

The 3rd Annual Meeting

Low Carbon Asia Research Network (LoCARNet)

November 24-26, 2014

Bogor, Indonesia

Towards Low Carbon Strategy in Cambodia

Ms. Khlok Vichet Ratha
Chief of Office,
Climate Change Department
Ministry of Environment

Outline

1. Background
2. Policy Options towards Low Carbon Development
 - A. Existing Policies
 - B. The Cambodia Climate Change Strategic Plan (2014-2023)/The Climate Change Action Plan
 - C. Green Growth Road Map/National Policy on Green Growth/National Green Growth Strategic Plan (2013-2030)
3. Low Carbon Development Strategy towards 2050
4. GHG emission reduction activities
5. Cambodia's Climate Change Financial Framework
6. Challenges
7. Way Forward

1. Background

- * Cambodia ratified the UNFCCC in 1995 and acceded to the Kyoto Protocol in 2002.
- * Ministry of Environment (MoE) is UNFCCC and Kyoto Protocol Focal Point for Cambodia.
- * MoE was appointed as the Designated National Authority (DNA) in 2003 for the Clean Development Mechanism (CDM).
- * Climate Change Office was established in 2003 and was upgraded to Department in 2009 :
 - the secretariat to National Climate Change Committee (NCCC)
 - the coordinating body for climate change responses in Cambodia.
- * NCCC was established in 2006.
- * Climate Change Technical Team (CCTT) was established in mid 2011 as a technical assistance and advisor group to NCCC.
- * The Cambodia Climate Change Alliance (CCCA) was established in 2010.
 - * CCCA Phase I (2010-2014): UNDP, Sweden, DANIDA, EU, GEF-LDCF, RGC
 - * CCCA Phase II (2014-2019): UNDP, EU, SIDA, RGC
- * PPCR and SPCR (September 2013 – September 2018): ADB/CIF

1. Background

- * The Royal Government of Cambodia recognizes the important of integration of Low Carbon Development initiative into national and sub-nationals sustainable development plan.
- * Cambodia could benefit from low carbon growth by:
 - reducing its dependency on imported fossil fuel,
 - reducing GHG emission,
 - accessing to environmentally-friendly technologies,
 - creating more jobs,
 - improving living standard, and
 - supporting sustainable development.

