

National Energy Technology Laboratory



Overview

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*Director, Office of Institutional
& Business Operations*

National Energy Technology Laboratory



Office of Fossil Energy



National Energy Technology Laboratory

- **Only DOE national lab dedicated to fossil energy**
 - Fossil fuels provide 85% of U.S. energy supply
- **One lab, five locations, one management structure**
- **1,200 Federal and support-contractor employees**
- **Research spans fundamental science to technology demonstrations**



Alaska



Oklahoma



Oregon



Pennsylvania



West Virginia



NETL Locations

Albany, OR

Pittsburgh, PA

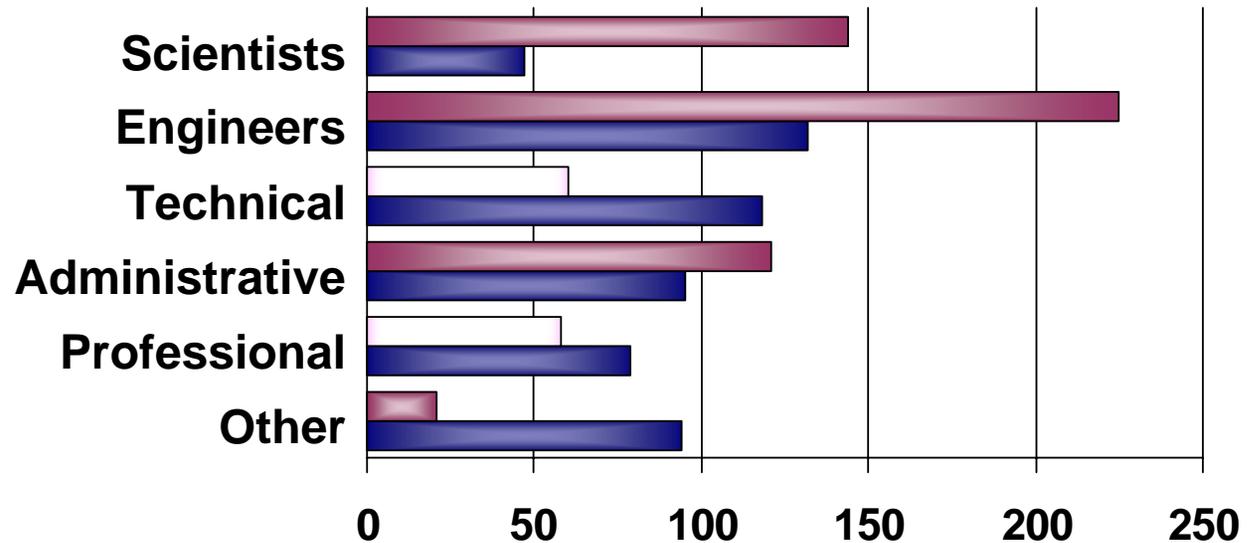
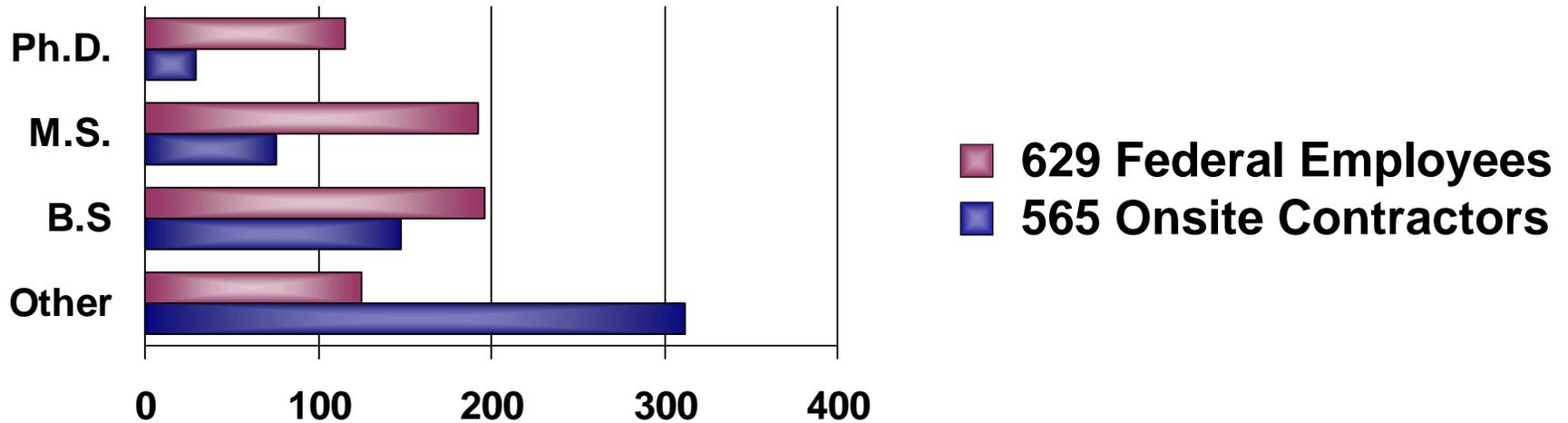
Morgantown, WV

