven to be a significant challenge. Time and experience have shown that successful partnerships should be built around a single, concrete issue that is relevant to stakeholders across multiple sectors. There is a need to find one significant

problem to solve that companies care about. The success of the Globallast project implemented by UNDP and executed by the International Maritime Organization (IMO) was due in part to the focused effort on solving a specific problem—marine invasive species.<sup>17</sup> The level of private sector engagement also benefitted from leveraging policy, in this case the Ballast Water Management Convention, which companies knew they would need to comply with. Ocean plastic pollution offers a good example of another current issue. It impacts businesses from waste management to tourism to consumer products companies, even seafood companies that increasingly view it as an issue material to their business.

**Recognition is key for initial trust and engagement**

Visibility and brand recognition are important for development organizations to engage with companies. Despite 25 years of work in the region and a high level of trust and recognition in the development community, broader private sector engagement was a new effort for PEMSEA over the past four years. Initially, it became clear that awareness of PEMSEA and its work was minimal within the business community, relative to other better-known global development organizations. Effort may be needed to promote the contributions made by an organization to address issues relevant to companies such as pollution, climate change and biodiversity conservation. There is also a need to share local successes and work with other organizations as evidence of the value of partnering.

**Internal capacity for engaging the private sector is critical**

It cannot be emphasized enough that without the right internal capacity for identifying opportunities, making an effective pitch in the language of business and managing a partnership in a manner that the private sector is accustomed to, it will be a major

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<sup>17</sup> GEF-UNDP-IMO GloBallast Partnerships Programme. [n.d.] “GloBallast Project.” Accessed February 4, 2019. <http://archive.iwlearn.net/globallast.imo.org/>.

challenge to establish and sustain private sector partnerships. It may be possible to build capacity with existing staff, but it is more likely that additional expertise will be required with the relevant experience, perhaps even hiring from the private sector. Support will still be required from technical staff who know the program and network best.

### **Meet companies where they are, but strive to evolve from a CSR mindset**

A large percentage of companies in the region are still lagging in their understanding of their reliance on healthy coastal and marine ecosystems, and the business value that can be derived from sustainable blue economy approaches. For those companies that do engage on issues related to social and environmental performance, many are still operating in a paradigm of corporate social responsibility (CSR). While this is an important step, it can be a limiting perspective on the full value of sustainable business practices. Much thought and practice has been developed beyond simple CSR approaches, including the work of Harvard's Michael Porter, the "father of modern corporate strategy", on "share valued". According to Porter, shared value is "not social responsibility, philanthropy or sustainability, but a new way for companies to achieve economic success... It is a management strategy in which companies find business opportunities in social problems. While philanthropy and CSR focused efforts highlight 'giving back' or minimizing the harm business has on society, shared value focuses company leaders on maximizing the competitive value of solving social problems".<sup>18</sup> These approaches may open up opportunities around new technologies, innovative finance, access to new markets or differentiation of products or services.

Disruption to business models is inevitable and the forecasted megatrends related to ocean health could lead to a number of significant disruptions (climate change, not the least). The goal for companies is to get ahead of these disruptions and position themselves to compete and succeed. Development organizations

must recognize where a company is on its sustainability journey and weigh the value of engaging at a level they understand—which may be a limited CSR view—against the greater long-term value of developing partnership around more advanced approaches to sustainable development and shared value for business.

### **Target existing industry collaborations**

Rather than targeting companies one by one, consider collaboration with existing industry associations that may benefit from expanding their programming to oceans, or if they are ocean-focused, strengthening their sustainable development emphasis. These associations have ready-made networks and an understanding of business, allowing them to serve as useful intermediaries that can speak the language of business and access multiple companies at once. Related to this approach, there may be opportunities to work across competitors on "pre-competitive" activity or up and down value chains, helping companies that rely on each other as buyers or suppliers to work together with a shared interest in the sustainability of their products. One emerging opportunity in the ocean space is "competitive clustering", which can promote vertical and horizontal links between local enterprises, coordinate with local organizations (e.g., governments and research institutes), promote diffusion of innovation and enhance access to markets.

### **Use your strengths as a development organization**

It is important for development organizations to understand that they have value to offer the private sector. Organizations should know what their strengths and limitations are, but oftentimes they underestimate what they can bring to the table. For instance, if used well, the TDA/SAP process can be extremely valuable for informing the business community about the scientific and policy context for operations in a marine ecosystem. Likewise, depending on the nature of a development organization, it may be able to offer guidance on engaging local stakeholders, play a role as a neutral convener or tap a network of local expertise.

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<sup>18</sup> Shared Value Initiative. 2019. "About shared value." Accessed February 4, 2019. <https://www.sharedvalue.org/about-shared-value>.



## Pilot Business and Investment Cases

# 3

With blue economy as a guiding framework and its private sector partnerships evolving, PEMSEA launched a program to advance the understanding and practice of another important pillar for blue economy in the region—private sector investment. It is important to note that private sector partnerships and investment by the private sector are treated as two different activities. Partnering with a company on sustainable development might include some investment activity, but there are many other forms of potential partnership activity with companies. Likewise, while a company may invest in blue economy-related projects, there are several other types of investors, including impact funds, banks, development finance institutions, high net worth individuals and pension funds, among others.

The GEF/UNDP project on *Scaling up the Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)* executed by PEMSEA includes components for overcoming barriers to investment by the public and private sectors in enterprises, technologies, practices and services that contribute to a sustainable ocean-based economy. Activities under the project include setting up a platform to promote, facilitate, structure and package investments in support of blue economy development and developing pilot demonstration projects and case studies aimed at testing investment mechanisms to boost capital flows into blue economy investments.

To move from the theoretical to the more concrete, PEMSEA initiated development of pilot cases to a)

identify and validate potential forms of investment opportunities available, b) learn-by-doing about the process, partnerships and expertise needed to develop investments, c) better understand on-the-ground context, reality and barriers for blue economy investment and d) begin establishing some track record to promote, facilitate, and package investments.

The first step was developing proper business cases, i.e., cases with models for operations, revenue generation and managing costs and risks (Section 4.1). Building on the lessons from the business cases, a new set of investment cases were developed that included fleshed-out financing models with elements including sources and uses of investment proceeds, target returns, investment terms and potential investment funds identified (Section 4.2).

The definition of “investment” is important here. The development community generally thinks of investment more broadly as the flow of financing in any form to generate desired development outcomes and ideally to stimulate financial flows, though not necessarily back to the source of capital (i.e., not necessarily a financial return to the entity that provided the financing). However, for these case studies, investment is approached in the way that the private sector and investor community understand it. For private investors, an investment should have a financial return somewhere along the spectrum of capital preservation (what a development organization might call “cost recovery”), to concessionary returns, to full commercial returns. If the goal is to access private investment, this condition must be met.

### Pilot Business Cases

Under the GEF/World Bank project for *Applying Knowledge Management to Scale Up Partnership Investments for Sustainable Development of Large Marine and Coastal Ecosystems of East Asia and their Coasts*, PEMSEA began to develop and assess pilot business cases. Under the project framework, cases were developed in collaboration with four ongoing World Bank projects in the region: Philippine Climate

Change Adaptation Project (PhilCCAP), Philippine Rural Development Project (PRDP), Coral Reef Rehabilitation and Management Program - Coral Triangle Initiative 3 (COREMAP-CTI III) and Coastal Resources for Sustainable Development (CRSD). Working with project development experts, PEMSEA identified the highest potential activities within each project and developed business cases that were presented to the project proponents. A summary of the business cases is provided in Text Box 1.

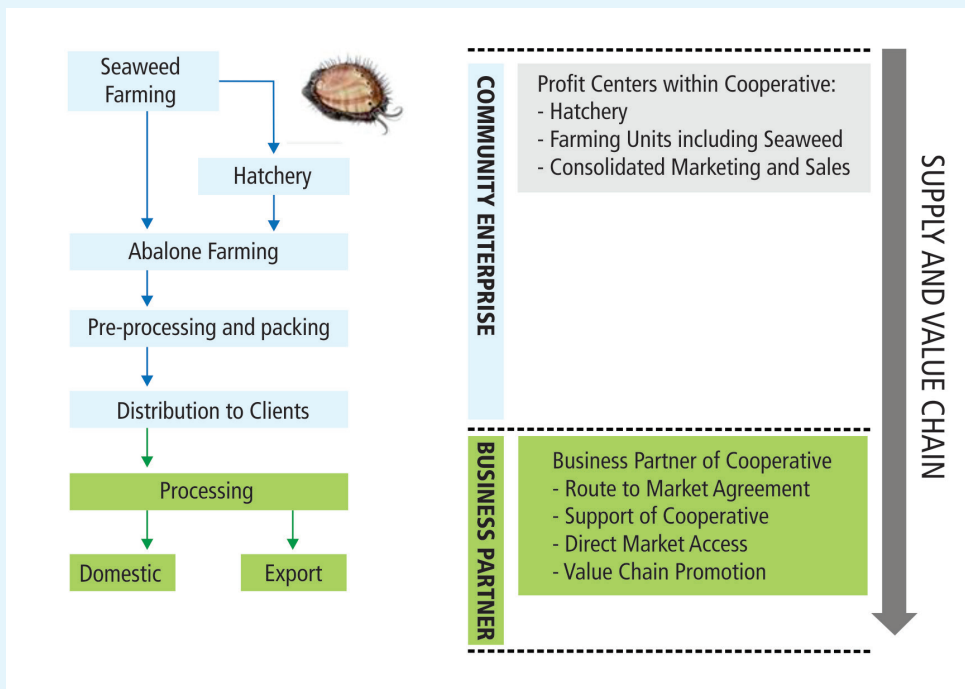
## TEXT BOX 1

### Pilot Business Cases

#### Business Case 1: Abalone farming on Siargao Island, Philippines<sup>19</sup>

The PhilCCAP project, with a site in Siargao Island in the southern Philippines, focused on developing and demonstrating approaches that enable communities to adapt to potential impacts of climate variability and change. The project chose value chain analysis as a priority activity, particularly around an identified pilot abalone farming operation. A preliminary business plan had been developed by PhilCCAP, but further feasibility study was needed.

**Figure 3: Overview of Supply and Value Chain for an Integrated Cooperative Farming Model.**



Source: FAO, 2016.

<sup>19</sup> PEMSEA. 2017. *Coastal community business models and development of sustainable private sector enterprises: A case study from the Philippines*.



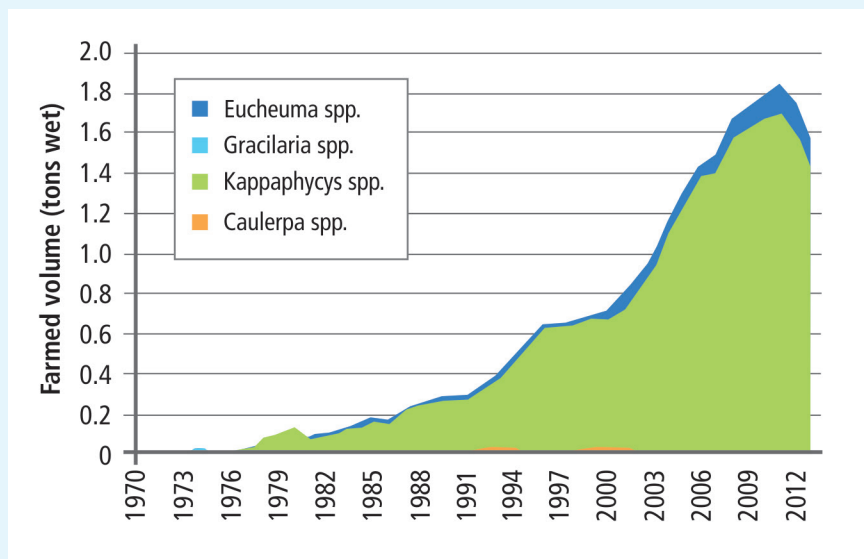
PEMSEA conducted field visits in 2015 to develop a full value-chain analysis for a pre-feasibility business plan. Based on PEMSEA's initial analysis, the operation was minimally profitable, sometimes operating at a loss. The business plan explored the possibility of adding hatchery facilities and additional grow-out capacity to increase volumes and supply frozen abalone to markets in Cebu, China and Hong Kong. The study found that a full hatchery, grow-out and marketing business could only be profitable at a volume that was beyond the capacity of the site. This factor, along with other physical and market constraints led PEMSEA to recommend against outright investment in abalone production. The study did, however, suggest seaweed farming as a practical first step to establish the feed needed to support larger scale abalone production. And, in fact, the seaweed farming itself presented a more profitable business model on its own.

**Business Case 2: Community-based seaweed aquaculture in Palawan, Philippines<sup>20</sup>**

Based in part on the lessons from the abalone farming case study in Siargao Island, PEMSEA provided services to the PRDP project to develop a business plan and investment model for community-based seaweed farming in Palawan, Philippines. Focused on increasing rural incomes and enhancing farm and fishery productivity by supporting smallholders and fishers to increase their marketable surpluses and access to markets, seaweeds were identified by PRDP as one priority commodity for the project.

Despite a long history in the Philippines, seaweed production has significant room for improvement and optimization in most places, with scope to increase productivity and economic performance. PEMSEA evaluated the feasibility of investing in a community-based seaweed farming model. Examining factors such as operational capacity, production approach, market demand and cost

**Figure 4: Seaweed Production History and Breakdown by Farmed Species in the Philippines.**



Source: FAO, 2016.

<sup>20</sup> PEMSEA. 2017. *Impact investment for a business venture for community-based seaweed farming in Northern Palawan, Philippines.*

of goods sold, a cooperative-based model was proposed to increase farming and supply chain productivity and efficiency. The cooperative sells the seaweed at improved pricing relative to the status quo, due to improved farming techniques, better quality, more direct supply chains and optimized timing and logistics of sales. The model also includes a commercially run tissue culture lab providing farmers with quality seedlings for better growth performance and disease resistance.

Investment would generate higher revenue for the community and provide alternative livelihoods through an environmentally benign activity. The study indicated that the same business model could be replicated in at least four other communities identified in northern Palawan.

### **Business Case 3: Sustainable grouper farming in Selayar, Indonesia<sup>21</sup>**

The COREMAP project sought to institutionalize approaches for sustainable management of coral reef resources, associated ecosystems and biodiversity for the welfare of communities in seven districts in Indonesia. The project identified grouper aquaculture as a priority business under its Sustainable Enterprise Alliances component. Groupers are among the most popular fisheries products on the markets of Southeast Asia and China. As a consequence of this demand, grouper prices are high and the fishing pressure on groupers is substantial.



Based on the priorities of COREMAP, PEMSEA developed a business case for Selayar Island in South Sulawesi. The proposed business plan lays out the case for a hatchery and grow-out for tiger grouper. The operation at the time was not commercially viable, and furthermore was not environmentally sustainable based on the sourcing of wild caught juvenile groupers for raising in cages. The business plan proposes establishment of an integrated hatchery and farming approach, where one half of the hatchery-reared groupers are raised to marketable size by an integrated grow-out operation, while the other half is available for independent farmers. The case also proposes investment in infrastructure and training for the local farmers. These farmers would buy grouper fingerlings from the hatchery and sell the commercial-size groupers on the local live market or back to the hatchery company, which would run supply chain logistics for the product.

Although there are several grouper hatcheries in Indonesia, disease-free fry resulting in good survival is rare. Applying adequate best practices in the hatchery can result in high quality fry, creating a potential for the hatchery to represent a best-case example on a regional scale.

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<sup>21</sup> PEMSEA. 2017. *Impact investment for a grouper aquaculture project in areas of intense grouper fishing in Indonesia*.

The study indicated that the proposed project is expected to create jobs on and around Selayar Island and provide alternative livelihoods that generate more regular income than can be obtained through the highly irregular supply from fisheries. By saturating the local market on the islands with hatchery-reared grouper, it can be expected that fishing pressure on wild stocks will decrease and these stocks will be consequently allowed to recover. Furthermore, illegal fishing activities can be expected to decrease.

#### **Business Case 4: Sustainable tuna fishery in Central Vietnam<sup>22</sup>**

In line with the strategy of the national government, the CRSD project aims to improve the sustainable management of coastal fisheries in Vietnam. Tuna represents a key species for the overall sustainability of Vietnam's fisheries. The fishery targeting larger tuna in Vietnam is located in the three central provinces of Khanh Hoa, Phu Yen and Binh Dinh, with a total fleet of 2,000 vessels catching as much as 23,000 tons per year (as of 2016). The fleet targets Yellowfin tuna by handlining and retains other pelagic species caught (e.g., other tunas and larger mackerels, sharks, marlins, swordfish, mahi). By 2014, almost the entire fleet switched to handlining because the catch rates with handlining were believed to be higher. From a sustainability perspective, handlining is desirable since it is much more selective for large tunas, and the level of non-target species can be controlled. However, the longer and more intense struggling times by the fish with handling result in lower quality raw material than longlining. Furthermore, although the fish is landed fresh and stored in ice, the freshness of the landed fish is poor due to long fishing trips.

The business proposal aimed to support the handline fishery by creating incentives to produce better quality of landed tuna and consequently access to better markets to generate higher income. The proposal includes investments to improve quality through new technology to reduce hauling and killing time and improved logistics to reduce the time span between capture and processing by using a system of collector boats to collect caught tuna from the vessels fishing at sea. The investable entity for the proposal was identified as a local processing company that would allocate the catch technology, provide training on best practices and manage the collection vessel operation.

The business proposal aims to improve the management of the fishery by reporting fishing trips and catches by weight and species, with a stringent, reliable and transparent traceability system in digital format from landing to export. Based on this data, the sustainability of non-target species capture will be reviewed, and measures can be adopted accordingly. The information collected on tuna and other species can be made publicly available for fisheries management. The proposal also has a strong socio-economic impact, with a projected 15% increase in incomes for fishermen.

<sup>22</sup> PEMSEA. 2017. *Impact investment for a fishery supply and value chain improvement project targeting the Yellowfin tuna handline fishing operation in Vietnam.*

## Lessons Learned from Business Cases

As a relatively new area for international development organizations, identifying and developing viable and sustainable business cases came with its share of challenges. These efforts generated some useful lessons for continuing to evolve PEMSEA's approach to blue economy investment.

### **Pre-feasibility is about determining whether an approach might be viable**

Although a potential opportunity may be initially identified, pre-feasibility study is needed to determine whether the opportunity is viable. In the case of PhilCCAP in Siargao, further study revealed that, while there is an interesting potential model for abalone production, initially the community would not be able to produce sufficient volume to achieve profitability. The study revealed that the seaweed needed to feed the abalone is actually a more viable product. While this may not have been what was hoped for as a finding, it's good to identify what won't work before investing time and resources in a venture that is not likely to be successful. Learning from the study, the project can adapt its approach. In the case of PhilCCAP, it doesn't mean that the abalone project isn't valuable, it can continue as a small-scale, grant-funded activity. It just means that it's not likely to attract private investment to establish ongoing financial sustainability.

In the case of the sustainable tuna fishery in central Vietnam, based on preliminary assessment, it was clear that a viable business case would be difficult to develop within the constraints of the project's objectives and designated sites. This is generally well understood by the private sector—some amount of exploration and experimentation is needed, and only some opportunities may turn out to be viable. Development organizations and projects must know that looking into investment opportunities does not guarantee that they will be present. It's possible that with more time and resources for a deeper investigation, opportunities may be uncovered, but

this must be weighed against the available time and resources at a project's disposal.

### **Work towards a goal of identifying the best opportunities first**

Building on the previous point, while some opportunities may be identified within the constraints of a project, they may not be the best opportunities. The grouper farming in Selayar, for instance, presents a compelling model, but it faces some difficult challenges (e.g., water quality issues). That particular model was developed based on the prioritization of grouper. It's possible there may be better models in other locations and/or focused on other sectors, species or approaches. To achieve the greatest probability for success, it's helpful to start with a systematic approach to evaluating the business viability and social and environmental impact of potential investments across sectors and locations as a way to focus in on the right opportunity.

### **Translate the business case into an investment case**

At this stage of building a knowledge base of pilot business cases, PEMSEA partnered with experienced international project developers. Within the constraints of the various projects, the business models were validated as being thorough and practical, yet they still must be translated into a format with the right information for an investor. The four business cases were shared with an expert from the investment banking industry to translate into investment proposals that investors could understand and potentially invest in. Despite including all the financials for business operation, some cases still lacked information required by the investor community, e.g., cash flow analysis, capital structure, uses of investment proceeds, target returns, investment terms, etc. It became clear that there's value in investment experts being involved from the beginning of development of the business case, alongside the project developer.

## From Business Case to Investment Case

Building on lessons learned from the four pilot business cases, it was clear that there was a disconnect between a “good” business case and an “investible” project. To take the next step, PEMSEA embarked on the development of investment cases in four ocean-

related sectors—sustainable seafood, MPAs and sustainable tourism, wastewater management, and ocean plastic pollution. Summaries of the four pilot investment cases are provided below.<sup>23</sup>

### TEXT BOX 2

#### Pilot Investment Cases

##### Investment Case 1: Sustainable Seafood

PEMSEA partnered with Impact blue, a sustainable fisheries and aquaculture project developer, to create an investment case for the launch of a Philippines-based sustainable seafood venture. Due to the complexity of fisheries governance in East Asia, aquaculture was identified as the target sector for impact investment. Through a rigorous screening process, grouper was selected as the species with highest impact potential and lowest business risk among species that are feasible for farming in the region.

The grouper is an iconic marine finfish found throughout Southeast Asia, prized as a high value whitefish among Asian and other consumers. Because of its high value, wild groupers are overfished and under threat of depletion. Groupers are generally not resilient to fishing pressure because of their slow growth and late maturity. Added to this, groupers are often harvested with particularly damaging fishing practices including the use of cyanide and dynamite, which can devastate marine ecosystems. In spite of growing interest from high-end buyers of grouper products, there is no sustainably sourced or produced grouper available.



The investment case explores a joint venture for a sustainable grouper farming operation. The operation includes a local Filipino partner company under the strategic and operational guidance of Blueyou, an international sustainable seafood company (and founder of Impact blue), managed against strict environmental standards for sustainable aquaculture, as well as direct market access through an existing local subsidiary, Meliomar, a Manila-based seafood processing and distribution business. Blueyou and Meliomar’s leadership and management teams bring extensive on-the-ground expertise and a track record of sustainable seafood sales in the SE Asian Region.

The venture requires investment to build vertically integrated hatchery, nursery and grow-out operations aiming to sustainably produce grouper products for distribution as live and fresh products in the Philippines and regional Asian markets. Investment proceeds will be utilized for capital expenditures to build the land-based hatchery and nursery facility, to construct the open-

<sup>23</sup> Since the cases are all still in discussion or pending with investors, certain details cannot be shared publicly.

water farming operations and to build a proximate packing and dispatch station, along with working capital requirements.

### Lessons Learned

There is a definite economic up-side potential to investing in sustainable aquaculture that can be coupled with positive social and environmental outcomes. Development of the investment case generated some useful lessons.

### Follow a structured approach

Finding an investment case that provides a suitable risk-return profile requires breaking free from constraints of location that are often found in development projects that operate in specific sites. A broader approach was used to develop the investment case for aquaculture as follows:

1. Identify species suitable for aquaculture farming in SE Asia
2. Evaluate species suitability based on specific factors, e.g., commercial value per production time required, feed requirement, mortality-resilience and hatchery feasibility
3. Group similar species and define the optimal setup for the top species groups with respect to seed stock supply, farming method, feeding regime and market
4. Run each species group through an assessment methodology scoring for Sustainable Impact Potential (environmental impact mitigation, social impact and communities, economic and market potential) and Business and Investment Risks (biotic production risks, production system risks, market and supply chain risks, financial risks, political and legal risks)
5. Identify any red-flag indicators for species, such as dependence on overexploited wild stock for seed supply, obvious lack of potential for profitability, unmitigated food safety hazards or inability to secure tenure by relying on harvesting in public places

The assessment methodology provides a valuable and replicable approach to identifying potential impact investments in sustainable aquaculture in other locations, and with some modification perhaps in other sectors (see Figure 5).

**Figure 5: Sample Assessment Scoring for Impact Potential and Business and Investment Risks.**

Impact Parameter	Indicator	Details for Assessment	Importance	Score
1. Biotic Production Risks	1.1 Risk of total loss due to disease	Risk for total production losses due to disease	50%	2
	1.2 Risk of partial loss due stressors	Resilience towards disturbance, environmental changes	20%	1
	1.3 Food safety hazard & recall	Risk of food safety hazards in marketed products	30%	3
2. Production System Risks	2.1 System vulnerability to extreme weather	Typhoons, flooding, storms	30%	1
	2.2 Systems, technology & infrastructure	Risk for system and technology failure	25%	2
	2.3 Management attention	Risk for high management attention and capabilities / capacities	45%	1
3. Market & Supply Chain Risks	3.1 Price volatility	Risk for high price volatility	25%	3
	3.2 Clustering of demand / Buyer power	Cluster risk of demand in only limited locations and/or sectors	20%	3
	3.3 Level of competitiveness	Risk of competition and competitiveness on target markets	20%	2
	3.4 Dependency on processing	Need for secondary processing of product (outside business model)	10%	3
	3.5 Spoilage risk	Risk for post-harvest losses	10%	2
4. Financial Risks	4.1 Initial investment cost	Level of initial CAPEX investment cost	20%	1
	4.2 Working capital need for cost of goods	Ongoing operational cost for COG (feed, PL, other inputs)	60%	2
	4.3 Maintenance need	Risk for high maintenance need	10%	2
	4.4 Depreciation level	High deterioration of assets / short depreciation	10%	2

**Identify key issues that can impact the investment**

The screening process revealed a few critical factors for the sustainability of the aquaculture operation. First, proper spatial planning is essential for future growth of the sector. Offshore sites may compete with other sectors and users for space and adjacent activities can impact the water quality essential for healthy operation of a farming operation. Bio-security protocols for disease mitigation are critical for ensuring viability of the operation. While the risk may be low, the impact can be significant, where a disease can wipe out an entire operation. Finally, an aquaculture operation can only be as sustainable as the ingredients of its feed. While it comes at a higher cost, operators that are serious about sustainability must ensure that feed is sourced from a reliable supplier who can verify the source of the ingredients. As a corollary, non-feed-based farming systems and species, such as seaweed, will have the lowest impact.

**Potential benefits**

The grouper farming operation would be established based on the Tropical Marine Finfish standard in development by the Aquaculture Stewardship Council (ASC) and might also consider organic certification in the future. The operation would source fingerlings exclusively from its vertically integrated, local hatchery operations, use traceable and sustainably sourced feed ingredients and monitor all impacts on the farm’s aquatic environment. The venture would offer a sustainably produced alternative to overfished wild caught grouper and would be the first certified sustainable producer of grouper in any market worldwide.

