

€ TRAINING

Environmental Sustainability and Energy
Management





Environmental Sustainability and Energy Management

Introduction:

This training program is designed to educate participants on various aspects of energy production, carbon emissions, and their environmental impacts. It empowers individuals to make informed decisions and take sustainable actions to address energy-related challenges and protect the environment.

Program Objectives:

At the end of this program, participants will be able to:

- Gain knowledge about various types of energy production, including their advantages, disadvantages, cost comparisons, and recommendations by the Intergovernmental Panel on Climate Change IPCC.
- Obtain an in-depth understanding of sustainability principles, including the calculation of carbon footprints.
- Explore the significance of climate change and the necessity of a global perspective with input from diverse regions.
- Understand the importance of waste management issues and water availability in the context of sustainability.
- Learn about the concept of Zero Waste and the benefits of implementing an integrated Waste Management System.

Targeted Audience:

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

Program Outlines:

Unit 1:

Types of Energy and Their Relationships with The Environment:

- Definitions.
- A detailed look at the various forms of energy used for electrical production and their positives and

negatives.

- Fossil oil, natural gas, and coal.
- Canadian Oil Sands and Gulf Coast Countries oil similarities and differences.
- Geothermal.

Unit 2:

Forms of Energy Used for Electrical Production:

- Nuclear, Hydro Electric
- Biomass, Combined Cycle.
- Wind, Fuel Cell.
- Electrochemical batteries.
- Emerging Technologies.

Unit 3:

Carbon Footprints:

- Carbon footprints for each of the various forms of energy used for producing electricity and their contribution to the organization's KPIs.
- Environmental Risks and Health & Safety Issues.
- Carbon Footprints calculations.
- KPIs.
- Environmental Risks.
- ISO 18001.

Unit 4:

GHGs Green House Gases:

- Green House Gases.
- Sustainability issues.
- Related International Environment Treaties.

- Availability of Water.
- Water banking.

Unit 5:

Climate Change:

- Climate Change and its significance for the Gulf Coast Countries.
- Integrated Waste Management System.
- Waste disposal & the concept of Zero Waste.
- Environmental Ethics.
- Moving towards a low carbon future carbon negative.
- Generic recommendations concerning "greening" your company at a reasonable cost.