



Empowered lives.
Resilient nations.

DOWN TO EARTH: Territorial Approach to Climate Change

Green, Low-Emission and Climate-Resilient Development Strategies at the Sub-national Level

2012 UPDATE



THE CLIMATE GROUP



Introduction

Most efforts, to date, to address development in a changing climate have been focused on isolated, distinct, and often competing goals and actions on low emission and climate resilient development. However, long-term climate change management requires a shift to an integrated approach that advances co-benefits of adaptation and mitigation in the context of sustainable development goals. Such an approach recognizes that climate change responses are closely intertwined with development choices and actions involving multiple sectors and stakeholders, and involve complementary and sometimes competing priorities. An integrated approach also enables countries to mobilize and employ diverse financing options.

As such, the overall strategic objective of UNDP's work in the area of climate change is to support national and sub-national governments to attract and direct public and private investment towards catalyzing sustainable economic growth. To achieve this, UNDP supports the development of integrated Green Low Emission and Climate Resilient Development Strategies (Green LECRDS) and concrete, on the ground, actions that remove market, institutional, and capacity barriers, thus encouraging the scaling-up of climate compatible development initiatives. At the sub-national level UNDP promotes country-driven, multi-stakeholder identification of priority mitigation and adaptation activities aligned to short and long-term development goals. One of the end-products is a portfolio of investment-ready projects in line with sub-national climate policies and targets.

UNDP enhances the capacity of sub-national governments to formulate, finance and implement low-emission and climate-resilient strategies, in a manner that catalyses an array of financing sources and delivers long term results.

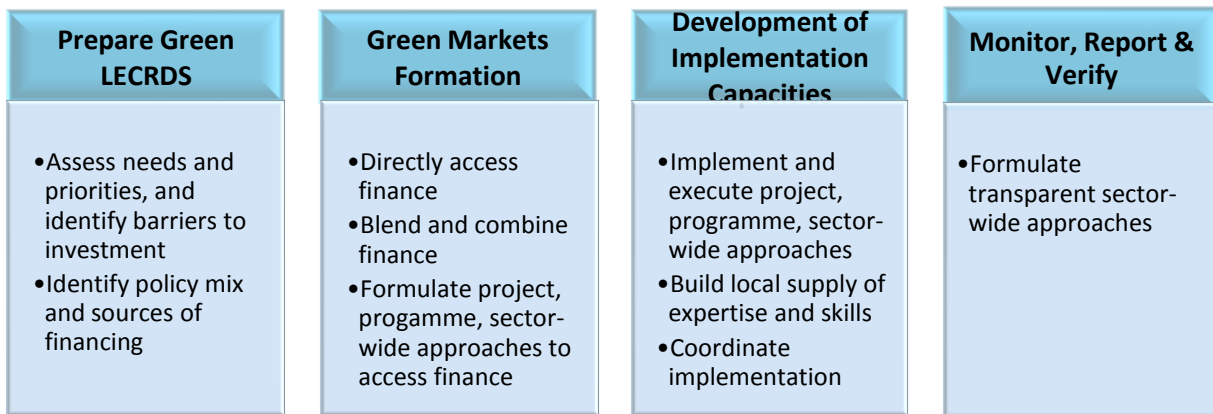
The Down to Earth: TACC initiative provides technical assistance to pilot a sub-national component of UNDP's support for Green LECRDS. Specifically the initiative supports a key element of a partnership between the United Nations and sub-national governments designed to foster climate-friendly development at the sub-national level. This partnership includes the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP) and eight associations of regions.

The UNDP Climate Readiness Framework

UNDP is one of the largest brokers of environmental grants in the developing world¹ as well as one of the major sources of technical assistance in environment and energy². Figure 1 presents a framework to improve the capacity of policy-makers to put in place nationally-appropriate systems to sustainably manage climate finance. UNDP’s many targeted support programmes, guidebooks, publications, and toolkits on climate finance have been designed to support various elements of this framework.

