## Energy-efficient buildings can help reduce carbon footprint



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LUCKNOW: Did you know that incorporating simple changes in conventional designs of buildings could go a long way in saving energy for posterity? Experts believe making use of raw material like bricks with cooling properties and designs like bay windows help reduce electricity consumption in homes. In fact, following 'green energy benchmark' can help save up to 2 billion units of electricity every year.

Several energy experts participated at the orientation workshop on Agenda for Green Buildings organised by the Centre for Science and Environment (CSE) on Thursday to discuss ways to incorporate energy saving techniques in real estate. Officials from Lucknow Development Authority also participated in



\* Architect Dipendra Prasad speaking at the orientation workshop on Agenda for Green Buildings, DEEPAK/HT

the programme. "Till now, only 30% of construction-worthy land has been used by the real estate and 70% of building is yet to be done. For construction of buildings on the remaining land, strict rules in terms of employing energy saving techniques must be laid for builders and developers. This will make sure we have water and electricity in future," said Anumita Roychowdhury, executive director, research and advocacy, CSE.

Throwing light on green

energy benchmark, experts said it pertained to the amount of electricity used by a household vis-à-vis the total area of the building.

Lucknow witnesses several private constructions apart from development schemes by government authority regularly.

The district has investors' participation of approximately 40%, which is expected to escalate further, thus providing ample opportunity for builders to implement 'green rules'.

"Everyday, we see big advertisements in newspaper about apartments with features like green walk and swimming pools on campus. Government should support such builders who want to build flats with designs that consume less electricity for light and cooling," said Roychowdhury.

She said the Noida authority has decided to give tax and other benefits to builders making energy-efficient apartments and will also conduct energy audit of

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- In India, buildings are responsible for 40% of the energy use, 30% of raw material use, 20% of water use and 20% of land
- Adopting designs that support natural light and cooling in the buildings/houses can save up to 2 billion units of electricity.
  As per Bureau of Energy
- Efficiency, existing buildings have the potential to save up to 50% energy.
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the same. If the buildings fail in the audit, penalty will be imposed on builders. "Europe has made energy audit mandatory for each building. Maybe we too need something like this," she said.

Explaining about the energy conservation building code (ECBC) released by bureau of energy efficiency, V Ranga of Green Tree Building Consultant, New Delhi said this benchmark, which talks about minimum energy parameters to be followed during construction, has to be adopted for a secure future.