PROGRAM FRAMEWORK DOCUMENT (PFD)

TYPE OF TRUST FUND: GEF Trust Fund

TYPE OF PROGRAM: Program Accessible to All GEF Agencies

PART I: PROGRAM IDENTIFICATION

Program Title	Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Implementation of Intergovernmental Agreements and Catalyzed Investments		
Country(ies)[1]	Cambodia, China, Indonesia, Lao PDR, Philippines,Timor Leste, Vietnam	GEF Program ID:	4936
Lead GEF Agency:	UNDP	GEF Agency Program ID:	5007
Other GEF Agency:	-	Submission Date: Resubmission Date: Resubmission Date:	March 29, 2012 April 12, 2012 August 16, 2012
Other Executing Partners	TBD	Program Duration (months)	60
GEF Focal Area(s):	International Waters	Agency Fee ($)	1,800,000

A. FOCAL AREA STRATEGY FRAMEWORK

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Type of Trust Fund	Indicative Financing	Indicative Cofinancing
IW-2	Outcome 2.1: Implementation of agreed Strategic Action Programmes (SAPs) incorporates ecosystem-based approaches to management of LMEs, ICM principles, and policy/legal/ institutional reforms into national/local plans GEF financing: 2,250,000 Co-financing: 45,000,000 Outcome 2.2: Institutions for joint ecosystem-based and adaptive management for LMEs and local ICM frameworks demonstrate sustainability GEF financing: 2,000,000 Co-financing: 33,000,000 Outcome 2.3: Innovative solutions implemented for reduced pollution, rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/ conservation, and port management and produce measureable results GEF financing: 11,750,000 Co-financing: 204,989,357	Output 2.1. National and local policy/ legal/institutional reforms adopted/ Output 2.2. Agreed commitments to sustainable ICM and LME cooperation frameworks Output 2.3: Types of technologiesand measures implemented in local demonstrations and investments Output 2.4: Enhanced capacity for issues of climatic variability andchange	GEF TF	16,000,000	282,989,357

[1] At time of submission of this PFD, Thailand is still conducting consultations regarding participation in the program, specifically the project "Scaling up the Implementation of the Sustainable Development Strategy for the Seas of East Asia". Participation of Thailand will be confirmed at time of PIF submission for this project.

IW-3	Outcome 3.3: IW portfolio capacity and performance enhanced from active learning/ KM/experience sharing (IWLearn) GEF financing: 1,500,000 Co-financing:1,000,000 Outcome 3.4: Targeted Research Networks fill gaps GEF financing:1,500,000 Co-financing:41,511,721	Output 3.3. Active experience /sharing/ learning practiced in the IW portfolio	GEF TF	3,000,000	42,511,721
		Sub-Total		19,000,000	325,501,078
		Program Management Cost		1,000,000	18,404,688
		Total Program Costs		20,000,000	343,905,766

B. PROGRAM RESULTS FRAMEWORK

Program Goal: To rebuild and sustain coastal and ocean ecosystem services across the East Asian Seas region through the scaling up of partnerships, capacities and investments at the regional, country and local levels

Program Component	Grant Type	Expected Outcomes	Expected Outputs	Type of Trust Fund	Indicative Financing ($)	Indicative Cofinancing ($)
1. Partnerships in coastal and ocean governance	TA	1.1. A regional partnership-based mechanism for transboundary governance and management of LMEs and coastal waters, and a platform for rebuilding and sustaining coastal and marine ecosystems services and reducing the impact of climate variability and change	1.1.1. Country partner commitments to intergovernmental cooperation under a regional partnership mechanism (PEMSEA) and 2 linked LME governance systems including YSLME Commission and WCPF Commission 1.1.2 Collaborative planning, updating and evaluation of management interventions in SDS-SEA and associated LME SAPs implementation undertaken at regional, LME and country levels	GEF TF	4,500,000	68,633,097
		1.2. National and local governments adopting and initiating ocean policy, legal instruments and institutional improvements, and mainstreaming SDS-SEA and LME SAP targets and interventions into their medium-term development and investment plans and programs	1.2.1 National and sub-national coastal and ocean policies and legal and institutional arrangements adopted and initiated for sustainable management of LMEs, priority coastal and marine areas, surrounding watershed and resources in at least 6 partner countries; applicable sectoral policies aligned 1.2.2 Agreed commitments for SDS-SEA and SAP implementation, including ICM			

			and CCA/DRR targets (e.g. 20% of coastline under ICM), incorporated into national and local government medium-term development and investment plans in partner countries 1.2.3 Climate smart policy and legislation formulated for mainstreaming into nationally and sub-nationally in at least 6 partner countries to reduce the vulnerability of coastal communities and enhance the resilience of coastal and marine resources to the impacts of climate fluctuations			
		1.3. Innovative financing mechanisms in place for sustaining the operation of intergovernmental and multi-sectoral partnership arrangements at the regional, subregional/ LME levels	1.3.1. Sustainable financing mechanisms developed and adopted at the regional and LME levels with niches for national and local governments, the business community, donors and development partners			
2. Healthy and resilient marine and coastal ecosystems	TA	2.1 Increase in the areal extent of healthy, resilient habitats (i.e., blue forests), including mangroves, coral reefs, sea grass and other coastal habitats/ areas	2.1.1 Increase in the proportion of coastal and watershed areas and LMEs with zoning schemes, marine spatial plans, PAs/MPAs, EAFM, ICARM and other management processes in place and contributing to scaling up ICM to achieve 20% coastline coverage target committed to by 7 GEF eligible partner countries under the SDS-SEA 2.1.2 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 2.1.3. Strengthened MPAs functioning effectively in coastal areas and improved regional network of MPAs operating in at least one LME	GEF TF	12,000,000	207,856,260

		2.2. Improved management of over exploited and depleted fisheries leading to recovery	2.2.1. Innovative fisheries management schemes developed and implemented in the context of ecosystem-based approach to reduce overexploitation in at least two threatened fishing grounds in coastal areas and in at least one LME 2.2.2.Harvesting of shared tuna stocks in the WCPF Convention area in the EAS meet sustainability criteria set by the WCPF Convention 2.2.3. Demonstration and replication of enhanced and sustainable mariculture and aquaculture production in YSLME to ease pressure on capture fisheries			
		2.3. Reductions in the discharge of pollutants from land-based activities	2.3.1. Measurable reductions in pollutants (e.g., N; P; BOD) in 5 river basins and coastal areas jeopardized by water quality degradation and loss of ecosystem services; with a target of up to 10% reduction in pollutants from land-based sources in YSLME to improve ecosystem health 2.3.2 Demonstration of innovative technologies and good practices in nutrient reduction (financed under the GEF/World Bank investment fund) shared, promoted and replicated in ICM sites and LMEs			
		2.4. Improved water use efficiency/ conservation in priority river basins and coastal areas	2.4.1Water use and conservation measures demonstrated and replicated based on targets adopted in at least two priority coastal areas/river basins 2.4.2. Investment strategy/ plan for water use and conservation demonstrating innovative policy, technologies and practices in at least two priority coastal areas and river basins			
		2.5. Coastal communities	2.5.1. Increase in the proportion			

		prepared and capable of responding to natural and manmade hazards, including climate fluctuations 2.6 Innovative instruments applied and generating funding to rehabilitate and sustain coastal and marine ecosystem services	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 2.5.2 Adaptive management 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 in 7 countries) 2.6.1 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 the implementation of ICM programs 2.6.2 Corporations and the business community engaged as partners of local governments in at least 10 ICM sites and at least one LME			
3. Knowledge platforms for building a sustainable ocean-based green economy	TA	3.1. Regional knowledge sharing platform for ecosystem management assists decision makers to translate policies and strategies into actions	3.1.1. National and sub-national environmental monitoring programs covering ICM sites, coastal seas, YSLMEs 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 3.1.2. Network of ICM Learning Centers and ICM Community of Practice enhance skills and intellectual capital and support services for governments at the national and sub-national levels	GEF TF	2,500,000	49,011,721

			3.1.3. Targeted research on ecosystem modeling, including total allowable nutrient loading, valuation of ecosystem services, and macro-scale zoning of vulnerable coastal and watershed areas, support sound policy and management decisions in ICM and related management processes, climate change adaptation and disaster risk reduction in priority watershed, coastal and marine areas			
		3.2. Increased resource allocation to ICM, CCA/DRR and SAP/NAP implementation at the national, sub-regional and regional levels in the EAS	3.2.1. Informed decision-makers at the national and local levels mainstream ICM, CCA/DRR, and SAP/NAP targets into medium-term investment plans in at least 4 countries and 8 local governments by end of programme			
		3.3. Program contributes to global learning on scaling up of investments in sustainable coastal and ocean management	3.3.1. One percent of IW budget supports the regional knowledge platform to contribute to IWLearn activities, including IWLearn project websites, experience notes and IW Conferences			
				Subtotal	19,000,000	325,501,078
				Program Management Cost	1,000,000	18,404,688
				Total Program Costs	20,000,000	343,905,766

C. INDICATIVE CO-FINANCING

Sources of Cofinancing	**Name of Cofinanciers (if known)**	**Type of Cofinancing**	**Amount ($)**
National Governments	Governments of GEF-recipient countries: Cambodia; China; Indonesia; Lao PDR; Philippines; Timor Leste; Vietnam	Grant	10,112,480
		In-kind	109,969,580
	Governments of self-financing participating countries: Japan; RO Korea	Grant	16,973,332
		In-kind	113,871,374
Local Governments	Governments of GEF-recipient countries: Cambodia; China; Indonesia; Lao PDR; Philippines; Timor Leste; Vietnam	Grant	100,000
		In-kind	54,445,000
	Governments of self-financing participating countries: Japan; RO Korea	Grant	100,000
		In-kind	-
GEF Agency	UNDP	In-kind	216,000
		Grant	11,758,000
Private Sector	UNDP-Coca Cola "Every Drop Matters Program"	Grant	15,000,000

	Others	Grant	1,425,000
Bilateral/Multilateral Agencies	Various	In-kind	2,435,000
Implementing Partner	WCPFC, SPC, Others	In-kind	4,900,000
NGO	WWF	In-kind	2,600,000
Total			**343,905,766**

D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY

GEF Agency	Type of Trust Fund	Focal area	Country Name/Global	Program amount (a)	Agency Fee (b)	Total c=a+b
UNDP	GEFTF	IW	Global	20,000,000	1,800,000	21,800,000
Total Grant Resources				20,000,000	1,800,000	21,800,000

PART II: PROGRAMATIC JUSTIFICATION

A. GOAL OF THE PROGRAM:

The goal of the Programme is to rebuild and sustain coastal and ocean ecosystem services across the East Asian Seas (EAS) region through the scaling up of partnerships, capacities and investments at the regional, country and local levels. The general approach is to address the urgent threats to the environment and human well-being and to remove barriers to building a sustainable ocean-based green economy in the EAS. To illustrate the importance of the seas and oceans to the economy of the EAS, the region harbours about 30% of the world's coral reefs and one-third of the mangroves and also produces about 40 percent of the world's fish catch and more than 80 percent of aquaculture. The seas provide nutrition, livelihoods, recreation, minerals, medicine, and building materials.