Varying configurations of these four components can exist within institutions, between institutions, or across national or sectoral systems. The associated functions can be carried out through a variety of national systems and models, each specific to its country context. The climate readiness framework provides a lens through which existing efforts and gaps can be identified and organized in a holistic and integrated manner, ultimately producing a more coherent approach to climate finance at the national level.

Figure 1: A Country-Driven and Multi-Stakeholder Delivery Framework for Climate Change Finance



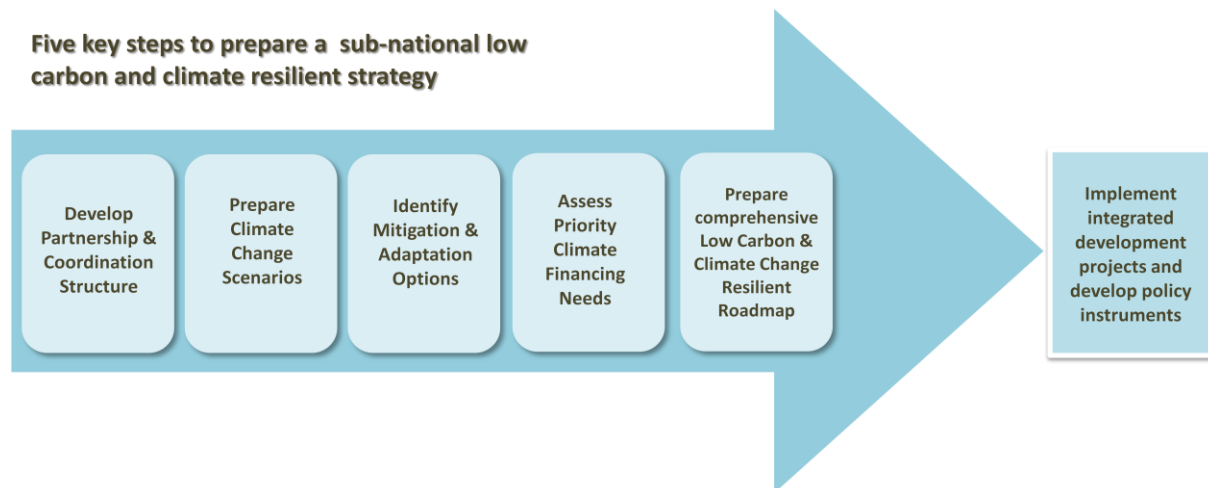
The *Down to Earth: TACC* initiative provides one mechanism to support the preparation of Green LECRDS at the sub-national level (first pillar) and touches upon the formation of green markets (second pillar) by laying some of the critical groundwork for the financial and technical support platform.

More specifically UNDP has outlined the five broad steps to develop Green LECRDS (see below) in a series of guidance documents, toolkits and knowledge products based on its experience in supporting National Communications and Mitigation and Adaptation projects in more than 140 countries worldwide.

This approach is being implemented at the national and subnational levels.

¹ UNDP has mobilized more than US\$ 250 million in climate finance to governments between Q3 2010 and Q2 2012.

² UNDP’s assistance to 140 countries to prepare their National Communications to the UNFCCC over the past decade, support to 29 LDCs to prepare their NAPAs and access new financing from LDCF to implement NAPA priorities, support for the design of 60 SCCF/LDCF projects for non-Annex I countries managed by UNDP, support to 114 countries to prepare National Capacity Self Assessments and assistance to 68 countries with their Technology Needs Assessments.



Core components of the Green LECRDS include:

