



Climate Change

Strategy for the UNEP Programme of Work 2010-2011

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UNEP Climate Change Strategy

1. The defining challenge of our age

Climate change is generally recognized as the major environmental problem facing the globe. Evidence is building that impacts are being felt in the form of melting icecaps in the polar areas and increased variability of temperature, rainfall and storms in virtually all regions. The scientific consensus underpinning the rising political and public recognition of the climate problem has been captured in the recent reports of the Intergovernmental Panel on Climate Change (IPCC).

The IPCC Fourth Assessment Report (AR4) clearly states that it is no longer relevant to discuss whether the climate is changing but rather how much change we are committed to and how fast this will occur. In addition the IPCC emphasized that climate change, while a long-term issue, needs to be considered as a medium term problem requiring short-term action. The IPCC also states that the required action to forestall serious climate change is possible with strong policies, technology development and transfer of technologies using a broad range of policy and technical options.

The total costs of limiting concentrations of greenhouse gas emissions (GHGs) to manageable levels will be significant. However, when compared with the anticipated economic impacts of climate change if mitigation does not occur and the size of the world economy and its expected growth over the coming decades, the costs of mitigation will amount to a small fraction of that growth. In short, combating climate change should not affect overall economic development patterns. AR4, however, underlines that this statement is only true if action is taken urgently and that costs will increase if action is delayed. A similar point was made in the Stern Review on the Economics of Climate Change.

The 13th Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC) in Bali in December 2007 (CoP13) reached an historic agreement on the fight against global warming and the world community's ability to deal with climate change. Decision 1/CP.13 (the Bali Action Plan), launched a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, in order to reach an agreed outcome and adopt a decision at its fifteenth session. The road leading to the 15th Conference of Parties in Copenhagen in December 2009 is a critical one if we are to address climate change and collectively set the world on a development path that does not undermine our future.

The political landscape is changing fast in some areas and provides reason for optimism. At the same time the reality is that developments on short-term policy actions and key issues under negotiation are still moving relatively slowly. In addition, and notwithstanding the increasing political focus, greenhouse gas emissions (GHG) continue to increase and not enough has been done to support increased resilience to climate change in developing countries.

Addressing climate change is now central to the work of the United Nations. The UN Secretary-General, Ban Ki-moon, has not only made climate change one of the three priorities for the UN system, but is also tirelessly championing what he has called "the defining challenge of our age".

2. UNEP's long-term commitment to climate change

UNEP has more than twenty years of experience working on climate change. UNEP helped establish the IPCC with the World Meteorological Organization (WMO) in the 1980s and conducted assessments of the scientific understanding of climate change in preparation for the 1992 UN Conference on Environment and Development (UNCED). UNEP also supported the negotiation of the UNFCCC, which entered into force in 1994.

Beyond its support for science and legal mechanisms, UNEP's work has concentrated on efforts to reduce emissions of greenhouse gases, mainly by promoting renewable energy and improved energy efficiency, and spurring development of a carbon market. UNEP has also been active in efforts to reduce the risks of, and improve society's resilience to, climate change, notably through its support to the development of National Adaptation Programmes of Action. Many of UNEP's activities, while not driven solely by climate concerns, have had positive mitigation or adaptation impacts.

While these efforts have often broken new ground in terms of innovation and awareness raising, successes have sometimes remained localized. In order to confront the challenges spelled out clearly by the IPCC, UNEP will significantly scale up its climate activities where it can add more value, working always with its major partners and stakeholders. Given its longstanding experience and mandate, UNEP is well positioned to step up its support to governments, the private sector and civil society helping them to reduce emission of greenhouse gases and to prepare for the consequences resulting from a changed climate.

The climate change programme will build on UNEP's areas of distinctiveness which include:

- A broad environmental perspective and expertise in linking climate change to other environment and development issues in an integrated manner;
- A global environmental mandate that allows UNEP to both work with developed and developing countries on normative frameworks and undertake projects in developing countries;
- Scientific expertise and a science-based approach that is strongly supported by a wide network of world-class scientific institutions and UNEP collaborating centres;
- Convening power and proven ability of working on issues through multi-stakeholder and multi-disciplinary approaches, including its strong relationship with the private sector;
- Proven track record of raising public awareness on environmental and climate change issues.

