

Circular Economy Principles in Renewable Energy Deployment

COURSE OVERVIEW

This course provides a comprehensive understanding on how circular economy models can be applied to enhance the sustainability, efficiency, and resilience of renewable energy systems. Through real world case studies, policy frameworks, and innovative business models, the course provides a practical and forward-looking perspective on how circular practices can accelerate the global energy transition while reducing environmental impact. Participants will examine strategies for minimizing waste, maximizing resource efficiency, and extending the lifecycle of renewable energy technologies such as solar panels, wind turbines, and batteries.

WHO SHOULD ATTEND?

The course is designed for policymakers, sustainability managers, environmental consultants, engineers and decision makers in both public and private sectors who are seeking to integrate circular economy principles into energy planning, project design and operations. It is also relevant for researchers with a strong interest in sustainable energy transitions.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Explain the core principles of the circular economy and their application to renewable energy.
- Evaluate lifecycle impacts of renewable energy technologies and identify opportunities for resource efficiency.
- Develop strategies for reuse, recycling, and repurposing of renewable energy components.
- Apply circular business models to enhance economic and environmental performance of renewable projects.
- Align renewable energy initiatives with global sustainability frameworks such as the SDGs and net-zero targets.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand:

- How to apply circular economy principles across renewable energy project lifecycles.
- Strategies for designing out waste and minimizing resource use in energy systems.
- Methods for implementing circular supply chains in solar, wind, and storage technologies.
- Approaches to extending asset lifespan through repair, refurbishment, and repurposing.
- Business models for circularity, including product-as-a-service and material recovery.
- How to conduct lifecycle assessments and measure circularity performance.
- Policy frameworks and incentives that support circular renewable energy systems.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded