



## ECOSYSTEM SERVICES TRAINING



MTBM Group Sdn. Bhd. (1600656-M)

Level 8, MCT Tower, Sky Park, One City, Jalan USJ 25/1, 47650 Subang Jaya, Selangor

**Course Title:** Continuous Environmental Monitoring System (CEMS) Training

**Course Validity:** 2 Days

**Validity:** Not Applicable

**HRD Corp Scheme:** Claimable

## **INTRODUCTION**

This training provides a comprehensive understanding of ecosystem services, their functions, and their value in supporting human well-being, environmental health and organisational sustainability. It covers provisioning, regulating, supporting and cultural services, along with the methods used to assess, monitor and protect ecosystems. Participants will gain practical knowledge on integrating ecosystem service considerations into project planning, impact assessments, land-use decisions and sustainability strategies aligned with national environmental policies and global conservation frameworks.

## **OBJECTIVE(S):**

- Understand the concept of ecosystem services and their classifications.
- Identify key ecosystem functions that support biodiversity and human life.
- Assess the benefits provided by natural ecosystems to organisations and communities.
- Recognise threats to ecosystem services caused by human activities.
- Apply ecosystem service assessment and valuation methods.
- Integrate ecosystem services into environmental planning and decision-making.
- Strengthen sustainability strategies through nature-positive approaches.
- Support conservation and restoration efforts using ecosystem-based management.

**TARGET GROUP(S):**

- Environmental Officers and Executives
- Sustainability and ESG Teams
- Land-Use Planners and Project Managers
- Engineers and Facility Personnel
- Conservation and Biodiversity Practitioners
- OSH and Environmental Management Personnel
- Anyone involved in environmental planning or natural resource management

**ENTRY REQUIREMENT(S):**

- Able to read, write and communicate verbally in Malay/English

**TOPIC(S):**

1. Introduction to Ecosystem Services and Natural Capital
2. Classification of Ecosystem Services (Provisioning, Regulating, Supporting and Cultural)
3. Key Ecosystem Functions: Water, Soil, Air and Biodiversity
4. Human Dependency on Ecosystems and Environmental Well-Being
5. Threats to Ecosystem Services: Pollution, Habitat Loss and Climate Change
6. Ecosystem Service Assessment Methods and Valuation Techniques
7. Integrating Ecosystem Services into Environmental Management Systems
8. Ecosystem-Based Management and Conservation Planning
9. Nature-Based Solutions for Climate Adaptation and Mitigation
10. Case Studies, Field Scenarios and Sustainability Action Planning

**LIST OF REFERENCE BOOK(S):**

- Millennium Ecosystem Assessment Reports
- National Policy on Biological Diversity (Malaysia)
- UNEP Ecosystem Services Guidelines
- Environmental Quality Act 1974
- ISO 14001:2015 (Environmental Management and Ecosystem Considerations)

**LIST OF TEACHING AID(S):**

- LCD projector
- Ecosystem service diagrams and natural capital visuals
- Case study worksheets
- Valuation templates
- Flip chart or whiteboard

**METHODOLOGY(S):**

- Interactive lecture
- Group discussion
- Case studies
- Scenario-based activities
- Ecosystem service assessment exercises

## TRAINING SCHEDULE

### Day 1

Time	Activity / Topic
8:30 am – 9:00 am	Registration and Introduction
9:00 am – 10:15 am	Topic 1: Introduction to Ecosystem Services
10:15 am – 10:30 am	<b>Morning Tea Break</b>
10:30 am – 12:30 pm	Topic 2–3: Classification and Key Ecosystem Functions
12:30 pm – 1:30 pm	<b>Lunch Break</b>
1:30 pm – 3:30 pm	Topic 4: Human Dependency and Environmental Benefits
3:30 pm – 3:45 pm	<b>Afternoon Tea Break</b>
3:45 pm – 5:00 pm	Topic 5: Threats to Ecosystem Services

## TRAINING SCHEDULE

### Day 2

Time	Activity / Topic
8:30 am – 9:00 am	Recap of Day 1
9:00 am – 10:15 am	Topic 6: Calibration, Zero and Span Checks
10:15 am – 10:30 am	<b>Morning Tea Break</b>
10:30 am – 12:30 pm	Topic 7–8: Data Validation, Reporting and Troubleshooting
12:30 pm – 1:30 pm	<b>Lunch Break</b>
1:30 pm – 3:30 pm	Topic 9: CEMS Integration with EMS and Process Controls
3:30 pm – 3:45 pm	<b>Afternoon Tea Break</b>
3:45 pm – 5:00 pm	Topic 10: Case Studies, Simulation and Final Review