



CARBON REDUCTION AND DECARBONISATION FUNDAMENTALS 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: Carbon Reduction and Decarbonisation Fundamentals Training

Course Validity: 2 Days

Validity: Not Applicable

HRD Corp Scheme: Claimable

INTRODUCTION

This training provides participants with a foundational understanding of carbon reduction, decarbonisation pathways, and organisational climate strategies. It explores key climate science principles, emission reduction approaches, energy efficiency methods, low-carbon technologies, and transition planning aligned with international sustainability frameworks. Participants will learn practical tools to identify carbon hotspots, plan reduction initiatives, and support organisational pathways toward net-zero emissions.

OBJECTIVE(S):

- Understand climate change fundamentals and carbon reduction principles.
- Identify organisational emission sources and carbon hotspots.
- Apply strategies for reducing Scope 1, Scope 2 and Scope 3 emissions.
- Explore low-carbon technologies and energy efficiency opportunities.
- Understand decarbonisation frameworks, roadmaps and transition pathways.
- Develop practical organisational decarbonisation plans.
- Strengthen climate governance and sustainability practices.
- Support long-term net-zero planning and stakeholder communication.

TARGET GROUP(S):

- Sustainability and ESG Teams
- Environmental Officers and Executives
- Facility Managers and Energy Managers
- Engineers, Technicians and Operations Personnel
- Corporate Strategy and Compliance Teams
- Consultants and Analysts
- Anyone involved in organisational climate strategy

ENTRY REQUIREMENT(S):

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

TOPIC(S):

1. Climate Change and Carbon Fundamentals
2. Greenhouse Gas Emissions and Organisational Sources
3. Identifying Carbon Hotspots and Baseline Assessment
4. Energy Efficiency Measures and Resource Optimisation
5. Low-Carbon Technologies and Renewable Energy Options
6. Scope 1, Scope 2 and Scope 3 Reduction Strategies
7. Decarbonisation Frameworks and Transition Pathways
8. Carbon Management Tools and Decision-Making Models
9. Stakeholder Engagement and Sustainability Reporting
10. Case Studies and Decarbonisation Planning Workshop

LIST OF REFERENCE BOOK(S):

- GHG Protocol Standards
- IPCC Climate Change Assessment Reports
- National Low Carbon Policy and Energy Roadmap References
- ISO 14001:2015 (Environmental Aspects and Management)
- Net-Zero and Science-Based Target Initiative (SBTi) Guidelines

LIST OF TEACHING AID(S):

- LCD projector
- Carbon reduction templates
- Emission factor references
- Case study worksheets
- Flip chart or whiteboard

METHODOLOGY(S):

- Interactive lecture
- Group discussion
- Case studies
- Practical exercises
- Planning workshop

TRAINING SCHEDULE

Day 1

| Time | Activity / Topic |
|---------------------|--|
| 8:30 am – 9:00 am | Registration and Introduction |
| 9:00 am – 10:15 am | Topic 1: Climate Change and Carbon Fundamentals |
| 10:15 am – 10:30 am | Morning Tea Break |
| 10:30 am – 12:30 pm | Topic 2–3: GHG Emissions and Carbon Hotspots |
| 12:30 pm – 1:30 pm | Lunch Break |
| 1:30 pm – 3:30 pm | Topic 4: Energy Efficiency and Resource Optimisation |
| 3:30 pm – 3:45 pm | Afternoon Tea Break |
| 3:45 pm – 5:00 pm | Topic 5: Low-Carbon Technologies and Renewable Options |

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: Scope 1, Scope 2 and Scope 3 Reduction Strategies |
| 10:15 am – 10:30 am | Morning Tea Break |
| 10:30 am – 12:30 pm | Topic 7–8: Decarbonisation Frameworks and Tools |
| 12:30 pm – 1:30 pm | Lunch Break |
| 1:30 pm – 3:30 pm | Topic 9: Stakeholder Engagement and Climate Reporting |
| 3:30 pm – 3:45 pm | Afternoon Tea Break |
| 3:45 pm – 5:00 pm | Topic 10: Decarbonisation Planning Workshop and Final Review |