

# CO<sub>2</sub>: TECHNICAL AND ECONOMICAL EVALUATION OF CCS PROJECTS (Carbon Capture Storage)

## OBJECTIVES

Bring the tools and knowledge necessary for economical evaluation of CCS projects. Upon completion of the course, attendees shall:

- know the guiding principles to be applied for optimizing a CCS chain implementation, from both technical and economical standpoints,
- know the major regulation constraints potentially applicable to CCS projects,
- know the major financing mechanisms applicable to CCS projects,
- know the key dimensioning factors of the economics on a CCS chain,
- know major identifiable economic and financial risks related to the evaluation of a CCS chain,
- know the issues of economic modelling a CCS chain project.

## COURSE CONTENT

### INTRODUCTION AND TECHNICAL DESIGN OF A CCS CHAIN 0.25 day

Main Capture, Transport and Storage technologies: Efficiencies (costs and energy consumptions), risk management development perspectives

Technical development options function of:

Surrounding storage capacities and captured CO<sub>2</sub> valuation options

### INTERACTION BETWEEN ECONOMY / PROJECT DEVELOPMENT REGULATION FRAMEWORK / LIFE CYCLE ANALYSIS 0.25 day

Regulation : constraints and uncertainties

LCA objectives and purpose

Interaction between LCA and economical analysis

### PROJECT ECONOMICAL ASSESSMENT 0.50 day

Investments and operating costs key parameters

Comparison strategy between business as usual projects and CCS projects

Sensitivity parameters identification

Utilities ( CO<sub>2</sub>, fossil fuel...) price modelling

Identification of constraints due to existing business model of emitters

### RISK AND KEY DEVELOPMENT FACTORS FOR CCS CHAIN 0.25 day

Matrix risk identification (SWOT analysis) in order to underline key CCS chain development factors

### IDENTIFICATION OF DECISIONAL FACTORS THROUGH A CASE STUDY 0.50 day

Analysis of an industrial pool including a urea production unit, a steam boiler, a waste incinerator and a biodiesel refinery with potential storage in a nearby deep aquifer.

Identification of Project key points and risks, Study perimeter and analysis strategy, Technical options to be explored, Best designs on an economical standpoint in function of different contexts through Excel analysis (Excel datasheet will be provided partly completed).

### SUMMARY AND CONCLUSIONS 0.25 day

Feed back on key points to be studied during technico-economical analysis of CCS chain projects

Position of the technico-economical analysis within global CCS chain project analysis and decision process

CCS chain development perspectives: Who and When?

E-085

#### ▲ Who should attend?

Decision makers, managers, engineers and technicians involved in future CCS projects and studies.

#### ▲ Duration

2 days

#### ▲ Sessions in English

June 23-24, 2010  
Rueil-Malmaison (Paris)

**French sessions: F-085**

#### ▲ Registration

Fees: € 1,300

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#### ▲ Course Coordinator

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