

ASIA LOW CARBON BUILDINGS TRANSITION

Life Cycle Assessment for Transitioning to a Low-Carbon Economy | PROJECT IN INDIA



Project Location:	Asia / India
Project Period:	August 2023 ~ August 2028
Project Funding India:	EUR 17.98 Mn (India: EUR 4.61 Mn)
Theme:	Green Investment, Climate Action, Green Buildings, Policy
Project Code:	ROA035

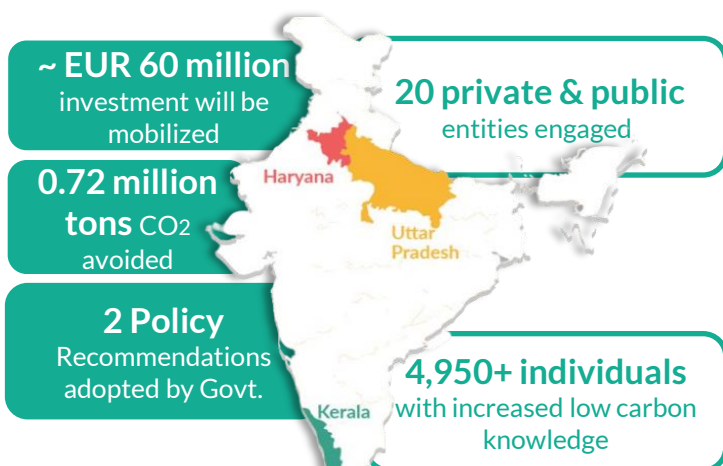
Project Summary

India experiences different climatic conditions throughout the year. In the states of Kerala, Haryana and Uttar Pradesh a variety of different climatic conditions are experienced, resulting in their different energy usage patterns throughout the year.

In line with the Government of India’s objectives to decarbonize the buildings sector, the Asia Low Carbon Buildings Transition (ALCBT) Project will assess the embodied and operational carbon and mainstream Energy Conservation Building Code (ECBC) in buildings. It will also develop a comprehensive building registry to identify low-carbon building pilots in each state. The selected buildings will be retrofitted with the implementation of energy-efficient and natural refrigerant-based air conditioners. The project will also enhance the capacity of governments, industry, building experts, energy auditors, ESCOs, banks & financial institutions and mobilize finance to facilitate the low-carbon transition pathway in India.

Project Goal and Objectives

The project in India aims to ensure nationwide transition towards Low Carbon Buildings (LCBs) through successful implementation of technical, planning, and institutional tools for LCB, which are streamlined by key public and private sector stakeholders resulting in direct emissions reduction by 2028.



The project is being implemented in Kerala, Haryana and Uttar Pradesh under the guidance of Ministry of Housing and Urban Affairs, Government of India

Consortium Partners

Lead:



