United Nations Institute for Training and Research

Unitar Online Catalogue

Waste Management and Circular Economy

Planet

□□ :	Course
□□ :	Web-based
□□ :	1 Days
□□□□ :	Chemicals and Waste Management
□□ :	http://www.unitar.org
□□ :	US$0.00
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□□ :	SEPA

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Welcome to the Waste management course! In this session you will be introduced to the challenges of waste and the concept of circular economy.

The course information is based on the latest reports on waste management and circular economy, as well as relevant country case studies. The methodological part builds on UNITAR's Guidance Series for designing and implementing national chemicals and waste management systems (Guidelines for national waste

management strategies: moving from challenges to opportunities).

The course also draws heavily on the Basel Convention Guidance Manuals for Govern- ments that provide countries with a suggested methodology for undertaking the design and implementation of a national waste management system.

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After taking the course, participants will be able to:

- Understand the importance of sound waste management in relation to SDGs and reduction of poverty;
- Identify tools that can be used on effective planning for waste management;
- Discuss how to promote effective governance of waste among key stakeholders;
- Identify Policy instruments to be used on waste management and waste reduction;
- Discuss how circular economy approaches can be supported through waste management.
- Understand the importance of biowaste management and its contribution to economic growth;

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Module 1 - Waste basics

Learning objectives

- Understand the concept of waste and circular economy
- Describe the elements of a waste management system
- Understand the role of each stakeholder involved in waste management and describe the different tools/instruments to prevent waste

Content

1. Introduction to waste and circular economy;
2. Sources of waste and municipal waste in low and middle income countries;
3. Special waste fractions;
4. Institutional and organizational considerations around waste management;
5. Waste prevention and 7Rs principles.

Module 2 - Municipal solid waste collection systems and disposal

Learning objectives

- Identify the waste collection service infrastructure and its functioning
- Understand waste management planning and the importance of waste quantification

Content

1. Introduction to collection services and infrastructures;
2. Examples of colection service and infrastructure;
3. Quantification of total generated MSW;
4. Quantification of collection rate;
5. Institutional and organizational considerations around waste collection;
6. Disposal.

Module 3 - Policy instruments on waste management

Learning objectives

- Identify and describe the different policy instruments used on waste management and the role of industry and citizens in waste management
- Identify waste management financing mechanisms, including EPR
- Describe policy interventions that can stimulate investment in waste management

Content

1. Introduction;
2. Regulatory instruments and enforcement matters;
3. Economic instruments;
4. Extended producer responsibility (EPR);
5. Communicative instruments;
6. Monitoring and reporting.

Module 4 - Circular economy

Learning objectives

- Define circular economy in relation to waste management
- Understand poverty reduction in relation to the application of the circular economy approach

Content

1. The Circular Economy System and definitions;
2. Materials Flow;
3. Environmental and economic benefits;
4. Circular Economy and social benefits - reduction of poverty in the informal sector;
5. Sectorial opportunities - examples;
6. Circular Economy case studies;

Module 5 - Biowaste composting

Learning objectives

- Understand the principles of Biowaste and its importance on waste minimization
- Describe the food waste situation and your role in its prevention

Content

1. Definition of Biowaste, physicochemical characteristics and examples;
2. Sourcing biowaste; the issue of waste segregation and packaging;
3. Food waste;
4. Composting as a process;
5. Composting technologies;
6. Mixing biowaste types for suitable composting;
7. Anaerobic digestion (biogas);
8. Overview of biowaste treatment technologies;
9. Legislative considerations.

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The course, which contains about 6 hours of content, is self-paced and adapted to the schedule of full-time working professionals. We advise short or medium sessions from 10 to 60 minutes per day, depending on the section studied.

Participants are provided with the opportunity to learn through various experiences: absorb (read); interact (activity); and reflect (relate to one’s own reality). This includes videos, reading materials and quizzes.

The 5 modules of the course are self-standing and can be completed in any order. However, it is recommended that learners complete the Introductive module first.

All sections conclude with a quiz assessing the knowledge learners will acquire (each quiz requires a score of 70% to pass).

A certificate of completion will be awarded to all participants who have successfully completed all 5 modules of the course.

Additionnally, participants will be requested to provide feedback on the course by filling in a feedback form after completing all the modules, accessible anytime.

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This e-learning course is intented for local government officials (e.g. municipal, city or district level) and local technical officers engaged in designing and implementing waste management programmes, assumed to have an education level of secondary/high school and higher.

It can also be accessed by other stakeholders, including for example:

- Government officials who are not already specialists on the subject in question
- NGOs (for themselves and for training others)
- Students and other interested persons with a basic intellectual education

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TECHNICAL REQUIREMENTS

The course can be completed on a computer (Windows and Mac) or a mobile device. Any internet browser is compatible as long as it has been updated to its latest version.