







GREEN BUILDING TECHNOLOGY

Green building is environmentally-conscious construction and operation of a building structure.

Green building is becoming increasingly common. With the shift in mind-sets today the idea of promoting sustainability and green building concepts have taken a front foot in the Real Estate industry

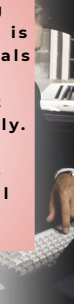
And as different stakeholders look for the opportunity to become more involved with promoting these concepts, several green building technologies have been developed to pave the way and ease the process for long-term practices in green and sustainable construction.



WHAT IS GREEN BUILDING TECHNOLOGY



A Green building is nothing more than a building which is built using reusable materials and other materials which make the building efficient and environmentally friendly. And Green building technology typically covers everything from geothermal heating to energy-efficient appliances.



WHY DO WE NEED GREEN BUILDING TECH

We are a country of 7.9 Billion People and counting ...

☑38% percent of Indian population lives in Urban Areas

☑800% increase in commercial energy consumption in the last four decades and the numbers are growing

☑Energy consumption in India will touch 4 trillion units by 2030

☑There is a shortage of average 225 million litre water per day in major Indian Cities, and an alarming 21 Indian cities are estimated to run out of water by 2030



IMPORTANCE GREEN TECHNOLOGY

Startling facts, aren't they? Well, undoubtedly, Green Building Construction presents one big solution to this unsustainable growth. Green Building are designed to meet certain critical objectives like:

- ☑ Protecting Occupant Health
- ☑ Improving Employee Productivity
- ☑ Conservation Of Energy, Water, And Other Fast Depleting Resources
- ☑ Reduce The Use Of Energy, Water, And Other Fast Depleting Resources
- ☑ Lower Carbon Footprint
- ☑ Reducing The Overall Impact To The Environment
- ☑ Better Indoor Air

Green building technology can really help in achieving these objectives in an efficient manner.

DIFFERENT TYPES OF GREEN BUILDING TECHNOLOGIES

"Green building (also known as green construction or sustainable building) refers to both a structure and the application of processes that are environmentally responsible and resource-efficient throughout a building's life-cycle: from planning to design, construction, operation, maintenance, renovation, and demolition.

GREEN RATING TECHNOLOGIES

- ☑ Net Zero Concepts
- ☑ HVAC (Heating, Ventilation And Air Conditioning)
- ☑ Low-Emitting Materials
- ☑ Cool Roofs
- ☑ Green Insulation
- ☑ Solar Power
- ☑ The Use of Smart Appliances
- ☑ Sustainable Resource Sourcing
- ☑ Electrochromic Smart Glass
- ☑ Sustainable Indoor Environment Technologies
- ☑ Self-Powered Buildings
- ☑ Passive House
- ☑ Technology Efficiency
- ☑ Water Efficiency Technologies

WHAT IS A GREEN BUILDING RATING SYSTEM?



☑ A Quantitative System to evaluate and measure the environmental impact of a building on the environment.

- ☑ Site
- ☑ Water
- ☑ Materials
- ☑ Energy
- ☑ Indoor Environment

☑ It evaluates the "whole building"
☑ Integration of systems is crucial to achieving Green

☑ The Most Widely Used Rating System is LEED



GREEN BUILDING RATING SYSTEMS

☒ Reduce energy consumption

☒ Reduce water consumption

☒ Reduce materials waste

☒ Reduce heat island effect

☒ Improve indoor air quality

☒ Reduce absenteeism

☒ Reduce Toxins in environment

☒ Improve productivity

☒ Preserve open space

☒ Preserve species habitat

☒ Improve asset value

☒ Increase infrastructure vitality

LEED GREEN BUILDING RATING SYSTEM

LEED (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world.

Developed by the U.S. Green Building Council

www.usgbc.org



WHAT MARKET PROBLEM OR OPPORTUNITY ARE WE ADDRESSING?

EMPLOYABILITY SKILLS NEEDED IN THE EMERGING GLOBAL WORK MARKETPLACE

Internet Penetration in India is increasing by 50% per year .

India is the 2nd-fastest-growing freelance market in the world

Source: Freelancing in 2020: An Abundance of Opportunities by Paycom

The world is changing and the way people work is changing with it.

GREEN BUILDING MARKET ACTIVITY

Level of Green Building Activity (According to all respondents)

These findings show that green building continues to remain a global priority, likely driven by increasing extreme weather events and despite other rising concerns like the global pandemic.

Top Barriers to Increasing Green Building Activity

- Affordability: Green Buildings is for High-end projects only (77%)
- Lack of Trained/Educated Green Building Professionals (41%)

INNOVATION BEING USED TO SOLVE THE MARKET PROBLEM / OPPORTUNITY

BEYOND SMART CITIES - WORK MARKETPLACE WITH KNOWLEDGE LAB

Knowledge Lab - Empowering Engineering Students Through Employability Skills

Skills Workplaces - Sustainability /Green Building /Energy/Environment/Smart cities / Infrastructure /Commissioning /Health Safety / Fire Safety /Emerging Technology /Specialists (7 verticals ,280+ Categories)

INFLUENCES ON GREEN BUILDING MARKETS

Top Triggers for Green Building (Based on Top 100 Green Buildings, Engineers and Contractors)

Top Triggers for Green Building (Collected in the Top 100 Green Buildings and Contractors)

GREEN MEANS JOBS



In fact, green industries are already major global employers: a 2020 report by the International Renewable Energy Agency (IRENA) found that there are now 11.5 million jobs in the renewable energy sector; while a 2019 study estimated that there were 10 times more jobs in the U.S. green economy than the country's entire fossil fuel industry – a remarkable turnaround. According to the ILO, the future looks even brighter (and greener): it predicts that the greening of the global economy will create 24 million additional jobs by 2030, a net increase of 18 million.

Beyond Smart Cities is the world's 1st Green Technology Marketplace, connecting millions of Sustainability Specialists, Green Building Specialists, Energy Specialists, Commissioning Specialists, Environment Specialists, Health & Safety Specialists, Fire Safety Specialists, Climate Change Specialists & Green Products/Technology Manufacturers with independent talent around the globe.

BEYOND
SMART CITIES

THANK YOU

**THE WORLD'S 1ST GREEN TECHNOLOGY
MARKETPLACE**
