

GHG & Carbon Footprint Calculations & Reporting

Training Course
By SustainAcademy



POWERED BY



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I. Introduction

This course equips you with the knowledge and skills to understand; calculate; and report greenhouse gas (GHG) emissions and carbon footprint. Gain a comprehensive understanding of climate change and the role of GHGs. Master the concept of carbon footprint and its measurement methods. Explore the IPCC Guidelines for GHG Inventory; the international standard for emissions accounting. Learn practical methods for calculating GHG emissions from different activities across individuals and organizations. Develop the ability to effectively report GHG emissions data following best practices.

Our planet faces a significant challenge: climate change. Greenhouse gases (GHGs) like carbon dioxide (CO₂) trap heat in the atmosphere, leading to rising temperatures and disrupting weather patterns. Understanding these gases and their impact is crucial.

This course delves into the world of GHGs and carbon footprints. We'll explore how human activities contribute to GHG emissions and how these emissions affect our climate. We'll then introduce the concept of a carbon footprint, a measure of the total amount of GHG emissions associated with an individual, organization, or product.

By learning how to calculate and report GHG emissions and carbon footprints, you'll gain valuable skills for building a more sustainable future. This course equips you with the knowledge and tools to contribute to climate action efforts, whether in your personal life, professional career, or by influencing product development and consumption habits.



II. About SustainAcademy

SustainAcademy is a new initiative created by SustainArabia Group!

SustainAcademy is a comprehensive educational platform designed to empower individuals and organizations with the knowledge and skills they need to create a more sustainable future. Our curriculum offers a variety of courses covering essential sustainability topics, from renewable energy and resource conservation to sustainable business practices and social responsibility.

Whether you're a seasoned sustainability professional or just starting your journey, we have something for you. We offer flexible learning options to fit your busy schedule, and our expert instructors are passionate about helping you make a difference.

SustainArabia Group is a Sustainability Services and Consultations group Led by a team of highly professional ESG / sustainability experts to serve the Arab world in understanding and achieving the principles of sustainable development and understanding the challenges facing humanity with regard to the challenges of ESG management through the establishment of a consulting group targeting training, capacity building, and spreading community awareness, providing ESG / Sustainability consultations and institutional governance, building plans and strategies and writing related reports, preparing feasibility studies for potential sustainability projects in the areas of ESG, risks of climate change and greenhouse gas emissions, carbon reduction and trading consultations, scientific research and development plans in the pillars of sustainable development. SustainArabia Group intends to expand and enhance the group's activities through partnerships or mergers with companies interested in the same activities in the Middle East region".





III. CPD Accreditation Service

Our training course is a CPD certified course.

CPD stands for Continuing Professional Development and is the term used to describe the learning activities professionals engage in to develop and enhance their abilities. CPD is a holistic approach towards the enhancement of personal skills and proficiency throughout a professional's career.

Continuing Professional Development is a commitment to ongoing lifelong learning. CPD encourages looking forward and identifying opportunities to learn something new, refresh existing knowledge, improve skills, or simply keep up-to-date with the latest developments within a particular profession or industry.

In practice, CPD can mean everything from taking a training course or attending an educational event, to studying for new qualifications or learning new aspects of a job.





IV. Instructor Bio, Dr. Samir Tantawi, Ph.D.

- Former Climate Change Consultant (UN Office for Disaster Risk Reduction – UNDRR)
- UNDP Project Manager (since 2013)
 - Fourth National Communication (NC4Egypt) Project, 2019 – to date
 - Low Emission Capacity Building (LECB) Project, 2013-2018-
- Lead Author - IPCC- Intergovernmental Panel on Climate Change (since 2017)
 - 2023: Member of Task Force for GHGI Board (on Africa)
 - 2017-2019-: The 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, [Vol. III, Ch. 3.11, Hydrogen Production]
- Lead Reviewer - United Nation Framework Convention on Climate Change (since 2009)
 - Greenhouse Gases Inventory Reports [IPPU-Industrial Processes and Product Use]
 - National Communications and Biennial Reports from Developed Countries
 - Biennial Update Reports from Developing Countries
- Article 6.4 mechanism Rosters of Experts (Since 2023)
 - Methodologies” and “Climate Policy” Expert
- CDM – AT - United Nation Framework Convention on Climate Change (since 2008)
 - Technical Expert of Renewable Energy Projects/ Accreditation Panel (AC)
- Climate Change Negotiator (since 2005)



V. Learning Objectives

- Define greenhouse gases (GHGs) and their impact on climate change.
- Introduce the international GHG Inventory Guidelines.
- Explain the concept of a carbon footprint and its measurement.
- Identify methods for calculating GHG emissions from various

activities, including:

Energy consumption (electricity, fuel)

Transportation (cars, planes, public transport)

Industrial processes and product use

Agriculture, Forestry and Land-use

Waste generation

- Describe different methodologies for calculating carbon footprint (e.g., lifecycle assessment).
- Interpret emission factors and their role in carbon footprint calculations.





VI. Course Summary

- GHGs are gases that trap heat in the atmosphere, contributing to climate change.
- Carbon footprint is the total amount of GHG emissions caused by a person or organization.
- The IPCC Guidelines for GHG Inventory provides a standardized framework for calculating and reporting emissions.
- By calculating emissions, we can identify areas for improvement and implement strategies to reduce our environmental impact.
- Effective reporting allows for transparency and accountability in emission reduction efforts.

VII. Course Content

- This course equips you with the knowledge and skills to understand, calculate, and report greenhouse gas (GHG) emissions and carbon footprint.
- Gain a comprehensive understanding of climate change and the role of GHGs.
- Master the concept of carbon footprint and its measurement methods.
- Explore the IPCC Guidelines for GHG Inventory, the international standard for emissions accounting.
- Introduction to CBAM (Carbon border adjustment mechanism)
- Learn practical methods for calculating GHG emissions from different activities across individuals and organizations.
- Develop the ability to effectively report GHG emissions data following best practices.



VIII. Benefits

- Contribute to sustainability efforts by identifying areas for emission reduction.
- Enhance transparency and accountability in environmental performance.
- Gain valuable skills for a growing field focused on climate change mitigation

IX. Who Should Attend

- Sustainability professionals
- Environmental consultants
- Business leaders and managers
- Individuals seeking to understand their environmental impact





X. Certification

- Upon successful course completion, you'll earn a certificate of completion accredited by the CPD, demonstrating your commitment to continuous professional development in the vital field of GHG and carbon footprinting; as you'll be a certified professional, prepared to make a significant impact in mitigating climate change.



XI. Contact Us

Ready to take the next step in your sustainability journey? Contact us to learn more about this course and how it can benefit you.



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