The world-leading rapid economic growth registered in this region in the past decades has been accompanied by deterioration in air and water quality, depletion of resources including renewable natural resources, and loss of coastal habitats and endemic species. Habitat and resource degradation and loss of biodiversity reduce the productive capacity and intrinsic resilience to climate change and to other natural disasters, which in turn affect livelihoods and incomes, food security, natural defenses (e.g., shoreline protection) against calamities and future potential uses. This pattern of economic growth is short-lived due to the high costs of ecological and socioeconomic impacts which will limit long-term growth.

In the EAS region, the unsustainable pattern of growth affecting its seas and oceans has already been recognized. This is due in part to the impacts of the various initiatives that have been supported by the GEF, including those in the international waters focal area. Total investments to date by the GEF to the region from the International Waters focal area exceeded $210[2] million with a total cofinancing of over $1.8 billion. These projects have addressed transboundary concerns, including water pollution, water resources management, overexploitation of fisheries, and loss of coastal habitats, among others. A number of these projects have supported the preparation and completion of foundational work for some of the LMEs and two LMEs are currently going through this step, while some of the strategic action programs have been formally adopted by governments and/or initially implemented.

Table 1. Impacts of Selected GEF Investments in the East Asian Seas and Remaining Challenges

Project	Year Approved	Amount (USD)	Results	Impacts	Remaining Gaps/Challenges

[2]The background paper for the EAS stock taking meeting held in Manila in October 2010 has provided an analysis of the GEF support to the region. This PFD draws from this background paper. The figure of $210 million was as of 2010 and excludes the recently approved IBRD program "Scaling Up Partnership Investments for Sustainable Development of the LMEs in East Asia and their Coasts" with allocation of $27 million from IW.

ICM Projects					
Prevention and Management of Marine Pollution in the East Asian Seas	1993	8,000,000	Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) prepared and adopted by 14 countries, as well as 19 non-country partners; East Asian Seas Partnership Council established and operational directing and co-coordinating the implementation of the SDS-SEA; participating countries set targets of 20% of the regional coastline covered by ICM and 70 % of countries with national coastal and ocean policy, by 2015; 9 national ICM demonstration sites and 26 parallel ICM sites established and operational in 9 countries; 10% of EAS coastline under ICM management as of 2010; PEMSEA recognized by countries as an international organization with its own legal personality (2009)	Total investments in environmental infrastructure (pollution reduction; waste management; habitat restoration/conservation, fisheries management, environmental monitoring) US$369 million by governments and private sector, resulting in 10-25% pollution reduction, 10-20 percent increase in mangrove and MPA coverage, reductions in the vulnerability of coastal communities to extreme weather events and other natural and manmade hazards, and increased fish catch and food security, in selected ICM sites across the region PEMSEA Network of Local Governments implementing ICM established and operating under its own Charter and financing, and serving to advocate and facilitate ICM scaling up across the region. Strategic partnership established with the GEF/World Bank Scaling Up Partnership Investments for Sustainable Development of the Large Marine Ecosystems of East Asia and their Coasts, to promote and facilitate increased investments in the blue and brown agenda	Strengthening of PEMSEA and the SDS-SEA as the regional governance mechanism and platform for scaling up the implementation of LME SAPs and NAPs; achieving the 20 % target for ICM coverage of the region's coastline, while addressing constraints and challenges to sustaining coastal and marine ecosystem products and services, including climate variation and change, extreme weather events and other natural and manmade hazards; mainstreaming investments in pollution reduction, climate change adaptation/disaster risk reduction, habitat restoration and management, and sustainable fisheries in national and local government development and investment plans; converting strategies and plans into investments through capacity building and knowledge sharing at the national, local and regional levels
PEMSEA, phase 1 – Partnerships for Environmental Management in the Seas of East Asia	1999	16,223,722			
PEMSEA, phase 2 - Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)	2006	700,000			
	2007	10,876,336			
Development and Implementation of Public-Private Sector Partnerships in Environmental Investments	2004	1,000,000			
Sub-total		**36,800,058**			
TDA/SAP Projects					
Yellow Sea (YS) LME	2004	14,394,183	TDA completed and endorsed (YSLME, South China Sea, ATS) YSLME SAP (endorsed by China	Pilot implementation of SAPs resulting in initial successes in reducing fishing effort, sustainable aquaculture, recovery of fish stocks, reversing degradation in coastal	Strengthening of integrated and cross-sectoral LME-based governance in order to implement SAPs and NAPs
Sulu-Celebes Seas LME	2008	85,000			
	2010	2,890,000			
Arafura and Timor Seas (ATS) Ecosystem Action Program	2008	150,000			
	2010	2,500,000			

Reversing Environmental Degradation in the South China Sea and the Gulf of Thailand (SCS-GT)	2000	16,414,000	and ROK) SCS-GT SAP (endorsed at Steering Committee level)	ecosystems such as mangroves, seagrass beds and coral reefs; among others	Scaling up of successful demonstration activities to achieve large-scale impacts across the LMEs
Other Project(s)					
West Pacific East Asia Oceanic Fisheries Management Project	2007	75,000	Collection of data and system developed for tuna fisheries; draft tuna management plans in Indonesia, Philippines, Vietnam	Reduced uncertainty in tuna stock assessments in the Western and Central Pacific Fisheries Convention (WCPFC) area	Finalizing and implementing the tuna management plans; Indonesia and Vietnam ratification of the WCPF Convention
	2007	925,000			
Sub-total		**37,433,183**			
Total		**74,233,241**			

The table above shows information about the subset of the GEF portfolio composed of 8 IW regional projects upon which this program will build on. Since 1993, the GEF has invested over $73 million (with co-financing of about $545 million) to address priority transboundary concerns. PEMSEA has successfully developed and implemented integrated coastal management (ICM) in 8 developing countries and the approached is recognized as a global model. (This is discussed further below.) The TDAs have been prepared and endorsed in all LMEs except for the Sulu-Celebes Seas where the process is going on. The SAPs have been either endorsed or currently being drafted. The implementation of the SAPs yielded positive and encouraging results, even for some LMEs where implementation has been in limited demonstration sites. Through the adoption of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) by fourteen of the riparian (developed and developing) countries and the recognition by EAS countries of PEMSEA as an institution with its own legal personality in 2009, an overarching policy and institutional framework has been established for the sustainable management of the EAS and implementation of associated Strategic Action Programmes for its LMEs.

Nevertheless, further investments are needed to sustain the efforts and consolidate the successes achieved to date to ensure larger-scale positive impacts on the coastal and marine environment. Specifically, there is urgent need to step up efforts to promote convergence between the three pillars of sustainable development – economic development, social development and environmental protection. - in line with and support the green economy agenda that is being reviewed at the Rio+20 meeting on Sustainable Development.

The SDS-SEA identifies Integrated Coastal Management (ICM) as an effective management framework to achieve the sustainable development of coastal and marine areas. Subsequently, the Haikou Partnership Agreement (2006) set a target of 20 percent of the region's coastline to be covered by ICM programs by 2015. In November 2009, the East Asian Seas Congress that brought together more than 1,400 participants with participation from 14 countries in the EAS region took stock of progress in implementing the SDS-SEA. It identified remaining challenges related to coastal and ocean governance, the need to strengthening PEMSEA and the SDS-SEA as the regional governance mechanism and platform for scaling up the implementation of LME SAPs and NAPs, the need to integrate climate change considerations into development frameworks, and to support local capacity development to address natural and man-made hazards. Enhancing the capability of local communities to manage and maintain habitats, water supply and management, need for better aquaculture practices and cross-sectoral approaches to fisheries in order to improve food security and livelihoods, and more and better facilities and services for pollution reduction and waste management were also high on the agenda.

GEF and partners have already made substantial investments in the EAS Region. A recent Stocktaking Report (PEMSEA, 2011) of GEF support to the EAS concluded that the top priorities in the future should be to strengthen governance arrangements and mechanisms at regional and sub-regional levels in order to implement existing strategies and action programmes for sustainable management of the coastal and marine resources. This would provide the foundation for scaling up of investments informed by the latest data and science on environmental status and trends in the EAS through regional knowledge management. The proposed Programme is designed to respond to these recommendations and to implement the

provisions of the SDS-SEA and associated Strategic Action Programmes (SAPs) for LMEs in the EAS. The Programme will thus focus on three interrelated components:

Component 1: Partnerships in coastal and ocean governance that will ensure institutional and financial sustainability of regional and sub-regional marine and coastal governance arrangements;

Component 2: Healthy and resilient coastal and marine ecosystems that will be realized by protecting habitats, implementing ecosystem approaches to fisheries and aquaculture management, reducing pollution and improving the resiliency of coastal areas and LMEs in the EAS to climate change and other hazards; and

Component 3: Knowledge platforms for building a sustainable ocean-based green economy that will ensure that decision makers translate national policies and strategies into action based on the latest data and science on environment and development trends in the EAS.

The proposed Programme will build on past acheivements and existing efforts in coastal and marine management undertaken by national governments, regional mechanisms, and international institutions. The institutionalisation of Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) programme provides an opportunity to bring different initiatives together on one single platform. PEMSEA led the development of the SDS-SEA and is a recognised as a global centre of excellence in ICM that now has the capacity to bring together different planning frameworks, such as the SDS-SEA, LME SAPs (e.g. the Yellow Sea and the South China Sea)f and the West and Central Pacific Fisheries (WCPF) Convention to ensure that they are linked spatially, thematically and operationally to implement and scale up climate resilient ecosystem-based management (EBM) in the EAS.

The feasibility of consolidating regional coastal and marine governance in the EAS within the PEMSEA governance structure will be assessed and implemented to facilitate international cooperation and implementation of complementary national and local actions. At the national level, inter-sectoral coordination will be enhanced to enable countries to better respond to transboundary management challenges, such as monitoring management interventions on marine pollution, fisheries recovery and habitat improvement to build a resilient coastal and marine sector. UNDP has the experience and mandate to bring about harmonisation of interventions from local to national to regional levels in support of sustainable development and timely achievement of the MDGs in the EAS region, through adaptive management.

B. DESCRIPTION OF THE CONSISTENCY OF THE PROGRAM WITH:

B.1.1 The GEF/LDCF/SCCF focal area strategies:

This proposed Programme is consistent with IW Objective 2 to catalyze multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and large marine ecosystems while considering climate variability and change. It will contribute to *IW Outcome 2.1: Implementation of agreed Strategic Action Programmes incorporates ecosystem-based approaches to management of LMEs. ICM principles, and policy-legal/institutional reforms into national/local plans*, through Component 2 on habitat conservation, implementation of ecosystem approaches to fisheries and aquaculture, reduction of pollution in priority areas while building resilience to climate change and other natural and manmade hazards. This is underpinned by reform of national level policies and institutions under Programme Component 1. This outcome will be delivered through three projects: (i) implementation of the SDS-SEA and ICM across the region through the PEMSEA Resource Facility; (ii) implementation of the YSLME SAP; and (iii) implementation of the WCPF Convention for sustainable management of highly migratory fish stocks in the EAS, particularly in the Convention areas within the waters of Vietnam, Indonesia and the Philippines.