Fairbanks, AK

Tulsa, OK



A Well-Trained Workforce



12/31/05

Site-Support Contractors Assist in Laboratory Operations

Performance Results Corp.

***Support Administrative
Services***

PRC

**Technology &
Management Services, Inc.**

(Small Business)

***Technology and Management
Support (TAMS) Services***

TMS

The Majors

**Eagle Facility
Management Services**

(Alaska Native 8(a) Corp.)

***Site Operations
Services***



**GOLDBELT
EAGLE**

ProLogic, Inc.

(Small disadvantaged 8(a) business)

***Information Technology
and Engineering (ITES)
Services***



**ProLogic
Incorporated**

**Research and Development
Solutions, LLC (RDS)**

***Joint venture of EG&G,
SAIC, Parsons, CMU, Pitt,
and WVU***

RDS

Access to 20 companies through subcontracts



Fossil Energy Mission Statement

To enhance U.S. economic and energy security by:

- **Managing and performing energy-related research**
- **Supporting development of information and policy options that benefit the American public**
- **Ensuring that FE technology is used in market**
- **Operating our nation's petroleum reserves**



NETL's Mission

Implement a research, development, and demonstration program to resolve the environmental, supply, and reliability constraints of producing and using fossil resources



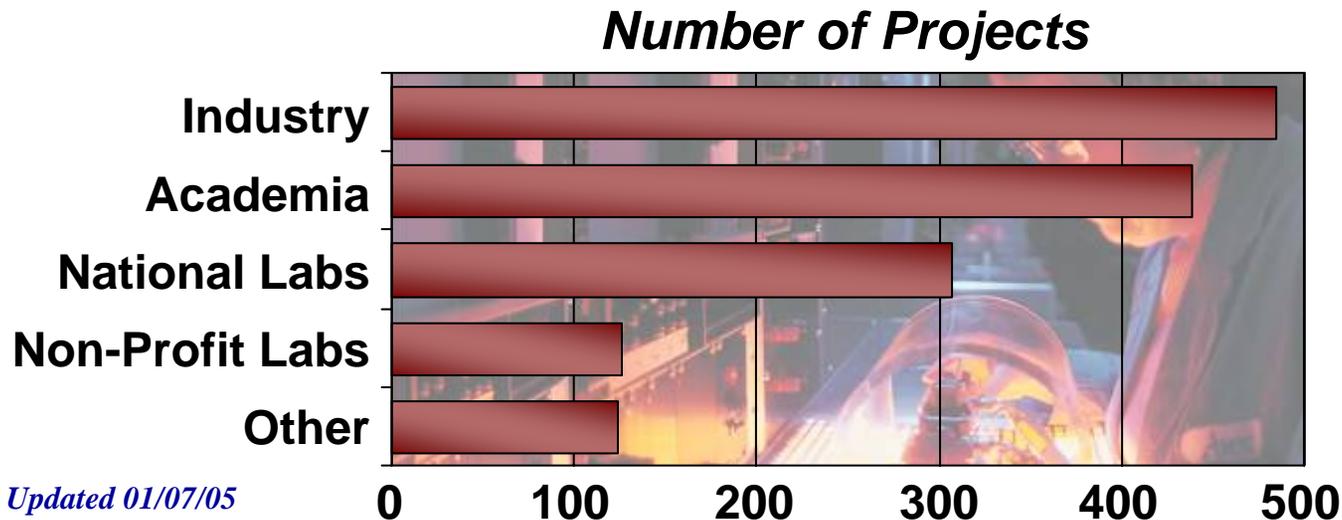
Accomplishing Our Mission

- Implement and manage extramural RD&D
- Conduct onsite research
- Support energy policy development



NETL Implements and Manages Extramural RD&D

- Over 1,400 research activities in 47 states and more than 40 foreign countries
- Total award value of nearly \$8 billion
- Private sector cost-sharing of almost \$4 billion
 - Leverages DOE funding
 - Ensures relevance
 - Accomplishes mission through commercialization



Updated 01/07/05

NETL Conducts Onsite Research

Energy System Dynamics

- Fuel Cells / Hybrids
- Gas Combustion
- Carbon Capture
- FutureGen



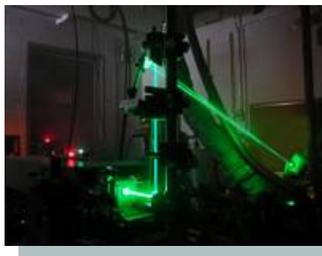
Geological and Environmental Systems

- Carbon Sequestration
- Clean Air Technology
- Water & Coal Utilization Byproducts



Computational and Basic Sciences

- Computational Chemistry
- Device Simulation
- Advanced Fuel Systems
- Gas Hydrates

