



LIFE CYCLE ASSESSMENT (LCA) FOR EPD 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: Life Cycle Assessment (LCA) for EPD Training

Course Validity: 1 Day

Validity: Not Applicable

HRD Corp Scheme: Claimable

INTRODUCTION

This training provides participants with a complete understanding of Life Cycle Assessment (LCA) as required for the development of Environmental Product Declarations (EPDs). The programme explains ISO 14040 and ISO 14044 standards, data collection requirements, system boundaries, functional units, environmental impact categories and modelling approaches. Participants will learn how LCA results feed into EPD reports, how to interpret Product Category Rules (PCRs) for LCA studies and how to organise datasets for third-party verification. Practical insights on software tools, data quality rules and lifecycle inventory (LCI) preparation are also covered to support accurate, credible and verifiable EPD submissions.

OBJECTIVE(S):

- Understand the principles and structure of LCA under ISO 14040 and ISO 14044
- Learn how LCA is used as the basis for Type III EPD development
- Understand functional unit, system boundaries and lifecycle stages
- Identify data collection requirements, datasets and environmental impact categories
- Learn how to model, interpret and document LCA results for EPD reporting
- Strengthen organisational capability in preparing LCA studies for verification

TARGET GROUP(S):

- Manufacturers and producers
- Sustainability and environmental teams
- LCA practitioners
- QA/QC executives
- R&D and product development personnel
- Procurement and supply chain personnel

ENTRY REQUIREMENT(S):

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

TOPIC(S):

1. Introduction to Life Cycle Assessment
2. Overview of ISO 14040 and ISO 14044 Standards
3. Goal and Scope Definition for EPD-Based LCA
4. Functional Unit, System Boundaries and Lifecycle Stages
5. Data Collection, Inventory Analysis (LCI) and Data Quality Requirements
6. Environmental Impact Assessment (LCIA) Categories and Methods
7. Interpretation of Results and EPD-Relevant Outputs
8. Relationship Between LCA, PCR Requirements and EPD Structure
9. LCA Software Tools, Databases and Modelling Guidance
10. Preparing LCA Documentation for Third-Party Verification

LIST OF REFERENCE BOOK(S):

- ISO 14040 and ISO 14044 Life Cycle Assessment Standards
- ISO 14025 Environmental Declarations – Type III
- Relevant Product Category Rules (PCRs)
- LCA Databases and Software Documentation (e.g., SimaPro, GaBi, OpenLCA)

LIST OF TEACHING AID(S):

- LCD projector
- Computer
- Whiteboard with accessories

METHODOLOGY(S):

- Lecture
- Group discussions
- Case studies
- Implementation workshop

TRAINING SCHEDULE

Day 1

Time	Activity / Topic
8:30 am – 9:00 am	Registration and Introduction
9:00 am – 9:45 am	Topic 1: Overview of LCA and ISO 14040/14044
9:45 am – 10:30 am	Topic 2: Goal and Scope Definition for EPD-Driven LCA
10:30 am – 10:45 am	Morning Tea Break
10:45 am – 11:30 am	Topic 3: Functional Unit, System Boundaries and Lifecycle Stages
11:30 am – 12:30 pm	Topic 4: Data Collection, LCI Development and Data Quality Requirements
12:30 pm – 1:30 pm	Lunch Break
1:30 pm – 2:30 pm	Topic 5: Environmental Impact Categories and LCIA Modelling
2:30 pm – 3:30 pm	Topic 6: Interpretation of LCA Results and EPD Integration
3:30 pm – 3:45 pm	Afternoon Tea Break
3:45 pm – 5:00 pm	Workshop: LCA Modelling for EPD and Q&A