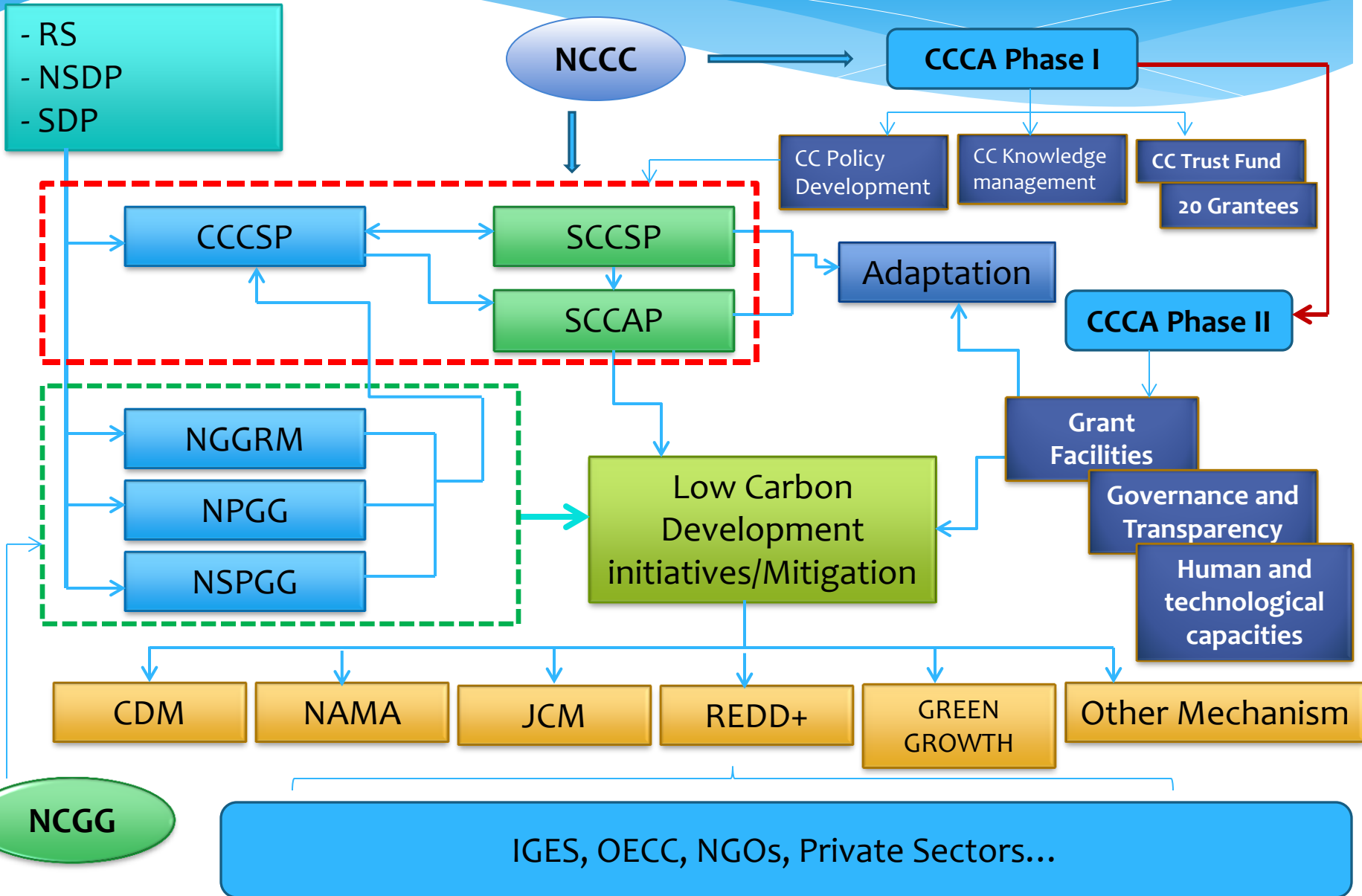
1. Background

- * Royal Government of Cambodia through Ministry of Environment and the Government of Japan signed Agreement on Low Carbon Partnership on **11 April 2014** and to start implementing Joint Credit Implementation (JCM) in Cambodia.
- * Cambodia is contributing to mitigating GHG emission through various schemes.
 - * CDM projects and voluntary market :
 - renewable energy (hydro power plants, Biomas, Biogas, Solar Panel...),
 - energy efficiency,
 - REDD+, etc.,




2. Policy Options towards Low Carbon Development

Towards Low Carbon Strategy in Cambodia



A. Existing Policies

- * **Rectangular Strategy (I &II)** for growth, employment, equity and efficiency is a holistic and integrated document
- * “Green Growth” has been considered as a key feature of Rectangular Strategy III (2014-18)
- * **The National Strategic Development Plan (NSDP) update (2009-2013):**
 - mainstreaming environment and climate change
 - further identify and foster the implementation of CDM and GHGs reducing projects
 - decentralize the preparation Of national GHG inventory and database management system.
- * **The NSDP (2014-2018)** recognizes climate change as one of its cross-cutting issues (with gender and disaster risk management), and integrates specific climate change actions in relevant sectors, as well as climate change-related indicators.
- * **The Sectoral Development Plan**
- * **Energy Policy of Cambodia 1994 – Target of Energy Strategy:**
 - By 2020, 100% of villages have accessed to electricity services.
 - By 2030, 70% of HH have accessed to quality electricity services.



