



Partnerships in
Environmental Management
for the Seas of East Asia

Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) Implementation Plan

2012 - 2016



Global Environment
Facility



United Nations
Development Programme



United Nations Office for
Project Services



**SUSTAINABLE DEVELOPMENT STRATEGY FOR
THE SEAS OF EAST ASIA (SDS-SEA)
IMPLEMENTATION PLAN**

2012-2016

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FOREWORD

In 2010, PEMSEA Country and Non-Country Partners agreed to undertake joint planning for the development of the SDS-SEA medium-term implementation plan¹, and exercise collaborative actions to:

- Shift coastal and ocean governance from being government-centered to a more inclusive approach involving both government and stakeholder partners;
- Consolidate regional efforts in achieving target-focused action programs;
- Mobilize the human and financial resources of stakeholder partners through a common platform and framework for coastal and ocean governance;
- Re-orient existing fragmented projects and programs related to coastal and ocean management; and
- Instill a dynamic process to enable advocacy, monitoring and evaluation of progress and impacts.

The preparation of the SDS-SEA implementation plan entailed a series of consultations and planning sessions at the regional, national and sub-national levels. The planning sessions included representatives from national agencies, local governments, academe, non-government organizations, bilateral and multilateral projects, and the business sector.

PEMSEA's Framework for Sustainable Development of Coastal Areas through ICM (Figure 1) was employed as a guide for the planning sessions. There are three main components to the Framework, namely:

- A governance component that emphasizes interagency and multisectoral cooperation and the integration of policies and strategies to create a policy atmosphere for environmental investments, legislation, institutional arrangements, knowledge and information sharing, capacity development and sustainable financing;
- A sustainable development aspects component, which covers 5 main management considerations that are an integral part of sustainable development of marine and coastal areas, namely: natural and man-made hazard prevention and management; habitat protection and restoration management; water use and supply management; food security and livelihood management; and pollution reduction and waste management; and

¹PEMSEA Meeting Report 9. Proceedings of the Third EAS Partnership Council Meeting, Dandong, Liaoning Province, PR China, 26-29 July 2010.

- A State of the Coasts (SOC) reporting system, to monitor and assess baseline conditions and the responses, trends, impacts and outcomes of ICM programs, using an agreed set of indicators.

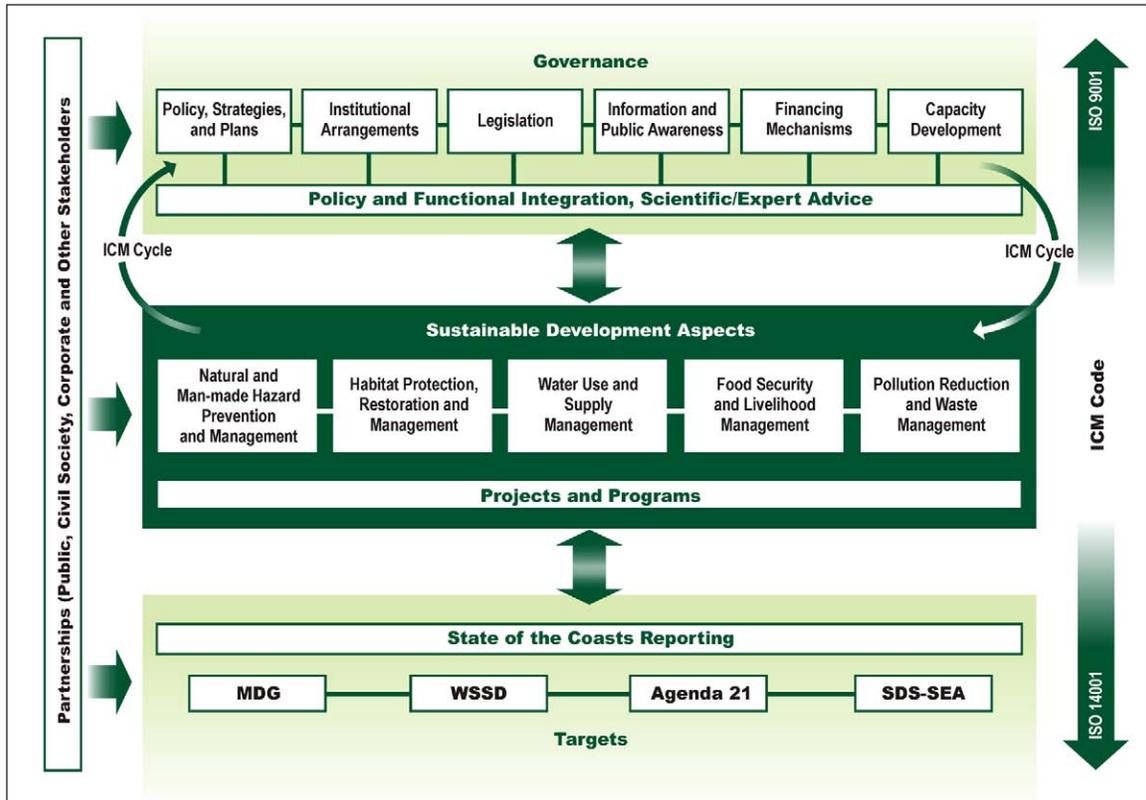


Figure 1: Framework for Sustainable Development of Coastal Areas through ICM

The Framework was used to:

- Review and validate progress and challenges with regard to implementation of SDS-SEA strategies and action programs;
- Identify sectoral activities and priorities in relation to the components of the Framework;
- Consolidate sectoral outputs into a listing of national priority issues and outputs;
- Formulate action plans in support of national priorities and outputs and, where appropriate, identify strategic locations in the country where the development and implementation of ICM programs could be employed to address sectoral and cross-cutting concerns; and
- Prepare a monitoring and evaluation program, including the development of progress and impact indicators in accordance with the SOC reporting system.

Through the collaborative planning process a consensus emerged among the participants on the medium-term priorities. Although perspectives and conditions varied from country-to-country across the region, core issues were clustered into: (a) improved coastal and ocean governance at the regional, national and local levels; (b) ICM scaling up priorities to protect and sustain coastal and marine ecosystem services while building an ocean-based blue economy; (c) capacity development and knowledge management programs; (d) innovative sustainable financing mechanisms; and (e) monitoring, evaluation and reporting systems.

The coastal and ocean priorities in each country were then translated into specific actions, considering current and planned programs, projects and activities of the various national agencies and local governments. Gaps and potential synergies to be considered in the development and updating of sectoral programs, plans and actions were identified and priority locations were mapped in order to explore collaborative initiatives across sectors. Information was then summarized for each priority issue, detailing actions, progress indicators, priority sites, responsible agencies, resource and capacity needs, and the monitoring and reporting process.

At the end of the process, 5-year national SDS-SEA/ICM Implementation Plans were prepared in Cambodia, China, DPR Korea, Indonesia, Lao PDR, Philippines, Thailand, Timor Leste and Vietnam. The national plans were then rolled into this regional implementation plan, along with contributions from Japan, RO Korea and Singapore, as well as PEMSEA Non-Country Partners, Sponsors and collaborators, the EAS Partnership Council and the Executive Committee.

I. PEMSEA: A REGIONAL PARTNERSHIP MECHANISM IN COASTAL AND OCEAN GOVERNANCE

PEMSEA is an international organization specializing in integrated coastal and ocean governance for the Seas of East Asia. It is a partnership arrangement comprised of 11 Country Partners and 19 Non-Country Partners² with a collective commitment to the implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA). The SDS-SEA represents a consensus among Partners on the shared vision, mission, objectives and action programs of PEMSEA for sustainable development of the Seas of East Asia.

PEMSEA operates in accordance with the following principles:

- **Participation** by all countries of the region as well as concerned stakeholders, within their respective capacities and resources, is the key to confronting and overcoming the challenges to sustainable development of the Seas of East Asia.
- **Partnerships** among governments and stakeholders are designed to achieve common goals and objectives, while recognizing individual priorities, shared responsibilities, desired outcomes and mutually supportive roles to address disparities in capacity.
- **Coordination** of integrated coastal and ocean management projects and programs entails joint and collaborative planning and implementation at the national, sub-national and regional levels, including monitoring and evaluation of outcomes and refinement of objectives and action programs on a regular basis.
- **Cooperation** across national and sub-national boundaries is critical to the success of the SDS-SEA mission, as the threats and impacts of existing and

² As of December 2011, PEMSEA Country Partners include: Cambodia, China, DPR Korea, Indonesia, Japan, Lao PDR, Philippines, RO Korea, Singapore, Timor Leste and Vietnam. PEMSEA Non-Country Partners include: ASEAN Biodiversity Center (ACB), Coastal Management Center (CMC), Conservation International (CI) - Philippines, Intergovernmental Oceanographic Commission – Sub-Commission for the Western Pacific (IOC/WESTPAC), International Environmental Management of Enclosed Coastal Seas (EMECS), International Union for Conservation of Nature – Asia Regional Office (IUCN ARO), International Ocean Institute (IOI), Korean Environment Institute (KEI), Korean Maritime Institute (KMI), Korean Ocean Research and Development Institute (KORDI), Northwest Pacific Action Plan (NOWPAP), Ocean Policy Research Foundation of Japan (OPRF), Oil Spill Response Limited (OSRL), PEMSEA Network of Local Governments for Sustainable Coastal Development (PNLG), Plymouth Marine Laboratory (PML), Swedish Environmental Secretariat for Asia (SENSA), UNDP/GEF Small Grants Programme, UNDP/GEF Yellow Sea Large Marine Ecosystem (YSLME) Project, and UNEP Global Programme of Action for the Protection of the Marine Environment from Land-based activities (UNEP/GPA).

emerging natural and man-made hazards necessitate responses that are multilateral, regional and/or global in nature.

Partners derive benefit from PEMSEA's regional partnership arrangement through:

- **Joint planning among governments and collaborating organizations**, providing opportunities to share perspectives, to explore new ideas and to develop priorities with respect to SDS-SEA implementation.
- **Mobilization of resources, capacities and services** in support of SDS-SEA implementation, including identifying sources of external resources and financing, and developing and promoting priority projects with donors, the business community and organizations within the region and outside of the region.
- **Access to training and scientific and technical advice and assistance for ICM development, implementation and scaling up** through the PEMSEA Resource Facility, ICM Learning Centers, Regional Centers of Excellence, Twinning Network for Integrated River Basin and Coastal Area Management, and Regional and National Task Forces.
- **Learning experiences, information- and knowledge-sharing for improved governance** at the sub-national level through the PEMSEA Network of Local Governments.
- **Partnerships with the business community/private sector** in the scaling up of ICM programs, as well as credible and willing investors in environmental infrastructure and conservation projects.
- **Inter- and intra-regional collaborations** in integrated coastal and ocean management, as well as transfer of new and innovative skills, tools and expertise across projects and programs.
- **State of the Coasts reporting** on the progress, achievements and gaps in SDS-SEA implementation, as well as emerging trends in coastal and ocean management in the region.
- **National, regional and global advocacy** for sustainable development of coasts and oceans, including responses, advice, standards of practice, guidelines, training and broader technical services that reflect the latest experiences,

scientific and technical knowledge and best practices in integrated coastal and ocean management.

PEMSEA is transforming into a self-reliant and dynamic international organization that is relevant, effective and responsive to regional and national priorities and needs. PEMSEA is presently implementing its approved re-engineering, financing and communication plans, as approved by the EAS Partnership Council in 2011.

As an international organization, PEMSEA will focus on the implementation of its mandate, i.e. the implementation of the SDS-SEA especially the promotion of 5-year national plan implementation, capacity development and knowledge management.

PEMSEA is ready to take on the new economic challenges and opportunities of the Rio+20 towards a green economy by taking advantage of the policy and management fundamentals established through the implementation of the SDS-SEA and ICM programs. PEMSEA will continue its partnership approach in order to mobilize country and non-country partners, as well as donors and financial institutions, to invest in the sustainable “blue economy” of the Seas of East Asia and as a showcase of successful regional ocean governance.

PEMSEA will also continue to work closely with educational institutions, Regional Centers of Excellence and ICM Learning Centers to build a critical mass of broad-based, trained and educated coastal and ocean managers to undertake the enormous tasks in the region.

II. SUSTAINABLE DEVELOPMENT STRATEGY FOR THE SEAS OF EAST ASIA (SDS-SEA)

SDS-SEA Vision

The sustainable resource systems of the Seas of East Asia are a natural heritage for the people of the region, a medium of access to regional and global markets, and a safeguard for a healthy food supply, livelihood, economic prosperity and harmonious co-existence for present and future generations.

SDS-SEA Mission

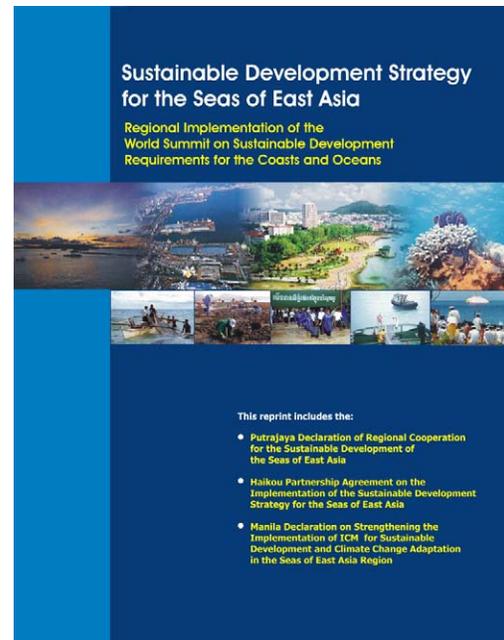
To build interagency, intersectoral, and intergovernmental partnerships for achieving the sustainable development of the Seas of East Asia.

SDS-SEA Strategies, Objectives and Action Programs

The Sustainable Development Strategy for Seas of East Asia (SDS-SEA) was developed over a three year period through consultation among the countries and other regional stakeholders, and adopted by 12 governments in December 2003, namely: Brunei Darussalam; Cambodia; China; DPR Korea; Indonesia; Japan; Malaysia; Philippines; RO Korea; Singapore; Thailand; and Vietnam, with the signing of the Putrajaya Declaration of Regional Cooperation for Sustainable Development of the Seas of East Asia. In 2006, the governments of Lao PDR and Timor Leste also adopted the SDS-SEA. The SDS-SEA was agreed upon at the ministerial level to allow the countries to comply on a voluntary basis, or through national programs that provide implementation options that are within the country's means and capacities.