- **STEP 1: Partnership and coordination structures.** The first activities under the LECRDS aim to identify key stakeholders, including government officials, investors, community leaders and technical experts, and to build upon/put in place the structures for a participatory planning decision-making process that accounts for synergies and trade-offs.
- **STEP 2: Climate change physical impact and vulnerability scenarios.** The second step involves the generation of climate profiles and prospective climate scenarios that will help assess current climate vulnerabilities and future risks. These scenarios help countries develop trajectories resilient to the range of possible climate outcomes and help prepare for the uncertainties inherent in climate change.
- **STEP 3: Prioritization of mitigation and adaptation options.** This component involves the identification and prioritization of climate activities that respond to vulnerability and emissions patterns and also lead to the transformation of economies.
- **STEP 4: Initial assessment of policy and climate financing needs.** Following an assessment of socio-economic impact and cost-benefit analyses of the identified options, financing and policy instruments are then identified to meet the financial flow requirements for implementation of the options.
- **STEP 5: Low-emissions and climate-resilient ecosystems and development road map.** Finally, a comprehensive low-emission and climate-resilient roadmap is designed to guide development of projects and policy instruments, and identify financial flows to support the overall implementation of the strategic plan activities.

Toolkits and Guidance Manuals

The Green LECRDS toolkits and guidance manuals below, some of which were developed in the framework of the Down to Earth: TACC Initiative, namely “charting a New Carbon Route to Development”, provide practical support to countries to develop their Green LECRDS at the national and sub-national levels.

LECRDS Approach



Preparing Low-emission and Climate-Resilient Development Strategies (LECRDS) - Executive Summary

This report serves as the Executive Summary to a series of manuals and guidebooks that UNDP is offering in support of LECRDS. It provides a brief outline of the approach and methodologies that these materials treat in detail. (English, French, Spanish)

Step 1: Develop a Multi-Stakeholder Climate Planning Process



Charting a New Carbon Route to Development

Integrated climate change planning - a how-to guide for local and regional policy-makers on planning a low-carbon future. This document focuses on the importance of full engagement of sub-national authorities to comprehensively address climate change and suggests that taking the necessary action to tackle climate change will be more effective if it helps address local development issues. (English, Spanish, Russian)

Step 2: Prepare Climate Change Profiles and Vulnerability Scenarios



Formulating Climate Change Scenarios

This guidebook offers project managers and decision makers, who are working with a team of scientific and technical experts, a framework for the development of a prospective range of climate scenarios in their regions. It aims to empower project managers and decision-makers to engage in discussions on climate-scenario development, including involvement in science-based decisions on the availability, applicability, and robustness of various climate-scenario approaches. (English, French, Spanish)



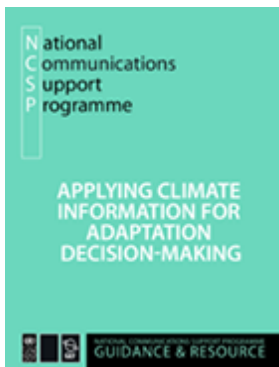
Managing the National Greenhouse Gas Inventory

The handbook was developed by UNDP with input from a wide range of institutions and national experts from Annex I and non-Annex I Parties. The objective of the handbook is to provide non-Annex I Parties with a strategic and logical approach to a sustainable inventory process.



Mapping Climate Change Vulnerability and Impact Scenarios

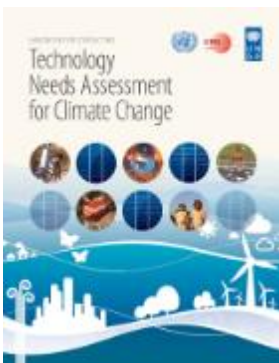
This guidebook assists planners working at the sub-national levels to identify and map the nature of current and future vulnerability to long-term climate change so that appropriate policies and interventions can be designed and implemented.



Applying Climate Information for Adaptation Decision-Making: A Guidance and Resource Document

This guidance document intends to provide countries with a practical tool on using climate information in their decision-making processes. This guide addresses issues of adaptation planning under uncertainty of observed and projected climate change.

Step 3: Identify Strategic Options Leading to Low-Emission Climate-Resilient Development



Technology Needs Assessment Handbook

Building on lessons from earlier TNA efforts, the updated TNA Handbook offers a systematic approach for conducting TNA in order to identify, evaluate and prioritize mitigation and adaptation technologies.



Designing Climate Change Adaptation Initiatives

This Toolkit helps practitioners understand how to differentiate between a climate change adaptation and a traditional development initiative. It sets out the fundamental components of the design process, the approach to building stakeholder consensus, and key tools and methodologies.