UNEP has strong competencies which can be built on in areas such as finance, including the Kyoto Protocol's Clean Development Mechanism (CDM); clean energy; ecosystems; environmental assessments; law and governance; and regional support for capacity building and technology transfer. Strengthening will be required, but these are areas where UNEP has a recognized comparative strength or advantage in relation to other international institutions. The organization will work with UN and other partners to improve its strategic presence. It will build a comprehensive climate change programme that cuts across the entire organization and brings together projects and funds from multiple sources to deliver results within the framework of its climate change strategy.

UNEP's Climate Change Strategy is the result of a comprehensive process involving external experts and UNEP staff from across the organization. The strategy is built on the analysis of UNEP's political mandate, the existing portfolio of climate change activities and the areas of distinctiveness. The Climate Change Strategy provides the foundation for transforming the organization's engagement on climate change and for developing a results-oriented programme of work. UNEP will complement other processes and the activities of other institutions and will emphasize the substantial co-benefits of climate change actions and their contribution to environmental sustainability.

It is important to note that UNEP's strategy and climate change programme in no way prejudice the current climate negotiations underway and UNEP will adapt its programme in 2010-11 to reflect any future climate agreement, including any future agreement on the international financial regime on climate change finance, and the needs of the UNFCCC Secretariat and its Parties resulting from such agreements.

3. Mandate

There is significant political support for UNEP's climate change work. Member States have expressed their support through UNEP mandates, decisions by the Governing Council/Global Ministerial Environment Forum, the approved programmes of work for 2006-2007 and 2008-2009,

incorporating a range of activities across all Divisions to address the climate challenge, as well as the global framework agreed through the UNFCCC. These political drivers include:

- The Malmö Ministerial Declaration of 2000, recognizing the “tremendous risk of climate change” as an environmental issue that needs to be addressed;
- The adoption of a cross-cutting issue on biodiversity and climate change within the Convention on Biological Diversity (CBD);
- The Bali Strategic Plan that includes “climate change” as a main thematic area.

UNEP’s work on climate change is further guided by the Medium Term Strategy 2010-2013. At the 10th Special Session of the Governing Council/Global Ministerial Environment Forum in February 2008, Governments welcomed the Medium Term Strategy (MTS) and authorized the Executive Director to use it in formulating the programmes of work and budgets for 2010–2011 and 2012-2013. Climate change is one of the six cross-cutting thematic priorities in UNEP’s Medium Term Strategy around which the organization will focus its activities as it becomes a more effective, efficient and results-focused entity.

4. Partnership

Many other organizations and other parts of the UN system are now addressing climate change on the international level, or seeking to do so. The Secretary-General has identified five focus areas and four cross-cutting areas around which the United Nations will coordinate its climate change activities. He has proposed UN organizations with significant programmes and mandates in each of these nine areas should play a convening role. UNEP has been assigned a co-convening role for capacity building (with UNDP), Reducing Emissions from Deforestation and Degradation (with FAO and UNDP), public awareness (with UNCG) and climate neutral UN. These four areas will help UNEP to further focus its own climate change work.

UNEP will complement the activities of the other UN agencies working on climate change. UNEP has held consultations on its climate change strategy with a number of key UN players and the agreements mentioned below demonstrate the types of complementarities and division of labour that UNEP will be seeking with others agencies across the system. It is worth noting that in most instances UNEP is already working with these partners on climate change issues, so agreements on expanded or new areas of cooperation are an evolution of existing arrangements.

- **The UNFCCC Secretariat** is the conduit for the United Nations system inputs into the intergovernmental negotiation process. UNEP will focus its activities in the provision of the substantive work that will help inform and support the negotiation process. Key areas of cooperation that have been agreed with the UNFCCC Secretariat in a joint work programme for 2008-2009 include: strategic communications; utilizing UNEP’s analytical capacity to support the negotiations process; assisting small and medium-sized developing countries in the international negotiations and capacity building and provision of targeted analysis such as the analysis of public finance institutions. UNEP and UNFCCC are also working closely on supporting UNFCCC work streams especially the work of the Expert Group on Technology Transfer, efforts on financing of climate investments and Reducing Emissions from Deforestation and Degradation (REDD). A similar joint work programme will be developed for 2010-11.

