# **ECBC Training Material & Proficiency Test**

# **Background**

The Government of India under the provision of the Energy Conservation Act, 2001 launched Energy Conservation Building Code (ECBC) in May 2007 for its voluntary adoption in the country. Since then Bureau of Energy Efficiency (BEE) has been promoting the implementation of ECBC through several capacity building programs. USAID supported ECO-III Project has been working closely with BEE in these initiatives, and has developed ECBC User Guide and ECBC Tip Sheets for raising awareness among stakeholders on ECBC. During these capacity building efforts, a strong need has been felt to assist architects and engineers at the design stage in terms of the basic principles of building physics along with compliance requirements as given in ECBC.

# **ECBC Training**

The ECBC Standard Training Package for Professionals has been developed by the ECO-III Project to strengthen and expedite Bureau of Energy Efficiency's objective of ECBC implementation. The training material has been developed with the help of many technical resources, including the ECBC Tip-sheets and ECBC User Guide, which had earlier been developed by the ECO-III Project. The team has made significant efforts to include as many illustrations and tables as possible to illustrate the technical topics in an "easy to understand" fashion.

The duration of the training program is two days and there will be an ECBC Proficiency Test at the conclusion of the training program. The objective of this training package is to enhance ECBC awareness, provide administrative and technical guidance towards Code compliance, help understand the technical basis of ECBC requirements and introduce the participants to other useful resources and knowledge bank. This training will conclude with an ECBC Proficiency test for professionals to test their understanding of the modules and the Code. The package consists of the following eight modules.

1. **ECBC Awareness:** The module discusses national and international energy scenarios vis-a-vis the growth in construction industry. It gives a brief introduction to the ECBC background, development and its significance in terms of energy savings.

- 2. **ECBC Scope & Administration:** The module gives an introduction to the ECBC Scope as well as the various compliance approaches.
- 3. **Building Envelope**
- 4. Heating, Ventilation and Air conditioning
- 5. Service Hot Water and Pumping
- 6. Lighting
- 7. Electrical power
- 8. **ECBC Compliance:** The module details out the Compliance procedure and requirements (documents).

Modules 3-7 outline the mandatory and prescriptive requirements from the Code. Each of these modules starts with some of the basic concepts explaining the terminology/intent of the Code requirements followed by a description of requirements as given in the Code for each section.

A ninth module on 'Introduction to Building Physics' has been added to this set in order to explain, in detail, some of the more advanced technical issues and concepts that a professional needs to understand to complement his/her knowledge of ECBC.

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