Paving the way for climate resilient infrastructure

This report summarizes the proceedings of the El Salvador conference (June 2010) "Strategies for Adapting Public and Private Infrastructure to Climate Change". It outlines the multiple development benefits of climate-proofing infrastructure. While these proceedings address the specific context of El Salvador, the methodologies outlined can be applied to a wide range of situations.

Step 4: Identify Policies and Financing Options to Implement Priority Climate Change Actions



Catalyzing Climate Finance – A Guidebook on Policy and Financing Options to Support Green, Low-Emission and Climate-Resilient Development

This guidebook is offered as a primer to countries to enable them to better assess the level and nature of assistance they will require to catalyze climate capital based on their unique set of national, regional and local circumstances. (English, French, Spanish, Russian)



Readiness for Climate Finance

The document presents a framework for understanding what it means to be “ready” to plan for, access, deliver, and monitor climate finance in a transformative way at the national level. The aim is to provide policy-makers with an overall lens through which readiness and preparatory activities offered by a range of international, regional, and national partners can be organized.



Climate Finance Options (jointly with World Bank)

This Climate Finance Options platform addresses the multitude of funds available for climate action in developing countries. It is composed of two complementary domains (one led by UNFCCC and one by UNDP/World Bank Group), both of which help to catalyze financial and investment flows leading to more effective and efficient mitigation and adaptation measures.

Step 5: Prepare Low-Emission Climate-Resilient Development Roadmap



Blending Climate Finance through National Climate Funds

An important tool that can help countries to make the most of climate finance is a National Climate Fund (NCF). An NCF is a country-driven mechanism that supports the collection, blending, coordination of, and accounting for climate finance at the national level. This guidebook presents a process for designing and establishing an NCF and provides a simple, robust and transparent method for meaningful stakeholder engagement. In this way, countries are better equipped to manage climate finance and achieve results. (English, French and Spanish)

Upcoming publications:

1. Multi-stakeholder decision making processes for Green LECRDS
2. Legal requirements for Green LECRDS
3. Guidebook on preparing NAMAs
4. Guidebook on preparing MRV for LEDS

Country Projects

The Down to Earth: TACC Initiative is implemented in Colombia, Senegal, Uganda, Uruguay and Peru. To illustrate country project achievements, the following summary highlights results achieved thus far in Uruguay.

Uruguay

LOCAL PARTNERS:

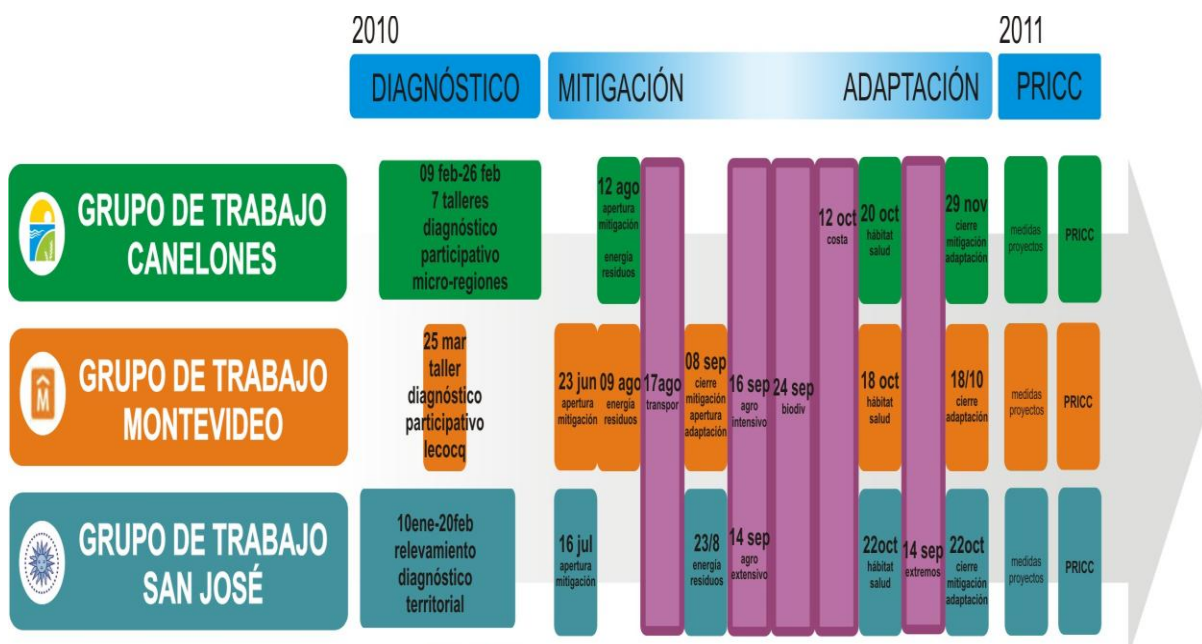
Canelones, Montevideo and San José Governments, National Climate Change Response System (Relevant Ministries)