- **UNDP** is another key partner for UNEP. The two organizations have reviewed each others climate change strategies to ensure full complementarities. While some of the desired impacts are similar (in terms of adaptation, finance and mainstreaming for example), the means to achieve these are distinct. At the country level UNEP will focus on piloting new and innovative approaches, developing guidelines and blueprints while UNDP will look to “upscale” these proven methods. Wherever possible more detailed programmes will be developed to present a unified approach to a particular theme, for example the UNEP-UNDP-FAO Collaborative Programme on REDD under which the three agencies are undertaking all of their REDD activities jointly, based on their distinct but complementary roles. Activities such as adaptation mainstreaming will be undertaken through mechanisms such as the UNEP-UNDP Poverty Environment Initiative to ensure a coordinated country approach that is fully in line with the Nairobi Framework.

- The **World Bank** is also an increasingly important partner. UNEP and the Bank have consulted on their climate change work and one concrete result is that UNEP will play a more active part in the World Bank Climate Investment Funds. Similarly UNEP is working towards specific agreements with the Bank for implementing joint or complementary work on issues such as REDD, transport etc. UNEP’s work on finance in particular will be fully complementary with the World Bank as the Bank focuses on the provision of large-scale investments and UNEP limits its work to capacity building of national investors, banks and other institutions.

- Work with the **IPCC Secretariat** will be two-fold: a support role based on helping the Secretariat in the global assessment processes with UNEP scientists and helping to communicate the results to a wider audience; and an implementation role in helping countries to use IPCC methodologies, scenarios and tools to develop their own national and regional assessments to shape policy and focus efforts on climate-proofing vulnerable economies and a wider effort of outreach aimed at bridging the knowledge gap on the implications and actions needed as a result of IPCC assessment reports.

The above are only a few of the partners with whom UNEP will engage in the implementation of its climate change strategy. Section 6 below provides an indicative list of specific partners that UNEP will be working with to help implement the different Expected Accomplishments. The list does not include a number of partners that UNEP will be working with on all Expected Accomplishments, such as the UNFCCC Secretariat, UNDP, the GEF Secretariat as well as the relevant regional and subregional fora and bodies such as AMCEN. UNEP will also continue to work with and through national government environment and other agencies on all national activities.

5. UNEP’s Past Activities in Climate Change

Responses to climate change have traditionally been organized around two main types of interventions: those with a focus on reducing emissions of greenhouse gases (mitigation) and those aimed at reducing the risks of, and improving society’s resilience to, increased climate variability and long-term climatic changes (adaptation). For the purposes of the review of UNEP’s past activities it is useful to add a third (cross-cutting) category, covering those interventions which, directly or indirectly, support both mitigation and adaptation efforts.

Until this strategic exercise was conducted, many of UNEP’s activities relevant to climate change were not apparent. Although they contributed directly to meeting needs in the areas of adaptation,

mitigation, science and outreach, many activities were not labelled as climate change. A real value of the exercise, then, is that it has revealed the true extent of UNEP's activities in the area.

Adaptation

In the area of adaptation UNEP has facilitated the development of better local climate data and its use in determining possible impacts of long-term climate change and short-term increased variability; contributed to improving scientific methods and assessment tools, with a view to advancing the understanding of climate change impacts, vulnerability and adaptation needs; and supported the improvement of the science and policy communities' ability to undertake adaptation planning and cost-effective preventive action, including that linked to disaster prevention efforts.

Use of climate data to determine climate impacts: GEF funding has been used to build information and institutional capacity in developing country government agencies, to support the preparation of National Adaptation Programmes of Action, as contemplated in the UNFCCC. UNEP has also been developing and helping countries undertake integrated environmental assessments, such as the Global Environment Outlook and its regional, subregional, national and city versions. The integrated assessments deal with climate change and its impacts as part of a more holistic assessment process.

Adaptation planning and cost-effective prevention: Planning and preparedness are at the heart of several UNEP efforts in this area, notably those aimed at promoting the use of environmental management as an effective tool for disaster risk reduction, integrating environment in relief and recovery operations in post-crisis areas, and for ecosystem resilience. As a response to the particular vulnerability of coastal areas, UNEP is supporting national governments in efforts to develop integrated watershed and coastal zone management plans, as well as conducting vulnerability assessments of marine biodiversity, with a view to informing adaptation planning in countries that depend strongly on marine resources. A web-based 'information and knowledge platform' helps disseminate best practices on these and related adaptation policies.