The Programme will contribute to *IW Outcome 2.2: Institutions for joint ecosystem-based and adaptive management for LMEs and local ICM frameworks demonstrate sustainability* through Component 1 and support to establishment of a self-sustained, regional partnership-based mechanism for collaborative planning, financing and monitoring and evaluation of SAP and ICM implementation to sustain coastal and marine ecosystem services through the project with PEMSEA that is building the Regional Facility which is the institutional platform for cooperation; the YSLME project

that will establish a commission for the YSLME, and the project with the WCPFC that will strengthen regional collaborative arrangements for highly migratory fish stocks.

The Programme will also contribute to *IW Outcome 2.3: Innovative solutions implemented for reduced pollution, rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/conservation, and port management and produce measurable results* through demonstration activities under Component 2 in the Yellow Sea, the Gulf of Thailand and South China Sea, Indonesian Sea and Sulu-Celebes Sea on reduction of land-based and sea-based pollution, establishment of fisheries refugia and other rights-based management measures for highly migratory stocks, ICM, conservation of coral reefs, mangroves and seagrass beds, and implementation of port safety, health and environmental management systems in selected ports. The project with PEMSEA, the YSLME project, and the project with the WCPFC will contribute to achieving this outcome.

This Programme is also consistent with IW Objective 3: Support foundational capacity building, portfolio learning, and targeted research needs for ecosystem-based, joint management of transboundary waters systems. It will contribute to *IW Outcome 3.3: IW portfolio capacity and performance enhanced from active learning/KM/experience sharing through IW:Learn* to which all projects will allocate one percent of their respective budget to contribute to global learning on sustainable coastal and ocean governance and management. *IW Outcome 3.4: Targeted Research Networks fill gaps* will be supported under Component 3 of the Programme that will ensure that targeted research addresses knowledge gaps on ecosystem modeling, including total allowable nutrient loadings to coastal waters, valuation of ecosystem services and zoning for climate change and other hazards, and contributes to sound policy and management decisions related to EBM, ICM, MPA networking and climate change adaptation through the project with PEMSEA.

B.1.2. For programs funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:

N/A

B.2. National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

The proposed Programme is consistent with national and regional priorities and plans, such as: the Sustainable Development Strategy for the Seas of East Asia and associated local ICM plans developed by the network of local governments coordinated by PEMSEA; and approved Strategic Action Programmes for the LMEs of the East Asian Seas, such as the Yellow Sea, the South China Sea and the Western and Central Pacific Ocean (WCPO). The convention for WCPO – the WCPFC – has already been ratified by the Philippines and negotiations are ongoing with Vietnam and Indonesia. In addition, the Programme, through its partnership arrangements, will also be able to harmonize activities with SAPs under development for the Arafura-Timor Seas and for the Sulu-Celebes Sea to ensure consistency across existing and proposed LME governance arrangements, and thematic and geographic priorities, including selection of innovative demonstration activities.

The proposed Programme is also consistent with the findings of the GEF Stocktaking Meeting in October 2010 in Manila that identified pollution reduction from land-based sources and unsustainable exploitation of marine resources (over-fishing) as the two most pressing issues in the region, followed by destruction of critical habitats (coral reefs, mangroves, seagrass beds); b) the need to mainstream climate change considerations into existing planning frameworks and actions on-the-ground; and c) strengthening of regional governance arrangements for marine and coastal management by giving PEMSEA a broad mandate as the regional mechanism providing a platform for coordination, monitoring and evaluation and knowledge sharing and management in the EAS.

The proposed Programme will cooperate closely with existing regional programmes and coordinate with the World Bank led Programme on *Scaling Up Partnership Investments for Sustainable Development of the Large Marine Ecosystems of East Asia and their Coasts*. The World Bank Programme which seeks to generate incremental benefits through capital investments in biodiversity conservation and enhancement (i.e., blue agenda) and in reduction of land-based pollution (i.e., brown agenda) in selected coastal areas of four countries, complements the proposed Programme. PEMSEA will be responsible for the knowledge management component of both Programmes, thereby ensuring that

project outputs, such as innovative investment policies and technologies, capacities and best practices generated by the World Bank Programme are packaged and shared among participating countries and stakeholders, and promoted to replicate and scale up under the proposed Programme. Coordination will also take place with the Coral Triangle Initiative through PEMSEA's East Asian Seas (EAS) Partnership Council to promote exchange of experiences and harmonization of interventions.

Further, the proposed EAS program will coordinate closely with FAO's global/regional programs and projects pertaining to the management of highly-migratory species. Of relevance here are the FAO-led global program "ABNJ Global Sustainable Fisheries Management and Biodiversity Conservation in the Areas Beyond National Jurisdiction" (4580 and the individual projects in this program, including 4581), as well as the proposed UNDP-FAO project (4746) "Implementation of Global and Regional Oceanic Fisheries Conventions and Related Instruments in the Pacific Small Island Developing States (SIDS)". These program/projects are of relevance to one of the three individual projects proposed in this program "Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian (WPEA) Seas". There is complementarity and no duplication between the proposed WPEA project and the FAO program as the latter is exclusively focusing on ABNJs, while the UNDP project is focusing on EEZs within the EAS region. The WCPFC, the lead agency for the proposed UNDP WPEA project, is also involved on the ABNJ project and thematic linkages and synergies will thus be ensured.

C. Rationale of the program and description of strategic approach (including description of current barriers to achieve the stated objectives):

The Seas of East Asia (EAS) are bordered by China, Japan and the Korean Peninsula in the north and the Southeast Asian nations in the south. The region encompasses a series of large marine ecosystems (LMEs), sub-regional seas, coastal areas, and their associated river basins that are linked by large-scale atmospheric, oceanic and biological processes/ phenomena, e.g., typhoons, Kuroshio Current and highly migratory species. The East China Sea, the Yellow Sea, the South China Sea, the Sulu-Celebes Sea, and the Indonesian Seas are five LMEs of great ecological and economic importance to the region. These LMEs are semi-enclosed and interconnected. They are strategic, globally significant, and geologically unique international water systems. Major ocean currents which originate from the North and South Pacific travel to the eastern side of the Asian continent. They help generate upwelling zones which contribute to high productivity. These currents also bring about long-distance dispersal of larval recruits of tuna and other highly migratory species and are thus important for maintenance of oceanic fish stocks. The Pacific Ocean Warm Pool Large Marine Ecosystem (POWPLME) is a globally significant maritime region that is connected to the EAS region through the Indonesian through-flow and associated currents. Oceanic fish stocks that migrate throughout this region support the world's largest tuna fisheries.

The human pressure on marine and coastal resources is very high with approximately two billion people living in the region that is highly urbanized, with rapid population growth. Coastal settlements have developed into major cities now counted among the most populated in the world. Because of the region's geography, a large proportion of the East Asian people are dependent on marine food production. One-fourth of the world's marine fish production is contributed by East Asia. There are 10 million fisherfolks, and 50 million people are dependent on fisheries for a major portion of their livelihood. Twenty-eight percent of the animal protein intake of the East Asian people comes from fish. Being the region worst affected by natural disasters, combined with high population densities and the large number of people living on floodplains and low-lying coastal areas, the vulnerability of the people of East Asia is high.

The coastal area is the interface between the land and the sea and is characterized by high biological productivity and biodiversity. The vast living and nonliving resources of the seas of East Asia provide needed primary resources for industrial development within and outside the region. They contribute to the development of maritime trade and livelihood to millions of coastal inhabitants. The coastal areas of East Asia provide a continuous supply of goods — fish, oil, gas, minerals, salt, and construction materials — and services — shoreline protection, sustaining biodiversity, water quality maintenance, transportation, recreation, and tourism. Coral reefs in Southeast Asia alone generate an estimated value of $112.5 billion a year. The value of the global center of marine biodiversity supported by the area is beyond valuation. If it is lost, it can never be replaced. Coastal areas are also very accessible, making them centers of human activity, where people live, derive their recreation and their means of livelihood. People aggregate in a very narrow strip of land. The already dense population in that

area is growing much faster than in inland areas. It is also the preferred site for urbanization. Providing the natural setting conducive to port, shipping, maritime trade, primary industries, and coastal tourism, the coasts of the region are major social and economic development zones, contributing some 40 to 60% of the GDP of the countries in the region. Because coastal areas are preferred sites for human settlements and urbanization, severe conflict results from multiple use and competition for the limited land and sea resources by various stakeholders.

Environmental issues are increasingly transboundary because resources occur in or move through many countries; activities in the marine environment, such as shipping, fishing, and the movement of migratory and alien species, involve multiple countries; and the ocean is a medium through which pollutants are relatively easily transmitted. The causes and/or impacts involve more than one country or jurisdiction and therefore the response needs to be multilateral or regional. The Programme will address barriers to sustainable management of the EAS from transboundary to national to local levels related to:

(i) Institutional/governance challenges at multiple levels, including inappropriate and/or inconsistent application of government policies, weak regulatory and enforcement systems and lack of coordination of interventions from regional to national to local levels;
(ii) Limited pool of skilled human resources to effectively manage the coastal and marine resources in the context of increasing trade-offs and changing climate;
(iii) Lack of regional platforms for sharing information and lessons learned for decision making and for transforming strategies and plans into concrete on-the-ground actions; and
(iv) Low priority given to coastal and marine resource management as measured by budgetary commitments and funding.

The Programme has been designed to overcome these barriers by mainstreaming primarily existing regional and subregional agreements (SDS-SEA and the SAPs) into national and sub-national policy, planning and investment frameworks. This is expected to unleash the requisite resources for sustainable coastal and marine management in the EAS. The transition to a sustainable ocean-based green economy will be further aided by strengthened capacities to develop and implement ICM and risk management plans to address climate variability and coastal disasters at local government level, and a strengthened knowledge base for ecosystem-based management that supports decision-making at national and regional levels.

D. Discuss the added value of the program vis-à-vis a project approach (including cost effectiveness):

Only a programmatic approach can generate the long-term political and financial support required to address the barriers related to governance of shared coastal and marine resources at the geographic scale of the EAS and wide-ranging thematic scope of the supporting interventions. A programmatic approach will facilitate the building of synergies of interventions at multiple levels and ensure that ICM programmes with local governments across the EAS region are aligned with and support the implementation and development of LME specific SAPs. A programmatic approach will also lead to scaling up of investments in sustainable coastal and marine management by establishing innovative financing mechanisms at regional level in partnership with governments, the business community, donors and development partners.

PEMSEA has the institutional mandate to coordinate and provide services, such as M&E support, capacity building in coastal and ocean governance, and outreach and advocacy that can only be fully realized under a programmatic approach that brings different projects and regional stakeholder together under one coherent policy and institutional framework guided by the Sustainable Development Strategy for the Seas of East Asia.

UNDP is well positioned to support a cost-effective programmatic approach in the EAS by building on its extensive experiences from past LME projects and ICM activities in the region complemented by its institutional presence in all the EAS countries. Cost effectiveness will be ensured through building of synergies and linkages with UNDP's sustainable development agenda at country level and its ocean governance programme at regional and global levels. UNDP will also actively promote mainstreaming of SDS-SEA and SAP targets into national development and planning frameworks, such as UNDAF, which is expected to leverage additional resources to the proposed Programme.