INTERNATIONAL PARTNERS:

Basque Government, ART-GOLD Trust Fund, Province of Québec

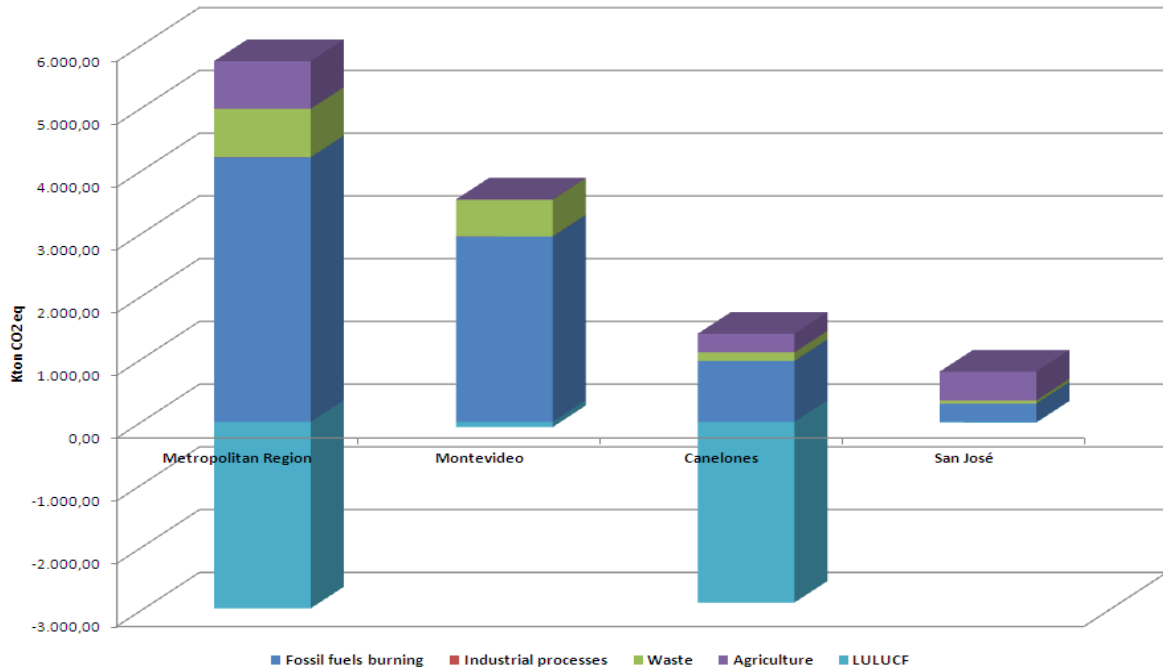
STEP 1: STAKEHOLDER ENGAGEMENT

- Agreement signed by 3 governors, 4 ministers and UNDP
- 30 workshops: collective diagnostics with more than 700 technical experts
- Stakeholder composition adjusted to local conditions (Montevideo: high participation of national representatives and academia, Canelones: NGOs, San José: private sector and municipal governments)

