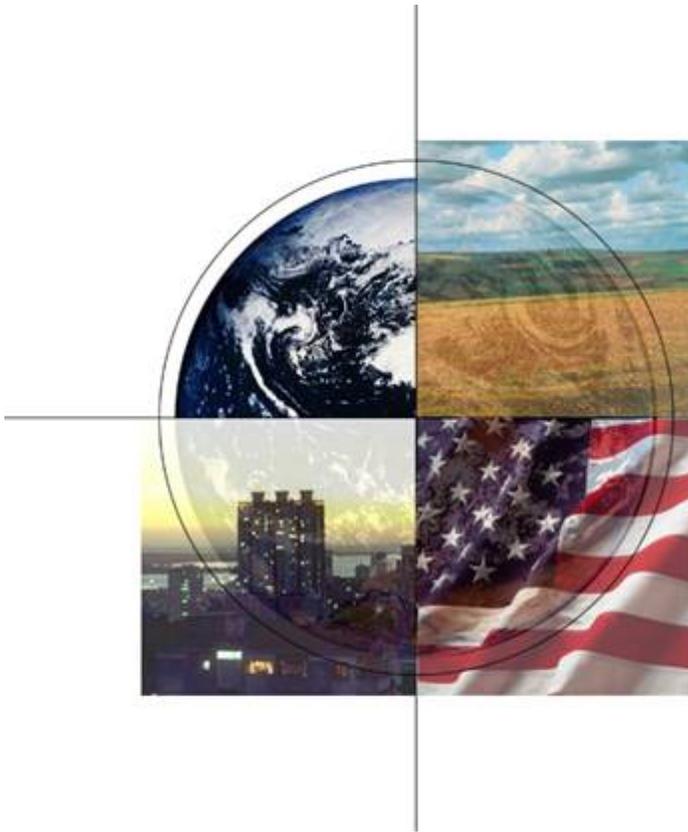


Strategic Center for Coal



*Open House
June 4, 2008*

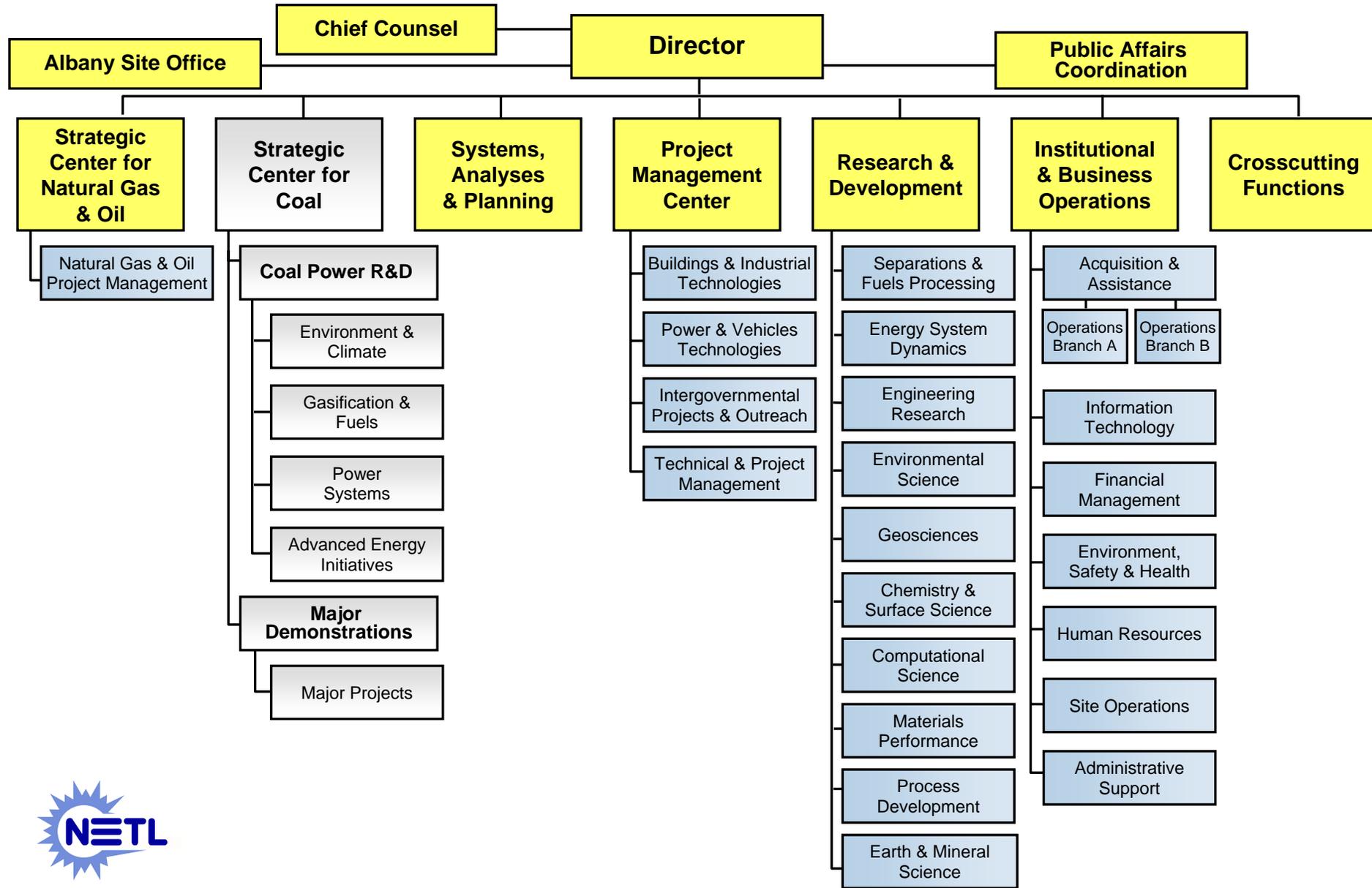
Scott Klara

National Energy Technology Laboratory

Office of Fossil Energy



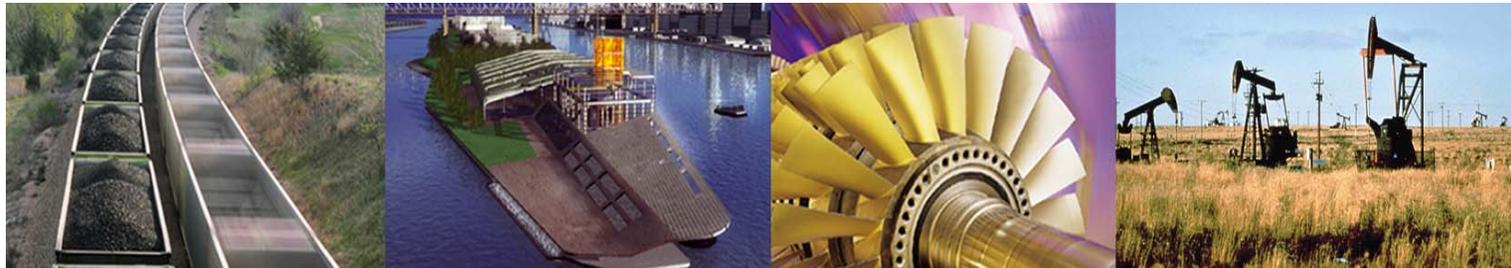
National Energy Technology Laboratory



Coal Research & Development

Driving Technology

To Near Zero Emissions at Reasonable Cost



Coal Technology R&D Pathways

Critical R&D Challenges to Near Zero Emissions From Coal

Near Term Plants

Pulverized Coal

Power Generation

Improve Efficiencies

Minimize Criteria Pollutants

Minimize Water Usage