The investment is expected to deliver commercially attractive returns, promote local ownership and employment, enhance skills and incomes of local fisher households, and reduce overfishing. Discussions are underway with investors on moving forward with the investment case in specific suitable location(s).

**Table 1: Social Impact Goals and Objectives for Sustainable Grouper Farming Operation.**

<b>Short Term Environmental and Social Impact Goals and Objectives</b>	
Environmental Impact	<ul style="list-style-type: none"> <li>• Develop standards and markets for sustainably farmed seafood products</li> <li>• Increase the supply of market substitutes for wild caught species, putting downward pressure on wild caught prices and dampening incentives for grouper overfishing</li> </ul>
Social Impact	<ul style="list-style-type: none"> <li>• Create employment for Philippine workers, offering participation in the formal economy, benefits, and transferable skills training</li> <li>• Generate \$275k in local economic activity (local operating expenses) with multiplier effects on local communities</li> </ul>
<b>Long Term Environmental and Social Impact Goal and Objectives</b>	
Environmental Impact	<ul style="list-style-type: none"> <li>• Through growing market presence and competitive responses, reduce pressure on wild caught grouper</li> </ul>
Social Impact	<ul style="list-style-type: none"> <li>• Enable livelihood creation among Philippine employees and families. Depending on site location decision, specific long-term livelihood creation goals and metrics will be identified.</li> </ul>



### Investment Case 2: Marine Protection and Sustainable Tourism

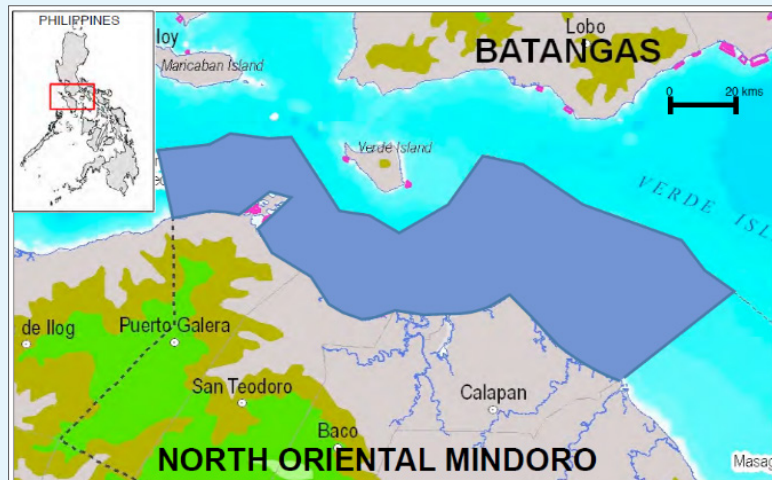
PEMSEA partnered with Blue finance, an NGO project developer for structured investments in coral reef conservation, livelihood improvements and climate change resilience for coastal communities, to create an impact investment scheme for marine protection in SE Asia. Building on the knowledge gained through its work in the Eastern Caribbean, Blue finance prepared an investment case based on a proposed public-private partnership (PPP) between local government and a newly-created private operator. The partnership would be formalized through a co-management arrangement, which requires no increase in public debt, no public budget allocation and no transfer of property. Such an approach was applied in the Eastern Caribbean, e.g., in the Dominican Republic, where Blue finance is developing a US\$2.5M investment for a Marine Sanctuary with 8,000 km<sup>2</sup> of coastal ecosystems.

The Blue finance/PEMSEA collaborative project sought to identify a pilot site with the highest probability of success based on factors including local government interest, MPA governance, tourism potential and biophysical characteristics.

The assessment identified the MPA network in North Oriental Mindoro in the Philippines as the top candidate site. Considered to be the center of the center of marine biodiversity globally, the area is home to vibrant coral reef, mangrove and seagrass ecosystems and is one of the country's top ecotourism destinations. The network includes 450km<sup>2</sup> of coastal ecosystems with 400,000 annual visitors. But the area is under a number of development-associated threats including from uncontrolled tourism development and activities (e.g., anchor damage), unsustainable fishing practices, nutrient and bacteriological pollution from untreated and partially treated sewage discharges, foreshore encroachment, erosion and sedimentation, inadequate water supply and proximity to international and domestic shipping lanes.

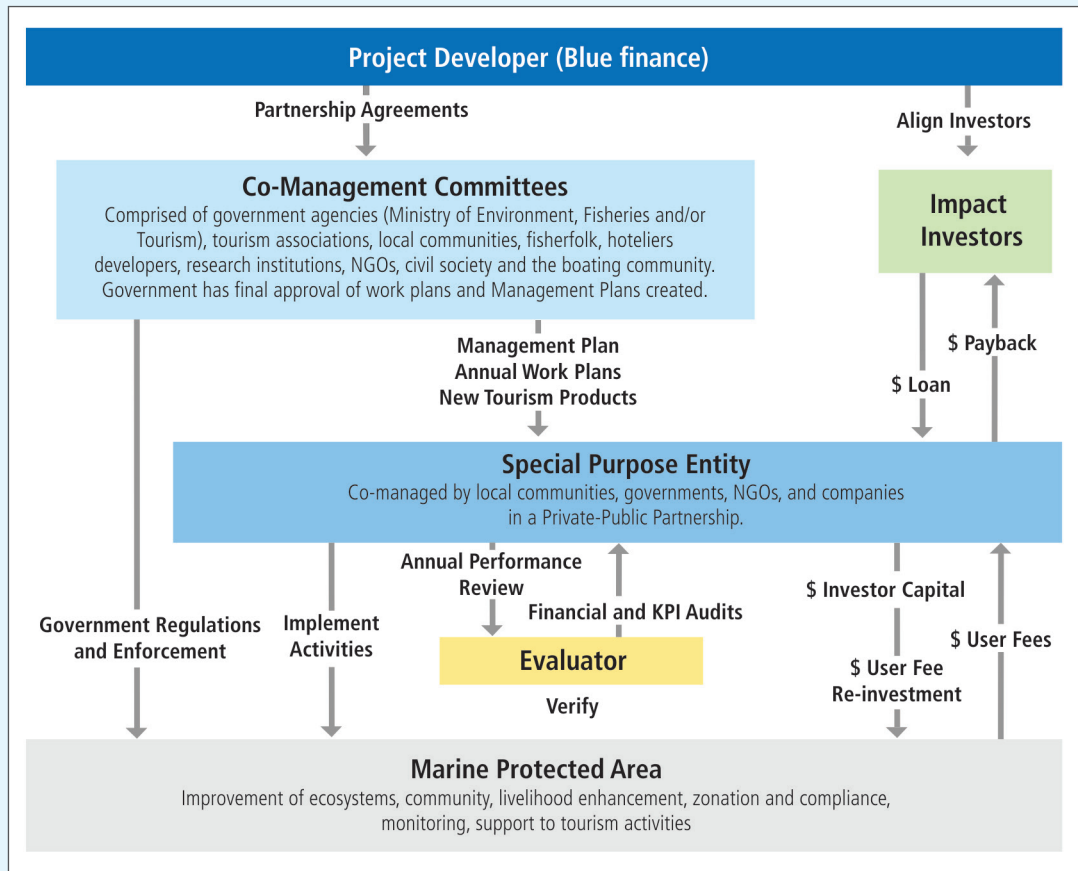
The proposed investment involves co-management of the MPA network by a non-profit, non-stock foundation or special purpose entity (SPE) through a 10-year renewable agreement between the province, four local government units (LGUs) and the SPE, with a mechanism for termination of the agreement in case of underperformance. The SPE, guided by a Co-management Committee comprised of public, NGO and academic stakeholders, would receive a mandate from the concerned LGUs to charge statutory user fees to generate revenue. However, initial funding is needed from impact investors to launch the venture and invest in the necessary assets and equipment.

**Figure 6: Map of targeted MPAs in North Oriental Mindoro, Philippines.**





**Figure 7: Conservation Investment Blueprint for MPA Public-Private Partnership.**



Source: CPIC / Blue finance

**Lessons Learned**

The Blue finance investment model, with support from some impact investors, represents an innovative approach. Working with this model in East Asia requires a willingness by governments to experiment with new approaches. Already, development of the investment case for the MPA network in Northern Mindoro has produced some useful lessons.

**Focus on local buy-in**

Local stakeholder input on development of the investment arrangement—in the case of the Blue finance, the co-management agreement—is a must. Without local buy-in, not only will the arrangement lack the local knowledge needed for proper design, the likelihood of successful implementation is low. The presence of one or more strong NGOs with a good local track record is needed, both for help with initial local engagement and, in the case of co-management governance, as part of the SPE or Co-Management Advisory Committee. Working with a local consultant can be extremely helpful in gathering the right information and support needed. In addition to local support, policy support from national government can be instrumental in moving projects forward. Finding a champion in the higher levels of government can be extremely helpful.

### **Identify and address political risks early in the planning process**

While it varies from location to location, the risk of losing political support can easily slow down or halt the development of an investment project. In the case of Northern Mindoro, multiple local governments and a provincial government are involved, and their support is crucial for the signing of the co-management agreement. Turnover of elected officials can mean a change in political priorities, and even an election itself can result in project activities being put on hold. For example, the proposed co-management agreement in Northern Mindoro was structured as a legally binding 10-year renewable agreement to weather potential political turnover. It is important to engage a broad array of stakeholders as early as possible to establish a set of local champions and, to the extent possible, demonstrate the benefits of the case early in the process. Both government and private investors will be easier to engage with some demonstrated track record of success.

### **Apply integrated solutions that balance investment, social, economic and environmental benefits fairly and transparently**

PEMSEA's approach over 25 years has been based on ICM so that social, economic and environmental impacts are properly managed across multiple sectors. In the Northern Mindoro case, it was important to ensure that the co-management agreement included all the necessary provisions for enforcement, regulation, environmental activities, monitoring and local capacity. Any approach must balance the technical and financial aspects of the investment case, including local government and community inclusiveness in the investment, as well as management and operational aspects of the project. It's also important to take a holistic approach that considers other impacts of the investment, for instance understanding the link between tourist arrivals, deteriorating water quality, and existing and planned sewage treatment facilities in the area. Integrated solutions are needed so that the investment reduces environmental stress and protects the area, and doesn't result in unintended additional stresses on the area.

### **Potential benefits**

The US\$1.5M investment required for initial capital expenditures in the MPA Network is structured as a senior 8-year loan (i.e., a loan at 8% interest rate, with debt holders getting paid back first before those with more junior debt) to the newly-created non-profit SPE, with no collateral guarantee required.<sup>24</sup> The investment would be secured via a PPP with the government. The investors would provide a loan based on the agreement that guarantees user fees and other revenues that would be used to repay the loan. The loan would be paid back by the SPE through revenues of more than US\$1M annually generated from statutory visitor fees and innovative sustainable tourism activities.

Enhanced management of the MPA is expected to result in reduced overfishing and user conflicts, sustainable tourism practices, improved enforcement of water quality regulations, improved fishery

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<sup>24</sup> Blue Finance. 2019. *Conservation Investment Blueprint: Public-Private Partnership for Marine Protected Areas*.

incomes for local communities, opportunities for eco-tourism businesses and protection from coastal erosion and resilience to climate change, benefitting an estimated 35,000 households.

At the time of writing, finalization of a co-management agreement with the local government is moving forward. Meetings have been held with town councils, the tourism council and environmental experts. A major international NGO is on board to become one of the founding members of the new co-management body, and impact investors have confirmed initial interest.

### Investment Case 3: Wastewater as a Resource

PEMSEA partnered with ARCOWA, an advisory firm focused on sustainable and entrepreneurial water and ocean management, to improve the understanding of in-country wastewater sector opportunities and constraints in East Asia and to develop a pre-feasibility study for investment in wastewater and related resource recovery activities. The project followed a systematic process to identify one validated, high-potential investment case, with its scope as Indonesia<sup>25</sup>, the Philippines<sup>26</sup> and Vietnam.<sup>27</sup> The project also produced reports covering the urban and industrial wastewater sector in the three countries as a basis for further analyzing opportunities to invest in wastewater treatment and resource recovery and as an initial step in the potential mobilization of public and private investments.

Following the country research, a water company serving a special economic zone in the Philippines was identified as a candidate for development of a prefeasibility study. The company is currently not meeting the general effluent standards (GES) on nutrient concentration (for class C water bodies) in the Philippines, particularly so with respect to ammonia and phosphates. The pre-feasibility study recommended options for upgrading the company's existing wastewater treatment facility (WWTF), enhancing its capacity to remove the nutrient content of the wastewater in compliance with the GES.

The existing WWTF has a design capacity of 27,000 m<sup>3</sup>/day and is comprised of a series of lagoons with two activated sludge ponds, two aerated partial mix ponds and two maturation ponds. Discharge of the effluents impact local waterways and, ultimately, contributes to excessive nutrient loadings of Manila Bay.

### Lessons Learned

#### Explore alternative financing mechanisms, but build on government commitment

Major investments in water, wastewater and sanitation infrastructure are needed in the three countries studied. These investments can only be partially funded by government; other sources of financing are critical to meeting the targets for SDG 6 (clean water and sanitation) and SDG 14 (Life below water). Expanding and upgrading wastewater collection and treatment and implementing resource

<sup>25</sup> ARCOWA. 2018. *Wastewater management and resource recovery in Indonesia: Current status and opportunities*.

<sup>26</sup> ARCOWA. 2018. *Wastewater management and resource recovery in the Philippines: Current status and opportunities*.

<sup>27</sup> ARCOWA. 2018. *Wastewater management and resource recovery in Vietnam: Current status and opportunities*.

recovery has potential, but legal and financial commitments are required by government to promote, support and incentivize wastewater treatment. The private sector cannot and should not be expected to take on the responsibility for provision of water and wastewater services. There are a number of ways to diversify financing, management and operating mechanisms for wastewater treatment, depending on the local political, social and economic context, including the potential involvement of national and international private sector investors. These aspects should be thoroughly reviewed and presented to local stakeholders as part of professionally prepared feasibility studies to pave the way for an investment case.

### **Look for acceptable solutions, not just low hanging fruit**

Industrial parks present a good entry point for wastewater investment. In this case, the decision was made to develop an investment case for an economic zone due to budget and time constraints. As discrete, bounded systems, economic zones are generally easier to understand and manage in terms of wastewater input and output. Private operators may also have a higher comfort level with new technologies and approaches than local governments.

However, the need for engaging with local governments and investing in municipal/urban wastewater treatment is paramount to achieving the SDG and SDS-SEA objectives and targets. Few local governments have implemented effective sewerage or septage management schemes as they have limited capacity and weak incentive to comply with existing laws and standards. And, while expertise is readily available to design and build conventional sewage and sanitation collection, treatment and disposal facilities, a gap exists when it comes to professional capacity and foresight to provide solutions that are cost efficient, affordable, sustainable and acceptable to local governments and serviced communities. The lesson is that more time, effort and financial support is needed up front to identify and explore technical, financial, management and operating options in a fully transparent and inclusive manner. The idea is to provide local governments, potential investors and the private sector with solutions that embody mutual benefits that they are willing and able to engage on and manage.

### **Potential benefits**

The main drivers for upgrade of the WWTF in the economic zone are compliance with the new wastewater effluent norm, potential for water re-use (sales) due to water scarcity, expansion of activities in the economic zone and reduction of the WWTP footprint and associated lease costs.

Of the options for upgrading and retrofitting the existing WWTF, biological nutrient removal combined with chemical phosphorus removal was found to be the most financially viable option. A capital investment of 68M PHP (approximately US\$1.3M) would have an ROI of more than 8% and a payback period of less than two years. Implementing the proposed upgrade of the WWTF will result in a reduction in nutrient discharge to the local waterways and, ultimately, Manila Bay. Total nutrient discharge would be reduced by approximately 15 tons per year. The resulting water reuse would also reduce pressure on groundwater resources.

Based on the results of the prefeasibility study, the company is exploring preparation of a full feasibility study for investment in the WWTF upgrade.

### Investment Case 4: Ocean Plastic Pollution

Eight million metric tons of plastic from land-based sources enter the ocean every year, much of it a consequence of under-investment in both infrastructure and operations for waste management services.<sup>28</sup> This is especially important in East Asia, which is home to the largest contributors to ocean plastic leakage.<sup>29</sup>

The 2016 report *The Next Wave* published by the Ocean Conservancy showed that integrated, locally-appropriate waste management solutions are needed now, but it is highly unlikely that government funding alone will be sufficient. Private investments are needed to overcome barriers and transform the system, including:<sup>30</sup>

- Collection, sorting and processing systems
- Designing more products for profitable recycling and incentivizing the use of recycled feedstock where feasible in product manufacturing
- Inclusive integration with the informal waste-picking economy to effectively collect and sort material while realizing benefit throughout the supply chain
- Supporting waste system educational and outreach programs

In 2017, PEMSEA established a partnership with Circulate Capital, an impact-focused investment management firm dedicated to incubating and financing companies and infrastructure that prevent ocean plastic pollution, with a strong focus in PEMSEA's region. Not unlike other sectors examined, investment in solid waste management suffers from a lack of pipeline opportunities. There is a "missing middle" of investible entities that can demonstrate a track record of profitability and growth. Circulate Capital aims to "blend concessionary and philanthropic monies with market rate investment capital to unlock institutional funding by showing that investment in the resource recovery sector can ultimately provide attractive financial returns".<sup>31</sup>

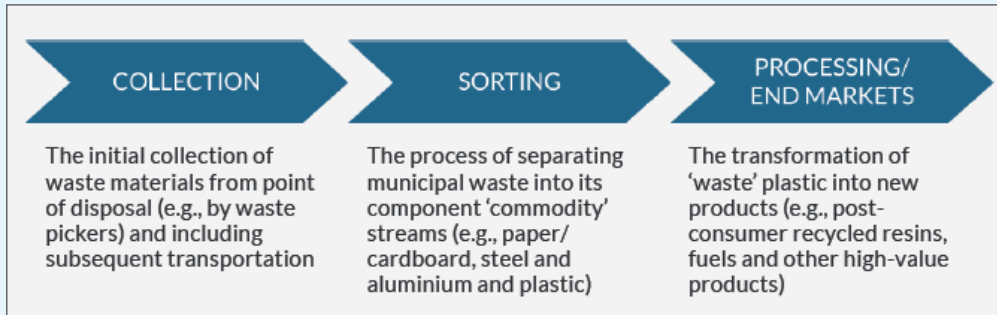
### Lessons Learned

#### Invest in capacitating local entrepreneurs

Overall, the investment pipeline in Southeast Asia does not appear to be especially robust. A common characteristic identified with smaller, early stage companies—which tend to be concentrated in the collection and sorting segments of the plastic value chain (see Figure 8)—is a need for technical assistance to develop their management skills, build networks and access technologies. There aren't enough entrepreneurs with experience to create new businesses, and often the public sector and NGOs aren't sure how to engage the private sector.

Incubation of new ventures helps to address this need. For example, Circulate Capital launched The Incubator Network with a grant from the U.S. State Department to enable capacity building for ventures not ready for investment capital. The Incubator Network is designed to accelerate solutions to ocean plastic waste by partnering with existing incubators (e.g., SecondMuse, WeWork Labs India and McKinsey.org) to build ecosystems of waste management and recycling innovators.

**Figure 8: Segments of the Plastic Value Chain.**



Source: Circulate Capital

### **Establish good governance**

Policy, regulation and enforcement play a critical role in setting the scene for investment, particularly for foreign investors to come in. Lack of sound policy or enforcement represents a significant problem. In some areas, illegal waste collection and disposal practices and unscrupulous operators distort markets and generate far too much risk for investors' appetite. Government action is required to set the ground rules for markets. The viability of investments in waste infrastructure, for instance, often depends on the tipping fees or tariffs in place. As another example, Extended Producer Responsibility (EPR) incentivizes producers to price disposal costs into products, giving consumers financial responsibility for their consumption.

### **Open doors with value-added partnerships**

Localization is critical for executing a plastics management strategy. As investors move into what may be new geographies or asset classes, they need partners they can trust that can help to de-risk their investments. Partners are needed with the local knowledge and relationships to navigate deals and build capacity on the ground, particularly in a region as diverse as Southeast Asia. At the same time, organizations with a regional view, beyond a specific locale, can help to reach further across a region to open doors of opportunity for investors and project developers.

PEMSEA has benefitted from high-level engagement among large corporate brands, manufacturers and recycling and waste operators who are working with Circulate Capital. This provided PEMSEA with an important link to global knowledge and innovative approaches that can benefit the region.

### **Refine the partnership as it evolves**

A shared vision and common goals can be enough to initiate a partnership, but it is important to clearly refine the partners' roles and revisit them as the partnership evolves. In the case of PEMSEA and Circulate Capital, the "why" of the partnership was easy. Both organizations understood the



problems and were looking for innovative ways to solve them through new financing approaches. The initial parameters of the partnership were set with the flexibility to evolve, which they did, in this case with the Closed Loop Ocean project transforming into Circulate Capital. Regular communication was important as the organizations learned about each other and how to best support their work.

After a successful initial partnership, moving into the next phase focused on execution, PEMSEA continues its role as a lead partner in the region, jointly supporting incubation of early-stage investments and promoting investments addressing waste management and plastic pollution in SE Asia. PEMSEA will provide technical review and local guidance to Circulate Capital, ensuring that projects take a holistic approach that considers the local context and that proper environmental and social safeguards are used for investment projects.

### **Potential benefits**

With its focus on South and Southeast Asia, Circulate Capital stands as an important investment partner for the region. By late 2018, it announced more than US\$100 million in commitments toward investing in waste management and recycling companies and infrastructure in the region.

The partnership also represents a step forward in understanding and developing a pipeline of investments. Early examples include:

- Tridi Oasis Group, a women-owned and managed producer of high- and medium-grade rPET flakes for the packaging and textile industries. Based in Tangerang, near Jakarta in Indonesia, its current annual production is about 2,000 metric tons with a target of 14,000 metric tons by 2020. This growth will see the company move increasingly toward the production of food grade rather than sheet grade rPET flakes and a larger proportion of overseas sales.
- SURE Global W2Wi Pte. Ltd., a developer of waste-to-worth projects in Asia, seeks equity investors for a project that will convert municipal solid waste into biofuels and compressed natural gas using proven technologies, selling those end products in the local market in Dagupan City, Philippines. It will remove a 50-year old open dumpsite that is adjacent to the beach outside Dagupan City.



## 4

## Ocean Investment in East Asia

The need to access private capital has been well understood, but the means to do so has been less clear. At the same time, there is no shortage of private capital available, and investors are looking for new opportunities to diversify and find growth in new asset classes with the appropriate risk and returns. One benefit of private capital is that it can be inherently self-sustaining. The right models that would attract private investment would do so based on an expected financial return into the future. There is no need to continually “go back to the well” for additional donor funding to achieve development outcomes. Private investors will willingly bring their capital for the returns—the development outcomes may just be an added benefit. But there are development outcomes all the same.

In development of its strategy, PEMSEA recognized that core funding for SDS-SEA implementation should generally come from the countries themselves, and that governments would need to undertake public investments into infrastructure, ports, fisheries and the like. Private funding is seen as additional means to support commercially viable investments in infrastructure and services. Countries acknowledge that establishing private funding mechanisms and sourcing projects and relationships with investors and the private sector will take time to develop.

PEMSEA’s work to date has focused more on facilitating direct investment by investors rather than through mechanisms such as revolving funds, payment for ecosystem services or carbon credits. While these have an important role to play and can often factor into investments as potential revenue

*“It’s incumbent upon development organizations to understand what investors are looking for. There’s still a lack of understanding of how to structure deals in a way that makes them investable and attractive to a private investor. There may be a huge economic benefit on paper, but if investors aren’t able to capture these benefits and generate an acceptable return, it won’t work.”*

**Trip O’Shea, Private Equity Investor and Fisheries Finance Expert**

streams, the need for strengthening the ability of development projects and organizations, like PEMSEA, to attract private investors was viewed as a critically underdeveloped area.

### Proper governance as a basis for investment

Private investment in sustainable development of oceans is often perceived as untested and risky, particularly in a largely developing region like East Asia. Investors may have concerns about ease of doing business, rule of law, local management and enforcement capacity, available infrastructure, clear zoning rules and property rights, which all can have severe consequences for an investment. Risks can be reduced by providing streamlined policy frameworks

and stable governance. Business and investors also ask for simplified compliance processes that don't compromise environmental and social standards.

Addressing these concerns, PEMSEA's integrated governance and management approach guides planning and decisions for sustainable use of goods and services of coastal and marine ecosystems, providing:

1. a mechanism for stakeholder engagement in development of coastal governance;
2. a guiding framework for policy design, strategy development and capacity building; and
3. a means for companies and investors to engage with government at the local and national levels.

PEMSEA's ICM Code and Certification System provide an internationally recognized standard to guide coastal management and validate performance excellence. Through certification, governments are able to validate that their system of governance and management, inclusive of institutional mechanisms, policies, regulations and enforcement capabilities, conforms to international standards for governance and management of coastal areas, thereby reducing

*"There's a tension between the need to disaggregate 'oceans' for the purposes of investment, for example breaking it down by renewable energy, fisheries, coastal infrastructure, etc. and the importance of being mindful of how it all fits together, and the potential for knock-on effects. That's where an integrated management system is useful."*

**Anna Creed, Climate Bonds Initiative**

risk and encouraging partnerships and investments with the private sector and other interested parties.

### Understanding the ICM investment landscape in East Asia

ICM development and implementation across PEMSEA's network of local governments encompasses a wide range of on-the-ground blue economy investment opportunities. As a first step in identifying concrete investments, local governments implementing ICM programs were consulted on investment needs and opportunities. The responses from across 8 countries covered more than 300 items, which were categorized into the following sectors:

1. ICM Development and Implementation
2. Coastal Transport
3. Energy
4. Fisheries and Food Security
5. Pollution Reduction and Waste Management
6. Ecotourism / Sustainable Tourism
7. Enterprise and Livelihood Development
8. Habitat Protection, Restoration and Management
9. Natural and Manmade Hazard Prevention and Management
10. Water Use and Supply Management

To address just how much existing investments were being directed to the 10 identified priorities, a report entitled *Investment Landscape Mapping in East Asia: Integrated Coastal Management and Sustainable Development of Coasts and Oceans*<sup>32</sup> was prepared and launched by PEMSEA in late 2015. For the report, investment was considered in the context of ICM rather than blue economy, establishing a link to PEMSEA's ICM program. The report maps financial funding flows to ICM-related sectors across the grants and investment capital spectrum over a ten-year period (2005-2015). The range of funding comprises

<sup>32</sup> Shujog and PEMSEA (Partnerships in Environmental Management for the Seas of East Asia). 2015. *Investment landscape mapping in East Asia: Integrated coastal management and sustainable development of coasts and oceans*. PEMSEA, Quezon City, Philippines. 77 p.

