Carbon Footprint Measurement and Reduction Strategies Training Course



23 - 27 Nov 2026

Cape town

4600 € (Per Person)

Ref: #SUS3846_284135

Course Introduction / Overview:

In an era where corporate responsibility and environmental stewardship are paramount, understanding and managing an organization's carbon footprint is no longer optional but a critical component of sustainable business strategy. This comprehensive training course is designed to equip professionals with the essential knowledge and practical skills to measure, manage, and strategically reduce their organization's greenhouse gas (GHG) emissions. Drawing on established frameworks like the GHG Protocol, the course demystifies the complexities of carbon accounting, from defining operational boundaries to calculating Scope 1, 2, and 3 emissions. As highlighted by experts like Mike Berners-Lee in his influential work "How Bad Are Bananas? The Carbon Footprint of Everything," quantifying impact is the first step toward meaningful change. BIG BEN Training Center has developed this program to move beyond mere compliance, empowering participants to drive genuine decarbonization initiatives, identify cost-saving efficiencies, and enhance their company's reputation. This course provides a clear roadmap for developing robust carbon reduction plans, evaluating offsetting options, and aligning corporate objectives with global net-zero targets, transforming environmental challenges into strategic opportunities for innovation and long-term growth.

Target Audience / This training course is suitable for:

- Sustainability Managers and ESG Specialists.
- Environmental Health and Safety (EHS) Officers.
- Operations and Facilities Managers.
- Supply Chain and Procurement Professionals.
- Corporate Strategy and Business Development Executives.
- Finance and Investment Analysts focused on ESG metrics.
- Compliance and Risk Management Officers.
- Product Development and R&D Managers.
- Consultants in environmental and sustainability fields.
- Anyone aspiring to lead climate action initiatives within their organization.

Target Sectors and Industries:

- Manufacturing and Industrial Production.
- Energy, Oil, and Gas sectors.
- Transportation, Logistics, and Aviation.
- Construction and Real Estate.
- Agriculture and Food Production.
- Technology and Information Services.
- Retail and Consumer Goods.
- Financial Services and Investment Banking.
- Governmental agencies and public sector organizations.
- Healthcare and Pharmaceuticals.

Target Organizations Departments:

- Sustainability and Corporate Social Responsibility (CSR).
- Operations and Production.
- Supply Chain Management and Logistics.
- Finance and Accounting.
- Strategic Planning and Corporate Development.
- Facilities and Asset Management.
- Environmental, Health, and Safety (EHS).
- Procurement and Sourcing.
- Risk Management and Compliance.
- Research and Development (R&D).

Course Offerings:

By the end of this course, the participants will have able to:

- Master the principles of the GHG Protocol for corporate carbon accounting.
- Accurately calculate Scope 1, 2, and the more complex Scope 3 emissions.
- Develop a comprehensive GHG inventory for their organization.
- Identify and prioritize key areas for emissions reduction.
- Formulate effective and data-driven carbon reduction strategies.
- Evaluate the viability and credibility of carbon offsetting projects.
- Understand the process of setting Science-Based Targets (SBTi).
- Integrate carbon management into broader corporate and ESG strategies.
- Communicate sustainability performance to stakeholders effectively.
- Navigate the landscape of carbon reporting standards and frameworks.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be immersive, practical, and highly interactive, ensuring participants can apply their learning directly to their professional roles. We move beyond theoretical lectures to foster a dynamic learning environment built on real-world application. The course heavily features case studies of leading companies that have successfully implemented carbon reduction strategies, allowing for in-depth analysis of their challenges and triumphs. Participants will engage in hands-on workshops, using sample data sets to practice calculating carbon footprints and building a GHG inventory. Team-based exercises will challenge groups to develop a mock decarbonization plan for a fictional company, promoting collaborative problem-solving and strategic thinking. Interactive sessions, expert-led discussions, and Q&A segments ensure that complex topics are thoroughly understood. Continuous feedback from the instructor and peers is a core component, helping participants refine their understanding and build confidence in their new skills. This blended approach ensures a comprehensive mastery of both the technical and strategic aspects of carbon management.

Course Agenda (Course Units):

Unit One: Fundamentals of Carbon Footprint and Climate Science

- Introduction to Climate Change and Greenhouse Gases (GHGs).
- The Business Case for Carbon Management.
- Understanding the GHG Protocol Corporate Standard.
- Defining Organizational and Operational Boundaries.
- Introduction to Scope 1, Scope 2, and Scope 3 Emissions.
- Global and Regional Regulatory Frameworks.
- The Role of Carbon Footprinting in ESG and Corporate Strategy.

Unit Two: Measuring and Quantifying GHG Emissions

- Methodologies for Calculating Scope 1 Direct Emissions.
- Calculating Scope 2 Indirect Emissions from Purchased Energy.
- Tackling the Complexity of Scope 3 Value Chain Emissions.
- Data Collection Strategies and Management Systems.
- Selecting and Using Appropriate Emission Factors.
- Developing a Comprehensive GHG Inventory.
- Introduction to Carbon Accounting Software and Tools.

Unit Three: Developing Carbon Reduction Strategies

- Identifying Emission Hotspots and Prioritizing Actions.
- Strategies for Improving Energy Efficiency in Operations.
- Evaluating and Implementing Renewable Energy Solutions.
- Decarbonizing the Supply Chain through Supplier Engagement.
- Implementing Waste Reduction and Circular Economy Principles.
- Low-Carbon Transportation and Logistics Strategies.
- Employee Engagement and Fostering a Culture of Sustainability.

Unit Four: Advanced Carbon Management and Offsetting

- Introduction to Life Cycle Assessment (LCA) for Products.
- Setting Ambitious Targets with the Science Based Targets initiative (SBTi).
- Understanding Carbon Neutrality vs. Net-Zero.
- The Role of Carbon Offsetting and Removal Projects.
- Evaluating the Quality and Integrity of Carbon Credits.
- Navigating the Voluntary and Compliance Carbon Markets.
- Technological Innovation in Carbon Capture and Reduction.

Unit Five: Strategy, Reporting, and Communication

- Integrating Carbon Reduction into Core Business Strategy.
- Major ESG and Sustainability Reporting Frameworks (GRI, SASB, TCFD).
- Developing a Credible Net-Zero Transition Plan.
- Communicating Carbon Performance to Investors and Stakeholders.
- Managing Climate-Related Risks and Opportunities.
- The Future of Corporate Climate Action and Policy Trends.
- Final Project. Developing a Strategic Carbon Management Roadmap.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

Beyond compliance and reporting, how can a deep understanding of a company's carbon footprint become a primary driver for innovation and competitive advantage?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by moving beyond theoretical knowledge to a deeply practical and strategic application of carbon management. While many programs focus solely on the technical aspects of calculation, this training course dedicates significant time to what comes next. developing actionable reduction strategies, integrating them into core business operations, and communicating the results effectively. We emphasize the strategic link between decarbonization and business value, teaching participants how to frame climate action not as a cost center, but as a driver of innovation, operational efficiency, and long-term resilience. The curriculum is uniquely structured to address the entire carbon management lifecycle, from foundational data collection to advanced topics like Science-Based Targets and navigating carbon markets. By focusing on real-world case studies and hands-on workshops, the course ensures that participants leave not just with knowledge, but with the confidence and strategic frameworks to lead meaningful change and position their organizations as leaders in the low-carbon economy. It provides a holistic, A-to-Z mastery of the subject.