Implementation of Energy Conservation Building Code

Administrative Staff College of India
Natural Resources Defense Council
International Institute of Information Technology Hyderabad
ECBC in Andhra Pradesh and Telangana: Work that went into the code, and next steps


• Extensive stakeholder consultations and awareness building about ECBC
• Formation of a steering committee and a technical committee to inform process and adapt ECBC to local bylaws
• Notification of ECBC through amendment to G.O.M.S.168 i.e., G.O.M.S. 30 dt. 28.01.2014.
• Implementation of ECBC in the state of Andhra Pradesh and newly formed Telangana

• Empanelment of architects - completed
• Training completed – more than 750 government officials, real estate developers and architects in AP and Telangana
Building Approval Process

**HYDERABAD ECBC APPROVAL PROCESS & STEPS**

1. **Stage I - Design Phase**
   - Real Estate Developer (RED) Prepares Design in Consultation with Architect and MEP Consultant

2. **Second Party Assessor**
   - RED Submits Design to Third Party Assessor (TPA). TPA Gives ECBC Compliance Certificate

3. **Online Approval System**
   - RED Applies for Building Construction Approval Through Online System

4. **Building Committee Approval**
   - DISAPPROVAL
     - Prepares objections, Meets Applicant to Resolve Issues
   - APPROVAL
     - Construction Phase Begins
     - Municipal Corporation may conduct random inspections during construction

5. **Stage II - Post Construction Phase**
   - Municipal Corporation may conduct additional random inspections post issuance of BOC
   - Municipal Corporation Issues Building Occupancy Certificate (BOC)
   - RED submits the data (materials used, certificates etc.) to TPA for physical inspection. TPA issues Building Construction ECBC compliance verification certificate after inspection
ECBC Implementation status

• For effective implementation of ECBC and achieve higher level of compliance following activities were completed in the state with the support of Administrative Staff College of India (UNDP-GEF-BEE funding)
  – Empanelment of Third Party Assessors for ECBC compliance verification and issuing the certificate. 42 Third Party Assessors are empanelled.

  – More than 750 participants which includes government officials from town & country planning, municipal bodies, electricity utilities etc. and private people like Architects, Real Estate Developers and Engineers etc. are trained in the state of Andhra Pradesh as part of capacity building.

  – Setting up ECBC Cell in Amravati and Hyderabad
Further Action

- Setting up Technical Committee (set by GO 1328) for ECBC implementation at each ULB Level
- Releasing easy TS-ECBC Guidelines and Frequently Asked Questions
- Strengthen the implementation framework
- Strengthen the Third Party Assessors framework by defining rules and regulation
- Directions for Commercial building approval committees at each ULB level to scrutinize ECBC as 15c of GO 168 in the application forms
- Strengthen the Online Building Approval System by Incorporation of ECBC in an effective way
- Promotion and outreach plan for ECBC

Frequently Asked Questions
Online Compliance System for Energy Conservation Building Code (ECBC) for Hyderabad
Http://www.ghmc.gov.in/tender%20pdfs/ECBC_FAQs.pdf
Step 1 Formation of Technical Sub-Committee for regular review of ECBC compliance

A core group of representatives to lead the implementation of critical tasks

- Commissioner – ULB
- Chief City Planner - ULB
- VC & MD / CEO – TNREDCL/SECM (SDA)
- Director TCPO (Town and Country Planning office)
- Representative from Electricity Utilities
- Roads and Buildings Representative
- ASCI – IIIT - NRDC
Step 2 Building Approval Committee

A dedicated ULB-ASCI-IIIT resource included in Commercial Building Application Committee meetings for handholding support to ULBs

- Reviewing submitted projects
- Answering queries on ECBC requirements and process
- Fulfilling ECBC compliance requirements
- Tracking and reporting progress
Step 3 Framework for Third Party Verification

- Equip ULBs for ECBC compliance
- Create pool of minimum ECBC experts with certification
- Entrust institutional support to ULBS for effective implementation of ECBC
Step 4 Capacity Building for TPA Empanelment

- ASCI in collaboration with UNDP-GEF-BEE is training 100 architects, MEP consultants. Already trained 48 Professionals till date.
Andhra Pradesh and Telangana Case – Key Lessons and Roadmap

• **Lesson 1**
  – Creating a sense of urgency for ECBC at the highest level – Preferably at the Chief Secretary level

• **Lesson 2**
  – Institutional complexity and ownership in implementation of ECBC
  – Urban Development Departments at the State level shall anchor ECBC

• **Lesson 3**
  – Code adaptation – Should be made applicable to town planning
  – ULB involvement

• **Lesson 4**
  – Incentives are split in the sector – create incentive structure for builders

• **Lesson 5**
  – Code should be made mandatory – linked to reforms

• **Lesson 6**
  – Capacities to support change at the state level
  – Third party assessment for ECBC
Thank You

Rajkiran Bilolikar,
Associate Professor – Energy Area,
Centre for Energy, Environment, Urban Governance and Infrastructure Development
ASCI