



## **NETL Overview**

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**George Guthrie, Focus Area Leader  
Office of Research and Development  
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# National Energy Technology Laboratory

- Only DOE national lab dedicated to fossil energy
  - Fossil fuels provide 85% of U.S. energy supply
- One lab, three research campuses
- 1,200 Federal and support-contractor employees
- Research encompasses fundamental science through technology demonstration



*Pennsylvania*

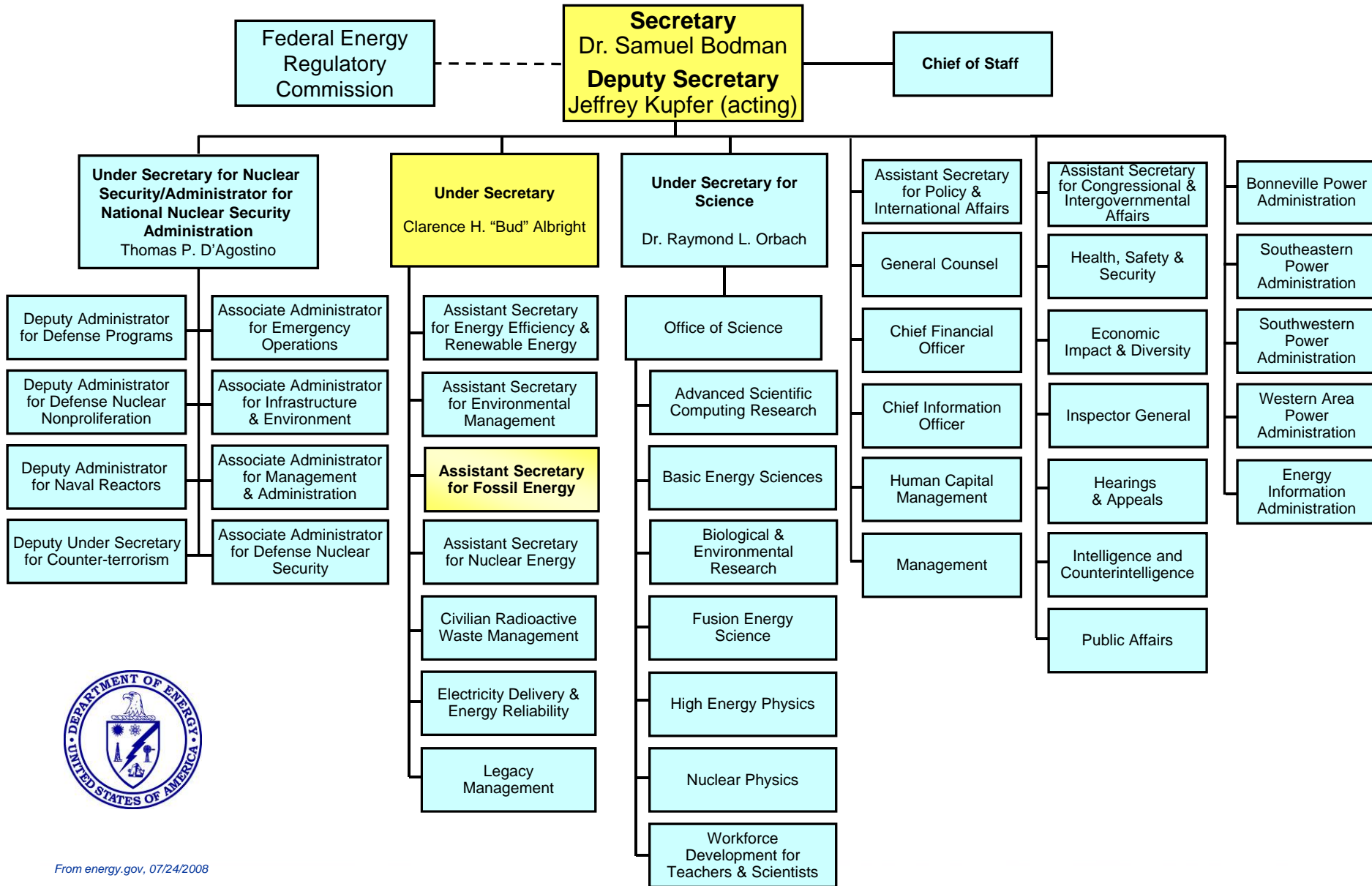


*West Virginia*

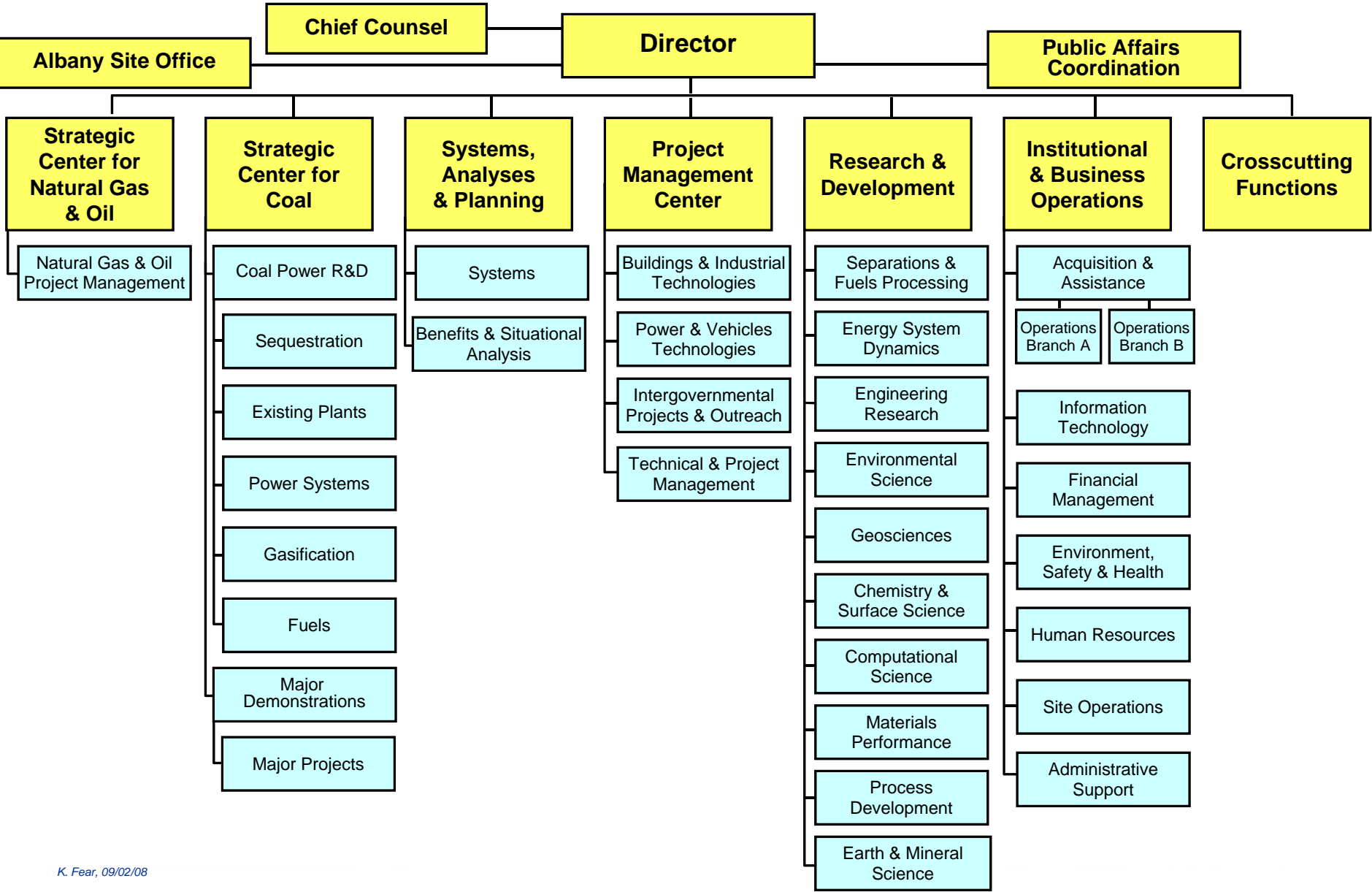


*Oregon*

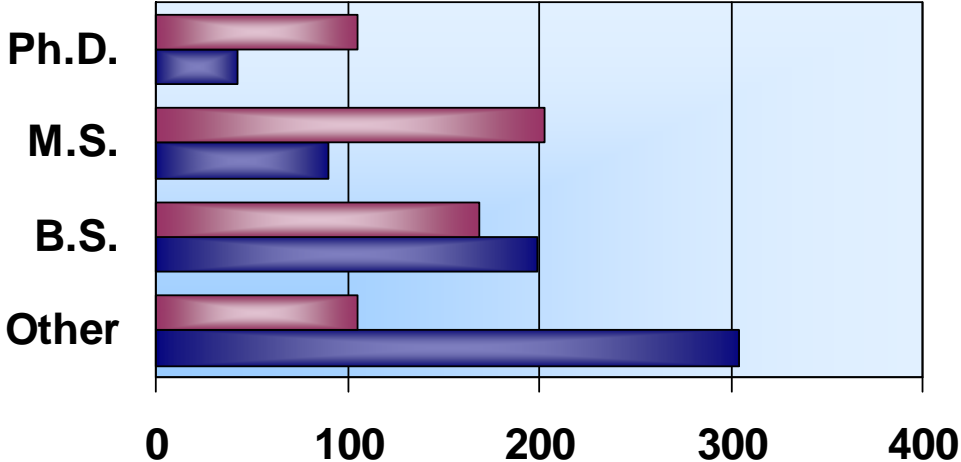
