













## **Telangana State and Greater Hyderabad Municipal Corporation**

# BUILDING A BETTER FUTURE: ECBC RESOURCE GUIDE

Highlighted Resources on Implementing the Energy Efficiency Building Code (ECBC) for Commercial Buildings in Telangana State – including FAQs, Guidelines, Factsheets and Papers

The Government of Telangana along with the Greater Hyderabad Municipal Corporation (GHMC) are working to meet anticipated growth needs and goals of energy conservation to build healthy communities. Led by the Steering Committee for the Telangana State Energy Conservation Building Code (ECBC) with thorough deliberations, broad stakeholder engagement and extensive research, Telangana State along with the Hyderabad have created a framework for building code compliance.

To streamline building approvals, Telangana State and Hyderabad launched the mandatory online ECBC compliance system for commercial buildings – the Development Permissions Management System (DPMS) – in December 2017.

### **Energy Efficiency & Building Codes**

With skyrocketing energy demand, rapid urbanization and increasing pollution levels, India critically needs energy solutions. Energy efficiency is an immediate solution, locking in energy savings in India's growing cities. To reap energy savings, Hyderabad and Telangana State are moving forward with India's first mandatory online system to ensure energy savings in buildings.

Buildings account for more than 30% of India's electricity consumption, and the total built space in the country is growing at a tremendous rate. The Energy Conservation Building Code (ECBC), launched by the Ministry of Power's Bureau of Energy Efficiency (BEE), has the potential to transform the way buildings are constructed and to unleash significant energy savings. Constructing energy efficient buildings is also a central strategy to achieve India's climate

target to reduce emissions intensity by 33 to 35 percent from 2005 levels by the year 2030 as part of the Paris Agreement.

Taking the lead on energy savings, the states of Telangana and Andhra Pradesh adopted mandatory energy conservation building codes for commercial buildings in 2014, applicable to both states after bifurcation. The Administrative Staff College of India (ASCI) and the Natural Resources Defense Council (NRDC) collaborated with state and city officials as knowledge partners to develop the code and to guide it through official adoption and launching a city-wide compliance system that can be scaled across the state and country.

#### **KEY FEATURES OF THE TELANGANA STATE ECBC**

- The Telangana State ECBC applies to any commercial building or building complex that has a plot area of 1,000 square meters or more or a built-up area of 2,000 square meters or more.
- Buildings of a certain type, such as multiplexes, hospitals, hotels, and convention centers, must comply with the ECBC, irrespective of their built-up area.
- The code offers a Star Rating system using a single star rating mandatory with "prescriptive method" or "whole building performance method" for all commercial buildings. For two stars or more, officials can award incentives, such as expediting the building approval process for construction and occupancy.
- Code compliance is verified through third-party assessors during the building design approval stage and after construction.
- Applications for building permissions for commercial buildings must include ECBC compliance verification forms, available on the state online system.

#### **Highlighted Resources for the TSECBC Online Compliance System:**



Telangana Energy Conservation Building Code (TSECBC) Guidelines

http://tnredcl. telangana.gov.in/PDFs/ TS\_ECBC\_guidelines\_ MAY\_24\_2017.pdf



Frequently Asked Questions Online Compliance System for Energy Conservation Building Code (ECBC) for Hyderabad

http://www.ghmc.gov.in/ Townplanning\_Reports/ TSECBCFAQs.pdf



Building a Better Future: Implementing the Energy-Saving Building Code in Hyderabad

https://www.nrdc.org/ sites/default/files/ better-future-energysaving-building-codehyderabad.pdf

#### **ASCI – NRDC Building Efficiency Case Studies:**



Retrofitting Mahindra Towers: How an Innovative ESCO Model Lowers Energy Bills with No Upfront Cost

https://www.nrdc.org/ sites/default/files/escoenergy-retrofit-mahindra-CS.pdf



Building Smart from the Start: Spotlight on Energy-Saving Commercial Office Building in Noida, India

https://www.nrdc. org/sites/default/ files/energy-savingconstruction-legacyspectral-CS.pdf



Saving Money and Energy: Case Study of the Energy-Efficiency Retrofit of the Godrej Bhavan Building in Mumbai

https://www.nrdc.org/ sites/default/files/ energy-retrofit-godrejbhavan-CS.pdf

#### **ASCI – NRDC Building Efficiency Reports and Papers:**



Building Efficient Cities: Strengthening the Indian Real Estate Market through Codes and Incentives

https://www.nrdc.org/ sites/default/files/realestate-efficiency-codes-IB. pdf



Taking Energy Efficiency to New Heights: Analysis and Recommendations for the Buildings Sector from the Hyderabad Experience

https://www.nrdc.org/ sites/default/files/ efficiencynewheights.pdf



Transforming Cities: Building Efficiency Lessons from Hyderabad

https://www.nrdc.org/ sites/default/files/ india-transformingcities-2014-report.pdf



Greener Construction Saves Money: Incentives for Energy Efficient Buildings Across India https://www.nrdc.org/ sites/default/files/energyefficient-constructionincentives-IB.pdf



Constructing Change: Accelerating Energy Efficiency in India's Buildings Market

https://www.nrdc.org/ sites/default/files/indiaconstructing-change-report. pdf



Capturing
Energy Savings
Opportunities
through Increased
Building Efficiency
https://www.nrdc.org

https://www.nrdc.org/ sites/default/files/ energyefficiency-fs.pdf



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