State Government Partners



Nodal Ministry

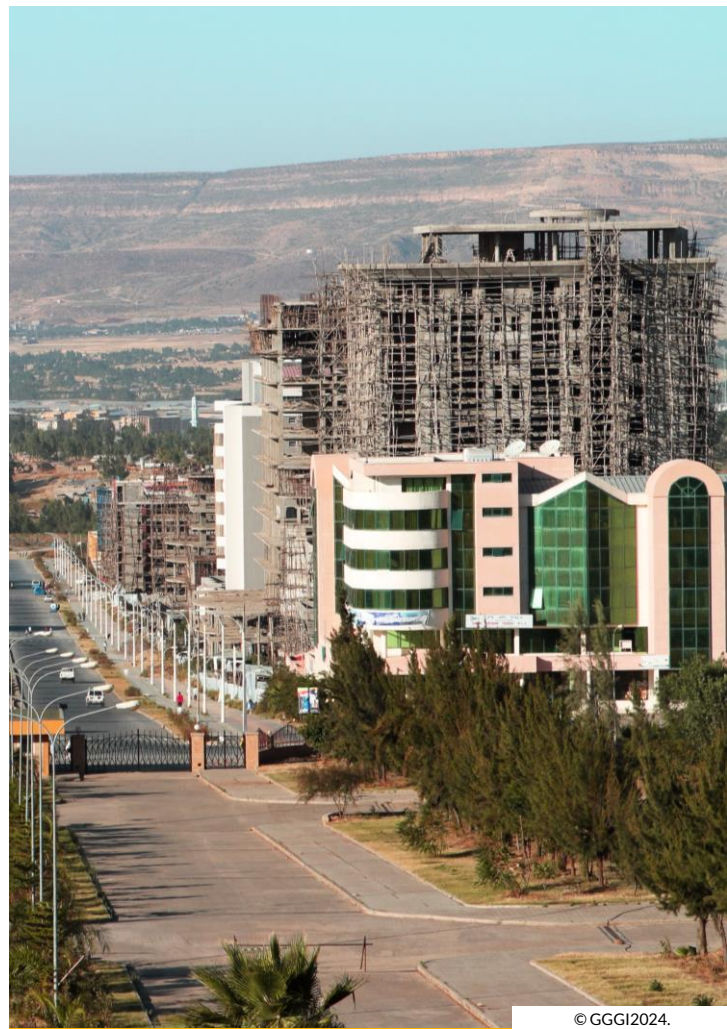


Resource Partners

Supported by:



on the basis of a decision by the German Bundestag



Context and Background

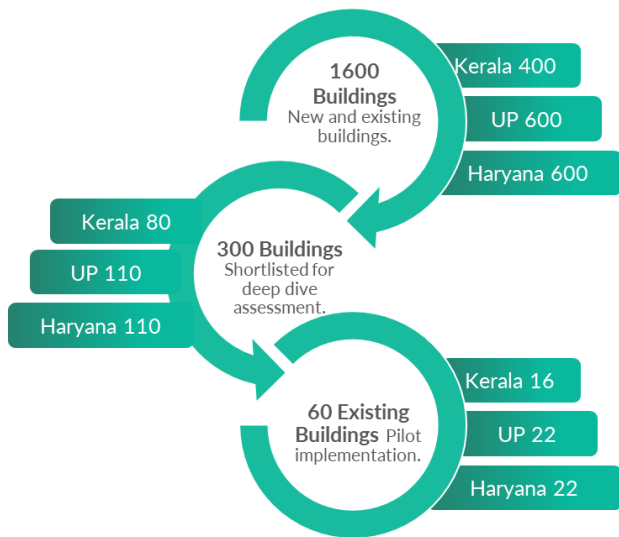
India accounts for the largest increase in peak electricity load in the world, mostly due to cooling demand. Commercial and residential buildings are estimated to consume around 850 Billion KWh by 2030, and this demand may increase further. 70% of India's building infrastructure in 2030 is yet to be built, this creates a potential for substantial reduction in the amount of carbon emissions.

The India Cooling Action Plan (ICAP) targets the reduction of cooling demand and enhance energy efficiency of new and existing buildings by 2038. Furthermore, the Energy Conservation Building Code (ECBC) is set to be mandated across India to establish minimum energy performance standards for buildings in India. Initially mandated for all commercial buildings across India, they were extended to residential buildings in 2018. Despite massive efforts, mainstreaming ECBC through adoption and implementation still faces several challenges. If not addressed, this could lead to a seven-fold increase in carbon emissions by 2050.

In line with the above, GGGI under the Indo-German Bilateral Agreement is leading the implementation of the ALCBT project across the three states of India with the 3 state designated agencies under Ministry of Housing and Urban Affairs.

Buildings Registry

The project will develop a database or registry for 1,600 new and existing commercial and residential building will be developed for the three states. Applicability for this database will be as per ECBC and ENS codes. The registry will help identify low carbon building pilots in each state.



Learn more at www.alcbt.gggi.org

#AsiaLowCarbonBuildings
#IndiaTowardsLCBT
#LowCarbonHighComfort

Project Outcomes in India

By 2028, technical, planning, and institutional tools for LCB will be developed and successfully implemented by key public and private sector stakeholders in India.

0.72 mt of CO₂
Emission reductions



20 Private & Public entities
incorporating LCB tools, training programs



2 policy recommendations
will be adopted by governments



~ EUR 60 million
approximately investment will be mobilized



60 buildings
will be assessed, registered,
piloted with natural refrigerants



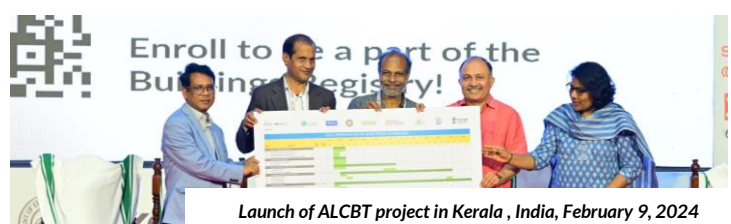
4,950+ individuals
with increased low carbon
knowledge



Launch of the ALCBT project in India, November 21, 2024.



Technical Advisory Committee Meeting in New Delhi, India, July 30, 2024.



Launch of ALCBT project in Kerala, India, February 9, 2024

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