# Department of Energy



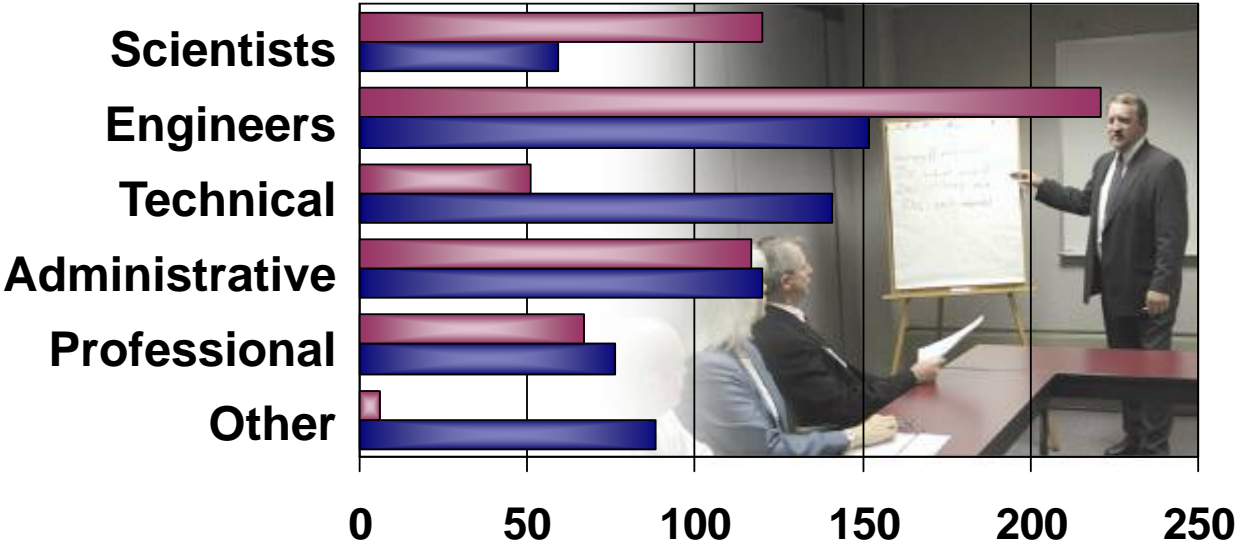
# National Energy Technology Laboratory



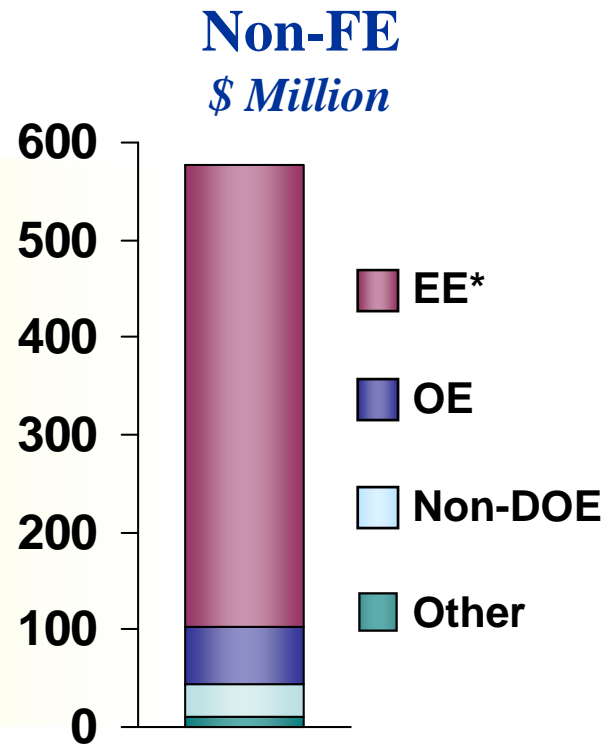
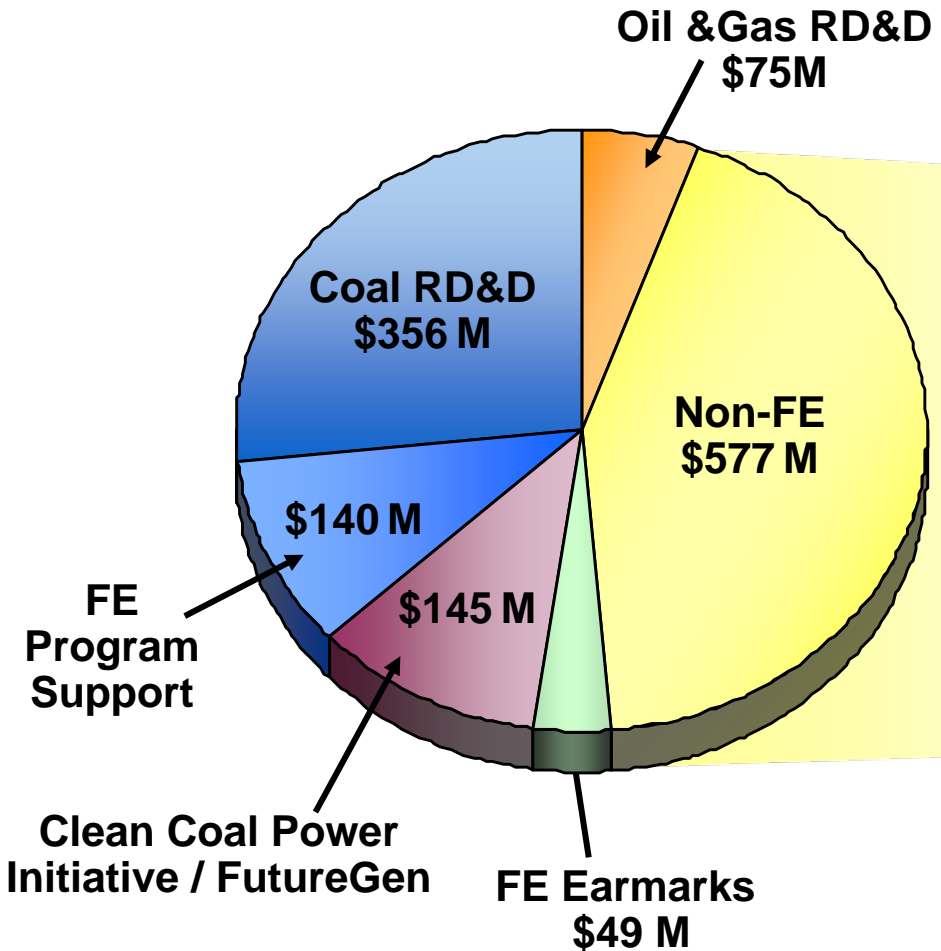
# A Well-Trained Workforce



