



Climate Change Bulletin

Special Issue

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Introduction

The International community reached a truly historic milestone with the Paris Climate Agreement in 2015. Together, they agreed to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels, to significantly reduce the risks and impacts of climate change.

The Royal Government of Cambodia (RGC) is committed to combating climate change and accelerating the transition to a climate-resilient, low-carbon sustainable mode of development. The RGC has supported global efforts against climate change by being a Party to the United Nations Framework Convention on Climate Change (UNFCCC) since 1996. Cambodia adopted and ratified the Paris Agreement by which the country submitted an ambitious Intended Nationally Determined Contribution (NDC), which showcased progress in climate policy, and put forward mitigation targets and adaptation actions consistent with national circumstances. The country is now proud to submit an updated NDC, which strengthens her aspirations towards a cleaner and greener economy and fulfils her obligations to better the lives of her citizens, in particular the vulnerable.

Cambodia's Updated Nationally Determined Contribution (NDC)

Submitted to the UNFCCC on 31st December, 2020 Summary

The focus of Cambodia's development is on reducing poverty and ensuring stable economic growth, with the aim of achieving upper-middle income status by 2030, as enshrined in the National Strategic Development Plan (NSDP). Cambodia is highly vulnerable to the effects of climate change, and adaptation features prominently in the NDC. At the same time, Cambodia's total greenhouse gas (GHG) emissions are increasing as the country develops. The country has already made remarkable progress in terms of climate change policy, particularly in mainstreaming climate change into national and sub-national planning. The RGC has developed and continues to implement the Cambodia Climate Change Strategic Plan 2014-2023 (CCCSP) (2013) and each relevant ministry has developed associated action plans (CCAPs). Cambodia's first Biennial Update Report (BUR) was submitted in August 2020, and the Third National Communication (TNC) work is underway. The National Monitoring and Evaluation (M&E) Framework for the response to Climate Change has also been developed and regular climate public expenditure reviews have been undertaken. Cambodia has also improved the tracking of climate finance in her Official Development Assistance (ODA) database, among many other initiatives.

Mitigation

In the BAU scenario, overall GHG emissions in 2030 without the Forestry and Other land use (FOLU) are expected to rise by up to 79 million tCO₂e/year, while overall GHG emissions with the FOLU are expected to increase to 155 million tCO₂e/year.

Sectoral share and absolute number of BAU GHG emissions in 2030

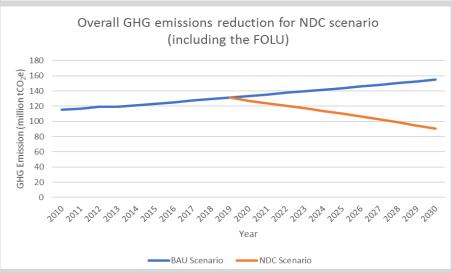
Sector	Sectoral share (%)	GHG Emissions (MtCO ₂ e)
FOLU	49.2	76.3
Energy	22.2	34.4
Agriculture	17.5	27.1
Industry (IPPU)	9.0	13.9
Waste	2.1	3.3

The FOLU sector will generate the highest overall BAU emissions in 2030, with 49.2% of the forecasted BAU emissions in 2030. This would be followed by the energy sector with 22.2%, the agricultural sector with 17.5%, and Industry (IPPU) with 9.0%.

Mitigation target

Using the information provided by relevant ministries on the mitigation measures, activities, and assumptions, NDC scenarios for energy generation, transport, waste, industry, agriculture, and the building sectors were modelled using PROSPECT+, while NDC scenarios for the FOLU sector were developed using the EX-ACT tool.

The estimated emission reductions of the NDC scenario are shown below



The estimated emissions reduction with the FOLU by 2030 under the NDC scenario will be approximately 64.6 million tCO₂e/year (41.7% reduction of which 59.1% is from the FOLU).