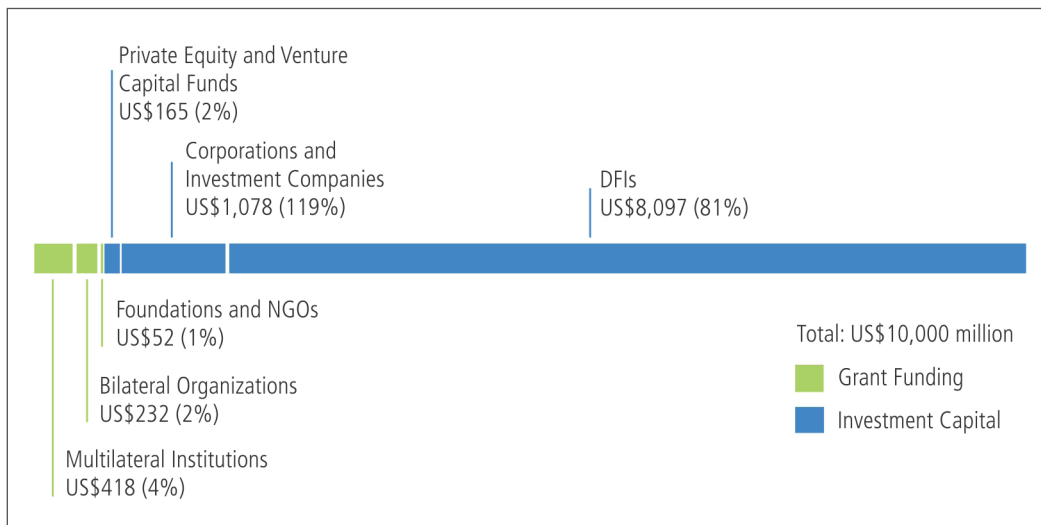
donors (both bilateral and multilateral), foundations and CSR initiatives at one end, and development finance institutions (DFIs), corporations, impact investments and commercial investors at the other. The report identifies the major funders, programs, areas of investment, types of investors, geographical preferences and sizes of the investments deployed across ICM in select countries of East Asia. The paper also analyses the requirements, strategies, and expectations of investors and donors.

Over the ten-year period, investments into ICM activities topped an estimated US\$10 billion (Figure 9) in the countries reviewed, which included Cambodia, PR China, Indonesia, Lao PDR, the Philippines, Thailand, Timor-Leste, and Vietnam. Over the study period, the countries examined were beneficiaries of over 420 donor-funded projects and initiatives from some 30 international donor organizations with grants in excess of US\$702 million of financial commitments, over half of that from multilateral institutions, the remaining from bilaterals, foundations and NGOs. Across many projects and programs, donors tended to link efforts to strengthen coastal areas to address environmental challenges like climate change and biodiversity.

But across the investment landscape for ICM, investments with expectations of financial returns greatly outpaced donor funding. In terms of investment capital, over the study period countries welcomed an estimated 111 ICM-related investments from 23 investors providing upwards of US\$9.3 billion in financial commitments. This is dominated by loans from DFIs by a wide margin, reaching an estimated US\$8.1 billion primarily focused on water use and supply management, pollution reduction and natural and man-made hazard prevention and management. In absolute terms, the World Bank, ADB and JICA together account for almost all of these DFI funds. Corporations and investment companies provided some US\$1.1 billion of financing as one-off investments in a variety of private sector enterprises and initiatives, including seafood processing companies, desalination and waste treatment technology, ecotourism and coastal energy projects. Private equity and venture capital funds had only begun making initial investments into the sector, with total investments reaching an estimated US\$165 million for the countries under review.

The report notes that impact investing remained largely unrealized in the region, but could offer new

**Figure 9: Grant Funding and Investment Capital to ICM-Related Sectors in Select East Asian Countries, (2005-2015) By Donor Category, Estimates of Committed Funds (in US\$ million, % of total).**



and creative financing options for ICM projects and an ocean-based blue economy at local, national and regional levels. Also notably missing from the ICM investment landscape in East Asia were large institutional investors (traditionally pension funds, endowments and insurance companies), family offices and high net worth individuals (HNWIs). Institutional investors tend to be risk-averse in their investment strategy and their hesitance to commit to ICM projects could possibly be due to the relatively uncharted nature of the East Asian ICM landscape as a destination for private investment. Investors frequently cited difficulties in sourcing high-quality investable deals as an important factor preventing them from actively participating in the sector. A lack of track record, few examples of

successful investments, capriciousness of local politics, issues of rights and tenure and untested revenue models all conspired to limit the potential of investing in ICM, even from the most patient of private capital.

The report recommends awareness building targeting the wider investment community and impact investors in particular through established case studies, research, events and conferences. With many ICM-related projects seeking investment capital at early stages, proof of concept and technical assistance is needed to help enterprises become investment-ready. Investment-readiness support can strengthen projects to meet the expectations of impact investors.

### TEXT BOX 3

#### The Emerging Ocean Investment Ecosystem

Through its blue economy activities, PEMSEA has identified an emerging, vibrant investment ecosystem focused on oceans in the East Asian region. It's important for development organizations to understand the differences between the various players in the investment ecosystem and the role that they play. Table 2 highlights examples of Funds and Investment Managers; Development Finance Institutions; Consultants, Technical Advisors and Project Developers; Commercial Financial Institutions; Multilaterals / Bilaterals; Foundations; NGOs and Convening Organizations; Intergovernmental Organizations and Development Projects and Investment Facilities; all of which play a unique and important role in channeling more private capital to sustainable development of oceans in the region. This list is not exhaustive, and there may be other local grantmaking institutions, venture philanthropists, high net worth individuals, private equity firms or others engaged in this space, but it highlights some of the players most active in advancing the thinking and on-the-ground practice of blue economy investment in the region.



**Table 2: Blue Economy Investment Ecosystem Players in East Asia.**

<b>Ecosystem Player</b>	<b>Function</b>	<b>Examples</b>
Funds and Investment Managers	Provide return-seeking investment capital with a mandate for delivering environmental and social benefits.	Althelia Funds, Meloy Fund, Encourage Capital, Circulate Capital, Rockefeller Ocean Strategy (Ocean Foundation), CI Ventures, ADM Capital, C4D, Aqua-Spark
Development Finance Institutions	Key facilitating role; arrange and manage debt and equity transactions; intermediary for blended finance, attracting private co-financing; provide guarantees and insurance; programs focused on thematic issues (e.g., sustainable fisheries).	Asian Development Bank, World Bank, European Investment Bank, OPIC, local development banks
Consultants, Technical Advisors and Project Developers	Advance thinking and deliver expertise to develop investible projects that deliver environmental and social benefits; run competitions and incubators to cultivate investible enterprises.	Impact blue, Blue finance, ARCOWA, Impact Investment Exchange, Clarmondial, Blue Ventures, Wilderness Markets, SYSTEMIQ, Resonance, Global Ocean Trust, Conservation XLabs, Fish 2.0
Commercial Financial Institutions	Provide commercial return-seeking investment capital.	Credit Suisse, BNP Paribas, local commercial banks
Multilaterals / Bilaterals	Grants for technical assistance; concessionary debt or equity and guarantees to lower cost of capital and improve risk-return profile of deals.	GEF, UNDP, USAID, DFAT, UNEP, FAO, GIZ, GCF, JICA, SIDA, Norway
Foundations	Provide seed financing for breakthrough initiatives, concessionary capital to de-risk and crowd in private capital	Rockefeller, Packard, Walton Family, Summit, Gordon and Betty Moore, Bloomberg, Ellen MacArthur, Paul Allen
NGOs and Convening Organizations	Advance thinking through research and convenings; develop pilot projects; provide technical assistance and seed funding.	TNC, WWF, Conservation International, EDF, Rare, Zoological Society of London, Economist, IUCN, World Ocean Council, Monterey Bay Aquarium, Future of Fish, Climate Bonds Initiative
Intergovernmental Organizations and Development Projects	Advance thinking through research and convenings; develop models and pilot projects; guide policy development; provide technical assistance.	PEMSEA, COBSEA
Investment Facilities	Provide finance and technical assistance to prepare and structure bankable investments.	Blue Natural Capital Financing Facility

## An Ocean Investment Facility for East Asia

Ocean investments can be much more diverse and complex in nature than the typical land-based infrastructure investment, and therefore require special expertise to source, evaluate, develop and profitably exit an investment. Improved capacity is needed at the local level, including government, NGOs and community organizations, to identify potentially investible projects and move them through the necessary steps towards successful investment, in partnership with the right experts. At the same time, assistance is needed in connecting projects with interested investors.

Over 25 years, governments, GEF, development agencies, donors, financial institutions and non-government organizations have contributed billions of dollars to LME, Regional Seas (RS) and ICM programmes to: (1) support regional scientific assessments; (2) develop regional Strategic Action Programmes (SAPs); and (3) establish regional institutional mechanisms for addressing transboundary issues and promoting sustainable development of coastal and marine ecosystems shared by multiple countries (e.g., PEMSEA). The SAPs provide a government-sanctioned, scientifically-based planning and action framework for investing in coasts and oceans. Such advanced management plans have the potential to reduce investment risks as these new asset classes evolve, providing the private sector with the certainty needed for longer-term financial returns, along with transparency and accountability frameworks for sustainable development. The maturity of these SAPs presents a unique opportunity to redirect potentially billions of dollars of capital towards blue economy investments. It's hoped that oceans as an asset class will follow the same path of growth and maturity as energy efficiency and renewable energy.

The concept of an "ocean investment facility" is based on the rationale that some project proponents (i.e., regional organizations or national and local

*"Blue economy investment has advanced, but we're probably still 4-5 years away from seeing a major shift in oceans as an investment asset class. It took energy efficiency and renewable energy at least 10 years to come into the mainstream."*

**Veerle Vandeweerd, Sustainable Development Expert, Former Director Environment and Energy, UNDP**

governments) may lack the capacity and know-how to identify, develop and transform SAP priorities and objectives into bankable investments that provide a financial return to capital providers, along with positive social and environmental impact on coastal and marine ecosystems. An ocean investment facility could be designed to fill this gap, assisting governments to develop a pipeline of investible projects as well as identify and develop sources of capital for a range of investments, from impact investments, to venture capital, to large project infrastructure investments. The pipeline of high-quality, bankable projects generated would contribute to the implementation of the regional and national SAPs and thereby to sustainable economic development and growth.

At the same time, an ocean investment facility would be designed to contribute to the sustainability of regional organizations, like PEMSEA, which play an important planning, coordinating, capacity development and knowledge sharing role for SAP implementation at the regional, national and sub-national levels. The significance of regional coordinating mechanisms is further highlighted by their ability to convene governments, business, investors and other stakeholders on specific projects within a regional context. Expanding the scope of

services provided by regional organizations to include identification and development of investments would entail innovation in the organizational, functional and financial arrangements and operations of regional organizations. PEMSEA, with its focus on blue economy development and partnerships, is well-positioned for on-the-ground testing of this innovative concept.

A key proposition is that an ocean investment facility would be self-financed after an initial round of projects are funded and implemented by public and private partners, with the help of institutional and other investors (i.e., an incubating period). Certain fees (e.g., success fees on closed deals and consulting fees for supporting the development of investible projects) would be used to recover cost and pay for services delivered by the facility. Any revenue realized over and above full cost recovery would support growth of the facility (e.g., outreach/technical assistance, project development, knowledge sharing). This represents an innovative and useful mechanism for reducing reliance on donor funding and, over time, contributing to a strategy for donor exit.

The concept was originally conceived as launching both a pre-investment facility and an actively managed investment fund or set of funds (see Annex G) with the mandate to construct financial deals and co-invest capital into projects generating positive social and environmental impacts and attractive financial returns for the investors. However, given the emergence of other blue economy-focused funds and the complexity of launching a fund, along with the clear need for pipeline development, PEMSEA chose to first prioritize the pre-investment service of an ocean investment facility.

### **Designing a pre-investment service**

Since 2015, PEMSEA has been gradually linking with the growing ecosystem of investment partners across several sectors. These partners bring international expertise in identifying and developing bankable investment cases across sectors, including

marine protection and ecotourism, wastewater, low-carbon and renewable energy, sustainable fisheries and aquaculture and recycling and ocean plastics, among others. The next step was to further develop and test the concept of the pre-investment service and build awareness, consensus and capacity to operationalize it. In concept, the proposed pre-investment service would provide investment services to local governments and project proponents, along with regional and global investment funds, assisting in the identification, development and consolidation of blue economy investment projects. The service would target projects that are financially sustainable and that generate measurable positive social and environmental impact. Acting as an intermediary between projects and investment funding, PEMSEA would leverage its 25 years of on-the-ground experience in the region. The pre-investment service would ensure that projects take a holistic approach underpinned by the principles and framework of ICM, supporting implementation of the SDS-SEA and the SDGs and benefitting local communities.

### **The pre-investment service helps project proponents to:**

- Identify investible projects that address priority management concerns of local governments and stakeholders, at the same time assisting in knowledge transfer to build internal capacity
- Assess business and financial models and connect with a network of experts to help develop investible projects
- Identify project developers and/or investors to complete feasibility studies
- Tap into a growing pool of interested investment funds, matching with the right investment capital and capital structuring, including blended finance from private sector and donor sources
- Promote investment projects to potential investors, assisting with negotiation, development and investment close

### **The pre-investment service helps investors by:**

- Leveraging a regional network of national and local governments, research and science institutions,

international and donor agencies, regional programmes, NGOs and companies—including the PEMSEA Network of Local Governments (PNLG) and PEMSEA Network of Learning Centers (PNLC)—to identify investment opportunities

- Providing political context and minimizing risks for effective functioning of investments
- Identifying opportunities for aggregation, alignment and collaboration with complementary projects, initiatives and enterprises supporting investment projects
- Tailor-fitting projects to investor requirements, including structuring and monitoring for sustainability and impact using indicators-based monitoring and evaluation and reporting systems
- Tapping into opportunities for blended finance through its role as an intergovernmental organization and established track record with donors

Building on PEMSEA's ICM approach, the pre-investment service facilitates investments across a range of interconnected sectors:

- Solid waste management and ocean plastics
- Sustainable fisheries and aquaculture
- Sustainable tourism / ecotourism
- Wastewater management and water supply
- Climate smart development and coastal resilience
- Ocean-based technology (e.g., marine renewable energy, ICT, environmental services, etc.)

The pre-investment service aims to apply blended finance approaches where public or donor funding can complement private capital. In line with this principle, capital may be sourced from multiple funder types:

- Impact Investment Funds
- Multilateral Funding
- Bilateral Funding
- Foundations and other Charitable Institutions
- Public and Private Grants
- Private Equity or Debt Funds
- Corporate Social Responsibility (CSR) Funding

Geographic Focus: Cambodia, PR China, Indonesia, Japan, Lao PDR, Malaysia, Philippines, RO Korea, Singapore, Thailand, Timor-Leste, Viet Nam

The facility can link to and utilize a variety of investment products and mechanisms:

- Loans
- Equity
- Grants
- Hybrid Investments (Mezzanine, Quasi Equity)
- Public-Private Partnerships

### Standard processes for project development and investment

The goal of a pre-investment service is to move away from an ad hoc approach, providing a standardized method for identifying and developing investment projects. Acting as an intermediary between project proponents and investors, the proposed pre-investment service focuses on 5 steps in the lifecycle of investment project development:

1. **Project Sourcing** – originate blue economy projects from the PEMSEA network
2. **Pre-Feasibility** – initial diligence and match identified projects with potential investors to gather early feedback on investor interest and requirements
3. **Feasibility** – further diligence and determine fit of the project to the investor
4. **Project Development** – develop project to full investment-readiness
5. **Investment** – investor invests in the project

**TEXT BOX 4**

PEMSEA created a simple 2-page Project Submission Form designed to balance ease of use by local project proponents with obtaining the necessary preliminary information to understand a potential investment. As a second step, a Pre-Feasibility Template was developed to gather more detailed information about a potential investment project, along with Risk Asset Assessment Criteria for understanding the level of risk based on financial, governance, management, market, production and technology dimensions.

**Figure 10: Ocean Investment Facility Project Submission Form.**

**PEMSEA**  
Appendix B  
Ocean Investment Facility Project Submission Form

**Project Name**  
[Text box]

**Contact Information** (person who referred the project)  
Name: [Text box] Telephone: [Text box]  
Position: [Text box] Email: [Text box]  
Organization: [Text box] Skype: [Text box]  
(Project developer, local government, national government, NGO, social enterprise, foundation, etc.)

**Project Overview**  
Please provide a short description of the project, its stage of maturity, and description of location (attach a map if available)  
[Text box]

**Blue Economy Investment Category**

- Ecotourism / Sustainable Tourism
- Sustainable Fisheries & Aquaculture
- Pollution Reduction and Waste Management Infrastructure and Technology
- Sustainable Ports, Shipping and Marine Transport
- Marine Renewable Energy
- Water Use and Water Supply Management Infrastructure and Technology
- Low Carbon / Climate Smart Coastal Development
- Ocean-based Technology-Enabled Products and Services, including biotechnology, data analytics and information technology

**Sustainable Development Goal (SDG) Contribution**

- GOAL 1: No Poverty
- GOAL 2: Zero Hunger
- GOAL 3: Good Health and Well-being
- GOAL 4: Quality Education
- GOAL 5: Gender Equality
- GOAL 6: Clean Water and Sanitation
- GOAL 7: Affordable and Clean Energy
- GOAL 8: Decent Work and Economic Growth
- GOAL 9: Industry, Innovation and Infrastructure
- GOAL 10: Reduced Inequality
- GOAL 11: Sustainable Cities and Communities
- GOAL 12: Responsible Consumption and Production
- GOAL 13: Climate Action
- GOAL 14: Life Below Water
- GOAL 15: Life on Land
- SDG 16: Peace and Justice - Strong Institutions
- GOAL 17: Partnerships to achieve the Goal

**Project Proponent's Information**

**Proponent's or organisation's name**  
[Text box]  
(Project developer, local government, national government, NGO, social enterprise, foundation, etc.)

**Organization**  
[Text box]

**Address**  
[Text box]

**Country**  
[Text box]

**Email**  
[Text box]

**Telephone**  
[Text box]

**Track Record**  
(Short description of experience or track record of current and completed projects, including location)  
[Text box]

**Overview of the Social and Environmental Impact**  
**How does the Project contribute to the UN Sustainable Development Goals (SDGs)?**  
[Text box]

**Financing Model**  
**What is the financing strategy of the project** (e.g., equity, debt, grants)?  
[Text box]

**Support requested from Ocean Investment Facility**  
**What type of support is required from the Ocean Investment Facility?** (e.g., feasibility study, development, linkage to investors)  
[Text box]

**Initial development of a pre-investment service**

In 2017, the EAS Partnership Council, PEMSEA's Governing Body, allocated US\$300K as seed funding for the design and development of the aforementioned pre-investment service and for the preparation of a full funding proposal for its implementation. The Council requested that the funding proposal include the development and implementation of a further service (referred to as an Ocean Investment Funding Facility) to identify and direct targeted investment

capital and financial backing to impact investments (i.e., investments that not only have positive social and environmental impact, but also provide acceptable capital returns to financial backers and investors). Partner Countries concluded that these new services should be developed with full consideration of their contribution to PEMSEA's self-sustainability and that the resulting project proposal include details of potential cash flow.<sup>33</sup> Such support could then form part of a diversified approach for sustaining PEMSEA's operations, which includes voluntary

<sup>33</sup> PEMSEA. 2017. *Proceedings of the ninth East Asian Seas Partnership Council meeting.*

country contributions, knowledge management/capacity development and project delivery services.

On this fairly lean budget, and complemented by related activities under the SDS-SEA Project, PEMSEA was able to establish partnerships with four project development partners to generate an understanding of investment opportunities and pilot investment cases in four different sectors, as discussed in Section 4.

### Next Steps for PEMSEA to Continue Advancing Blue Economy Investment

It became clear that it would be challenging to realize the full ambition of the pre-investment service (i.e., development and promotion of investible projects and generation of revenue to support the service and PEMSEA's operations) within the existing legal structure, available resources and staff capacities of PEMSEA. Therefore, three basic options were identified to complement the PEMSEA-internal pre-investment service as a way forward, namely:

1. Development and implementation of a pre-investment facility only as an in-house service of the PEMSEA Resource Facility, including strengthening of in-house capacity to develop and manage the facility;
2. Establishment of a private company, operating as an independent business and providing pre-investment services to PEMSEA for projects with commercial-level returns on investment; and
3. Application of a blended approach involving the establishment of a company that is wholly-owned or partially owned by PEMSEA, operating as a business and providing pre-investment services to PEMSEA for projects with commercial-level and non-commercial level (e.g., impact investments) returns on investment. Major considerations for each option are identified in Text Box 5.

The option of a blended approach, whereby a company that is wholly or partially owned by PEMSEA is established has some precedent. Precedents for such spinoff companies, including the Meloy Fund

spun off from Rare Conservation, and Peace and Equity Holdings spun off from Peace and Equity Foundation in the Philippines, could be reviewed for whether they can be adapted to PEMSEA's unique institutional set-up.

During the project preparation phase of the regional GEF/UNDP project on *Reducing Pollution and Preserving Environmental Flows in the East Asian Seas through the Implementation of Integrated River Basin Management (IRBM) in ASEAN Countries* (which may start in late 2019), it was recognized by participating countries and stakeholders that capital financing was beyond the existing capacities of the concerned local governments. Thus, it was agreed that one of the major innovations of the IRBM project would be to put in place the necessary partnerships and financing for 7 proposed pilot projects, covering solid waste management, sewage treatment/nutrient management and water re-use/resource recovery, water supply conservation and security, reforestation and renewable energy, among others.

The pending GEF/UNDP/PEMSEA project could potentially provide an opportunity for PEMSEA should it be able to overcome legal hurdles to incubate this new pre-investment service while achieving the expected outputs and activities of the IRBM project.<sup>34</sup>

The proposed company would provide services to local and national governments, regional organizations, development agencies, corporations and other institutions to develop and implement investible projects that are in line with blue economy principles, effectively operated as a business arm of PEMSEA. The company would operate as a private enterprise, with profit-sharing contributing to PEMSEA's sustainable operation as a regional coordinating mechanism. The company would provide as services:

1. Professional project preparation, design, financing, supervision and management.
2. Taking a lead role in the start-up and operational phases of projects (e.g., monitoring documentation, communication, knowledge building/sharing, training, etc.) to ensure full transparency of operations, partnerships, impacts and benefits.

<sup>34</sup> Lorenz, J. and S.A. Ross. 2018. *Proposal to establish and operationalize PEMSEA services corporation*. (unsolicited).



3. Promoting and launching replication and scaling-up activities for follow-on projects including sustainable project structures that result in circular, environmentally balanced and economically sound mechanisms that support SDS-SEA implementation across the region.

The company would bridge a long-standing gap that international institutions, governments, investment funds, banks and consultancies have not been able to address—the lack of a regional, independent project preparation, evaluation and transparent decision-making and contracting entity. The company would be a partner to both PEMSEA and local governments, providing services to decision-makers in the public sector that enable well-informed, participatory, balanced and far-sighted decisions concerning project activities, potential investments and resulting impacts.

Cavite Province, Philippines, offers a useful project example. Legal action was taken against several LGUs in the province in connection with ongoing solid waste management operations. In addition, a moratorium on groundwater extraction has been issued by the National Water Resources Board (NWRB), and a potable water shortage of 51 million liters per day has been forecast by 2020. A project proposal has been prepared by PEMSEA for development and implementation of investment projects for water, sewage and solid waste. The full investment services would cover baseline assessment; site and logistical analysis; feasibility studies with technical, financial and management options; partner identification and selection; contracting; detailed design of selected projects; investment/financial packaging; monitoring and documentation during procurement, construction and operational phases; and finally, knowledge and capacity building for scaling up and replicating. PEMSEA's investment service would provide comprehensive, professional technical, financial and legal services that fully meet or surpass the needs, expectations and due diligence requirements of the concerned governments, communities, financial institutions/investors and business sector.

The company would build on the existing ICM programs and approaches of PEMSEA and would be seamlessly

embedded into these programs and approaches to form an integrated and practical extension of PEMSEA's services to its partners, but with a business-focused operating approach. The company would complement PRF services in SDS-SEA implementation and scaling up ICM programs across the region, and developing partnerships for the blue economy investment ecosystem for the region.

With its additional flexibility and capacity, the company as a wholly-owned or partially owned subsidiary of PEMSEA, would be able to take on larger scale investment projects (in the tens or hundreds of millions USD) and apply an integrated investment approach, assessing the range of solutions and providing options. Where the PRF would cast a wide net to build a pipeline for the region, the company would focus on targeted, high-impact investment projects with multiple dimensions (built on an ICM approach).

With the IRBM project as a potential platform and Cavite project as proposed pilot, the timing is right for PEMSEA to roll-out this new, innovative holistic investment service. The proposed blended approach may be the next phase of PEMSEA's continuing journey to facilitate blue economy investment in East Asia.



