

CLIMATE ACTION IN BHUTAN

Country context

Bhutan, one of the world's Least Developed Countries (LDCs), is a net sink for greenhouse gases (GHGs). In 2000, there was an estimated forest sequestration capacity of 6.3 million tonnes of CO₂, and GHG emissions of only about 1.6 million tonnes of CO₂.

The government strongly recognizes the need to balance its development with environmental conservation, which is understood to be a key contributor to the country's "gross national happiness".

At the December 2009 global climate talks in Copenhagen, Bhutan made a commitment to remain carbon neutral. The government's strong commitment was driven by recognition of the potential impacts of climate change on the country and its primary economic sectors that are climate-sensitive, such as agriculture and forestry. Within a year of its voluntary carbon neutrality commitment, Bhutan adopted a **Green Economic Development Policy**.

By 2012, the government had drafted a National Strategy and Action Plan for Low Carbon Development which recommended the development of a comprehensive national climate change strategy and mainstreaming of climate change into national policies, development plans and programmes. Industry and road transport were recognized as key sectors with high mitigation potential.

Bhutan sought to extend and elaborate its options and processes to address and promote low emission development effectively, through assessments, sectoral policies, and strategy documents in the areas of transport, human settlements, solid waste management, and industries. The Low Emission Capacity Building (LECB) project was initiated to support Bhutan to move ahead on these efforts to address climate change, in accord with the country's priorities and policies.



LECB BHUTAN at a glance



Total financing
US \$1,134,600

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Timeframe
5 years (2012-2017)



Sectors
Transport, waste, energy,
industry and housing



Counterparts
National Environment
Commission (NEC)



Thematic areas

- Institutional frameworks
- GHG inventory systems
- NAMAs
- LEDS
- INDC support
- MRV systems
- Private sector involvement
- Climate finance

LECB ASIA

Strengthened and expanded national GHG inventory system

LECB strengthened the national GHG inventory data process by developing the Environment Information Management System (EIMS), an electronic database system to improve collection, archiving, documentation, and quality of data and inventory calculations. Given the significance of carbon sequestration to Bhutan's net carbon neutrality commitment, the National Forest Inventory (NFI), was improved by incorporating analysis and management of carbon sequestration data into this process. To ensure the regular updating of the GHG inventory and forest carbon data into the EIMS and NFI processes, the project conducted essential capacity-building trainings and workshops to sensitize data providers throughout contributing ministries and public institutions.

LEDS for road transport and industry sectors prepared and approved

Through LECB, comprehensive LEDS documents for the Road Transport and Industry sectors were prepared. The project employed extensive multi-stakeholder consultation in which the objectives, institutional arrangements, and financial, technical and capacity needs for its long-term implementation were laid out, as part of the LEDS design. This multi-stakeholder process ensured participation from diverse populations and beneficiaries thereby supporting better buy-in and ownership.

Approved NAMAs on transport and waste

The LECB project in Bhutan saw the completion of two NAMA proposals, for the urban road transport system and municipal solid waste management. These clearly outline the scope, objectives, emission reduction targets (aligned with the national development goals relating to carbon neutrality), institutional arrangements, and the monitoring, reporting and verification (MRV) systems to assess progress towards their goals. Decision support tools were used to identify these NAMA interventions. Gender considerations were factored into the NAMA design. As a result Bhutan has two completed NAMAs that have the potential to contribute to their NDC commitments under the Paris Agreement.

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Technical Working Groups

for NAMAs, LEDS and MRV systems (including links to GHG inventory system) established and operating after completion of the project

RESULTS

Introducing intelligent transport systems

In an effort to initiate a low carbon solution in the transport sector in the cities of Thimphu and Phuentsholing LECB carried out an in-depth study to assess international best practices on intelligent transport systems (ITS) implementation. The study concluded the need for revision of the 2006 Urban Transport Policy to **incorporate aspects of modern public transport systems into the policy.** The project piloted a number of urban transport system interventions in both cities to build confidence and promote awareness among stakeholders and affected communities on the utility and benefits of sustainable and intelligent urban public transport systems, including installation of displays to provide real-time information on bus schedules; the use of a smart card system for improved ticketing and revenue collection; developing a model bus-stop featuring seating, wheelchair access, passenger safety measures, and 24/7 video surveillance; and new audio-visual media.

US \$3 million approved to date

through project proposals from World Bank and UNDP to promote intelligent urban public transport systems and electric mobility in Bhutan

183 Locations approved

by World Bank for funding to build LECB Bhutan's model bus stop demonstrated in Thimphu

IMPACTS



Paris Agreement ratified by the Bhutanese Parliament in 2017

and climate change mainstreamed into the national agenda through its inclusion as a key result area in Bhutan's 12th Five Year Plan (2018–2023). Sustained engagement and targeted capacity building of high-level political stakeholders facilitated by way of the LECB project has resulted in increased ownership and capacity on key areas of climate change action across all levels of the public sector, as evidenced by these national and international public commitments.



