

SUPPORTING COUNTRIES IN MEETING THE CLIMATE CHANGE CHALLENGE

UNEP's Priorities for Catalysing a Green Economy

UNITED NATIONS ENVIRONMENT PROGRAMME www.unep.org





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UNEP's Priorities for Catalysing a Green Economy

The United Nations Environment Programme (UNEP) is accelerating its role, responsibilities and response to climate change under a new and rapidly evolving strategy. It is a strategy tailored to the needs of Member States and a growing number of requests on how best to realize a low carbon, resource efficient Green Economy for the 21st century.

Three priorities have been identified as lead areas that match calls for international guidance, the urgent need for action at a national level on climate change and the organization's skill set, experience and mandate.

Ecosystems-based adaptation

There is real recognition that healthy ecosystems from coral reefs and wetlands to mangroves and fertile soils - are a key to successfully adapting to climate change. Investing in the management and maintenance of healthy ecosystems is a buffer and an insurance policy against extreme weather events and a rapidly changing climate.

There is equally an understanding that damaged and degraded ecosystems will make other efforts to adapt that much harder given the importance of these natural assets in areas such as maintaining water supplies and sustainable agriculture to cost-effective flood defence systems.

Ecosystems and the services they provide also represent serious, multi-trillion dollar economic assets and natural infrastructure, as revealed by The Economics of Ecosystems and Biodiversity, of which UNEP hosts the secretariat.

Meanwhile new evidence is emerging on the climate mitigation potential



of ecosystems. A recent UNEP report, compiled with scientists, estimates that carbon emissions equal to half the annual emissions of the global transport sector are being captured and stored by such marine ecosystems as mangroves, salt marshes and sea grasses alone.

UNEP is evolving its already wellestablished advocacy and scientific assessment role into the areas of economic assessments and support on the ground for Member States.

Demonstration projects include assistance to the Government of Iraq in rehabilitating the marshlands of Mesopotamia; support to the Government of Kenya in restoring the Mau forest complex and to the Government of Mali in reviving Lake Faguibine.

Plans are at an advanced stage to deploy, in partnership with others, the necessary

Ecosystems and the services they provide also represent serious, multitrillion dollar economic assets and natural infrastructure. assessment and project management measures for ecosystem renovation in Haiti.

UNEP is ready to support Member States in gearing up their economies to overcome policy and financial barriers and to incorporate ecosystem adaptation measures into national climate, development and sectoral strategies.

Reduced Emissions from Deforestation and forest Degradation (REDD and REDD+)

Emissions linked with deforestation and forest degradation may account for close to 20 per cent of current global greenhouse gas emissions.

UNEP is part of the international effort to prepare developing economies for a REDD regime that may emerge at UNEP is ready to support Member States in gearing up their economies to incorporate ecosystem adaptation measures into national climate, development and sectoral strategies.



the United Nations climate convention meeting in Copenhagen in December.

By some estimates a country such as Indonesia could generate revenues of around \$1 billion a year initially if deforestation rates are halved.

Through the UN-REDD Programme, a partnership between UNEP, the Food and Agricultural Organization and the United Nations Development Programme, nine countries are being made ready for REDD.

The Programme is supporting those countries through appropriate methodologies, monitoring and verification systems and safeguards in order to ensure REDD delivers value not only in climate and national economic terms but in terms of livelihoods for local communities. REDD+ is taking the knowledge forward into areas such as carbon farming. Similar methodologies, monitoring and verification techniques are being tested with communities in western Kenya, China, Niger and Nigeria.

It should soon allow farmers and landowners to benefit from carbon sequestration of different farming and land management regimes including agroforestry.

REDD+ is also aimed at overcoming the practical, policy and financial barriers, including appropriate insurance, that have been holding back afforestation and reforestation projects as part of the Kyoto Protocol's Clean Development Mechanism.

UNEP is ready to support Member States in gearing up their economies to incorporate REDD and REDD+ measures into national climate, development and sectoral strategies.

Clean Technology Readiness

Investing in low-carbon energy alternatives and reducing emissions from inefficient energy consumption offer the best way to achieve immediate and sustained reductions in greenhouse gas emissions. They also make economic and environmental sense.

Many low-carbon technologies are already commercially viable but transferring them to new markets and mainstreaming their use globally remains a challenge. This is where UNEP and its collaborative partners come in.

UNEP and partners are already delivering clean tech via smart market mechanisms.

In India, UNEP in collaboration with the United Nations Foundation, the Shell Foundation and Indian banks have bought down the cost of solar technology loans.

Within a matter of a few years, 100,000 people have accessed solar electricity in rural areas and the initiative is now self-financing.

The penetration of solar water heater systems in North Africa has been pioneered by UNEP and partners with the critical linking of loans to electricity utility bills: the key to unlocking the market.



There are many more examples of how UNEP has worked at the national level to unlock the market to deliver clean-tech transformations, not least a pioneering project with funding from the Global Environment Facility to deliver more efficient geothermal exploration in East Africa.

Meanwhile UNEP has undertaken renewable energy mapping assessments, assisting 15 developing countries determine their solar and wind potential and devise policies to tap these clean energy sources.

The organization has launched an effort to help more than 35 countries determine the specific low greenhouse gas technologies best able to meet their development needs and prepare The penetration of solar water heater systems in North Africa has been pioneered by UNEP and partners with the critical linking of loans to electricity utility bills: the key to unlocking the market. national plans to acquire and use those technologies.

In terms of catalysing a set of global norms and standards, UNEP is currently working in four sectors: energy efficiency in building, vehicle fuel efficiency, efficient lighting, and biofuels.

To complement its work on policies, UNEP is also helping more than 25 countries identify and overcome financial and other barriers that hinder the financing of cleaner technologies.

UNEP in partnership with others is ready to support other Member States in gearing up their economies to incorporate clean tech and renewable energies into national climate, development and sectoral strategies. UNEP in partnership with others is ready to support other member states in gearing up their economies to incorporate clean tech and renewable energies into national climate, development and sectoral strategies.





UNEP support across the 'climate change action value chain'





Summary of work	 Play a global leadership role in deepening understanding of and advocating for importance of ecosystems-based adaptation measures Support countries in: Assessing climate vulnerability of ecosystems Identifying ecosystems-based adaptation measures Including such measures in country plans Overcoming policy and finance barriers to delivery 	 Develop a holistic perspective on REDD co-benefits, including long-term benefits regarding ecosystems and biodiversity Help developing countries to: Understand vulnerability of forests Understand co-benefits of REDD 	 Plan activities Overcome policy, financial and other critical barriers (e.g., community issues) to delivery Include consideration of terrestrial carbon beyond forests 	 Develop a holistic perspective (environmental, economic, social) on clean technologies, starting with bio-energy (biogas, biomass-to-power, biofuels) and solar (large-scale CSP) Support countries on and build local capacity to: 	 Understand resources and technology potential Assess complex technology trade-offs Include clean technologies in sector master plans Set policies and standards Overcome financial and other barriers to delivery
Description	Help developing countries to build resilience through ecosystems-based adaptation measures	Help countries to factor in co-benefits of REDD (and other terrestrial carbon sequestration) to enhance the overall sustainability of REDD and to reduce risks to it		Help developing countries to build 'readiness' for clean technology uptake and	scale-up (attracting and effectively using available funds), with an initial focus on bio- energy and solar
	Ecosystems- based adaptation	REDD+		Cleantech readiness	