The SDS-SEA incorporates relevant international conventions, existing regional and international action programs, agreements and instruments, as well as applicable principles and implementation approaches for achieving sustainable development of the Seas of East Asia. It does not create a new set of obligations but rather complements existing ones. The strategy is designed to:

- Promote regional cooperation for addressing environmental relationships across national boundaries;



- Harmonize interactions and enhance synergies between economic development and environmental management;
- Reinforce relationships between a healthy environment and social issues, such as poverty alleviation, food security, employment and human health; and
- Provide a platform for partnerships among countries of the region, the private sector, NGOs, academe, local communities and other members of the civil society, and UN and international agencies.

The SDS-SEA deals with:

- The relationship among economic and social development, and environmental protection;
- Linkages among programs on poverty alleviation, sustainable livelihood, reduction of vulnerability to natural hazards, long-term security, economic growth, and the health of human beings, ecosystems and the natural resource base; and
- Intersectoral, interagency, intergovernmental and interproject partnerships for the sustainable development of the region.

A number of principles, objectives and action programs that have been enshrined in global and regional instruments and agreements to guide decision-making and management actions have been incorporated into the SDS-SEA. These include the UN Convention on the Law of the Sea (UNCLOS), UN Framework Convention on Climate Change (UNFCCC), Agenda 21, Convention of Biodiversity (CBD), the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), the World Summit on Sustainable Development – Johannesburg Plan of Implementation, the UN Millennium Development Goals (MDG) and various IMO Conventions. The SDS-SEA provides a framework for policy and program development and implementation at the

Box 1: Strategic Action Statements of the SDS-SEA

The East Asian Countries shall:

Ensure the **Sustainable** use of coastal and marine resources.

Preserve species and areas of the coastal and marine environment that are pristine or are of ecological, social or cultural significance.

Protect ecosystems, human health and society from risks occurring as a consequence of human activities.

Develop economic activities in the coastal and marine environment that contribute to economic prosperity and social well being while safeguarding ecological values.

Implement international instruments relevant to the management of the coastal and marine environment.

Communicate with stakeholders to raise public awareness, strengthen multi sectoral participation and obtain scientific support for the sustainable development of the coastal and marine environment

national and local levels for achieving the goals and targets set by these various global instruments. The SDS-SEA also provides a platform for cooperation among PEMSEA Partners and collaborators, as well as other stakeholders.

The SDS-SEA contains six strategies and 227 action programs for sustainable development of coasts and oceans.

The *DEVELOP* strategy concerns new and emerging development policies and investment strategies of countries of the region with a focus on growth areas in, and opportunities for, development of the “blue economy”. The objectives and action programs in the Develop strategy emphasize the use of integrated coastal management (ICM) as an effective management framework for achieving economic improvements in the marine sector while securing social and ecological well being.

The *SUSTAIN* and *PRESERVE* strategies address issues related to biodiversity protection, conservation and rehabilitation, enhancement of freshwater and marine water quality and equitable and sustainable fisheries...essential aspects for sustainable development of the marine economy.

The *PROTECT* strategy addresses the brown agenda...pollution reduction and waste management from land- and sea-based sources, while the *IMPLEMENT* strategy focuses on compliance with relevant international conventions and agreements, and the execution of related obligations at the national, local and regional levels.

The *COMMUNICATE* strategy is an overarching commitment to information and knowledge-sharing and the mobilization of governments, civil society, the business community, scientists and universities, and the region’s youth for sustainable development of the coastal and marine environment.

SDS-SEA Strategic Targets

While the SDS-SEA is considered to be non-binding, over time countries have developed confidence in the development and application of integrated coastal and ocean management as an effective tool for achieving the SDS-SEA objectives. Ministerial-level meetings conducted among countries in 2006 and 2009 recognized these accomplishments and agreed to work toward achieving strategic targets that represent individual and collective commitments to scaling up SDS-SEA implementation across the region, namely:

TARGET 1: a self-sustained regional partnership mechanism for the implementation of the SDS-SEA³;

TARGET 2: national coastal and ocean policies and supporting institutional arrangements in place in at least 70% of Partner Countries³;

TARGET 3: ICM programs for sustainable development of coastal and marine areas and climate change adaptation covering at least 20% of the region's coastline^{3,4}; and

TARGET 4: a report on the progress of ICM programs every three years, including measures taken for climate change adaptation⁴.

These four targets represent the desired outcomes of SDS-SEA implementation at the national and regional levels to 2015.

Progress in the Implementation of the SDS-SEA

The PEMSEA document entitled, Implementation of the Sustainable Development Strategy for the Seas of East Asia 2003-2011 (PEMSEA 2012) provides a comprehensive assessment of the programs, projects and initiatives undertaken by countries of the region, Non-Country Partners and regional organizations/programs that contributed to the SDS-SEA objectives and action programs since 2003. Specifically, the document reviews the current status of the regional coordinating mechanism, national coastal and ocean policy development and ICM program implementation across the region.

With respect to the four targets adopted by countries for SDS-SEA implementation, the status as of 2011 was identified as follows:

TARGET 1: PEMSEA began its transformation into an international legal entity in November 2009, when 8 countries (Cambodia, DPR Korea, PR China, Indonesia, Lao PDR, Philippines, RO Korea and Timor Leste) signed the Agreement Recognizing PEMSEA's International Legal Personality. At present, the organization is in the process of finalizing a Host Country Agreement. In 2010, an assessment of all GEF-supported regional and sub-regional projects in the East Asian Seas region concluded that PEMSEA and the SDS-SEA, respectively, provide the strongest regional

³Haikou Partnership Agreement on the Implementation of the Sustainable Development Strategy, 2006

⁴Manila Declaration on Strengthening the Implementation of Integrated Coastal Management for Sustainable Development and Climate Change Adaptation in the Seas of East Asia Region, 2009

mechanism and framework for coastal and marine management in the East Asian Seas region.

TARGET 2: Since 2003, nine of the 12 PEMSEA participating countries (i.e., Cambodia, China, Indonesia, Japan, Philippines, RO Korea, Singapore, Thailand and Vietnam) have initiated the development and/or are now in the process of adopting and implementing their respective national coastal and ocean policies and strategies. In the case of Lao PDR, a National Water Resources Strategy and Action Plan has been developed and adopted.

National interagency coordinating mechanisms for coastal and ocean management programs have been set up and are currently operational in Cambodia, DPR Korea, Indonesia, Japan, RO Korea and Singapore. The National Working Group Committee in China includes representation from ocean bureaus at the central and local levels. In Lao PDR, the government has recently approved the formation of a River Basin Committee to coordinate river basin development in the country. Other countries, including the Philippines, Thailand, Timor Leste and Vietnam, are in the process of developing their interagency coordinating mechanisms.

TARGET 3: Countries are progressing toward Target 3, with ICM programs covering approximately 11 percent of the region's coastline as of 2011. It is apparent that countries and their Partners need to exert greater effort, collectively and individually, if this milestone is to be achieved in the next 5 years.

TARGET 4: The PEMSEA Network of Local Governments for Sustainable Coastal Development adopted the State of the Coasts (SOC) Reporting System in July 2011 (i.e., Dongying Declaration on Building a "Blue Economy" through Integrated Coastal Management). The Declaration commits the Network to apply the SOC reporting system to 100 percent of its members by 2015, to identify and validate social, economic and environmental status and changes in coastal and marine areas, and measure progress and impacts of ICM implementation among local governments of the region.

Gaps and Constraints in SDS-SEA Implementation

In spite of the number of policy and program achievements in SDS-SEA implementation, various challenges remain, namely:

1. A solid foundation of policies, strategies and legislation has been established in most countries. However, it is also apparent that the interagency and multi-sectoral coordinating mechanisms, which are needed in order to better engage the concerned stakeholders in collaborative planning, implementation, monitoring and continual improvement, are still under consideration or are in the process of being developed in the majority of countries. The implication is that overlapping responsibilities, program gaps, conflicts in policy and management interventions, and competition among government agencies for available resources remain a challenge in planning and implementation of SDS-SEA related programs.
2. With regard to enabling capacities, most developing countries are relying largely on external sources of funding and expertise to meet their capacity development needs. While these have been effective in building a core of skilled managers and practitioners in each country, scaling up the implementation of SDS-SEA and ICM programs in coastal areas and LMEs of the region implies increasing and continuing demands for ICM managers and practitioners, as well as expertise in social, natural and applied sciences. The question that has not been addressed in a systematic manner is, "What are the capacity needs for SDS-SEA, LME SAP and ICM implementation at the local, national and sub-regional sea/LME levels, and how can these needs be effectively met?"
3. An encouraging indication of progress in sustainable financing is the fact that countries are beginning to set targets for protecting, managing and rehabilitating coastal and marine ecosystems in their medium-term development plans, through such measures as ICM/EBM, river basin/watershed management, sustainable fisheries, sustainable forestry, protected area development, integrated land- and sea-use planning/marine spatial planning, climate change adaptation, disaster risk reduction, etc. Mainstreaming these targets into the programs and budgets of the relevant sectoral agencies is at an early stage in most countries, and over the next 5 years can be expected to improve. The use of economic and market-based instruments for improved coastal and marine management, such as public-private partnerships, environmental user fees, payment for ecosystem services, corporate social responsibility, polluter pays, etc., are still at a demonstration/testing stage in most countries. China, Indonesia, Philippines, and RO Korea lead the way in promoting opportunities for business sector/corporate sector participation in coastal and ocean governance and

management, with the adoption of innovative policies, laws and regulations (e.g., Payment for Ecosystem Services Law, China; National Strategy for Green Growth, RO Korea) and a number of successful partnerships emerging (e.g., Bataan Coastal Care Foundation, Philippines; CSR Program for Small Islands Development, Indonesia). These good practices and experiences, and others, will need to be packaged, shared and replicated over the next 5 years, as a part of a regional knowledge platform in support of SDS-SEA implementation.

4. By 2011, 5-year national action plans for scaling up ICM implementation were under development in Cambodia, China, DPR Korea, Indonesia, Philippines, Thailand, Timor Leste and Vietnam, and were already in place in RO Korea and Singapore. In the case of Lao PDR, similar efforts were underway with regard to a national action plan for water resources management. At the sub national/local government level, 32 ICM projects were either under development or fully operational in 10 countries, while in the case of Singapore, the ICM program covered the entire coastline of the country. In total, ICM implementation covered more than 11 percent of the region's coastline by 2011, although the various sites were at different levels of development and implementation. It is also evident from the SDS-SEA review that action plans covering biodiversity conservation, climate change and disaster risk reduction and management were likewise being developed and adopted by central governments during this period, with on-the-ground efforts in vulnerability assessment and hazard mapping being conducted in all countries. However, it was not evident how and if ICM is being employed consistently and effectively as a process and management framework for developing and implementing these sectoral initiatives at the national and local levels.
5. National environmental monitoring and reporting systems were in place in China, Japan, RO Korea, Singapore, Thailand and Vietnam. In other participating countries, monitoring of the coastal and marine environment was primarily program (e.g., fisheries management) or project specific (e.g., World Bank's Environment Monitor report). In 2011, the PEMSEA Network of Local Governments (PNLG) committed to develop and implement a State of the Coasts Reporting System for 100 percent of its membership by 2015 (Dongying Declaration, 2011). This marks a first in the region, and perhaps globally, where local governments in different countries will be measuring their progress and achievements in sustainable development of coastal areas through ICM, using a common protocol and a shared set of indicators.

Overall trends suggest that coastal and marine ecosystems of the region are experiencing increasing threats to the services that they provide humanity. Marine pollution from land-based sources continues to be a serious problem, as evidenced by the expansion of hypoxic (dead) zones from increasing nutrient inputs, primarily from untreated or partially treated sewage discharges and agricultural activities. International commitments made regarding biodiversity and marine protected areas have fallen short of expectations. Depletion of marine waters through overfishing and use of destructive fishing gear/fishing practices continues. On top of it all, the multiple risks and impacts related to climate change and extreme weather events are becoming more evident. In short, the region is not yet reached that elusive tipping point, where reduction in pollution discharges, conservation and rehabilitation of habitats, biodiversity preservation and enhancement and economic stability have begun to shift the balance in favor of sustainable development.

However, the recovery power of coastal and marine ecosystem services in the Seas of East Asia is still in place, as evidenced in a number of ICM and coastal resource management initiatives across the region. There are opportunities to protect the Seas of East Asia while at the same time building and ocean-based blue economy for the region. The SDS-SEA remains an appropriate platform and framework for both. To optimize the implementation of the SDS-SEA will take more time and effort. Thus, the 5-year SDS-SEA Implementation Plan is a timely and important next step in the journey towards sustainable development.

III. SDS-SEA IMPLEMENTATION PLAN 2012-2016

SDS-SEA Implementation Plan Structure

The changes required to accelerate the implementation of the SDS-SEA, the transition to an ocean-based blue economy and, ultimately, the goal of sustainable development entail a mix of policy/legislation, institutional, operational, behavioral and physical factors. Each of the actions identified in the SDS-SEA Implementation Plan has been prepared within the context of the 6 strategies of the SDS-SEA and their associated objectives, as well as the 4 regional targets agreed to by Country Partners. Figure 1 illustrates the relevancy of each of the actions in the implementation plan to the spectrum of strategies and primary objectives in the SDS-SEA, which in turn serves to emphasize the interconnected nature of the transition that countries are making.

The 5-year SDS-SEA Implementation Plan consists of 5 components, namely: governance; ICM scaling up; monitoring, evaluation and reporting; capacity development/knowledge management; and sustainable financing.

Over the next 5 years, the focus of the governance component takes into account:

1. Setting up and operationalizing effective coordinating mechanisms in coastal and ocean governance at the regional, LME/coastal seas, and national levels, aligning the respective action plans and programs on a common platform, improving the effectiveness of coastal and ocean governance at all levels, and mobilizing human and financial resources of partners, collaborators and stakeholders; and
2. Accomplishing coastal and ocean policy and legislation by mainstreaming the objectives, targets, controls and actions that are agreed to in such instruments into national and sub national development and investment plans, as well as sectoral policies, laws and programs.

