

Carbon Capture, Utilization and Storage

DAY 1

Carbon Capture and Storage: Can We Afford to be Unconcerned?

The concepts Energy Security and pursuits

Intergovernmental Panel on Climate Change (IPCC) assessments and Kyoto Protocol

Global Status of CO₂ Emission Trends

Costs of CCUS Implementation

The role of your Country

Carbon Capture, Utilization, and Utilization

CCUS Current Technology and Policy Status

Mapping of CCUS Research Publication

Awareness and Capacity Building Pathways

DAY 2

Carbon Capture and Storage – Laying the Foundation of the Future Energy industry

Post-Combustion Carbon Capture

CO₂ Capture by Adsorption

Oxy-Fuel Technology

Chemical Looping Combustion

Pre-combustion Carbon Capture Methods

Integrated Gasification Combined Cycle

Gas processing Before CO₂ Capture

Global R&D for CO₂ Capture

CO₂ Recovery from Power Plants by Adsorption

DAY 3

CO₂ Sequestration Technologies

Geological Sequestration in Saline Aquifers

Geological Storage of CO₂

Options for CO₂ Storage and its Role in Reducing CO₂ Emissions

Carbon Capture, Storage, and Utilization

Identification of potential coal fields

Carbon Sequestration in Forests

Biomimetic Carbon Sequestration

Bio-Sequestration of CO₂ – Potential and Challenges

CO₂ Mitigation from Flue Gas using Microalgae

Cyanobacteria in Carbon Capture and Utilization

Cyanobacterial Extracellular Polymeric Substances

Cyanobacterial EPS as Biofloculants and Biosurfactants

DAY 4

CO₂ Fixation and Utilization – Enhanced Oil Recovery by CO₂ Injection

Introduction to Enhanced Oil Recovery Techniques EOR

The EOR by CO₂ Cases in the Rest of the World

Monitoring/Flow Surveillance

IEA Compiled 50 world basins with favorable conditions for miscible CO₂.

The Economics of Enhanced Oil Recovery by CO₂ Injection

Geologic Potential for Enhanced Oil Recovery CO₂ Injection

Conclusions

DAY 5

More CO₂ Sequestration Techniques

Real-Term Implications of Carbon Sequestration in Coal Seams

CO₂ Utilization in Ocean

Feasibility Study – Use of Converted Carbonates as Coastal Protection Structures

CO₂ Sequestration in Marine Microalgae

Summary and wrap up