*Photo by Provincial Tourism Office of Cavite Province*

**TEXT BOX 5**

**Organizational Options for PEMSEA's Pre-Investment Service**

(for discussion purposes only since any institutional set up would largely depend on the availability of funds and results of a legal review )

Organizational Options/ Organizational considerations	PRF In-house Pre-Investment Service	Private Sector Pre-Investment Service (investment service external to PRF)	Blended PRF-Private Sector Pre-Investment Service (shared responsibilities between PRF and a private company)
1. Organizational arrangements	<ul style="list-style-type: none"> <li>PRF professional staff are contracted/ trained to manage both the pre-investment facility (PIF) (i.e., development, planning and implementation of investment projects) and the OIF (i.e., identifying and promoting investment and networking sinwith investors and funding organizations).</li> <li>External consultants/ specialists are contracted by the PRF on a project specific basis to develop pre-investment projects.</li> </ul>	<ul style="list-style-type: none"> <li>Pre-investment services are set up and implemented externally by (an) independent private company(ies).</li> <li>The private enterprise develops and implements investment projects with commercial-level returns on investments.</li> </ul>	<ul style="list-style-type: none"> <li>Pre-investment services are set up and implemented by a company that is wholly owned by PEMSEA, or partially owned by PEMSEA and an existing corporate entity.</li> <li>The company provides pre-investment services on behalf of PEMSEA for commercial and non-commercial level projects with social, economic and environmental benefits to communities.</li> </ul>
2. Legal arrangements	<ul style="list-style-type: none"> <li>All staffing and contracting by PRF are in accordance with PEMSEA rules, regulations and procurement procedures.</li> <li>Legal liability for PRF staff/ consultants' actions is the responsibility of the PRF as the contracting authority.</li> <li>Immunities and privileges of PEMSEA as an international organization remain intact.</li> </ul>	<ul style="list-style-type: none"> <li>A legal agreement is developed between the PRF and the private company.</li> <li>The legal agreement delineates the nature of information to be developed/provided by the PRF for potential investments at ICM sites, the processes to be implemented by the private company, and the support required by the PRF to introduce and facilitate the interaction between the concerned national and local governments and the private company.</li> <li>The PRF is not involved legally, technically, or financially in the investment project.</li> <li>Immunities and privileges of PEMSEA as an international organization need to be reviewed.</li> </ul>	<ul style="list-style-type: none"> <li>The company is established and registered with the Philippines Security and Exchange Commission by PEMSEA or by PEMSEA and an existing corporate entity, primarily to develop and promote investments in, and take partial ownership in financially viable, blue economy development-oriented enterprises that offer innovative and high impact solutions to challenges/constraints to sustainable coastal and ocean management for the Seas of East Asia.</li> <li>A legal agreement between the PRF and the registered company delineates the respective roles and responsibilities of the organizations in the planning, development and implementation of pre investment and investment projects in accordance with SDS-SEA/ICM objectives, principles and priorities.</li> <li>The legal agreement is time-bound, covering a specified "incubating" period to fully operationalize the arrangement, with agreed processes for either party to review, renegotiate, extend or terminate the agreement during the period.</li> <li>Immunities and privileges of PEMSEA as an international organization need to be reviewed as there could be potential legal and reputational risks involved.</li> </ul>

Organizational Options/ Organizational considerations	PRF In-house Pre-Investment Service	Private Sector Pre-Investment Service (investment service external to PRF)	Blended PRF-Private Sector Pre-Investment Service (shared responsibilities between PRF and a private company)
3. PRF Human Resource Requirements	<ul style="list-style-type: none"> <li>• PRF staff requirements:                             <ul style="list-style-type: none"> <li>◦ Project development/ planning and management specialist (full-time)</li> <li>◦ Investment/financing/ business development specialist (part-time)</li> <li>◦ Communications, marketing and networking specialist w/ investment focus (part-time)</li> <li>◦ Knowledge management and capacity development specialist w/investment focus (part-time)</li> <li>◦ Training/upgrading of ICM project managers on investment project identification and development (PIF)</li> </ul> </li> <li>• PRF consultancy requirements:                             <ul style="list-style-type: none"> <li>◦ Consultancy contracts for investment development (technical, business, investment, legal) issued on as needed basis (PIF)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• PRF staff requirements:                             <ul style="list-style-type: none"> <li>◦ Project development/ planning and management specialist</li> <li>◦ Training/upgrading of ICM project managers on investment project identification and development in accordance with the requirements of the Agreement</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• PRF staff requirements                             <ul style="list-style-type: none"> <li>◦ Project development/planning and management specialist (PIF/OIF)</li> <li>◦ Training/upgrading of ICM project managers on investment project identification and development</li> <li>◦ Communications/marketing and networking specialist w/investment focus (OIF)</li> <li>◦ Knowledge management and capacity development specialist w/investment focus (OIF)</li> </ul> </li> </ul>
4. PRF Direct Costs	<ul style="list-style-type: none"> <li>• Salaries and benefits of 4 new full-time staff and 3 existing ICM managers.</li> <li>• PIF/OIF annual operating costs (\$200K)</li> <li>• Consultancy contracts are issued to deliver feasibility studies and business plans (up to \$50K per consultant as needed, up to \$250K per investment project).</li> <li>• Funds are sourced from PRF operating budget for PRF staff, and from development project grants for external consultants.</li> </ul>	<ul style="list-style-type: none"> <li>• Salaries and benefits of one new full-time PRF staff and 3 existing ICM managers.</li> <li>• PRF annual operating costs (\$140K).</li> <li>• Funds are sourced from PRF operating budget (at start-up) and revenues generated by finder's fee (from full investment projects).</li> </ul>	<ul style="list-style-type: none"> <li>• Salaries and benefits of one new full-time PRF staff, 2 part-time staff, and 3 existing ICM managers</li> <li>• PRF annual operating costs (\$170K)</li> <li>• Funds are sourced from PRF operating budget for PRF staff and from development project grants and co-financing arrangements with project beneficiaries for the registered company at start-up of incubating period. Revenues are generated from pre-investment and full investment services, as partial ownership of operating enterprises.</li> </ul>

Organizational Options/ Organizational considerations	PRF In-house Pre-Investment Service	Private Sector Pre-Investment Service (investment service external to PRF)	Blended PRF-Private Sector Pre-Investment Service (shared responsibilities between PRF and a private company)
<p>5. Financial benefits to/ Sustainability of PEMSEA</p>	<ul style="list-style-type: none"> <li>• Direct costs to the PRF for PIF/OIF services are covered by development project grants.</li> <li>• Administrative/management fees for development projects range from 5% to 7% of direct costs (i.e., a development project annual budget of \$2.8-\$4.0 million is required to support the PRF operational cost).</li> <li>• Consultancy contracts are supported directly by development project grants.</li> </ul>	<ul style="list-style-type: none"> <li>• Finder's fees are negotiated on a project by project basis</li> <li>• Finder's fees can range from 0.5% to 2% of the investment depending on investment size, risk and forecast return (i.e., a full investment project ranging from \$7-\$28 million capital investment is required to support the annual PRF operational cost).</li> </ul>	<ul style="list-style-type: none"> <li>• Direct costs to the PRF annual operating cost would be covered by development project grants</li> <li>• Administrative/management fees for development projects range from 5% to 7% of direct costs (i.e., a development project annual budget of \$2.4-\$3.4 million is required to support the annual PRF operational cost)</li> <li>• Company costs for the development of investment projects would be supported directly by the development project grant and co-financing from government and non-government beneficiaries during the incubating period</li> <li>• Company costs for implementation of full investment projects would be supported directly by government and non-government beneficiaries and investors</li> <li>• Margins on revenues earned from investment project preparation and implementation can potentially range from 10% to 20%, depending on the size and location of the capital investment</li> <li>• Capital raised through revenue margins would be used to:                         <ul style="list-style-type: none"> <li>◦ Purchase shares in operating companies that are established through the investment projects</li> <li>◦ Set up a project development fund for developing/upscaling new investment projects</li> <li>◦ Contribute to the sustainable operation of the PRF</li> </ul> </li> </ul>

Organizational Options/ Organizational considerations	PRF In-house Pre-Investment Service	Private Sector Pre-Investment Service (investment service external to PRF)	Blended PRF-Private Sector Pre-Investment Service (shared responsibilities between PRF and a private company)
6. Risks/ Challenges	<ul style="list-style-type: none"> <li>In-house expertise and access to support financing are the major challenges in the start-up and operation of an in-house pre-investment service.</li> <li>The implementation of full investment projects is handed over to a third-party investor, meaning the PRF will have limited access to information or to monitor and evaluate the benefits and impacts of the investments, which could be used for knowledge sharing, scaling-up and replicating purposes.</li> <li>Time and experience are required to develop investible projects and secure financing for such projects; all projects may not be investible and other solutions will be required.</li> </ul>	<ul style="list-style-type: none"> <li>Capital is required to develop and operationalize a private business/company (estimated upfront costs are \$3-\$8 million); no source of financing has been identified to date.</li> <li>Capital is required to establish a regional ocean investment fund to serve as seed funding for investible projects (estimated to be \$100 million); development of such a fund would be a targeted output of the initial \$3 - \$8 million capital investment.</li> <li>PRF service is in support of a private enterprise; PRF has no control over how the private sector deals with local governments and other PEMSEA clients, the benefits and impacts derived from projects, or the replication and scaling up of investments.</li> </ul>	<ul style="list-style-type: none"> <li>The approach is innovative and unproven in the context of regional ocean governance. Developmental risks are evident, including the willingness of national and local governments to engage the company in pre-investment projects. An incubating period is necessary, which is built-in as a component of development projects.</li> <li>Time and experience are required to develop investible projects and secure financing for such projects; all projects may not be investible and other solutions will be required. This suggests that other sources of financing for scaling up and replicating successful investment projects are essential to the targets and objectives of the SDS-SEA and to the sustainability of the PRF.</li> </ul>
7. Benefits to Country Partners/local governments	<ul style="list-style-type: none"> <li>PRF continues to interact directly with the national and local governments as the overall manager of the development project and the provider of pre-investment services.</li> <li>Knowledge and experience gained in the development of pre-investment projects are packaged and disseminated to encourage national and local governments to upscale and replicate good practices in pre-investment project development.</li> </ul>	<ul style="list-style-type: none"> <li>The privatized facility eventually includes a regional ocean investment fund that serves as seed funding for future investment projects and used as a leverage to encourage other investors to participate in such projects.</li> </ul>	<ul style="list-style-type: none"> <li>PRF continues to interact directly with the national and local governments as the overall manager of the development project, continually gathering feedback on the expectations and satisfaction of the primary clients, namely national and local governments.</li> <li>The company provides investment services to local governments and other clients as an extended service of PEMSEA.</li> <li>The company becomes a shareholder in the blue economy enterprises to ensure that the sustainable development objectives of the investments are maintained as agreed to by the respective national and local government clients. This provides a potential source of revenue for the PRF and the corporate entity. It also provides access to information that can be used for knowledge-sharing, capacity development and upscaling and replicating of investment projects.</li> </ul>

## Other Financing Mechanisms

In addition to more direct investment by impacts funds and investors, PEMSEA has explored other emerging mechanisms for financing sustainable development of coasts and oceans in the region. Over the past four years, two stood out among all the others: bond financing and coastal blue carbon.

### Green bonds for scaling ocean investment

Marine assets and coastal management are well suited to green bonds, which could be used as an innovative financing mechanism for governments to help scale investments, particularly large infrastructure investments given the scale at which bond financing generally operates. Beginning in early 2016, PEMSEA joined the Climate Bonds Initiative (CBI) Technical Working Group for developing standards to guide bond financing of marine investments.<sup>35</sup> In parallel, PEMSEA partnered with CBI to explore a new bond product aligned with the tenets of ICM, which could represent a significant new source of debt-financing for coastal and marine assets. An ICM bond label would indicate the type of green assets included in the bond (coastal and marine) and ICM certification of the issuer. This type of bond could deliver financing (or re-financing) for mutually supportive investments supporting SDS-SEA implementation, such as habitat restoration, fisheries improvement, sustainable aquaculture, renewable energy, waste management and water supply infrastructure and other resilient coastal infrastructure.

With CBI's support, PEMSEA assessed the potential for issuance of an ICM bond. The research found that given the nature and ownership profile of potential ICM investments, a public institution would be the

most appropriate issuer for such a bond. The bonds could be issued by a central or local government or by another public entity such as an independent agency, multilateral or local development bank. Three PEMSEA countries were selected for analysis of potential issuers in the region: Indonesia, the Philippines and Vietnam. The analysis resulted in three options for an ICM bond issuance: 1) sovereign bond in domestic or foreign currency, 2) sub-sovereign bond from a local government or 3) multilateral development bank bond.

The most viable options were identified as a sovereign bond from the Indonesian government, which has a growing bond market and sustainable finance ambitions, or a bond from the Asian Development Bank or World Bank, which already hold significant investments in coastal and marine projects in the region. Further analysis into the assets to include in a bond with a pilot country need to be carried out.

The findings of the paper were presented to PEMSEA's country partners at the 2017 Ocean Leadership Roundtable, but more work is needed to identify and secure interest from partners to pilot the ICM bond concept.

### Blue carbon financing

The SDS-SEA project identifies management of coastal blue carbon ecosystems as a priority, including development of policies and financial incentives to support mitigation and adaptation initiatives. Blue carbon refers to mangroves, tidal marshes and seagrass meadows and their role in sequestering CO<sub>2</sub> from the atmosphere, among their other ecosystem service benefits. Across East Asia, some 3.4 million hectares of blue carbon ecosystems have been lost, representing 40% of

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<sup>35</sup> Sector criteria are currently available for Marine Renewable Energy, with criteria for fisheries and shipping under development: <https://www.climatebonds.net/standard/marine>.



what once existed, a loss of sequestered CO<sub>2</sub> of more than 6,000 million metric tons. Countries in the region have started to embrace blue carbon policies, tapping into new climate finance opportunities arising from the Nationally Determined Contributions (NDCs) under the Paris Agreement, along with mechanisms supporting Nationally Appropriate Mitigation Actions (NAMAs) and Reducing Emissions from Deforestation and Forest Degradation (REDD+).

In partnership with Conservation International (CI), The Nature Conservancy (TNC) and Silvestrum Climate Associates, in 2017 PEMSEA released a paper on *Strategic Coastal Blue Carbon Opportunities in the Seas of East Asia*, a first-of-its-kind report examining the status of blue carbon stocks and emissions across East Asia and identifying opportunities for including the conservation and restoration of blue carbon ecosystems within national climate response policies. The potential for blue carbon as a finance mechanism is real, with several countries in the region making commitments to blue carbon-based climate finance instruments in their NDCs. A growing number of institutions have started to conceptualize



opportunities linking blue carbon interventions with payment-for-ecosystem services, blue bonds and debt-for-nature-swaps.

PEMSEA has been increasingly incorporating blue carbon finance into its project development efforts, and several PEMSEA country partners have expressed openness to developing some form of blue carbon crediting mechanism. More work is needed to establish concrete partnerships and initiatives with countries focused on blue carbon finance.

**Table 3: Recommended Actions for Countries to Advance Blue Carbon Initiatives in East Asia.**

<b>Improve</b>	tracking of blue carbon ecosystem gains and losses and reporting of associated greenhouse emissions.
<b>Include</b>	blue carbon ecosystems within policies under commitments to the Paris Agreement.
<b>Consider</b>	the significance of blue carbon ecosystems across policy and planning, including on trade, aid and integrated coastal management.
<b>Promote</b>	the role of blue carbon ecosystems as a vehicle for adaptation and resilience, including sustainable environmental infrastructure.
<b>Build</b>	public-private initiatives and support international financing for blue carbon ecosystem conservation and restoration.





*Photo by Marjo Aho/TNC*

# Knowledge Management for Investment: Seas of East Asia Knowledge Bank

## 5

The Seas of East Asia Knowledge Bank (SEAKB), available at [seaknowledgebank.net](http://seaknowledgebank.net), was launched in 2016 as a platform for policymakers, planners, managers, investors and other stakeholders to scale up ICM and investment in sustainable development of coasts and oceans in the region. The platform provides access to a collection of case studies, manuals, technical reports and other resources, along with opportunities for engaging and collaborating with peers and experts. The SEAKB supports local governments and other stakeholders in identifying and developing projects that could attract investment, including a series of rapid assessments and the ability to submit a project for further evaluation. Features include:

- **Library** of resources developed and collected over 25 years covering coastal and ocean governance, ICM, sustainable development, blue economy and related topics, including case studies, manuals, technical reports, project information, meeting documents and more. The library includes a set of ICM Solution case studies from PEMSEA sites and tools developed by the Capturing Coral Reef and Related Ecosystem Services (CCRES) project, including for developing businesses.
- **Directory of Experts**, including NGOs, consultants, research organizations and development programs, with relevant expertise and services related to coastal management science, policy, practice and finance.
- **State of the Coasts Reporting** allowing local governments to measure and document the impacts of policy and management interventions supporting sustainable coastal development and evaluate progress towards local, national and international targets, including a rapid online assessment tool.
- Private **Communities of Practice** where professionals and specialists can exchange updates, methods, techniques and tools found useful in their common area of practice.
- Access to **Capacity Development** services such as workshops, training and leadership forums in partnership with PEMSEA's regional network and major regional events.
- **Certification** designed for local governments and port operators seeking a recognized standard for sustainable management of coasts and port areas.
- **Tracking System** for the PEMSEA Network of Local Governments (PNLG) to report on the impact of their ongoing efforts towards achieving the targets under SDGs 6, 11, 13 and 14.

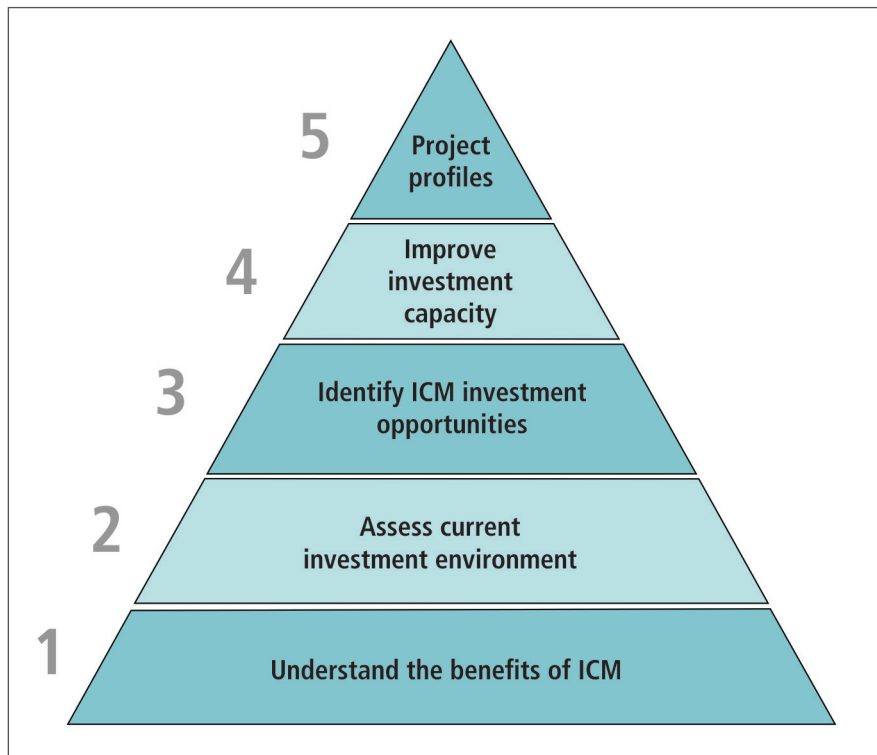
### Strengthening investment-readiness

The SEAKB includes unique features supporting the identification, development and sharing of sustainable and investment-ready projects and enterprises in

coastal and marine areas. The design is based on extensive research of the investment landscape in East Asia and the needs of government and projects developing investments, along with the expectations of the investment community. In principle, the design considers that investment capital is available in the form of grants, equity investment and loans, but investors have difficulty sourcing quality, investable projects. The platform supports a range of project focus areas, including ecotourism, sustainable fisheries & aquaculture, pollution control infrastructure & technology, sustainable ports, marine renewable energy, water supply infrastructure and climate smart coastal development.

The features provide a jump-start in understanding the enabling environment for investment, identifying investment gaps and opportunities and assessing the investment-readiness of projects through easy-to-use online assessments. Investors, which may include private impact investors, foundations, development organizations or others, can express interest in specific investment areas and connect with organizations to explore opportunities for collaboration and blended finance approaches. The platform aims to not reinvent or compete with existing platforms or services, rather its focus is on helping projects and governments to become more investment ready.

**Figure 11: Levels of the ICM Investment Process.**





1. **Establishing an enabling environment for investment.** Considerations such as ease of doing business, available infrastructure, rule of law, and local management and enforcement capacity can have a significant impact on investment risk. Proper governance is critical for establishing an enabling environment. A short online assessment provides feedback on how risky an area may appear to investors and provides recommendations for strengthening the enabling environment (Table 12).

2. **Discovering investment gaps and opportunities.** The platform provides guidance on 10 investment categories based on investment needs identified by governments across the region. A simple rapid assessment offers feedback on development gaps where investment could benefit the health of coastal ecosystems and communities, with specific examples of types of investments based on project experience in the region (Table 13).

3. **Improving investment-readiness capacity.** The most important feature, this step can provide feedback on the investment-readiness of a specific project or enterprise and how favorable it may look to investors. Through a more detailed questionnaire, project owners can develop a better understanding of what investors expect across several important dimensions based on actual diligence criteria used by impact investors, such as business model viability, market competition, human resources, financial sustainability and social and environmental impact (Table 14).

Based on the outcomes of the assessments, project proponents are then able to submit a project to PEMSEA through the platform for further assessment. Projects meeting minimum criteria can be plugged into PEMSEA's pre-investment services for further development and linking with investors. Investors are also able to submit expressions of interest to PEMSEA in specific investment areas for matching with opportunities.

**Figure 12: Rapid Online Assessment of the Enabling Environment for Investment.**

**RAPID ASSESSMENT: ENABLING ENVIRONMENT FOR ICM INVESTMENT**

Do you know if the city, municipality or province where you operate provides an enabling environment for ICM investment? Take this simple rapid assessment to learn more about the level of risk that potential investors may encounter investing in ICM projects in your area. Some items may require further investigation, so you may wish to review the questions ahead of time and/or complete the assessment with a team. For each of the following 3 questions, please indicate whether the element in question is not true/established, partially true/established or completely true/established.

1. In what country are you located?

2. Is there a coastal profile and risk assessment completed and available to the public?  
 No  
 Partial  
 Complete

3. Is there a coastal strategy and/or management plan adopted by the local government and available to the public?  
 No  
 Partial  
 Complete

**Prepare for ICM Investments**

- 1 Understand the benefits of ICM investment
- 2 Establish Enabling Environment for ICM investment
- 3 Discover ICM Investment Gaps and Opportunities
- 4 Improve Investment Readiness Capacity
- 5 Prepare ICM Investment Project Profile

The e-Library contains a range of manuals and case studies on ICM policy development.

**Sample ICM policy publications:**  
 The Development of National Coastal and Marine Policies in the People's Republic of China  
 Conditions Affecting the Success of Fisheries Co-management: Lessons from Asia

[Review all ICM Policy Publications](#)

**Figure 13: Results of Online Assessment of Investment Gaps and Opportunities.**

**RESULTS: DISCOVER ICM INVESTMENT GAPS AND OPPORTUNITIES**

Thank you for taking the rapid assessment to learn more about the potential investment gaps in your local coastal and marine area. Based on your responses and research of actual ICM programs in several countries across East Asia, you might consider the following areas for exploring development of ICM projects and investment:

**ICM Development and Implementation**

A well thought out integrated coastal management (ICM) program forms the foundation for the sustained health of ecosystems, communities and economies in coastal and marine areas. Examples of investment in ICM program development you might consider include:

- ICM System Certification
- Development of a coastal strategy and implementation plan, including mainstreaming into local development plans
- ICM baseline assessments (e.g., strategy, status of coastal, socioeconomic conditions, livelihoods)
- ICM capacity building, marine ecosystem education, stakeholder engagement and coordination
- Marine spatial planning (practice and technology), integrating land and sea use zoning into local development planning
- Integrated near-harbor management including assessment, stakeholder engagement and capacity building

**Coastal Transport**

Providing safe, reliable transportation that minimizes impact on the environment is critical for economic and ecologically sustainable development of coastal areas. Examples of coastal transport infrastructure investment you might consider include:

- Safe, secure and reliable transportation services for tourists (e.g., ferry service and piers)
- Route-to-market roads
- Large-scale port development, including safety, health and environmental management program
- Port Safety, Health and Environmental Management (PSHEM) System Certification

**Ecotourism / Sustainable Tourism**

Expanded traditional tourism, ecotourism / sustainable tourism considers the health of the local environment and communities and provides a differentiated experience for tourists. Examples of ecotourism / sustainable tourism investment you might consider include:

- Marine sanctuary programs and facilities (e.g., watching/touring of birds, turtles, mangroves, dolphins, whales, sharks, rays, etc.)
- Recreational programs and facilities (e.g., surfing, sailing, snorkeling/SCUBA, cave trekking, fishing, historical tours, etc.)
- Ecotourism services skills development (e.g., boat operation, hospitality services, hygiene and sanitation standards)
- Sustainable eco-tourism certification

**Prepare for ICM Investments**

- 1 Understand the benefits of ICM investment
- 2 Establish Enabling Environment for ICM investment
- 3 Discover ICM Investment Gaps and Opportunities
- 4 Improve Investment Readiness Capacity
- 5 Prepare ICM Investment Project Profile

Looking for more information? The e-Library contains a range of reports and case studies on ICM investment.

**Sample ICM investment publications:**  
 "Phuoc Financing" for MPAC Concrete Experiences  
 The ICM Biodiversity Finance Book: A guide to proactive investment in natural capital

[Review all ICM investment publications](#)

**Figure 14: Results of Online Assessment of Investment Readiness.**

**RESULTS: IMPROVE INVESTMENT-READINESS CAPACITY**

Thank you for taking the rapid assessment to learn more about your project's readiness to pursue and receive investment!

Based on your legal personality as a **privately owned company**, your organization could pursue the type of funding/investment capital indicated below in the diagram. Click on each circle to see examples of organizations providing that form of funding/investment in East Asia.

**Investment readiness Scorecard**

Based on your answers, the following scorecard provides an assessment of your project/enterprise investment readiness across five dimensions.

**Business Model Viability**

0.00 1.00 2.00 3.00 4.00

Disruptive Moderate Favorable

Based on your score, the viability of your project/enterprise business model should be assessed in more detail. Areas of focus should include:

- Identifying the end user for your product/service

**Prepare for ICM Investments**

- 1 Understand the benefits of ICM investment
- 2 Establish Enabling Environment for ICM investment
- 3 Discover ICM Investment Gaps and Opportunities
- 4 Improve Investment Readiness Capacity
- 5 Prepare ICM Investment Project Profile

The e-Library contains a number of resources for developing social enterprises.

**Sample enterprise development publications:**  
 Measuring Social Enterprise: A Resource Book for Social Enterprise Performance Measurement  
 Start Your Social Enterprise

[Review all social enterprise development publications](#)

**Social Enterprise Development Service Providers**

Visit the directory of social enterprise development service

### Taking the Seas of East Asia Knowledge Bank on the road

An online platform can only achieve so much. Investments are involved, high-touch engagements and in-person interaction is needed. To help promote the SEAKB platform and gather feedback from government, development organizations and other local stakeholders, a roadshow was conducted in mid-2016, with multiple workshops taking place in the Philippines, Indonesia and Vietnam in collaboration with PhilCCAP, PRDP, COREMAP, CRSD and CCRES. During the workshops, participants had an opportunity to test features of the platform, provide feedback and identify potential investments for development and inclusion on the platform.

Overall, feedback on the platform was encouraging. Participants found the online assessments useful, particularly the investment-readiness assessment. Some found the investment terminology difficult to understand and emphasized the value in providing local-language versions of the SEAKB. Many participants expressed interest in preparing and submitting investment profiles (though at the time of writing the number of submissions has been low). Participants expressed some concern about the ongoing maintenance of the platform beyond the life of the World Bank project and some apprehension related to investment ideas submitted to the platform being protected—both taken as positive signs of interest in using the platform. There was also

*“It’s critical to have on-the-ground perspective, to ensure that the voices of local stakeholders from local fishing communities - both women and men - are heard. Innovative financial mechanisms can play a catalytic role in achieving this by systematically linking impact being measured to the capital being mobilized.”*

**Natasha Garcha,**  
Impact Investment Exchange

concern about whether they would be “competing” with other projects for funding, which is not the case since the platform is not designed for grant-funding competition, instead as a way for project proponents to improve their investment readiness.