E. Describe the baseline program and the problem that it seeks to address:

Many trends in environmental and social problems in the East Asian Seas are on negative pathway. In the last 30 years, 11% of coral reefs collapsed while 48% are in critical condition. Recent findings show over 80% face risks. Mangroves, on the other hand, have lost 70% of their cover in the last 70 years while the loss in seagrass beds ranged from 20-60% across countries. Unless managed, the current rate of loss will result in the removal of all mangroves by 2030, while reefs face collapse within 20 years.

Fish production in the region has fallen. Peak production was reached in 1988 in the Northwest Pacific Ocean and in 1991 in West Central and Southwest Pacific Ocean. Data from these fishing regions show that change in catch from peak year to 1992 ranged from -2% to -10%. Problems in open access and overcapacity precipitated the decline. In 1995, East Asia contributed 78% to global capacity with its 980,000 decked fishery vessels.

In 2000, 6 coastal megacities (with more than 10 million people) were located in East Asia; this is predicted to increase to 8 by 2015. With urbanization and the continued rural-to-urban migration, the populations of smaller coastal cities (3-8 million people) are also increasing. There are 35 pollution hotspots and 26 sensitive and high-risk areas identified in countries and sub-regions bordering South China Sea.

Trade in East Asia as a share of GDP increased from 15% in 1970 to over 50% in 1995, as exports grew 10% per year. Accompanying this increase is the proportionate growth in seaborne trade, especially containerized trade. In East Asia ports, total volume of containers increased by 270% from 1985 to 1995; with the ports estimated to handle around 47% of total world container throughput in 2000, which figure is expected to reach 50% by 2005.

The “East Asian economic miracle” has been sustained over three decades - changing the regions’ patterns of production and consumption. Poverty reduction has accompanied this economic growth– from 720 million to 350 million people. Recent economic projections, however, see a very volatile and unpredictable growth, posing a grave threat to the millions of people still mired in poverty. Economic development has also been taking place at the expense of the environment and environmental degradation has reached critical levels in recent years threatening the sustained provision of ecosystem services important for human well-being. Many of the environmental problems in the EAS are transboundary in nature and include, among others:

Pollution

- Projected growth in production will also generate increasing industrial and domestic wastes, the major sources of marine pollution in the region.
- The current level of sewage treatment in the region is low. For example, just over 10% of the organic component is removed by sewage treatment in countries bordering the South China Sea. Unless this is drastically improved, the sewage from increased populations in concentrated areas will accelerate eutrophication and threats to public health at transboundary levels.
- Nonpoint sources of pollution, or runoff from such diverse activities as agriculture, mining, timbering and land-clearing, and residential and commercial development are increasing in volume. Evidence indicates that land-based sources are polluting nearshore areas and bays and inlets and may also be affecting the main areas of LMEs.
- International trade is anticipated to triple in the next 20 years and between 80 and 90% of this is expected to move by shipping. About 300 oil spills with over 200 million gallons of oil have been spilled in the region since the mid-1960s. Although these numbers have largely been in decline during the last decade, the projected increase of shipping traffic increases the likelihood of oil spills.

Introduction of alien species

- International shipping also transfers approximately 10 billion t of ballast water around the world annually. For example, in some countries red tide organisms have been introduced by ballast water and have contaminated shellfish. As ships get larger and faster, and as maritime trade increases, the problem will become more acute.

Overexploitation

- Most of the small pelagic species, which could be shared or straddling stocks, are already fully exploited. There is also indication that the large pelagic stocks migrating between the West Pacific Ocean Warm Pool and the East Asian Seas are in a state of full exploitation.

- The discard of by-catch, estimated at over one-fourth of total marine catch, contributes to inefficient and wasteful exploitation.

Destructive fishing practices

- Destructive fishing practices in one country can impact on the viability of migratory fish in another country. These practices include fishing with explosives, trawling with nets and chains, and using cyanide to stun fish so that they can be caught alive - a trade valued at $1 billion per year - and other practices which degrade fish habitats such as reefs and mangroves.

Change in consumption and use patterns and international trade

- The rising global demand for shrimp has largely been met by exports from the region despite major adverse environmental impacts through the deforestation of mangroves, the introduction of alien shrimp species (and associated pathogens) and the threat to public health from chemicals associated with shrimp culture.
- Degradation of coastal habitats contributing to loss of biodiversity has transboundary impacts because of the strong interdependence of seagrass beds and coral reef ecosystems on one another. Furthermore, they contribute significantly to fisheries shared by proximate coastal countries.

If current trends in environmental degradation are not reversed, the provision of ecosystem services important for human well-being and social stability could dramatically deteriorate over the next 50 years.

- Food security will be undermined as populations of fish and other edible marine products crash due to unsustainable take, destructive practices, and habitat degradation.
- Economic dislocation will result for those whose jobs are related to the coastal and marine environment when the environment is no longer able to generate sustainable livelihoods.
- Public health will be compromised by toxins and hazardous compounds in edible marine products and by increased dangerous waste levels in coastal waters used by the public.
- Some coastal areas will be made uninhabitable due to rising sea levels and intensified severe weather systems from climate change. This will increase the vulnerability of the people, especially the poor, to climatic events.
- There will be increased loss of life and more pollution incidents as greater shipping congestion and other marine activities lead to more maritime accidents.
- Infrastructure will deteriorate as pressures of urbanization undermine ability to provide adequate infrastructure levels for the population.
- Aesthetic and recreational values will be lost.
- Conflicts on the use of the resources and inaccessibility will intensify and lead to social strife.
- Pressure on the state will increase to cope with and compensate for the loss of values of the marine environment, e.g., health and social services, food adequacy, and public works.
- Economic development will not be able to compensate for irreversible damage in the Seas of East Asia.

Efforts have been made to address these mounting challenges and the region is comprehensively covered by environmental assessments and TDA/SAP processes, including the SAPs for the Yellow Sea and the Gulf of Thailand and South China Sea, as well as recent initiatives in the Sulu-Celebes Sea and Arafura-Timor Seas. Successful demonstrations of ICM have also been implemented and rolled out across the region and in 2010, it was estimated that countries had scaled up ICM programs to cover between 9 to 10 percent of the coastline of the EAS. The total GEF investment in foundational capacity building and demonstrations of sustainable coastal and marine management in the EAS now amounts to more than $74 million. The proposed Programme will therefore focus on implementation of the existing SAPs and related NAPs, and scaling up of successful ICM experiences in order to move from planning and demonstration to larger-scale implementation of sustainable management of coastal and marine resources to sustain ecosystem services and reduce the impact of climate variability and change. Baseline investments under the programme are discussed in further detail below.

Baseline investments

Component 1:UNDP and GEF have already made substantial investments in the EAS Region by developing capacities in ocean and coastal governance in several LMEs, such as the Yellow Sea LME, South China Sea LME

(UNEP), Sulu-Celebes LME and Arafura-Timor Seas, and at EAS regional level trough PEMSEA. UNDP has also been supporting the building of cross-sectoral capacities and the putting in place of effective and sound policies and institutions to manage and develop ocean resources in a sustainable way at both national level through the CCA/UNDAF process, and at regional level through its Ocean Governance Programme. These efforts constitute a strong baseline to build upon for scaling up of partnerships, capacities and investments to restore and sustain coastal and ecosystem services across the region. The proposed Programme will speed up governance reform by linking different levels of governance and sectors involved through the establishment of a coordinating mechanism at regional level and agreed procedures and methodologies to monitor improvement of the status of the LMEs in the EAS as a result of interventions. The institutionalization of PEMSEA provides an opportunity to establish a country-owned regional mechanism that will provide the much needed coordination and monitoring at the regional level of programmes and projects on coastal and ocean management. Baseline support from countries for coastal and marine management programmes, which contribute directly to the objectives and action programmes identified in the SDS-SEA, is estimated to be more than $1 billion per year based on the medium-term development and investment plans among PEMSEA Partner countries. PEMSEA is already working closely with several LME/sub-regional projects, such as the Yellow Sea and Sulu-Celebes projects. The proposed Programme will further strengthen vertical integration by forging closer linkages with COBSEA and the South China Sea programme as well as with ATSEF for the Arafura-Timor Seas. Linkages between PEMSEA and regional fisheries management bodies, such as the WCPFC, will also be strengthened in order to coordinate reform in the fisheries sector with other LME-based interventions to improve the coastal and marine environment in the EAS.

Component 2: Investments in environmental stress reduction in key sectors in the LMEs in the EAS are significant. In the Yellow Sea alone, countries have committed around $3.6 billion in baseline funding to regional fisheries management, including buy backs of boats and artificial reef deployment. The largest baseline investment in the YSLME is in pollution control where the SAP commitment is to reduce nutrient discharges from the Yellow Sea countries by 10% every 5 years through enhanced wastewater treatment, reducing fertilizer use and industrial discharges, valued at $5.62 billion. For biodiversity conservation, the main commitments of the YSLME SAP are to protect coastal habitats, establish regional marine protected area network, and promote civil society participation in the coastal countries of the Yellow Sea valued at $1.59 billion. Altogether, the baseline investments in the YSLME amount to more than $10 billion. Although detailed calculations are not available, the South China Sea is likely to benefit from similar levels of baseline investment from countries, while the other LMEs in the EAS region, such as the Indonesian Sea and the Sulu-Celebes Sea are likely receiving much lower levels of baseline investments in environmental stress reduction.

Since the adoption of the SDS-SEA, 9 countries (Cambodia, China, Indonesia, Japan, Philippines, RO Korea, Singapore, Thailand and Vietnam) have formulated and/or are in the process of adopting and implementing their respective national ICM or coastal development policies and strategies, which constitutes a strong baseline for scaling up of ICM best practices in pollution reduction and waste management. For example, in Xiamen in China and in Danang, Vietnam, the local governments have invested more than $190 million and $43 million, respectively, in sewage treatment. In Bali, investments in development of alternative energy from municipal solid waste, and sewerage development are worth around $75 million, including support from both the public and private sector. In Manila Bay, $500 million of investments in sanitation and sewerage facilities are in the pipeline. Total baseline investments in infrastructure in support of ICM-related sustainable development aspects (e.g., water supply; sanitation; sewerage; habitat conservation; fisheries; flood control/river basin management; climate change adaptation; food security; and disaster reduction and management) are estimated to be between $2 and $2.5 billion annually in EAS region (from ADB and World Bank databases).

The UNDP baseline for Component 2 includes: (a) The UNDP GOAL-WaSH programme (Governance, Advocacy and Leadership for Water, Sanitation and Hygiene) in Lao that collaborates with the UN-Habitat initiative MEK-WATSAN (The Mekong Region Water and Sanitation Initiative). The fundamental goal of this initiative is to improve the living conditions of the urban poor in the Mekong region and protect local environments by providing the inhabitants with an improved access to water supply and adequate sanitation services; (b) The UNDP China and Coke partnership that has been going on since 2007 and is called "Water Resources Management and Drinking Water Safety in Rural Regions of China". Together with the EDM programme (UNDP-Coke partnership at global

level), UNDP China is planning to implement projects on Source Water Protection and Biodiversity Conservation, Sustainable Agriculture and; Reclaimed Water Utilization and; (c) UNDP Philippines' support to "Integrating Disaster Risk Reduction and Climate Change Adaptation in Local Development Planning and Decision-making Processes" (DDR/CA) and "Enhancing Greater Metro Manila's Institutional Capacities for Effective Disaster/Climate Risk Management towards Sustainable Development" (GMMA) projects.