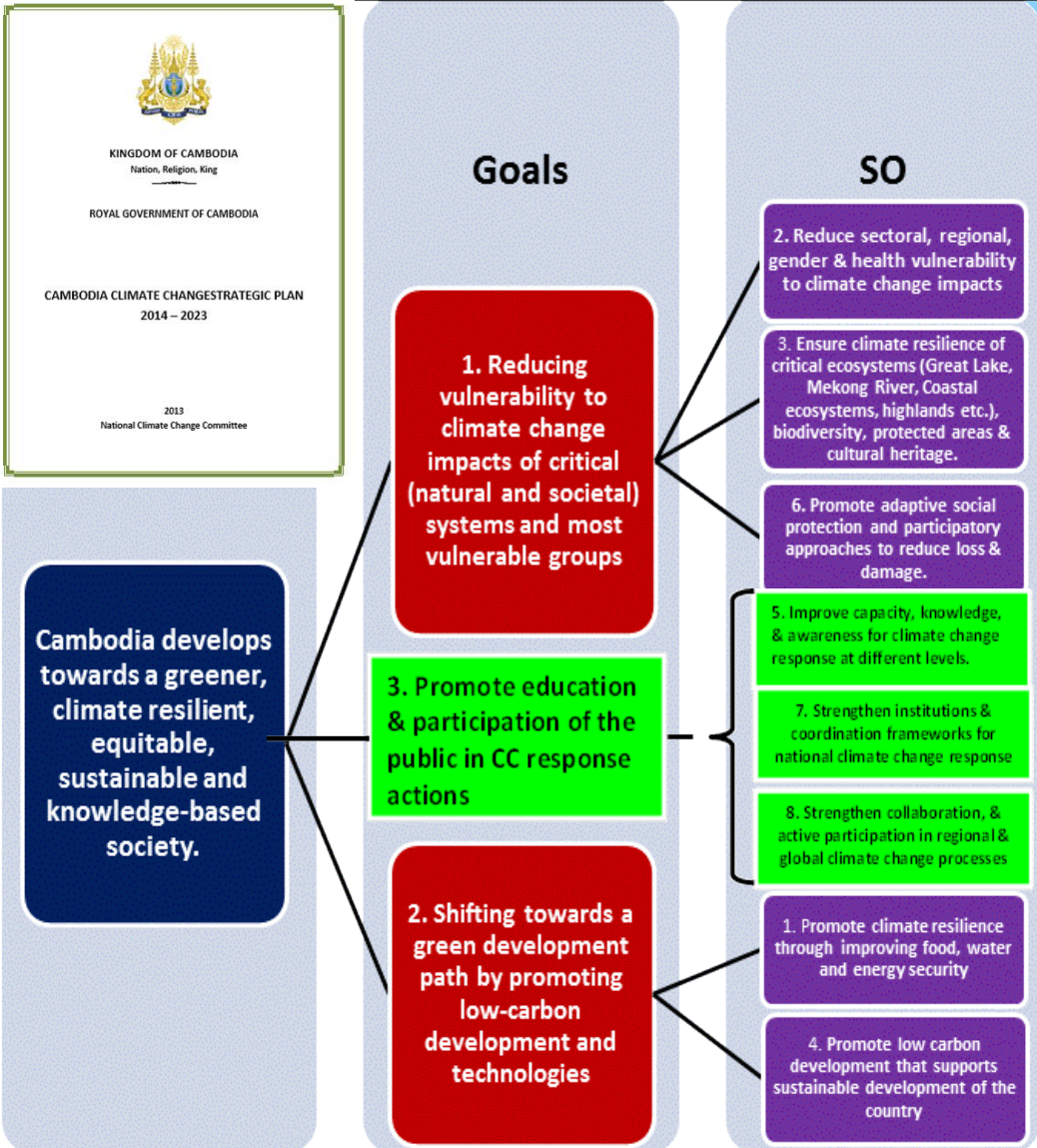
**B. The Cambodia Climate Change
Strategic Plan
(CCCSP) 2014-2023**

**The Sectoral Climate Change
Action Plan (CCAP)**

The CCCSP (2014-2023)

- * The Royal Government of Cambodia has approved the CCCSP on **31st October 2013** and officially announce the promulgation on **5th November 2013**.
- * This is the first ever comprehensive national policy document responding to the climate change issues our nation facing.
- * It builds synergies with existing government policies to ensure a strategic cohesion to address a wide range of climate change issues linked to adaptation, GHG mitigation, and low-carbon development.
- * The CCCSP has reflected our political will:
 - firm commitment and readiness for reducing climate change impacts on national development, and contributing, with the international community, to global efforts for mitigating GHG emissions under the UNFCCC.