The ICM scaling up component concentrates on maximizing sub national/local government functions and capacities to facilitate investments and changes on the ground. It also converges sectoral initiatives and programs for: a) climate change adaptation and disaster risk reduction; b) conservation and redress of biological diversity and equitable and sustainable fisheries, including food security and livelihoods; and c) protection and improvement in water quality and addressing hazards associated with unsustainable development in terms of both water quality and water quantity.

The monitoring and evaluation component entails development and implementation of a more comprehensive, scientifically sound, environmental monitoring program. The purpose of the monitoring program is to generate data and information on the health and resiliency of the ecosystem and changes and trends over time. In addition, the application of the SOC Reporting System will be scaled up as a knowledge sharing and decision support tool, to better inform policymakers and managers of progress toward desired policy, social, economic and ecological objectives and targets.

Finally, the capacity development/knowledge management and sustainable financing components provide the means for scaling up ICM programs, building technical and management capacity, strengthening information dissemination and knowledge-sharing, and enhancing investments in capital (both natural and manmade) assets of a sustainable ocean-based blue economy.

Recognizing that all issues cannot be covered in all areas in the next 5 years, the strategy adopted by countries in the planning process was to concentrate ICM scaling up programs on priority concerns in priority locations. The outcome is expected to be a

core of successful projects and initiatives in integrated coastal and ocean management in countries across the region, with measureable improvements in the health and resiliency of ecosystems and coastal communities, and the skills and experience to scale up and replicate good practices and investments to other parts of the country and the region.

The following section of this document goes into further detail on the 6 targets and the corresponding actions over the next 5 years. It also details measurable indicators of progress, which can be employed to monitor and report on advancements on a regular basis.

Annex A provides the planned schedule for the various actions and outputs, as well as the priority locations (as available), which have been identified in national SDS-SEA Implementation Plans as priority areas for management interventions.

FIGURE 1: TEMPLATE OF SDS-SEA IMPLEMENTATION PLAN

CATEGORY	SDS-SEA TARGETS	ACTIONS	SUSTAIN	PRESERVE	PROTECT	DEVELOP	IMPLEMENT	COMMUNICATE	
NATIONAL AND REGIONAL GOVERNANCE	Target 1	1.1 Complete the transformation of PEMSEA into a self-sustaining regional governance mechanism							
	Target 2	2.1 Achieve coastal and ocean policy							
ICM SCALING UP TO 20% OF THE REGION'S COASTLINE	Target 3	3.1 Maximize local government capacity							
		3.2 Realize climate change adaptation (CCA) and disaster risk reduction (DRR) measures in vulnerable coastal areas through ICM Programs							
		3.3 Integrate sustainable use of coastal and marine ecosystem services into ICM programs in biodiversity and fisheries hotspots							
		3.4 Advance water supply conservation and management and pollution reduction and waste management through ICM programs in priority coastal and watershed areas							
MONITORING, EVALUATION AND REPORTING	Target 4	4.1 Implement integrated environmental monitoring to strengthen knowledge and understanding of ecosystems and their management from "ridge to reef"							
		4.2 Apply the State of the Coasts Reporting System							
CAPACITY DEVELOPMENT/ KNOWLEDGE MANAGEMENT	Enabling	5.1 Establish accredited ICM and special skills training courses and programs							
		5.2 Enable ICM Learning Centers, National and Regional Centers of Excellence and educational institutions to train, educate and build awareness in coastal and ocean management							
		5.3 Build a knowledge platform and support network to facilitate scientifically sound decisions and investments in sustaining ecosystem services							
SUSTAINABLE FINANCING	Enabling	6.1 Increase public and private sector investments in enterprises, technologies, practices and services that contribute to a sustainable ocean-based blue economy							
		6.2 Mobilize donors, domestic and foreign investors and other concessional sources of funding to help address program gaps in means and capacity							
		6.3 Demonstrate and replicate the use of innovative financial and economic instruments and other incentives, designed to drive positive changes in behavior							

LEGEND Primary Objective Supporting Action

IV. SDS-SEA IMPLEMENTATION PLAN TARGETS, ACTIONS AND INDICATORS OF PROGRESS 2012-2016

GOVERNANCE TARGET 1: A self-sustained regional partnership mechanism for the implementation of the SDS-SEA

- ACTION 1.1:** *Complete the transformation of PEMSEA into a self-sustaining regional partnership mechanism for governance of the Seas of East Asia, serving as a platform for rebuilding and sustaining coastal and marine ecosystems services and reducing the impacts of climate variability and change across LMEs and coastal waters of the region.*
- As a transformed regional organization, PEMSEA will:
- Assist and coordinate the efforts of Country Partners to execute their respective national SDS-SEA Implementation Plans. The organization will also provide a platform for operationalizing sub-regional/LME governance mechanisms within the Seas of East Asia region, in collaboration with Non-Country Partners as appropriate, using PEMSEA's legal personality and SDS-SEA framework.
 - Function as the regional hub of a knowledge-sharing and capacity development network for coastal and ocean governance, through such events as the triennial EAS Congress as well as sub-regional/LME and national initiatives involving Country and Non-Country Partners, sub-regional and regional projects and programs, universities, non-governments organizations, experts and young professionals. PEMSEA will continue to work closely with educational institutions, Regional Centers of Excellence and ICM Learning Centers to build a critical mass of broad-based, trained and educated coastal and ocean managers.
 - Mobilize financing for investments in climate change adaptation, disaster risk reduction, biodiversity conservation, sustainable fisheries, water use/conservation, pollution reduction, capacity development and knowledge management, consistent with national SDS-SEA Implementation Plans. In the medium-term this entails developing projects in collaboration with Country and Non-Country Partners for promotion to domestic and international investors and donors; and
 - Continue its partnership approach in order to engage and rally country and non-country partners, the

corporate sector and business community, as well as donors and financial institutions, to invest in a sustainable “blue economy” for the Seas of East Asia and as a showcase of successful regional ocean governance.

**INDICATORS OF
PROGRESS**

Key indicators of progress by 2016, through the collaborative efforts of PEMSEA, national and local governments and their partners, include:

- ❖ A host agreement signed between the Government of the Philippines and PEMSEA, providing the organization with the privileges and immunities necessary to enable it to effectively perform its mandate and functions in the Philippines (2012-2013);
- ❖ The adoption and initiation of a 5-year regional SDS-SEA Implementation Plan with time-bound targets and a system of joint and collaborative planning, implementation, reporting and updating among PEMSEA Partners and collaborators (2012-2013);
- ❖ The adoption and implementation of measures to enhance PEMSEA’s efficiency, flexibility and effectiveness as a country-owned regional organization, including rules of governance, a sustainable financing plan, a communication/knowledge-sharing plan, and a restructuring plan for the PEMSEA Resource Facility (PRF) (2012-2013);
- ❖ Voluntary financing and in-kind commitments from PEMSEA Country and Non-Country Partners, facilitating PEMSEA’s core management, coordinating, administrative, secretariat and fundraising operations (2012-2014);
- ❖ Partnership agreements between PEMSEA and other regional and sub regional/LME governance mechanisms to consolidate and align Strategic Action Programmes (SAPs) and other endeavours in large marine ecosystems (LMEs) and sub-regional sea areas (e.g., the Yellow Sea; the Arafura-Timor Seas; part of the area covered by the Western and Central Pacific Fisheries (WCPF) Convention) into as common

platform for improving coastal and ocean governance and for mobilizing the human and financial resources of stakeholder partners (2012-2013);

- ❖ Innovative financing mechanisms developed and put in place for sustaining PEMSEA and technical assistance and support to countries for SDS-SEA implementation (2014-2016);
- ❖ A portfolio of flagship projects prepared in support of national SDS-SEA Implementation Plans, and facilitated through co-financing arrangements with domestic and international investors and donors (2012-2016); and
- ❖ Expansion of PEMSEA Partners, with the inclusion of all countries of the region, as well as organizations that share PEMSEA's vision, mission and goals, as Partners (2012-2016).

GOVERNANCE TARGET 2: National coastal and ocean policies and supporting institutional arrangements in place in at least 70% of Partner Countries

ACTION 2.1: *Achieve national coastal and ocean policies through the institutionalization of interagency, multi-stakeholder coordinating mechanisms and integration of SDS-SEA objectives and targets into national and sub national medium-term development and investment plans.*

Countries have made significant progress in translating internationally adopted principles and objectives into national policies and strategies, or are in the process of doing so. Over the next 5 years, the development and initiation of programs to implement the adopted policies and strategies will be the focus of attention, including: legislation to facilitate/strengthen coastal and ocean governance; communication and awareness building to inspire and mobilize stakeholders; capacity development to create a core of skilled human resources for managing and implementing programs and projects; and sustainable financing to support on-the-ground management interventions and conservation initiatives. A key measure of progress will be the implementation of national SDS-SEA/ICM programs, and the mainstreaming of such programs into the medium-term socio-economic development and investment plans.

The establishment of interagency and multi-sectoral institutional mechanisms to coordinate and manage the implementation of national SDS-SEA plans is also a major milestone of progress in the medium-term. The purpose of such arrangements is to improve the efficiency and effectiveness of coastal and ocean governance within the concerned countries, by clarifying roles and responsibilities among government agencies and levels of government, identifying and tapping synergies across sectoral programs and projects, reducing overlaps and conflicts, sharing information and knowledge, and making a comprehensive assessment of progress, achievements and changes related to economic development of marine and coastal areas and environmental and resource management.

INDICATORS OF PROGRESS

Key indicators of progress by 2016, through the collaborative efforts of PEMSEA, national and local governments and their partners, include:

- ❖ The adoption and implementation of national policy for coastal and ocean governance in 70 percent of participating countries (2012-2015);
- ❖ The preparation and adoption of national legislation on coastal and ocean governance and management, including contributions to sustainable development objectives and targets and building an ocean based blue economy (2012-2015);
- ❖ The preparation and adoption national land- and sea-use legislation, including the integration of sustainable development, climate change adaptation and disaster risk reduction measures into national and local land- and sea-use planning processes (2012-2015);
- ❖ Setting up and operation of national interagency, multi-sectoral coordinating mechanisms to oversee and coordinate coastal and ocean policies and governance issues (2012-2015);
- ❖ The adoption and initiation of medium-term national SDS-SEA/ICM Implementation Plans in PEMSEA Partner countries (2012-2013);
- ❖ The incorporation of objectives, targets and actions of the national SDS-SEA/ICM Implementation Plans into the medium-term socio-economic development and implementation plans of participating countries (2013-2016);
- ❖ The development and implementation of a monitoring and reporting system to determine progress, achievements and challenges with regard to national SDS-SEA/ICM implementation (2013-2016);
- ❖ The ratification and implementation of international conventions and agreements related to sustainable development of coasts and oceans, and the subsequent actions to develop and/or harmonize existing national laws and regulations with such instruments (2012-2016).

ICM SCALING UP TARGET 3: ICM programs for sustainable development of coastal and marine areas and climate change adaptation covering at least 20% of the region's coastline

ACTION 3.1:
Maximize local government capacity to effectively contribute to national policies and plans for protecting and sustaining coastal and marine ecosystem services, including commitments under international conventions, regional agreements and LME SAPs

Local governments are at the frontline of defense for protecting, conserving and sustaining coastal and marine resources for the security of coastal populations and the benefit of local and national economies. On a daily basis, local governments deal with conflicting and competing uses for coastal and marine resources, and the recurring socio-economic impacts of habitat degradation and destruction, pollution, overexploitation and natural and manmade hazards, including climate change and severe weather events. By strengthening the capacity of local governments to implement ICM, on-the-ground actions can be undertaken in support of national development priorities and objectives, as well as international obligations and commitments. Maximizing local governments' capacities entails mainstreaming ICM programs, objectives and targets into local development and investment plans, and ensuring that local governments have the capacity to develop and implement ICM in a competent manner.

INDICATORS OF PROGRESS

By 2015, local governments in each participating country are implementing ICM programs and contributing to coverage of at least 20 percent of the region's coastline. National governments, in partnership with PEMSEA and other stakeholders, are maximizing local governments' capacities to implement ICM programs through:

- ❖ The adoption and implementation national policies, legislation and programs to direct and guide local governments in ICM development and implementation (2012-2014);
- ❖ Setting up or strengthening sub-regional and national coordinating mechanisms to oversee and direct the implementation of ICM programs;
- ❖ The establishment or facilitation of education and training programs to build a core of competent ICM managers and implementers at the national and sub

- national levels (2012-2015);
- ❖ The mobilization of the required human and financial resources to mainstream national ICM policies, legislation and programs into local government development and investment plans (2012-2016);
- ❖ The implementation of the State of the Coasts Reporting System as a systematic approach to measuring progress and impacts of ICM programs, and providing feedback to decision makers (2012-2016);
- ❖ The application and scaling up of PEMSEA's ICM Code and Recognition System in at least 50 percent of ICM programs across the region, as a means of assessing and recognizing local governments' efforts to strengthen governance and sustainable development of marine and coastal resources and to shape potential social, ecological and economic benefits of a blue economy (2012-2015).

ACTION 3.2:
Realize climate change adaptation (CCA) and disaster risk reduction (DRR) measures in vulnerable coastal areas through ICM Programs

This ICM scaling up action relates to the SDS-SEA strategies and action programs for addressing natural and manmade hazards that threaten sustainable development of coastal and marine areas (e.g., tropical storms; coral bleaching; earthquakes; red tides; oil and chemical spills; invasive alien species; erosion; subsidence; etc.). In addition, it focuses on the priorities identified in the Manila Declaration (2009), namely scaling up the implementation of ICM for sustainable development and climate change adaptation.

Countries of the region are signatories to the UN Framework Convention for Climate Change and have also adopted the Hyogo Framework for Action (HFA, 2005-2015) with the objective of reducing disaster risk by 2015. Progress in implementing the HFA indicates that national efforts remain focused on strengthening policy, legislation, institutional frameworks and capacities for disaster preparedness, response, risk assessments, and early warning. In contrast, more effort is needed in using knowledge, education and innovative outreach programs to stimulate a culture of disaster resilience to address the

underlying drivers that configure disaster risk.

