Carbon Footprint Management in Industry Training Course

Professional Development Training Course Outline

Category	General Training	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Carbon Footprint Management in Industry Training Course is designed to equip professionals with cutting-edge knowledge and practical tools to measure, reduce, and strategically manage greenhouse gas (GHG) emissions, carbon accounting, and sustainable industrial operations. As global industries face increasing pressure from ESG compliance frameworks, net-zero targets, and carbon taxation policies, organizations must adopt robust decarbonization strategies that align with international standards such as ISO 14064, GHG Protocol, and Science Based Targets initiative (SBTi). This course delivers actionable insights into carbon auditing, life cycle assessment (LCA), energy optimization, and climate risk reporting to drive measurable environmental impact reduction.

With rising demand for green manufacturing, climate disclosure regulations, and corporate sustainability leadership, this program bridges the gap between policy and practice. Participants will learn how to implement carbon tracking systems, sustainability reporting dashboards, renewable energy integration, and circular economy models across industrial operations. The training emphasizes real-world applications, enabling professionals to transform carbon data into strategic decisions that enhance operational efficiency, brand reputation, and regulatory compliance in a rapidly evolving global economy.

Programme Curriculum

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Course Duration

5 days

Course Objectives

1. Master carbon footprint measurement techniques for industrial processes
2. Apply GHG Protocol standards for Scope 1, 2, and 3 emissions
3. Develop net-zero transition strategies aligned with global climate goals
4. Implement carbon accounting systems and ESG reporting frameworks
5. Conduct life cycle assessment (LCA) for industrial products
6. Optimize energy efficiency and decarbonization pathways
7. Understand carbon credit trading and offset mechanisms
8. Integrate renewable energy solutions in manufacturing systems
9. Assess climate risk and regulatory compliance requirements
10. Design sustainable supply chain and procurement strategies
11. Use carbon analytics tools and sustainability dashboards
12. Apply circular economy principles in industrial operations
13. Build organizational capability for climate leadership and ESG transformation

Target Audience

1. Sustainability Managers & ESG Officers
2. Environmental Engineers & Consultants
3. Industrial Operations Managers
4. Energy Managers in Manufacturing Plants
5. Corporate Strategy & Compliance Teams
6. Government Environmental Regulators
7. Supply Chain & Procurement Professionals
8. Climate Change & Sustainability Analysts

Course Modules

Module 1: Fundamentals of Carbon Footprint & Climate Science

- Greenhouse gas basics and global warming mechanisms
- Industrial emission sources identification
- Carbon footprint calculation methodologies
- Introduction to Scope 1, 2, 3 emissions

- Case Study: Emission mapping in a cement manufacturing plant

Module 2: GHG Protocol & ISO 14064 Standards

- Overview of GHG Protocol frameworks
- ISO 14064 compliance requirements
- Emission verification and reporting systems
- Corporate carbon disclosure practices
- Case Study: Multinational company ESG reporting transformation

Module 3: Carbon Accounting & ESG Reporting

- Carbon inventory development techniques
- ESG data collection and validation
- Sustainability reporting frameworks
- Digital carbon tracking tools
- Case Study: Automotive industry ESG dashboard implementation

Module 4: Life Cycle Assessment (LCA) in Industry

- Product life cycle emission analysis
- LCA software tools and methodologies
- Raw material sourcing impact assessment
- Environmental impact reduction strategies
- Case Study: Plastic packaging lifecycle optimization

Module 5: Energy Efficiency & Decarbonization

- Industrial energy audit techniques
- Fuel switching and electrification strategies
- Waste heat recovery systems
- Smart manufacturing and IoT energy optimization
- Case Study: Steel plant energy efficiency transformation

Module 6: Renewable Energy Integration

- Solar, wind, and biomass adoption in industry
- Power Purchase Agreements (PPAs)
- On-site renewable energy systems
- Energy storage and grid balancing
- Case Study: Factory transition to solar-powered operations

Module 7: Carbon Trading & Offset Mechanisms

- Carbon markets and pricing mechanisms
- Voluntary vs compliance carbon markets
- Carbon credit generation and verification
- Offset project development
- Case Study: Forestry-based carbon offset project in Africa

Module 8: Net-Zero Strategy & Circular Economy

- Net-zero roadmap development

- Circular economy principles in production
- Waste minimization and resource efficiency
- Climate risk governance and corporate strategy
- Case Study: Zero-waste manufacturing facility model

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price

21 Sep 2026	25 Sep 2026	Online	$1,000
21 Sep 2026	25 Sep 2026	Physical	$1,500
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

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