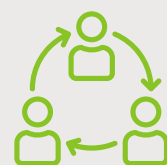
Increased appreciation of consideration of gender aspects in climate action,

with enhanced technical capacity of decision makers to mainstream gender concerns in climate policy going forward.



Public institutions' ability and confidence to develop long-term strategies and policies to address climate change

on their own accord using in-house capacity, as in the case of the Energy Efficiency roadmap and National Climate Change Policy.



Strengthened national GHG inventory process and EIMS

underpin the formulation of current and future national reporting that form an important component of Bhutan's MRV arrangements under the Paris Agreement. Bhutan's Third National Communication, its Biennial Update Report, and the National Climate Change Policy were all informed by the strengthened GHG inventory system and EIMS processes.



Increased support by international developmental agencies in mobilizing resources

for scaling up interventions on sustainable development, most recently on urban public transport systems. In addition to its successful proposal for rolling out new bus stops, the World Bank submitted a proposal to the Green Climate Fund, seeking US \$1.5 million to promote intelligent urban public transport systems in Bhutan, and UNDP submitted a nearly US \$3 million proposal to the Global Environment Facility for an electric mobility project to commence in 2018, which has been approved. This mobilization of resources builds directly on foundations laid through LECB.



General overview of the UNDP Low Emission Capacity Building Programme

Since its inception, the UNDP LECB programme has paved the way for effective and lasting climate action by building capacities of government staff to develop policies, strategies and tools that help implement their climate change goals. Focusing specifically on essential building blocks such as strengthening GHG inventory data and systems; formalization of institutional arrangement for climate actions; development and alignment of low emission development strategies (LEDS); and the creation of Nationally Appropriate Mitigation Actions (NAMAs), LECB provided much of the enabling environment necessary for countries to respond quickly to emerging needs, such as the submission of Intended Nationally Determined Contributions (INDCs) and socialization of the Paris Agreement. Given its flexible nature and strong country ownership, often the originally-envisaged and measurable LECB outputs have been exceeded, leading to some unplanned but highly welcomed additional impacts.

CASE STUDY

GENDER INTEGRATION IN LOW EMISSION DEVELOPMENT PLANNING



The Royal Government of Bhutan considers gender equality an inherent aspect of good governance. The government recommends mainstreaming gender and environment in all sectors, through its **Green Economic Development Policy (2010)**, the **10th Five-Year Plan (2008–2013)**, and the **Carbon Neutral Strategy**. The government also issued a mandate of **30% female representation** in working groups, trainings and workshops. Bhutan's focus on gender mainstreaming has enabled effective integration of gender into national strategies and also assisted in maintenance of gender disaggregated data to improve policy-planning.

Need for gender mainstreaming in projects

Gender mainstreaming ensures that projects are designed so that both women and men are entitled to participate and benefit from a

project equally. Frequently, women may be more disadvantaged than men in similar circumstances. Women in Asia play an important role in ensuring livelihood security in different forms, and climate change impacts can have negative implications on various dimensions of women's lives including education, health, economic opportunities and participation in management and decision-making processes as well as on household livelihoods. Therefore measures have to be designed to overcome the issues that hinder women from participating and benefiting from project interventions.

LECB Bhutan Strategy

Integration of gender concerns was a key element of LECB Bhutan. The LECB Bhutan Project Board, with overall responsibility for the execution and management of the project,

included several representatives who had worked on gender issues. The project sought to ensure that both genders were well represented in all workshops and trainings. Members of the National Commission for Women and Children were invited to be a part of the project's Technical Working Group. Gender aspects were also incorporated into the design process of NAMAs and LEDS across the Transport, waste, housing and industry sectors.

An easy entry point was to ensure consideration of gender issues as a key component in the terms of reference for engaging expert consultants. A Gender Capacity Needs Rapid Assessment was carried out for the NAMAs and LEDS. This study focused specifically on assessing the overall capacity needs, gaps and corresponding opportunities to enhance women's participation. LECB Bhutan capacitated officials in decision

In recent years, Bhutan has been at the forefront of assessing the implications for women and men in all areas, including legislation, policies or programmes. LECB has provided a platform to address gender aspects from an early stage in climate mitigation interventions. We will use the learnings from this exercise to address gender concerns in our programmes and policies to ensure equality and prosperity of all citizens



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The UNDP Low Emission Capacity Building (LECB) Programme was launched in January 2011 as part of a joint collaboration between the European Union, the Governments of Germany and Australia and UNDP. It is a global programme that helps countries build the public and private sector capacities needed to scale up country-driven mitigation actions.

LECB Bhutan made possible by:



Supported by:



based on a decision of the German Bundestag