Minimize Greenhouse Gases



Future Plants

Advanced Coal

Power and Multiple Products

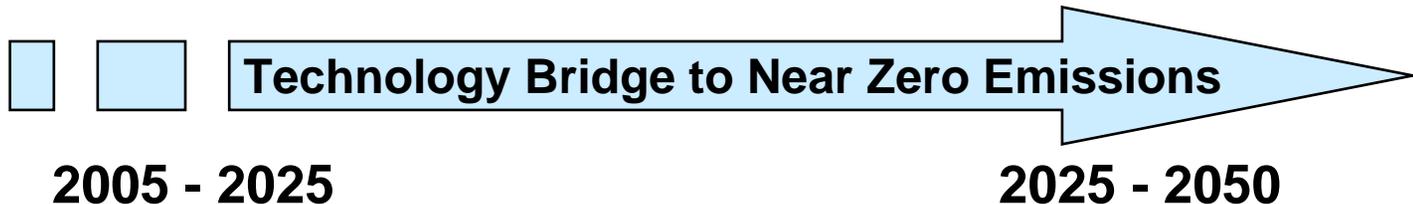
Improve Reliability

Maximize Efficiencies

Near Zero Criteria Pollutants

Near Zero Water Usage

Near Zero Greenhouse Gases



Coal and Power Program

Fiscal Year 2008 Funding Profile

Clean Coal Power Initiative **\$ 70 M**

FutureGen **\$ 75 M**

Fuels and Power Systems **\$ 350 M**

- *Innovations for Existing Plants* 36.1
- *Advanced Gasification* 53.5
- *Advanced Turbines* 23.8
- *Carbon Sequestration* 118.9
- *Fuels* 24.8
- *Fuel Cells* 55.5
- *Advanced Research* 37.2