Component 3: Monitoring and assessment of the coastal and marine environment of the EAS, as well as data processing and information management are already supported through PEMSEA and other regional marine programmes, such as COBSEA and ATSEF, and regional fisheries management organisations, such as the WCPFC. The total baseline investment is estimated at around $50 million. The UNDP baseline for Component 3 includes Cap-Net (Capacity Building for Integrated Water Resources Management) that provides capacity building through partner networks in the South East Asia region through AguJaring (South East Asian Capacity Building Network in IWRM), CK-Net-INA (Collaborative Knowledge Network-Indonesia) and MyCBNet (Malaysia Water Partnership Capacity Building Network). The proposed Programme will strengthen the knowledge base for investment decisions and ensure the sharing of experiences and lessons across all LMEs and countries for scaling up of good practices in integrated coastal management, including habitat restoration and management, ecosystem approaches to fisheries and aquaculture, and pollution reduction.

F. *Incremental* /*Additional cost reasoning*: describe the incremental (GEF Trust Fund) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF financing and the associated *global environmental benefits*(GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The Programme will directly address the threats and barriers to sustainable development of the coastal and marine resources of the EAS through its three mutually reinforcing components:

Component 1: Partnerships in coastal and ocean governance.

Governance arrangements will be strengthened at three interlinked levels – regional, sub-regional and national – in order to bring about a shift in planning and implementation processes for coastal and marine management to ensure sustainability. The first expected outcome is a regional partnership-based mechanism that strengthens country commitments to intergovernmental cooperation at the EAS regional level and in at least two LME governance systems – the YSLME and the POWPLME. This is expected to lead to collaborative planning, updating and evaluation of management interventions in the SDS-SEA and LME SAPs. This will be supported by governance reform at national level to ensure that national level policies, institutions and development and investment plans fully support the sustainable management of the EAS and are aligned with implementation of SDS-SEA and LME SAP targets. The programme will also put in place financing mechanisms for sustaining the partnerships in coastal and ocean governance at different levels with niches for national and local governments, the business community, donors and other development partners.

Global environmental benefits will accrue from strengthened application of ecosystem-based management in the EAS of its coastal and marine areas and LMEs through alignment of national policies and institutional arrangements with agreed environmental targets in the SDS-SEA and approved SAPs for conservation and sustainable use of biodiversity, habitat management and pollution reduction. Strengthened governance arrangements for coastal and oceanic fisheries at national level and at regional level in collaboration with the WCPFC will contribute to wider application of the ecosystem approach to fisheries and the rebuilding of fish stocks in the region, including highly migratory stocks.

Component 2: Healthy and resilient coastal and marine ecosystems

GEF incremental funding will support conservation of coastal habitats through scaling up of the application of ICM in EAS coastal areas to achieve coverage of 20% of the region's coastlines, as committed to by partner countries under the SDS-SEA, through ICM-related processes, including protected areas and marine protected areas (PAs/MPAs), other marine spatial planning tools, ecosystem approach to fisheries management (EAFM) and integrated coastal area and river basin management (ICARM). It will also contribute to rehabilitation and

maintenance of habitats and strengthening the management of watersheds and climate vulnerable resources in priority coastal areas in at least one LME. This component will also lead to a decrease in over exploited and depleted fish stocks in priority fishing areas in at least one LME. For Indonesia, Philippines and Vietnam, it will contribute to sustainable harvesting of shared tuna stocks in line with WCPFC criteria. Ecosystem health will also be improved through reduction in discharge of pollutants from land-based activities (e.g. N,P, BOD), supported by demonstrations of innovative technologies and good practices in nutrient reduction at ICM sites in collaboration with the GEF/World Bank Pollution Reduction Investment Fund and associated programmatic approach. Further, water use efficiency/conservation will be targeted in at least two priority coastal areas/river basins. Finally, this component will also build resilience of the EAS LMEs to climate change and other natural and man-made hazards in order to reduce the vulnerability of coastal communities and contribute to improvement of coast and ocean based livelihoods. Adaptive management measures will be implemented at highly vulnerable ICM sites.

Global environmental benefits of this component include the enhanced flow of ecosystem services, especially regulating and provisioning services. This will be achieved by conservation and sustainable use of biodiversity in biodiversity hotspots in threatened habitats of mangroves, coral reefs, seagrass beds and coastal wetlands in priority coastal areas and LMEs; recovery of depleted fish stocks in priority fishing areas supported by e.g. no-take zones, fisheries refugia, and sustainable mariculture and aquaculture production that ease pressure on capture fisheries and; reduction of pollutants, such as N discharge, that lower the productivity of marine ecosystems, sometimes even creating 'dead' zones.

Component 3: Knowledge platforms for building a sustainable ocean-based green economy

GEF incremental support is needed to assist decision makers in the EAS to translate national coastal and marine policies into action and ensure that decision-making in the EAS on coastal and ocean management is informed by up-to-date monitoring and the latest scientific knowledge. This will be achieved by establishment of a network of ICM Learning Centres and an ICM Community of Practice, and support to targeted research on ecosystem modeling; application of ecosystem-based management; integrated coastal management; ecosystem approach to fisheries and rights-based management; spatial management measures, such as marine protected areas; and impacts of climate change on the coastal and marine environment and local communities and their livelihoods. Resource allocations to ICM, SAP/NAP implementation and climate change adaptation and disaster risk reduction are expected to increase as a result of mainstreaming of relevant targets into medium-term investment plans as well as access to innovative financial mechanisms, services and instruments, such as revolving funds, Public Private Partnerships (PPPs), Payment for Environmental Services (PES), markets for carbon credits, Corporate Social responsibility (CSR) and certification programmes (e.g. MSC). Finally, this component will also contribute to strengthening global partnerships by contributing to global learning on sustainable coastal and ocean governance and management through IWLearn.

Global environmental benefits will be generated by increased allocation of resources to sustainable management of coastal and marine ecosystems through rolling out of ICM and related approaches across the region to reach the target of ICM programs covering at least 20% of the region's coastline, thereby contributing to global and regional targets including: A) disaster risk reduced by 2015; and B) conservation of at least 10% of coastal and marine areas of particular importance for biodiversity and ecosystem services by 2020 through well connected systems of protected areas and other effective area-based conservation measures.

G. Describe the socioeconomic benefits to be delivered by the Program at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits(GEF Trust Fund) or adaptation benefits (LDCF/SCCF).

Socioeconomic benefits for the target communities in the riparian countries will be realized from improved provision of ecosystem services related to food production, clean and healthy environment and resilience to impacts of climate change. For example, it is expected that the incomes of fishermen will improve in the medium to the long-term as overfishing is effectively addressed in priority fishing areas for coastal and oceanic fisheries. Restoration and

conservation of mangroves and coastal wetlands will reduce the vulnerability of coastal communities to climate change impacts related to storm surges and sea-level rise and will thereby improve their living conditions.

Gender will be mainstreamed in the Program through the active engagement of women to optimize the impacts of the interventions at all levels. In many coastal communities in the EAS, women are primarily responsible for food security for their families, where and to fish and collect shell fish for consumption at the family level. In larger scale and industrial fisheries, women play an important role in post-harvesting processing, yet they remain largely invisible and their roles unacknowledged. The Program M&E system and the collection of information will therefore be gender disaggregated to the extent possible to ascertain the role of women in the environmental planning and management. The Program will seek and engage women from local to regional level in, for example, implementation of demonstration activities on sustainable livelihoods, planning and management processes at all levels, and in the Programme Coordination Committee at regional level.

The socioeconomic benefits and gender mainstreaming will serve to strengthen the impacts of the interventions on the management of the EAS. There is a mutually reinforcing effect between and among the objectives of improving the environment, optimizing economic benefits and improving the role of women.

H. Justify the type of financing support provided with the GEF/LDCF/SCCF resources:

Incremental funding from GEF will support the implementation of one regional project for the entire EAS region focusing on implementing the SDS-SEA through scaling up of investments in ICM to protect habitats, reduce pollution, improve water-use efficiency and ensure sustainable fisheries in the EAS. This multi-sectoral regional project is supported by one LME-based project in the Yellow Sea focusing on introducing ecosystem-based management in order to reduce environmental stress and restore ecosystem goods and services of the LME. A project that will strengthen collaboration with the WCPFC and introduce the ecosystem approach to fisheries for management of highly migratory fish stocks moving between the POWPLME and the EAS will improve sustainability of oceanic fisheries in the region.

The Program is leveraging significant amounts of co-financing from participating national governments, local governments, NGOs and civil society and from UNDP and other international organisations reaching an overall co-financing ratio of about 1:17 allowing for large-scale programmatic impacts. The GEF funding is thus having a strong catalytic effect and will be used strategically to bring about ecosystem-based management of the EAS and its LMEs in order to restore and sustain the provisioning of ecosystem services of regional and global importance.

I. Indicate risks, including climate change risks that might prevent the program objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the program design:

Risk	Rating	Risk Mitigation Measures
Changes in policy and decision makers, or other events beyond the control of the Programme, lead to changes in support for the Programme objective of sustaining coastal and ocean ecosystem services through scaling up of partnerships, capacities and investments.	Low	Programme is in line with agreed strategies and strategic action programmes at regional, sub-regional and national levels and is thus strongly anchored in existing policies. Strong stakeholder participation in the program will further reinforce support from policy and decision makers at all levels.
Potential conflicts between the participating countries could occur over the use and management of the shared resources of EAS.	Low	With the countries' agreeing to co-operate in the implementation of the SDS-SEA, any conflicts should be resolved at a high policy level through regional co-operation.

Failure to mainstream ICM, CCA/DDR and SAP/NAP targets at national and local level impedes upscaling.	Low	The scope of the program has been agreed with national governments and local governments participating in ICM and SAP/NAP activities. Existing co-financing commitments from these partners is proof of their willingness to mainstream programme targets into their development and investment frameworks.
Innovative financial mechanisms fail to deliver new resources to sustainable coastal and ocean management.	Medium	PEMSEA will take the lead in continuously exploring, testing and validating new financing options and to provide guidance to programme partners on sustainable financing for upscaling of ICM, CCA-DDR, and implementation of SAPs.
Environmental variability and climate change compromise the Programme achievements in terms of sustaining ecosystem services.	Low	The programme has been designed to mitigate adverse climate change impacts at vulnerable sites and communities through development of risk management plans, establishment of early warning systems and implementation of a suite of climate change adaptation and disaster risk reduction measures on the ground.

J. Outline the institutional structure of the program including coordination and monitoring & evaluation:

UNDP will be the sole GEF agency for this Programme and work closely with countries and PEMSEA to coordinate the Programme and to prepare and implement the three sub-projects under it.