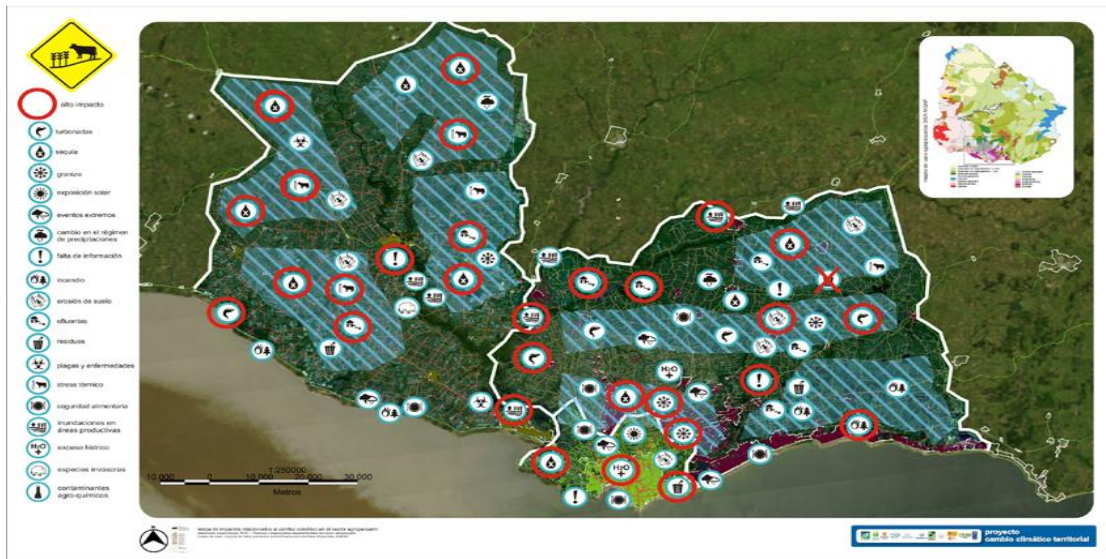


STEP 2: CLIMATE CHANGE SCENARIOS

GHG Inventory and Scenarios



Impact Maps for coastal areas and agriculture



Example for agriculture including droughts, squalls, fires, floods and hailstorms

STEP 3: STRATEGIC OPTIONS

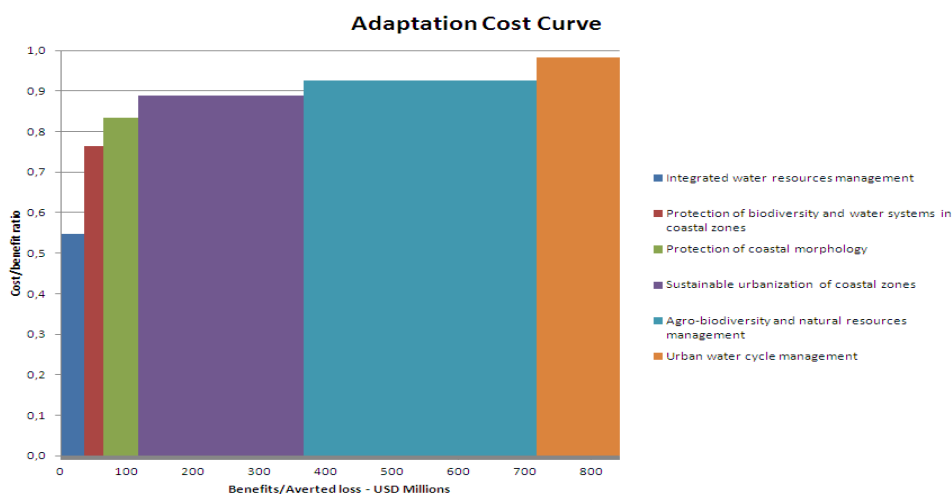
More than **500 potential options** identified by working groups, classified and prioritized according to 9 criteria into strategic lines, programmes and short term actions, divided by sectors and regions as well as integrated into national CC Plan.

