MISSION

Discover, integrate and mature technology solutions to enhance the Nation’s energy foundation and protect the environment for future generations

- Effective Resource Development
- Efficient Energy Conversion
- Environmental Sustainability

VISION

Be the Nation’s renowned fossil-energy science and engineering resource, delivering world-class technology solutions today and tomorrow

- Technology Convener
- Knowledge and Technology Generation Center
- Responsible Steward
Research Focus by Site

Multiple Sites Operating as 1 LAB System

- Materials Performance
- Multi-environment Materials Characterization
- Alloy Development/Manufacture
- Geospatial Data Analysis

- Process Systems Engineering
- Decision Science
- Functional Materials
- Environmental Sciences
- Energy Systems Optimization

- Energy Conversion Devices
- Modeling, Simulation and Analysis
- In-Situ Materials Characterization
- Supercomputer Infrastructure
- Diagnostics, Sensors, and Controls
NETL possesses an array of authorities to manage & implement complex R&D programs

- Program planning, development, and execution
- Legal, Financial, Procurement and Head of Contracting Authority (HCA)
- Project Management Expertise

By the Numbers

- 3 labs across the U.S.
- 900+ R&D projects in 50 states
- $6.3B total award value
- $991M FY19 budget

Workforce

- 1,226 Full Time Equivalent Employees (FTEs)
- 70 Joint Faculty
- 109 Postdoctoral Researchers
- 54 Graduate Students
- 40 Undergraduate Students
NETL Budget

FY19 Budget/FY20 CR
$991M

Coal Program
- Carbon Capture: $101M
- Carbon Storage: $98M
- Crosscutting: $56M
- NETL Coal R&D: $36M
- Rare Earth Elements: $18M
- STEP: $22M
- Transform. Coal Pilots: $25M

Oil & Gas Program
- Natural Gas Tech.: $51M
- Unconvent. FE Tech.: $46M

FE Program Support
- Program Direction: $27M
- NETL Research & Ops.: $50M
- NETL Infrastructure: $45M

Non-Fossil Programs
- EERE: $150M
- OE: $19M
- CESER: $65M

Strategic Partnerships
- Other: $52M

Updated June 25, 2019
Technology Development Pathway

**An Active Portfolio from Concept to Market Readiness**

- **Commercialization**
  - Technology available for wide-scale deployment
  - TRL 9

- **Demonstration**
  - System demonstrated in operational environment
  - TRL 8

- **System Testing**
  - System performance confirmed at pilot-scale
  - TRL 6-7

- **Development**
  - Technology component validated/integrated
  - TRL 4-5

- **Discovery**
  - Concept identified/proven at laboratory-scale
  - TRL 1-3

**Fundamental Studies**

**Knowledge-Based Decision Making**

- **Systems Engineering and Integration**
  - Engineering analysis
  - Pre-FEED/FEED studies
  - NEPA

- **Decision Science and Analysis**
  - Screening studies
  - Techno-economic analysis
  - Technology Readiness Assessments
Established & Expanding Partnerships

An Active Portfolio from Concept to Market Readiness

600+ partnerships with industry, academia & govt organizations
900+ research and development projects nationwide
Conclusions

- DOE’s Office of Fossil Energy and the National Energy Technology Laboratory are aligned with the priorities of the America First Energy Plan.
  - R&D, STEM, and Workforce

- NETL manages a variety of research programs on behalf of DOE’s Office of Fossil Energy
  - Including an HBCU-OMI program targeting fossil energy
Questions?

VISIT US AT:  www.NETLDOE.gov

@NETL_DOE

@NETL_DOE

@NationalEnergyTechnologyLaboratory

CONTACT:

Sydni Credle, Ph.D., P.E.
Technology Manager, University Training and Research
304-285-5255
sydni.credle@netl.doe.gov