

#SUS3100

Strategies for Modern Waste Management and Recycling Training Course

Course Introduction / Overview:

This training course is designed to provide a comprehensive and strategic overview of modern waste management and recycling innovations. As environmental regulations tighten and the circular economy gains traction, organizations need to move beyond traditional waste disposal to embrace innovative solutions. This program, offered by BIG BEN Training Center, provides a strategic framework for understanding the full lifecycle of waste, from reduction at the source to advanced recycling technologies. We will explore key concepts such as waste hierarchy, sustainable waste utilization, and how to implement a circular economy model within your organization. The curriculum is informed by the academic work of authors like José María Ponce-Ortega, whose book "Solid Waste Management: Navigation from Fundamentals to Innovation" provides a strong foundation for understanding how sustainability and cutting-edge technologies converge to tackle the escalating challenges of waste disposal and treatment. We go beyond compliance to prepare participants to be leaders in a new kind of economy, one where waste is seen not as a problem but as a resource with immense value.

Target Audience / This training course is suitable for:

- Environmental managers and coordinators.
- Facility and operations managers.
- Sustainability professionals.
- Supply chain and logistics managers.
- Corporate social responsibility (CSR) managers.
- Public health officials.
- Municipal waste management professionals.
- Government agencies and equivalents.

Target Sectors and Industries:

- Manufacturing and industrial.
- Retail and consumer goods.
- Logistics and transportation.
- Hospitality and food service.
- Construction and demolition.
- Energy and utilities.
- Government and public administration agencies.
- Waste management and recycling companies.

Target Organizations Departments:

- · Operations.
- Supply chain.
- Environmental health and safety.
- Sustainability.
- Corporate social responsibility.
- Public works.
- Strategic planning.
- Legal and compliance.

Course Offerings:

By the end of this course, the participants will have able to:

- Develop a comprehensive waste management strategy.
- Apply the principles of the circular economy.
- Implement waste reduction and reuse programs.
- Understand different recycling technologies.
- Analyze and manage hazardous and special wastes.
- Navigate local and international waste regulations.
- Measure and report on waste reduction performance.
- Engage employees in waste management initiatives.

Course Methodology:

This training course uses a highly practical and case-study based methodology. The program is built around real-world examples of organizations that have successfully implemented innovative waste management and recycling programs. Participants will work in teams to conduct a waste audit and develop a strategic plan for a hypothetical company, applying the tools and frameworks learned in the course. We will use interactive workshops to deep dive into specific topics, from waste segregation to advanced recycling technologies. The curriculum is designed to be a collaborative experience where participants can share their unique challenges and innovative solutions. Our trainers, with extensive experience in the field, will provide direct feedback and guidance throughout the course. BIG BEN Training Center is committed to providing a dynamic and practical learning environment, ensuring that participants leave with the skills and confidence to lead effective waste management initiatives.

Course Agenda (Course Units):

Unit One: Foundations of Modern Waste Management

- The global challenge of waste generation.
- Understanding the waste hierarchy.
- Introduction to the circular economy model.
- Waste characterization and auditing.
- Legal and regulatory frameworks.
- Environmental and economic benefits of proper waste management.
- Case studies of sustainable waste systems.

Unit Two: Waste Reduction and Reuse Strategies

- Source reduction and product design.
- Implementing effective reuse programs.
- Employee engagement and behavioral change.
- Best practices for commercial waste management.
- Managing food waste and organic materials.
- Reducing single-use plastics.
- Developing a zero-waste strategy.

Unit Three: Recycling Technologies and Processes

- · Overview of mechanical and chemical recycling.
- Recycling plastics, paper, and glass.
- E-waste management and recovery of valuable resources.
- Composting and anaerobic digestion.
- Innovations in materials recovery facilities (MRFs).
- The role of technology in sorting and processing.
- Managing construction and demolition waste.

Unit Four: Hazardous and Special Wastes

- Classification and handling of hazardous waste.
- Legal compliance and documentation.
- Safe disposal methods.
- Biomedical and medical waste management.
- Managing industrial waste streams.
- Sustainable alternatives for hazardous materials.
- Risk assessment and mitigation.

Unit Five: Strategic Planning for the Future

- Developing a sustainable waste management plan.
- Measuring and reporting on performance.
- Supply chain optimization for waste reduction.
- Financial analysis and cost-benefit of recycling.
- Emerging trends and future innovations.
- Leveraging smart technology in waste management.
- Leadership in a circular economy.

FAO:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How can we redesign our current systems to see waste not as an end product to be disposed of, but as a valuable resource that can be reintegrated into the production cycle?

What unique qualities does this course offer compared to other courses?

This training course is unique because it provides a dedicated, strategic focus on modern waste management and the latest innovations in recycling. While other courses may cover general environmental topics, our curriculum is designed to empower professionals with the specific skills needed to implement a circular economic model within their organizations. The program is a hands-on experience, with exercises that directly simulate the challenges and decisions involved in a waste audit or the implementation of new recycling technologies. We go beyond theoretical concepts to provide a clear, actionable roadmap for balancing regulatory compliance with long-term profitability and sustainability. This course is for professionals who want to lead their industry toward a more efficient and environmentally responsible future.