The purpose of promoting the implementation of CCA/DRR strategies and plans at national and local levels through ICM scaling up programs is to reduce vulnerability and increase resilience. Linking national and local CCA and DRR initiatives is especially critical in vulnerable coastal areas, including capacity building, financing and community awareness and mobilization.

**INDICATORS OF
PROGRESS**

The key indicators of progress towards natural and manmade hazard management through ICM scaling up at the national level include:

- ❖ Climate smart policy and legislation adopted and mainstreamed nationally and sub-nationally in at least 70 percent of participating countries to reduce the vulnerability of coastal communities and enhance the resilience of coastal and marine resources to the impacts of climate fluctuations (2012-2014);
- ❖ The delineation of highly vulnerable coastal and watershed areas, coastal communities and resources and habitats, as well as vulnerable sectors of society, including the poor, women and the youth, and strengthening their capacity to adapt to climate change (2012-2014);
- ❖ The preparation and adoption of national legislation/guidelines on land- and sea-use planning and zoning, and the integration of DRR/CCA measures into land and sea use planning processes at the sub national level (2012-2014);
- ❖ The implementation of habitat restoration and management programs, including coral reefs, seagrass beds, coastal wetlands and mangroves, and establishing marine protected areas, as appropriate, based on scientifically sound information, to improve the natural defenses of watershed areas and coastal and marine ecosystems to the impacts of climate change and to enhance carbon sequestration capacities of relevant habitats, in at least one ICM site/sub-regional sea area per country;
- ❖ The formulation and implementation of disaster risk

management programs, including oil spill preparedness and response, in highly vulnerable coastal areas, coastal seas/LMEs, including strengthening capacities to prepare for, respond to and recover from natural and manmade hazards and disasters (2012-2016);

- ❖ Coordination among concerned national agencies to develop appropriate communication/knowledge sharing materials and events on ICM programs and benefits derived for adapting to climate change and other natural and manmade hazards, and incorporation of these into formal and non-formal education channels (2012-2016);
- ❖ The development of new sources of financing, including the private sector, to support adaptation measures and preparedness, response, recovery and compensation for damages from natural and manmade disasters (2012-2016).

Key indicators of progress of on-the-ground management interventions through the collaborative efforts of PEMSEA, national and local governments and their partners by 2016 include:

- ❖ Increase in the proportion of coastal communities in vulnerable coastal areas that are capable of responding to natural and manmade hazards, including climate change and extremes through the preparation and adoption of risk management plans and applicable early warning systems;
- ❖ Adaptive management/disaster risk reduction measures implemented in at least 10 ICM sites to reduce the impacts of climate change, improved oil spill preparedness and response, and strengthened maritime safety measures (e.g., PSHEM Code adopted and implemented).

ACTION 3.3:
Integrate sustainable use of coastal and marine ecosystem services into ICM programs in biodiversity and fisheries hotspots

Action 3.3 concerns SDS-SEA strategies and action programs for sustainable development and use of coastal and marine habitats and fisheries. It also contributes to the Convention on Biodiversity (CBD) and in particular, Aichi Biodiversity (AB) Targets 7 and 11:

- AB Target 7: By 2020, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem approaches, so that overfishing is avoided....
- AB Target 11: By 2020, at least...10 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into wider landscapes and seascapes.

The thrust of Action 3.3 is two-fold, namely:

- The convergence of existing national strategies and programs that focus on widespread degradation of coastal and marine habitats and the precarious loss of biodiversity, through ICM interventions in biodiversity and fisheries hotspots;
- The operationalization of National Biodiversity Strategies and Action Plans (NBSAP) through ICM program development and implementation in priority marine corridors and fishing grounds, providing the framework and process for aligning national and local priorities, programs and resources.

INDICATORS OF PROGRESS

The key indicators of improved governance in the protection and sustainable use of coastal and marine ecosystem services include:

- ❖ The delineation of coastal and marine areas of significant biological diversity and natural value locally, nationally and sub-regionally (2012-2013);
- ❖ The development/updating of NBSAPs, including identification of priority locations for convergence with

sub-national ICM programs (2012-2103).

- ❖ The development and adoption of national policies and strategies for coastal and marine development and coastal reclamation projects, taking into account the natural values of biodiversity and identifying limits on their use and alteration (2012-2014);
- ❖ The development of partnerships across government and non-government sectors for protecting habitats, fisheries and/or rare and endangered species in priority locations (2012-2014);
- ❖ The preparation and adoption of national legislation/guidelines on land- and sea-use planning and zoning, and the integration of measures to restrict development, misuse or conflicting use of significant sites, habitats and fisheries resources into land and sea use planning processes at the sub national level (2012-2014).

Key indicators of progress of on-the-ground management interventions by 2016, through the collaborative efforts of PEMSEA, national and local governments and their partners, include:

- ❖ Increase in the proportion of coastal and watershed areas and LMEs with zoning schemes/marine spatial plans, PAs/MPAs, EAFM, IRBCAM and other management processes in place and contributing to scaling up ICM to achieve the 20% coastline coverage target;
- ❖ The development and initiation of habitat restoration and management plans in at least 10 ICM sites and one coastal sea/LME aimed at the rehabilitation of altered critical habitats and improving the resilience of coastal and marine ecosystems to climate change (2012-2014);
- ❖ The development and initiation of sustainable fisheries management plans in at least 10 ICM sites and one coastal sea/LME aimed at equitable and sustainable fisheries and conservation of fish stocks through an ecosystem management approach (2012-2014);
- ❖ Measureable improvements in the areal extent, health

and resiliency of habitats (e.g., blue forests) including mangroves, coral reefs, sea grass and other habitats, in at least 10 coastal waters and watershed areas including biodiversity hotspots and areas-at-risk to climate change;

- ❖ Strengthened MPAs functioning effectively in 10 ICM sites and an measurable improvement in the effectiveness and benefits derived from a regional network of MPAs operating in at least one coastal sea area/LME;
- ❖ Decrease in the number of overexploited and depleted fisheries stocks in at least two threatened fishing grounds in ICM sites, coastal sea areas and LMEs.

ACTION 3.4:
Advance water supply conservation and management and pollution reduction and waste management through ICM programs in priority coastal and watershed areas

Action 3.4 relates to SDS-SEA strategies and action programs for policies and programs on water resource development and management, addressing consumptive and non-consumptive water uses, pollution and waste management, climate change, food security, public health and the protection and conservation of natural resources. This action contributes directly to the relevant targets concerning access to safe drinking water and sanitation of the Millennium Development Goals, the Johannesburg Plan of Implementation and other international conventions and agreements dealing with land-based and sea-based sources of marine pollution. In addition, Action 3.4 contributes to the priorities indicated in the Manila Declaration on Furthering the Implementation of the Global Programme of Action (GPA) for the Protection of the Marine Environment from Land-based Activities, as adopted by the Third Intergovernmental Review Meeting of the GPA in January 2012, namely: nutrient management, reduction in marine litter and wastewater management. Action 3.4 recognize the development and implementation of integrated river basin and coastal area management (IRBCAM) as a holistic approach to protecting and improving water quality in coastal areas, rivers and tributaries through: (a) conserving and

managing water use efficiently and equitably; and (b) nutrient management, pollution reduction and waste management, with a view to ecosystem integrity, public health protection, and food security.

Action 3.4 also addresses the issue of marine litter, through the sharing of best practices, capacity building and partnerships with regional and international organizations and the corporate sector aimed at preventing, reducing and managing marine litter.

INDICATORS OF PROGRESS

The key indicators of progress toward water use, conservation and pollution reduction within the framework of ICM scaling up programs at the national and local levels include:

- ❖ The delineation of priority coastal areas and river basins that will be the focus of integrated river basin and coastal area management, addressing ecosystem integrity, public health and vulnerability (2012-2013);
- ❖ As may be relevant, the development and adoption of national policy, legislation and programs in support of integrated water resource development and management (2012-2014);
- ❖ The incorporation of integrated water resources management priorities into national and sub-national socio-economic development and investment plans (2012-2014);
- ❖ The development and adoption of integrated river basin and coastal area management (IRBCAM) plans for priority coastal and watershed areas, addressing water quality, water availability, water use, nutrient management and pollution reduction/waste management (2012-2014);
- ❖ The establishment of functional national and local IRBCAM coordinating mechanisms in priority watershed and coastal areas (2012-2014).

Key indicators of progress of on-the-ground management interventions by 2016, through the collaborative efforts of PEMSEA, national and local governments and their partners, include:

- ❖ Measurable reductions in pollutants (e.g., N; P; BOD) in at least 5 priority river basins and coastal areas being threatened by water quality degradation and loss of ecosystem services;
- ❖ Demonstration of innovative technologies and good practices in nutrient management in at least two priority coastal areas and river basins;
- ❖ Demonstration of good practices in water use and conservation measures in at least two priority coastal areas/river basins;
- ❖ Investment strategies/plans for water use and conservation and pollution reduction/waste management, including innovative policy, technologies and practices, adopted in at least two priority coastal areas/river basins;
- ❖ The organization and initiation of comprehensive water quality monitoring and reporting systems in at least two priority coastal areas/river basins.

MONITORING, EVALUATION AND REPORTING TARGET 4: A report on the progress of ICM programs every three years, including measures taken for climate change adaptation

Target 4 focuses on a systematic approach to communicating information on the implementation of SDS-SEA and ICM programs. In particular, the intention is to inform senior policy makers at the national level and local chief executives at the sub national levels of the progress and impacts of SDS-SEA and ICM program implementation, with regard to sustainable development of coastal and marine areas and climate change adaptation. In a broader sense this management target is also about communicating with stakeholders in general, raising public awareness, strengthening multisectoral participation and accessing scientific data and information for assessment and decision-making processes.

There are two aspects to Target 4. The first involves the development of a scientifically sound monitoring program to measure conditions in the coastal and marine environment, as well as surrounding watershed areas, and to measure changes and trends as a consequence of ICM implementation. The second is the use of the State of the Coasts (SOC) Reporting System as an operational tool for local governments to consolidate information and to report on the impacts, benefits and trends, relative to specific indicators of local, national and international sustainable development targets.

As part of the national ICM scaling up programs, each ICM site will prepare a baseline SOC report, which is a participatory process involving multisectoral stakeholders, identifying current conditions in the area. As local governments progress through ICM cycles, SOC reports will be prepared regularly to identify changes in the baseline conditions as a consequence of ICM interventions, as well as define new and emerging issues that warrant attention. These reports are submitted to the local government for review and assessment of the ICM program, and for planning subsequent stages of the ICM program.

As more and more ICM sites prepare their local SOC reports, consolidation of these outputs into a national SOC will provide policymakers at the central level with an on-the-ground assessment of the national ICM scaling up program and its success in operationalizing national policy and targets.

ACTION 4.1:
*Implement
integrated
environmental
monitoring to
strengthen
knowledge and
understanding of
ecosystems and
their management
from “ridge to reef”*

Environmental monitoring is conducted to determine the status and trends in the condition of ecosystems, the consequences of management actions (and inaction), and the necessary policies and management interventions to address adverse changes and conditions. The current approach to environmental monitoring normally entails a number of different agencies and institutions conducting separate monitoring programs. This fragmented approach fails to provide the comprehensive environmental assessment that is necessary to formulate effective solutions. In some cases, duplication of effort also leads to inefficient use of resources.

Action 4.1 focuses on improving environmental monitoring capacities in the coastal and marine environment as part of ICM program development and implementation. The action entails:

- Identifying existing monitoring programs and capacities in ICM sites
- Identifying priorities and indicators for monitoring, which are relevant and within the capacity of the local government and their partners
- Streamlining and integrating separate monitoring efforts into an integrated multiagency, cross-sectoral environmental monitoring program, which will allow better understanding of the linkages between environmental quality, resource and habitat conditions, and human health
- Develop partnerships and capacities in support of the agreed program, including upstream-downstream monitoring programs for freshwater and marine water systems
- Share information and resources in order to use available resources more cost-effectively
- Adopt a mechanism for managing and reporting the data, conducting periodic risk assessments, and enhancing feedback mechanisms for regulatory bodies, decision-makers and policymakers.

**INDICATORS OF
PROGRESS**

- ❖ Development and implementation of integrated environmental monitoring programs in at least two priority river basins and coastal areas

ACTION 4.2:
*Apply the State of
the Coasts
Reporting System*

Action 4.2 is intended to scale up the use of SOC as an important source of information to local chief executives, policymakers, and planners for use in reviewing, assessing and investing in the governance and management of coastal and marine areas.

**INDICATORS OF
PROGRESS**

The key indicators of progress toward a progress report on ICM programs every 3 years, including climate change adaptation measures, include:

- ❖ PEMSEA's SOC reporting system and IIMS adopted and incorporated into national ICM scaling up programs (2011-2013);
- ❖ Training materials, software and hardware, as appropriate, and other informative materials on the development and use of SOC and IIMS prepared and disseminated to local governments implementing ICM programs (2012-2016)
- ❖ SOC and IIMS Training workshops and technical assistance organized and conducted (2012-2013);
- ❖ Regular ICM Forums or similar events organized and conducted for local governments implementing ICM programs for information sharing, including SOC reporting (2012-2016)
- ❖ First national SOC report prepared, using local SOC reports, as well as other pertinent information from national, bilateral and multilateral projects (2012-2016)
- ❖ National and sub-national environmental monitoring programs covering ICM sites, coastal seas, LMEs and priority watersheds providing scientific data and feedback on the effectiveness and impacts of management interventions and commitments of Partner Countries and local governments, and published in State of Ocean and Coasts (SOC) Reports (2012-2016).

ENABLING TARGET 5: Capacity development and knowledge management

The capacity development and knowledge management component is designed to raise public awareness and competence, build and strengthen multi-sectoral participation in support of the sustainable development of the coastal and marine environment, and mobilize increased investments in protecting and sustaining coastal and marine ecosystem services from the public and private sectors. The envisaged actions provide an opportunity for the active participation of Non-Country Partners, academia, international organizations, donors and the business community in SDS-SEA implementation programs at local, national and regional levels.

