

# 11th Regional 3R and Circular Economy Forum in Asia and the Pacific

## Cambodia's actions on climate change: Long-Term Strategy for Carbon Neutrality (LTS4CN)

08 February 2023, Siemreap, Cambodia

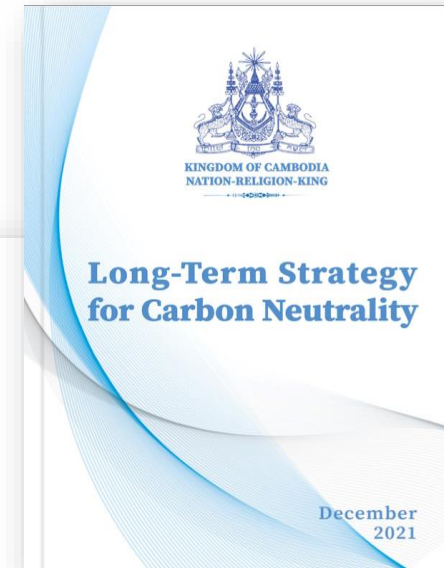
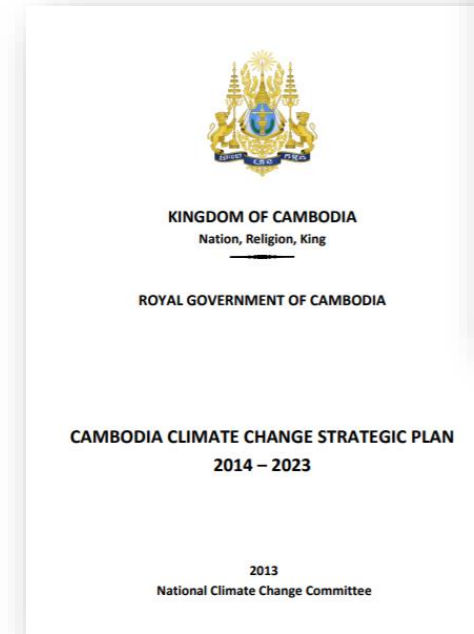
**Dr. Hak Mao**  
Director of Department of Climate Change



# Cambodia's responses to climate change

Cambodia has made good progress in terms of setting climate change policy, including:

- The release of the Cambodia Climate Change Strategic Plan 2014-2023, the first comprehensive national policy document responding to climate change.
- The National Monitoring and Evaluation (M&E) Framework for the response to Climate Change has been developed and regular climate public expenditure reviews undertaken.
- The country has also submitted the first Nationally Determined Contribution (NDC) in 2015 (27% reduction) and updated it in 2020 (41.7% reduction).
- Cambodia's first Biennial Update Report (BUR) was submitted in 2020, and the Third National Communication (TNC) in 2022.
- The country submitted her Long-Term Strategy for Carbon Neutrality in December 2021 with 2050 carbon neutral target
- LTS4CN/NDC Online tracking system
- The National Energy Efficiency Policy and the Power Development Plan (up to 2040) have been approved in 2022.
- Preparations for Cambodia to participate in the carbon finance regime under the Paris Agreement (Art.6) are on going.



# LTS4CN development process

- PM announced in December 2020 that Cambodia would submit a LTS in 2021. Process led by the National Council for Sustainable Development/ MOE;
- For the next 10 years (until 2030), the proposed scenario is largely based on existing policies and targets;
- For the period between 2030 and 2050, a few existing Government targets have been used;
- When no targets exist for 2030-50, consultations with ministries were organized to formulate assumptions, with expert inputs (including support from UNDP, FAO, AFD, GGGI, WB). In addition, no objection was received from these ministries at the end of the process;
- The LTS4CN does not replace the NSDP or sector strategies, some LTS4CN actions still have to be integrated in sector strategies.

# LTS4CN key targets



## Agriculture

- **Less methane-intensive rice cultivars**
- Direct seeding practices
- Alternate wetting and drying practices
- Promotion of **organic fertilizer and deep fertilizer technology**
- Feed additives for cattle
- Improved **fodder management**
- Introduction **of composting technology**



## Forests and other land uses

- Reducing the deforestation rate by **50 percent in 2030**
- **Stopping deforestation by 2045**
- Afforestation, improved **forest management and forest restoration**
- **Agroforestry and commercial tree plantation**
- Full implementation of the **REDD+ Investment Plan by 2050**



## Energy

- **No new coal generation capacity beyond already committed projects**
- Use of natural gas as a dispatchable transition fuel
- Investments in liquefied natural gas (LNG) import, storage and infrastructure
- Increase in solar, hydro, biomass and other renewables **to 35 percent of the generation mix by 2050, of which 12 percent is from solar**
- Investments in grid modernization, flexibility and storage Energy efficiency measures in buildings and industry
- **Energy efficiency measures in buildings and industry**
- **Fuel switching to electricity for cooking**
- Substitution of coal in the industrial and power sector