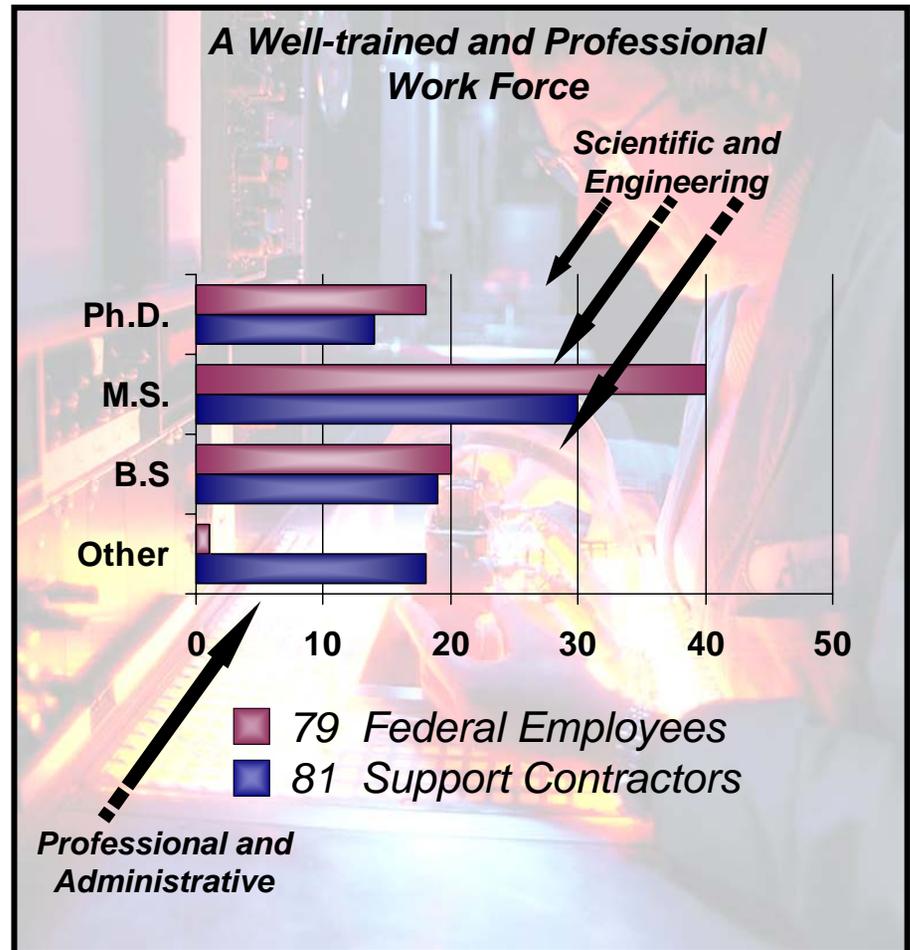
Total Coal **\$495 M**



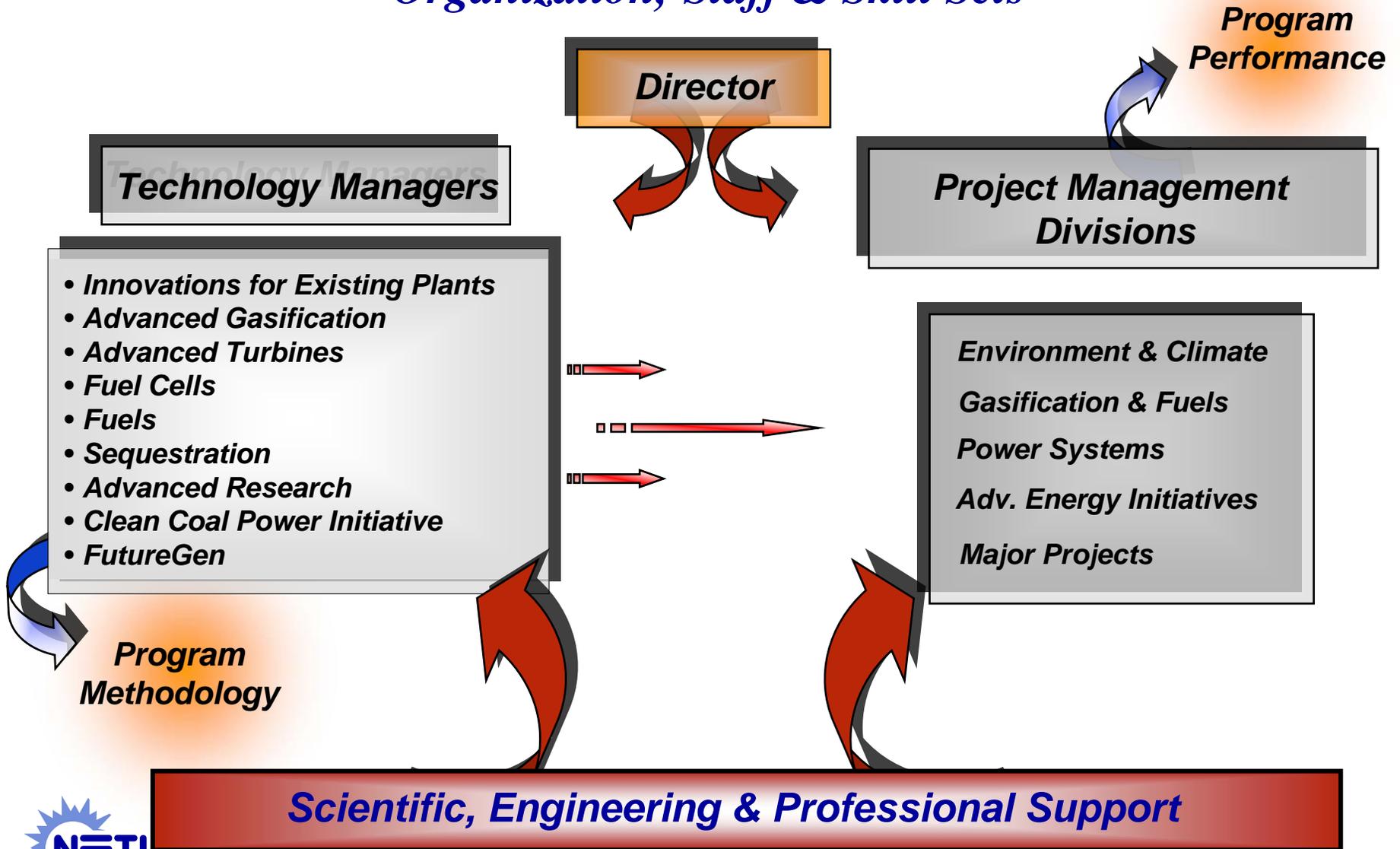
NETL's Coal and Power Program

FE's Principal Implementing Laboratory

- 349 Active Projects
- Total Value \$7.8 B
- DOE Share \$3.7 B
- Participant Share \$4.1 B
 - *Leverages DOE Funding*
 - *Ensures Relevance*
 - *Facilitates Commercialization*



Strategic Center for Coal Organization, Staff & Skill Sets



Energy Sector Planning and Analysis

... A sampling of potential areas of interest

- ***Energy Sector Evaluation***
- ***Expert Scientific and Engineering Examination of Technology Options and Potential Developmental Pathways***
- ***Investigation of Energy System Interdependencies, Infrastructure and Strategy Implications***
- ***Expert Process Simulation and Modeling, Using State-of-the-Art Systems***
- ***Quick-response technical/economic/policy analysis***



Program Performance Management

... A sampling of potential areas of interest

- ***Program Planning and Development***
- ***Program Performance Assessment***
- ***Annual and Multi-year Program Budgeting***
- ***Portfolio Analysis and Technology Transfer/Deployment***
- ***Program Outreach, Communications and Documentation, including Workshops, Conferences and Information Management***
- ***Program Processes, Practices and Procedures***