The “investments” identified by the local stakeholders during the workshops reaffirmed the persistent gap in understanding of what private investors are looking for. With some exceptions, there is a general lack of understanding of business models, considering factors such as the product or service being offered, organization and financial structure and ability to generate some form of financial return in addition to positive social and/or environmental impacts. Examples included:

- Investigating socioeconomic needs of the local communities
- Habitat restoration, conservation and biodiversity protection (e.g., mangroves)
- Coastal use zoning and marine spatial planning
- Livelihood improvement for local farmers (e.g., value chain analysis)
- Fisheries co-management and enterprise development, including community stakeholders, government, etc.
- Sustainable aquaculture models, e.g., improve intense shrimp and tilapia farming, integrated mangrove aquaculture, seaweed farming
- Eco-tourism access and accommodation
- Infrastructure and equipment, e.g., seafood cold storage, aquaculture equipment and supplies, environmental monitoring equipment, water processing and distribution, wastewater and septage treatment, solid waste and waste-to-energy facilities
- Ability to track production data for traceability and certification
- Climate change adaptation projects
- Strengthening of law enforcement

It’s clear from this list, given that some items are quite broad and many would help to support investment but are not investments themselves, much more work remains to build capacity and understanding with local stakeholders of what investment entails.

# Conclusions and Recommendations

## 6

PEMSEA has been establishing the foundations for blue economy investment in East Asia for many years based on the evolving landscape and needs of its partners. It has been rewarding to see the recent acceleration of interest and growing momentum around investment, and PEMSEA is excited to be a part of the movement as a regional intermediary, convener and technical advisor for enabling blue economy investment.

In its work over the past five years, PEMSEA has observed the recurring theme of a “blue capital markets impact ecosystem” that can direct the right kind of capital to the right opportunities at the right cost. PEMSEA’s recent efforts have focused on helping to build this ecosystem for the Seas of East Asia. The approach has centered around focusing its donor-funded activities on areas where donor funding can have the greatest impact—by strengthening its role as a regional intermediary enabling organization.

It is too early yet to cite figures for private capital mobilized in this new wave of blue economy investment. But through its work, PEMSEA has achieved some important outcomes towards its goal of bolstering blue economy investment and sustainable financing of the SDS-SEA:

- Facilitating local, regional and international dialogue and establishing a network of project developers, investment funds and facilities with an interest in blue economy investment in East Asia and capital ready to deploy that could support the SDS-SEA.
- Generating pilot investment cases at various stages of development with benefits for local communities, potentially in or near PEMSEA ICM sites, with preliminary identification of several other potential sites.
- In addition to this report, producing a number of knowledge products with its partners, including landscape assessment of wastewater recovery in three countries, tools for evaluating investment projects and a handbook on ocean plastics investment in the region.
- Steps taken in further building local understanding and capacity for identifying potential pipeline investment projects.
- A growing understanding within the investment community of the role and benefits of ICM in managing the various technical, financial and political aspects of investment projects.
- Establishing standardized and replicable approaches and templates for investment based on best practices and trial-and-error learning from its pilot projects.
- Identifying and evaluating options for generating returns from investments to support PEMSEA’s pre-investment services and contribute to PEMSEA’s work as a regional coordinating mechanism.

These achievements were recognized in the mid-term review conducted by UNDP in 2018 for the SDS-SEA Project, under the project outcomes focused on innovative economic and investment instruments. The assessment found that PEMSEA had “undertaken a significant amount of work to establish the enabling environment to attract non-donor funding to support

ongoing implementation of project results and a number of highly innovative products have been developed”, giving it the highest ratings for the review.<sup>36</sup>

In PEMSEA’s experience, it has been possible to advance this work using creative funding approaches. Considering standard costs for development of just one pilot investment project, PEMSEA has been able to achieve these outcomes on a small amount of seed funding complemented by activities from other ongoing projects. That said, additional funding and modes of operation will be needed to scale the pre-investment services to full operation (see Chapter 4).

The work on blue economy investment has produced some valuable lessons both for PEMSEA and for the broader ocean community. It’s hoped that other international organizations, NGOs and regional programmes, particularly the GEF-funded LME Programmes, can benefit from what PEMSEA has learned as they explore their own work on blue economy investment in their part of the world.

## Lessons Learned and Recommendations

### The understanding and application of sustainable ocean investment has advanced over the past 4 to 5 years

Experts agree that, for the most part, the application of investment for sustainable development of oceans has advanced, though perhaps not quickly enough, with some expressing frustration at the incremental pace of change. The level of open conversation at the international and regional levels is encouraging, but it hasn’t yet filtered down to how agencies are working. The private sector is increasingly talking about the SDGs, with some using them as a framework to guide investment. There are a lot of ideas on the table, the question is how much will be translated into actual investments.

Some draw parallels with energy efficiency and renewable energy, which took 10 years to develop into new asset classes. Experts predict it will take at least another 4 to 5 years before we see the same shift in blue economy investment. The emergence of ocean-focused funds is evidence of progress, having moved from “wild idea” to well capitalized funds. A lot of work had been done to define and navigate what blue economy investment is and where the opportunities are. Deals are just starting to get done, but funds are struggling to get the volume of deals needed. As one fund manager put it, “I don’t have ten transactions and I need dozens.” New donor-funded ocean projects almost always include some investment component. But experts point out the need to involve the private sector in the early stages of project development. Investment will not succeed if it’s included as an afterthought once the other outcomes of a project have been addressed. Overall, oceans have become a hot topic, and a lot more potential investment opportunities will be coming to the fore, in part due to an increased supply of capital.

### Development projects and programs have contributed to advancing blue economy investment

The classic grant approach to conservation has been working well, but there are a limited number of success stories of working with the private sector. The development community has played an important enabling role in raising awareness, advancing the dialogue and understanding the challenges around the concept of blue economy investment. Blended finance has been important, for instance, with credit guarantees enabling the private sector to crowd in more investment to dedicated funds. Donors and development projects can continue to play a role by helping to de-risk investments through blended finance, policy development that provides the right enabling conditions, providing technical assistance on the ground and helping to improve the availability of data for measuring impact. Development organizations are encouraged by investors to continue

<sup>36</sup> PEMSEA. [n.d.]. *Scaling up the implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA). Mid term review - UNDP-GEF full size project.*



building their capacity to support the development of bankable projects.

**There is a continuing misalignment of understanding of what “sustainable investment” means**

There remains a divide in understanding the definition and application of “sustainable investment”. Government and development organizations tend to define it more broadly as any use of funds that stimulates financial flows for sustainable development. The private sector has a narrower definition that includes an expectation of financial return to the provider of funds. Anything else would be considered philanthropic activity. For private investors, it requires some form of cash flow-producing business or asset.

Progress is being made in the two sides learning to communicate, but there is still misunderstanding and the potential for talking past each other. Experts have expressed that it’s easy to connect around the larger agenda, but it becomes more challenging at the project level. Development organizations need to understand how hard these issues can be to address though private capital and the need for investments to stand on their financial merits as investments, while investors should not forget the overriding mission of development organizations to deliver sustainable outcomes. But if private capital is the goal, it’s incumbent upon the development organizations to understand what the private sector needs.

The terminology itself can be confusing. A topic of debate for more than 30 years, the term “sustainable” means different things to different people. To investors it can mean the ongoing viability of an investment, but to the development community it indicates social, economic and environmental sustainability. Experts suggest a more precise use of language, such as “investment in sustainable development”, may help in building understanding.

**Investment is just one important tool for sustainable development, and it relies on policymakers**

It’s well understood that private capital will be needed to achieve the sustainable development goals by 2030. Private capital can fill gaps and bring new approaches, but there is a risk in overhyping its role within the development community and setting the wrong expectations. Private investment is just one tool and it can’t solve all problems. It’s important to consider where capital is a limiting factor and where there are other leverage points to address.

The most important action may be in first establishing more stable policy and regulatory frameworks, before investment can even be considered. As the Blended Finance Taskforce puts it, “private capital will rarely flow at meaningful scale where corruption, political instability, weak legal systems, currency volatility and complex or unpredictable government decision-making processes prevail.”<sup>37</sup> Investors point out that there are structural reasons that the investment pipeline isn’t emerging more quickly.

It can’t be emphasized enough the importance of smart policy and sound enforcement in enabling private investment. There’s willingness by the private sector to engage, but there’s a need to first clarify

*“Never underestimate the power of a good law, whether at the local, national regional or global level. In UNDP’s experience, one of the most important drivers of R&D and investment across sectors, from fisheries to shipping to wastewater treatment, has been in having regulations in place, well enforced and implemented.”*

**Andrew Hudson, UNDP**

<sup>37</sup> Blended Finance Taskforce. 2018. *Better finance, better world. Consultation paper of the Blended Finance Taskforce.*

and harmonize stable policy and legal frameworks. Lack of enforcement is a significant problem. Illegal fishing, polluting liquid and gaseous discharges and waste mismanagement are three examples. With fisheries, as a common pool resource, the issue of property rights is central to establishing any kind of viable investment model. If policy doesn't allow for investors to capture benefits, then there's no justification for making an investment. Investors want stability and need to know the rules of the game. Past experience has shown that regulating the private sector can be the most important contributing factor to catalyzing significant investment. If major steps are not taken to address these structural policy and enforcement issues, governments and development organizations may work against themselves when it comes to attracting private investment. Ultimately, strengthening global, regional and national governance of coasts and oceans and sustainable development is how international organizations like PEMSEA can provide added value to create an environment that is conducive for investment.

### **We need to address the missing pipeline of projects suitable for private investment**

While positive steps are being taken, there remains a persistent lack of investments with a clear business case, i.e., providing a solution to a problem that can have some commercial value. The vast majority of "investment" cases identified have no viable technical or financial model, mechanism for generating acceptable returns or approach to managing risks. Blended finance shows promise, where donor organizations can help to de-risk investments and increase investor confidence. But it doesn't eliminate the need to structure projects for competitive risk-adjusted financial returns. Investors have pointed to a number of elements that might be considered in a serious investment deal, including proper capital structure to meet a project's net funding needs, assessing a suitable debt profile, satisfying lenders' requirements for credit ratio performance, assessing and optimally sizing the equity investment, ensuring

*"It can be easier to incorporate conservation aspects into private sector projects than it is to expect local NGOs or projects to know how to run a business."*

**Jurgen Zeitlberger,  
Conservation Investment Expert**

a project has an adequate payback timeframe and net present value (NPV) cashflows profile and providing attractive returns on equity, debt and the overall project. Standard approaches in developing and structuring projects are needed so investors can make an "apples to apples" comparison of investment opportunities.

### **Intermediaries play a crucial role in the investment ecosystem**

Stakeholders from across the investment ecosystem consistently cite the importance of intermediaries. These organizations are needed to open doors, provide local context and deliver technical assistance to address both operational complexities and governance challenges, particularly in ensuring development outcomes with the proper social and environmental safeguards and benefits for local communities. Intermediaries are needed to translate between the language of the private sector and sustainable development. Especially in a region as diverse as East Asia, organizations like PEMSEA can help investors by leveraging regional networks, navigating the local political setting, identifying pipeline investments and opportunities for aggregation and assisting with monitoring and evaluation. Local governments and other project proponents typically appreciate being led through the process by a trusted partner, assessing business and financial models, aligning with local management plans and matching projects with the right experts

and investors. Project assistance should include knowledge sharing to support replication and scaling. It's critical that in its role as an intermediary, these organizations have clear arrangements with partners, who may have a variety of their own interests and approaches. A consistent, structured approach with guidelines and requirements is needed so that the intermediary can ensure the delivery of targeted development outcomes. Intermediary organizations can also lead the way in providing data and monitoring the performance of investment projects.

### Intermediaries should look for holistic, integrated approaches

Intermediaries have a unique responsibility for ensuring a holistic approach is taken to investment projects, with an eye for interrelationships and impacts between sectors. GEF-funded projects, in particular, have an opportunity to utilize the TDA-SAP approach to identify not only the interrelated challenges, but also opportunities. Aside from safeguarding against potential unintended consequences, this can lead to improved investment outcomes.

For example, one investment project in the Philippines combined wastewater collection systems, construction of coastal infrastructure, water supply systems and renewable energy to create a more compelling business case. The approach optimizes for capital and operating costs, reduces carbon footprint, enhances amenities for tourism opportunities and improves both habitat conservation and local resilience, which would not be possible investing in a wastewater treatment system alone. Likewise, IUCN's Blue Natural Capital Finance Facility (BNCFF) seeks to package investments in coastal ecosystem services, marine renewable energy and marine data and technology to access a diversity of potential revenue streams for structuring financially viable investments. Another good example is the Net-Works program from the Zoological Society of London, which combines sustainable seaweed

*"TDAs can tend to be conservative, focusing on identifying challenges. We need to more fully embrace using the TDA process to find potential solutions and opportunities."*

**Patrick Debels, CLME+ Project**

farming with the collection of discarded fishing nets for recycling, providing multiple revenue streams while generating benefits for local communities.

It should be recognized that there is an inherent tension between the interconnectedness of issues and the need to break them down by discrete sectors (e.g., energy, fisheries, coastal infrastructure) to understand their investment potential and risks. This disaggregation is a clear need for investors, but it must be done without losing sight of how everything fits together.

### Don't underestimate the time and resources needed to make meaningful progress

Development organizations should start with a realistic view of what it may take to develop projects able to attract private capital. It's important to recognize the "runway" of time and resources required and build in the necessary funding and schedules up front. Even a small- to medium-scale investment may take a year or more to develop, prior to engaging in discussion with investors. The cost is estimated to be, at a minimum, 10% of the investment ticket size (i.e., a US\$2 million investment could cost at least US\$200K in fees for the right project development and financing expertise to develop a case). This can put a strain on resources available for project development, particularly when the outcome of developing a case cannot be guaranteed. Creative

partnership arrangements may be useful to mitigate development costs, e.g., a development partner taking an equity role in an investment.

The time it can take to realize a financial return can be multiple years. Investors understand this and will evaluate investments accordingly, but development organizations and governments may not be as familiar with the process or the timing. On the other side, investors may need to adjust their expectations based on what can be a slower pace by government given the time needed for political processes.

### **The development community needs more capacity for private investment**

By and large, there is a lack of combined entrepreneurial and conservation skills needed to understand and identify investment-ready projects with impact potential, access private sources of capital and manage investment funds. This applies to NGOs, international organizations and other intermediaries as well as the local stakeholders they work with. Given the complexity of the subject matter and expertise required, it's highly unlikely that training of current staff will be enough to drive a program. Anecdotally, the feedback has been that there aren't enough people with the combined skill set in the region, and organizations and funds have struggled to find and retain the needed talent. Similarly, there are only a small number of consultants and advisors with the specialist expertise needed to develop projects and structure blue economy investment transactions.

Local stakeholders also require capacity building. There is a genuine desire by local governments to explore private investment, but there remains a gap between the desire and the ability to develop bankable projects. In several cases, it has been challenging to gather even the rudimentary data needed to make an initial assessment of a project to

determine whether further pre-feasibility analysis is warranted. Providing basic capacity building of local partners (e.g., government) can be helpful in building a network of support for identifying investments, but be sure to consider the background and experience of the partners. Running one training is not likely to build the capacity needed—it cannot happen overnight. Consider finding local entrepreneurs with an understanding of business as one possible approach. They may have investment opportunities of their own, or it may be possible to engage them in a championing or supporting role of other local investment projects being developed that lack the necessary capacity.

The province of Guimaras in the Philippines has a local investment office set up with expertise for engaging with and soliciting investors, including foreign investors. A handful of international NGOs, such as CI, TNC and WWF, have been building up their investment expertise, as well as some local NGOs, such as Peace and Equity Foundation in the Philippines. However, given the scope and coverage of the ocean sector, there are huge needs and opportunities to be derived from improved awareness and enhanced capacity in identifying and developing sustainable investment projects at the local level.

### **Impact measurement for investment in coastal sustainable development needs to advance**

One of the most common challenges cited by all parties is the ability to monitor and evaluate the impact of an investment—a challenge that is not new to the development community. It's also not unique to oceans—the impact investment community has wrestled with it for years, and a lot of good work has been done to develop approaches for impact measurement. The Global Impact Investment Network (GIIN), for example, developed IRIS, a catalog of generally accepted performance metrics that impact investors can use to measure and manage

social, environmental and financial performance and evaluate deals.<sup>38</sup> IRIS+, launched in May 2019, adds Oceans & Coastal Zones as a new impact category in the catalog.<sup>39</sup>

In developing projects, organizations must consider whether they are simply providing environmental and social safeguards to minimize or eliminate negative impacts, or will the investment generate positive impacts. IUCN developed a “BNC+ Framework” describing approaches for development and monitoring of blue natural capital projects for positive impacts. The companion “BNC Positive Impacts Management System” provides a system for the assessment, monitoring and reporting of investment impact for blue natural capital projects.<sup>40</sup>

### Work remains to address the perceived risks around ocean investment

In general, investors still have a long way to go to be comfortable with oceans as a new asset class given its complexity and their lack of familiarity with it. Investors are certainly paying more attention, but they know very little about this space in general. Blue economy investments present a range of potential financial and impact risks, including political, regulatory, social, project and market, among others. It’s hard to avoid issues around oceans as a common-pool resource, raising questions about public versus private goods, which can have bearing on business models.

There are a number of ways to help mitigate risks. Packaging investments together may create a stronger risk-return profile by diversifying risk. Introducing an anchor investor, particularly one requiring initial diligence, can give other investors more confidence. Finally, and most importantly,

proper policy and regulatory frameworks are key at the local and national levels. Make sure to engage the right government agency for the right purpose. Certainly, for conservation projects the local environment office or national Ministry are appropriate. When looking at investments, consider also working with the Planning or Investment Office or Ministry.

### Make sure to understand who you’re engaging from the private sector

There can be a tendency to lump “private sector” organizations into one category. But there are important distinctions. Engaging in a corporate partnership can be a very different thing than engaging a company as an investor. Partnership around a CSR effort will likely have allocated philanthropic budget from a company looking to achieve certain impacts from the effort. However, if a company is making an investment, there will be an expectation of financial return. Within investment, there are further distinctions between local and overseas banks, development finance institutions and private funds. They all have different needs, expectations and strengths that should be understood and considered in developing investments that look to attract capital from them.

### Market investment projects proactively

Over the past several years the international development community has shown interest in creating online clearinghouses for sharing information and matching groups with each other, including matching projects with funders and investors. While these clearinghouses can be useful as repositories at the very least, significant effort is required to gain the visibility and critical mass needed

<sup>38</sup> Global Impact Investing Network. 2019. “Iris+: An impact measurement and management system by GIIN.” Accessed March 25, 2019. <https://iris.thegiin.org/>.

<sup>39</sup> Global Impact Investing Network. 2019. “IRIS catalog of metrics.” Accessed March 25, 2019. <https://iris.thegiin.org/metrics/?search=&category%5B%5D=cat-oceans-and-coastal-zones&sortby=alphabetical>.

<sup>40</sup> IUCN (International Union for Conservation of Nature). 2019. *Blue Natural Capital Positive Impacts Framework (BNC+)*.

for use of the platform to become self-sustaining. An “if you build it, they will come” strategy is generally not enough. The content in a clearinghouse must be of sufficient quality and volume to interest users, and then it must be supported by offline promotional activities and events to drive users to the platform. Projects need to build in the resources and time to account for these online and offline supporting activities.

### Involving investment expertise early has tremendous advantages

Bringing in investment expertise early to provide ground-truthing of investment cases as they are developed is extremely helpful. Certain elements can be eliminated and clarifications gained early in the process rather than making it to the final case only to bring up questions by investors at that point. Rather than a business case, the target for an output should be an investor memo, written in a format and language familiar to investors. The active participation by an investment expert can also provide links to investment funds for initial feedback by investors and line up interest early on.

### Potential Roles for Development Organizations

As this report has hopefully made clear, PEMSEA’s journey with blue economy investment has generated a robust set of lessons learned. But it has also raised as many new questions that beg further investigation. Given the exploratory nature of this work, chief among these questions, and one that has understandably been asked by PEMSEA’s partners is “What role does PEMSEA want to play?” At this stage in its learning, through the research for this report and invaluable experience with its partners, PEMSEA has identified 6 key roles that development

organizations should consider for advancing blue economy investment (Table 4).

The roles in Table 4 are overlapping and mutually reinforcing in certain areas. For instance, having strong technical assistance also lends itself to serving as a Pipeline Project Developer. Organizations may find that they can fulfill multiple roles. Given its unique profile and experience it’s accumulated, along with the lessons from its recent blue economy investment efforts, PEMSEA is best positioned to operate as an **Ecosystem Building, Investment Enabler** and **Technical Advisor** first, and secondarily as a **Finance Catalyzer** and **Pipeline Developer**.

As a **Capital Provider** PEMSEA must rely on its ability to plan and prepare development projects in collaboration with governments, donors and development organizations. Such projects will have an investment component, which provide the necessary capital to prepare investment projects. PEMSEA’s pre-investment service supports investment projects with no expectation of return, as well as investment projects with an expectation of return on investment. There is a need for both.

### New approaches require new mindsets—and practical expectations

Blue economy provides an opportunity to look beyond traditional models, think outside the box and try new approaches. Investment should be viewed as one mechanism that can be leveraged for generating development outcomes. It necessitates a process of discovery and some tolerance for risk taking. Only in learning by doing can we build the experience needed. There may be failures, but that is how we learn and adapt. Know that compromise may be needed. Don’t let the perfect be the enemy of the good.

**Table 4: Potential Roles for Development Organizations to Advance Blue Economy Investment.**

Role	Objective	Typical Activities	Best for organizations with...
<b>Capital Provider</b>	Provide the organization's own capital to a project or enterprise as either a grant or an investment to help achieve development outcomes	<ul style="list-style-type: none"> <li>• Provide grants with no expectation of repayment</li> <li>• Make investments with an expectation of financial return, at a minimum, preservation of invested capital</li> </ul>	<ul style="list-style-type: none"> <li>• Legal structure allowing for disbursement of grants and investments</li> <li>• Sufficient on-staff finance expertise</li> <li>• Access to sufficient capital and willingness to risk it</li> </ul>
<b>Finance Catalyzer</b>	Utilize blended finance to de-risk investments or fund project development and investment readiness	<ul style="list-style-type: none"> <li>• Cultivate relationships and execute projects for donors (e.g., multilaterals, foundations)</li> <li>• Develop project concepts and proposals blending public, donor and private capital</li> </ul>	<ul style="list-style-type: none"> <li>• Relationships with international funders</li> <li>• Ability to access specific donor funding (e.g., as a GEF Implementing Agency) or close relationship with such partners</li> <li>• Track record of developing project proposals and accessing grant capital</li> <li>• Sufficient on-staff finance expertise</li> </ul>
<b>Pipeline Developer</b>	Leverage local knowledge and relationships to identify and develop potentially investable projects and enterprises	<ul style="list-style-type: none"> <li>• Identify potential pipeline investment opportunities</li> <li>• Provide accelerator, incubator or TA services to build investment-readiness of projects and enterprises</li> </ul>	<ul style="list-style-type: none"> <li>• Local relationships and understanding of local context</li> <li>• Track record of local capacity-building</li> <li>• Sufficient on-staff or outsourced business / finance expertise</li> <li>• Access to interested investors</li> </ul>
<b>Technical Advisor</b>	Deliver technical expertise on conservation, sustainable development and impact investment aspects of projects and enterprises	<ul style="list-style-type: none"> <li>• Provide technical expertise to development projects and/or investors supporting environmental and social impact and investment-readiness</li> <li>• Provide independent measurement and evaluation of impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Technical expertise and experience delivering services</li> <li>• Understanding of local context</li> <li>• Ability to collect data and track record of measuring and evaluating development outcomes</li> </ul>
<b>Ecosystem Builder</b>	Coordinate and promote relationships and knowledge to advance blue economy investment	<ul style="list-style-type: none"> <li>• Develop partnerships and establish linkages between organizations along the blue economy investment value chain</li> <li>• Produce knowledge products</li> <li>• Conduct local, national and regional convenings and dialogues to further knowledge sharing and relationship building</li> </ul>	<ul style="list-style-type: none"> <li>• Research expertise and track record of knowledge management</li> <li>• Experience designing and delivering successful workshops and conferences</li> <li>• Relationships and ability to convene government, NGO, private sector, multilaterals, etc.</li> </ul>
<b>Investment Enabler</b>	Serve as a policy-oriented advocacy and capacity-building platform for creating the right conditions for private investment	<ul style="list-style-type: none"> <li>• Advocate for policy reforms and public investment with local and national government</li> <li>• Facilitate proper governance, including regulatory and enforcement regimes needed for investment</li> <li>• Provide capacity-building, primarily of local stakeholders, on requirements for private investment</li> </ul>	<ul style="list-style-type: none"> <li>• Relationships and experience engaging local and national government and multilaterals on policy issues</li> <li>• Track record of local capacity-building</li> <li>• Sufficient on-staff or outsourced business / finance expertise</li> </ul>



Political will is needed to set policy and regulatory frameworks that can enable investors to come in. Government can provide other support including credit enhancement, tax credits and subsidies for investors, funding for technical assistance and even co-investment. It's vital to ensure full transparency and buy-in from local stakeholders. While government tends to be more risk averse, the donor community is in a position to provide the additional support needed to allow for experimentation with new approaches.

Among members of the investment ecosystem, some are more bullish on the prospects for blue economy investment, others are more cautious. Commercial investment cases are not yet abundant, and organizations need to strike a balance between positive vision for the evolution of this space and being realistic about what can be achieved in a given timeframe. Impact investing is unlikely to replace donor funding in the short- to medium-term.

### **Momentum is with blue economy, now is the time to push ahead**

Conservation and sustainable development projects face many challenges, with stable access to capital as a major obstacle to long-term viability. But technology, systems and models are available today to address the mounting challenges

facing sustainable development of oceans and coasts. Much more investment will be needed. The bottleneck is not a lack of capital or liquidity, but a lack of investable projects, enterprises and assets. Identification of potential opportunities and development of more pre-feasibility studies of viable investment cases are needed. Several experienced international organizations are focusing resources on new solutions and encouraging models and approaches are emerging. There's a clear need and interest from both the investor community and by local stakeholders for pre-investment assistance. It's important that this is done well in the initial stages so blue economy investments build a strong track record of success.

