



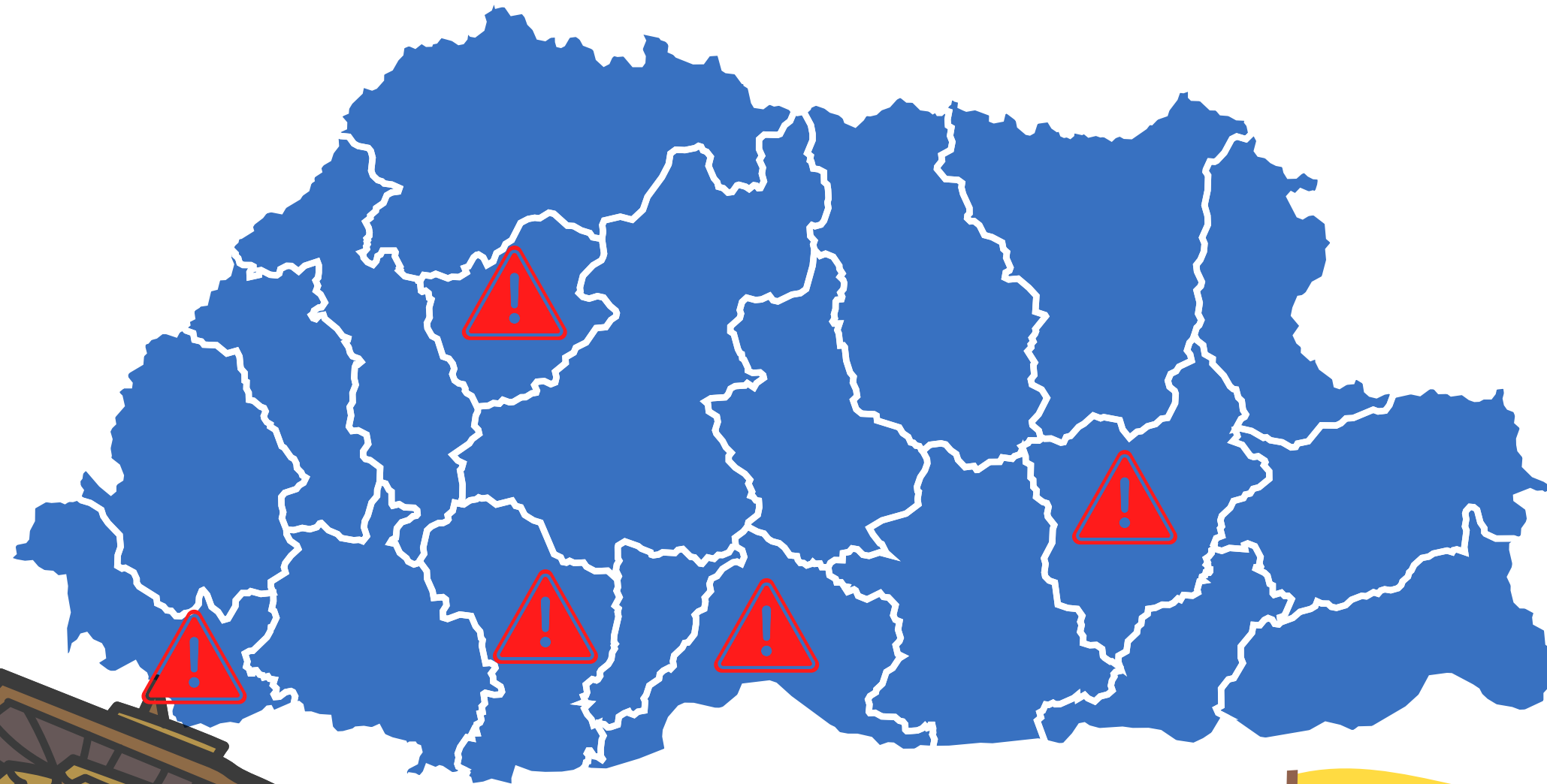
# Facilitative Multilateral Consideration of Progress