Summary of the CCCSP



Strategic Objective 1: “Promote climate resilience through improving food, water and energy security.”

- (a) Facilitate business and industrial response to carbon market opportunities for green trade and investment,
- (b) Promote renewable energy and energy efficiency to reduce GHG emissions.

Strategic Objective 4: “Promote low carbon planning and technologies to support sustainable development of the country”

- (a) Develop low carbon development policies, strategies and action plans.
- (b) Promote appropriate technological measures for promoting low carbon development through: (1) Development of guidelines, technical assistance and establishment of partnerships, (2) Financial and fiscal incentives, (3) Market mechanisms, (4) Mobilizing public-private partnerships.

The Intermediate Phase in 2014: CCAP

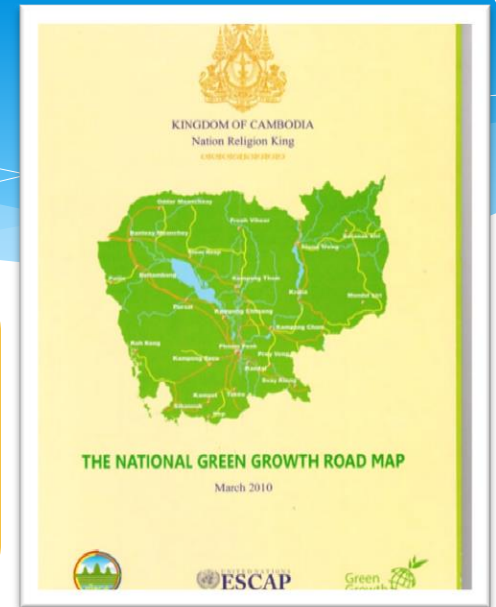
- Putting in place institutional and financial arrangements for the implementation of the CCCSP;
- Development of national M&E framework and indicators for CCCSP and CCAP; and
- Development and approval of climate change action plans (2014-2018) by line ministries;
- Funding mobilization for CCAP implementation



**C. Green Growth Road Map/National
Policy on Green Growth / National
Strategic Plan on Green Growth
2013-2030**

Green Growth Road Map

Vision: economic growth and development, human well-being, and environmental quality, which will promote the improve livelihoods

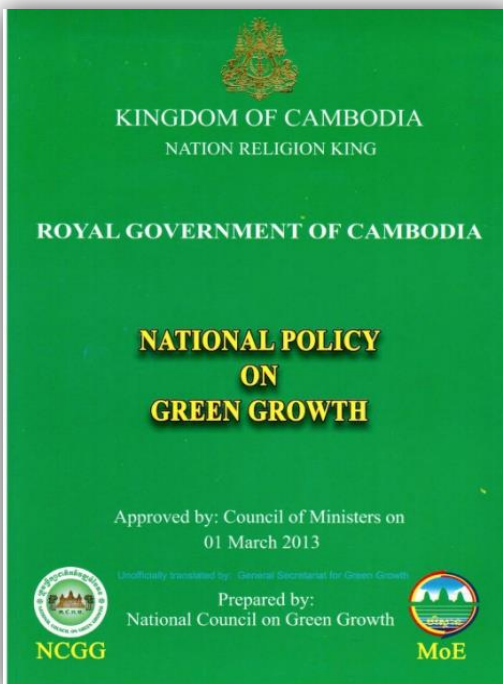


- In line with the priority sectors of development in the Rectangular Strategy, the Road Map focuses on all the sectors that are conducive for economic growth and environmental sustainability.
- The National Green Growth Roadmap focuses on addressing seven “A”s:
 - Access to clean water and sanitation;
 - Access to renewable energy;
 - Access to information and knowledge;
 - Access to means for better mobility;
 - Access to finance and investment;
 - Access to food security (agriculture) and non-chemical products; and
 - Access to sustainable land-use

National Policy on Green Growth

Vision:

The national policy is envisaged to strike balance of economic development with environment, society, culture, and sustainable use of national resources through integration, matching and adaptation, as well as harmonization between a green growth principle and national policy.

