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# Preparing Low-Emission Climate-Resilient Development Strategies: A UNDP Guidebook

UNDP is assisting national and sub-national governments in developing countries to prepare low-emission climate-resilient development strategies (LECRDS). Working within relevant national, local, and regional planning and coordination frameworks, LECRDS are designed to build upon existing strategies and development plans. These strategies simultaneously address the threats, risks, vulnerabilities and uncertainties associated with global climate change and the pressing development needs countries face as they pursue sustainable development. LECRDS are based on a series of steps and various robust and integrated assessments (e.g. scientific, institutional, financial and socio-economic) such as climate change scenarios, current and projected sustainable development needs, and climate change response options. These assessments assist countries in identifying climate change efforts; they are country-driven and include the vast range of affected stakeholder groups and sectors throughout the assessment and implementation stages. They result in strategic and programmatic roadmaps for developing country governments to implement LECRDS and achieve more equitable sustainable development trajectories that are low emission and resilient to climate change.

### Introduction

Climate change is predicted to have severe, if not catastrophic, consequences over the short to medium term across sectors (e.g. agriculture, industry, energy, water, etc.) if immediate action is not taken to reduce greenhouse gas (GHG) emissions 50 percent by 2050 from 1990 levels. Global warming will lead to erratic and extreme weather events, floods, droughts, and sea-level rise, which could adversely affect food and water supplies, human health, and ecosystems and biodiversity. Developing countries are the most vulnerable to the effects of climate change, and their sustainable development prospects the most compromised.

Climate change is clearly the greatest development challenge of the 21st Century. To date, narrowly-defined mitigation (lowering emissions) and adaptation (reducing vulnerability) projects have dominated climate change action policies taken by most countries. This has resulted in the accumulation of many efforts, isolated in nature, to respond to a crosscutting issue. New and innovative programmatic approaches are necessary to leverage existing experiences and place them into a comprehensive policy framework to support developing country governments in integrating climate and development planning, policies, and action across multiple sectors and levels (national, regional and local levels).

In order to meet the challenges and uncertainties of climate change, development processes must be rendered more climate resilient and lower in carbon emissions. The formulation and implementation of low-emission climate-resilient development strategies (LECRDS) will allow developing countries to respond more effectively to climate change. LECRDS will not only serve as the programmatic nexus for capturing conventional and innovative sources of sustainable development and climate financing, but will also assist sub-national and national governments in implementing, monitoring, and building upon existing low-emission climate-resilient development projects and programmes.

### **UNDP Technical Advisory Infrastructure to Support LECRDS**

National project teams manage the preparation of low-emission climate-resilient development strategy (LECRDS) for country projects. UNDP Country Offices, UNDP Environment and Energy Technical Advisors based in Regional Service Centers (RSCs) in Bangkok, Bratislava, Dakar, Pretoria, and Panama, and the global UNDP Territorial Approach to Climate Change (TACC) Facility provide project oversight and quality assurance to national teams.

The TACC Facility is comprised of a global support team of technical advisors specializing in climate modeling, greenhouse gas inventories, mitigation analysis, vulnerability assessments, climate economics and finance. It operates with an international network of global and regional centers of excellence.

Climate/biophysical modeling and carbon accounting partners: ClimSAT/Brest Technopole, University of Cape Town, Columbia University and NASA/Goddard, among others.

**Socio-economic modeling partners (under negotiation):** Yale University, University of Pretoria, Economy and Environment Program for Southeast Asia (EEPSEA), and Fondazione Eni Enrico Mattei, and UNDP-GGCA cadres of gender-climate national experts.

The TACC Facility is complemented by the UNDP Partnership Bureau's Hub for Innovative Partnerships, which is dedicated to building partnerships and mobilizing resources to support the provision of LECRDS technical assistance to developing country governments.

