€TRAINING

Energy, Carbon and the Environment

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Introduction:

With increasing concerns about climate change, carbon footprint, and energy production, there are a lot of misconceptions and misunderstandings concerning the subject. This course will try to clear up these misunderstandings and misconceptions by going into some depth about the various forms of energy production, their environmental impacts, waste management issues, and the global challenges in these areas that we all have to deal with. As the push is on now to moving towards a low carbon future, organizations have to ensure that their staff are being kept current and informed.

Course Objectives:

At the end of this course the 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
- Get an in-depth look at sustainability
- 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 the availability of Water are important components of the equation
- Learn about the concept of Zero Waste and the benefits of an integrated Waste Management System

Targeted Audience:

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

Course 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