First Biennial Transparency Report of Bhutan  
June 2026



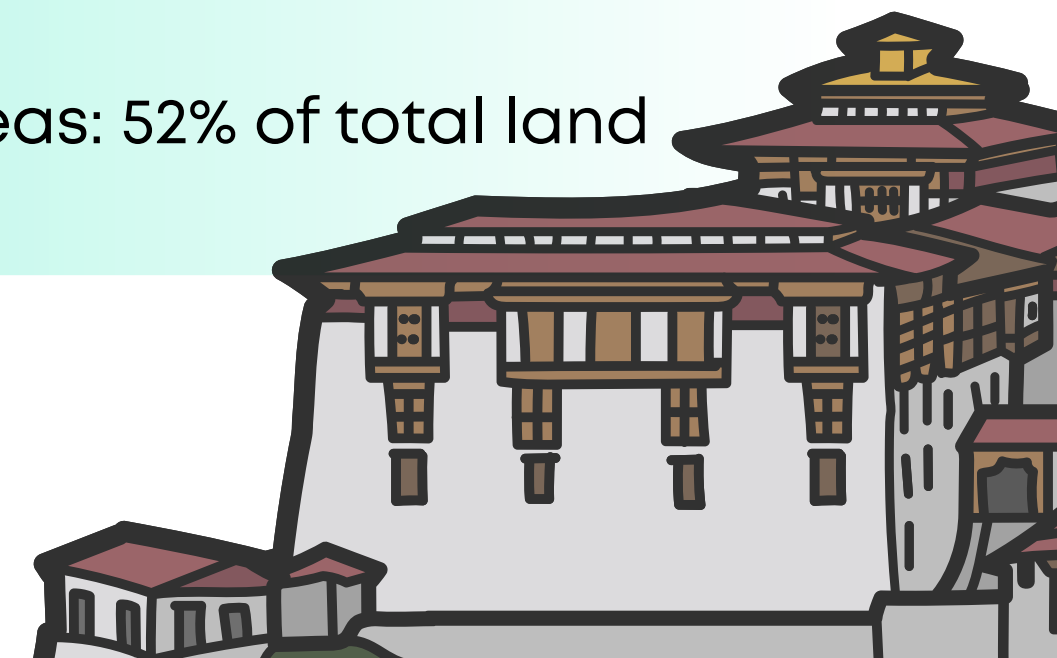
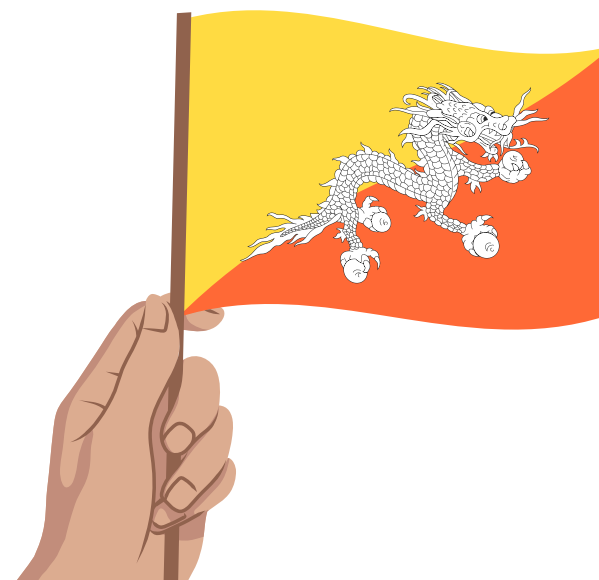


# National Circumstances



- Landlocked, mountainous developing country nestled in the Eastern Himalayas
- Area: 38,394 sq. km
- Population: 777,224 (projected, 2024)
- Elevation: Ranges from 100 masl to over 7000 masl
- Agriculture: ~2.93% of total land area allocated for agricultural use

- Glaciers: ~700, covering close to 630 sq. km (1.64% of total land area), with 17 potentially dangerous glacial lakes
- Forest cover: 69.71% of total land area
- Protect areas: 52% of total land area





# Bhutan's Nationally Determined Contribution

## Conditional: To maintain carbon neutrality

- NDC 1 (2015)
- NDC 2 (2021)
- NDC 3 (2025)

## BTRI 2024

- Reported progress against NDC 2 (2021-2030)
- Considered NDC 2 as a multi-year target
- Indicator: Total emissions and removals
- GHG inventory proves carbon neutrality for 2022

## Priority Mitigation Sectors

Energy, human settlements, surface transport, agriculture and livestock, industry, waste, and forestry.