CRITERION	Assessment		
	High/Positive	Intermediate/Neutral	Low/Negative
No Regret	Beneficial in most scenarios	Beneficial in several scenarios	Beneficial in few scenarios
Social Benefits	High number of beneficiaries – Equally distributed	Intermediate	Low number of beneficiaries – Unequally distributed
Environmental Benefits	Positive impact	Low positive impact	Potential negative impact
Community Acceptance	Broadly accepted	Mostly indifferent	Rejected – Potential conflict
Institutional Acceptance	Institutional acceptance and support	Indifference or resistance	Opposition of at least one institution
Implementation Feasibility (Local Capacities & Measure Complexity)	High	Medium	Low
Legal Requirements	Appropriate regulation in place	Requires legal modifications	Nonexistent or opposing regulation
Budget Requirements	Low	Medium	High
Net Benefits	High	Medium	Low

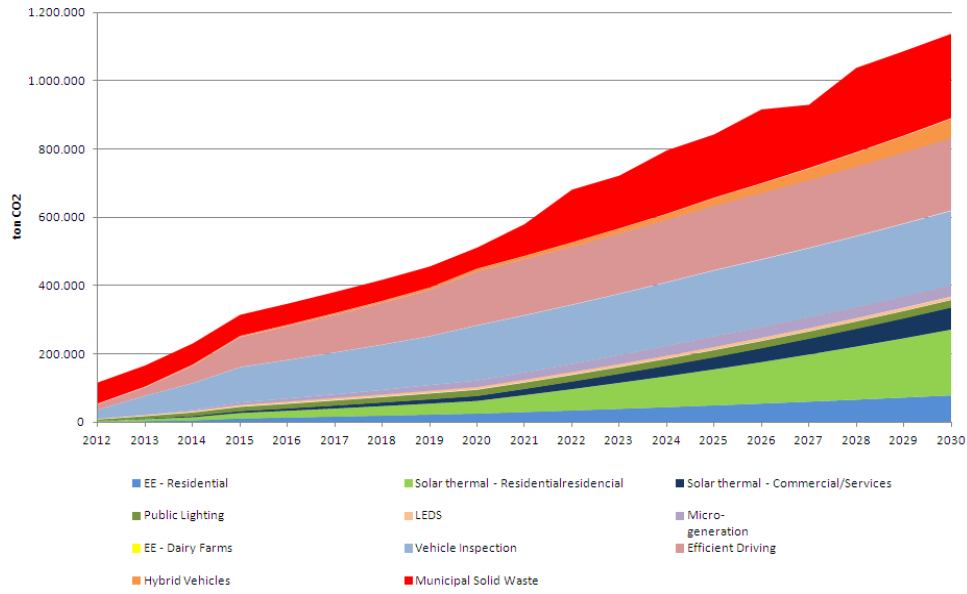
Using the above criteria the options were categorized. Below is an example of the outcome of this process for the agriculture sector.

Sector	Agriculture
Strategic line	Integrated water resources management
Prioritized action	Infrastructure development to provide water supply solutions for agriculture production
Strategic line	Climate information and insurance
Prioritized action	Promotion of public-private partnerships to create new insurance schemes aimed at agriculture SMEs and promotion of already existing insurances
Strategic line	Promotion and conservation of agro-biodiversity and natural resources
Prioritized action	Promotion of sustainable land use management, pastures and forages to increase carbon sinks and reduce producers' vulnerability to climate change
Strategic line	Food security
Prioritized action	Identification, rescue and re-appreciation of native crop species, better adapted to local conditions, to increase resilience and adaptation to climate change

