



B  **YOND**
S M A R T C I T I E S



wel come to
BEYOND SMART CITIES

BEYOND
SMART CITIES



GREEN CLASSROOM PROFESSIONAL GCP CERTIFICATE REFRESHER

ONLINE PROFESSIONAL COURSES LED BY THE
WORLD'S TOP SPECIALISTS

ONLINE TRAINING BY KRISHNAJI PAWAR

LEED AP(BD+C), GSAS CGP, GCP, ISO 14001

LEARN.BEYONDSMARTCITIES.IN



MODULE
6

Green School Management, Aesthetics, and Efficiency

KRISHNAJI PAWAR - CEO & FOUNDER

LEED AP(BD+C),GSAS CGP,GCP,ISO 14001

WWW.BEYONDSMARTCITIES.IN





GREEN CLASSROOM PROFESSIONAL GCP CERTIFICATE REFRESHER

Green schools offer a healthy learning environment while minimizing environmental impact. They integrate sustainable practices into management, aesthetics, and operational efficiencies. This comprehensive examination covers physical plant, occupant health, aesthetics, waste reduction, recycling, composting, and air quality control.

Learning Objectives

- Introduction
- Getting Started with Green School Buildings
- What Does a Successful Green School Look Like?
- The DNA of Whole School Sustainability
- Teaching projects and problem-based learning
- **Green School Management, Aesthetics, and Efficiency**
- Design Principles for Whole School Sustainability
- Policy, Safety, and Diversity, Equity, and Inclusion in Green Schools
- Green Building Basics and Cost Benefits
- Healthy Ecosystems for Learning



INTRODUCTION

- Green school management promotes sustainability and environmental responsibility among students and staff.
- Principles include sustainable resource use, waste reduction, curriculum integration, and community engagement.
- Examples include the Green School in Bali, Indonesia, which uses bamboo structures and renewable energy sources.
- Aesthetics in green school management enhance the learning experience and promote well-being.
- High Tech High School in San Diego, California, emphasizes natural light, open spaces, and green roofs.
- Efficiency in green school management involves optimal use of resources to achieve educational goals while minimizing waste and environmental impact.
- Examples include the implementation of smart building technologies and project-based learning initiatives that integrate sustainability themes.
- The interconnectedness of green school management, aesthetics, and efficiency is evident in the Eco-School Network, which promotes sustainable practices in schools.

ENVIRONMENTAL MANAGEMENT PRACTICES

- Environmental audits assess waste types and quantities, evaluate energy usage patterns, and measure indoor and outdoor air quality.
- Waste management and reduction initiatives, composting, and air quality and pollution control are prioritized.

Energy-Efficient Systems

- Green schools use renewable energy sources, smart energy management systems, and sustainable transportation.
- Solar panels, smart meters, and sensors optimize energy use and reduce carbon footprint.
- Encouraging walking, biking, and public transportation reduces emissions associated with school commutes.



SCHOOL BUILDINGS: AESTHETIC APPEAL AND LEED / BSAS CERTIFICATION



- School buildings often lack aesthetic appeal and consider student or teacher opinions.
- Ideal learning spaces include efficient systems, comfort, natural light, quiet spaces, and aesthetic appeal.
- LEED /BSAS certification promotes energy and water efficiency and reduces carbon footprint.
- School buildings impact student health and learning, requiring consideration of natural light, noise, air quality, allergen exposure, and lead levels.
- Equity issues arise, with students of color often living in poor-condition buildings.
- Inadequate funding for PreK–12 building infrastructure necessitates allocation of funds to blighted schools.
- Green initiatives and LEED / BSAS certification can enhance learning and learning through audits.

CLIMATE CHANGE

- Climate change refers to long-term changes in Earth's climate system, driven by human activities like burning fossil fuels, deforestation, and industrial processes.
- Greenhouse gases trap heat in the Earth's atmosphere, leading to the greenhouse effect.
- The current rate of climate change is unprecedented, largely due to human activities increasing greenhouse gas concentration since the Industrial Revolution.
- Global warming, the increase in Earth's average surface temperature, has led to melting of polar ice caps, rising sea levels, more severe heatwaves, and changes in precipitation patterns.
- Climate change exacerbates extreme weather events like hurricanes, droughts, and wildfires, causing devastating consequences for human health, agriculture, and infrastructure.
- Climate change can also have indirect effects on ecosystems and biodiversity, leading to shifts in species distributions, loss of habitat, and increased risk of extinction.
- Addressing climate change requires a coordinated global effort to reduce greenhouse gas emissions, transition to renewable energy sources, and adapt to the changing climate.





THE KYOTO PROTOCOL

- An international agreement aimed at reducing greenhouse gas emissions.
- Adopted in December 1997 and entered into force in February 2005.
- Negotiated under the United Nations Framework Convention on Climate Change (UNFCCC).
- Establishes legally binding emission reduction targets for industrialized countries.
- Countries can implement domestic policies, increase renewable energy use, and implement carbon pricing mechanisms.
- Allows countries to participate in emissions trading for cost-effective emission reduction.
- Includes Clean Development Mechanism (CDM) and Joint Implementation (JI) for developed countries to offset their own emissions.
- Has faced criticisms for not including major emitters and for some countries struggling to meet their targets.
- Despite limitations, the Kyoto Protocol has raised awareness about reducing emissions and paved the way for more ambitious climate agreements.



THE PARIS AGREEMENT | UNFCCC

Paris Agreement:

- Adopted in 2015, builds upon the principles of the UNFCCC.
- Aims to limit global temperature rise to well below 2 degrees Celsius above pre-industrial levels, with efforts to limit the increase to 1.5 degrees Celsius.
- Enhances countries' ability to adapt to climate change impacts and make financial flows consistent with low greenhouse gas emissions and climate-resilient development.

Key Features of the Paris Agreement:

- Concept of nationally determined contributions (NDCs).
- Transparency framework promoting accountability and trust among countries.





CONTACT US



+91 6363032722



info@beyon-smartcities.in



learn.beyon-smartcities.in



#55,HMR Layout ,Bengaluru ,India



THANK YOU