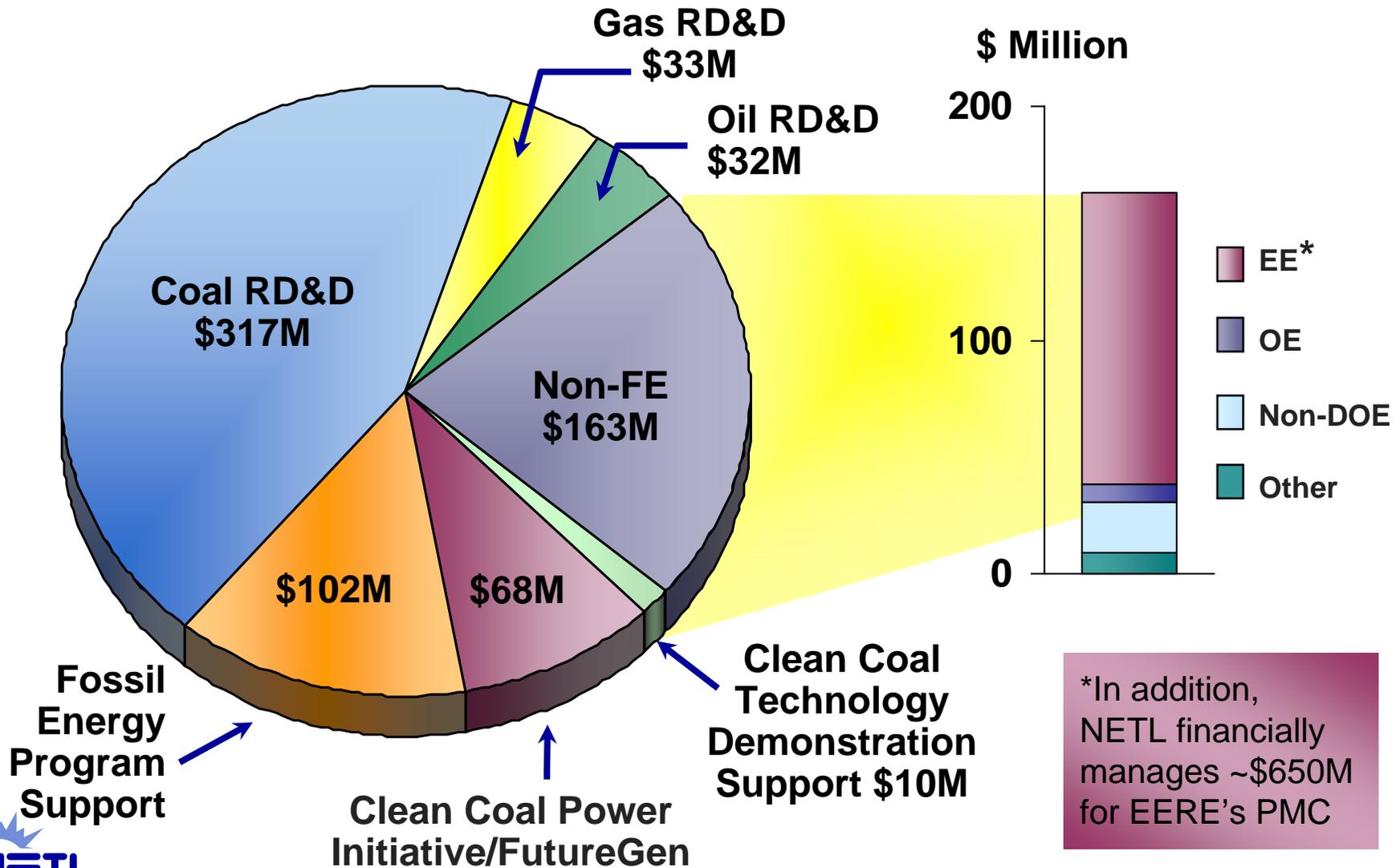


Albany Metallurgical Research

- Materials production
- Process development
 - Processing improved materials through to disposal and recycling



NETL FY 2006 Budget: \$725 Million



NETL's Investment in Pennsylvania

Impacting Economy Through On-Site Operations

- Contribute \$50M annually through Federal and contractor payroll, small purchases, and conferences
- Draw nearly 3,000 visitors to Pittsburgh area per year

Impacting Economy Through R&D

- \$1.3B total value of agreements and contracts
- Obligated \$57M in FY05 generating 2,280 job-years in PA
 - Small businesses - total value of \$44M with \$9M obligated annually
 - Colleges/universities - total value of \$295M with \$22M obligated annually



FY 2005

NETL's Investment in Oklahoma

Impacting Economy Through On-Site Operations

- **Contribute \$6M annually through Federal payroll, small purchases, site support contracts, and conferences**
- **Draw over 1,200 visitors to Tulsa office per year**

Impacting Economy Through R&D

- **\$36M total value of agreements and contracts**
- **Obligated \$10M in FY05 generating 400 job-years in OK**
 - Small businesses - total value of \$31M with \$2M obligated annually
 - Colleges/universities - total value of \$19M with \$1M obligated annually

FY 2005



NETL's Investment in West Virginia

Impacting Economy Through Onsite Operations

- Contribute \$51M annually through Federal and contractor payroll, small purchases, and conferences
- Draw nearly 2,000 visitors to Morgantown area per year

Impacting Economy Through R&D

- \$370M total value of agreements and contracts
- Obligated \$82M in FY05 generating 3,280 job-years in WV
 - Small businesses – total value of \$70M with \$21M obligated annually
 - Colleges / universities – total value of \$170M with \$12M obligated annually



FY 2005

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U.S. DEPARTMENT OF ENERGY

SCIENCE & TECHNOLOGY | ENERGY SOURCES | ENERGY EFFICIENCY | THE ENVIRONMENT | PRICES & TRENDS | NATIONAL SECURITY | SAFETY & HEALTH

