University of Kentucky

(Lexington, Kentucky)

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Major Takeaways: University of Kentucky

Event Overview

- The University of Kentucky hosted the nation's first Energy Innovation Regional Forum on April 21. It included 100 attendees from 11 U.S. states. In addition to keynote remarks from Energy Secretary Ernest Moniz and welcoming comments from UK President Eli Capilouto, the program featured panels on the following topics: Innovation, Combustion and CCS; New Value Creation from Coal; and Technology Innovation as a Driver for Regional Energy and Economic Development. The day also included a poster session featuring energy-related work from across the UK community.

Key Takeaways

- Current Regional Innovation Ecosystem
  - UK has a long, proud history of partnering with universities, industry, and non-government organizations across the region, nation and the world to solve the complex issues facing the energy industry. That tradition continues today.
  - UK CAER is well-positioned as a leader in developing technologies that utilize regional resources in an efficient and environmentally-sustainable manner. CAER researchers specialize in clean coal technology; beneficial re-use for coal ash and industrial waste; renewable fuels and chemicals; cost & reliability of power; and energy efficiency and security.
  - The current U.S. energy research and development ecosystem has encouraged investigators and institutions to focus on the same problems, regardless of geography, regional energy resources, and professional and institutional expertise.
- Building a Broader Ecosystem
  - The U.S. needs to change the innovation paradigm. We must innovate in ways that are appropriate to a region's resources and strengths. There is no "one size fits all" answer to ensuring a sustainable, reliable energy future in the United States. We must invest equally in new technologies regardless of fuel sources to remain internationally competitive in current and emerging markets.

Major Takeaways: University of Kentucky (continued)

Key Takeaways (continued)

- Opportunities & Priorities
  - Create a sustainable, consistent national research and development budget that invests in an “all-of-the-above” energy strategy. Regional partners can assist in this area by informing our policymakers, legislators, and key stakeholders of the importance of such policy.
  - Discovering breakthrough energy innovations will require long-term investment. Investment decisions should be managed by each region to ensure that regional partnerships can set priorities based on the particular needs and opportunities in each region. This will help region’s invest in their strengths and maximize their resources.
- Challenges
  - Successful regional energy innovation partnerships need to be two things that don’t necessarily “get along.” They need to be patient and nimble. We need to be patient in investing in technologies that we know hold great promise in the long-term (carbon capture and storage), and nimble enough to react and invest in new, emerging technologies.
  - Universities, institutes, and government agencies are not traditionally agile in their ability to react to market conditions. These regional organizations needs to develop processes and procedures that will allow them to react more quickly, while remaining patient with projects that need time to develop. The ability to make investment decisions regionally should help address these issues.
- Next Steps
  - Continue to partner and foster relationships with those that attended the Regional Energy Innovation Forum. At UK CAER, our work with organizations across the region and country continue to evolve and become central to the Center’s growth strategy.