

# University Coal Research & Historically Black Colleges and Universities and Other Minority Institutions

Preparing the next generation of scientists and engineers to meet future energy challenges and realize future energy opportunities.

## OBJECTIVES

Maintain and upgrade education, training, and research capabilities in the fields of science and technology related to fossil energy resources.

The Historically Black Colleges and Universities (HBCU) and Other Minority Institutions (OMI) program and the University Coal Research (UCR) program were designed to increase the competitiveness of universities and HBCU/OMIs in fossil energy research and discoveries by increasing the capabilities of current researchers while training new generations of diverse research scientists and engineers.

### FY17 BUDGET

\$1.0M HBCU/OMI  
\$1.4M UCR

Technology Manager – Briggs White  
Federal Project Manager – Maria Reidpath

### SUCCESS STORIES

#### UCR Outreach Program Participant

##### Robert Fryer, Ph.D.

- University of Maine
- specializes in harsh-environment Surface Acoustic Wave (SAW) sensor technologies
- contributes to NETL research on thin-film characterization, deposition, and testing



#### HBCU/OMI Alumni



##### Monica Cadena, B.S.

- The University of Texas at El Paso
- 2 published journal articles
- Graduated in May 2015
- Mechanical Engineer at Exxon Mobil in Houston, TX

#### UCR Alumni



##### Mitchell Colby, Ph.D.

- Oregon State University
- 29 scientific/research publications
- Senior Research Engineer at Scientific Systems Company in Woburn, MA

## ACCOMPLISHMENTS

Institutions participating in the programs show their capabilities and accomplishments when NETL hosts its annual Joint-Kickoff Meetings for recently awarded projects and at Annual Project Review Meetings where the students make presentations on the status of all active projects.

**2016** 9 universities presented (6 UCR & 3 HBCU) on newly awarded projects  
40 presentations were made (27 UCR & 13 HBCU) on project status

**2017** 7 universities presented (3 UCR & 4 HBCU) on newly awarded projects  
46 presentations were made (31 UCR & 15 HBCU) on project status

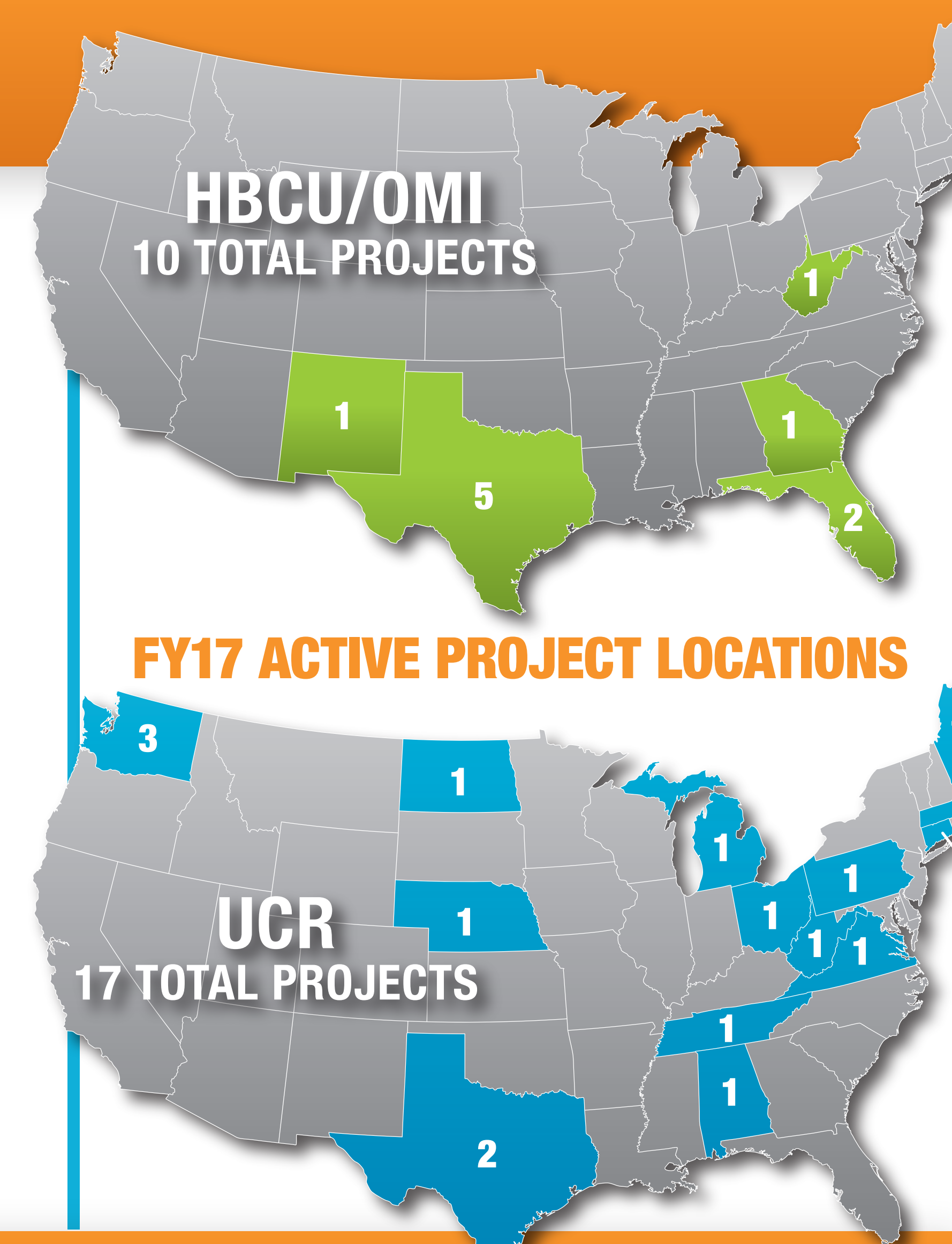
### HBCU/OMI Accomplishment

Each year, HBCU/OMI institutions can participate in a webinar to learn about NETL and its mission and to gain an in-depth understanding of how to prepare and submit proposals responsive to set criteria.

**2016** 40 universities represented  
90 individuals attended  
**2017** 20 universities represented  
60 individuals attended

### UCR Accomplishment

The UCR Outreach Initiative provides opportunities for qualified students and post-doctoral researchers to hone their research skills with NETL's in-house scientists. Candidates are primarily sought through active UCR schools and conduct on-site research in topic areas of their expertise.

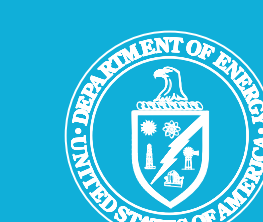


## IMPORTANCE

HBCU AND UCR STUDENTS HAVE INCREASED FOSSIL ENERGY SECTOR EXPOSURE, EDUCATION, AND RESEARCH ENGAGEMENT

1. Advance energy technologies to allow for expansion of energy production
2. Facilitate energy sector job growth
3. Increase the number of technically skilled and qualified individuals
4. Create positive economic and national security realities

### PARTNERS



U.S. DEPARTMENT OF ENERGY