Improved land use and reduced deforestation: UNEP's has an existing portfolio of deforestation, forest degradation and climate change activities. Work includes developing standardized tools for quantification and assessment of Carbon and GHG Benefits, and associated pilot studies and capacity building. UNEP is also working to enhance expertise to generate African carbon credits by promoting forestry and bioenergy projects such as reforestation, agroforestry, and forest and soil conservation efforts. UNEP is also working to identify the extent to which the protected area network captures carbon under the Carbon Storage Value of Protected Areas project. UNEP is also working on projects to promote alternatives to unsustainable forest carbon exploitation by developing innovative revenue streams and positive incentives (in particular REDD) to help minimize the carbon and ecosystem impacts of bioenergy production land-use change and poor development planning. UNEP has pioneered practical options for peatland management and restoration using low-cost techniques which are appropriate for inclusion in future REDD interventions. UNEP also works to improve land use, and reduce deforestation and forest degradation as a source of greenhouse gas emissions.

Mitigation

In the area of mitigation, UNEP helps countries make sound, informed energy supply choices with a focus on renewable energy options. It does so by providing guidance on energy policies and policy reform at the request of governments, tapping where possible expertise that exists in the UNEP-facilitated Global Network on Energy for Sustainable Development. It partners with actors in key

economic sectors and other stakeholders – including city networks and consumer groups – to improve the efficiency with which energy is used and promote energy conservation measures; and supports the development of the carbon market in developing and least developed countries.

Renewable energy: UNEP's efforts to bolster renewable sources of energy are two-pronged: by providing information and building capacity, it helps the financial sector mobilize financing for renewable energy investments, mostly photovoltaic (solar) panels, wind, and solar thermal systems. UNEP also promotes the development of renewable energy resource information by bringing together information providers and user – notably investors and project developers. The goal of these initiatives has been to break down the financial and information barriers that prevent a larger up-take of renewable energy technologies. The co-hosting of the secretariat of the Renewable Energy Policy Network for the 21st Century (REN21) with GTZ has given UNEP a strong link to the renewable energy policy community.

UNEP has a long record of projects in the field of access to clean energy and facilitates the work of the Global Network on Energy for Sustainable Development. Its efforts to mobilize financing for small- and micro-scale clean energy enterprise development in Africa, Asia and Latin America have become a UNEP flagship project. A new stream of work has recently been added to UNEP's renewable energy portfolio – an effort to contribute to the development of sustainability standards for the production of biofuels.

Energy efficiency and conservation: As in the renewable energy area, UNEP has sought to break down information and financial barriers to measures that promote energy efficiency. To this end it has used GEF money to develop energy funds and support energy service companies, mostly in Central and Eastern Europe, as well as to promote standard-setting for certain technologies. UNEP has developed technical documents on measures to improve industrial energy efficiency, for use by dedicated centres in developing countries – an approach that has been tested with some of the centres in the joint UNIDO-UNEP network of National Cleaner Production Centres.

UNEP has also established a partnership bringing together stakeholders from the building and construction industries in an effort to improve the energy efficiency of buildings. Finally, in the urban and mobility context, UNEP has worked on rapid public transport systems; established partnerships with car and oil companies; and conducted awareness raising campaigns with coalitions of local authorities, mostly around urban transport-related air quality concerns in an effort to exploit the climate co-benefits of measures aimed at reducing local air pollution in urban areas.

Carbon market development: UNEP has developed a major programme in the area of CDM, providing technical assistance to developing countries with a special focus on Africa. The CDM programme also has a central role in providing state-of-the-art guidance on evolving issues, expanding the CDM into new areas and improving information sharing through a CDM Bazaar operated jointly with the UNFCCC Secretariat. The UNEP Risø Centre operates the most authoritative global source of information on CDM transactions, again in partnership with the UNFCCC secretariat.

Cross-cutting

Activities under this heading include UNEP's support to climate change negotiators from developing countries; efforts to improve the information base of decision-makers, mainly through targeted economic assessments; initiatives to raise awareness about climate change issues both broadly and in

selected audiences; and data analysis and assessment activities on the environment that highlight the links between global warming and other environmental problems.

Climate change negotiations: As a part of its support to multi-lateral environmental agreements, and in close cooperation with the UNFCCC Secretariat, UNEP provides information and training to national focal points to the climate change negotiation process, as well as analyses of emerging issues related to the negotiation process. The goal of this stream of work is to ensure that developing country concerns are taken into consideration in the intergovernmental negotiation process.