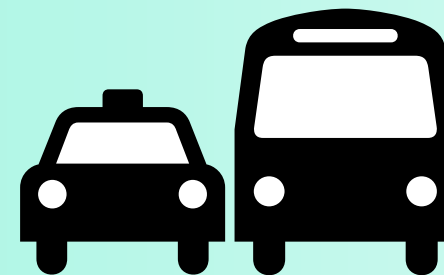


# GHG Emission Profile (2022)



## IPPU

- 673.93 Gg CO<sub>2</sub>e
- Emissions mainly arise from Ferro-alloy and cement production



## ENERGY

- 559.38 Gg CO<sub>2</sub>e
- Emissions mainly arise from the surface transport sector



## AGRICULTURE

- 410.18 Gg CO<sub>2</sub>e
- Emissions mainly arise from the livestock sector (enteric fermentation)



## WASTE

- 99.01 Gg CO<sub>2</sub>e
- Emissions mainly arise from wastewater



## FOLU

- -11,450.45 Gg CO<sub>2</sub>e
- Sequestration by sinks

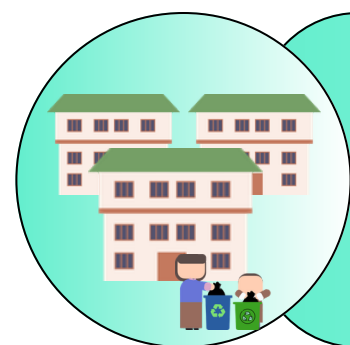


## NET EMISSIONS

- **-9707.94 Gg CO<sub>2</sub>e**
- Carbon neutrality maintained

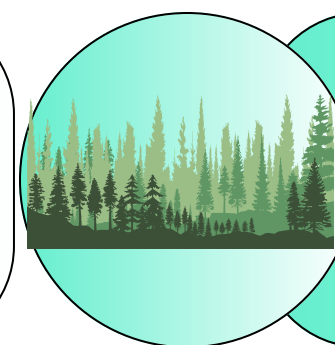


# Mitigation Priorities (2022)



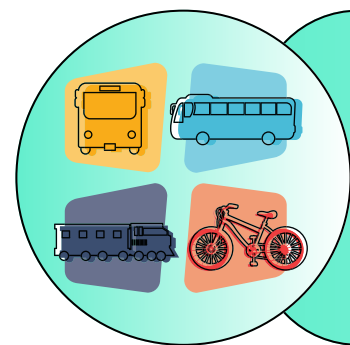
## LEDS Human Settlements 2021

- Solarization, switch to electricity for cooking, municipal solid waste management, green buildings, wastewater management



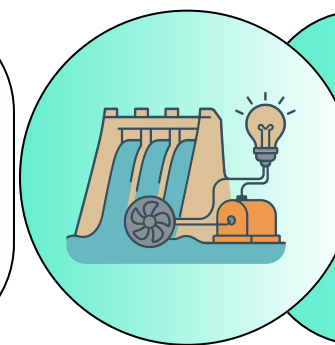
## National REDD+ Strategy 2020

- Improved forest management and conservation, maintaining land under protected area, enhancement of forest carbon sink, conservation of wetlands



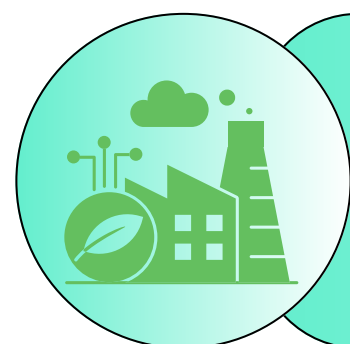
## LEDS Surface Transport 2021

- BRT, promotion of EVs, low emission freight transport, non-motorized transport, improved fuel efficiency, private vehicle demand management



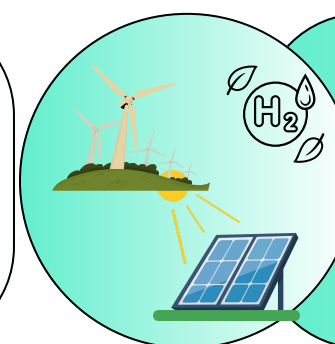
## Sustainable Hydropower Development

- 4 hydropower projects of ~2938 MW to be commissioned before 2030; 3 priority hydropower projects of ~4114 MW to be pursued



