MTBM

PRODUCT CARBON FOOTPRINT (PCF) BASICS TRAINING

MTBM Group Sdn. Bhd. (1600656-M)

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Course Title: Product Carbon Footprint (PCF) Basics Training

Course Validity: 2 Days

Validity: Not Applicable

HRD Corp Scheme: Claimable

INTRODUCTION

This training provides participants with foundational knowledge of Product Carbon Footprint (PCF) concepts, methodologies and requirements for quantifying greenhouse gas emissions associated with products throughout their life cycle. It introduces key standards, calculation principles, system boundaries, emission factors and reporting expectations. Participants will learn how to interpret PCF guidance, apply basic calculation methods and understand the role of PCF in sustainability, carbon reduction and product environmental performance improvement.

OBJECTIVE(S):

- Understand the definition, purpose and scope of Product Carbon Footprint (PCF)
- Learn core concepts in carbon accounting and life cycle–based emissions
- Strengthen skills in identifying system boundaries and life cycle stages
- Improve capability in selecting emission factors and data sources
- Understand GHG calculation principles and PCF methodology requirements
- Support organisations in developing credible and transparent PCF results
- Enhance awareness of PCF reporting, communication and claims
- Build readiness for further PCF, LCA and decarbonisation programmes

TARGET GROUP(S):

- LCA, ESG and sustainability teams
- Product development & engineering personnel
- EPD project teams and environmental consultants
- QA/QC, compliance and technical documentation teams
- Organisations preparing EPDs for global markets

ENTRY REQUIREMENT(S):

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

TOPIC(S):

1. Introduction to Product Carbon Footprint & Global Context
2. PCF Standards (ISO 14067) & Carbon Accounting Principles
3. Life Cycle Stages, System Boundaries & Functional Unit Basics
4. Data Requirements, Emission Factors & Calculation Approaches
5. Direct & Indirect Emissions Classification (Scope 1, 2, 3)
6. PCF Reporting Requirements & Documentation
7. Carbon Reduction Opportunities Based on PCF Results
8. Developing Basic PCF Assessments & Improvement Actions

LIST OF REFERENCE BOOK(S):

- ISO 14067: Product Carbon Footprint Standards
- GHG Protocol Product Standard
- IPCC Emission Factor Guidance
- Carbon Accounting & Life Cycle Assessment References

LIST OF TEACHING AID(S):

- LCD projector
- Computer
- Whiteboard with accessories

METHODOLOGY(S):

- Lecture
- Case studies
- Group discussions
- PCF mapping & emission estimation exercises
- Practical carbon footprint calculation workshops

TRAINING SCHEDULE

Day 1

Time	Activity / Topic
8:30 am – 9:00 am	Registration and Introduction
9:00 am – 9:45 am	Topic 1: Introduction to PCF & Global Carbon Context
9:45 am – 10:30 am	Topic 2: ISO 14067 & Carbon Accounting Principles
10:30 am – 10:45 am	**Morning Tea Break**
10:45 am – 11:30 am	Topic 3: Life Cycle Stages, Boundaries & Functional Unit
11:30 am – 12:30 pm	Topic 4: Data Needs, Emission Factors & Calculation Basics
12:30 pm – 1:30 pm	**Lunch Break**
1:30 pm – 2:30 pm	Case Study: Reviewing Sample PCF Assessments
2:30 pm – 3:30 pm	Workshop: Mapping Product Life Cycle Emissions
3:30 pm – 3:45 pm	**Afternoon Tea Break**
3:45 pm – 5:00 pm	Practical Exercise: Estimating Emissions by Stages

TRAINING SCHEDULE

Day 2

Time	Activity / Topic
8:30 am – 9:00 am	Recap of Day 1 & Q&A
9:00 am – 9:45 am	Topic 5: Scope 1–2–3 Emissions Classification
9:45 am – 10:30 am	Topic 6: PCF Reporting Requirements & Documentation
10:30 am – 10:45 am	**Morning Tea Break**
10:45 am – 11:30 am	Topic 7: Identifying Reduction Opportunities Based on PCF
11:30 am – 12:30 pm	Practical: Using Emission Factors in PCF Calculations
12:30 pm – 1:30 pm	**Lunch Break**
1:30 pm – 2:30 pm	Topic 8: Developing Basic PCF Assessments
2:30 pm – 3:30 pm	Group Exercise: Drafting a Simple PCF Summary
3:30 pm – 3:45 pm	**Afternoon Tea Break**
3:45 pm – 5:00 pm	Final Review, Q&A & Closing