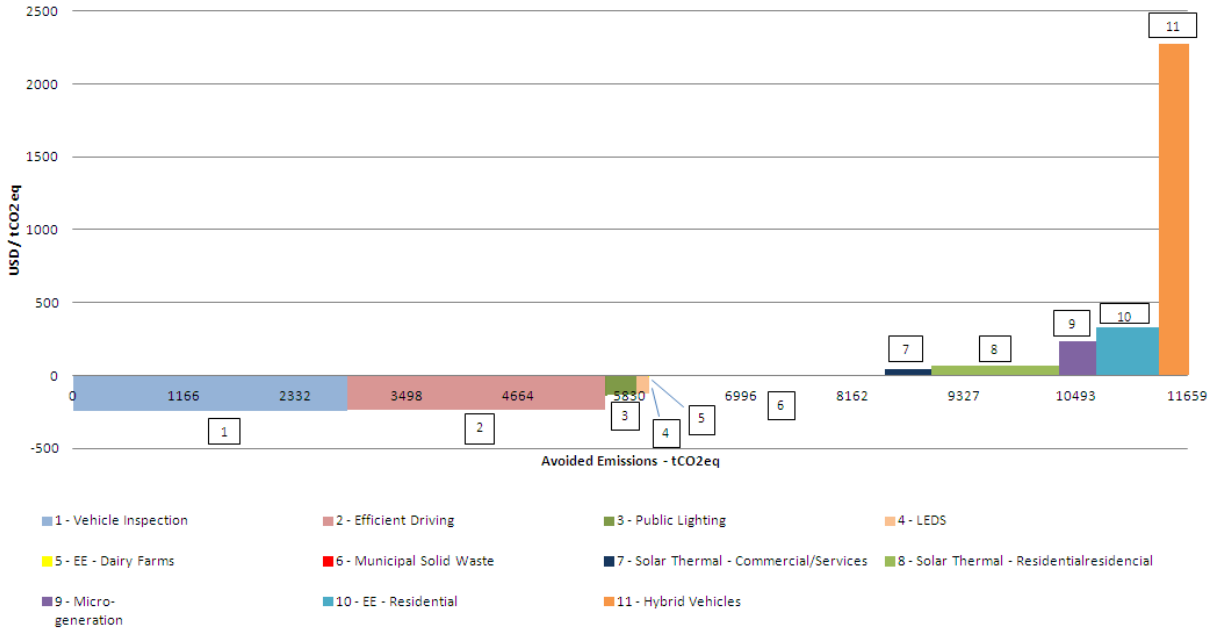
Based on this outcome prefeasibility studies and cost curves were prepared.



Avoided Emissions



GHG abatement cost curve



STEP 4: FINANCIAL AND POLICY FRAMEWORK

- Preliminary results include:
 - Project design & finance:
 - Energy production from agriculture waste (Eletrobras / Duke Energy, USD 3M, Pre-approved)
 - Sustainable irrigation technologies for milk production (EU funds, EUR 330.000, On-going)
 - Vulnerable basin flooding risk assessment (IDB, USD 120.000, on-going)
 - Rural women & youth climate related employment (EU funds, EUR 275.000, Pre-approved)
 - Increased investments in surface water storage and underground water perforations
 - Local emergency response committee created

Partners

NETWORK OF PARTNERS: The work is implemented using a unique partnership concept that brings together the UN, networks of sub national governments, decentralized cooperation and counterparts from developing countries. The capacity of UNDP to mobilize co-financing from vertical funds (such as the GEF, the Adaptation Fund or the LDCF) and reach out to a large number of governments and other partners has been used to combine and leverage complementary sources of funding from bilateral donors, decentralized cooperation, the private sector as well as UNDP's own resources.

UNDP would like to thank the following partners for their support and/or financial contribution:

ADEME
 Basque Country
 Brittany
 Catalonia
 DANIDA
 DfID
 Spain
 NASA
 NRG4SD
 Ontario
 Poitou Charentes
 Québec
 Rhône Alpes
 The Climate Group
 Veolia Environnement
 Wales Government
 Wallonia

CONTACT

United Nations Development Programme
 Bureau for Development Policy
 Environment and Energy Group
 New York, NY 10016

United Nations Development Programme
 Bureau for External Relations and Advocacy
 1211 Geneva 10, Switzerland

Email: downtoearthtacc@undp.org
<http://www.undp.org/climatestrategies>



*Empowered lives.
 Resilient nations.*