The Programme Coordination Committee (PCC) - will become a sub-committee to the EAS Partnership Council, and its Intergovernmental Session, which is composed of PEMSEA member countries, and its Technical Session, which also includes Non-Country partners, including UNEP's Regional Seas Programme (NOWPAP) and UNEP GPA, scientific institutions, non-governmental organisations as well as international organisations, including the World Bank. The PEMSEA Resource Facility already acts as the Secretariat to the EAS Partnership Council and will provide similar services to the PCC. Mechanisms will be put in place for the WB program for the EAS to be part of the PCC for closer collaboration.

Monitoring and evaluation arrangements (M&E) – each project will have its own M&E system that will be linked to the State of Coasts (SOC) reporting system for the EAS region established by PEMSEA. PEMSEA is already facilitating the development and distribution of national and local government SOC reports that with the help of the Programme will be complemented by LME reports. Key regional SOC indicators and targets that the proposed Programme will monitor its contribution to include:

- National coastal and ocean policies and supporting institutional arrangements in place in at least 70% of PEMSEA Partner Countries by 2015
- ICM programmes for sustainable development of coastal and marine areas and climate change adaptation covering at least 20% of the region's coastline by 2015
- Disaster risk reduced by 2015
- By 2020, the rate of loss of natural coastal and marine habitats of significant environmental value are at least halved and degradation and fragmentation are significantly reduced
- By 2020, at least 10% of coastal and marine areas of particular importance for biodiversity and ecosystem services are conserved through well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

K. Identify key stakeholders involved in the program including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

International organisations: UNDP, in its capacity as a GEF Implementing Agency, has strengthened regional governance of coastal and marine resources through the established PEMSEA and will be the coordinating agency of the Programme. Other international organisations, such as UNEP and its Regional Seas Programme, and IMO will be involved through the EAS Partnership Council to ensure coordination of international initiatives in the EAS.

Regional and sub-regional programmes and mechanisms for coast and ocean governance: PEMSEA, YSLME and WCPFC will take the lead in preparation and implementation of the three projects under the Programme. PEMSEA will have overall responsibility for information collection, reporting, monitoring and evaluation, and dissemination at the regional and programme level in addition to the project level.

Relevant government agencies: Ministries of Foreign Affairs, Ministries of Marine Affairs and Fisheries, Ministries of Environment, Ministries of Agriculture and other relevant line ministries will participate in the projects under the programme to ensure high political buy in and cross-sectoral collaboration and coordination at national level. Key Ministries are also represented at East Asian Seas (EAS) Partnership Council that with the support of PEMSEA will be responsible for overall Programme coordination.

Local governments in target areas: will take the lead in developing and implementing ICM plans and risk management plans to address climate variability and coastal disasters with support from the regional and national stakeholders listed above.

Non-governmental organisations (NGOs): NGOs, such as WWF, are participating in on-the-ground implementation of activities together with local communities to rehabilitate and sustain ecosystem services while improving livelihoods in e.g. the Yellow Sea LME.

Civil society organisations in project target communities: will participate in consultations and contribute to design of local demonstration activities and promote best practices in ICM, etc.

Private sector: will participate in PPPs, PES, CSR, MSC certification and other innovative financial mechanisms, services and instruments to leverage funding for rehabilitating and sustaining coastal and marine ecosystem services in the EAS.

L. Indicate the co-financing amount the GEF agency is bringing to the project:

UNDP is bringing a total of $26.974 million to the Programme of which $26.01 million is in grant financing through the partnership with Coke and "Every Drop matter Programme" ($15 million), the GoALWaSH programme in Lao PDR ($2 million), DDR/CCA ($2.42 million) and GMMA ($2.02 million) projects in the Philippines, Cap/Net ($750,000), UNDP Country Office project in China linked to the YSLME ($2.09 million) and financing of Coastal Strategy Action Plans through PEMSEA ($2.48 million). In addition, $216,000 in in-kind support from UNDP Philippines is provided for the project with the WCPFC.

M. How does the program fit into the GEF Agency's program (reflected in documents such as UNDAF, CAS, etc.) and the Agency staff capacity in the country to follow up program implementation:

UNDP's Strategic Plan for 2008-2013 approved by the UNDP Executive Board includes Managing Energy and the Environment for Sustainable Development (Goal 4), and includes the outcome Strengthened national capacities to mainstream environment and energy concerns into national development plans and implementation systems. UNDP has taken further internal steps to operationalise the mainstreaming elements of the Strategic Plan at a subsidiary level through its Water Governance Strategy endorsed by the UNDP Management Group in 2007. The Water Governance Strategy includes as one of its three Strategic Priorities Regional and Global Cooperation and the associated Outcome, Enhanced regional and global cooperation, peace, security and socio-economic development through adaptive governance of shared water and marine resources, and the principal Output, Assist countries to develop and implement cooperation on transboundary waters through multi-country agreements on priority concerns, governance reforms, investments, legal frameworks, institutions and strategic action programmes.

Notably, UNDP's work on improving governance of shared water and ocean resources incorporates both freshwater and marine water bodies and has for some time applied a "ridge-to-reef" approach recognizing the freshwater-marine continuum and important linkages between upstream water and land management and the health and

integrity of downstream coastal and marine ecosystems. Underscoring this approach is UNDP's poverty reduction mandate and commitment to preserving and enhancing food security and livelihoods of the nearly 2 billion people who depend on healthy, functioning marine ecosystems in the EAS.

In managing its LME and transboundary fisheries programmes, UNDP's Ocean Governance Programme (www.undp.org/water/ocean-coastal-governance.shtml) draws on a wide range of staff expertise in marine ecosystems, fisheries and marine/coastal resources management at HQ, in its Regional Centers, and through its network of Country Offices. Senior advisors at HQ and in regional centers all have relevant Ph.D.'s (fisheries economics, marine biology, environmental management/policy, marine resource economics, etc.). UNDP's cumulative LME portfolio, working in 11 different LMEs in all 5 UNDP regions covering over 100 countries, represents $528 m. in total financing from GEF, UNDP, governments, donor partners and others. This represents the largest investment of any kind in advancing the sustainable, integrated, ecosystem-based management of LMEs, from which over 85% of the world's fisheries are harvested, which contribute $12.6 trillion/year in goods and services to the global economy, and which provide livelihoods for nearly half a billion people, many in the world's poorest countries.

In terms of implementing GEF IW projects, UNDP has consistently delivered results through a broad range of international transboundary water interventions including the high-level adoption of 17 SAPs (8 in LMEs), eight of which are currently being implemented. In addition to providing vital technical, financial and capacity building support for the establishment of the world's first post UN Fish Stocks conservation and management organization for highly migratory fish stocks, the Western and Central Pacific Fisheries Commission (WCPFC), UNDP has strengthened or established 20 multi-country marine/coastal, river and lake basin management agencies or commissions including establishment of the world's first two LME commissions, the Benguela Current and Guinea Current LME Commissions. UNDP builds on its extensive field presence in the EAS countries. In addition, the Programme will be directly supported by an experienced UNDP Regional Technical Advisor based in the region and by the UNDP Principal Technical Advisor at UNDP Headquarters with responsibility for global oversight of the UNDP Ocean Governance programme. Lastly, this Programme also supports the UNDAFs of the participating countries.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach theOperational Focal Point endorsement letter (for programs accessible to all GEF Agencies) and Operational Focal Point Endorsement letter (for programs accessible to GEF Agencies with board) with this template.

NAME	POSITION	MINISTRY	DATE*(MM/dd/yyyy)*
Mr. Lonh HEAL	Technical Director General	Ministry of Environment, **Cambodia**	March 14, 2012
Ms. Jiandi YE	Deputry Director IFI Division III International Department	Ministry of Finance, **China**	April 12, 2012
Mr. Dana A. KARTAKUSUMA	Special Advisor to the Minister on Economic and Sustainable Development Affairs	Ministry of Environment, **Indonesia**	April 13, 2012
Mr. Khampadith KHAMMOUNHEUANG	Deputy Director General,	Environment Department Science Technology and Environment Agency (STEA), **Lao PDR**	April 3, 2012
Ms. Analiza REBUELTA-TEH	Undersecretary	Department of Environment and Natural Resources, **Philippines**	February 23, 2012
Mr. Mario XIMENES	Director, Secretariat of State for Environment	National Directorate for International Environmental Affairs, **Timor Leste**	March 16, 2012
Dr. Van Tai NGUYEN	Director General, Institute for Strategic Policy of Natural Resources and Environment	Ministry of Natural Resources and Environment, **Vietnam**	July 25, 2012

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation. Following the new project cycle, UNDP will submit all PIFs under the program within 6 months after Council approval of the PFD.

Agency Coordinator, Agency name	Signature	DATE*(MM/dd/yyyy)*	Project Contact Person	Telephone	Email Address
Adriana Dinu UNDP-GEF Deputy Executive Coordinator		16 August 2012	Jose E. Padilla	+66 2304 9100 ext 2730	jose.padilla@ undp.org

ANNEX A

LIST OF PROJECTS UNDER THE PROGRAM FRAMEWORK

Projects Submitted for Council approval in this work program + Future submissions:						
Project Title	**GEF Amount ($)**			**Agency Fee ($)**	**Total ($)**	**Expected Submission Date**
	Focal Area 1	**Focal Area 2**	**TOTAL**			
	Project	Project	Project			
FSP submitted with PFD in the work program						
1.						
2.						
3.						
4.						
Total						
MSPs Submitted for CEO approval						
1						
2.						
3.						
Total						
FSP Projects to be submitted in future work programs:						
1. Implementation of the Yellow Sea LME Strategic Action Program for Adaptive Management	7,562,430		7,562,430	680,619	8,243,049	November 2012
2. Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas	2,293,578		2,293,578	206,422	2,500,000	January 2013
3.Scaling up the Implementation of the Sustainable Development Strategy for the Seas of East Asia	10,143,992		10,143,992	912,959	11,056,951	January 2013
4.						
Total FSPs	20,000,000		20,000,000	1,800,000	21,800,000	

MSP Projects to be submitted for CEO Approval						
1.						
2.						
Total	20,000,000		20,000,000	1,800,000	21,800,000	

Note: Qualifying GEF Agencies submitting the PFD do not need to fill this table. For all other GEF Agencies, fill in the focal area split, if any. If more than two focal areas involved, add columns as necessary.

Annex B
Sub-Project Summaries

This Annex provides preliminary description of the individual projects that are part of the proposed program for the East Asian Seas. These individual projects are intended to build on the successes and lessons learned from ongoing/completed projects, namely: a) Implementation of the Sustainable Development Strategy for the Seas of East Asia; b) Preparation and Preliminary Implementation of a Strategic Action Programme for the Yellow Sea Large Marine Ecosystem; and c) West Pacific and East Asia Oceanic Fisheries Management Project. The first and third projects will be completed before the end of 2012 and terminal evaluations are scheduled during the 3rd quarter of 2012. The second project is winding down and a terminal evaluation has been completed.

Annex B.1: SDS-SEA

Title: Scaling up the Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)

Objective: To catalyze actions and investments at the regional, national and local levels to rehabilitate and sustain coastal and marine ecosystem services and build a sustainable coastal and ocean-based economy in the East Asian region, in accordance with the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA).