FOSSIL ENERGY

Fossil Energy
Clean Coal & Natural Gas Power Systems
Carbon Sequestration
Hydrogen & Other Clean Fuels
Oil & Natural Gas Supply & Delivery
Natural Gas Regulation
U.S. Strategic Petroleum & Other Oil Reserves

IN YOUR STATE
Select a State

OFFICES & FACILITIES
Select a Field Site

EMAIL UPDATES
Register to receive Fossil Energy NEWSALERTS by e-mail. GO

QUICK REFERENCE
Fossil Energy Project

FOSSIL ENERGY NEWS SPOTLIGHT

SPR Completes Drawdown Deliveries
The Department of Energy has completed the last delivery of crude oil sold through its online competitive sale of the Strategic Petroleum Reserve stockpile. The sale resulted in award of 11 million barrels of crude oil to five companies who submitted favorable bids. Read more >

01:13:06 :: Technology Advance Aids Quest for Deep Gas
A cement developed as part of DOE's Deep Trek program has been commercially applied by several companies to stop seal failures in gas wells at depths up to two miles. Read More >

01:03:06 :: Jeffrey Jarrett to Lead Fossil Energy Office
Jeffrey D. Jarrett was sworn in as the 10th Assistant Secretary for Fossil Energy after being confirmed by the Senate on December 17, 2005. Jarrett brings more than 30 years of energy and environmental experience to the job. Read More >

OFFICE OF FOSSIL ENERGY
Ensuring that we can continue to rely on clean, affordable energy from our traditional fuel resources is the primary mission of DOE's Office of Fossil Energy. Fossil fuels supply 80% of the nation's energy, and we are working on such priority projects as pollution-free coal plants, more productive oil and gas fields, and the continuing readiness of federal emergency oil stockpiles.

Read more about:
Fossil Energy Organization
Business & Funding Opportunities

Office of Fossil Energy's website:
www.fe.doe.gov



National Energy Technology Laboratory

Site Map GO

NETL

THE ONLY U.S. NATIONAL LABORATORY DEVOTED TO FOSSIL ENERGY TECHNOLOGY

ABOUT NETL
KEY ISSUES & MANDATES
ONSITE RESEARCH
TECHNOLOGIES
SOLICITATIONS & BUSINESS
CAREERS & FELLOWSHIPS
CONTACT NETL

Tackling U.S. Energy Challenges

Secure and Reliable Energy
Domestic coal, oil, and natural gas resources can contribute enormously to our Nation's economic strength, energy security, and quality of life through the 21st century.

View Secure & Reliable Energy Supplies

Research for an energy-secure America
DOE Announces Commercial Success in Deep Trek Program
A "supercement" developed in DOE's Deep Trek program has been commercially applied by several companies during recent drilling operations to stop seal failures in wells at depths up to 2 miles.

NEWS & FEATURES // All >
Significant Milestone Achieved in SECA Fuel Cell Development Program
DOE Announces Commercial Success in Deep Trek Program
Draft Environmental Assessment (EA) for the LNG from Coal Mine Methane for Industrial and Transportation Applications Project (PDF-3.94MB)
Draft EIS for the Gilberton Coal-to-Clean Fuels

EVENTS CALENDAR // All >
2006 West Virginia Science Bowl
2006 SW Pennsylvania Science Bowl
2006 Oklahoma Science Bowl

PUBLICATIONS & PROJECTS // All >
Annual Site Environmental Report (PDF-2.81MB)
Oil & Natural Gas Supply
Coal & Power Systems
Carbon Sequestration
Hydrogen & Clean Fuels

NETL's website:
www.netl.doe.gov



A satellite-style image of Earth, showing the Americas (North and South America) in shades of green and brown, surrounded by blue oceans and white clouds. The text is overlaid on the center of the image.

Technology is one of
the Government's
tools to ensure a
sustainable, secure,
and affordable energy
future