



Introduction to Greenhouse Gas Management, Accounting, and Reporting - NG-51 - eLearning course

COURSE

About the Course

Climate change is a key sustainable development issue, and transitioning to a low-carbon economy is now imperative. Most governments are taking steps to reduce Greenhouse Gas (GHG) emissions based on international and governmental standards and recommendations such as The Greenhouse Gas Protocol, ISO14064/14067/14080, CARB, ASHRAE/ICC 240P, IFRS S1 and IFRS S2 (ISSB) and NIST among others. This is done through national policies that include the introduction of emissions trading programs, voluntary programs, carbon or energy taxes, and regulations and standards on energy efficiency and emissions.

Organizations must be able to understand and manage their GHG risks if they are to ensure long-term success and to be prepared for future national or regional climate policies. A well-designed and maintained corporate GHG inventory (carbon footprint) is essential to manage these risks effectively.

This program is comprised of the following EnergyAcademy® online learning modules. Each module averages approximately 2 hours of self-paced online learning activities.

See demo online learning module

The course is also available as a 5-day instructor-led course - [see details](#)

Target Audience

This course is for anyone wanting to commence their learning or to further consolidate their fundamental knowledge and competence with regard to GHG management.

You Will Learn

- Identify the Kyoto Protocol GHGs and recognize their sources
- Explain global warming potentials (GWP)
- Appreciate that GHG emissions are reported in tonnes of carbon dioxide equivalence (tCO₂e)
- Describe the GHG Protocol
- Consider the base-year
- Identify the principles of GHG management and accounting
- Distinguish between control and equity share organizational boundaries
- Identify different greenhouse gas (GHG) emissions inventory consolidation approaches
- Explain GHG emissions within these different boundaries

- Review the various associated financial andDefine and distinguish between control and equity share Operational boundaries
- Apply different greenhouse gas (GHG) emissions inventory consolidation approaches
- Account for GHG emissions within these different boundaries
- Interpret the various associated financial and equity definitions equity definitions
- Consider oil and GHG emissions, including those from combustion, venting, and fugitive sources
- Identify sources and sinks
- Follow a robust quantification process
- Manage exclusions
- Evaluate and use emission factors
- Consider other calculation factors required
- Apply GHG emissions calculations
- Consider assurance
- Evaluate the characteristics of activity data
- Identify the risks during the quantification process
- Decide upon aggregation strategies
- Appreciate the level of uncertainty
- Select a base-year
- Justify the selection
- Establish a base-year recalculation policy and process
- Consider significance thresholds
- Identify structural, organizational changes
- Undertake actual base-year recalculations
- Identify the risk areas within GHG data management
- Consider the principles of GHG data accounting
- Identify what processes and procedures are required
- Identify how and where GHG data errors arise
- Apply sense checking and vertical and horizontal checks
- Differentiate between GHG data auditing, validation and verification
- Characterize types of GHG data audits
- Design a GHG data audit process
- Consider the risks and opportunities of climate change for an organization
- Review transition and physical risks for a company
- Review the need for scenario analysis
- Ensure GHG reporting has integrity
- Determine what is mandatory to report
- Ensure compliance with the GHG Protocol
- Satisfy complex Scope 2 reporting requirements
- Consider the different GHG reporting frameworks and standards
- Provide for regulatory compliance with respect to GHG reporting in specific jurisdictions
- Apply ratio indicators
- Construct a good (practice) GHG report
- Identify the main oil and gas sector GHGs and understand their sources
- Ensure a complete GHG inventory

- Consider the GHG management hierarchy of eliminate, reduce, substitute and compensate
- Review GHG emission reduction approaches
- Appreciate planning for net zero
- Identify and consider the different sources of Scope 2 GHG emissions
- Apply the GHG Protocol
- Appreciate the various complications with Scope 2 GHG emissions quantification
- Understand the sources of generation
- Quantify Scope 2 GHG emissions
- Appraise the sources of grid factors
- Differentiate and understand the locations-based and market-based methods of Scope 2 quantification
- Consider electricity transmission and distribution losses
- Calculate Scope 2 GHG emissions
- Identify and consider the different sources of Scope 3 GHG emissions
- Apply the GHG Protocol
- Appreciate the importance of Scope 3 emissions across the value chain
- Consider upstream and downstream Scope 3 categories
- Calculate specific Scope 3 GHG emissions categories
- Apply a structured quantification strategy
- Appraise different Scope 3 data sources
- Prioritize data collection
- Appreciate the specificity of the calculation method
- Consider disclosure requirements and net zero
- Identify Scope 3 reduction measures

Course Content

- Introduction to Greenhouse Gas Emissions
- Organizational Boundaries for Greenhouse Gas Inventories
- Operational Boundaries for Greenhouse Gas Inventories
- Greenhouse Gas Emissions Sources and Quantification
- Greenhouse Gas Emissions Tracking Over Time
- Greenhouse Gas Emissions Inventory Quality Management
- Climate Change Risk and Opportunities Assessment
- Greenhouse Gas Emissions Reporting Requirements
- Scope 1 Greenhouse Gas Emissions – An Introduction
- Greenhouse Gas Emissions Reduction Strategies
- Scope 2 Greenhouse Gas Emissions – An Introduction
- Scope 3 Greenhouse Gas Emissions – An Introduction

Product Details

Categories: [Energy Transition](#)

Disciplines: [Greenhouse Gas](#) [Net Zero & Renewables](#) [Energy Business](#)

Levels: [Basic](#)

Product Type: [Course](#)

Formats Available: [On-Demand](#)

Instructors: [Paul Jackson](#)

On-Demand Format

Course On-Demand (Available Immediately)	\$2,700.00
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