Countries have adopted three targets as progress indicators for the implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) and building a sustainable coastal and ocean-based economy in the region, namely: Target A) a functional, country-owned regional partnership-based mechanism strengthening intergovernmental and multi-sectoral cooperation at the EAS regional level for SDS-SEA implementation and the achievement of agreed targets; Target B) national coastal and ocean policies and supporting institutional arrangements in place and functional in at least 70 percent of participating countries; and Target C) scaled up national and local government programs providing ICM coverage of at least 20% of the region's coastline.

A 5-year SDS-SEA Implementation Plan is now under development in collaboration with participating countries and with the assistance of GEF, which will detail the activities to be undertaken in each country, and regionally, in support of these three targets. The 5-year plan is scheduled for adoption by governments at the upcoming PEMSEA Ministerial Forum in July 2012. Subsequently, the PIF for this project will be prepared, including details concerning project locations, expected outputs and quantifiable indicators of progress.

Contributions to PFD Components

Component 1: Partnerships in coastal and ocean governance

Baseline Activities: This component of the baseline project will focus on Targets A and B, as adopted by participating countries. Activities will include: organizing and conducting consultations, awareness building and collaborative planning forums at the national and local levels involving decision-makers, planners, public and private sector stakeholders and coastal communities; improving understanding and building consensus on the importance of coastal and ocean policy; refining policy objectives and targets based on stakeholder feedback/input; integrating policy objectives and targets into medium term development plans and regulatory frameworks, including policy/regulations aimed at reducing vulnerability of coastal communities and resources to climate change and severe weather conditions; and delineating and initiating programs at the national and local levels to transform policy into actions and investments.

Incremental reasoning: The GEF funding will be utilized for two purposes, namely: to share/promote good practices in ocean policy development and implementation at the national and local levels through technical assistance; and to facilitate the establishment of PEMSEA and the SDS-SEA as the regional mechanism and platform for improved coordination of ocean governance and management across LMEs and coastal waters of the region. To this end, the GEF funding will support activities aimed at developing and initiating partnership agreements and working arrangements between PEMSEA and the Yellow Sea Large Marine Ecosystem (YSLME's Yellow Sea Commission), Western and Central Pacific Fisheries

Commission (WCPFC) and Arufura Timor Seas Expert Forum (ATSEF), including developing and adopting financial mechanisms to sustain program operations.

Major quantifiable indicators: Partnership agreements concerning institutional and operating arrangements signed among participating countries, PEMSEA, YSLME, WCPFC and ATSEF; national coastal and ocean policies and institutional arrangements implemented in at least 70 percent of participating countries; SDS-SEA targets, including CCA/DRR, incorporated into the medium-term development plans of 8 participating countries; climate smart policy and legislation adopted and mainstreamed, nationally and sub-nationally, in at least 6 participating countries;

Component 2: Healthy and resilient marine and coastal ecosystems

Baseline Activities: This component of the baseline project is focused on Target C, as adopted by participating countries. In the process of identifying their respective contributions to the 20 percent regional ICM target, participating countries are identifying priority coastal and watershed areas as well as major challenges to rehabilitating and/or sustaining coastal and marine ecosystem services in these selected areas. Using the ICM framework and process as the vehicle for systematically strengthening local governance of coastal and marine areas and resources, building partnerships and leveraging investments in on-the-ground interventions, the baseline project will be directed at: a) habitat conservation and management in biodiversity hotspots, including improvement in the management effectiveness of new and existing MPAs and MPA networks; b) sustainable fisheries management in threatened fishing grounds, including strengthening local applications of marine spatial planning, ecosystem-based approaches to fisheries management, and supplemental livelihood opportunities for fishers; c) pollution reduction in priority river basins and coastal areas through the application of total allowable pollutant loading and the preparation and promotion of good practices and investments in efficient use of fertilizers as well as reductions in priority pollutants from domestic, industrial and agricultural sources; and d) building resilience to climate change and other natural and manmade hazards in vulnerable coastal communities through vulnerability assessments, disaster risk reduction and preparedness at the community level and investments in hard and soft engineering solutions to natural and manmade hazards.

Incremental Reasoning. The GEF funding assistance will be used to help build and implement governance and management improvements at the local level and to leverage required investments in rehabilitating and sustaining healthy and resilient coastal and marine ecosystems. ICM brings global, regional and national benefits and contribute to relevant objectives and targets, and a number of innovative technologies and measures, to the local level. GEF support will facilitate the transfer and application of these instruments to local governments, communities, and other stakeholders. By capacitating local governments with ICM development and implementation tools, including integrated land- and sea-use zoning, vulnerability/risk assessment, integrated environmental monitoring, State of the Coasts (SOC) reporting, and so on, and building in-country experience and partnerships to mentor, assist and replicate good practices, GEF resources will have immediate and direct benefits at the selected ICM sites, as well as contribute to the experience and knowledge base that is required over the longer term to scale up SDS-SEA implementation nationally and regionally to address new and emerging challenges to building sustainable coastal and ocean-based economies.

Major quantifiable indicators. ICM programs in place covering at least 20 percent (45,000 km) of the region's coastline; measureable improvements in the areal extent, health and resiliency of habitats including mangroves, coral reefs, sea grass and other habitats in at least 10 coastal and watershed areas, including biodiversity hotspots and areas-at-risk to climate change; increase in species productivity in threatened fishing grounds within 2 selected ICM sites; pollutant loading reduction targets and investment programs adopted in 5 priority coastal areas and river basins; portfolio of investment projects developed and facilitated in at least 3 participating countries; innovative technologies and good practices in nutrient reduction shared, promoted and replicated in 2 ICM sites, with measurable reductions in priority pollutants; 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; improved oil spill (and hazardous and noxious chemical spill) preparedness and response measures adopted and implemented in least 3 countries sharing a common sub-regional sea area

Component 3: Knowledge platforms for building a sustainable ocean-based green economy

Baseline Activities: Resource allocations to ICM, SAP/NAP implementation and climate change adaptation and disaster risk reduction are expected to increase as a result of national coastal and ocean policy adoption and mainstreaming related objectives and targets into national and local government medium-term development plans. Monitoring and assessment of the coastal and marine environment, as well as data processing and information management are ongoing at the national and regional levels. Through its schedule of national and local ICM forums, publication and dissemination of case studies and good practices, and the development of national State of the Coasts report system, the baseline project will work towards building bridges between existing and new knowledge on ICM and investments in sustaining coastal and marine ecosystem services and the governments, agencies and communities that need this knowledge to inform their responses to the challenges of sustainable development.
Incremental reasoning: GEF incremental support will be used to strengthen the soundness of policies, decisions, commitments and investments at the national and regional levels, in support of building as sustainable coastal and ocean-based economy. Among others, the support system will include a network of ICM Learning Centres, an ICM Community of Practices, targeted research on application of ecosystem-based management, use of innovative economic and financing instruments, engaging the corporate and business sector, and recognition of good governance and sustainable practices. Finally, this component will also contribute to strengthening global partnerships by contributing to global learning on sustainable coastal and ocean governance and management through IW Learn.
Major quantifiable indicators. State of Coasts (SOC) reports published by participating countries; network of ICM Learning Centers and ICM Community of Practice set up and operational; targeted research conducted on total allowable nutrient loading, valuation of ecosystem services, and macro-scale zoning of vulnerable coastal and watershed areas; at least100 local chief executives participate in regional ICM forum; certification/recognition system program implemented for exemplary local governments, ports and corporations/ business sector; at least 2 regional and 10 national forums share knowledge and good practices in SDS-SEA/ICM implementation; 2 Minister level meetings conducted to review global, regional and national trends and emerging issues and set new targets/commitments for SDS-SEA implementation.

Indicative financing by program component

Program Component	GEF funding (US$)	Indicative Cofinancing (US$)	Sources of Cofinancing
1. Partnerships in coastal and ocean governance	2,451,957	28,044,143	• Governments of Cambodia, China, Indonesia, Lao PDR, Philippines, Timor Leste, Vietnam, (national and local) • Governments of ROK and Japan
2. Healthy and resilient marine and coastal ecosystems	5,485,729	41,270,448	• Governments of Cambodia, China, Indonesia, Lao PDR, Philippines, Timor Leste, Vietnam, (national and local) • Governments of ROK and Japan • UNDP/Coke; Foundations

3. Knowledge platforms for building a sustainable ocean-based green economy	1,699,101	23,911,721	• Governments of Cambodia, China, Indonesia, Lao PDR, Philippines, Timor Leste, Vietnam, (national and local) • Governments of ROK and Japan • UNDP
4. Project management cost	507,205	4,104,688	• Governments of Cambodia, China, Indonesia, Lao PDR, Philippines, Timor Leste, Vietnam, (national and local) • Governments of ROK and Japan
Total	**10,143,992**	**97,331,000**	

Annex B.2: YSLME

Title: Implementation of the Yellow Sea LME Strategic Action Programme for Adaptive Ecosystem-Based Management

Objective: To achieve adaptive ecosystem-based management of the Yellow Sea (YS) by fostering long-term sustainable institutional, policy and financial arrangements in accordance with the YSLME Strategic Action Programme (SAP).

The semi-enclosed nature of the Yellow Sea (YS) and the rapid economic development of the surrounding area have resulted in an increasingly polluted and over-exploited sea. This large marine ecosystem (LME) faces major transboundary problems, including: fisheries depletion resulting from the dramatic increase in fish landings that has grown from 400,000 tonnes to 2.3 million tonnes in the past 20 years; continuing increases in the discharge of pollutants; changes to ecosystem structure and functions leading to an increase in jellyfish and harmful algal blooms; and a 40% loss of coastal wetlands.

Contributions to PFD Components

Component 1: Partnerships in coastal and ocean governance

Baseline. UNDP's Ocean Governance Programme has mobilized $0.4 million of (non-GEF) resources and commenced implementation of a key baseline project aimed at consolidating key results and outcomes from the GEF YSLME IW project. This baseline project is supporting a number of critical activities that will enable the successful commencement of SAP implementation, including: facilitating final discussions and negotiations with China and R. of Korea governments on the project framework for the YSLME SAP Implementation project; consultative meetings on the relevant issues regarding the establishment of the YSLME Commission; regional workshop on mainstreaming economic considerations in the ecosystem-based approach; regional Forum on involvement of local government in the relevant management actions on fishery management.

Incremental reasoning. The GEF funding will: enable regionally coordinated implementation of the SAP through the YSLME SAP Implementation Facility (IF), and in the medium to longer term through establishment of the YSLME Commission; facilitate participation of all the coastal countries, and; foster the removal of sectoral barriers to integrated management of ecosystem carrying capacity. GEF support will ensure the establishment of a YSLME Commission, which will ensure the long-term cooperation among the riparian countries. The Commission is envisioned to become self-sufficient and sustainable through establishment of appropriate financial mechanisms that will be mutually agreed by the countries. Implementation of YSLME SAP will also support implementation of the "Sustainable Development

Strategy for the Seas of East Asia (SDS-SEA)" at the sub-regional level. This will provide valuable benefits to strengthen regional infrastructure established under GEF's efforts.
Major quantifiable indicators: YSLME Commission established, operational and sustained; at least 15 agreements with partners on overall environment cooperation and management, fishery management, marine habitat conservation and pollution reduction linked to SAP and SDS-SEA targets.