Awareness and communications: UNEP has developed a multi-faceted approach to awareness raising and communications for climate change, which ranges from global media relations and special events, including World Environment Day, for which UNEP is the lead UN entity, to targeted advocacy via programmes on children and youth and sports and environment. At the regional level, a range of public authority networks have been established with two distinct areas of focus: exchange of best practices and demonstration projects. Locally, informal campaigns have been developed in Geneva and Brussels, which serve a coordination role and provide up-to-date information to UN agencies in these cities. Some of this work is carried out in cooperation with the UNFCCC Secretariat, supporting Article 6 of the Convention. In addition, UNEP is facilitating the transition to climate neutrality by local and national governments, cities and the private sector via a climate neutral network.

Data and assessments: The Global Environment Outlook programme remains UNEP's key source of independent information on the environment, including climate change. The programme is widely used in developing countries to inform policy-making – notably, the links between various environmental issues. In support of this work, the Global Climate Observation System, a set of remote observation programmes, performs a monitoring function in the areas of climate change, ocean and marine ecosystem changes, and terrestrial and physical ecosystem changes. Lastly, UNEP conducts an assessment programme on water scarcity and land use and cover.

Economics and finance: In an effort to provide both governments and the private sector with sound analyses linking climate change and economic concerns, UNEP has undertaken macro-economic policy development through its work on, for example, trade and subsidies; developed tools and analyses to promote engagement by the finance sector in clean energy; and helped to raise awareness among the financial services industry about the risks and opportunities stemming from climate change.

6. Strategic Priorities of UNEP's Climate Change Programme

Within the Medium Term Strategy and under the climate change thematic priority, UNEP's objective is to strengthen the ability of countries to integrate climate change responses into national development processes. Consistent with the UNFCCC and within the broader United Nations approach for dealing with climate change, the objectives and expected accomplishments focus on providing environmental leadership in the four areas prominent in the international response to climate change: adaptation, mitigation, technology and finance, and their interlinkages.

The UNEP expected accomplishments are:

- (a) That adaptation planning, financing and cost-effective preventative actions are increasingly incorporated into national development processes that are supported by scientific information, integrated climate impact assessments and local climate data;
- (b) That countries make sound policy, technology, and investment choices that lead to a reduction in greenhouse gas emissions and potential co-benefits, with a focus on clean and renewable energy sources, energy efficiency and energy conservation;
- (c) That improved technologies are deployed and obsolescent technologies phased out, financed through private and public sources, including the Clean Development Mechanism;
- (d) That increased carbon sequestration occurs through improved land use, reduced deforestation and reduced land degradation;
- (e) That country policy-makers and negotiators, civil society and the private sector have access to relevant climate change science and information for decision-making.

The climate change strategy is wholly consistent with the Medium Term Strategy, integrates recent priorities given to UNEP by the UN CEB, and is structured around four themes – mitigation, adaptation, science, and communication:

- **Adapting by building resilience to a changing climate:** helping developing countries to reduce vulnerabilities and build resilience to the impacts of climate change. UNEP will build and strengthen national institutional capacities for vulnerability assessment and adaptation planning, and support national efforts to integrate climate change adaptation measures into development planning and ecosystem management practices. The work will be guided by and contribute to the Nairobi Work Programme on Impacts, Vulnerability and Adaptation. UNEP will also work to promote sustainable land use management and reduced emissions from deforestation and degradation, bridging adaptation and mitigation.
- **Facilitating a transition towards low carbon societies:** working to reduce emission of greenhouse gases through an accelerated shift to lower carbon and more efficient energy systems. In line with the Bali Strategic Plan for Technology Support and Capacity-building, UNEP will facilitate technology transfer and financing for renewable energy and energy efficiency in order to provide expanded access to cleaner energy, facilitate the application of the CDM in new sectors and countries; and foster the development of a broader, more inclusive carbon market.
- **Improving understanding of climate change science:** drawing on UNEP's strengths as a science-based organization to make available better and more relevant scientific information on climate change impacts to developing country decision-makers and help improve capacity to use this information for policy purposes, as well as providing scientific, legal and institutional support to developing country negotiators and their institutions so that they can meaningfully contribute to a strengthened international regime on climate change.
- **Communicating and raising awareness:** working with partners to improve understanding of and promote action on different aspects of climate change, targeting policy-makers and negotiators, NGOs, the private sector, media, children, youth and the public at large.

UNEP has already signalled its commitment to scale up its efforts by realigning its work programme and by making climate change one of the six thematic priorities on which it will focus its efforts over the next six years. While implementing this strategy will require additional financial and human resources, work is already underway to organize UNEP's existing resources behind the strategy. A formal mechanism, including staff, has also been put in place for coordinating the implementation of the proposed climate sub-programme and for proactively driving its implementation in a collaborative, cross divisional manner.