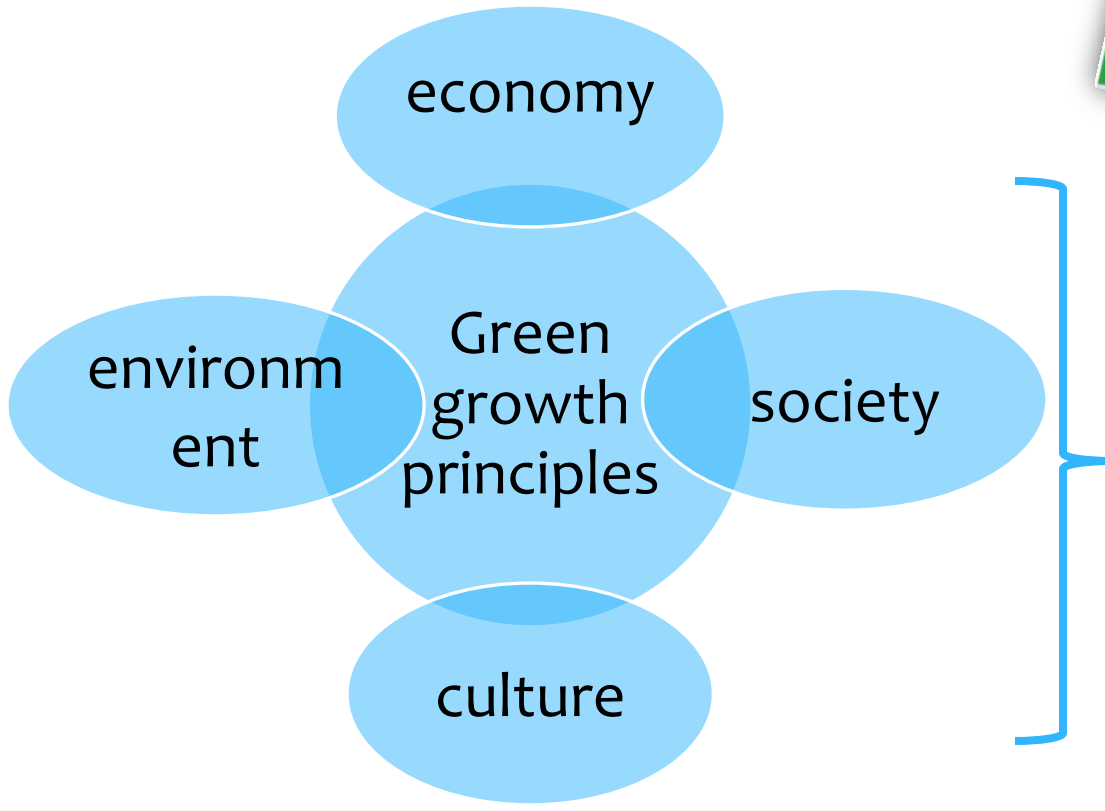


Goal:

The policy aims at enhancing the well-being and livelihood of all people in harmonization with ecological safety through green development growth, basing on green economy, blue economy, environment protection, social safety nets system and uphold of national cultural identity.

National Strategic Plan on Green Growth 2013-2030

the RGC regards green growth as a win-win approach for sustainable economic growth moving towards a developed country in the future.



to promote green growth, public health, quality of environment, people's livelihoods, and uphold of a national cultural identity

National Strategic Plan on Green Growth 2013-2030

Vision

The National Strategic Plan (NSP) is envisaged to develop sustainable economy, together with environmental, social and cultural sustainability for poverty alleviation.