# LTS4CN key targets



## Transportation

- More use of public transportation – **30 percent modal share in urban areas by 2050**
- Moderate penetration of electric vehicles – **70 percent for motorcycles and 40 percent for cars and urban buses by 2050**
- Increased fuel efficiency for internal combustion engine vehicles
- Rail for freight and passengers
- Compressed Natural Gas (CNG) penetration of **80 percent for interregional buses and 80 percent for trucks by 2050**



## Industrial processes and product use

- Clinker substitution in cement production
- Carbon capture and storage for cement kilns
- Use of recycled aggregate concrete
- Increasing use of refrigerants with low global warming potential
- Regular inspection of refrigeration and air-conditioning equipment and recovery of spent refrigerants

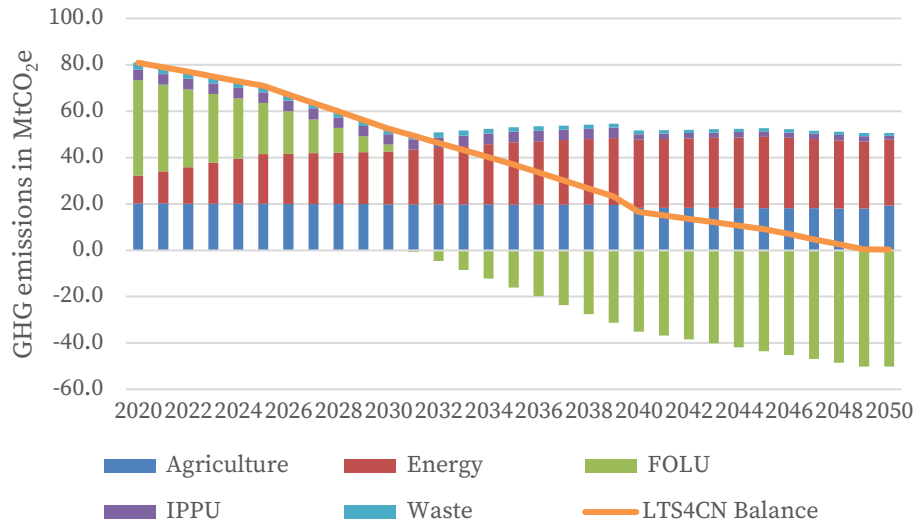


## Waste

- Reducing open burning by expanding waste collection coverage to **85 percent in 2050**
- Implementing a **reduce, reuse, and recycle strategy**
- Landfill gas management
- Organic composting
- Anaerobic digestion and wastewater treatment

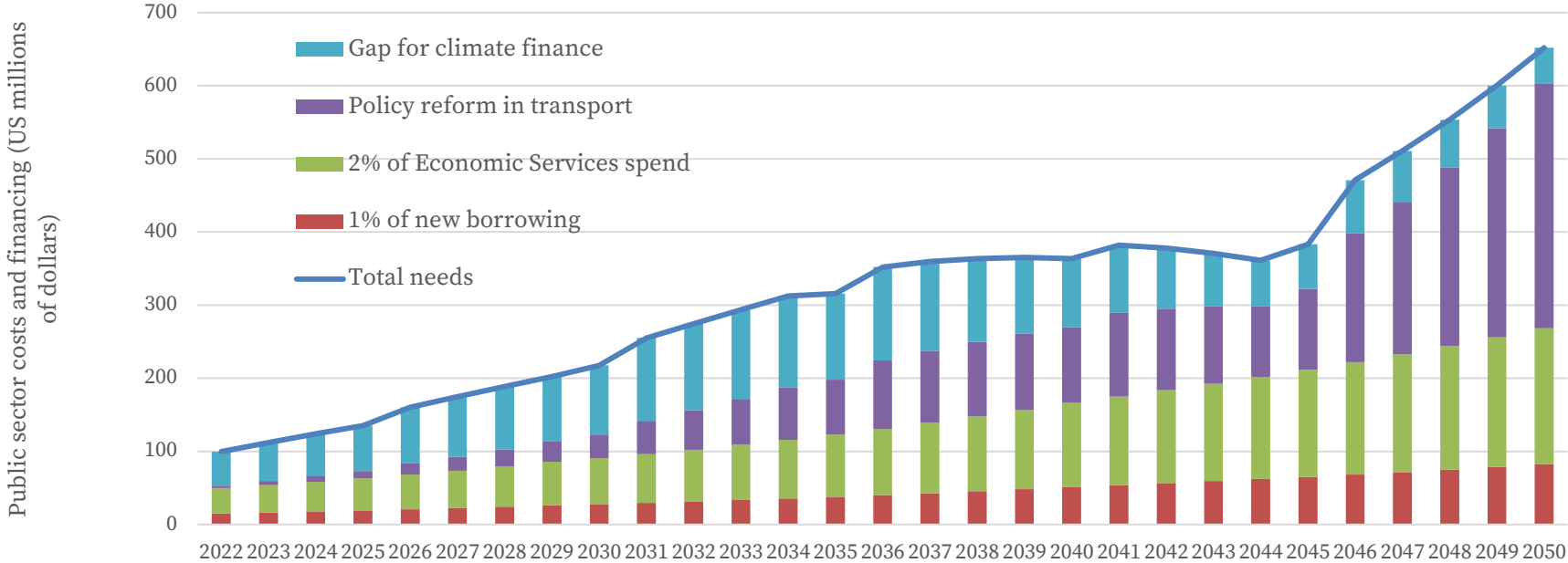
# LTS4CN: 2050 vision for carbon neutrality