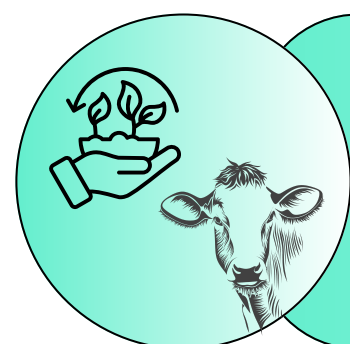
## LEDS Industries 2021

- Cement blending, replacing fossil origin reductants, waste-heat recovery, RDFs, energy efficiency, conversion of diesel to electric boilers



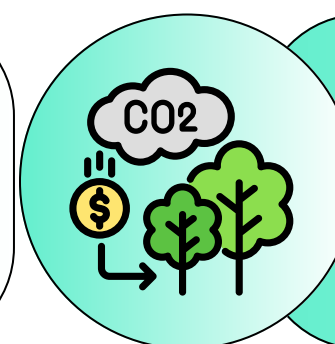
## Alternate Renewable Energy and EE

- Utility-scale solar and wind, prosumer, solar water heating systems, mini-hydel, green hydrogen, WtE feasibility, demand-side management (EE)



## LEDS Food Security 2021

- Switch from synthetic to organic fertilizers, reduction of continuous rice flooding, domestic biogas production, improved dairy cattle



## Cooperative mechanisms

- CDM: 3 projects
- Article 6 of PA: market and non-market approaches



# Adaptation Priorities



## Water

- Drying up of water sources
- Decreasing winter precipitation
- Flashfloods
- Landslides
- GLOF



## Forest and Biodiversity

- Forest fire
- Threats to human settlements



## Human Settlements

- Damage to infrastructure from climate-induced hazards



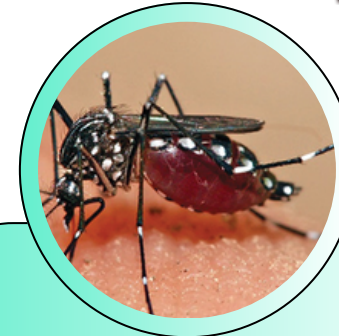
## Energy

- Drier winter
- Increased sedimentation
- Increased O&M cost



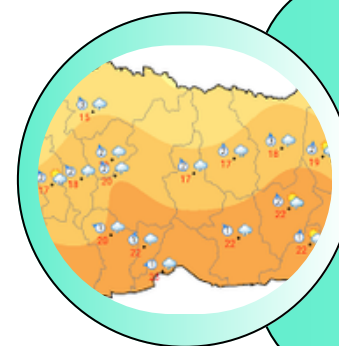
## Agriculture and Livestock

- Shortage of water
- Wildlife depredation
- Erosion
- Pests and diseases



## Health

- Risks of vector- and water-borne diseases
- Risks of zoonoses



## Climate Services and Disaster Risk Reduction

- Increased demand for weather and climate forecasts
- Climate-induced hazards



# Financing Needs (2022)

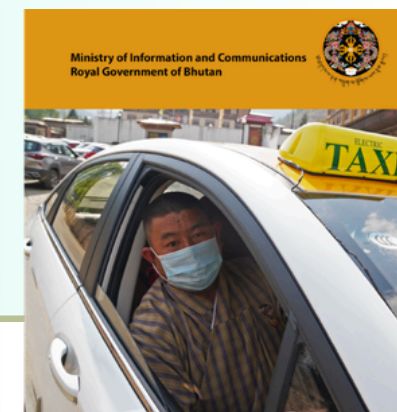
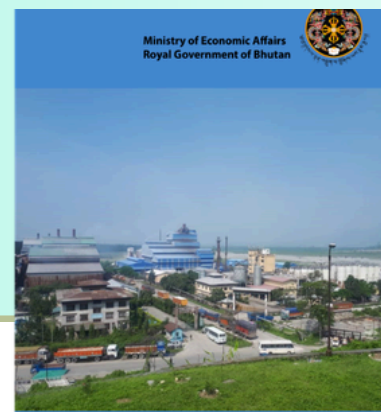


## NDC 2 (2021-2030)

NDC 2 (2021-2030): **USD 3.454 billion** (not including policy implementation - uncosted)

Costed strategies:

