

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



## INTEGRATING MONO ETHANOL AMINE (MEA) REGENERATION WITH CO<sub>2</sub> COMPRESSION AND PEAKING TO REDUCE CO<sub>2</sub> CAPTURE COSTS

### Background

In Phase I, Trimeric Corporation, in collaboration with the University of Texas at Austin, performed engineering and economic analyses necessary to determine the feasibility of novel MEA processing schemes aimed at reducing the cost of CO<sub>2</sub> capture from flue gas. These novel MEA-based CO<sub>2</sub> capture schemes are designed for integration into coal-fired power plants with the aim of reducing costs and improving efficiency.

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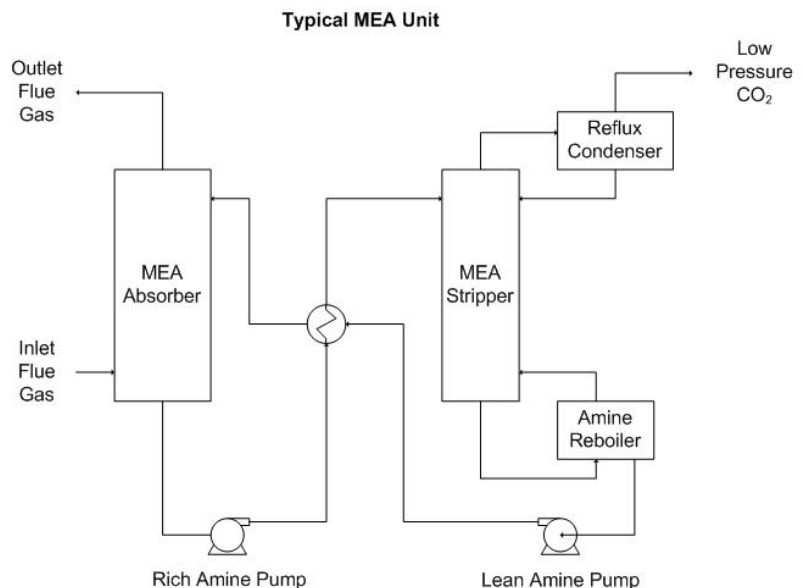
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### Primary Project Goal

The primary goal of this project was to reduce the cost of MEA scrubbing for the recovery of CO<sub>2</sub> from flue gas by improved process integration.



## **PARTNERS**

Trimeric Corporation  
University of Texas at Austin

## **COST**

**Total Project Value**  
\$99,969

**DOE/Non-DOE Share**  
\$99,969 / \$0

## **ADDRESS**

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## **Objectives**

The objective was to evaluate various schemes for integrating MEA regeneration into the overall system to improve MEA economics and decrease the cost of CO<sub>2</sub> capture from the flue gas from coal-fired power plants.

## **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 CO<sub>2</sub> from stack gases is cost. This project demonstrated that significant cost reductions associated with the MEA scrubbing could be achieved, thus increasing the prospect of being able to capture and sequester CO<sub>2</sub> without a detrimental impact on our economy.