Training Course on Energy Management in School Buildings

Professional Development Training Course Outline

Category	Educational Leadership and Management	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

As educational institutions face increasing pressure to reduce operational costs and environmental impacts, Energy Management in School Buildings has emerged as a critical priority. Training Course on Energy Management in School Buildings provides school leaders, facility managers, and educators with strategic knowledge and practical tools to optimize energy use, reduce carbon footprints, and create healthier learning environments. Through evidence-based practices and case studies, participants will gain essential skills in sustainable energy planning, HVAC optimization, and smart building technologies tailored to educational settings.

Designed with a focus on energy efficiency, climate resilience, and green building strategies, this course empowers participants to lead energy-conscious initiatives in their institutions. By integrating data-driven energy audits, renewable energy solutions, and policy-driven sustainability frameworks, the course ensures learners are equipped to make informed decisions that benefit both the environment and school budgets.

Programme Curriculum

Training Course on Energy Management in School Buildings

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Course Objectives

1. Understand the fundamentals of sustainable energy management in educational buildings.
2. Conduct comprehensive energy audits tailored to school infrastructures.
3. Explore energy-efficient HVAC systems and their applications in schools.
4. Identify and implement smart lighting solutions for classrooms and facilities.
5. Integrate renewable energy sources such as solar panels in school settings.
6. Analyze building envelope performance to reduce heat loss and gain.
7. Interpret and utilize energy consumption data for improved decision-making.
8. Develop a school-wide energy conservation policy.
9. Implement behavioral change programs for staff and students.
10. Leverage IoT and smart technology for real-time energy monitoring.
11. Understand the financial implications of energy savings performance contracts (ESPCs).
12. Align school energy strategies with national green building standards.
13. Create a roadmap for long-term energy sustainability in schools.

Target Audiences

1. School Administrators
2. Facility and Operations Managers
3. Environmental Education Coordinators
4. Sustainability Officers
5. Maintenance and Technical Staff
6. Architecture and Engineering Consultants
7. Local Government Education Officers
8. Teachers and Curriculum Designers

Course Duration: 5 days

Course Modules

Module 1: Introduction to Energy Management in Schools

- Overview of school energy consumption patterns
- Importance of energy efficiency in education
- Introduction to sustainability goals
- Global trends in green school buildings
- Basic terms: kWh, carbon footprint, BTU
- **Case Study**: “Green School Bali – A Model for Sustainability”

Module 2: Conducting Energy Audits

- Energy audit tools and techniques
- Identifying energy hotspots in schools
- Creating an energy inventory
- Data collection and benchmarking
- Audit report writing and interpretation
- **Case Study**: “New York City Schools Energy Benchmarking Initiative”

Module 3: HVAC System Optimization

- Types of HVAC systems in schools
- Seasonal energy performance
- Controls and automation
- Maintenance practices for efficiency
- Retrofitting vs. replacing systems
- **Case Study**: “LA Unified School District HVAC Retrofit Success”

Module 4: Smart Lighting and Controls

- LED lighting vs. traditional systems
- Use of daylight and occupancy sensors
- Lighting controls and timers
- Cost-benefit analysis of upgrades
- Integrating lighting with BMS
- **Case Study**: “Ontario School Board Smart Lighting Rollout”

Module 5: Renewable Energy Integration

- Solar PV systems for schools
- Wind turbines and geothermal options
- Calculating energy offset potential
- Grid-tied vs. off-grid systems
- Funding and grants for renewable projects
- **Case Study**: “Solar for Schools – California Clean Energy Program”

Module 6: Building Envelope and Insulation

- Roof and wall insulation standards
- Window glazing and shading solutions
- Preventing air leakage
- Importance of thermal imaging
- Long-term benefits of upgrades
- **Case Study**: “Sweden’s Net-Zero School Design Blueprint”

Module 7: Behavior Change and Stakeholder Engagement

- Student and staff energy awareness programs
- Gamification of energy-saving actions
- Communication strategies
- Creating Green Teams in schools
- Monitoring and celebrating progress
- **Case Study**: “UK Eco-Schools Program Impact Study”

Module 8: Policy, Planning, and Long-term Strategies

- Setting school energy goals and KPIs
- Writing an institutional energy policy
- Aligning with local/state sustainability mandates
- Budgeting and financing energy projects
- Creating an energy action plan
- **Case Study**: “Singapore’s Green Mark Schools Framework”

Training Methodology

- Interactive instructor-led virtual or in-person sessions
- Group discussions and peer-to-peer learning

- Hands-on energy audit simulations
- Real-world case study analysis
- Quizzes and reflection activities
- Access to downloadable energy management templates and tools

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training CenterANCY LD account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com