- LEDS Human Settlements 2021: USD 101.84 million
- LEDS Surface Transport 2021: USD 3.233 billion
- LEDS Industry 2021: USD 3.52 million (enabling activities and project development only)
- LEDS Food Security 2021: 61.65 million
- REDD+ 2020: USD 54.5 million

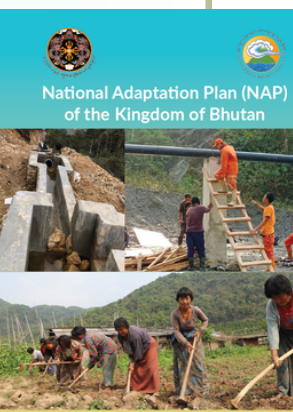


## NDC 3 (2026-2035)

- NDC 3.0 (2026-2035): **USD 13.683 billion**
- Cumulative mitigation potential 2026-2035: **up to 53,864.8 Gg CO2e, contingent on climate financing.**
- Includes Adaptation, Loss and Damage, social sectors, and SLCPPs.

## NAP 2023

- NAP 2023: **USD 13.944 billion**
- Seven priority sectors of water, forests and biodiversity, health, human settlements, energy, agriculture and livestock, and climate services and disaster risk reduction.
- impacts of climate change increasing over time





# Technical Expert Review of BTR1 (2025)



The first TER of Bhutan's first BTR was conducted in-country, from **6-10 October 2025**.

25+ capacity building recommendations proposed by the TERT.



Key recommendations:

- Building capacities of sectoral experts on technical aspects related to the GHG inventory
- Building/strengthening institutional and reporting arrangements
- Developing a centralized digital MRV platform to improve reporting



# Latest Developments



## CARBON MARKETS

- Implementation Agreement signed with Singapore under A6.2
- Opened project applications under A6.2 (5 received)
- National Carbon Registry
- Bhutan Climate Fund
- Carbon Market Information Platform
- Carbon Market Framework (2025)
- Positive list with 9 broad sectors and 36 potential mitigation activities
- 2 CDM projects transitioned to A6.4

## MITIGATION ASSESSMENTS

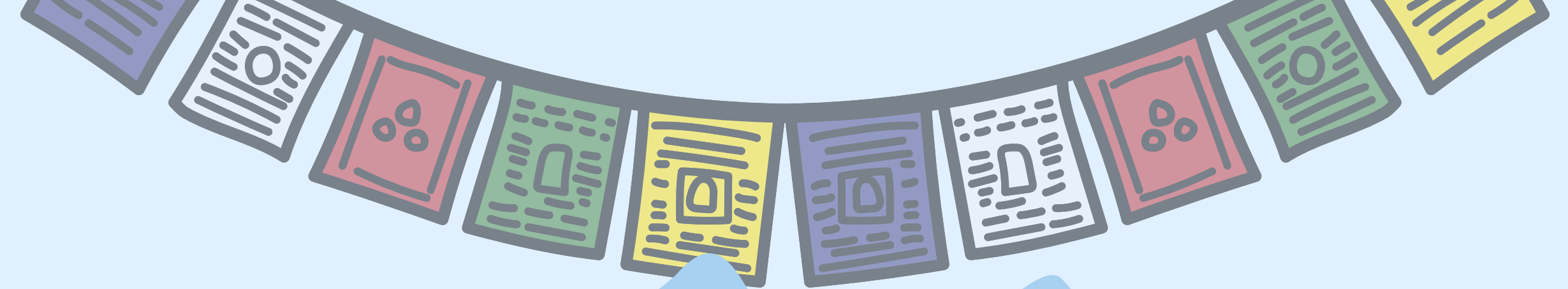
- LTS 2023 updated
- LEDS (2021) on Human Settlements, Surface Transport, Industries, and Food Security being updated
- Technology Needs Assessment 2013 update being pursued
- BTR2+NC4 in preparation

## ADAPTATION

- MEL assessment carried out (2026)
- Currently conducting climate vulnerability risk assessment in Thimphu and Paro region
- Gender Framework for Climate being developed
- Capacity needs assessment being carried out (adaptive capacity)
- Implementation of urban resilient interventions in the capital

## LOSS AND DAMAGE

- National Assessment Report 2025 (economic and non-economic)
- Sought technical assistance from SNLD on sectoral assessment of L&D
- FRLD proposal in development



**KADRINCHE LA**

**THANK YOU**