

# Carbon Accounting and Emissions Reporting (GHG Protocol) Training Course

## Professional Development Training Course Outline

|          |                                           |               |                         |
|----------|-------------------------------------------|---------------|-------------------------|
| Category | Environmental Management and Conservation | Duration      | 10 Days                 |
| Base Fee | \$3,000 USD                               | Delivery Mode | Online / On-site Hybrid |

### Course Introduction

Carbon Accounting and Emissions Reporting (GHG Protocol) Training Course provides essential knowledge and practical skills for professionals to accurately quantify, manage, and report greenhouse gas (GHG) emissions. In a world of increasing climate regulations, investor scrutiny, and consumer demand for corporate sustainability, mastering **carbon accounting** is a critical business imperative. This program focuses on the internationally recognized **GHG Protocol Corporate Standard** and its methodologies, empowering you to navigate the complexities of emissions measurement, set ambitious decarbonization strategies, and ensure regulatory compliance.

Participants will gain deep expertise in calculating **Scope 1, Scope 2, and Scope 3 emissions**, translating complex data into actionable insights. Through a blend of theoretical instruction, hands-on exercises, and **real-world case studies**, you will learn to build a robust carbon inventory, identify emission hotspots, and develop a transparent **carbon management** and **sustainability reporting** strategy. This course is designed to future-proof your organization, enhance your professional credibility, and position you as a leader in the global transition to a low-carbon economy.

### Programme Curriculum

#### Carbon Accounting and Emissions Reporting (GHG Protocol) Training Course

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### Course Duration

10 days

### Course Objectives

Upon completion of this course, you will be able to:

1. Master the principles of the GHG Protocol Corporate Standard.
2. Accurately quantify Scope 1, 2, and 3 emissions for an organization.
3. Set appropriate organizational and operational boundaries for a GHG inventory.
4. Apply carbon accounting methodologies to gather and manage activity data.
5. Calculate emissions using the correct emission factors and global warming potentials (GWPs).
6. Understand and implement data quality management for an accurate inventory.
7. Develop and implement emissions reduction strategies to achieve net-zero targets.
8. Prepare GHG emissions reports in line with global frameworks like CDP, TCFD, and CSRD.
9. Identify and engage supply chain partners for value chain decarbonization.
10. Navigate the process of third-party verification for GHG inventories.
11. Link carbon performance to corporate financial disclosures and ESG reporting.
12. Use carbon accounting software and tools for efficient data management.
13. Integrate climate risk and opportunity analysis into business strategy.

### Organizational Benefits

- Proactively meet tightening **climate regulations** and avoid penalties.
- Demonstrate commitment to **environmental stewardship** to attract and retain customers, investors, and talent.
- Identify and eliminate inefficiencies, particularly in energy use and supply chain logistics.
- Gain an edge in the market by showcasing verifiable **ESG credentials** and a commitment to sustainability.
- the requirements of **ESG-focused investors** and access new capital.
- Integrate **decarbonization roadmaps** into long-term strategic planning.
- Foster collaboration and drive emissions reductions across the entire **value chain**.

### Target Audience

1. Sustainability & ESG Professionals
2. Environmental Managers and EHS Specialists
3. Financial Accountants and Auditors

4. Supply Chain & Procurement Managers
5. Corporate Social Responsibility (CSR) Officers
6. Business Leaders and Decision-Makers
7. Environmental Consultants
8. Risk & Compliance Officers

## Course Modules

### 1. Foundations of Carbon Accounting & Climate Science

- Introduction to **climate change** and the **greenhouse effect**.
- Overview of the **GHG Protocol Corporate Standard**.
- Defining key terms: **carbon footprint**, **GHG inventory**, and **CO2e**.
- Global climate agreements and the drive for **decarbonization**.
- **Case Study**: A global manufacturing company's journey to understand its initial carbon footprint and establish a baseline year.

### 2. Setting Organizational & Operational Boundaries

- Understanding the difference between **Equity Share** and **Control** approaches.
- Determining the appropriate **organizational boundary** for the inventory.
- Defining **operational boundaries** and identifying all emission sources.
- Handling joint ventures, outsourced activities, and other complex scenarios.
- **Case Study**: A logistics firm must decide on the boundaries for its GHG inventory, including its fleet, warehouses, and subcontracted transport.

### 3. GHG Inventory: Scope 1 Emissions

- Identification and data collection for **Scope 1 emissions**.
- Calculating emissions from stationary combustion (e.g., boilers).
- Quantifying emissions from mobile combustion (e.g., company vehicles).
- Accounting for fugitive emissions and process emissions.
- **Case Study**: A chemical company analyzes its direct emissions from on-site manufacturing processes and refrigeration leaks to prepare its Scope 1 inventory.

### 4. GHG Inventory: Scope 2 Emissions

- Understanding **Scope 2 emissions** from purchased electricity, steam, heat, and cooling.
- Applying the **Market-Based** vs. **Location-Based** accounting methods.
- Collecting data from utility bills and renewable energy certificates.
- Calculating emissions using grid-average and supplier-specific emission factors.
- **Case Study**: A large data center evaluates its Scope 2 emissions, comparing the impact of using renewable energy credits versus standard grid electricity.