Transformation takes time, but it starts now. As the seminal UNDP report on *Catalysing Ocean Finance* points out, the time frames to transform ocean markets through integrated planning, barrier removal and market transformation are long, typically 15-20 years or more.<sup>41</sup> We need to keep the momentum moving forward. Real action is needed. As one investor put it, "It can't just be signing a nice document and moving on to the next thing. We need to execute and do the hard to work". Investment will happen one way or another, the questions is: will it be done in a way that delivers benefits to local communities and helps to achieve targets for sustainable development?

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<sup>41</sup> Hudson A. and Glemareck Y., (eds). 2012. *Catalysing ocean finance. Volume I: Transforming markets to restore and protect the global ocean*. United Nations Development Programme, New York.

# Appendices

# 7

## Appendix A: Oceans Finding their Place on the International Agenda

The United Nations Ocean Conference held at UN headquarters in 2017 signaled oceans' arrival on the international, multilateral agenda. Bringing together people from all corners of the global ocean community, the event featured a range of speakers and sessions on the topics of blue economy and sustainable investment. Voluntary commitments coming out of the conference numbered more than 1500 by early 2019,<sup>42</sup> and the UN launched nine thematic multi-stakeholder "Communities of Ocean Action" around the commitments, including one for sustainable blue economy.<sup>43</sup> The 2018 Sustainable Blue Economy Conference that followed welcomed 18,000 participants from around the world to UN Environment headquarters in Nairobi to discuss how to build a blue economy.<sup>44</sup> Earlier in the year, twelve heads of state and the UN Secretary-General's Special Envoy for the Ocean launched a High Level Panel for a Sustainable Ocean Economy for developing, catalysing and supporting solutions for ocean health and wealth in policy, governance, technology and finance.<sup>45</sup> Plans for a second UN Ocean Conference in 2020 are already underway.

The ocean-climate linkage continues to strengthen, signified by a series of Oceans Action Days held during the UNFCCC Conference of Parties (COP), the most recent at COP 24 in December 2018. Over 400 participants attended the discussions, debate and presentations highlighting issues linking the ocean to climate change adaptation and mitigation, food security, disaster risk reduction, trade, scientific research, finance and displacement and migration,<sup>46</sup> along with the need to address SDG 14 in connection with SDG 13 (climate action) and a focus on incorporating ocean-related issues into the nationally determined contributions (NDCs) under the Paris Agreement.<sup>47</sup> The "Because the Ocean Initiative", launched in 2015, encourages progress on incorporation of the ocean in the climate change policy debate.<sup>48</sup>

Oceans also feature prominently in the G20 policy discussion as part of its *Action Plan on the 2030 Agenda for Sustainable Development*, which calls for ocean economy dialogues and strategies to ensure that investment and growth in ocean use become

<sup>42</sup> United Nations. [n.d.]. "The Ocean Conference registry of voluntary commitments." Accessed March 26, 2019. <https://oceanconference.un.org/commitments/>.

<sup>43</sup> United Nations. [n.d.]. "Communities of Ocean Action for supporting implementation of SDG 14." Accessed March 26, 2019. <https://oceanconference.un.org/coa>.

<sup>44</sup> Government of Kenya, Ministry of Foreign Affairs. [n.d.]. "Sustainable Blue Economy Conference." Accessed March 26, 2019. <http://www.blueeconomyconference.go.ke/>.

<sup>45</sup> World Resources Institute. [n.d.]. "High level panel for a sustainable Ocean Economy." Accessed March 26, 2019. <https://oceanpanel.org/>.

<sup>46</sup> IISD Reporting Services. 2018. "Oceans Action Day bulletin." Accessed March 26, 2019. <http://enb.iisd.org/climate/cop24/oceans-action-day/html/enbplus186num15e.html>.

<sup>47</sup> Wagner, L. 2018. "COP 24 side event discusses Ocean-NDC linkages." *SDG Knowledge Hub*, December 13. Accessed March 27, 2019. <http://sdg.iisd.org/news/cop-24-side-event-discusses-ocean-ndc-linkages/>.

<sup>48</sup> Because the Ocean. 2019. "The initiative." Accessed March 27, 2019. <https://www.becausetheocean.org/the-initiative/>.

sustainable and reach their full potential.<sup>49</sup> Likewise, the G7 Leaders Summit, under the Presidency of Canada, produced the *Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities* in 2018, which focuses on resilient coastal communities, sustainable fisheries and ocean plastic waste and promoting collaborative partnerships with the private sector, international organizations and civil society.<sup>50</sup>

In mid-2018, the Global Environment Facility (GEF) announced that 30 countries had jointly pledged US\$4.1 billion to replenish the GEF Trust Fund for a new four-year investment cycle, known as GEF-7. The GEF-7 programming direction includes a focus on strengthening blue economy opportunities under its International Waters Focal Area and increased allocation for blended finance (“non-grant instruments”) to catalyse private sector investments.<sup>51</sup>

On the private sector side, The Economist World Ocean Summit (WOS), started in 2014, features ocean leaders from the highest levels of government and business and offers presentations and dialogue on topics ranging from financing and innovation to important sector-focused issues such as ocean plastic pollution and sustainable fisheries.<sup>52</sup> Blue economy featured prominently in the 2015 WOS, with the release of an oft-cited

briefing paper exploring the meaning of the blue economy and related investment opportunities.<sup>53</sup> The 2017 WOS held in Bali, Indonesia had an explicit focus on how capital and the private sector can drive scalable, sustainable investment in the ocean.<sup>54</sup> In 2018, The Economist went further by launching the World Ocean Initiative to concentrate on three cross-cutting levers of change—finance, governance and innovation—outside of its annual conference.<sup>55</sup> The 2019 WOS featured “financial opportunities in the blue economy” and “improving investment structures for ocean finance” on its agenda.

The list of events and initiatives goes on—the 2019 World Economic Forum (WEF) meeting in Davos, which included panel discussions on blue economy, ocean pollution and overfishing; the WEF’s Ocean Action Agenda designed as a PPP delivery mechanism to help advance SDG 14;<sup>56</sup> Friends of Ocean Action, a coalition of 51 ocean leaders from business, civil society, international organizations, science and technology supported by funding from the Benioff Ocean Initiative and convened by WEF in collaboration with the World Resources Institute;<sup>57</sup> an Action Platform for Sustainable Ocean Business launched by the UN Global Compact;<sup>58</sup> and the Our Ocean Conference, serving as a launch pad for many ambitious global ocean efforts, including those focused on blue economy and investment.<sup>59</sup>

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<sup>49</sup> hVisbeck, M. et al. 2017. *The Ocean Dimension of the 2030 Agenda: Conservation and sustainable use of the ocean, seas, and marine resources for sustainable development*.

<sup>50</sup> G7 (Group of Seven). 2018. *Charlevoix blueprint for healthy oceans, seas and resilient coastal communities*.

<sup>51</sup> GEF Secretariat. 2018. *GEF-7 replenishment: Programming directions*.

<sup>52</sup> The Economist Newspaper Limited. 2019. “World Ocean Summit 2018: Agenda.” Accessed March 30, 2019. <https://events.economist.com/events-conferences/americas/world-ocean-summit/#agenda>.

<sup>53</sup> The Economist Intelligence Unit. 2015. *The Blue Economy: Growth, opportunity and a sustainable Ocean Economy*.

<sup>54</sup> The Economist. “World Ocean Summit 2017.” Accessed March 30, 2019. <https://events.economist.com/events-conferences/asia/ocean-summit-2017/>.

<sup>55</sup> The Economist Newspaper Limited. 2018. “World Ocean Initiative.” Accessed March 30, 2019. <https://www.woi.economist.com/>.

<sup>56</sup> World Economic Forum. 2019. “Ocean Action Agenda.” Accessed March 30, 2019. <https://www.weforum.org/projects/a-new-vision-for-the-ocean>.

<sup>57</sup> Friends of Ocean Action. [n.d.]. <https://www.weforum.org/friends-of-ocean-action>.

<sup>58</sup> UN Global Compact. [n.d.]. “Action platform for sustainable ocean business.” Accessed April 3, 2019. <https://www.unglobalcompact.org/take-action/action-platforms/ocean>.

<sup>59</sup> Ministry of Marine Affairs and Fisheries Republic of Indonesia. 2018. “Our Ocean.” Accessed March 30, 2019. <https://ourocean2018.org/>.

## Appendix B: The Blue Economy Concept Continues to Mature

The blue economy movement has been largely spearheaded by the multilateral community, including UNDP, World Bank, UN Food and Agriculture Organization (FAO) and Asia-Pacific Economic Cooperation (APEC), along with a handful of national governments. Since the release of one of the first concept notes on the topic of blue economy by UNDP in 2012, coming out of the Rio+20 Conference,<sup>60</sup> an increasing number of organizations have weighed in on the blue economy (or in some cases, “sustainable ocean economy”) concept, including from the private sector and certain industry and economic alliances, such as the OECD. OECD has projected that by 2030 the blue economy could outperform the growth of the global economy as a whole, both in terms of value added and employment.<sup>61</sup>

International donors continue to play a critical role in nurturing the blue economy. According to GEF-7, “the Blue Economy concept identifies the oceans as areas for potential sustainable development of existing and new sectors, including tourism, hydrocarbon and mineral extraction, sustainable energy production, fisheries and aquaculture, coastal development and marine transport”. As it relates to blue economy, the GEF sees its role as “assisting countries in identifying sustainable public and private national investments within the Blue Economy space, through funding of collective management of coastal and marine systems and implementation of the full range of integrated ocean policies, legal and institutional reforms”.<sup>62</sup> Here, the GEF is using the term “investment” in a broader sense than strictly return-seeking investment, including examples such as stimulating private sector engagement through

relevant industry sectoral roundtables, establishing market mechanisms to support sustainable fisheries or informing transformation of plastic supply chains.

Participants at a blue economy roundtable held at the GEF International Waters Conference in November 2018 discussed frameworks for blue economy development and project-level successes and challenges across blue economy sectors, including fisheries and aquaculture, transport, energy, tourism and more. Discussion touched on linkages and value-adding to the TDA/SAP process utilized by GEF International Waters projects with respect to blue economy interventions.<sup>63</sup>

The United Nations continues to play a leadership role on blue economy. The UN Department of Economic and Social Affairs (DESA) Division for Sustainable Development Goals sees blue economy as comprising “a range of economic sectors and related policies that together determine whether the use of ocean resources is sustainable” with two primary pillars: 1) sustainability, i.e., climate change and controlling pollution and 2) production, i.e., accelerated economic growth, jobs and poverty alleviation.<sup>64</sup> Andrew Hudson, Head of Water and Ocean Governance Programme for UNDP, explains in a November 2018 article that “the Blue Economy paradigm is a natural next step in the overall conceptualization and realization of sustainable human development. It mirrors our long-accepted definition of sustainable development as one that meets the needs of the present without compromising the ability of future generations to meet their own needs. Simply put, it is the utilization

<sup>60</sup> United Nations. [n.d.]. *Blue Economy concept paper*.

<sup>61</sup> OECD (Organisation for Economic Co-operation and Development). 2016. *The Ocean Economy in 2030*. OECD Publishing, Paris.

<sup>62</sup> GEF Secretariat. 2018. *GEF-7 replenishment: Programming directions*.

<sup>63</sup> Barbieri, Marrakesh. 2018. “Day 4 - Pillar breakout transformational solutions: Blue Economy.” [presentation]. Accessed April 3, 2019. <https://iwlearn.net/documents/29617>.

<sup>64</sup> United Nations Department of Economic and Social Affairs. 2019. “Diving into the blue economy.” Accessed April 5, 2019. <https://www.un.org/development/desa/en/news/sustainable/blue-economy.html>.

of ocean resources for human benefit in a manner that sustains the overall ocean resource base into perpetuity". In essence, the blue economy must protect and restore the ocean resource base (e.g., fish stocks, coral reefs, mangroves) while developing opportunities for enhanced or new sustainable economic activity derived from the ocean (e.g., sustainable fisheries and aquaculture, renewable energy, ecotourism, carbon finance).<sup>65</sup>

The World Bank's stated blue economy approach "supports economic growth, social inclusion and the preservation or improvement of livelihoods while at the same time ensuring the environmental sustainability of oceans and coastal areas". Its 2017 report on *The Potential of the Blue Economy* highlights that the sustainable management of ocean resources requires collaboration across nation-states and the public-private sectors on a scale that has not been previously achieved.<sup>66</sup> As of September 2018, its active blue economy portfolio was worth around US\$4.1 billion, with a further US\$1.5 billion in the pipeline.<sup>67</sup>

A growing number of countries around the world are jumping in to the blue economy discussion or are including it as part of their policy platform. The US, Portugal, Barbados, Morocco, Kenya, Seychelles, Oman, India, Bangladesh and Pakistan, among others, are contemplating the role of blue economy

for their economies and citizens and, for some developing economies, are citing it as an important "pillar of development".<sup>68</sup>

But blue economy is still hindered by the lack of a clear, *agreed* definition for what it is and how to measure it. Organizations including the Center for a Blue Economy, part of the Middlebury Institute of International Studies, continue their work to better define the blue economy as an organizing framework for deriving wealth from the oceans on a sustainable basis, particularly by developing approaches to measuring the economic contributions of oceans and coastlines at the local, regional, state, national and international levels.<sup>69</sup> At the same time, the UN Economic and Social Commission for Asia and the Pacific (UNESCAP) is leading efforts on an Ocean Accounts Partnership to develop standards for ocean statistics based on the integrated approach of the SEEA.<sup>70</sup>

The paradigm has struggled from a lack of tangible success cases of true "sustainable blue economy", but promising examples continue to emerge. One example often highlighted is the Seychelles Blue Economy Approach. It was built in tandem with an innovative debt-for-nature conversion with The Nature Conservancy (TNC) in 2016 that raised funding to buy US\$21 million of Seychelles' sovereign debt to refinance it under more favorable

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<sup>65</sup> Hudson, A. 2018. "Blue Economy: A sustainable ocean economic paradigm." *United Nations Development Programme (blog)*, November 26. Accessed April 3, 2019. <https://www.undp.org/content/undp/en/home/blog/2018/blue-economy-sustainable-ocean-economic-paradigm.html>.

<sup>66</sup> World Bank and United Nations Department of Economic and Social Affairs. 2017. *The potential of the Blue Economy: Increasing long-term benefits of the sustainable use of marine resources for Small Island Developing States and Coastal Least Developed Countries*.

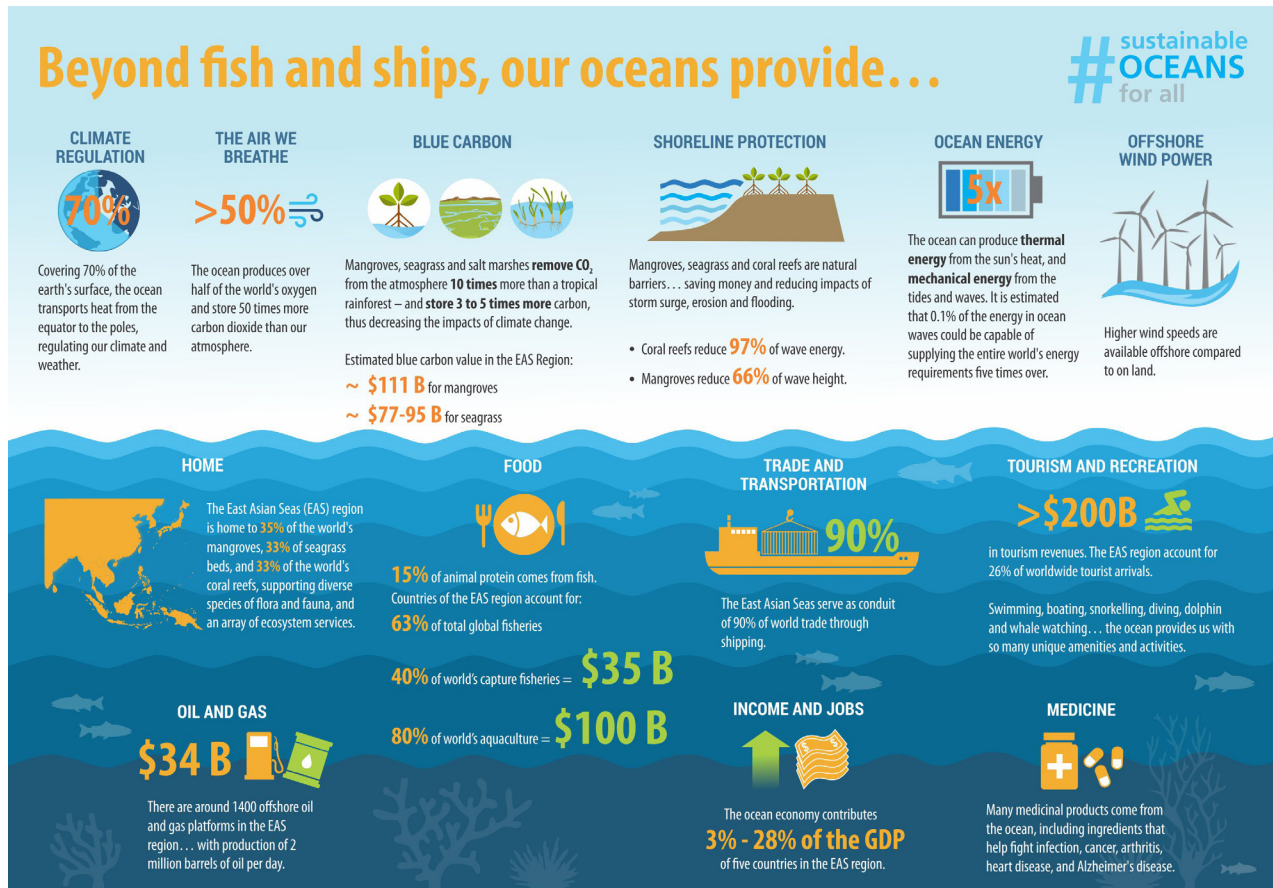
<sup>67</sup> The World Bank Group. 2018. "The World Bank's Blue Economy Program and PROBLUE: Supporting integrated and sustainable economic development in healthy oceans." *The World Bank Group*, November 26. Accessed April 3, 2019. <https://www.worldbank.org/en/topic/environment/brief/the-world-banks-blue-economy-program-and-problue-frequently-asked-questions>.

<sup>68</sup> Alaoui, M. 2019. "Blue Economy' could be a pillar of Morocco's development." *The Arab Weekly*, February 17. Accessed April 3, 2019. <https://theArabweekly.com/blue-economy-could-be-pillar-moroccos-development>.

<sup>69</sup> Middlebury Institute of International Studies. [n.d.]. "Measuring the global Blue Economy." Accessed April 5, 2019. <https://www.middlebury.edu/institute/academics/centers-initiatives/center-blue-economy/about>.

<sup>70</sup> United Nations, System of Environmental Economic Accounting. "Ocean Accounts Partnership holds first meeting." Accessed April 5, 2019. <https://seea.un.org/news/ocean-accounts-partnership-holds-first-meeting>.

Figure 15: Blue Economy in East Asia.



terms. A portion of repayments is directed to climate change adaptation, sustainable fisheries and marine conservation projects. As part of the deal, the Seychelles committed to securing over 400,000 square kilometers of its ocean area as new Marine Protected Areas (MPAs).<sup>71</sup> Other examples include new fisheries improvement investment models, such as the swimming blue crab in Indonesia,<sup>72</sup> and a notable portfolio of projects coming out of the GEF Small Grants Programme (SGP) focused in areas such as improved fish processing and

production, ecotourism, aquaculture and seascape conservation.<sup>73</sup>

The GloBallast project, implemented by UNDP and executed by IMO to tackle the pressing issue of aquatic invasive species, offers an excellent example of private sector partnership supporting blue economy at a global scale. To engage the private sector, in 2009 the project established the Global Industry Alliance (GIA) with the major private shipping corporations. Shipping companies joined the GIA to

<sup>71</sup> Damanaki, M. and K. E. Kemper. 2018. "Innovation drives Seychelles Blue Economy approach." *Global Insights | Perspectives*, March 23. Accessed April 5, 2019. <https://www.nature.org/en-us/what-we-do/our-insights/perspectives/innovation-drives-seychelles-blue-economy-approach/>.

<sup>72</sup> Wilderness Markets. "The Wild Blue Crab investment model - a case study." Accessed April 5, 2019. <http://www.wildernessmarkets.com/wild-blue-crab-investment-model-case-study/>.

<sup>73</sup> UNDP (United Nations Development Programme). 2018. *Blue Economy: Community solutions*. UNDP, New York.



ensure that their voice was heard and gain technical expertise and experience for complying with the new Ballast Water Management Convention. What began as individual funding support from companies eventually evolved into a GIA Fund aimed at finding solutions for addressing ballast water issues.<sup>74</sup>

Blue economy is not without its skeptics and critics. Some note that blue economy, if not done the right way, could simply be the next resource

grab, “a goldmine whose richness and potential still lay unexploited, more so in the developing world.”<sup>75</sup> Indeed, groups like the Global Partnership for Oceans have been seen as potentially enabling the “exploitation of the global ocean commons”. In certain cases, particularly where the local community is not appropriately represented, activists may resist the perceived “financialization and privatization of the world’s oceans”, as in one case in Indonesia.<sup>76</sup>

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<sup>74</sup> GEF-UNDP-IMO GloBallast Partnerships Programme. 2017. *The GloBallast story: Reflections from a global family*. GloBallast Monograph No. 25. GloBallast Partnerships Project Coordination Unit, International Maritime Organization, London, United Kingdom.

<sup>75</sup> Boomsma, K. 2019. “The dead cockroach in blue economy’s plate.” *Business Daily*, February 4. Accessed April 8, 2019. <https://www.businessdailyafrica.com/analysis/ideas/The-dead-cockroach-in-blue-economy-s-plate/4259414-4966500-caik15z/index.html>.

<sup>76</sup> Tramel, S. 2019. “Reclaiming control of Indonesia’s oceans.” *The Ecologist*, February 1. Accessed April 9, 2019. <https://theecologist.org/2019/feb/01/reclaiming-control-indonesias-oceans>.



## Appendix C: Approaching Private Sector Partnership

Integral to the success of blue economy development is the engagement of the private sector. While blue economy as a concept has been initially and primarily championed by the multilateral, government and NGO community, it will amount to little more than a policy exercise without the full participation of the business and finance sectors.

The importance of private sector engagement has been known to the international development community for many years, and private sector and sustainable finance finds its way into a majority of donor-funded projects these days. The development of PPPs has generated a great deal of learning over the years, in parallel with the rise in the private sector of corporate social responsibility (CSR) and its variants (e.g., corporate sustainability, corporate citizenship, shared value). According to a report from the Business & Sustainable Development Commission,<sup>77</sup> pursuing sustainable and inclusive business models could unlock economic opportunities worth at least US\$12 trillion a year by 2030 and generate up to 380 million jobs,<sup>78</sup> and more businesses are recognizing the opportunity that sustainable development presents.

Donors and NGOs know that the private sector must play an essential role in transforming economic systems and reversing unsustainable global trends for oceans. Indeed, global NGOs including but not limited to World Wide Fund for Nature (WWF) and Conservation International (CI) have programs around corporate partnerships that include oceans.<sup>79,80</sup> The

GEF looks towards a holistic approach drawing on interventions to promote private sector engagement and innovative financing models that include incentives to guarantee markets for new approaches and encourage long-term investments, deploying innovative financial instruments enabling private sector investment, convening multi-stakeholder alliances and strengthening institutional capacity.<sup>81</sup> Its GEF-7 private sector engagement approach is based on two pillars for 1) expanding the use of non-grant instruments for blended finance and 2) mobilizing the private sector as an agent for market transformation. New models are also emerging for businesses and government to work together, for instance, the development of maritime clusters for sustainable development in different parts of the world.<sup>82</sup>

By now, the challenges to private sector engagement are generally well understood. They can include project or government lack of capacity, hesitancy to engage due to lack of trust or understanding by either side, a different pace and set of incentives between sectors and a lack of identified concrete points for engagement that offer value to both. Making matters more difficult, SDG 14 “barely registers in the corporate conscience” according to a PwC report looking at how ready business is to support governments in achieving the SDGs, landing in last place among all 17 SDGs in terms of perceived impact by business and potential opportunity for companies in the future.<sup>83</sup>

<sup>77</sup> <http://businesscommission.org/news/release-sustainable-business-can-unlock-at-least-us-12-trillion-in-new-market-value-and-repair-economic-system>

<sup>78</sup> <https://www.thegef.org/topics/private-sector>

<sup>79</sup> <https://www.worldwildlife.org/partnership-categories/corporate-partnerships>

<sup>80</sup> <https://www.conservation.org/How/Pages/Innovating-with-Business.aspx>

<sup>81</sup> <https://www.thegef.org/topics/private-sector>

<sup>82</sup> OCEAN / MARITIME CLUSTERS: Leadership and Collaboration for Ocean Sustainable Development and Implementing the Sustainable Development Goals, World Ocean Council

<sup>83</sup> Make it your business: Engaging with the Sustainable Development Goals, PwC

A good body of literature is available covering best practices for establishing partnerships with the private sector for sustainable development. To learn more, Table 5 provides a list of resources with helpful frameworks and approaches.

While each partnership will have its own nuance and unique challenges, lessons from leading organizations can be distilled into a set of basic steps for fostering successful private sector partnerships, as follows:

1. Identify the rationale and long-term goals for collaborating and define a vision for private sector partnership that aligns with specific development targets and outcomes.
2. Establish clear objectives for the planning, development and implementation of a partnership with the private sector, based on an understanding of the respective organization's core strengths and limitations and those of the potential private partner(s), including resource requirements.
3. Develop the value proposition for why a private sector organization should partner with your organization. What are the benefits of partnering with you and how does it align with their interests?
4. Select and engage the right partner based on the nature of the work to be conducted and the capabilities of the private partner and determine the most appropriate form of partnership.
5. Build trust by aligning on the vision and key goals that have been defined and understanding strategic/cultural fit. Ensure open and inclusive planning of priorities, governance and operational structure for the partnership.
6. Implement the partnership, ensuring that all stakeholders are consulted as needed.
7. Measure and evaluate performance and results to learn from successes and failures and demonstrate value.
8. From the lessons learned, build institutional capability for improving the partnership and creating new future partnerships.

**Table 5: Resources for Partnerships with the Private Sector for Sustainable Development.**

Organization	Report	Focus
Global Environment Facility	GEF International Waters Public-Private Partnerships Guidebook	Geared specifically to assist GEF-funded projects with developing private sector partnerships.
Rockefeller Foundation, Monitor Institute, Deloitte	Participate: The power of involving business in social impact networks	Handbook describing the opportunity for building social impact networks that engage the private sector and models and practical steps for assessing and recruiting a potential corporate participant.
The Partnering Initiative	Unleashing the power of business: A practical Roadmap to systematically engage business as a partner in development	Highlights 5 essential areas for action with examples of what each sector can do, along with recommendations for putting the roadmap into practice.
GlobalCAD, Centre of Partnerships for Development	Partnering for Development, A Seven Step Methodological Approach	Includes a Partnership Strategic Framework, composed of building blocks that address in a systemic way the major milestones of the strategic partnership life cycle.