Component 2: Healthy and resilient marine and coastal ecosystems
Baseline. The YSLME countries have jointly committed over $10.86 billion, mostly through parallel projects, towards achieving the priority commitments made in the SAP. For ecosystem-based fishery manage; ment, the SAP commitment is to reduce 25-30% fishing effort in the coastal countries of the Yellow Sea through vessel buy-back and retraining, stock assessments, etc., valued at $3.638 billion. For pollution reduction, the SAP commitment is to reduce nutrient discharges from the Yellow Sea countries by up to10% every 5 years through enhanced wastewater treatment, reducing fertilizer use and industrial discharges, etc., valued at $5.625 billion. For biodiversity conservation, the main commitments of the SAP are to protect coastal habitats, establish regional MPA network, and promote civil society participation in the coastal countries of the Yellow Sea, valued at $1.586 billion. Additional UNDP contributions to the baseline project under the Pollution Control component of the YSLME SAP include the Improved Water Resources Management and Drinking Water Safety in Rural Regions of China (WRM) project ($2.092 m).
Incremental reasoning. The current sectoral management of the marine environment in the countries bordering the Yellow Sea prevents implementation of coordinated, integrated and ecosystem-based management as defined in the SAP. GEF assistance in the institutional, policy and management reforms will move the process from the business-as-usual approach to integrated management across sectors. Managing to improve ecosystem carrying capacity will be a novel process for the region to engage in, and there is an urgent need to move the region's perception of marine environmental management in this direction. As a result of the SAP implementation, the capacity of individual agencies to play a pivotal role in facilitating more holistic, ecosystem-based management will be improved. Use of GEF resources together with UNDP and national financial commitments will also support the sharing of experiences and lessons-learned on national and regional scales, ultimately aimed at increasing the replication potential for the project's impacts.
Major quantifiable indicators. Restoration of globally important fisheries by reducing within four years up to around 10 % of the current fishing effort; increased uptake of innovative (IMTA) sustainable mariculture techniques in a region responsible for 1/3 of global mariculture production; improved management of globally significant habitats for migratory birds and mammals; decreased eutrophication through reduction in nutrient discharges of about 10% after the 4-year project duration; and thus, significant progress towards restoration of ecosystem carrying capacity.

Component 3: Knowledge platforms for building a sustainable ocean-based green economy
Baseline: The baseline under this component includes finalisation, editing and publishing the reports of the 21 SAP demonstration activities, the co-operative cruises, and the reports on the regional fishery stock assessment; and preparing, finalizing and publishing a summary book to summarize the outcomes and outputs of the project, and the new knowledge generated during the project.
Incremental reasoning: The GEF support will ensure continued monitoring and evaluation to assess the effectiveness of the SAP management actions particularly at the regional (LME) level. The project's unique approach to formulating a SAP based on ecosystem services (in the first phase) can serve as a model for other LMEs that are developing SAPs, and in this proposed second phase, the approach could similarly be a model for effective regional LME management that encompasses science and governance. These experiences will be shared through IWLearn and other appropriate fora.
Major quantifiable indicators. Monitoring and knowledge sharing system for the YSLME in place and participation in at least 2 global knowledge sharing events

Indicative financing by Program Component

Program Component	GEF funding (US$)	Indicative Cofinancing (US$)	Sources of Cofinancing
1. Partnerships in coastal and ocean governance	1,570,043	38,332,954	• Governments of China and ROK (national and local) • UNDP
2. Healthy and resilient marine and coastal ecosystems	5,214,271	158,585,812	• Governments of China and ROK (national and local) • WWF • UNDP/Coke
3. Knowledge platforms for building a sustainable ocean-based green economy	400,000	20,000,000	• Governments of China and ROK (national and local)
4. Project management cost	378,116	13,500,000	• Governments of China and ROK (national and local)
Total	**7,562,430**	**230,418,766**	

Annex B.3: WPEA Seas

Title: Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas

Objective: To strengthen national capacities and regional cooperation to implement fishery sector reforms that will sustain and conserve the highly migratory fish stocks in the West Pacific Ocean and East Asian Seas while considering climatic variability and change

Eastern Indonesia, Philippines and Vietnam form the western boundary of the Pacific Ocean Warm Pool Large Marine Ecosystem (POWPLME). Highly migratory fish stocks regularly move between the POWPLME and the East Asian LMEs though these movements are not well understood. The tuna catch in the Exclusive Economic Zones (EEZs) of Indonesia, Philippines and Vietnam that are connected with the POWPLME amount to approximately 15 per cent of the global tuna catch and is thus of global and regional significance.

Contributions to PFD Components:

Component 1: Partnerships in coastal and ocean governance

Baseline. The management of tunas is complicated by their migratory nature, and calls for special cooperation among nations, since no one nation can manage tuna effectively. The Project builds on the MSP entitled *West Pacific East Asia Fisheries Management Project* (WPEA), which is building capacity in Indonesia, the Philippines and Vietnam to fully engage in regional initiatives to conserve and manage fisheries for highly migratory fish stocks. The project is implemented by the Western and Central Pacific Fisheries Commission (WCPFC) that has been established to implement the Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPF Convention) which entered into force on 19 June 2004. The Project builds on the countries' commitments to implementing the WCPFC as well as UNDP's baseline projects in ocean governance, and disaster risk reduction and climate change adaptation.

Incremental reasoning. The increased variability of the already complex fisheries in the West Pacific and East Asian Seas, caused by climate change, will require flexible governance incorporating adaptive management strategies. GEF support will be used to strengthen regional collaborative mechanisms for

monitoring and assessment of highly migratory fish stocks in the POWPLME and the SEA LMEs, including Illegal, Unreported and Unregulated (IUU) fishing. This may involve the establishment of a WCPFC Technical Advisory Committee to effectively coordinate monitoring of highly migratory stocks across POWLME and EAS LMEs, in partnership with PEMSEA. GEF support will also contribute to building the capacity of Philippines, Indonesia and Vietnam to mainstream climate change impacts into their national fisheries institutions and policies, linked to the work of the Commission

Major quantifiable indicators: (i) Regional collaborative mechanism in place for monitoring and assessment of highly migratory fish stocks in the EAS; (ii) more formal participation of Indonesia and Vietnam in the WPCFC; and (iii) Integration of climate change impacts on oceanic fisheries, such as temperature, wind and acidification driven shifts in fisheries, into national and regional policy and institutional frameworks and the regional fisheries management regime.

Component 2: Healthy and resilient marine and coastal ecosystems

Baseline. In Indonesia, the project draws on support from the National Commission on Fish Stock Research, which provides advice on the status of fisheries resources to the Minister of Marine Affairs and Fisheries, the Coordinating Forum on Fisheries Resource Management and Utilization, coordinated by the Directorate General of Capture Fisheries and the Ministry's Control and Monitoring of Marine and Fisheries Resources Programme. In Philippines, the project is linked to the Sustainable Archipelagic Framework, and the National Tuna Management Plan. In Vietnam, the project is linked to and supported by the Fisheries Bill and the Strategy for Offshore Fishing. Moreover, the Project builds on a strong development baseline and co-financing support from the governments to sustainable fisheries-based livelihoods.

Incremental reasoning. The sustainability of harvests of shared tuna stocks in East Asia is threatened by over-exploitation resulting from incomplete and inadequate collaborative arrangements for conservation and management, and illegal, unreported and unregulated (IUU) fishing. The Project intends to further strengthen national capacities and regional cooperation to implement fishery sector reforms that will sustain and conserve the highly migratory fish stocks in the West Pacific Ocean and East Asia LMEs while considering climatic variability and change. GEF resources will be used to support an ecosystems approach to management of shared target and non-target oceanic stocks and strengthened regulation and control nationally and regionally. It will strengthen compliance with existing legal instruments at national, regional and international level for the management of highly migratory fish stocks, implement EAFM Plans in Indonesia, Philippines and Vietnam, and enhance adaptive management of shared stocks. These activities will build on the accomplishments of the WPEA OFM MSP.

Major quantifiable indicators. (i) Conservation and sustainable management of highly migratory fish stocks in an area that is supplying around 15 per cent of the world tuna catch; (ii) Reduction of bycatch of critically endangered species, such as sea turtles, sharks and seabirds.

Component 3: Knowledge platforms for building a sustainable ocean-based green economy

Baseline: The Project builds on a strong baseline of data collection on oceanic fisheries in the South Pacific Ocean undertaken by the South Pacific Community (SPC) with support from WCPFC member states (CMMs), such as Australia, China, USA, Japan, Chinese Taipei and RO Korea. SEAFDEC has some information available but mostly on coastal tuna resources. Also, the Philippines, Indonesia and Vietnam have national monitoring programmes that the project will be linked to, but the quality of national data is often poor. Moreover, poor compatibility and limited information sharing across East Asia and the Pacific as well as limited involvement of the tuna industry, is threatening the sustainability of harvests of shared stocks.

Incremental reasoning: GEF resources will support the elaboration of monitoring programmes and stock assessments for highly migratory fish stocks and associated ecosystems, and establishment of a Regional Knowledge Platform for highly migratory stocks. An improved contribution to sustainable development will be achieved through enhanced information for decision-making in respect of necessary national economic, financial, regulatory and institutional reform. The Project will work with the private sector to

promote market-based approaches to sustainable harvesting of shared tuna stocks. Analysis of fishery supply chains for East Asian oceanic tuna will be coupled with identification of incentives for sustainable fishing practices (e.g. MSC certification) in collaboration with consumers and the tuna industry, including the International Seafood Sustainability Association (ISSF), which is a recently established global partnership among leaders in science, the tuna industry and WWF.

Major quantifiable indicators. (i) Monitoring and knowledge sharing system between the POWPLME and EAS in place for highly migratory fish stocks; (ii) Increased allocation of private-sector resources to sustainable harvesting of tuna in the EAS; (iii) Participation in at least 2 global knowledge sharing events.

Indicative Financing by Program Component

Program Component	GEF funding (US$)	Indicative Cofinancing (US$)	Sources of Cofinancing
1. Partnerships in coastal and ocean governance	478,000	2,256,000	• National governments of Indonesia, Philippines, Vietnam • UNDP • WCPF Commission
2. Healthy and resilient marine and coastal ecosystems	1,300,000	8,000,000	• National governments of Indonesia, Philippines, Vietnam • WCPF Commission • WWF • Private sector: tuna industries in Indonesia, Philippines, Vietnam
3. Knowledge platforms for building a sustainable ocean-based green economy	400,899	5,100,000	• National governments of Indonesia, Philippines, Vietnam • WCPF Commission • SPC (Secretariat of the Pacific Community) • Private sector: tuna industries in Indonesia, Philippines, Vietnam • Bilateral donor agencies (USA, Australia, Japan, RO Korea)
4. Project management cost	114,679	800,000	• WCPFC
Total	**2,293,578**	**16,156,000**	