This report, Preparing Low-Emission Climate-Resilient Development Strategies: A UNDP Guidebook, serves as the Executive Summary to a series of manuals and guidebooks of various lengths (see Box 1) that UNDP is offering in support of LECRDS. All of the manuals, guidebooks, and toolkits in this series draw upon the experience and information generated by UNDP's support for climate change adaptation and mitigation projects and National Communications to the United Nations Framework Convention on Climate Change (UNFCCC) in some 140 countries over the past decade. This guidebook is intended to enable project managers, UNDP Country Offices, and developing country government decision makers to acquaint themselves with a variety of methodologies most appropriate to their development contexts in support of the preparation of LECRDS. In a flexible and non-prescriptive manner, it offers detailed step-by-step guidance for the identification of key stakeholders and establishment of participatory planning and coordination frameworks; generation of climate change profiles and vulnerability scenarios; identification and prioritization of mitigation and adaptation option; assessment of financing requirements; and development of low-emission climate-resilient roadmaps for project development, policy instruments, and financial flows. This executive summary provides a brief outline of the approach and methodologies that these materials treat in detail. For additional information on LECRDS, please visit www.undp.org/energyandenvironment/climatestrategies.

### **Box 1:** Low-Emission Climate-Resilient Development Strategy Materials Available or Under Development

This guidebook is part of a series of manuals, guidebooks, and toolkits that draw upon the experience and information generated by UNDP's support for climate change adaptation and mitigation projects and National Communications to the United Nations Framework Convention on Climate Change (UNFCCC) in some 140 countries over the past decade. The reports are intended to enable project managers, UNDP Country Offices, and developing country government decision makers to acquaint themselves with a variety of methodologies most appropriate to their development contexts in support of the preparation of low-emission climate-resilient development strategies (LECRDS). In a flexible and non-prescriptive manner, they offer detailed step-by-step guidance for the identification of key stakeholders and establishment of participatory planning and coordination frameworks; generation of climate change profiles and vulnerability scenarios; identification and prioritization of mitigation and adaptation option; assessment of financing requirements; and development of low-emission climate-resilient roadmaps for project development, policy instruments, and financial flows. This executive summary provides a brief outline of the approach and methodologies that these materials treat in detail.

#### **LECRDS Approach**

- Charting a New Carbon Route to Development
- Executive Summary Preparing Low-Emission Climate-Resilient Development Strategies:
  A UNDP Guidebook

#### Step 1

 Establishing a Multi-Stakeholder Decision-Making Process for Low-Emission Climate-Resilient Development Strategies

#### Step 2

- Applying Climate Information for Adaptation Decision-Making: A Guidance and Resource Document
- Managing the National Greenhouse Gas Inventory Process
- Mapping Climate Change Vulnerability and Impact Scenarios: A Guidebook for Sub-National Planners
- Formulating Climate-Change Scenarios to Inform Climate-Resilient Development Strategies: A Guidebook for Practitioners
- Guidebook on Preparing a Greenhouse Gas Emissions Inventory at the Sub-National Level

#### Step 3

- Technology Needs Assessment Handbook
- Toolkit for Designing Climate Change Adaptation Initiatives
- Proceedings on Internalizing Climate Risks into Infrastructure Design
- Low-Emission Climate-Resilient Development Strategies and Green Employment

### Step 4

- Engineering Climate Investibility
- Website on Climate Change Financing (jointly with World Bank)
- International Guidebook for Environmental Finance Tools

#### Step 5

- A Guidebook on Climate Change Measurement, Reporting, and Verification
- National Climate Fund Guidebook
- A Guidebook on Legal Climate Instruments

 $The\ reports\ are\ available\ for\ download\ on\ www.undp.org/energy and environment/climate strategies.$ 

## Key Steps in Preparing a Low-Emission Climate-Resilient Development Strategy

Given the scope and complexity of the task, the LECRDS preparation process can take up to two years to complete. The exercise requires participation of multiple sectors, stakeholders, and levels of government, including high-level public and private authorities with decision-making authority. It also must ensure that planning activities and scientific assessments are coordinated and systematic. Each step is crucial to the success of the strategic planning exercise and resulting LECRDS roadmap, which identify climate-ready sustainable development projects. Once the LECRDS roadmap is in place, or even as it is being finalized, efforts can begin to identify sources of financing to implement projects conceived as a result of the LECRDS process.

# The LECRDS process may be usefully broken down into the following five steps:

STEP 1

**Develop a Multi-Stakeholder Planning Process** 

STEP 2

**Prepare Climate Change Profiles and Vulnerability Scenarios** 

STEP 3

Identify Strategic Options Leading to More Equitable Low-Emission Climate-Resilient Development Trajectories

Summary of Key Steps

预览已结束, 完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5 13342