Summary over BAU emissions and NDC emissions reduction

Sector	BAU 2016 emissions (MtCO ₂ e)	BAU 2030 emissions (MtCO ₂ e)	NDC 2030 Scenario (MtCO ₂ e)	NDC 2030 reduction (MtCO ₂ e)	NDC 2030 emission reduction %
FOLU	76.3*	76.3	38.2	-38.1	-50%
Energy	15.1	34.4	20.7	-13.7	-40%
Agriculture	21.2	27.1	20.9	-6.2	-23%
Industry (IPPU)	9.9	13.9	8.0	-5.9	-42%
Waste	2.7	3.3	2.7	-0.6	-18%
Total	125.2	155.0	90.5	-64.5	-42%

*The baseline for the FOLU is from the Second Forest Reference Level for Cambodia (2021). Further details of the calculation method can be found here: https://redd.unfccc.int/files/cam_2nd_frl_jan_8_2021.pdf

Mitigation measures

Mitigation actions were identified from information provided by the relevant ministries and institutions such as the Ministry of Agriculture, Forestry and Fisheries (MAFF); the Mnistry of Industry, Science, Technology and Innovation (MISTI); the Ministry of Land Mangaement, Urban Planning and

Construction (MLMUPC); the Ministry of Mines and Energy (MME); the Ministry of Environment (MoE); the Ministry of Education, Youth and Sports (MoEYS); the Ministry of Tourism (MoT); the Ministry of Public Works and Transport (MPWT); and the National Committee for Sub-National Democratic Development (NCDD) across seven mitigation sectors: energy, waste, industry, transport, agriculture, building, and the FOLU.

Adaptation contribution

Adaptation features strongly in Cambodia's initial NDC and is equally important in this updated NDC due to the country's continued high vulnerability to climate change.

Cambodia's vulnerability to climate change

Based on several international climate change indices, Cambodia is considered one of the most vulnerable countries to the impacts of climate change. The country is particularly vulnerable to floods, droughts, windstorms, and seawater intrusion. Climate change may reduce the country's annual average GDP growth by 6.6% and absolute GDP by 0.4% in 2020, by 2.5% in 2030, and up to 9.8% in 2050. This may delay reaching upper middle-income status by one year. Accordingly, Cambodia has begun working to develop a National Adaptation Plan (NAP) based on the National Adaptation Programme of Actions (NAPA).

Impacts and priorities for adaptation and resilience

Cambodia's vulnerability is characterised by frequent floods and irregular rainfall, coupled with an agrarian based economy, limited human and financial resources, insufficient physical infrastructure, and limited access to technologies. Socio-economic status, location, access to resources and technologies all influence Cambodian's ability to manage climate impacts. Different social groups experience climate vulnerability differently, and women, children, the disabled, the elderly and other socially marginalised groups are often hit harder.

For the development of the Second Naitonal Communication (SNC), climate change impacts and vulnerability and adaptation assessment were assessed for the five most vulnerable sectors including agriculture, water resources, forestry, coastal zones and human health.

Prioritised adaptation actions

As with mitigation, all line Ministries with adaptation relevance submitted their proposed priority actions (86 in total). The focus sectors, in line with the vulnerability of the country, are:

- Agriculture (17 actions)
- Coastal zones (2 actions)
- Energy (2 actions)
- Human health (5 actions)
- Industry (1 action)
- Infrastructure including roads, buildings and urban land use planning (15 actions)
- Livelihoods, poverty and biodiversity (7 actions)
- Tourism (3 actions)
- Water resources (6 actions).

In addition, a number of Ministries play an enabling role to facilitate the implementation of actions within the NDC. Such actions can be divided into:

- Education (4 actions)
- Gender (6 actions)
- Governance (2 actions)
- Information (4 actions)
- Knowledge sharing (1 action)
- Policy and planning (12 actions).

Cross-cutting areas

The initial NDC was developed quickly which made conducting far-reaching consultations challenging. As such, some crucial areas of climate change policy and implementation were not adequately analysed, namely gender; youth involvement; and engagement with the private sector.

Regarding gender, all sectors, especially waste and energy, are key to mitigation. For adaptation, agriculture, forestry, and fisheries sectors are particularly important, and all ministries provided targets for women's participation. Gender-balanced training and awareness material and the promotion of 'women champions' are key. Most Ministries included gender disaggregated targets of each action across these areas.

Regarding youth involvement, in mitigation there is a focus on energy, industry, and transport. In adaptation, youth are especially involved in energy, industry, and transport. Also, beyond direct engagement in these sectors, children, and youth play a critical role in the development, implementation, monitoring, and enforcement of climate actions across sectors.

With regard to private sector engagement, Public-Private Partnerships (PPPs) are key to the industry, waste, and energy sectors. While the private sector is less prevalent than in mitigation sectors, there are strong opportunities, especially for smallholder farmers and foresters. In general, the private sector can provide inputs, knowledge, and finance.

It is also important to highlight an additional area related to Indigenous People. The Cambodian Constitution recognises that all Khmer citizens (including all indigenous people under the National Policy on the Development of Indigenous Peoples) are equal before the law regardless of race, colour, national origin, etc. During the NDC implementation and particularly for mitigation measures in the FOLU, the RGC will seek to promote the rights of indigenous people, specifically concerning land ownership.

