

PROJECT facts

U.S. DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY
NATIONAL ENERGY TECHNOLOGY LABORATORY



Sequestration

08/2004

INTEGRATING MONO ETHANOL AMINE (MEA) REGENERATION WITH CO₂ COMPRESSION AND PEAKING TO REDUCE CO₂ CAPTURE COSTS

CONTACT POINTS

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Background

In Phase I, Trimeric Corporation, in collaboration with the University of Texas at Austin, will perform the engineering and economic analyses necessary to determine the feasibility of novel MEA processing schemes aimed at reducing the cost of CO₂ capture from flue gas. These novel MEA-based CO₂ capture schemes will be integrated into a coal-fired power plant with the aim of reducing costs and improving efficiency.

Primary Project Goal

The primary goal of this project is to reduce the cost of MEA scrubbing for the recovery of CO₂ from flue gas by improved process integration.

Objectives

The objective is to evaluate various schemes for integrating MEA regeneration into the overall system to improve MEA economics and decrease the cost of CO₂ capture from the flue gas from coal-fired power plants.



CUSTOMER SERVICE

1-800-553-7681

WEBSITE

www.netl.doe.gov

PARTNERS

Trimeric Corporation

University of Texas at Austin

COST

Total Project Value

\$99,969

DOE/Non-DOE Share

\$99,969/\$0

Benefits

MEA-based processes are well established in industry for the recovery of acid gases from process streams. A major factor preventing their use for recovering CO₂ from stack gases is cost. This project could reduce the cost of MEA scrubbing, thus increasing the prospect of being able to capture and sequester CO₂ without a detrimental impact on our economy.