Expected outputs include setting up and strengthening local, national and regional networks to collate, organize and disseminate information and knowledge on coastal and marine ecosystem services and resource management, as well as innovative policies, programs and practices to protect and manage these vital services. The action plan also includes the organization of a regionally-owned, knowledge platform to serve as a clearinghouse/repository of information on coastal and ocean governance issues, and promoting best practices and investments in improving the health and resiliency of marine and coastal resources in coastal areas and LMEs of the region. The knowledge management platform will also serve as a link with international agencies, programs and activities operating in the region and globally, encouraging and facilitating sharing of information and knowledge among countries, regions and institutions as one way to build capacity and learn from one another's experiences.

ACTION 5.1:
Establish accredited ICM and special skills training courses and programs

With the commitment to achieve ICM scaling up targets and progress towards sustainable development and a blue economy, it is evident that a degree of determination is required to ensure that competent coastal planners and managers are in place and capable of addressing the ecological, socioeconomic, political, and cultural complexities of developing and managing coastal and marine areas. In addition they will need special skills to facilitate, negotiate, mediate and implement policy and management changes.

While a core of ICM practitioners has been established in the region over the years, the gap between demand and

supply is still wide, and is likely to spread farther. This ties up with the initiation of efforts—through SDS-SEA objectives, policy reforms and country operations—to scale up ICM in the countries of the region.

INDICATORS OF PROGRESS

Key indicators of progress include:

- ❖ The development and initiation of ICM and special skills training and capacity development programs as a coordinated effort in the execution of SDS-SEA/ICM Implementation Plans, LME SAPs and other related action plans (2012-2014);
- ❖ The development and dissemination of PEMSEA certified ICM and special skills training courses for use in regional, sub-regional/LME and national ICM training and capacity development programs (2012-2016);
- ❖ The establishment of an East Asian Seas ICM Postgraduate Degree Program for human capacity development in coastal governance in partnership with universities (2012-2014);
- ❖ The establishment of a licensing and certification system for ICM professionals (2012-2016).

ACTION 5.2:
Enable ICM Learning Centers, National and Regional Centers of Excellence and educational institutions to train, educate and build awareness in coastal and ocean governance

The purpose of ICM Learning Centers is to assist PEMSEA countries to provide training and other capacity development services in support of ICM scaling up to local governments, NGO's and community members. As of 2011, PEMSEA ICM Learning Centers have been established in 7 universities in the region. However, additional ICM Learning Centers will be required in order to successfully achieve the ICM expectations in all participating countries.

In order to strengthen the capacities of ICM Learning centers, Action 5.2 will also facilitate a network of ICM Learning Centers, to promote wider dissemination and transfer of knowledge, experience and skills in ICM training, practice, tools and methodologies. In addition, through the establishment of a Regional Centers of Excellence (RCoE) program, this action aims to mobilize institutions with recognized strategic areas of expertise to

improve marine and coastal management in the region. As of 2011, one RCoE has been recognized by PEMSEA, namely the Hong Kong-based Centre for Marine Environmental Research and Innovative Technology (MERIT), with excellence in marine pollution. By designating recognized areas or centers of excellence as RCoEs, PEMSEA acknowledges the importance, distinction and relevance of their work in the region. By accepting the designation as RCoE, these institutions demonstrate their willingness and commitment to share their expertise and techniques with PEMSEA countries.

**INDICATORS OF
PROGRESS**

Key indicators of progress by 2016, through the collaborative efforts of PEMSEA, national and local governments, sub-regional/LME programs and projects and universities, include:

- ❖ The formation of ICM Learning Centers in at least 15 universities across the region
- ❖ The launching of a functional ICM Learning Network among ICM Learning Centers and universities across the region to promote the exchange of information and knowledge in ICM implementation, particularly the processes, practices and tools in coastal management through:
 - Regular international, regional and national forums
 - Staff exchange programs
 - Study tours/site visits
 - Training-of-trainer programs
 - Certification of trainers/training institutions
- ❖ RCoEs demonstrating excellence in special issues, including vulnerability assessment and climate change adaptation, disaster risk management, valuation of coastal and marine ecosystem services, and eco-business development, recognized by PEMSEA and contributing to SDS-SEA implementation.

ACTION 5.3:
Build a knowledge platform and support network to facilitate scientifically sound decisions and investments in sustaining ecosystem services

To build knowledge management support for national SDS-SEA Implementation Plans, Action 5.3 will focus on the collection, review, packaging and dissemination of lessons learned and best practices demonstrated among countries, across the region and globally, in coastal and ocean management and sustainable development. The knowledge management support system has two principal purposes, namely: a) to strengthen the use of available scientific information, technologies, processes and lessons learned in policy making and decision taking; and b) to increase political commitments and investments of national and local governments, the business community/corporate sector, donors, banks and investors for up scaling and replication of innovative technologies, tools, practices and procedures contributing to protecting and sustaining ecosystem services.

The specific goal of Action 5.3 is to establish a regionally and country-owned knowledge platform that: facilitates the integration of investments in sustaining ecosystem services into national and regional economic and development policies, processes and plans; strengthens linkages to the sustainable development agenda adopted by countries of the region; enhances capacities and services at the central and local government levels for developing and implementing investment projects; and engages domestic and foreign investors, donors and financial institutions in investment projects at the local, national and sub-regional/LME levels.

INDICATORS OF PROGRESS

Action 5.3 will bring together policymakers, local chief executives, project managers, practitioners, academia, investors and the business sector, and will work through a range of activities under three components by 2016:

- ❖ A regional ICM e-Library and knowledge sharing portal: a regionally and country-owned knowledge platform and portal to promote dialogue and improve the exchange of knowledge, information and methods within and among countries on ICM and investments in sustaining marine and coastal ecosystem services, and

a connection to existing and emerging networks and initiatives across the region and globally

- ❖ Innovative tools and best practices: a system for identifying, packaging and transferring new and innovative approaches and best practices to policymakers and practitioners and for facilitating the mainstreaming of time bound priority targets and projects under the brown and blue agenda into national and local government medium-term development and investment plans
- ❖ Communities of practice and support services: a support mechanism for national and local governments, providing access to and use of skills and experiences in the region and globally, as well as new and innovative tools and practices, for the development and implementation of investment projects
- ❖ The establishment of a PEMSEA Expert Advisory Group to counsel the EAS Partnership Council, the Executive Committee and the PRF on emerging trends and issues related to the objectives and targets of the SDS-SEA, to undertake independent assessment of PEMSEA's technical outputs, and to conduct reviews of informative documents, such as codes, guides, technical standards and best practices, which are submitted to the Executive Committee and the EAS Partnership Council for PEMSEA certification
- ❖ The strengthening of PEMSEA's Regional Task Force (RTF) and National Task Force (NTF) as a technical support network at the regional, national and local levels scaling up ICM programs through partnerships with universities, scientific and technical institutions, corporate sector, and ICM and IRBCAM sites.

Key indicators of progress as a consequence of improved knowledge management and networking in the region include:

- ❖ A 100 percent increase in membership to the PEMSEA Network of Local Governments for Sustainable Development by 2015, through enhanced interaction among national policy makers and local

chief executives via a regional e-network and serving as advocates for integrated management of coastal and marine areas

- ❖ Decision-makers at the national and local levels mainstreaming ICM, CCA/DRR, and SAPs/NAPs targets into medium-term investment plans in at least 70 percent of participating countries and 10 local governments.
- ❖ Leveraging of increased investments in protecting and sustaining coastal and marine ecosystem services by the public and private sectors by at least 5 local governments implementing ICM programs.
- ❖ Targeted research supports sound policy and management decisions in emerging issues, including hypoxia, climate vulnerability and ecosystem health and productivity in priority watershed, coastal and marine areas.

ENABLING TARGET 6: Sustainable financing

The purpose of the sustainable financing component is to realize adequate funding to develop and sustain commitments to SDS-SEA and ICM scaling up programs. The main thrust of the sustainable financing target involves:

- Adopting and implementing innovative national policies, programs and practices to establish a stable investment climate and encourage partnerships in sustaining coastal and marine ecosystem services;
- Boosting capital flows into environmental investments; and
- Strengthening the role of the business community/corporate sector in building a blue economy at the local, national and regional levels.

ACTION 6.1:
Increase public and private sector investments in enterprises, technologies, practices and services that contribute to a sustainable, ocean-based blue economy

It is generally recognized that coastal and marine resources are making significant contributions to the economies of countries of the region (Tropical Coasts, July 2009). Yet, the value of social and economic benefits from coastal and marine ecosystem services to local and national economies is only beginning to be recognized, while the process of translating ecological value into practical terms for policymakers, local stakeholders and investors continues to be a challenge. This lack of explicit value has created a barrier to engaging policy makers in the drive for change, including the creation and implementation of policies that facilitate increases in investment by the public and private sectors.

Action 6.1 will focus on strengthening investments in the blue economy by: a) quantifying the value of ecosystem services and the potential for enhancing “blue” markets at the local level; b) converting the value of ecosystem services and their market potential into investment opportunities covering, for example, building community resilience to climate change, development of sustainable alternative livelihoods and start-up of new income generating opportunities, technologies and practices; c) implementing demonstration projects as examples of enterprises that can be undertaken at the local level to turning constraints to sustainable development into opportunities for innovation; d) packaging and promoting innovative policies, tools, technologies, practices and

lessons learned from demonstration projects as well as from other relevant projects and initiatives; and e) forging partnerships arrangements, as appropriate, involving local, national and international stakeholders and investors for demonstration projects, as well as replicating and scaling up good practices. Action 6.1 will involve working in close collaboration with a number of regional and sub regional initiatives, including: the GEF/World Bank Program on Scaling up Partnership Investments for Sustainable Development of Large Marine Ecosystems of East Asia and their Coasts; the GEF/UNDP Program on Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Intergovernmental Agreements and Catalyzed Investments; the YSLME SAP; the CTI Regional Plan of Action; and other investment projects in the region and globally.

INDICATORS OF PROGRESS

Key indicators of progress by 2016, through the collaborative efforts of PEMSEA, GEF, World Bank, UNDP, national and local governments and other partners, include:

- ❖ The conduct of at least 5 demonstration projects at ICM sites and sub regional sea areas/LMEs addressing innovative policies, approaches and investments in sustainable ecosystem services/blue enterprises and building climate resilience into vulnerable sectors of the economy and the community.
- ❖ Packaging and dissemination of experiences, innovative policies and good practices through a regional knowledge management platform.
- ❖ Replication and up scaling of good practices in at least two countries in the region.
- ❖ Forging public-private partnership arrangements between national and local governments and the corporate sector/business community in support of replicating and scaling up investments.

ACTION 6.2:
Mobilize donors, domestic and foreign investors and other concessional sources of funding to help address program gaps in means and capacity

The SDS-SEA creates opportunities for innovative partnerships among national and local governments, regional and sub-regional organizations, UN agencies, donors, and domestic and foreign investors. The focus of Action 6.2 is to facilitate collaborative planning and improved interaction among Country Partners, Non-Country Partners, government agencies, levels of government, and other regional organizations, programs and projects to reduce duplication, identify program gaps and mobilize the required resources and support for capacity development, knowledge management and undertaking concrete measures to achieve the priority targets of the countries and their partners.

INDICATORS OF PROGRESS

Key indicators of progress by 2016, through the collaborative efforts of PEMSEA, national and local governments, regional organizations, programs and projects and their partners, include:

- ❖ The preparation and regular updating of a portfolio of unfunded and under funded priority projects, capacity development requirements and knowledge management initiatives of countries in support of SDS-SEA, LME SAPs or other related action plans.
- ❖ The development and promotion of project proposals in line with the interests of donors and investors, in collaboration with national and local governments and other stakeholders.
- ❖ The organization and conduct of donors/investors roundtables to promote and facilitate donor interest in the implementation of projects.

Key indicators of progress of on-the-ground management interventions by 2016, through the collaborative efforts of PEMSEA, national and local governments and their partners, include:

- ❖ The establishment of an e-based partnership network for sharing and promoting partnership opportunities in unfunded and underfunded projects and initiatives in the SDS-SEA portfolio;
- ❖ The start-up of a CSR network at the national and/or

regional level, as appropriate, to engage the corporate sector/business sector as partners of local governments and coastal communities in sustainable development projects and programs and building ocean-based blue economies.

- ❖ Corporations and the business community engaged as partners of local governments in at least 10 ICM sites and at least one LME
- ❖ The packaging of case studies on successful projects, good practices, and opportunities for scaling up and replication, for dissemination through the capacity development and knowledge management network.

ACTION 6.3:

Demonstrate and replicate the use of innovative financial and economic instruments and other incentives, designed to drive positive changes in behavior

Various financial and economic instruments have been tested and applied to different degrees across the East Asian Seas region. The focus of this action is to demonstrate the use of such instruments to meet the demands of local development, and particularly for sustainable development and an ocean-based blue economy. At present, there is a dearth of success stories. One of the most important keys to the success of these instruments is that they meet the demands of local communities.

INDICATORS OF PROGRESS

Key indicators of progress by 2016, through the collaborative efforts of PEMSEA, national and local governments, regional organizations, programs and projects and their partners, include:

- ❖ Innovative economic and investment mechanisms (e.g., revolving funds, PPP, PES, carbon credits) tested and applied in at least 4 partner countries to help national and local governments sustain and scale up the protection and management of coastal and marine ecosystem services, while building a blue economy.