Project Execution and Integration

... A sampling of potential areas of interest

- ***Project Execution and Integration***
- ***Procurement Planning and Execution***
- ***Project Control and Oversight***
- ***Project and Program Peer Reviews***
- ***Project-Specific Information Management***
- ***Project/Program Management Training***
- ***Process Improvement***
- ***Validation Assessments and Studies addressing project related technical, cost/schedule, risk and environmental factors***



Visit Our NETL Website

www.netl.doe.gov

Visit Our SCC Website

www.netl.doe.gov/coal/

NATIONAL ENERGY TECHNOLOGY LABORATORY
United States Department of Energy

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Privacy Statement October 18, 2004

TOP NEWS STORIES

New Mexico Coal-Fired Power Plant to Demonstrate Multi-Pollutant Controls
Energy Secretary Abraham announced that Peabody Energy's Mustang Energy Project has been selected to receive a \$19.7 million grant under the second round of competition in President Bush's 10-year, \$2 billion Clean Coal Power Initiative. [Read More!](#)

Energy Department Announces Nearly \$4.3 in Grants to Michigan
Acting Under Secretary of Energy David K. Garman announces nearly \$4.3 million in DOE grants to Michigan universities and companies. [Read More!](#)

Energy Department Announces \$9.4 Million in Grants to Pennsylvania
Secretary of Energy Spencer Abraham announced \$9.4 million in DOE grants to Pennsylvania universities and companies. [Read More!](#)

SW PA Science Bowl Registration

SPECIAL ANNOUNCEMENTS

- Natural Gas Leak Detection Technology Demonstration
- Updated Information on NETL's Upcoming Site Support Contractor Solicitation

RECENT HEADLINES

- DOE Grants New Mexico \$4.1 Million for New Fossil Energy R&D Projects
- DOE-Funded "Smart" Drilling Prototype On Track for Commercialization
- Testing Underway in Wyoming of Various Natural Gas Leak Detection System
- Successful CO2 Sequestration Project Heads into Phase II
- Draft Environmental Assessment Advanced Coal Utilization Byproduct Beneficiation Processing Plant at the Ghent Power Station, Carroll County, KY (PDF-1MB)

BUSINESS NEWS

Solicitations [Read More!](#)

- Amendment 001 for Funding Opportunity entitled "Office of FreedomCAR and Vehicle Technologies Program Wide Funding Opportunity Announcement"

TECHNOLOGY AREAS

- Strategic Center for Natural Gas & Oil
- Strategic Center for Coal
- Office of Science, Technology & Analysis
- Office of Advanced Initiatives

NATIONAL ENERGY TECHNOLOGY LABORATORY
THE STRATEGIC CENTER FOR COAL

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The Strategic Center for Coal

Developing clean, affordable, and reliable coal-to-energy technologies

Welcome to NETL's Strategic Center for Coal. Our mission is to create technology pathways for ultra-clean coal-to-energy pathways—capable of supporting the continued use of coal now and well into the future so that this country can rely on this secure and plentiful energy resource to provide the affordable electricity (and other useful products) our competitive economy requires. Through sustained public and private sector investments in the science and technology of coal and through partnerships with the nation's energy industry, we hope to bring about evolutionary in the near-term and revolutionary changes in the long term, the way power and fuels are produced from coal.

For more information about the national coal research, development and demonstration program sponsored by the Department of Energy's Office of Fossil Energy, see the [Overview](#).

Our site is designed to answer your questions about coal research, development and demonstration. If you're looking for more information, our Reference Shelf, and the reference shelves in the technology areas' websites, will serve as your key research tool. Please explore our site and [contact us](#) with any questions.

New Mexico Coal-Fired Power Plant to Demonstrate Multi-Pollutant Controls
Peabody Energy's Mustang Energy Project has been selected to receive a grant from the DOE under the CCPI second round competition. [Read More!](#)

Successful Weyburn Project, a CO2 Sequestration Project Involving Enhanced Oil Recovery, Moves into Next Phase
In this multinational project more than 110 billion cubic feet of 95 percent pure CO2 have been injected into an oilfield, producing more than 6 million barrels of oil. [Read More!](#)

TECHNOLOGY AREAS

- Strategic Center for Natural Gas & Oil
- Strategic Center for Coal
- Office of Science, Technology & Analysis
- Office of Advanced Initiatives

Advanced Research

- Carbon Sequestration
- CCPI/Clean Coal Demonstrations
- Combustion
- Distributed Generation
- Environmental & Water Resources
- Fuels
- FutureGen
- Gasification
- Turbines