## Appendix D: A Growing Wave of Ocean Investment

As early as 2012, NGOs were thinking about how to engage the finance community around the impact of their global investments. WWF, for example, released its report “The 2050 Criteria: Guide to Responsible Investment in Agricultural, Forest, and Seafood Commodities” as a field guide for investors to deploy criteria for responsibly identifying and guiding investees in sectors that include aquaculture and wild-caught seafood.<sup>84</sup> The same year, UNDP published its seminal two-volume work on *Catalysing Ocean Finance*, highlighting the progress made by UNDP in testing out and applying innovative approaches to financing and policy for oceans, estimating that initial public investment of around US\$5 billion over the following ten to twenty years could catalyze several hundred billion dollars of additional public and private investment.<sup>85</sup>

### Impact and Conservation Investment Continue to Grow

Conservation-focused investment experienced dramatic growth after 2013, as total committed private capital climbed 62% in just two years from \$5.1B to \$8.2B.<sup>86</sup> One significant effort was the launch of NatureVest by TNC and JPMorgan Chase in 2014. At that point, only US\$51 billion of the US\$290 billion a year needed to support global conservation efforts was funded, primarily by public and philanthropic money. NatureVest sought to close the funding gap by providing an impact investment platform for the private sector, building an investment pipeline across

multiple sectors with a goal to raise US\$1 billion in investments.<sup>87</sup>

The past five years have seen a 32% increase in yearly impact capital invested and a 27% increase in the number of deals, with the fastest growth in Oceania (45%) and East and SE Asia (28%).<sup>88</sup> The 2018 Annual Impact Investor Survey by the Global Impact Investing Network (GIIN) highlights several relevant findings for impact-focused investment in oceans in East Asia:

- As of 2017, impact investors had US\$228.1 billion in assets under management (AUM), over half of that allocated to emerging markets (56%), with 11% in East and SE Asia.
- Investors invest primarily through private capital markets, allocating their capital primarily through private debt (41%) and private equity (18%).
- Two-thirds of investors (64%) target risk-adjusted, market-rate returns. The remaining 36% target below-market-rate returns, with 16% of those seeking returns closer to capital preservation.
- Investors look to invest in businesses across various stages of development, with the greatest share in mature, private companies (39%) and growth-stage companies (35%), along with smaller amounts of capital into seed and venture-stage companies.
- Three-quarters of investors report tracking their investment performance to the SDGs or plan to do so in the future.

<sup>84</sup> World Wildlife Fund. 2012. *The 2050 criteria: Guide to responsible investment in agricultural, forest, and seafood commodities*. World Wildlife Fund, Washington D.C.

<sup>85</sup> Hudson A. and Glemareck Y., (eds). 2012. *Catalysing ocean finance. Volume I: Transforming markets to restore and protect the global ocean*. United Nations Development Programme, New York.

<sup>86</sup> JPMorgan Chase & Co. 2017. “Private investment in conservation reaches \$8.2 Billion.” *JPMorgan Chase & Co.*, January 11. April 20, 2019. <https://www.jpmorganchase.com/corporate/news/pr/tnc-private-investment-in-conservation-report-findings.htm>.

<sup>87</sup> Philanthropy News Digest (PND). 2014. “Nature Conservancy, JPMorgan Chase launch impact investment platform.” *Philanthropy News Digest (PND)*, May 1. Accessed April 22, 2019. <https://philanthropynewsdigest.org/news/nature-conservancy-jpmorgan-chase-launch-impact-investment-platform>.

<sup>88</sup> Mudaliar, Abhilash, Rachel Bass, and Hannah Dithrich. 2018. *Annual Impact Investor Survey 2018*. [https://theegiin.org/assets/2018\\_GIIN\\_Annual\\_Impact\\_Investor\\_Survey\\_webfile.pdf](https://theegiin.org/assets/2018_GIIN_Annual_Impact_Investor_Survey_webfile.pdf).

- Nearly three-quarters of respondents (72%) seek to address climate change through their investments. Likewise, 70% of respondents apply a gender lens to their investment process.
- Sources of capital include endowments, retail, development finance institutions (DFIs), banks / diversified financial institutions, family offices / HNWLs, foundations, pension funds / insurance companies and funds of funds.
- Average deal size remains steady over the past few years at approximately US\$1.5 million per investment.
- Investors have primarily deployed capital to sectors that promote financial inclusion, expand access to basic services, and create livelihoods. But conservation as a sector remains a small percentage of investors' assets under management (3%).

The impact investment community continues to learn about investor expectation and the performance of impact investment as a viable investment mechanism. Not all impact investments seek to achieve market rates of return. Some investors intentionally target below-market (i.e., concessionary) returns to achieve impact or catalyze other capital. In its report "GIIN Perspectives: Evidence on the Financial Performance of Impact Investments", the GIIN found that investors reported average gross return expectations of 16.5% (market rate) to 14.4% (below market rate) for private equity investments and 9.2% (market rate) to 7.4% (below market rate) for private debt investments in emerging markets (for 2016 when the latest data was available at the time of writing).<sup>89</sup>

## Challenges to Impact Investing

While progress is being made, impact investors report a number of continuing challenges and constraints. Investors perceive high risk among investments with little or no track record and untested business models, and among investments in certain geographies or sectors. East Asia represents a highly fragmented investment market, with countries at different stages of economic development and with entrepreneurial ecosystems at varying levels of maturity. Major gaps in seed-stage impact capital remain. Other challenges include difficulty finding high-quality investment opportunities, lack of appropriate capital across the risk/return spectrum and the need for a common understanding of how the impact investing market is defined (see Table 6). It's important to note that investors do report an improvement in the development of more investable deals and improving capacity of professionals.<sup>90</sup>

One of the biggest barriers to investment in ocean conservation is high-risk perception by investors. According to Mark Tercek, former CEO of The Nature Conservancy, better science is needed to produce the data and evidence to convince key decision makers to invest in nature, and more collaboration is needed across sectors, to build trust and understanding.<sup>91</sup> Policy and enforcement are also crucial. For example, a global "shadow financial system" plays a key role in undercutting sustainable investment, particularly in fisheries, where IUU fishing generates US\$15.5 billion to US\$36.4 billion in illicit profits annually and "flags of convenience" enable ship owners to avoid taxes, lower safety standards and skirt monitoring and tracking of their activities.<sup>92</sup>

<sup>89</sup> Mudaliar, Abhilash and Rachel Bass. 2017. *GIIN perspectives: Evidence on the financial performance of impact investments*.

<sup>90</sup> Mudaliar, Abhilash, Rachel Bass, and Hannah Dithrich. 2018. *Annual Impact Investor Survey 2018*.

<sup>91</sup> GreenMoney. [n.d.]. "The Nature Conservancy's CEO on how to scale up investments in nature." Accessed April 22, 2019. <https://greenmoneyjournal.com/the-nature-conservancys-ceo-on-how-to-scale-up-investments-in-nature/>.

<sup>92</sup> Hurley, Gail. 2017. "Opinion: Global shadow financial system enables the plunder of the world's oceans and seas." Devex, May 1. Accessed May 4, 2019. <https://www.devex.com/news/opinion-global-shadow-financial-system-enables-the-plunder-of-the-world-s-oceans-and-seas-90325>.

**Table 6: Areas of Progress and Challenges for the Growth of the Impact Investing Industry.**

	Significant progress	Significant challenge
High-quality investment opportunities (fund or direct) with track record	14%	32%
Professionals with relevant skill sets	13%	20%
Innovative deal/fund structures to accommodate investors' or investees' needs	13%	24%
Sophistication of impact measurement practice	12%	35%
Common understanding of definition and segmentation of impact investing market	11%	40%
Research and data on products and performance	10%	30%
Appropriate capital across the risk/return spectrum	8%	42%
Government support for the market	7%	24%
Suitable exit options	7%	37%

Source: GIIN

One top continuing challenge for conservation investment, including in oceans, is the lack of quality opportunities that meet investor expectations. Not enough projects seeking investment are yet organized in ways that generate cash flows. Scale and track record continue to be an issue, where a startup enterprise may be “too young for banks, yet too small for venture capitalists”<sup>93</sup> This has led to a growing gap between impact capital and conservation investments where the rate of investments is not keeping pace with the increase in available capital.<sup>94</sup> Asian Venture Philanthropy Network (AVPN) has noted this misalignment between financiers and businesses in the region, where businesses say there’s no funding and yet funders say there’s no pipeline.

According to the Conservation Finance Network (CFN), investors are looking for investments with management and business planning comparable to more typical mainstream investments. To access the growing pool of impact capital, these projects must better understand how to appeal to impact investors. CFN highlights the following findings on what impact investors are looking for:<sup>95,96</sup>

- There must be an underlying working business model for investors to risk their capital
- Investors are increasingly looking for impact opportunities that can provide strong interrelated social outcomes
- Investors are waiting for market standards and definitions and can shy away from first-time funds or new approaches with limited track records

<sup>93</sup> Richardson, Angela. 2019. “How can Asia bridge the gap between finance and sustainability?” *Eco-Business*, February 8. Accessed May 4, 2019. <https://www.eco-business.com/news/how-can-asia-bridge-the-gap-between-finance-and-sustainability/>.

<sup>94</sup> Mudaliar, Abhilash et al. 2017. *2017 Annual Impact Investor Survey*.

<sup>95</sup> Conti, Jeffrey. 2018. “Impact investors discuss how they view conservation investments.” *Conservation Finance Network*, July 25. Accessed May 5, 2019. <https://conservationfinancenetwork.org/2018/07/25/impact-investors-discuss-how-they-view-conservation-investments>.

<sup>96</sup> Conti, Jeffrey. 2018. “How to get an impact investor’s attention?” *Conservation Finance Network*, July 25. Accessed May 5, 2019. <https://conservationfinancenetwork.org/2018/07/25/how-to-get-an-impact-investors-attention>.

- One challenge is the limited number of capacity-building intermediaries in the conservation investing space
- More emphasis is needed on how impact can be generated and allocated on a portfolio level
- Some investors are not willing to accept below-market returns to generate verifiable impacts

### New Solutions Emerging for Impact Investing for Ocean Sustainability

The past few years have seen a handful of ocean-focused investment funds emerge, with an initial emphasis on sustainable wild-capture fisheries.

In late 2016, Althelia Ecosphere and USAID announced the launch of the **Althelia Sustainable Ocean Fund (SOF)** to provide impact financing for sustainable and responsible ocean economies. The SOF was bolstered by a risk sharing guarantee through USAID's Development Credit Authority (DCA).<sup>97</sup> The SOF states that it seeks to deliver both "strong investor returns and improved ecosystem health, marine conservation and associated livelihood benefits, such as food security and economic empowerment for coastal communities", as it deploys approximately US\$100 million across a portfolio of between 10 to 20 project investments in Latin America, the Caribbean and Asia. The SOF has since had a first close with commitments from leading institutional investors, including the European Investment Bank, AXA Investment Managers, the IADB, FMO and Caprock Group.<sup>98</sup>

The **Meloy Fund**, an impact investment fund launched by Rare Conservation to support sustainable coastal fisheries in Indonesia and the Philippines, saw its

commitments surpass US\$22 million in late 2018. Meloy seeks to invest in fishing and seafood-related enterprises that will lead to better management and protection of historically undervalued community-based coastal fisheries, as well as opportunities to boost the livelihoods of local, small-scale fishers.<sup>99</sup> Investments will be targeted to small and medium enterprises with expected tenors of 5-7 years and will be expected to earn between 10-15% returns, yielding an estimated gross internal rate of return of approximately 10.5% over the 10 year life of the fund.<sup>100</sup>

**Encourage Capital Pescador Holdings** invests in profitable sustainable seafood businesses in Latin America, the US and Europe, seeking to generate commercial financial returns and demonstrate systemic social and environmental impact. The holding company's strategy focuses on vertically integrating the seafood supply chain, increasing access to high-value markets and channels, and promoting the recovery and stabilization of wild fish stocks to the benefit of portfolio companies and fishing communities alike.<sup>101</sup>

The **Coalition for Private Investment in Conservation (CPIC)** was launched in 2016 by Credit Suisse, TNC, IUCN and Cornell University. As a global multi-stakeholder initiative focused on enabling conditions that support an increase in private, return-seeking investment in conservation, CPIC aims to facilitate the scaling of conservation investment by creating "blueprints" for the successful delivery of investable priority conservation projects, connecting pipeline providers with deal structuring support and connecting conservation project delivery parties with investors to execute investable deals.<sup>102</sup>

<sup>97</sup> Althelia Funds. 2016. "USAID partners with Althelia Sustainable Ocean Fund." *Althelia Funds*, October 19. Accessed May 5, 2019. <https://althelia.com/2016/10/19/althelia-sustainable-ocean-fund-statement/>.

<sup>98</sup> Althelia Funds. [n.d.]. "Sustainable ocean fund." Accessed May 5, 2019. <https://althelia.com/sustainable-ocean-fund/>.

<sup>99</sup> The Meloy Fund. 2018. "News." Accessed May 5, 2019. <https://www.meloyfund.com/news/>.

<sup>100</sup> Global Environment Facility. 2019. "Non-grant instruments." Accessed March 7, 2019. <https://www.thegef.org/topics/non-grant-instruments>.

<sup>101</sup> Encourage Capital. 2017. "Encourage Pescador Holdings." Accessed May 7, 2019. <http://encouragecapital.com/encourage-pescador-holdings/>.

<sup>102</sup> Coalition For Private Investment. 2017. <http://cpicfinance.com/>.



By early 2019, CPIC had launched blueprints in two areas directly relevant to ocean investment: Green Infrastructure for Coastal Resilience<sup>103</sup> and Sustainable Coastal Fisheries.<sup>104</sup> Taking a Source-to-Sea perspective, the other three blueprints for Green Infrastructure for Watershed Management, Forest Landscape Conservation and Restoration and Sustainable Agricultural Intensification could also be relevant to ocean health. According to CPIC, the blueprints serve as a model financial transaction structure intended to help facilitate replicable investments in priority conservation projects, describing the general enabling conditions necessary to facilitate project development, expected conservation outcomes, anticipated cash flows and the types of investors and capital stacks that are required for a financial transaction that delivers both economic and conservation returns.<sup>105</sup>

Supporting the work of CPIC, the **Conservation Finance Initiative (CFI)** managed by IUCN combines a GEF investment of US\$8 million with US\$2 million from Rockefeller Foundation. The CFI is expected to mobilize up to US\$100 million of private capital with the aim to improve investment in conservation through innovative blended finance models that enable the participation of return-seeking private investors.<sup>106</sup>

In terms of large development finance institution (DFI) financing, the launch of the **PROBLUE Fund** by the World Bank in late 2018 is notable. PROBLUE is a new Multi-Donor Trust Fund (MDTF) that supports healthy and productive oceans across four key themes: 1) management of fisheries and aquaculture; 2) threats

posed to ocean health by marine pollution, including litter and plastics; 3) sustainable development of key oceanic sectors such as tourism, maritime transport and off-shore renewable energy; and 4) building capacity of governments to manage their marine and coastal resources in an integrated fashion to deliver more and long-lasting benefits to countries and communities. At the time of writing, more than US\$100 million has been committed by donors to the PROBLUE Fund, including from Norway, Iceland, Germany, Sweden, Portugal, Denmark, France and the European Union.

Specific to the region, the Asian Development Bank (ADB) announced a new **Healthy Oceans Action Plan** in May 2019. The initiative aims to expand financing and technical assistance for ocean health and marine economy projects to US\$5 billion, focusing on: 1) inclusive livelihoods and business opportunities in sustainable tourism and fisheries; 2) protecting and restoring coastal and marine ecosystems and key rivers; 2) reducing land-based sources of marine pollution, including plastics, wastewater, and agricultural runoff; and 4) improving sustainability in port and coastal infrastructure development. ADB also launched an Oceans Financing Initiative to create opportunities for private sector investment in bankable blue economy projects through instruments such as credit risk guarantees and blue bonds.<sup>107</sup>

In addition to the launch of new facilities and funds, the past year has seen the release of new principles for guiding blue economy investment. The Sustainable Blue Economy Finance Principles,<sup>108</sup> launched by the European Commission, WWF, World Resources

<sup>103</sup> Coalition For Private Investment. 2017. "Green infrastructure for coastal resilience." Accessed May 7, 2019. <http://cpicfinance.com/blueprints/green-infrastructure-for-coastal-resilience/>.

<sup>104</sup> Coalition For Private Investment. 2017. "Sustainable coastal fisheries." Accessed May 7, 2019. <http://cpicfinance.com/blueprints/sustainable-coastal-fisheries/>.

<sup>105</sup> Coalition For Private Investment. 2017. "Blueprints" Accessed May 7, 2019. <http://cpicfinance.com/blueprints/>.

<sup>106</sup> GEF Secretariat. 2018. *GEF Assembly background note: Conservation finance*.

<sup>107</sup> Asian Development Bank. 2019. "ADB launches \$5 billion Healthy Oceans Action Plan." *Asian Development Bank*, May 2. Accessed May 14, 2019. <https://www.adb.org/news/adb-launches-5-billion-healthy-oceans-action-plan>.

<sup>108</sup> WWF-UK. 2018. "Sustainable Blue Economy finance principles." Accessed May 14, 2019. <https://www.wwf.org.uk/updates/sustainable-blue-economy-finance-principles>.

Institute (WRI) and the European Investment Bank (EIB) in late 2018 and endorsed by a long list of financial institutions and organizations, provide a standard for investing in the blue economy in a sustainable way. An accompanying IT-based tool is being developed to help investment managers assess whether their blue economy investment decisions are verifiably sustainable. A related Sustainable Blue Economy Finance initiative, under the auspices of the UN Environment Finance Initiative (UNEP FI), is also planned for launch in 2019.<sup>109</sup>

While not specifically ocean focused, the launch of the **Asia Sustainable Finance Initiative (ASFI)** in early 2019 further signaled the continuing rise of sustainable finance in Asia. With WWF as secretariat and partners including Global Canopy, UN Environment and WRI, the multi-stakeholder platform aims to shift Asia's financial flows towards sustainable economic, social and environmental outcomes by bringing together the finance industry, academia, and science-based organizations to support Singapore-based financial institutions operating in the region in deepening their sustainable finance expertise.<sup>110</sup>

To help solve challenges of pipeline development, recent years has seen an increasing number of business plan competitions, funding facilities and accelerators targeting Asia. The Blue Economy Challenge, for example, supported by Australian Aid and implemented by Conservation X Labs,

provided AU\$3 million for innovators, entrepreneurs, designers, NGOs and academics to rethink solutions for sustainable aquaculture in the Indian Ocean rim.<sup>111</sup> These competitions are often coupled with accelerators aimed at supporting early-stage, growth-driven companies through network support, mentorship and financing. Conservation X Lab's "Aquaccelerator" immerses innovators from its Blue Economy Challenge in a seven-month program of in-person and online business growth opportunities and customized support, enhanced by a global network of like-minded market leaders and technical experts to increase the impact of their designs and facilitate investment opportunities.<sup>112</sup> Fish 2.0, a global community that brings innovators together to grow the sustainable seafood sector, enables sustainable seafood businesses to meet potential investors, partners and advisors who can help them accelerate their impact and growth.<sup>113</sup>

Circulate Capital, a US\$90 million impact-focused investment firm dedicated to preventing the flow of plastic waste into the world's ocean, launched a multi-million-dollar Incubator Network to build ecosystems of waste management and recycling innovators in Indonesia, India, Vietnam, Thailand and the Philippines.<sup>114</sup> The BNCFF managed by IUCN supports the development of investable "blue natural capital projects" with clear ecosystem service benefits, based on multiple income streams and appropriate risk-return profiles. The BNCFF provides technical assistance and seed funding to

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<sup>109</sup> United Nations Environment Programme - Finance Initiative. 2018. "Pioneering global framework for sustainable ocean finance launched at Our Ocean Global Summit." *United Nations Environment Programme - Finance Initiative*, October 29. Accessed May 14, 2019. <https://www.unepfi.org/news/pioneering-global-framework-for-sustainable-ocean-finance-launched-at-our-ocean-global-summit/>.

<sup>110</sup> United Nations Environment Programme - Finance Initiative. 2019. "Asia Sustainable Finance Initiative launched." *United Nations Environment Programme - Finance Initiative*, January 21. Accessed May 14, 2019. <https://www.unepfi.org/events/asia-sustainable-finance-initiative-launch/>.

<sup>111</sup> InnovationXChange. 2015. "The Blue Economy challenge." Accessed May 14, 2019. <https://theblueeconomychallenge.com/>.

<sup>112</sup> InnovationXChange. 2015. "Aquaccelerator: supporting sustainable aquaculture solutions." Accessed May 14, 2019. <https://theblueeconomychallenge.com/aquaccelerator/>.

<sup>113</sup> Fish 2.0. [n.d.]. "What is Fish 2.0?" Accessed May 20, 2019. <https://www.fish20.org/about/overview>.

<sup>114</sup> Circulate Capital. [n.d.]. "The Incubator Network" Accessed May 20, 2019. <https://www.circulatecapital.com/incubator>.

*“There are major gaps in pipeline, largely due to local capacity. There are great entrepreneurs out there and we are excited to support them, but there simply aren’t enough of them with deep experience in creating and running new businesses.”*

**Rob Kaplan, Circulate Capital**

project partners to support assessing, preparing and structuring opportunities into bankable investments to help reduce the risk of natural capital investments.<sup>115</sup>

### Investing in Sustainable Fisheries

The ocean industry receiving the most attention from impact investors has been wild capture fisheries, where poor management and inefficient supply chains leave a lot of value on the table—by some estimates US\$600-\$1400 billion in present value over fifty years.<sup>116</sup> The ocean funds that have emerged—namely Encourage Capital’s Pescador Holdings, Althelia’s SOF and Rare’s Meloy Fund—have all taken an interest in fisheries first. Impact investors are generally ready to invest capital in sustainable fisheries, but face the same problem of a lack of investible entities with the capacity to accept investment as well as concerns about unpredictability, property rights, inability to monitor, long investment horizons and lack of project-development capital.<sup>117</sup>

The Blueprints for Sustainable Investments in Fisheries released in 2016 by Encourage Capital, Bloomberg Philanthropies and Rockefeller Foundation through its Vibrant Oceans Initiative provide a useful tool to replicate various forms of investment in sustainable fisheries. Each Investment Blueprint lays out a proposed set of fishery management improvements and profitable investments that establish quantifiable base-case impact targets for positive ecological and social impacts.<sup>118</sup>

Environmental Defense Fund (EDF) teamed up with Credit Suisse to create an Excel-based risk assessment tool for wild fisheries investments that catalogues risk factors unique to fisheries into a highly customizable decision guide.<sup>119</sup> The release of the Principles for Investment in Sustainable Fisheries in 2018 marked an important shift towards a more structured approach to investing in sustainable fisheries. The principles, endorsed by a who’s-who list of organizations in the sustainable fisheries space, are designed to move new capital into sustainable fishery investments, aligning it with responsible management and providing more assurance to investors that building sustainability into fisheries can also yield a return on investment.<sup>120</sup>

### International Development Organizations Move into Impact Investing

The potential for private sector investment in sustainable development has landed within the international non-governmental organization (INGO) community. According to “Amplify: the next mile of

<sup>115</sup> IUCN. 2019. “Blue Natural Capital.” Accessed May 20, 2019. <https://bluenaturalcapital.org/>.

<sup>116</sup> Wilderness Markets. [n.d.]. “Developing investment opportunities in sustainable marine capture fisheries.” Accessed May 21, 2019. <http://www.wildernessmarkets.com/developing-investment-opportunities-in-sustainable-marine-capture-fisheries/>.

<sup>117</sup> Wilderness Markets. [n.d.]. “Investing for sustainable fisheries needs funding for capacity building.” Accessed May 26, 2019. <http://www.wildernessmarkets.com/fishery-enterprises-need-capacity/>.

<sup>118</sup> Encourage Capital, LLC. 2019. <http://investinvibrantocceans.org/>.

<sup>119</sup> Environmental Defense Fund. 2019. “Putting fisheries investment risk in perspective.” Accessed May 26, 2019. <https://www.edf.org/oceans/putting-fisheries-investment-risk-perspective>.

<sup>120</sup> Principles for Investment in Sustainable Wild-Caught Fisheries. 2019. <http://www.fisheriesprinciples.org/>.

impact investing for NGOs” published by the INGO Impact Investing Network, INGOs are experimenting with a number different approaches to impact investment—investing patient capital, developing pipeline for other investors, launching incubators and accelerators, creating seed and early-stage investment vehicles, conducting advocacy for improved access to finance, launching impact-themed funds and investing in under-banked markets, among others.<sup>121</sup>

INGOs involved in the impact investment space are doing so in increasingly sophisticated ways, functioning as intermediaries, providing technical assistance to investees and project developers, sometimes though accelerators, and facilitating access to different forms of capital through blended finance. They leverage their strengths in understanding local context and operating realities in emerging markets, an ability to access grant or philanthropic funding to de-risk investments, a commitment to ensuring the positive social and environmental impact of investments and expertise in measuring that impact. These organizations play a

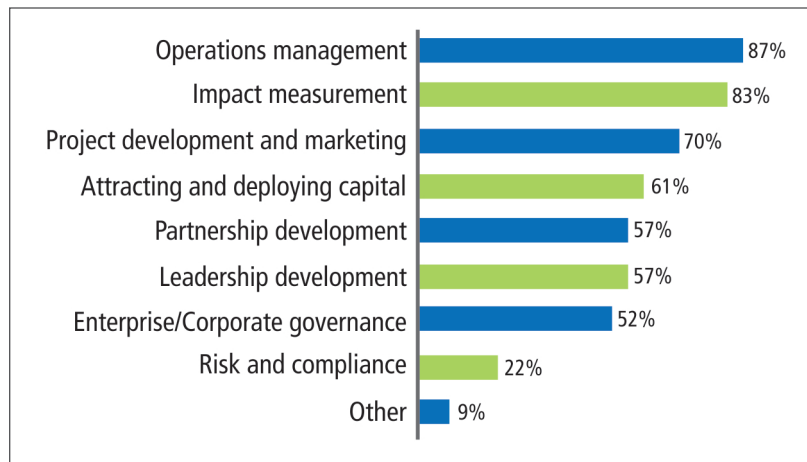
particularly important role in addressing the “pioneer gap” or “missing middle” of enterprises requiring technical assistance and capacity development to become investment-ready for more traditional impact investors. Often, INGO’s presence in a deal can help to de-risk investments given their knowledge of frontier markets, building programs and conducting research in specific sectors.<sup>122</sup>

INGOs possess a unique value proposition to serve the impact investment ecosystem:

- Convening power to bring together government, multilateral donors, nonprofits and the private sector to engage in holistic approaches
- Designing interventions for local contexts, with an ability to aggregate across larger geographic areas for knowledge sharing and scale
- Science-based research to inform decision-making, performance measurement, standards development and evidence-based tools

Overall, the sentiment is that the past few years have marked a turning point for blue economy investment.

