



Energy, Carbon, and the Environment  
Training Course



# Energy, Carbon, and the Environment Training Course

## Introduction

With increasing concerns about climate change, carbon footprint, and energy production, many things concerning the subject need to be clarified and understood.

This energy, carbon management, and environmental impact course will clear up these misunderstandings and misconceptions by going into some depth about the various forms of energy production, their ecological and environmental impacts, waste management issues, and the global challenges in these areas we all have to deal with.

As the push is on to move towards a low-carbon future, organizations must ensure that their staff is kept current and informed, incorporating elements of environmental science and exploring what energy is in environmental science.

## Is Carbon Bad for the Environment?

This energy, carbon management, and environmental impact course widely acknowledges that excessive carbon emissions contribute negatively to the environment, exacerbating climate change and global warming. Understanding carbon management and the role of activated carbon treatment in reducing emissions is crucial for a sustainable future.

This energy, carbon management, and environmental impact course also serves as a comprehensive energy industry training, preparing participants for the complexities and challenges of the energy sector by teaching them about the economics, environmental impact, and advancements in energy production technologies.

## Targeted Groups

- Energy Managers.
- Facilities Managers.
- Environment Managers.
- Environmental Representatives.

## Course Objectives

By the end of this energy, carbon management, and environmental impact course, participants will be able to:

- Learn about the various types of energy production, their positives and negatives, cost comparisons, and which ones are being recommended by the Intergovernmental Panel on Climate Change IPCC
- Discuss sustainability and energy environment economics, linking these domains with the energy, environment, and sustainable energy course.
- Understand carbon management, the benefits of energy efficiency for the environment and society, and how these topics are integral to a carbon management course or degree.
- Learn about the calculation of carbon footprints.
- Explore the significance of Climate Change and Why a global perspective with global input is necessary.
- Understand why waste management issues and water availability are essential components.
- Learn about zero waste and the benefits of an integrated waste management system.

## Targeted Competencies

At the end of this energy, carbon management, and environmental impact course, the target audiences will be able to:

- Risk reduction knowledge.
- The personal psychological advantage of an employee doing their part concerns one of UNEP's recommendations United Nations Environmental Program.
- Learn about integrated waste management systems.
- ISO 18001.

## Course Content

### Unit 1: Types of Energy and Their Relationships with The Environment

- Definitions.
- Overview of a detailed look at the various forms of energy used for electrical production and their positives and negatives.
- Understand what fossil oil, natural gas, and coal is.
- Learn about Canadian oil sands and Gulf Coast country's oil similarities and differences.
- Geothermal.

## **Unit 2: Forms of Energy Used for Electrical Production**

- Nuclear.
- Hydroelectric.
- Biomass.
- Combined cycle.
- Wind.
- Fuel cell.
- Electrochemical batteries.
- Emerging technologies.

## **Unit 3: Carbon Footprints**

- Learn about carbon footprints for various forms of energy used for producing electricity and their contribution to the organization's KPIs.
- Understand what environmental risks, health, and safety issues are.
- Carbon footprint calculations.
- KPIs.
- Environmental risks.
- ISO 18001.

## **Unit 4: GHGs GreenHouse Gases**

- Greenhouse gasses.
- Sustainability issues.
- Learn about related international environment treaties.
- Availability of water.
- Water banking.

## **Unit 5: Climate Change**

- What is climate change and its significance for the Gulf Coast countries?
- Integrate waste management system.
- Understand waste disposal and the concept of zero waste.
- Environmental ethics.
- Move towards a low-carbon future carbon negative.
- Learn about generic recommendations concerning "greening" your company at a reasonable cost.

By integrating these key areas, participants in the energy, carbon management, and environmental impact course will receive a comprehensive education on the intersection of energy, carbon, and the environment, setting them toward meaningful contributions to environmental science and sustainable energy management.