ANNEX A

SDS-SEA IMPLEMENTATION PLAN SCHEDULE 2012-2016

TARGET 1: REGIONAL GOVERNANCE MECHANISM		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
1.1 Complete the transformation of PEMSEA into a self-sustaining regional governance mechanism	1.1.1 A host agreement signed between the Government of the Philippines and PEMSEA, providing the organization with the privileges and immunities necessary to enable it to effectively perform its mandate and functions in the Philippines						Approval of Host Agreement by the Government of the Philippines Government of the Philippines, PRF
	1.1.2 The adoption and initiation of a 5-year regional SDS-SEA Implementation Plan with time-bound targets and a system of joint and collaborative planning, implementation, reporting and updating among PEMSEA Partners and collaborators						Preparation of a regional SDS-SEA Implementation Plan through a collaborative planning process involving PEMSEA Country and Non-Country Partners and other organizations/projects working on coastal and marine issues in the region; adoption of SDS-SEA Implementation Plan by the EAS Partnership Council; review, refinement and updating of the Implementation Plan on a regular basis PRF, EAS Partnership Council; PEMSEA Partners
	1.1.3 The adoption and implementation of measures to enhance PEMSEA's efficiency, flexibility and effectiveness as a country-owned regional organization, including rules of governance, a sustainable financing plan, a communication/knowledge-sharing plan, and a restructuring plan for the PEMSEA Resource Facility (PRF)						Preparation and adoption of plans; initiation of plans and submission of progress reports to the EAS Partnership Council on a regular basis PRF, EAS Partnership Council
	1.1.4 Voluntary financing and in-kind commitments from PEMSEA Country and Non-Country Partners, facilitating PEMSEA's core management, coordinating, administrative, secretariat and fundraising operations						Development of arrangements for voluntary financing and in-kind commitments in collaboration with PEMSEA Partners; adoption of voluntary arrangements by the EAS Partnership Council PRF, PEMSEA Partners, EAS Partnership Council

TARGET 1: REGIONAL GOVERNANCE MECHANISM		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	1.1.5 Partnership agreements between PEMSEA and other regional and sub regional/LME governance mechanisms to consolidate and align Strategic Action Programmes (SAPs) and other endeavors in large marine ecosystems LMEs and sub-regional sea areas (e.g. the Yellow Sea and the Arafura-Timor Seas and the West and Central Pacific Fisheries Commission (WCPFC)) into as common platform for improving coastal and ocean governance and for mobilizing the human and financial resources of stakeholder partners						Development of partnership arrangements in collaboration with sub regional sea/LME governance mechanisms, including; YSLME; ATS; WCPFC; COBSEA; Sulu Celebes; CTI; and other potential partners; approval of collaborative arrangements by EAS Partnership Council PRF, PEMSEA Partners, collaborating organizations, EAS Partnership Council
	1.1.6 Innovative financing mechanisms developed and put in place for sustaining PEMSEA and technical assistance and support to countries for SDS-SEA implementation						Development of a programmatic approach to investments in SDS-SEA implementation (PRF) in collaboration with Country Partners, GEF, UNDP, the World Bank and other sub regional sea/LME projects and programs; promotion of PEMSEA products, services and opportunities in support of SDS-SEA related projects and targets at the local, national and regional levels, including ICM scaling up (PRF); development and implementation of a regional knowledge sharing platform (PRF) to promote and advocate SDS-SEA and PEMSEA as a platform and mechanism for partnerships PRF, EAS Partnership Council

TARGET 1: REGIONAL GOVERNANCE MECHANISM		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	1.1.7 A portfolio of flagship projects prepared in support of national SDS-SEA Implementation Plans, and facilitated through co-financing arrangements with domestic and international investors and donors						Preparation of portfolio of flagship projects (PRF) in collaboration with Country Partners; portfolio projects will focus on strengthening the execution of national SDS-SEA /ICM Implementation Plans, including training and education, technical assistance, co-financing of investments under the blue and brown agendas, building ocean-based blue economies, and reducing the vulnerability of coastal communities and resources to climate change and other natural and manmade disasters. Integration of flagship projects into GEF and other donor programs and projects at the regional and national levels PRF, Country Partners, World Bank, UNDP, other donors, business sector
	1.1.8 Expansion of PEMSEA Partners, with the inclusion of all countries of the region, as well as organizations that share PEMSEA's vision, mission and goals, as Partners						Promotional materials/campaign prepared (PRF); conduct of advocacy campaigns at the national, sub regional and regional levels PRF, Country and Non-Country Partners, PNLG

TARGET 2: NATIONAL GOVERNANCE		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
2.1 Achieve national coastal and ocean policy through the institutionalization of interagency, multi-stakeholder coordinating mechanisms and integration of SDS-SEA objectives and targets into national and subnational medium-term development and investment plans	2.1.1 The adoption and implementation of national policy for coastal and ocean governance in 70 percent of participating countries						Assessment of innovative ocean policies and programs in the region and internationally, and how they address commitments under international conventions and agreements, RIO+20 outcomes, social, economic and ecological changes and emerging trends, while building an ocean-based blue economy; conduct of national consultations/forums; completion/adoption of national coastal and ocean policies/strategies Cambodia, China, Indonesia, Philippines, Thailand, Timor Leste and Vietnam
	2.1.2 The preparation and adoption of national legislation on coastal and ocean governance and management, including contributions to sustainable development objectives and targets and building an ocean based blue economy						Assessment of innovative coastal and ocean legislation in the region and internationally; identification of gaps and overlaps in existing national laws laws/regulations in relation to national policies and strategies for ocean-based blue economy development; conduct national consultations; undertake awareness building on the significance of coasts and oceans among policy makers and the general public; drafting and adoption of national coastal and ocean law and/or strengthening of existing legislation China, Indonesia, Philippines, Thailand
	2.1.3 The preparation and adoption national land- and sea-use legislation, including the integration of sustainable development, climate change adaptation and disaster risk reduction measures into national and local land- and sea-use planning processes						Assessment of legislation and best practices in the region and internationally; identification of issues, gaps and overlaps in existing national laws laws/regulations in relation to zoning of coastal and marine space, including climate change, disaster risk reduction and food security, national policies and strategies for sustainable development and building a blue economy; conduct national consultations; undertake awareness building on the significance of coasts and oceans among policy makers and the general public; drafting and adoption of national land- and sea-use legislation Cambodia, China, Lao PDR, Philippines, Thailand

TARGET 2: NATIONAL GOVERNANCE		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	2.1.4 Setting up and operation of national interagency, multi-sectoral coordinating mechanisms to oversee and coordinate coastal and ocean policies and governance issues						Review and assessment of options, including strengthening of existing mechanisms and establishing new mechanisms; organization and conduct of national consultations; institutionalization of national interagency coordinating mechanism for SDS-SEA/ICM implementation China, Indonesia, Philippines, Thailand, Timor Leste, Vietnam
	2.1.5 The adoption and initiation of medium-term national SDS-SEA/ICM Implementation Plans in PEMSEA Country Partners						Organization and conduct of a collaborative planning with concerned government agencies, levels of government, organizations, sectors and the general public, as appropriate, for the purpose of preparing and adopting a medium-term implementation plan for SDS-SEA /ICM, including measurable targets and work schedule; adoption and initiation of national SDS-SEA/ICM Implementation Plans Country Partners, PRF
	2.1.6 The incorporation of objectives, targets and actions of the national SDS-SEA/ICM Implementation Plans into the medium-term socio-economic development and implementation plans of participating countries						Incorporation of SDS-SEA/ICM objectives, targets and actions into the medium-term development plans and strategies in support of sustainable development and building blue economies Country Partners
	2.1.7 The development and implementation of a monitoring and reporting system to determine progress, achievements and challenges with regard to national SDS-SEA/ICM implementation						Development of an evaluation process to determine the effectiveness of policy, legislation, institutional arrangements and management processes in the delivery of SDS-SEA/ICM Implementation Plans, and the resulting benefits with regard to sustainable development targets and ocean-based blue economy development Country Partners, PRF
	2.1.8 The ratification and implementation of international conventions and agreements related to sustainable development of coasts and oceans, and the subsequent actions to develop and/or harmonize existing regulations with relevant instruments						Ratification and implementation of relevant instruments Philippines: IMO Conventions Thailand: UNCLOS and IMO Conventions

TARGET 3: ICM SCALING UP		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
3.1 Maximize local government capacity	3.1.1 The adoption and implementation national policies, legislation and programs to direct and guide local governments in ICM development and implementation						Preparation/strengthening and adoption of national legislation covering integrated coastal management (ICM), and other management mechanisms as may be appropriate including marine protected areas/protected areas (MPA/PA), integrated water resources management (IWRM), integrated river basin and coastal area management (IRBCAM), and land- and sea-use planning/marine spatial planning (MSP); development of procedures and guidelines for effective implementation of legislation/regulations at the national and local levels, including institutional mechanisms/ arrangements, roles and responsibilities of national and sub-national agencies and organizations, conflict resolution, capacity development and incentive programs, and monitoring, evaluation and reporting requirements DPR Korea, Lao PDR, Philippines, Thailand
	3.1.2 Setting up or strengthening of national and sub-national coordinating mechanisms to oversee and guide the implementation of ICM programs						Organization of functional national interagency mechanisms to coordinate and guide national ICM programs; establishment of interagency, multisectoral coordinating mechanisms at the sub-national (state; province; city; municipality) level to plan, coordinate and implement ICM programs on-the-ground Partner Countries
	3.1.3 The establishment of, or facilitation of access to, education and training programs to build a core of competent managers and implementers at the national and subnational levels for ICM program development, management and implementation						Development and implementation of a national capacity development strategy and plan; establishment of capacity development programs at the national level focusing on issues/priorities for ICM program development and implementation (e.g., training; education; knowledge management; integrated environmental monitoring; data sharing; awareness building); completion of capacity needs assessment, covering short-to-long-term needs for ICM scaling up; initiation national plan PRF, Partner Countries

TARGET 3: ICM SCALING UP		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	3.1.4 The mobilization of the required human and financial resources to mainstream national ICM policies, legislation and programs into local government development and investment plans						Identification and development of a core group of trainers/educators, institutions and/or programs for start-up of national ICM capacity development program; organization of professional development/training of trainers/educators, as required, to maintain quality of training, transfer new information, case studies and good practices and strengthen linkages among trainers/educators and scientific and technical disciplines across the region; organization and conduct of leadership seminars, study tours and workshops for local leaders, policymakers and planners to facilitate interaction across local governments to share ICM learning experiences PRF, Partner Countries
	3.1.5 The implementation of the State of the Coasts (SOC) Reporting System as a systematic approach to measuring progress and impacts of the ICM program, and providing feedback to decision makers for improving the program in ICM sites						Assessment/demonstration of the SOC reporting system and integrated information management system (IIMS) as a feasible tools for gathering, collating, analyzing and reporting on ICM programme development and implementation, including climate change adaptation; refinement and adoption of SOC reporting system with clear benchmarks and indicators for the national ICM program; development and implementation of SOC/IIMS training program, guidelines and technical backstopping for local governments to prepare SOC reports on a regular basis; organization and conduct a regular ICM Forum or similar event for local governments, as an opportunity to report on ICM progress, and present SOC reports; collation and synthesis of local government SOC reports for inclusion in national SDS-SEA/ICM reporting PRF, Partner Countries
	3.1.6 The application and scaling up of PEMSEA's ICM Code and Recognition System in 50 percent of ICM programs across the region, as a means of assessing and recognizing local governments' efforts to strengthen governance and sustainable development of marine and coastal resources and to shape social, ecological and economic benefits derived from an ocean-based blue economy at the local level						Demonstration of ICM Code and recognition system at three ICM sites, in collaboration with local government (PRF; China (Dongying), Philippines (Bataan), Vietnam (Danang)); submission of final documentation to EAS Partnership Council for approval and certification; roll-out of Code and recognition system in collaboration with the PNLG, including training program, guideline materials, technical backstopping and auditing PRF PNLG China (Dongying) Philippines (Bataan) Vietnam (Danang)

TARGET 3: ICM SCALING UP		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
3.2 Realize climate change adaptation (CCA) and disaster risk reduction (DRR) measures in vulnerable coastal areas through ICM Programs	3.2.1 Climate smart policy, strategy and legislation adopted and mainstreamed nationally and sub-nationally in at least 70 percent of participating countries to reduce the vulnerability of coastal communities and enhance the resilience of coastal and marine resources to the impacts of climate fluctuations						Research and assessment of legislation and best practices in the region and internationally; identification of issues, gaps and overlaps in existing national laws/regulations in relation to planning, development and zoning of watershed, coastal and marine space at the national and subnational levels, as well as sub regional sea areas and LMEs, with due regard for sea level rise, severe storm events, flooding, droughts, disaster risk reduction and food security, national policies and strategies; conduct national consultations; undertake awareness building on climate change and other natural and manmade hazards among policy makers and the general public; prepare national legislation/guidelines on land- and sea-use zoning, integrating disaster risk reduction (DRR) and climate change adaptation (CCA) measures into land and sea use planning processes; draft and adopt policy, strategy and legislation Cambodia, DPR Korea, China, Indonesia, Lao PDR, Philippines, Thailand, Timor Leste
	3.2.2 The delineation of highly vulnerable coastal and watershed areas, coastal communities and resources and habitats, as well as vulnerable sectors of society, including the poor, women and the youth, and strengthening their capacity to adapt to climate change						Delineation of climate sensitive/vulnerable areas and sectors within the country; monitoring and assessment of impacts, changes and trends; develop, adopt and initiate national DRR/CCA plans linking national agencies' programs with local government response programs in highly vulnerable areas, covering early warning systems, hazard mapping, community resiliency, emergency preparedness and emergency capabilities, etc.; raise awareness of local communities and authorities about the necessity and benefits of preparedness for natural and manmade hazards using mass media, social networks and other innovative communication systems; formulation of standards, guidelines and good practices in climate change adaptation, improved resiliency, and safety and security of coastal communities, marine and coastal resources and sectors of the ocean economy Cambodia, China, DPR Korea, Indonesia, Lao PDR, Philippines, Thailand, Timor Leste, Vietnam

TARGET 3: ICM SCALING UP		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	3.2.3 The preparation and adoption of national legislation/guidelines on land- and sea-use planning and zoning, and the integration of DRR/CCA measures into land and sea use planning processes at the subnational level						Development, adoption and initiation of a national DRR/CCA plan linking national agencies' programs with local government response programs, covering early warning systems, community resiliency, emergency preparedness and emergency capabilities, etc.; preparation of guidelines on land- and sea-use zoning, integrating disaster risk reduction (DRR) and climate change adaptation (CCA) measures into land and sea use planning processes at the local level; provide training and technical backstopping to local governments to develop land- and sea-use plans with the integration of DRR/CCA measures Cambodia, Indonesia, Lao PDR, Philippines, Thailand, Timor Leste
	3.2.4 The implementation of habitat restoration and management programs, including coral reefs, sea grass beds, coastal wetlands and mangroves, and establishing marine protected areas, as appropriate, based on scientifically sound information, to improve the natural defenses of watershed areas and coastal and marine ecosystems to the impacts of climate change and to enhance carbon sequestration capacities of relevant habitats, in at least one ICM site/sub-regional sea area per country						Valuation of regulating and support services of habitats as coastal protection from storm surges, coastal erosion, salt water intrusion; assessment of restoration/recovery options to maximize potential as natural defense, and other benefits, including carbon sequestration, and their "market" potential; demonstration project maximize the effectiveness and sustainability of ecosystem service for natural defense, including application of a land- and sea-use zoning plan that integrates climate change and disaster risk reduction aspects; documentation of lessons learned/good practices. PRF Partner Countries GEF/World Bank project on Capturing Coral Reef Ecosystem Services in East Asia