Theme 1: Adapting by building resilience

Expected Accomplishment (a): Adaptation planning, financing and cost-effective preventative actions are increasingly incorporated into national development processes that are supported by scientific information, integrated climate impact assessment and local climate data.

Adapting to climate change is essential since even the most stringent mitigation efforts cannot avoid impacts of a changing climate. Effective national adaptation needs to be fully integrated into national social and economic processes and cannot be undertaken in isolation. Climate change is a serious threat to ecosystems. At the same time, healthy ecosystems can provide natural buffers to the impacts of climate change, especially extreme weather events. Improving the health of ecosystems is one way of adapting to climate change, and yields multiple environmental, economic and social benefits. UNEP will therefore assist developing countries to better integrate an ecosystems approach into their climate change adaptation efforts.

UNEP's work in climate change adaptation will focus on meeting vulnerable countries' twin needs for environmental protection and economic development and assisting them to integrate adaptation into their multi-faceted planning and deliberative processes. Activities will be undertaken in line with the Nairobi Work Programme on Adaptation.

UNEP's work will focus on:

- Assessing vulnerabilities and adaptation services of critical ecosystems and helping to integrate the findings into national decision-making, planning and adaptation practices;
- Promoting ecosystem based-adaptation and planning to help ensure that development efforts are protected from negative impacts of climate change (climate-proofing), including through knowledge sharing, capacity building and technology transfer;
- Helping to strengthen national institutional capacity for adaptation planning, using knowledge, technology and policy support from global and regional networks;
- Helping to strengthen national capacity for undertaking integrated vulnerability and adaptation assessments, including capacity building in developing countries on science assessments of climate change, especially adaptation, and support to feed these into global processes such as the IPCC;
- Supporting countries to integrate adaptation into their national and sectoral development planning processes;
- Providing technical, analytical and policy support to major climate change financing mechanisms, such as the Adaptation Fund managed by the GEF, to support the coherence of their operations and ensure transformational investments in climate change

Indicative List of Partners:

- UN agencies and organizations: World Meteorological Organisation, Food and Agriculture Organisation, International Strategy for Disaster Reduction (ISDR);
- Intergovernmental organizations: World Bank, European Union, African Union, Asia-Pacific Economic Cooperation (APEC);
- NGOs: IUCN, WWF, Red Cross;
- Expert centres: the Stockholm Environment Institute (SEI), the International Centre for Integrated Mountain Development (ICIMOD), International Long-Term Ecosystem Research Network (ILTER), and World Bank Consultative Group for Agricultural Research (CGIAR), Risoe Centre on Energy, Climate and Sustainable Development etc.

Expected Accomplishment (d): Increase in investment towards reduction in greenhouse gas emission by land use, land use change and forestry (LULUCF), as a result of UNEP's intervention

Land use, land use change and forestry policies and actions and initiatives for reducing emissions from deforestation and degradation (REDD), could play a significant role in climate change adaptation and mitigation. These initiatives can also yield significant sustainable development benefits or co-benefits, including for biodiversity conservation and support to livelihoods, and can generate new financing for sustainable forest management in developing countries.

UNEP's REDD activities will be undertaken within the UN collaborative programme on REDD (UNEP-UNDP-FAO), which is implemented in close coordination with the UNFCCC Secretariat and the World Bank Forest Carbon Partnership Facility. LULUCF activities will build on UNEP's long track record of implementing GEF projects in this area, including development of standardized carbon monitoring and measurement methodologies.

The focus of UNEP's work will be:

- Mapping and assessing land use change, biodiversity, forest loss and carbon stocks, and associated capacity building to provide the knowledge base for reducing emissions from deforestation;
- Developing and testing tools for examining and modelling greenhouse gas emissions and carbon stocks from deforestation, land use change, forest and land cover degradation;
- Helping countries to strengthen legal, regulatory and institutional frameworks governing land use and forestry, including support for establishing monitoring and verification systems, developing payment structures (national to local), and running participatory consultation processes;
- Supporting REDD readiness in relevant developing countries through workshops and support for establishing monitoring and evaluation systems, payments for ecosystem services etc.;
- Convening major groups working on LULUCF and REDD to share experiences and develop common views on monitoring, valuation of co-benefits, development of payment systems and effective governance (including exchanges between climate change and biodiversity experts).