■ 582 Federal Employees  
 ■ 636 Onsite Contractors



# NETL FY 2008 Budget: \$2.27 Billion



*\*NETL also financially manages ~\$926M for EERE's Project Management Center*

# Oil and Gas R&D Funding

Department of Energy  
*Office of Fossil Energy*

NETL

\$37.5 MM

\$12.5 MM

## Consortium Program

- ◆ Ultra-deepwater
- ◆ Unconventional Gas
- ◆ Small Producer
- ◆ RPSEA administration
- ◆ NETL oversight

## Complementary Program

- ◆ Extreme Drilling
- ◆ Environmental Impacts
- ◆ Enhanced & Unconventional Recovery
- ◆ Resource Assessment

## Traditional Program

- ◆ E&P
- ◆ Hydrates
- ◆ Environmental
- ◆ RLE/EOR/SWC
- ◆ Infrastructure
- ◆ Deep Trek

# NETL Complementary Program R&D

## *Program Philosophy*

- **Conduct unique, high-value, non-duplicative R&D**
- **Coordinate with RPSEA & traditional program**
- **Focus:**
  - Fundamental applied science
  - Long-term research providing basis for next-generation technologies
  - Independent environmental science
- **Technical areas:**
  - Drilling under extreme conditions
  - Environmental impacts of oil & gas development
  - Enhanced & unconventional oil recovery
  - Oil & gas resource & technology assessment
- **Annual merit review to ensure project quality**
- **External technical committee to ensure complementary & non-duplicative**

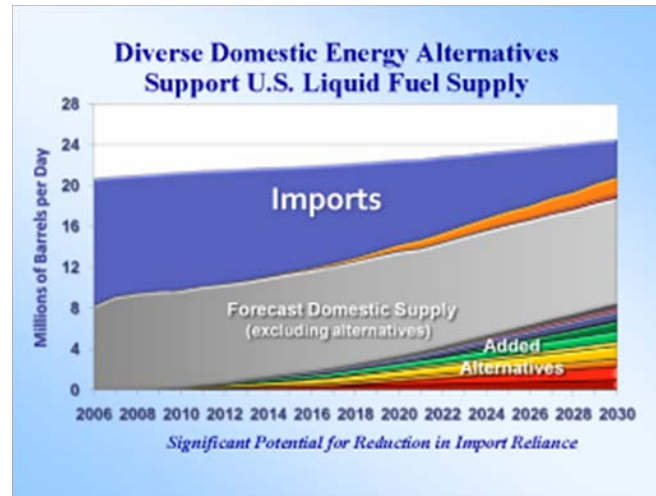


# NETL Applies Basic Science to Technology Development, Demonstration, and Transfer

## *Onsite Research and Development*



## *Systems, Analysis, and Planning*



## *Extramural Research and Collaboration*



*More Than 1,800 Activities in the United States  
and 40+ Other Countries*

# Office of Research and Development

## *Innovative Advanced Energy Technology*

- **Collaborating & transferring technology**
  - Universities, other national labs, and industry
- **Applying advanced computational methods with experimental facilities and field investigations to solve problems**
- **Structured into four focus areas that can access a broad range of technical divisions**
  - Computational & Basic Sciences (Madhava.Syamlal@netl.doe.gov)
  - Energy System Dynamics (George.Richards@netl.doe.gov)
  - Geological & Environmental Systems (George.Guthrie@netl.doe.gov)
  - Materials Science (Cynthia.Powell@netl.doe.gov)



# Visit Our Websites



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