TARGET 3: ICM SCALING UP		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	3.2.5 The formulation and implementation of disaster risk management programs, including oil spill preparedness and response, in highly vulnerable coastal areas, coastal seas/LMEs, including strengthening capacities to prepare for, respond to and recover from natural and manmade hazards and disasters						Update nautical charts for navigational safety and protection of the marine and coastal environment from sources of sea-based pollution; preparation of environmental sensitivity maps to identify high risk areas in the event of oil and chemical spills; conduct economic valuation of coastal and marine resources and services in areas at risk to oil spills; preparation of land- and sea-use zoning plan that integrates climate change and disaster risk reduction aspects; development and implementation of local emergency response/contingency plans with linkage to national plans; develop and build capacity in early warning and forecasting systems for severe weather events, storm surges, harmful algal blooms, etc., linking national and local networks; conduct training/drills for local communities, including evacuation plans and drills. PRF Partner Countries Cambodia, Thailand, Vietnam: Yeosu Project on Sensitivity Mapping in the Gulf of Thailand Other collaborating organizations
	3.2.6 Coordination among concerned national agencies to develop appropriate communication/knowledge sharing materials and events on ICM programs and benefits derived for adapting to climate change and other natural and manmade hazards, and incorporation of these into formal and non-formal education channels						see Component 5: Knowledge Management
	3.2.7 The development of new sources of financing, including the private sector, to support adaptation measures and preparedness, response, recovery and compensation for damages from natural and manmade disasters						see Component 6: Sustainable Financing

TARGET 3: ICM SCALING UP		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	3.2.8 Increase in the proportion of coastal communities in vulnerable coastal areas that are capable of responding to natural and manmade hazards, including climate change and extremes through the preparation and adoption of risk management plans and applicable early warning systems						Target and carry out habitat restoration and management in priority areas to improve the resilience and natural defenses of the coastal and marine ecosystem using the ICM framework and process; establish and manage marine protected areas, as appropriate, in order improve natural defenses of coastal and marine ecosystem to the impacts of climate change and to enhance carbon sequestration capacities of relevant habitats; increase knowledge and capacity for CCA and DRR through hard engineering demonstration projects, as appropriate, including climate proofing of houses, establishing wind breaks, and development of measures to reduce coastal erosion; establish an early warning system in vulnerable communities that is linked to a national system; prepare environmental sensitivity index maps on for coastal areas, and identify priority areas for protection in case of oil/chemical spills; local government contingency plans developed and operationalized for major hazards; supply basic equipment to local authorities and households on a shared cost basis (e.g., boats, shelters, communication equipment, etc. Indonesia: Bali, Sukabumi, Jakarta and Regions 7, 13 and 18 Philippines: GEF/World Bank project on Central Philippines Rural Development Thailand: Chonburi Timor Leste: Coral Triangle National Action Plan
	3.2.9 Adaptive management/disaster risk reduction measures implemented in at least 10 ICM sites to reduce impacts of climate change, improved oil spill preparedness, and strengthened maritime safety measures (e.g., PSHEM Code adopted and implemented).						Implementation of adaptive management/disaster risk reduction measures at ICM sites, including the application of PSHEM Code PRF, Country Partners, local governments implementing ICM, port authorities

TARGET 3: ICM SCALING UP		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
3.3 Integrate sustainable use of coastal and marine ecosystem services into ICM programs in biodiversity and fisheries hotspots	3.3.1 The delineation of coastal and marine areas of significant biological diversity and natural value locally, nationally and sub-regionally						Review and assessment/valuation of marine and coastal habitats and areas and identification of priorities for protection and rehabilitation; delineation of priority zones, including protection zones and prohibited development/reclamation zones; identification of priority locations for rehabilitation; coordination of roles of central and local governments in the protection and rehabilitation of designated priority areas; training and technical support provided to local governments/communities with responsibility for managing and restoring habitats China, DPR Korea, Indonesia, Philippines, Thailand, Timor Leste
	3.3.2 The development/updating of NBSAPs, including identification of priority locations for convergence with sub-national ICM programs						
	3.3.3 The development and adoption of national policy and strategies for coastal and marine development/coastal reclamation projects, taking into account the natural values of biodiversity and identifying limits on their use and alteration						Formulation of national policy on the control of foreshore development and land reclamation of bays, estuaries, islands and sandy banks China
	3.3.4 The development of partnerships across government and non-government sectors for protecting habitats, fisheries and/or rare and endangered species in priority locations						Development of partnerships between local governments, communities/community groups and the business sector to protect and manage habitats and fisheries in priority locations; identification and facilitation of new or innovative economic models to sustain and enhance the management effectiveness of protected areas (e.g. payment for ecosystem services; blue carbon; ecotourism; etc.); establishment of demonstration project to develop and test new economic models/partnerships. China, Indonesia, Philippines, Thailand, Timor Leste, Vietnam
	3.3.5 The preparation and adoption of national legislation/guidelines on land- and sea-use planning and zoning, and the integration of measures to restrict development, misuse or conflicting use of significant sites, habitats and fisheries resources into land and sea use planning processes at the subnational level						Development and implementation of national legislation and guidelines on land- and sea-use zoning and the protection and sustainability of important biodiversity areas, habitats, fisheries, etc.; implementation of zoning regulations and guidelines at the local level. Indonesia, Philippines, Thailand
	3.3.6 Increase in the proportion of coastal and watershed areas and LMEs with zoning schemes/marine spatial plans, PAs/MPAs, EAFM, IRBCAM and other management processes in place and contributing to scaling up ICM to achieve the 20% coastline coverage target;						Inclusion of country commitments to scaling up ICM and IRBCAM programs to achieve the 20 percent regional target in the respective 5-year SDS-SEA/ICM Implementation Plans; adoption and initiation of national implementation plans. China, Indonesia, Philippines, Thailand

TARGET 3: ICM SCALING UP		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	3.3.7 The development and initiation of habitat restoration and management plans in at least 10 ICM sites and one coastal sea/LME aimed at the rehabilitation of altered critical habitats and improving the resilience of coastal and marine ecosystems to climate change						Preparation and initiation of habitat restoration management plan within the framework of an ICM program in at least at one priority location in each country; monitoring and assessment of baseline conditions Country Partners; YSLME
	3.3.8 The development and initiation of sustainable fisheries management plans in at least 10 ICM sites and one coastal sea/LME aimed at equitable and sustainable fisheries and conservation of fish stocks through an ecosystem management approach						Development and implementation of sustainable fisheries management and conservation, using ICM/EAFM system in coastal areas/fishing grounds; implementation of alternative/supplemental livelihood programs to reduce pressure on fisheries and provide improved livelihoods for fisher folks China, RO Korea: Implementation of the YSLME SAP Indonesia: Tominy Bay, Northern Java, Arafura Sea Philippines: Timor Leste: Liquica, Bobonaro dan, Manatuto Vietnam: GEF/World Bank project on Coastal Resources for Sustainable Development (covering 7 provinces)
	3.3.9 Measureable improvements in the areal extent, health and resiliency of habitats (e.g., blue forests) including mangroves, coral reefs, sea grass and other habitats, in at least 10 coastal waters and watershed areas including biodiversity hotspots and areas-at-risk to climate change;						Country commitments to enhancing areal coverage of healthy and resilient habitats, including blue forests China, Indonesia, Philippines, Thailand, Timor Leste
	3.3.10 Strengthened MPAs functioning effectively in 10 ICM sites and an measurable improvement in the effectiveness and benefits derived from a regional network of MPAs operating in at least one coastal sea area/LME;						Country commitments to improving the management effectiveness of MPAs and MPA networks Cambodia, China, Indonesia, Philippines, Thailand, Timor Leste, Vietnam
	3.3.11 Decrease in the number of overexploited and depleted fisheries stocks in at least two threatened fishing grounds in ICM sites, coastal sea areas and LMEs.						Country commitments to decrease in the number of overexploited and depleted fisheries stocks China and RO Korea: YSLME SAP Indonesia: Tominy Bay, Northern Java, Arafura Sea Philippines:

TARGET 3: ICM SCALING UP		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
3.4 Advance water supply conservation and management and pollution reduction and waste management through ICM programs in priority coastal and watershed areas	3.4.1 The delineation of priority coastal areas and river basins that will be the focus of integrated river basin and coastal area management, addressing ecosystem integrity, public health and vulnerability						Selection of priority river basins and coastal waters for implementation of integrated river basin and coastal area management programs focused on land-sea management coordination using an ecosystem-based approach, with a particular focus on ecosystem integrity and pollution reduction and management China, DPR Korea, Lao PDR, Indonesia, Philippines, Thailand
	3.4.2 As may be relevant, the development and adoption of national policy, legislation and programs in support of integrated water resource development and management						Formulation/strengthening and adoption of national policy and legislation on integrated water resources management Lao PDR
	3.4.3 The incorporation of integrated water resources management priorities into national and sub-national socio-economic development and investment plans						Development and incorporation of objectives, time bound targets and investments in integrated water resources management in priority watershed and coastal areas into national and sub-national development and investment plans China, DPR Korea, Lao PDR, Indonesia, Philippines
	3.4.4 The development and adoption of integrated river basin and coastal area management (IRBCAM) plans for priority coastal and watershed areas, addressing water quality, water availability, water use, nutrient management and pollution reduction/waste management						Development and adoption of IRBCAM Plans or similar action programs focusing on pollution reduction investments: China: Blue Bohai Sea Action Plan (Daling River; Xiaoqinghe River; Luanhe River; Haihe River; Guanglihe River); Xiamen (Jiulong River) DPR Korea: Taedong River, Arok River Indonesia: Ciliwung River, Citarum River Lao PDR: Philippines: Manila Bay-Pasig River-Laguna Lake
	3.4.5 The establishment of functional national and local IRBCAM coordinating mechanisms in priority watershed and coastal areas						Organization/strengthening of IRBCAM coordinating mechanisms: China: Xiamen (Jiulong River) DPR Korea: Nampho, Taedong River, Arok River Indonesia: Ciliwung River, Citarum River Lao PDR: Philippines: Manila Bay

TARGET 3: ICM SCALING UP		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	3.4.6 Measurable reductions in pollutants (e.g., N; P; BOD) in at least 5 priority river basins and coastal areas being threatened by water quality degradation and loss of ecosystem services;						Development and implementation of monitoring programs in priority watersheds and coastal areas to determine pollutant reduction targets and levels of reduction being achieved through management interventions: China: Blue Bohai Sea Action Plan (Daling River; Xiaoqinghe River; Luanhe River; Haihe River; Guanglihe River); Xiamen (Jiulong River) Indonesia: Ciliwung River, Citarum River Philippines: Pasig River
	3.4.7 Demonstration of innovative technologies and good practices in nutrient management in at least two priority coastal areas/river basins;						Development and implementation of innovative technologies and good practices in pollution reduction and management: GEF/World Bank Program Framework (Manila Bay Integrated Water Quality Management Project; Guandong Agricultural Pollution Control Project) GEF/UNEP Global Project on Nutrient Management (Laguna Lake and Manila Bay Demonstration Project)
	3.4.8 Demonstration of good practices in water use and conservation measures in at least two priority coastal areas/river basins;						Demonstration of good practices in water management: China: Xiamen (Jiulong River Basin Management Project) Indonesia (16 River Basins-Daerah Aliran Sungai)

TARGET 3: ICM SCALING UP		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	3.4.9 Investment strategies/plans for water use and conservation and pollution reduction/waste management, including innovative policy, technologies and practices, adopted in at least two priority coastal areas/river basins;						Development and initiation of investment strategies and plans in priority watershed and coastal areas: China: Blue Bohai Sea Action Plan (Daling River; Xiaoqinghe River; Luanhe River; Haihe River; Guanglihe River); Xiamen (Jiulong River) Indonesia: Ciliwung River, Citarum River Lao PDR: Philippines: Manila Bay (Laguna Lake-Pasig River; Pampanga River)
	3.4.10 The organization and initiation of comprehensive water quality monitoring and reporting systems in at least two priority coastal areas/river basins.						Development and implementation of comprehensive water quality monitoring program linking watersheds and coastal areas: China: Blue Bohai Sea Action Plan (Daling River; Xiaoqinghe River; Luanhe River; Haihe River; Guanglihe River); Xiamen (Jiulong River) Indonesia: Ciliwung River, Citarum River Lao PDR: Philippines: Manila Bay (Laguna Lake-Pasig River; Pampanga River), as part of the GEF/World Bank project on Manila Bay Integrated Water Quality Management

TARGET 4: MONITORING, EVALUATION AND REPORTING		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
4.1 Implement integrated environmental monitoring to strengthen knowledge and understanding of ecosystems and their management from "ridge to reef"	4.1.1 Integrated environmental monitoring programs established and operationalized in at least two priority river basins and coastal areas						Establishment and/or strengthening of monitoring programs in priority watersheds addressing pollution reduction and management: China: Blue Bohai Sea Action Plan; Xiamen (Jiulong River Management Strategy and Plan) Lao PDR: Philippines: GEF/World Bank Manila Bay Integrated Water Quality Management Project
4.2 Apply the State of the Coasts Reporting System	4.2.1 PEMSEA's SOC reporting system and IIMS adopted and incorporated into national ICM scaling up programs						Adoption and implementation of SOC reporting system as part of national ICM programs; provision of technical support and backstopping to local governments preparing initial SOC reports, including training workshops, guidelines and technical assistance PRF, Country Partners, PNLG members, local governments implementing ICM
	4.2.2 Training materials, software and hardware, as appropriate, and other informative materials on the development and use of SOC and IIMS prepared and disseminated to local governments implementing ICM programs						
	4.2.3 SOC and IIMS Training workshops and technical assistance organized and conducted						
	4.2.4 Regular ICM Forum or similar event organized and conducted for local governments implementing ICM programs for information sharing, including SOC reporting						
	4.2.5 First national SOC report prepared, using local SOC reports, as well as other pertinent information from national, bilateral and multilateral projects						
	4.2.6 National and sub-national environmental monitoring programs covering ICM sites, coastal seas, LMEs and priority watersheds providing scientific data and feedback on the effectiveness and impacts of management interventions and commitments of Partner Countries and local governments, and published in State of Ocean and Coasts (SOC) Reports						

