

# It's time to save energy

**Q. What is the role of the Bureau of Energy Efficiency in promoting awareness about energy efficient buildings?**

A. After the successful launch of the Energy Conservation Building Code (ECBC) in May 2007, one of the major thrust areas was to augment the technical capacity of professionals by organising training programmes and workshops. Training programmes/workshops involving professionals have been conducted covering the major aspects of Building Envelop, HVAC, Lighting and building energy simulation, etc. The purpose of these workshops was to raise awareness and sensitise architects, engineers, urban local bodies, project developers, consultants and students of engineering/architectural colleges about ECBC.

To build technical capacity for effective implementation of ECBC, the BEE has empanelled a list of expert architects from all over the country to provide advice to design professionals to meet the Code requirements. Quality technical reference material in the form of Tip sheets on the various aspects of ECBC, i.e. envelope design, lighting, HVAC and energy simulation have also been developed for ease of implementation of the Code. Simultaneously, an exercise of augmenting the technical capacities of the students by developing architecture and engineering courses for energy efficient and sustainable building design has been taken up. These initiatives have been taken up under the USAID ECO Programme where the effort is to empower the student community by providing access to world class reference material and equipping them with fundamental principles of building energy efficiency.

**Are private builders following eco friendly norms?**

Lack of awareness about energy-efficient building design lead

## [ Interview ]



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them to believe that such projects may cost more which may not be the case if early and correct decisions are taken during the design process. Cost benefit analysis and interaction across different systems like better envelop design leading to down-sizing of HVAC systems ultimately result in lower cost.

Split incentives – project costs are borne by project developers and lower energy bills are enjoyed by tenants – is also a major barrier. Builders who do not build to own are driven by first cost, aesthetics, short-term fad and ultimately, saleability. Lack of awareness on the part of buyers also does not put pressure on the builders to develop commercial building with better amenities and with lesser environmental impact.

However, with the launch of ECBC and the awareness programmes to sensitise the developers, benefits of energy efficient buildings have begun to be realised. With the hi-tech facilities that are provided in these premium commercial spaces, energy consumption has increased at a much faster rate within the building

as compared to the electricity growth in the Indian economy. Therefore, with a view to optimise the energy use in upcoming new construction more and more developers have realised the need to develop better envelop design through appropriate glazing in buildings having large glass façades, integration of day-lighting with electrical lighting, adoption of building management systems to properly control lighting and HVAC system, etc.

**Can old buildings be made energy efficient?**

Energy efficiency in existing buildings can be achieved through retrofitting in end use such as lighting, heating, HVAC and controls. An initiative for making the existing government buildings energy efficient was launched by the government. These include the Rashtrapati Bhawan and the PMO.