### 5. GHG Inventory: Scope 3 Emissions - The Value Chain

- Deep dive into the 15 categories of **Scope 3 emissions**.
- Prioritizing and collecting data for the most relevant categories (e.g., purchased goods and services, business travel).
- Methodologies for measuring **upstream** and **downstream** emissions.
- Engaging suppliers to gather accurate data for **supply chain decarbonization**.

- **Case Study:** A retail giant calculates its Scope 3 emissions, focusing on the carbon intensity of its product sourcing, customer product use, and end-of-life disposal.

## 6. Data Management & Quality Assurance

- Establishing a robust system for **data collection and management**.
- Identifying and addressing common data gaps and uncertainties.
- Implementing internal controls and **quality assurance** processes.
- Using **emission factors databases** and ensuring their accuracy.
- **Case Study:** A financial services firm develops a data management plan to track its emissions from employee commuting and business travel across multiple international offices.

## 7. Setting Targets & Reduction Strategies

- Understanding different types of targets, from incremental to **Science-Based Targets (SBTs)**.
- Developing a **decarbonization roadmap** with short, medium, and long-term goals.
- Strategies for reducing emissions across all scopes
- Introduction to **carbon offsetting** and **carbon credits**.
- **Case Study:** A technology company works to set a net-zero target, outlining specific reduction initiatives for its data centers and employee work-from-home emissions.

## 8. GHG Reporting & Disclosure Frameworks

- Preparing an official **GHG inventory report**.
- Navigating key reporting frameworks: **CDP**, **TCFD**, and emerging standards like **CSRD**.
- Understanding the link between GHG reporting and **ESG disclosures**.
- Ensuring transparency and completeness in public reporting.
- **Case Study:** A publicly-traded company drafts its CDP and TCFD responses, highlighting its climate governance, strategy, and risk management approach.

## 9. Verification & Assurance

- The importance of **third-party verification** for credibility.
- Understanding the **ISO 14064** standard for GHG inventories.
- The verification process: from pre-engagement to final assurance statement.
- What to expect during a **GHG audit**.
- **Case Study:** A food and beverage company prepares its GHG inventory for third-party verification, addressing a key auditor finding on its Scope 3 data.

## 10. Carbon Accounting Software & Tools

- Evaluating different **carbon management software** platforms.
- Leveraging software for automated data collection, calculation, and reporting.
- Using tools to model different **decarbonization scenarios**.
- Integrating carbon data with existing enterprise systems.
- **Case Study:** A small business selects and implements a cloud-based carbon accounting platform to streamline its annual inventory and reporting process.

## 11. Sector-Specific Applications

- Applying the GHG Protocol to different industries (e.g., finance, technology, real estate).
- Exploring unique challenges and emission sources within specific sectors.

- Case studies and examples tailored to various business models.
- Discussing specific **emission factors** for different industries.
- **Case Study:** An airline analyzes its emissions from jet fuel and business travel, while a commercial real estate firm focuses on emissions from its portfolio of buildings and tenant energy use.

## 12. Integrating Climate Risk into Business Strategy

- Understanding **physical** and **transition climate risks**.
- Using GHG data to inform risk management and strategic planning.
- Identifying climate-related business opportunities.
- Communicating climate strategy to stakeholders.
- **Case Study:** An energy company conducts a climate risk assessment to understand how future regulations and market shifts could impact its business model.

## 13. Building a Culture of Decarbonization

- Engaging employees and leadership in the **sustainability journey**.
- Creating internal carbon reduction teams and initiatives.
- Communicating progress and celebrating milestones.
- Embedding **carbon management** into daily operations.
- **Case Study:** An organization launches an employee-led initiative to reduce office-related emissions and tracks the progress of its various projects.

## 14. Advanced Scope 3 Topics

- Advanced methodologies for calculating emissions from investments and leased assets.
- Handling complex **supply chain emissions** from global vendors.
- Using proxies and estimations for data-scarce categories.
- Introduction to the **GHG Protocol Scope 3 Standard**.
- **Case Study:** A private equity firm calculates the emissions associated with its portfolio companies and develops a strategy to influence their decarbonization.

## 15. Future Trends in Carbon Accounting

- Updates on evolving regulatory landscapes, including the **SEC's climate disclosure rules**.
- The rise of **AI-powered carbon accounting** and data analytics.
- Emerging standards for **Product Carbon Footprints** and **GHG removals**.
- The role of **carbon pricing** and internal carbon fees.
- **Case Study:** A forward-thinking company explores the use of blockchain technology to verify its carbon credits and ensure transparency.

## Training Methodology

Our training methodology is a blend of interactive and practical learning, ensuring participants not only understand the concepts but can also apply them effectively.

- Interactive Lectures: Led by industry experts, covering key theories and standards.
- Hands-on Exercises & Workshops.
- Real-World Case Studies.
- Group Discussions.
- Tools & Templates: Provide ready-to-use templates and guidance for reporting.

### Register as a group from 3 participants for a Discount

**Send us an email: [info@fineskilltrainingcenter.org](mailto: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 commencement 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

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

**Register Online Now**

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