

VK:e Updates...

Under IGBC Green Homes rating system, **Parkside Homes**, Nashik, has received Gold pre-certification. Project has planned and designed to meet all compliance points of IGBC to achieve the targeted score.

Engracia, Pune and **Pallasio**, Pune have received four star and three star pre – certification GRIHA rating. Projects shall be constructed in compliance with the requirements of GRIHA to attain the rating.



Blue Ridge, IT SEZ phase 1

Blue Ridge, IT SEZ phase 1 has also garnered with final Gold rating of LEED Core & Shell (CS). Project has designed its wall envelope using industrial by products, flyash and installed high performance glass. Energy efficient lighting fixtures and equipments are installed. Overall, project achieved 25% energy saving below ASHRAE standard.

E - waste generation and disposal



E-waste yard

Disposing off mobile phones, computer or TV sets and the quantity of that kind of waste is growing rapidly every year and there is no effective way to dispose such a waste. E-waste contains hazardous chemicals which is a risk to human health.

According to ASSOCHAM report, currently, India is generating 12.5 lakh million tonnes per annum of e-waste and growing at a compound annual growth rate of about 25%. However, only 4% is recycled while the remaining is handled by scrap dealers. It is expected that India is likely to generate e-waste of 15 lakh MTs by 2015.

The report adds that computer equipment accounts for almost 68% of e-waste material followed by telecommunication equipment (12%), electrical equipment (8%) and medical equipment (7%). Other equipment, including household e-crap account for the remaining 5%.

Pune is one of the major e-waste generator cities in India. Pune has two e-waste collection centres at Hadapsar and Kothrud. Now, SWaCH (Solid Waste Collection and Handling) has become licensed e-waste handlers from Maharashtra Pollution Control Board (MPCB). Pune is planning to manage e waste through proper disposing and recycling system. Individual participation will help in achieving the target.

India's first zero net energy building

Green Building movement in India is growing in fast pace and widely spreading across the nation both in public and private sector. Ministry of Environment and Forests (MoEF) is making efforts to trend in the country and inspire people towards adoption of green technology.



Indira Paryavaran Bhawan,

Indira Paryavaran Bhawan, Delhi who accommodates officials of MoEF is reported that building has installed the country's largest roof top solar system of 930 kW peak power.

The building is running on green technology by harnessing the renewable source of energy and generating power since last year November. Building is able to achieve 40% of total energy saving. It was constructed at the cost of Rs. 209 crores.

It is the first public building to generate power on-site. Further to renewable energy, building has been designed and constructed to meet all compliance points under Green building rating system of India. Building has adopted optimize energy and water efficiency, green materials and adequate day lighting and ventilation.

The zero-net energy building - also called Net Zero Building - is a structure with zero net energy consumption where the total amount of energy used in the premises on an annual basis is more or less equal to the amount of renewable energy created on the site.

India ranked 3rd in green building lists

According to the latest US Green Building Council report, India ranked third on the list of top 10 countries in Leadership in Energy and Environmental (LEED) design outside America.



In the path of global solutions for environmental challenges, India is able to convey its action in sustainable building practices.

In the report, Canada tops the lists followed by China, India, South Korea, Taiwan, Germany and Brazil, among others. The report highlights the global community recognition of the rating in combating world's environmental problems. The rating system is widely accepted in guiding the building designs, construction, operations and maintenance of green buildings.

Green solar cells using tin instead of lead



Till date, element used in light harvester, perovskite solar cells is lead. Perovskite is a mineral composed mainly of calcium titanate whose structure converts solar energy into electricity with 15% efficiency.

Recently, researchers have found a way to replace lead in perovskite-based solar cells. Their study shows that tin could be used as a low-cost and environmentally safe light-absorbing material in these cells.

One of the studies focused on using tin in solar cells to drive down cost is from researchers at Northwestern University in Illinois. Studied reports that tin-based perovskite layer acts as an efficient sunlight absorber that is sandwiched between two electric charge transport layers for conducting electricity. They found that their cell converted solar energy to electricity with an efficiency of 5.73 percent whose efficiency is good for new cells. Researchers are expecting that the efficiency will be more than 15% since both elements belong in the same group in the periodic table.

Did you know?



India ranked 125th in Environmental Performance Index (EPI) out of 132 countries in 2012. However, as per 2014 EPI, India has been ranked at a low 155th position in a global list that places countries on how well they perform on high-priority environmental issues as per by Yale University.

India is among the bottom performer in exception of forests, fisheries, and water resources. India's performance lags most notably in the protection of human health from environmental harm. India's air quality is among the worst in the world, in proportion of the population exposed to average air pollution levels exceeding World Health Organization thresholds.