Indicative List of Partners:

- International organizations including the World Bank Forest Carbon Partnership Facility and GEF Secretariat;
- Technical partners and research institutions including the Centre for International Forestry Research (CIFOR), the World Agroforestry Centre (ICRAF), the Woods Hole Research Centre, the IPCC Secretariat;
- Major tropical forest countries and the Coalition of Rainforest Nations;
- Donors such as Norway, Australia, the UK, the Packard Foundation and the Moore Foundation.

Theme 2: Facilitating a transition towards low carbon societies

Expected accomplishment (b) Countries make sound policy, technology, and investment choices that lead to a reduction in greenhouse gas emissions and potential co-benefits, with a focus on clean and renewable energy sources, energy efficiency and energy conservation

As part of the transition to lower carbon societies, energy needs will increasingly have to be met by renewable sources, advanced technologies and better management practices. Financing is a critical

element, but government policies have a strong role in influencing investment decisions made by the private sector. The rich interplay between technology, policy and financing decisions involving both public and private sector actors will largely determine the direction and pace of the transition. Efforts to bring about change must often— of necessity – involve multiple actors and address multiple barriers in a coordinated manner.

UNEP will, in particular, address end-user efficiency measures in selected sectors (e.g. buildings, transport) and selected technologies (e.g. lighting, refrigeration). This will be undertaken through three types of assistance: the provision of analytical support, including assessments of renewable energy potential and economic studies in key energy and climate change policy areas; the provision of policy support focussing on advising governments on energy efficiency and the development of renewable energy policies; and operational interventions to help governments implement renewable energy and energy efficiency programmes and reduce GHG emissions. These interventions are closely linked with the activities in section 1.B. on financing and deployment of clean technologies.

The focus of UNEP’s interventions will be to:

- Support countries to undertake technical and economic renewable energy resource assessments and mapping to support their energy policy and investment decisions;
- Support the development of national climate technology plans and their use to promote markets for cleaner energy technologies and hasten the phase-out of obsolete technologies;
- Establish and support knowledge networks to inform and support key stakeholders in the reform of policies and the implementation of programmes for renewable energy, energy efficiency and reduced greenhouse gas emissions;
- Undertake and promote the use of macro-economic and sectoral analysis of the costs and benefits of different policy options to foster low greenhouse gas emissions;
- Develop, refine and support the application of sustainability criteria and evaluation tools for different types of biofuels and their associated feedstocks, and assist developing countries in devising national biofuels plans and undertaking pilot projects that are consistent with sustainability and overall development objectives;
- Promote public/private partnerships and support application of best practice codes leading to energy efficiency improvements and greenhouse gas emissions reductions in selected sectors.

Indicative List of Partners:

- Government offices responsible for energy, energy efficiency and renewable energy policy, planning, and implementation, including technology and industrial development planning.
- UN organizations working in the field of energy efficiency, in particular UNIDO and UNDESA.
- Technical and economic/policy research institutions in developed and developing countries (for example members of the Global Network on Energy for Sustainable Development, International Energy Agency etc.), including those with expertise in determining renewable energy potentials through remote sensing.
- Private sector companies working in energy efficiency and renewable energy with an interest in joint efforts to reduce emissions of greenhouse gases.

Expected accomplishment (c) Improved technologies are deployed and obsolescent technologies phased out, financed through private and public sources, including the Clean Development Mechanism

Financing is a critical part of the shift to a lower carbon future, and carbon finance is becoming an increasingly important part of the global financial landscape. Activities will primarily focus on building capacity to access financing for deploying cleaner and more efficient technologies that reduce emissions of greenhouse gases, mostly in fast-developing countries, including through partnerships between private and public agencies. This will include capacity building and promotion of CDM projects, as well as other new and relevant financing mechanisms that may emerge in the run-up to a post-2012 agreement.

The focus of UNEP's interventions will be to:

- Undertake technical and economic analyses of clean energy and low carbon technologies to help remove barriers to financing renewable and energy-efficient technologies at the national level;
- Help developing countries access the CDM through training, development and use of new methodologies for sectoral CDM projects in new areas such as land use and forestry, and undertake global analysis of the CDM to help stimulate both greater interest and increased use;
- Help financial institutions in developing countries create dedicated clean energy funds, including through links to public and private sector financiers in developed countries, and support creation of new national public agencies that fund low-GHG investments in developing countries using;
- Advise national and local banks that are establishing lending programmes for renewable energy products in developing countries, and conduct capacity building programmes for national banks, insurance companies and others to help create or expand lending for energy efficiency investments;
- Create and support professional networks and related initiatives for banks, insurers, pension funds and other financial institutions interested in supporting low-GHG investments, building on the work of the UNEP Finance Initiative.

