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**Ministry of Housing
and Urban Affairs**
Government of India



Asia Low Carbon Buildings Transition Project: Kerala Chapter

Transforming the building sector for a greener, more sustainable future

India Context

India accounts for the largest increase in peak electricity load in the world. The India Cooling Action Plan (ICAP) targets the reduction of cooling demand, refrigerant transition, and enhancement of energy efficiency of new and existing buildings by 2038.

70% of India's building infrastructure in 2030 is yet to come up. If built right, they can reduce a substantial amount of carbon emissions.

Recognizing this potential the Government of India through the Bureau of Energy Efficiency (BEE), launched the Energy Conservation Building Code (ECBC) 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.

4x
Estimated growth in demand for electricity for space cooling by 2050.

Project Timeline



About ALCBT Project

The Asia Low Carbon Building Transition Program (ALCBT) is a 5-year multi-stakeholder project that aims to facilitate the nationwide transition towards Low Carbon Buildings (LCB) in 5 Asian countries.

The project aims to ensure technical, planning, and institutional tools for LCB are successfully implemented and streamlined by key public and private sector stakeholders resulting in direct emissions reduction by 2028.



Beneficiaries



INDIA



Kerala Chapter

The project is being implemented across 3 states under the guidance of the Ministry of Housing & Urban Affairs (MoHUA).



Expected Outcomes

0.3 million tons of CO₂ avoided emissions

1238 people with enhanced LCB skills

EUR 19.5 million Investment mobilized

1+ Policy recommendations adopted by the government.

5 pvt. and public sector entities incorporating ALCBT project tools and training programs to mainstream LCB.



KERALA

Output 1

Institutionalize Low Carbon Building Performance Metrics and thereby enhance National Building codes

- Building registry of 400+ New & Existing buildings categorized and assessed with LCT.
- ~8 key pvt. & public sector stakeholders engaged in developing policy recommendations
- 125+ industry and govt. stakeholders equipped with technical guidelines to encourage green procurement adoption.

Output 2

Enhance Public sector and Industry Capacity on Low-Carbon Assessment

- 530 Capacity Built through training of public officials and industry professionals.
- 1 National Universities incorporate sustainable cooling and LCB principles in syllabus.
- ~5 entities offering novel EE products and sustainable cooling services.

Output 3

Streamline and Facilitate Financing of Low-Carbon Buildings through ESCOs

- 2 Financial Institutions using ALCBT taxonomy, MRV, OSS database, etc. for assessing investments.
- 1+ Public Authorities (national/subnational) applying LCB standards and MRV tool for green procurement.
- 22 Buildings Retrofitted with energy efficient cooling appliances.
- 20 New Buildings constructed as per EE standards.

Output 4

Enable Replication & Scale-Up towards the goal of substantial reduction of GHG emissions from the building sector by 2028.

- 700 People with increased knowledge of LCB, sustainable cooling and LCT.
- 1+ Non-pilot State onboarded for scale up/ replication post pilot.
- 1+ Regional Knowledge Sharing Products developed and widely disseminated.

2027

2028

Green Public Procurement enhanced with carbon performance standards presented to the govt.

Outreach on LCA approach for buildings and promotion of building retrofits/ project success through videos and participation in events

AC distributors and installers trained on sustainable cooling

Project closure



[Link to the Buildings Registry Form](#)



Image above from left to right:
Senior Officials from EESL, EMC Kerala and GGGI
signed an MoU on January 11th, 2024 to implement the ALCBT Project
activities in Kerala.

Let [#IndiaTowardsLCBT](#) for [#LowCarbonHighComfort](#)

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International Climate Initiative (IKI) under the Federal Ministry for Economic Affairs and Climate Action (BMWK) is the donor for the project.



Energy Management Centre (EMC), in Kerala is the state designated agency under Energy Conservation Act 2001, to implement the Energy Efficiency program in the state.



Ministry of Housing
and Urban Affairs
Government of India

Ministry of Housing and Urban Affairs (MoHUA) is the nodal ministry for implementation of the ALCBT project in the 3 states of India.



Global Green Growth Institute (GGGI), Seoul, Republic of Korea, will drive national engagements in the project countries and create standardized tools for carbon management in the building sector.



Energy Efficiency Services Limited (EESL), in India will adopt an innovation-led approach, retrofitting buildings with low carbon solutions, streamlining the process through bulk procurement to enhance energy performance. It will target capacity building and stakeholder engagement to scale solutions and financial models.



ASEAN Center for Energy (ACE) in Indonesia, will develop technical tools, pilot initiatives, including energy performance contracting and on-bill financing, particularly aimed at SMEs. ACE will also play a key role in knowledge dissemination through the ALCB knowledge platform.



HEAT International, from Germany, will provide technical guidance and develop the LCA approaches to be applied in the project. HEAT will also support training on MRV, sustainable cooling and ALCBT tools.

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