Mission

This National Strategic Plan has a mission to promote, enhance and ensure effective implementation of green growth through mainstreaming green process and progress.

Goal

The National Strategic Plan aims at green growth, ensuring politic stability and macroeconomic stability to reach a status of a developed country.

Objectives

The National Strategic Plan is to promote a national economy with growth stability, reduction and prevention of environmental pollution, safe ecosystem, poverty reduction, and promotion of public health service, educational quality, natural resources management, and sustainable land use and water resources management to increase energy efficiency, ensuring food safety and glorify the national culture.



3. Low Carbon Development Strategy for Cambodia towards 2050

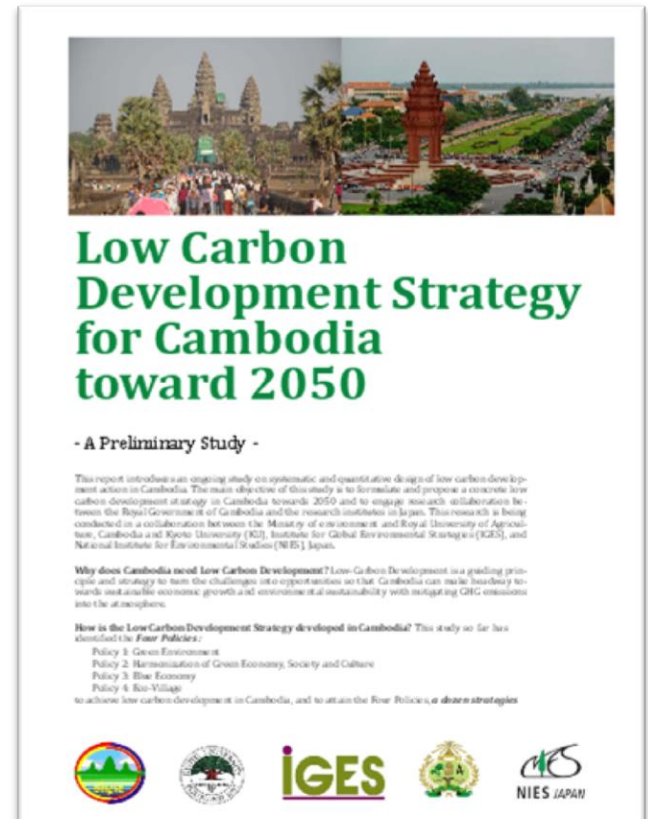
3. Low Carbon Development Strategy for Cambodia towards 2050

A Preliminary Study

Objective: to formulate and propose a concrete low carbon development strategy in Cambodia towards 2050

Four Policies identified:

- Policy 1: Green Environment
- Policy 2: Harmonization of Green Economy, Society, and Culture
- Policy 3: Blue Economy
- Policy 4: Eco-Village





4. GHG emission reduction Activities

- **Clean Development Mechanism (CDM)**
- **National Appropriate for Mitigation Action (NAMA)**
- **Joint Credit Mechanism (JCM)**
- **REDD+**
- **Green Growth**
- **Other Mechanisms**

GHG emission reduction

Clean Development Mechanism (CDM)

Potential sectors for GHG mitigation for JCM

CDM Projects in Cambodia

Type of project/Year	2006	2007	2008	2009	2010	2011	2012	Total
Biogas		2		1	1			4
Hydro power			1			1	2	4
Waste/heat gas utilization			1					1
Biomass	1							1
Total	1	2	2	1	1	1	2	10

The First Cambodian Standardized Baseline of Rice Mill Sector is adopted by UNFCCC during the Cop 19.

