

## **Renewable Energy and Sustainability**

### DAY 1

Energy Fundamentals

Energy Problems and Solutions

World Energy Overview

Energy Fundamentals Review

Country-Specific Energy Overviews

Electricity Fundamentals

Electricity Industry Structure

### DAY 2

Renewable Energy Technologies and Trends

Renewable Energy (RE) Basics

Renewable Energy (RE) Myths and Challenges

Renewable Energy (RE) Technologies

Economic Analysis of Renewable Energy (RE)

Renewable Energy (RE) Forecasts and Scenarios

### DAY 3

Distributed Renewables and Grid Integration

Distributed Systems and Microgrids

Rooftop Photovoltaics (PV) Technologies and Trends

Rooftop Photovoltaics (PV) Case Study Analysis

Grid Integration: Problem and Solutions

Storage Technologies and Trends

Hybrid Power Plants

### DAY 4

Information Technologies (Smart Grid) and Energy Policy

Electrification Trends and Implications

Electric Vehicles as Distributed Storage

Demand Response (DR)



Energy Policy Levers and Tools

Auctions

Feed-in Tariffs and Net Metering

DAY 5

Energy Efficiency and Sustainable Energy Futures

Energy Efficiency Overview and Technologies

Megawatts: Theory and Practice

Energy Efficiency - Business Models and Case Studies

Elements of a Sustainable Energy Future

Data Sources and Analysis Tools