TARGET 5: CAPACITY DEVELOPMENT/ KNOWLEDGE MANAGEMENT		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
5.1 Establish accredited ICM and special skills training courses and programs	5.1.1 The development and initiation of ICM and special skills training and capacity development programs as a coordinated effort in the execution of SDS-SEA/ICM Implementation Plans, LME SAPs and other related action plans						Development of national ICM training programs and special skills training courses; coordination of capacity development across coastal and ocean-realized programs and projects; development of operational mechanism for exchanging capacity development skills, training materials and programs at the regional and LME programs and projects; preparation and adoption of model training courses in ICM, EAFM, MSP, MPA, etc. and special skills training (e.g., valuation of ecosystem services; total pollutant loading; vulnerability/risk assessment) for dissemination/application PRF, Country Partners, collaborating organizations
	5.1.2 The development and dissemination of PEMSEA certified ICM and special skills training courses for use in regional, sub-regional/LME and national ICM training and capacity development programs						Continuing review and assessment of needs at the national and regional/LME levels; development and implementation of new and updated training and education courses; approval and adoption as PEMSEA certified materials for use in training and education programs PRF, Country Partners, collaborating organizations, ICM Learning Centers, Regional Centers of Excellence
	5.1.3 The establishment of an East Asian Seas ICM Postgraduate Degree Program for human capacity development in coastal governance in partnership with universities						Organization of a expert group of educators and ICM practitioners to develop, test and finalize postgraduate degree program in ICM, in collaboration with universities in the region PRF, ICM Learning centers, Regional Centers of Excellence, network of universities/colleges, collaborating organizations

TARGET 5: CAPACITY DEVELOPMENT/ KNOWLEDGE MANAGEMENT		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	5.1.4 The establishment of a licensing and certification system for ICM professionals						Organization, development and testing of licensing and certification system for ICM professionals in collaboration with national certification agencies in the region; development of qualified education and on-the-job training conditions with universities and colleges, national and local governments and business sector to enhance capabilities in integrated coastal and ocean development and progress toward a blue economy. PRF, Partner Countries, universities/colleges, collaborating organizations
5.2 Enable ICM Learning Centers, National and Regional Centers of Excellence and educational institutions to train, educate and build awareness in coastal and ocean management	5.2.1 The formation of ICM Learning Centers in at least 15 universities across the region						Identification and selection of universities, colleges, and scientific institutions in priority locations across the region to be recognized as ICM Learning Centers, in collaboration with national governments; training and recognition of core teams in ICM Learning Centers and ICM sites as certified ICM trainers and educators PRF, Country Partners, universities/colleges, scientific institutions
	5.2.2 The launching of a functional ICM Learning Network among ICM Learning Centers and universities across the region to promote the exchange of information and knowledge in ICM implementation, particularly the processes, practices and tools in coastal management through:						
	o Regular international, regional and national forums						
	o Staff exchange programs						
	o Study tours/site visits						
	o Training-of-trainer programs						
o Certification of trainers/training institutions							

TARGET 5: CAPACITY DEVELOPMENT/ KNOWLEDGE MANAGEMENT		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	5.2.3 RCoEs demonstrating excellence in special issues, including vulnerability assessment and climate change adaptation, disaster risk management, valuation of coastal and marine ecosystem services, and eco-business development are recognized by PEMSEA and are contributing to SDS-SEA implementation.						Identification and recognition of RCoEs; development of project proposals/work program and schedules PRF, EAS Partnership Council, RCoEs
5.3 Build a knowledge platform and support network to facilitate scientifically sound decisions and investments in sustaining ecosystem services	5.3.1 A regional ICM e-Library and knowledge sharing portal: a regionally and country-owned knowledge platform and portal to promote dialogue and improve the exchange of knowledge, information and methods within and between countries on ICM and investments in sustaining marine and coastal ecosystem services, and a connection to existing and emerging networks and initiatives across the region and globally						Development and approval of knowledge management projects under the GEF/World Bank and GEF/UNDP Program Frameworks; construction and implementation of a regionally and country-owned knowledge platform and portal to promote dialogue and improve the exchange of knowledge, information and methods within and between countries on ICM and investments in sustaining marine and coastal ecosystem services, and a connection to existing and emerging knowledge networks and initiatives across the region and globally. Development and implementation of coastal and ocean awareness program to attach greater attention to coastal and marine ecosystem services and their contributions to society and economies, and the protection and sustainability of such services PRF, PEMSEA Partners and collaborating organizations, GEF, World Bank, UNDP, GEF IW Learn and other existing and emerging knowledge management mechanisms in the region
	5.3.2 Innovative tools and best practices: a system for identifying, packaging and transferring new and innovative approaches and best practices to policymakers and practitioners and for facilitating the mainstreaming of time bound priority targets and projects under the brown and blue agenda into national and local government medium-term development and investment plans						Development/strengthening of innovative tools and best practices; implementation of a systematic process for identifying, packaging and transferring new and innovative approaches and best practices to policymakers and practitioners and for facilitating the mainstreaming of time bound priority targets and projects under the brown and blue agenda into national and local government medium-term development and investment plans. PRF, PEMSEA Partners and collaborating organizations, GEF, World Bank, UNDP, GEF IW Learn and other existing and emerging knowledge management mechanisms in the region

TARGET 5: CAPACITY DEVELOPMENT/ KNOWLEDGE MANAGEMENT		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	5.3.3 Communities of practice and support services: a support mechanism for national and local governments, providing access to and use of skills and experiences in the region and globally, as well as new and innovative tools and practices, for the development investment projects.						Organization of communities of practice and support services in ICM and other management mechanisms in support of national and local governments, providing access to and use of skills and experiences in the region and globally, as well as new and innovative tools and practices, for the development investment projects. PRF, PEMSEA Partners and collaborating organizations, GEF, World Bank, UNDP, GEF IW Learn and other existing and emerging knowledge management mechanisms in the region
	5.3.4 The establishment of a PEMSEA Expert Advisory Group to counsel the EAS Partnership Council, the Executive Committee and the PRF on emerging trends and issues related to the objectives and targets of the SDS-SEA, to undertake independent assessment of PEMSEA's technical outputs, and to conduct reviews of informative documents, such as codes, guides, technical standards and best practices, which are submitted to the Executive Committee and the EAS Partnership Council for PEMSEA certification						Identification and selection of PEMSEA Advisory Group in collaboration with Partner Countries and the EAS Partnership Council; initial meeting of Advisory Group and approval of work program; initiation of work program PRF, EAS Partnership Council
	5.3.5 The strengthening of PEMSEA's Regional Task Force (RTF) and National Task Force (NTF) as a technical support network at the regional, national and local levels scaling up ICM programs through partnerships with universities, scientific and technical institutions, corporate sector, and ICM and IRBCAM sites						Identification and training of RTF and NTF members in collaboration with Country Partners; development of recognition/certification system for task force members as an incentive for professional development and strengthening of support mechanism; linkages established between task forces and national and sub regional/LME programs, as a support mechanism PRF, Country Partners

TARGET 5: CAPACITY DEVELOPMENT/ KNOWLEDGE MANAGEMENT		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	5.3.6 A 100 percent increase in membership to the PEMSEA Network of Local Governments for Sustainable Development by 2016, through enhanced interaction among national policy makers and local chief executives via a regional e-network and serving as advocates for integrated management of coastal and marine areas						Implementation of the Dongying Declaration in collaboration with the PNLG membership; organization of annual forum for local Chief Executives and policymakers on ICM development and benefits in support of sustainable development and building a blue economy PRF, PNLG Secretariat, PNLG Members, Country Partners
	5.3.7 Decision-makers at the national and local levels mainstreaming ICM, CCA/DRR, and SAPs/NAPs targets into medium-term investment plans in at least 70 percent of participating countries and 10 local governments						Organization and conduct of collaborative planning among key agencies and local governments in coastal and ocean governance; identification of objectives and targets, and timeframe; inclusion in medium term planning process at the national and local levels; Organization and conduct of national ICM Forums to review progress and achievements of ICM implementation, and identify challenges and gaps for inclusion in medium-term development and investment plans at the appropriate levels of both levels of governance Country Partners, Local governments implementing ICM programs, NTF/RTF
	5.3.8 Leveraging of increased investments in protecting and sustaining coastal and marine ecosystem services by the public and private sectors by at least 5 local governments implementing ICM programs.						See Sustainable Financing component
	5.3.9 Targeted research supports sound policy and management decisions in emerging issues, including hypoxia, climate vulnerability and ecosystem health and productivity in priority watershed, coastal and marine areas						Development and implementation of targeted research projects on: ICM contribution to building a blue economy; effective management of MPAs and MPA networks; upstream/downstream alliances in IRBCAM; innovations in adaptation measures to reduce the impacts of climate change; valuation of coastal and marine ecosystem services; identification and development of eco-business opportunities, etc. PRF, PEMSEA Partners GEF/UNEP project on Nutrient Management GEF/World Bank project on Capturing Coral Reef Ecosystem Services in East Asia Other collaborating project and programs

TARGET 6: SUSTAINABLE FINANCING		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
6.1 Increase public and private sector investments in enterprises, technologies, practices and services that contribute to a sustainable ocean-based blue economy	6.1.1 The conduct of at least 5 demonstration projects at ICM sites and sub regional sea areas/LMEs addressing innovative policies, approaches and investments in sustainable ecosystem services/blue enterprises and building climate resilience into vulnerable sectors of the economy and the community.						ICM incorporation/application in GEF/World Bank project on Scaling up Partnership Arrangements for Sustainable Development of Large Marine Ecosystems of East Asia and their Coasts China; Indonesia; Philippines; Vietnam
	6.1.2 Packaging and dissemination of experiences, innovative policies and good practices through a regional knowledge management platform.						Development and implementation of medium-sized project under the GEF/World Bank Platform Program PRF in collaboration with Country Partners and projects
	6.1.3 Replication and up scaling of good practices in at least two countries in the region.						
	6.1.4 Forging public-private partnership arrangements between national and local governments and the corporate sector/business community in support of replicating and scaling up investments.						Development and implementation of CSR programs focused on coastal and ocean governance/ICM program development and implementation Indonesia, Philippines, Thailand

TARGET 6: SUSTAINABLE FINANCING		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
6.2 Mobilize donors, domestic and foreign investors and other concessional sources of funding to help address program gaps in means and capacity	6.2.1 The preparation and regular updating of a portfolio of unfunded and under funded priority projects, capacity development requirements and knowledge management initiatives of countries in support of SDS-SEA, LME SAPs or other related action plans.						Facilitation of increased investment in the SDS-SEA implementation by the PRF, through joint and collaborative project development and promotion with Country and Non-Country Partners, local governments, donors, financial institutions, and the business sector covering: a. Portfolio of priority projects in support of ICM scaling up programs, including knowledge sharing and information dissemination, training and education and investments in habitat and resource conservation and capital works prepared in collaboration with governments at the national and local levels and promoted among the public and private sectors domestically and internationally; b. thematic priorities including: climate change adaptation; fisheries; habitat and resource conservation and management; and land-based sources of marine pollution; c. capital works identified and developed in coastal areas in support of ICM scaling up programs, through linkages with the public and private sectors, domestically and internationally; and d. a shift from projects that have a planning focus to projects that implement agreed plans and result in desired on-the-ground changes. PRF, Country Partners, GEF, World Bank, UNDP, business/corporate sector, community groups
	6.2.2 The development and promotion of project proposals in line with the interests of donors and investors, in collaboration with national and local governments and other stakeholders.						
	6.2.3 The organization and conduct of donors/investors roundtables to promote and facilitate donor interest in the implementation of projects.						
	6.2.4 The establishment of an e-based partnership network for sharing and promoting partnership opportunities in unfunded and underfunded projects and initiatives in the SDS-SEA portfolio;						
	6.2.5 The start-up of a CSR network at the national and/or regional level, as appropriate, to engage the corporate sector/business sector as partners of local governments and coastal communities in sustainable development projects and programs and building ocean-based blue economies.						

TARGET 6: SUSTAINABLE FINANCING		2012	2013	2014	2015	2016	REMARKS
ACTIONS	INDICATORS OF PROGRESS						
	6.2.6 Corporations and the business community engaged as partners of local governments in at least 10 ICM sites and at least one LME						Partnership arrangements forged between local governments and the corporate sector PRF, PNLG, local governments implementing ICM, business/corporate sector
	6.2.7 The packaging of case studies on successful projects, good practices, and opportunities for scaling up and replication, for dissemination through the capacity development and knowledge management network.						Preparation of case studies, good practices and other informative documents based on experiences; dissemination and utilization of materials in capacity development programs at the national and regional levels through ICM Learning Centers and RTF/NTF networks, regional knowledge platform PRF, Country Partners, PNLG, ICM Learning Centers, local governments implementing ICM, collaborating organizations
6.3 Demonstrate and replicate the use of innovative financial and economic instruments and other incentives, designed to drive positive changes in behavior	6.3.1 Innovative economic and investment mechanisms (e.g., revolving funds, compensation funds, PPP, PES, carbon credits) tested and applied in at least 4 partner countries to help national and local governments sustain the implementation of ICM programs.						Preparation of case studies and good practices on innovative economic instruments and mechanism for sustainable financing; organization of demonstration projects in partnership with other regional and sub regional projects and programs to test and demonstrate innovative instruments; package and promote good practices and lessons for replication and scaling up PRF China: Xiamen and Bohai Sea Indonesia Lao PDR Philippines: GEF/UNEP project on Nutrient Management in Manila Bay Timor Leste GEF/World Bank: Capturing Coral Reef Ecosystem Services in East Asia