Sector	BAU scenario, MtCO <sub>2</sub> e	Emissions reduction in LTS4CN scenario, MtCO <sub>2</sub> e	Emissions balance in LTS4CN scenario, MtCO <sub>2</sub> e
Agriculture	34.9	-15.6	19.3
Energy	82.7	-54.3	28.2
FOLU	21.2	-71.4	(-50.2)
IPPU	10.7	-9.1	1.6
Waste	6.5	-5.3	1.2
<b>Total</b>	<b>156.0</b>	<b>155.6</b>	<b>0,3</b>



# LTS4CN financing

	2030	2040	2050
Private capital expenditures	473	743	1,384
Public capital expenditures	159	294	476



# Economic and wider benefits

	Additional GDP growth in 2050	Job creation
Economic benefits	2.8%	157,000
Adaptation co-benefits	0.7%	164,000
Social/Environmental	4.0%	
<b>Total</b>	<b>7.5%</b>	<b>321,000*</b>

\* Business as usual: 183,000

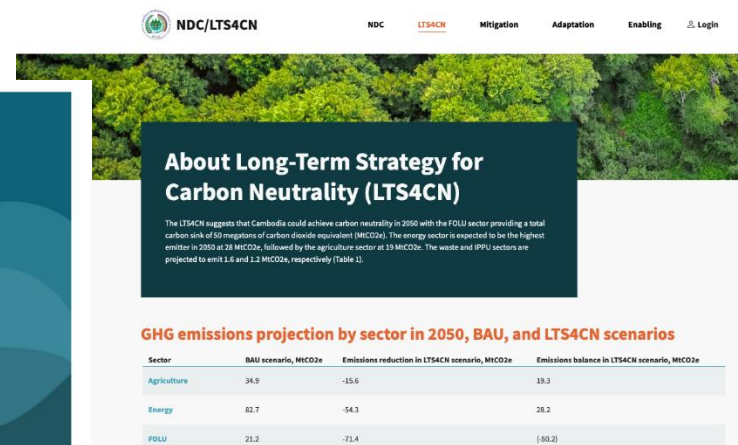
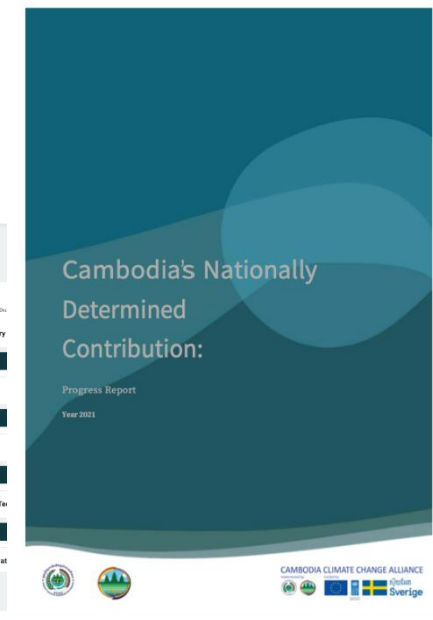
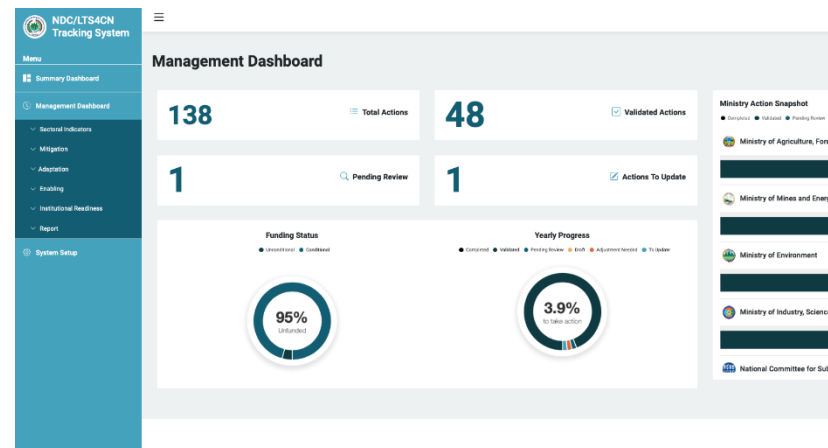


# National Enhanced Transparency Framework(ETF)

Cambodia is currently developing its ETF for the implementation of the Paris Agreement.

The NDC/LTS4CN tracking system set up:

- Assists the coordination of the NDC/LTS4CN implementation,
- Provides a collective and easy way to update on the progress made (including gender, youth, private sector and SDG targets),
- Serves as effective communication and engagement tool, and
- Provides access to information relevant to the reporting under the Paris Agreement (BTR).



# Thank you!