Governance and Implementation Processes

The NDC update process

The Department of Climate Change (DCC) of the General Secretariat of the National Council for Sustainable Development (GSSD) led a preliminary assessment of the NDC implementation and the identification of gaps, as well as the development of the corresponding NDC Roadmap and Stakeholder Engagement Plan. This ensured that the country was able to review her NDC targets by the COP26 meeting and is expected to achieve her stated contributions by 2030. The NDC update process was initiated with the relevant line ministries in March 2020 and included contributions from a number of development partner experts. A private sector event included the participation of stakeholders from a range of different sectors, and local communities and indigenous peoples were engaged in the process. Every effort was made to conduct consultations in a gender responsive way.

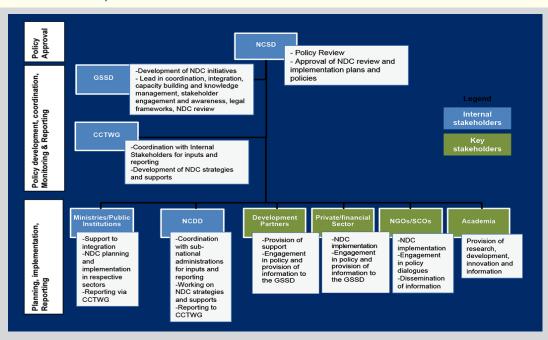
Overarching policy structures

Cambodia's NDC places strong focus on the CCCSP 2014-2023 (2013) and the related Sectoral Action Plans for its implementation. The following guidelines are also crucial: Cambodia's Sustainable Development Goals (CSDGs) 2016-2030 (2018); The National Strategic Plan on Green Growth (NSPGG) 2013-2030 (2013); The Rectangular Strategy IV (2018); The National Strategic Development Plan (NSDP) 2019-2023; The Circular Economy Strategy and Action Plan (also under development) sectoral policies, and the related strategies.

Stakeholder roles and responsibilities

An illustration of the roles and responsibilities of each stakeholder with regard to the NDC implementation is below.

Stakeholder roles and responsibilities



Means of Implementation

Finance

Despite ongoing efforts, financial demands remain high. Future resource mobilisation will look towards a reasonable mix of national and international funds, in addition to market mechanisms, where appropriate, and in line with progress on Article 6 of the Paris Agreement. The total funding required for all mitigation actions is over US \$ 5.8 billion. The FOLU, waste, and energy sector actions require the highest funding. Total funding required for all adaptation actions is just over US \$ 2 billion. Infrastructure, water, and agriculture require the highest funding.

Transparency

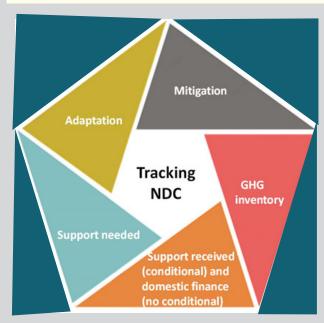
Overview

The RGC's approach to developing and operationalising its domestic measurement, reporting and verification (MRV) systems focuses on integration into the existing climate change M&E framework structure of the CCCSP rather than setting up new layers of institutional structures.

MRV for NDC Tracking

Cambodia is putting significant emphasis on the development of an integrated and detailed MRV system that is also aimed at achieving implementation of the NDC. It will be made up of the following components (mitigation, adaptation, GHG inventory, support received, and the support needed).

Components of MRV for NDC tracking



The system will detail how monitoring will occur and how data will be managed, aggregated, and translated into reports, with a particular focus on gender and vulnerable groups.

A simple, accessible online NDC tracking system will be developed and the tool will be made accessible through the website.

Fairness and ambition

Despite being a least developed country with an eighth of the per capita emissions when compared to the global average, with this NDC, Cambodia is proposing an ambitious set of sectoral reduction targets and structured and comprehensive adaptation actions.

Sustainable Development

Climate change mitigation and adaptation will be crucial not only to achieve SDG 13 on Climate Action, but a range of other SDGs and the Paris Agreement, given the cross-cutting nature of climate change. SDG 13 has significant implications on the achievement of other key priorities of each country, such as poverty reduction, food security, gender equality, water, and sanitation, energy access, reduced inequalities, sustainable cities, and sustainable land use and ecosystems¹.

1 Source: CDKN (2019). Planning for NDC implementation: a quick Start Guide, Climate Development Knowledge Network

Supported by



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