Indicative List of Partners:

- Government offices and agencies (including state-owned utilities) responsible for energy planning and investment decisions, and those with primary responsibility for national execution of plans.
- Public and private sector financial institutions, including multilateral development banks, and international financial institutions (for example AfDB, ADB, IADB, the World Bank) who lend to energy and development projects.
- Private sector companies with an interest in collaborative efforts to reduce emissions of greenhouse gases through the financing and accelerated deployment of low-GHG or energy-efficient technologies; expertise in technical/technology issues.

Theme 3: Improving understanding of climate change science

Expected Accomplishment (e): Country policy-makers and negotiators, civil society and private sector have access to relevant climate change science and information for decision-making.

Developing countries in particular need better information on how the climate is likely to change in the future. There is an urgent need for regional and national scientific assessments of climate change, its impacts, the costs of mitigation and adaptation (and the costs of inaction), as well as national vulnerability assessments. UNEP will draw on its strengths as a science-based organization in promoting the advancement of understanding about the causes and consequences of climate change, and the responses available to decision-makers. UNEP will also continue its support to the IPCC, in particular through its secretariat. Activities will include undertaking science-based assessments in order to help increase awareness of climate change and promote integration of climate change into policy-making in developing countries and countries with economies in transition.

UNEP will provide access to credible and relevant science for national government climate change officials from developing countries and countries with economies in transition in order to facilitate the negotiation and implementation of climate-related MEAs. As part of this process, UNEP will work in partnership with the UNFCCC Secretariat in organizing preparatory workshops for negotiators as well as other outreach programmes in support of the UNFCCC.

The focus of UNEP's interventions will be to:

- Undertake science-based assessment to increase awareness of climate change and its impact on specific sectors, and promote integration of climate change into policy making;
- Implement capacity building programmes to help countries customize climate change data, information and scenarios to their needs in order to strengthen climate change policy planning;
- Provide technical support and training for climate change negotiators and stakeholders charged with implementing climate related multilateral environmental agreements;
- Provide advisory and support services to Major Groups to demonstrate how climate change can be integrated into their activities, including technical assistance and capacity building workshops for networks of stakeholders for articulating positions on climate change.

Indicative List of Partners:

- International Academies of Sciences and International Scientific Institutions
- IPCC Secretariat, ICIMOD, CCI, TWAS, International Civil Society Organizations, START, NCAR, ICTP, IAI, APN.

Theme 4: Communicating and raising public awareness

Expected Accomplishment (e): Country policy-makers and negotiators, civil society and private sector have access to relevant climate change science and information for decision-making.

The United Nations is expected to and must play a key role in providing some of the answers and information that wider society expects, and UNEP has been given the UN system lead in climate change outreach. Audiences throughout the world are increasingly exposed to climate-related stories -- predominantly negative and inadequately solution-oriented. Helping governments, industry and the public to make sense of it all and take informed actions is a communications and advocacy challenge and opportunity that UNEP must embrace. UNEP's activities will be undertaken in collaboration with partners to ensure coordination and the highest impact possible, and will both guide and be informed by the UN Communications Group Task Force on Climate Change.

The focus of UNEP's interventions will be to:

- Develop strategic communications, including through mutually reinforcing messages with the

- UNFCCC Secretariat, to convey a sense of urgency in dealing with climate change;
- Use media and outreach activities to help deliver key messages on climate change, especially those derived from UNEP Climate Change publications, to the media and other target groups;
 - Help communicate successful climate change programmes to key stakeholders to promote replication of best practices and success stories using the Internet and audiovisual tools;
 - Conduct awareness raising, outreach, education and training for Major Groups to promote climate awareness, including targeted campaigns (e.g. Billion Tree Campaign, Climate Neutral Network), and special events (e.g. World Environment Day).

Indicative List of Partners:

- Technical and outreach partners including Earth Negotiations Bulletin (ENB), Television Trust for the Environment (TVE); green.tv; DevTV; YouTube; Still Pictures; Discovery Channel Planet Green;
- Private sector companies: Bayer, Canon, Luo Hong, Nikon, Nippon Foundation, Total, Toyota, Unilever, Volvo;
- Other partners, such as Prince Albert Foundation, Green Belt Movement, Global Foundation for Peace & Environment; Scout and Guide movements.