**Figure 16: Technical Assistance from INGOs to Entrepreneurs/Enterprises.**



Source: INGO Impact Investing Network

<sup>121</sup> Dente, Tom et al., ed. 2018. *Amplify II: the next mile of impact investing for INGOs*. Humentum and INGO Impact Investing Network.

<sup>122</sup> *Ibid.*

Credit Suisse points out that it is seeing impact investing become a strong priority for its clients, with ocean conservation of particular importance. Marisa Drew, CEO Impact Advisory and Finance at Credit Suisse believes that “opportunities for clients to invest in marine conservation and the blue economy will continue to grow alongside the growth in demand from those looking to help make a difference in the health of our oceans.”<sup>123</sup>

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<sup>123</sup> Marshall, Peter and Hanli Prinsloo. 2018. “The tides are turning: Why the Blue Economy matters.” *Credit Suisse*, June 19. Accessed May 26, 2019. <https://www.credit-suisse.com/corporate/en/articles/news-and-expertise/the-tides-are-turning-why-the-blue-economy-matters-201806.html>.

## Appendix E: The Importance of Blended Finance

There has been a growing recognition that government funding and philanthropy alone will not be enough to achieve the targets under the UN SDGs. The nature of grant funding is changing and competition for resources is increasing. Development organizations look increasingly to the private sector and private, return-seeking capital as an opportunity for impact and scale. According to Credit Suisse, “even with the best science, partnerships and policies, we will not achieve long-term ocean health without adequate funding. Many of the important efforts require longer-term impact finance rather than short-term grant funding to help stakeholders make the transition to sustainable practices.”<sup>124</sup>

The GEF estimates that US\$300-400 billion is needed annually to preserve healthy terrestrial and marine ecosystems, but only US\$52 billion is currently flowing towards projects supporting conservation. Meanwhile the private sector manages an estimated US\$300 trillion in assets.<sup>125</sup> The size of the blended finance market is estimated at over US\$50 billion with the potential to double over the next three to four years.<sup>126</sup> Blending different forms of capital offers exciting potential for unlocking greater scale of investment and impact. The 2012 *Catalysing Ocean Finance report* from UNDP estimates that reducing, and in some cases arresting, the

degradation of coastal and ocean resources would require an initial public investment of about US\$5 billion by around 2030.<sup>127</sup> Unfortunately, according to *The State of Blended Finance 2018* from Convergence, SDG 14 ranks second to last of the 17 SDGs in terms of the proportion of deals aligned with it.<sup>128</sup>

Blended finance is defined by the Blended Finance Taskforce as “strategic use of public or philanthropic development capital for the mobilization of additional external private commercial finance for SDG-related investments,” where private investors would otherwise not have participated.<sup>129</sup>

Research by the AVPN on the “Continuum of Capital in Asia” highlights that donors, while invariably impact-only and impact-first in their investments, play a critical role as catalysts in impact areas that have yet to become attractive or viable for impact investment. Donors are well-positioned to act as market catalysts, providing patient, catalytic capital, and as ecosystem builders, with an opportunity to act as a bridge between the global and local market. Donors have an opportunity to move beyond traditional grant-making to support and scale social innovations with a full spectrum of direct investments and non-financial support, but they must be open to new ideas and approaches, taking on a mindset of continuous learning.<sup>130</sup>

<sup>124</sup> Credit Suisse Group Editorial Office. 2018. “The “Blue Economy”: A sustainable future for the ocean.” *Credit Suisse*, May 14. Accessed May 26, 2019. <https://www.credit-suisse.com/corporate/en/articles/news-and-expertise/the-blue-economy-a-sustainable-future-for-the-ocean-201805.html>.

<sup>125</sup> GEF Secretariat. 2018. *GEF Assembly background note: Conservation finance*.

<sup>126</sup> Blended Finance Taskforce. 2018. <https://www.blendedfinance.earth/about/>.

<sup>127</sup> Hudson A. and Glemareck Y., (eds). 2012. *Catalysing ocean finance. Volume I: Transforming markets to restore and protect the global ocean*. United Nations Development Programme, New York.

<sup>128</sup> Convergence. [n.d.]. *The State of Blended Finance 2018*.

<sup>129</sup> Blended Finance Taskforce. 2018. *Better finance, Better world. Consultation paper of the Blended Finance Taskforce*.

<sup>130</sup> Asian Venture Philanthropy Network. 2019. “Leveraging the full spectrum of philanthropic capital towards impact: Case studies from Asia Pacific and the US.” Accessed May 29, 2019. <https://avpn.asia/insights/leveraging-philanthropic-capital/>.



**Figure 17: Blended Finance Definition.**

PUBLIC OR PHILANTHROPIC DEVELOPMENT CAPITAL	EXTERNAL PRIVATE COMMERCIAL FINANCE
<p><i>Capital with some objective other than maximising returns – includes but is not limited to concessional capital</i></p> <p><b>Concessional ODA from donor countries</b></p> <ul style="list-style-type: none"> <li>▪ Total annual ODA flow \$143 billion 2016</li> <li>▪ Total estimated available concessional facilities for blended finance around \$20 billion today</li> </ul> <p><b>Concessional or commercial funds MDBs and DFIs</b></p> <ul style="list-style-type: none"> <li>▪ Total annual flow MDB and DFI activity around \$220 billion 2016</li> </ul> <p><b>Philanthropic funds from foundations</b></p> <ul style="list-style-type: none"> <li>▪ Total AUM around \$1 trillion</li> </ul> <p><b>Investment by impact funds below market rate</b></p> <ul style="list-style-type: none"> <li>▪ Total annual commitments around \$1-2 billion 2016 (16% of total estimated below market rate, closer to capital preservation)</li> </ul>	<p><i>Capital whose primary objective is maximising commercial returns</i></p> <p><b>Commercial investment by asset owners (e.g. pension funds, insurers, SWFs), asset managers, project developers and endowments</b></p> <ul style="list-style-type: none"> <li>▪ Total overall AUM estimated at \$200 trillion</li> <li>▪ Total AUM “alternatives” estimated at \$6 trillion</li> </ul> <p><b>Investment by impact funds at or close to market rate</b></p> <ul style="list-style-type: none"> <li>▪ Total AUM \$114 billion</li> <li>▪ Total annual commitments \$22 billion in 2016 (84% of total at or closer to market rate)</li> </ul>

Source: Blended Finance Taskforce

The GEF was an early adopter of blended finance approaches. Its policy allows for the use of non-grant instruments, which provide financing in a form that has the potential to generate financial returns, to leverage capital for targeted investments. The GEF has successfully used blended finance models over two decades to pioneer and scale-up financing of new technologies in renewable energy, energy efficiency and urban transport, showing promise for application towards blue economy investment. Common instruments used by the GEF for blended finance include:<sup>131</sup>

1. Guarantees providing protection from various forms of risks of capital loss for the investor, e.g., credit guarantees, performance risk guarantees

2. Equity, typically in the form of junior equity accepting higher risks for lower financial returns, e.g., equity/investment fund, revolving equity fund
3. Debt, typically in the form of subordinated or concessional debt (or both), e.g., contingent loan, concessional loan, revolving loan fund

Likewise, the Asian Development Bank has developed a Green Finance Catalyzing Facility to utilize blended financing, linking it with performance and policy conditionalities to address the core problem of degrading ecosystems, constrained bankability and discontinuous investment pipelines.<sup>132</sup>

<sup>131</sup> Global Environment Facility. 2014. *GEF-6 Non-grant instrument pilot and updated policy for non-grant instruments*.

<sup>132</sup> Mehta, Anouj et al. *Catalyzing Green Finance: A concept for leveraging blended finance for green development*. Asian Development Bank, Mandaluyong City, Philippines.

INGOs can play an important role as intermediaries between grant capital and impact investors for bringing together blended finance solutions. Intermediaries, such as PEMSEA, are critical to maximize impact given their technical expertise and local knowledge. AVPN calls for more support for intermediaries given their critical role in ecosystem building.<sup>133</sup> According to the report “Amplify: the next mile of impact investing for NGOs”, INGOs have significant value to add in the blended finance market:

- **De-risk investments**, evaluating the local investment context, including policy, value chains and communities, while creating trust through networks
- **Increase access to concessional funds**, with the power to convene various stakeholders with different return/risk/impact expectations, especially strong relationships with bi- and multi-laterals that provide concessional financing
- **Pilot mechanisms for private capital to scale**, debunking myths about the risk of impact investments, incubating social enterprises and assisting them in attracting investment or using grant money for market research
- **Lower transaction costs**, using local networks and knowledge of local context to lower the cost of conducting due diligence for co-investors or private sector partners
- **Provide measurement of social outcomes**, helping partners to agree upon and measure the desired social impact

*“Mobilizing investment for the SDGs requires a working blended finance ecosystem which has enough large-scale, long-term capital, catalytic intermediaries and a solid pipeline of bankable projects.”*

#### **Blended Finance Taskforce**

The OECD developed a set of “Blended Finance Principles for Unlocking Commercial Finance for the Sustainable Development Goals” as a common framework and policy tool for providers of development finance. The principles are intended to help move financing of the SDGs from “billions to trillions”, well beyond the US\$146.6 billion provided as official ODA in 2017.<sup>134</sup>

In early 2019, MacArthur Foundation, The Rockefeller Foundation and Omidyar Network launched the Catalytic Capital Consortium to address financing gaps for funds and intermediaries that conventional financiers won’t touch.<sup>135</sup> They believe that catalytic capital is essential for unlocking the US\$5-7 trillion a year financing gap to achieve the SDGs.

<sup>133</sup> Asian Venture Philanthropy Network. 2019. “The continuum of capital in Asia.” Accessed May 29, 2019. <https://avpn.asia/insights/continuum-of-capital/>.

<sup>134</sup> OECD. 2019. “OECD DAC Blended Finance Principles.” Accessed May 29, 2019. <https://www.oecd.org/dac/financing-sustainable-development/blended-finance-principles/>.

<sup>135</sup> Field, Anne. 2019. “New consortium of heavy hitters aims to boost the power of catalytic capital.” *Forbes Media LLC*, March 12. Accessed May 29, 2019. <https://www.forbes.com/sites/annefield/2019/03/12/new-consortium-of-heavy-hitters-aims-to-boost-the-power-of-catalytic-capital/>.

## Appendix F: Other Forms of Innovative Finance

While tapping into impact investment remains the most commonly used approach for INGOs to crowd in more private investment, a number of other mechanisms are being explored around the world for unlocking more private capital supporting conservation and sustainable development—some are new, others are new applications of familiar mechanisms. The NGO network InterAction offers a useful view of “innovative” finance as “any instrument beyond a traditional grant that mobilizes new capital and/or improves the efficiency or effectiveness of existing capital to tackle social and environmental problems... The ‘innovation’ can stem from introducing a new financing product, repurposing an existing product, or crowding in new players”.<sup>136</sup>

Innovative finance can come in many forms: fees and taxes, dedicated conservation funds, loans and loan guarantees, bond financing, payment for ecosystem services, debt swaps, biodiversity offsets, project finance, and crowdfunding, among others. InterAction’s report on Innovative Finance for Development (IF4D) includes a useful chart comparing the various instruments. UNDP’s Biodiversity Finance Initiative (BIOFIN) maintains a comprehensive catalogue of instruments, tools and strategies applicable to biodiversity-related finance, many of which apply to oceans (<https://biodiversityfinance.net/finance-solutions>). The following highlight a few mechanisms that have emerged recently with promising cases for ocean finance.

### Blue bond financing

“Green Bonds” are an emerging fixed-income finance product where proceeds are dedicated to funding climate change mitigation, adaptation and other environmentally friendly projects. According to the Climate Bonds Initiative’s State of the Market 2018 report, 2018 saw the labelled bond market size top US\$167.6 billion.<sup>137</sup> 2018 also witnessed a rise in label diversification with the issuance of “sustainability”, “SDG” and “social” bonds. Related to oceans, “blue bonds” represent the application of green bonds towards financing ocean-related assets. In 2018, the government of the Seychelles issued the first sovereign blue bond (for US\$15 million) with proceeds going towards efforts to improve fisheries management and coastal conservation. The approach includes a unique blending of GEF non-grant funding. Based on its success in the Seychelles, in April 2019 The Nature Conservancy announced plans for US\$1.6 billion in blue bonds through its Blue Bonds for Conservation initiative, which aims to protect over 4 million square kilometers of the world’s oceans in the next five years.<sup>138</sup> For the PEMSEA region, the release of the ASEAN Green Bond Standards in late 2017 also marked an important policy milestone.<sup>139</sup>

<sup>136</sup> Sarkisova, Elina and Rita Perakis. 2018. *Innovative finance for development: A guide for international NGOs*.

<sup>137</sup> Climate Bonds Initiative. 2019. *2018 Green Bond Market Summary*.

<sup>138</sup> The Nature Conservancy. 2019. “Blue Bonds: An audacious plan to save the world’s oceans.” *The Nature Conservancy*, April 16. Accessed June 3, 2019. <https://www.nature.org/en-us/what-we-do/our-insights/perspectives/an-audacious-plan-to-save-the-worlds-oceans/>.

<sup>139</sup> ACMF (ASEAN Capital Markets Forum). 2017. *ASEAN Green Bond Standards*. Revised, October 2018.

## Debt restructuring

Another approach being pioneered by TNC, through its NatureVest platform, is the use of debt conversion for marine conservation. Developing countries around the world that are most dependent on oceans also tend to be the most vulnerable to the impacts of climate change. They are also, unfortunately, often excessively burdened with sovereign debt as they look to finance their development. In a now well-known example, TNC helped to engineer a debt restructuring between the Government of Seychelles and its creditors that also included a strong marine conservation component.<sup>140</sup> The restructuring used a combination of investment capital and grants and allowed the government to free up capital that can be directed toward climate change adaptation and marine conservation activities that benefit fisheries and tourism. It's hoped that the Seychelles example can serve as a model for public-private co-investment debt restructuring in other parts of the world.

## Insurance

Also being explored by TNC is the application of insurance to help manage marine ecosystems. It's been shown that loss of the top 1 meter of healthy reef can double onshore financial losses.<sup>141</sup> In a unique pilot project in Mexico, state government and hotel owners are partnering with TNC and The

Rockefeller Foundation to establish a Coastal Zone Management Trust that will finance ongoing maintenance of reefs and beaches and purchase insurance to restore them after extreme storms. The innovative funding system helps to protect a US\$10 billion tourism industry, bolstering economic resilience of the region and encouraging conservation of a valuable natural asset.<sup>142</sup> UNDP and The Nature Conservancy are working together to create similar markets for nature-based insurance products in other countries.<sup>143</sup>

The Pacific Ocean Finance Program (POFP), which aims to develop novel ocean finance, points out that the goal of ocean finance should not be simply more funding, but ultimately good ocean governance and ocean health. Four actions are suggested for focusing on strategic and ongoing financial planning to support ocean governance goals:<sup>144</sup>

- **Generate** public and private financial capital through traditional and innovative finance mechanisms to create a diversified portfolio of revenue that supports ocean health.
- **Invest** financial capital effectively, efficiently, and strategically to achieve measurable ocean outcomes and sustained ocean governance.
- **Account** for how financial capital is deployed against performance benchmarks, and account for values of marine ecosystem services through time.
- **Align** public and private economic incentives with long-term ocean health.

<sup>140</sup> The Nature Conservancy. 2019. "Nature Vest." Accessed June 3, 2019. <http://www.naturevesttnc.org/investment-areas/ocean-protection/>.

<sup>141</sup> The Nature Conservancy. 2019. "Coastal protection." *Mapping Ocean Wealth*. Accessed June 3, 2019. <https://oceanwealth.org/ecosystem-services/coastal-protection/>.

<sup>142</sup> The Nature Conservancy. 2018. "Insuring nature to ensure a resilient future." *The Nature Conservancy*, March 8. Accessed June 5, 2019. <https://www.nature.org/en-us/what-we-do/our-insights/perspectives/insuring-nature-to-ensure-a-resilient-future/>.

<sup>143</sup> Way, Mark and Jan Kellett. 2018. "Reefs for resilience: Insuring our shared natural capital." *The Nature Conservancy*, April 26. Accessed June 5, 2019. <https://www.nature.org/en-us/what-we-do/our-insights/perspectives/reefs-for-resilience-insuring-our-shared-natural-capital/>.

<sup>144</sup> Walsh, Melissa. 2018. *Ocean finance: Definition and actions*.

The POFP Knowledge Portal (<https://www.pacificoceanfinance.org/finance-solutions>) includes a useful catalogue of finance mechanisms relevant for oceans and a register of specific examples of innovative ocean finance solutions.

A diversified approach to funding sources is the best approach to ensure that ocean conservation efforts are financially sustainable, not over focusing on any

one mechanism. The role of policy should not be overlooked, with instruments including subsidies and tax incentives helping to promote investments in sustainable development. Likewise, the importance of partnering with both regional development banks and local banks should be recognized in developing and implementing financing mechanisms given their expertise, knowledge of the market and role as financial intermediaries.

## Appendix G: Potential Fund Strategies for a Sustainable Ocean Investment Fund

### 1) Impact Fund

**Vision, mission and investment philosophy:** Dedicated to private and illiquid investments with social and environmental impact that promote ocean conservation and sustainable development. The fund will target investments on the project, entrepreneur and SME level that favorably impact the environment or have meaningful human and social impact as it relates to the ocean space while providing returns on invested capital for the investor.

**Type of fund:** Closed-end, Social Impact, Private Fund

**Size of fund/Capitalization:** US\$10 million

**Investment mandate:** The fund will focus on small-sized investments in environmentally and/or socially impactful projects in coastal and marine areas that seek funding through equity, hybrids, mezzanine debt or customized financing structures, yet may not have the financial profile that produces high investor returns

**Sector focus/verticals:**

- Ecotourism / Sustainable Tourism (including coastal development)
- Fisheries & Aquaculture
- Pollution Reduction and Waste Management
- Biodiversity
- Habitat Protection, Restoration and Management
- Small-scale Water Use and Water Supply Projects (e.g., sewerage systems, wastewater purification and recycling)
- Natural and Man-made Hazard Prevention and Management (e.g., coastal defense infrastructure)
- Low Carbon / Climate Smart Development (e.g., energy efficiency, reducing CO2 Emissions for Maritime industries)

**Fund Term/Investment Horizon:** 7-10 years, with a possible 2-year extension

**Capital investment size:** US\$250,000 – US\$1,000,000 per investment

**Average Size of Investment portfolio:** Between 10 – 20 investments

**Asset life-cycle:** Up to 10-year asset life

**Investment Period:** 3 years after fund close

**Divestment period:** 7–10 years after fund close

**Type of investment management:** Active management of private, illiquid investments



**Exit options:** Share re- purchase agreement or resale of ownership stakes to other social impact funds or market driven funds or roll-over of the fund into another fund at term end

**Hurdle rate:** Predominant risk-free rate

**IRR target:** 8-12%

**Potential investors:** Governments, Philanthropic Funds, Philanthropists, International Financial Organizations, Family Offices, HNW individuals, Endowments and Foundations

## 2) Venture / Early Stage Capital Fund

**Vision, mission and investment philosophy:** Dedicated to early-stage private and illiquid investments in the coastal and marine areas. The investment philosophy of the fund will seek to identify investments on the entrepreneurial, private company and SME level that generate positive environmental and social impact, while providing attractive market-driven returns on invested capital for the investor. The fund will seek to advance entrepreneurial private efforts towards the development of technologies, product and service offerings that aim to protect coastal and marine health, as well as develop the ocean as a sustainable resource for humanity.

**Type of fund:** Closed-end, Venture Capital Private Fund

**Size of fund/Capitalization:** US\$25-30 million

**Investment mandate:** The fund will focus on small to medium size investments in environmentally or socially desirable projects in the ocean, marine and coastal areas, that seek funding through equity and hybrids and provide highly attractive investor returns. The investments will fund businesses that are both on a pre-revenue and post-revenue stage of their development.

### **Sector focus/verticals:**

- Coastal and Ocean Technology-Enabled Products and Services (including biotechnology)
- Ecotourism / Sustainable Tourism (including coastal development)
- Marine Renewable Energy
- Fisheries & Aquaculture
- Pollution Reduction and Waste Management Technologies and Technology-Enabled Products or Services
- Water Use and Water Supply Technologies and Technology-Enabled Products or Services
- Natural and Man-made Hazard Prevention and Management Technologies and Technology-Enabled Products or Services

- Low Carbon / Climate Smart Technologies and Technology-Enabled Products or Services
- Information, Data Analytics and Communications Technology related to Coasts and Oceans
- Marine Spatial Planning Technologies
- Technology-Enabled Products and Services for Habitat Protection, Restoration & Management

**Fund Term/Investment Horizon:** 10 years, with a 2-year extension

**Capital investment size:** US\$1,000,000 – 2,000,000 per investment

**Average Size of Investment portfolio:** 15 initial investments, with follow-on on the winning investments

**Asset life-cycle:** Up to 10-year asset life

**Investment Period:** 5 years after fund close, 3 years after close for very early growth investments

**Divestment period:** 7-10 years after fund close

**Type of investment management:** Active management of private, illiquid investments

**Exit options:** Mergers & Acquisitions, Secondary Resales to later stage VC fund or early stage PE funds

**Hurdle rate:** 6-8%

**IRR target:** 25-30%

**Potential investors:** Governments, Multilateral Financial Institutions, Private Pension Funds, Family Offices, Sovereign Wealth Funds, Private Banks, HNW individuals

### 3) Growth Capital Fund

**Vision, mission and investment philosophy:** Dedicated to later-stage private and illiquid investments in coastal and marine areas. The investment philosophy of the fund will seek to identify investments on the entrepreneurial, private company and SME level that generate positive environmental and social impact, while providing attractive market-driven returns on invested capital for the investor. The fund will seek to advance private and public efforts towards the development of technologies and product and service offerings that aim to protect coastal and marine health, as well as develop the ocean as a sustainable resource for humanity.

**Type of fund:** Closed-end, Growth Capital Private Fund

**Size of fund/Capitalization:** US\$25-30 million

**Investment mandate:** The fund will focus on small- to medium-sized investments in environmentally or socially desirable projects in coastal and marine areas that seek funding through equity and hybrids and provide attractive investor returns. The investments will provide funding to later-stage businesses only that have proven business models and generate revenue and EBITDA.

**Sector focus/verticals:**

- Sustainable Ports, Shipping and Marine Transport
- Ecotourism / Sustainable Tourism (including Coastal Development)
- Marine Renewable Energy
- Fisheries & Aquaculture
- Pollution Reduction and Waste Management
- Water Use and Water Supply Management
- Natural and Man-made Hazard Prevention and Management
- Low Carbon / Climate Smart Development
- Information, Data Analytics and Communications Technology related to Coasts and Oceans
- Marine Spatial Planning
- Coastal and Ocean Technology-Enabled Products and Services (including biotechnology)
- Habitat Protection, Restoration and Management

**Fund Term/Investment Horizon:** 10 years, with a 2-year extension

**Capital investment size:** US\$2,000,000 – 4,000,000 per investment

**Average Size of Investment portfolio:** 15 initial investments, with follow-on on the winning investments

**Asset life-cycle:** Up to 10-year asset life

**Investment Period:** 4-6 years after fund close

**Divestment period:** 5-7 years after fund close

**Type of investment management:** Active management of private, illiquid investments

**Exit options:** Mergers & Acquisitions, Secondary Re-sales to later stage or Buy-out Funds, IPOs where applicable

**Hurdle rate:** 8%

**IRR target:** 20-25%

**Potential investors:** Governments, Multilateral Financial Institutions, Private Pension Funds, Family Offices, Sovereign Wealth Funds, Private Banks, HNW individuals, Strategic Investors

#### 4) Infrastructure Fund

**Vision, mission and investment philosophy:** Dedicated to infrastructure investments in coastal and marine areas. The investment philosophy of the fund will seek to identify project finance investments and Private Partnerships that generate positive environmental and social impact, while providing attractive market-driven returns on invested capital for the investor. The fund will seek to advance public and private efforts towards the development of larger-scale infrastructure projects in the region that aim to protect coastal and marine health, as well as develop the ocean as a sustainable resource for humanity.

**Type of fund:** Closed-end, Infrastructure Fund

**Size of fund/Capitalization:** US\$30-40 million

**Investment mandate:** The fund will focus on brownfield environmentally or socially desirable infrastructure projects in coastal and marine areas that seek funding through high leverage (loans, bonds, mezzanine, fixed income alternatives), as well as through unlisted equity.

**Sector focus/verticals:**

- Sustainable Ports, Shipping and Marine Transport
- Ecotourism / Sustainable Tourism (including Coastal Development)
- Marine Renewable Energy
- Large-scale Infrastructure for Fisheries & Aquaculture
- Large-scale Pollution Reduction and Waste Management Infrastructure
- Large-scale Water Use and Water Supply Management Infrastructure
- Large-scale Natural and Man-made Hazard Prevention & Management Infrastructure
- Large-scale Low Carbon / Climate Smart Development

**Fund Term/Investment Horizon:** 12-15 years, with a 1-2-year extension

**Capital investment size:** US\$6,000,000 – 8,000,000 per investment

**Average Size of Investment portfolio:** 5 initial investments for 1st closing, to be followed by 2nd fund closing to bring the fund up to US\$100M if investment pipeline allows for 10-12 investments

**Asset life-cycle:** Up to 15-20-year asset life

**Investment Period:** 2-3 years after 1st fund close for the initial 4-5 investments

**Divestment period:** 7-12 years after fund close

**Type of investment management:** Active management of private, illiquid infrastructure investments

**Exit options:** Mergers & Acquisitions, Secondary Re-sales to Infrastructure Funds

**Hurdle rate:** 8%

**IRR target:** 10-12% unlevered equity IRR; 15-17% levered IRR

**Potential investors:** Governments, Multilateral Financial Institutions, Family Offices, Sovereign Wealth Funds, HNW individuals, Strategic Investors

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Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) is an intergovernmental organization operating in East Asia to foster and sustain healthy and resilient oceans, coasts, communities and economies across the region. Through integrated coastal management solutions and partnerships, PEMSEA works with local and national governments, international development organizations, companies, investors and research institutions towards sustainable development of coasts and oceans in East Asia.