National Appropriate for Mitigation Action (NAMA)

The first meeting of NAMA Technical Working Group has identified and proposed idea for NAMA case study in Cambodia, which include:

- (1) National Bio-digester Programme,
- (2) Solar PV,
- (3) Energy Efficiency in Building, and
- (4) Biomass (rice husk)

Join Credit Mechanism (JCM)

REDD+

Green Growth

Other Mechanisms

Join Credit Mechanism (JCM)



The initial communication on Join Credit Mechanism was started in 2012

Bilateral signing Ceremony of Low Carbon Growth Partnership between Kingdom of Cambodia and Government of Japan was held on **11 April 2014**

According to SNC, the potential GHG mitigation options for JCM

Join Credit Mechanism

- Transportation
- Eco mobility (E-Reumork)
- Sterling Engines
- Bio-digester
- Energy Saving by Efficiency Improvement of water Treatment Plants of Phnom Penh Water Supply Authority (planning study)
- REDD+ (Prey Long, Seima Area)

Energy and Transport

energy efficiency measures, hydro, solar power, gasification & cogeneration, electric vehicles, efficient cook stoves, biogas digesters, ceramic water filters, etc

Agriculture, Forestry and Land Use

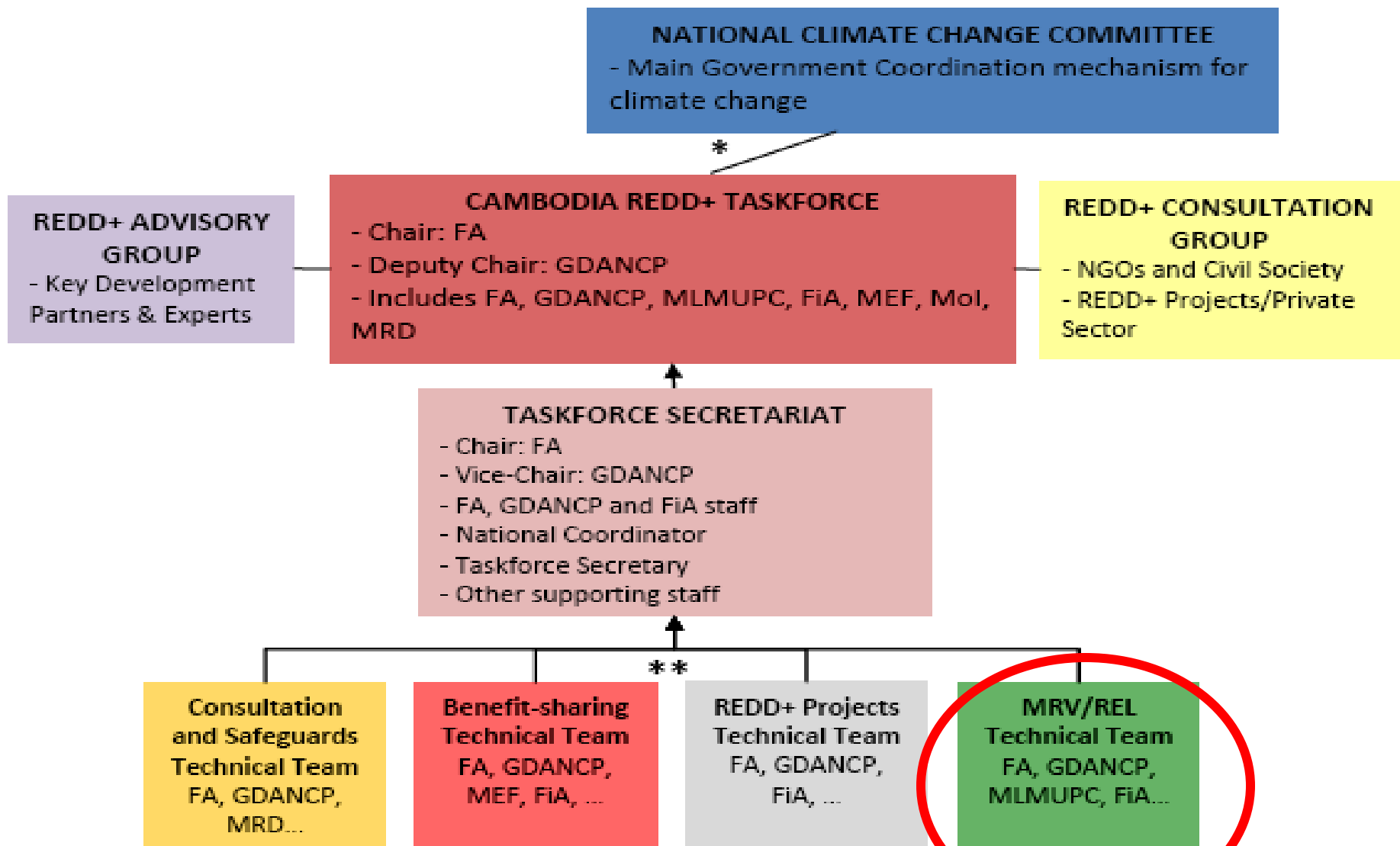
Manure management, biogas, fertilizer switch to sulfated fertilizer, drainage in rainy season, compost/bio-slurry, organic input, crop management, agro-forestry, REDD+, etc.,

