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# GREEN CLASSROOM PROFESSIONAL GCP CERTIFICATE REFRESHER

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ONLINE TRAINING BY KRISHNAJI PAWAR

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

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MODULE  
**12**

# Operations and Maintenance for Whole School Sustainability

KRISHNAJI PAWAR - CEO & FOUNDER

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

[WWW.BEYONDSMARTCITIES.IN](http://WWW.BEYONDSMARTCITIES.IN)





# **GREEN CLASSROOM PROFESSIONAL GCP CERTIFICATE REFRESHER**

Operations and Maintenance (O&M) is a critical aspect of school sustainability, ensuring efficient, sustainable, and effective operation of facilities. It involves strategies and practices to ensure the physical infrastructure and organizational processes support sustainable outcomes.

# Learning Objectives

- Green school buildings are dynamic learning environments.
- **Operations and Maintenance for Whole School Sustainability**
- Meaningful, purposeful, and engaging learning
- Sustainable Spaces and Smart Transportation
- Energy Efficiency - Lighting
- Energy Efficiency - Plug Loads & HVAC Systems
- Water Efficiency and Quality
- Indoor Environment: Air Quality and Acoustics
- Smart Cleaning & Integrative Pest Management
- Materials and Resources
- Emerging Design and Technology
- Summary and Resources
- SCS Quiz: Test Your Knowledge!

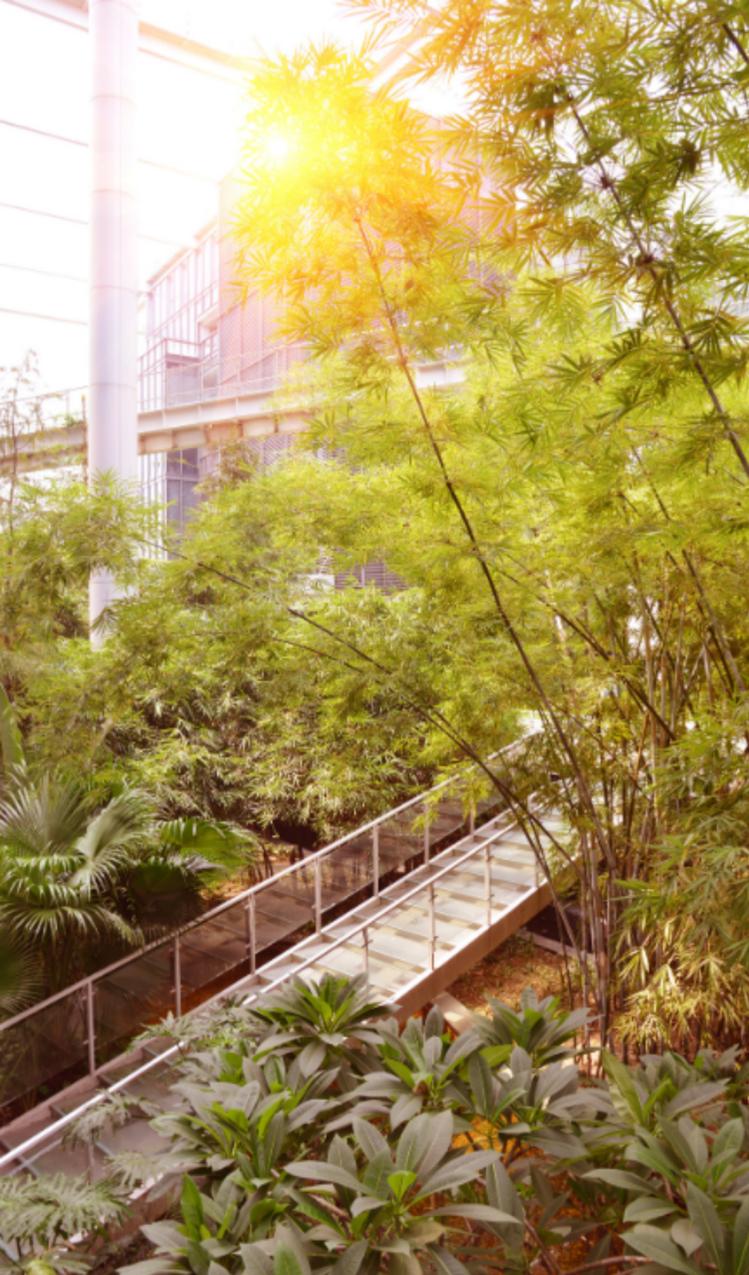
# INTRODUCTION

## Operations and Maintenance for School Sustainability

- Crucial for efficient, sustainable operation of school facilities.
- Includes strategies to ensure physical infrastructure and organizational processes support sustainable outcomes.
- Enhances resource efficiency by reducing energy and water consumption.
- Prevents deterioration of facilities, benefiting financial sustainability.
- Reduces health and safety risks associated with hazards.
- Provides rich, hands-on learning experiences for students.

# O&M FRAMEWORK FOR SUSTAINABILITY

- Facility Management: Strategic oversight and operation of physical school environments.
- Preventive Maintenance: Systematic inspection, detection, and correction of potential problems.
- Energy Management: Monitoring and controlling energy consumption.
- Waste Management: Minimizing waste generation, promoting recycling, and proper disposal of hazardous materials.
- Water Management: Strategies to reduce water consumption and improve water quality.
- Community Engagement and Stakeholder Collaboration: Fostering a culture of stewardship and shared responsibility.



# DYNUNDERSTANDING OPERATIONS AND MAINTENANCEAMIC LEARNING ENVIRONMENTS

- O&M refers to the daily operations and maintenance of physical facilities.
- It includes facility management, energy efficiency, waste management, and green procurement.
- Effective O&M practices extend the life of school facilities, optimize resource use, and reduce environmental impact.



# PRINCIPLES OF SUSTAINABLE OPERATIONS AND MAINTENANCE

- Resource Efficiency: Emphasizes the efficient use of resources like energy, water, and materials.
- Waste Management: Reduction of waste generation, promotion of recycling, and implementation of composting programs are crucial for sustainability.
- Indoor Environmental Quality (IEQ): Maintaining a high IEQ is vital for the health and well-being of students and staff.
- Green Procurement: Prioritizing environmentally friendly products and services supports sustainable markets.



# IMPLEMENTATION STRATEGIES

- Sustainability Planning: Develop a comprehensive plan aligning O&M practices with broader educational goals.
- Stakeholder Engagement: Engage stakeholders including students, staff, parents, and community members.
- Training and Capacity Building: Provide training for staff and students on sustainable practices.
- Monitoring and Evaluation: Establish key performance indicators (KPIs) to track sustainability outcomes.



# CHALLENGES & CONSIDERATIONS

- Funding Limitations: Budget constraints can hinder the implementation of sustainable practices.
- Resistance to Change: Cultural inertia and resistance from staff or stakeholders can impede the adoption of new practices.
- Regulatory Compliance: Schools must stay informed about relevant policies and ensure compliance while pursuing sustainability goals.





# CONTACT US



+91 6363032722



[info@beyondsmartcities.in](mailto:info@beyondsmartcities.in)



[learn.beyondsmartcities.in](http://learn.beyondsmartcities.in)



#55,HMR Layout ,Bengaluru ,India



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