REDD+

Reducing Emissions from Deforestation and Forest Degradation (REDD): UN-REDD Program (17th Nov 2011)

- * REDD+ started its activities since 2010.
- * REDD+ Road Map:
 - 1st step: develop REDD+ road map (2010),
 - 2nd step: Implement REDD+ Road map (2011-2014), and
 - 3rd step: Implementing REDD+ (2015)
- * Four technical working groups under REDD+
- * MRV team plays important role in developing RELs/RL, National Forest Inventory, and GHG inventory for AFOLU/LULUCF sector, etc.,

REDD+ Management Structure



* Represents reports from the Taskforce sent to the NCCC

** Taskforce Technical Teams will include Government and non-Government representatives as appropriate



5. Cambodia's Climate Change Financing Framework

Progress to date on budgeting systems

- * Cambodia now has a strategic framework to guide its national response to climate change. The framework also focuses on institutional mechanisms and coordination.
- * Draft Climate Change Financing Framework (CCFF)
- * M&E framework being gradually introduced (main principles outlined in CCCSP, 4 new NSDP indicators, work on national vulnerability index, next steps under discussion)

Cambodian Climate Change Financing Mechanism

- Government Regular Budget (CIP, AWP)
- Pooled Funding Modality (MOH, MoEYS)
- Climate Investment Fund, Climate Adaptation Fund, Green Climate Fund, GEF, and CCCA
- Bilateral and multi-lateral donors (USAID, EU, DFID)

Key findings

- * CC financing includes not only additional CC finance but also CC-relevant portion of regular ODA, budget and private sector expenditure. It is important to manage them all in a coherent manner.
- * Priority actions to:
 - Improve coordination of CC finance (various modalities)
 - Better track and analyze CC-relevant expenditure
 - Initiate dialogue with private sector
 - Include CC in planning, budget and M&E practices of Government

6. Challenges

- Institutional and human capacity
 - Effective strategy and action plan
 - Budget limitation
 - Individual knowledge and experience
 - Coordination and facilitation among stakeholders
- Lack of investment fund for new environmental technology
- Lack of specific research and development
- Insufficient information flow
- Lack of legally and policy enforcement
- Low mitigation potential due to limited industrial processes and energy industry

7. Way Forward

- Based on the policy and financing framework, Cambodia seeks the way to implementation for ensuring low carbon development:
 - Further scientific and specific researches on low carbon development;
 - Strengthening institutional and human capacity;
 - Building a robust GHG Inventory system;
 - Strengthening a full-scale national Climate Change programme (including Ministries' action plans, financing arrangements, M&E and coordination mechanisms);
 - Promoting grant facilities to support climate change projects/programs;
 - Opportunities for public-private partnerships, contributing to Green Growth.



Thank You !

Climate Change Department, Ministry of Environment

#48 Samdech Preah Sihanouk Blvd

Phnom Penh, Cambodia

www.camclimate.org.kh