

North Central and Intermountain West Region
(ND, SD, NE, KS, CO, MT, WY, UT, ID and discussions with NM)



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Major Takeaways: Colorado Energy Research Collaboratory

Event Overview

The Sept 19 summit convened 167 individuals & approx. 30 on the live stream over a ten-state region (ND, SD, NE, KS, MT, ID, UT, CO, WY, NM) to acquire input and ideas from a wide variety of participants on topics including regional energy and innovation ecosystem strengths, opportunities and challenges; opportunities for regional public/private partnerships leading to pilot-scale commercial deployment; and understanding how public policy decisions influence achieving these goals.

The agenda included keynote sessions by former Colorado Governor Bill Ritter, current Colorado Governor John Hickenlooper and Dr. Lynn Orr from DOE. There were four topic areas discussed in pre-summit conference calls as well as concurrent breakout sessions. The topics included Grid and Storage; Food/Energy/Water; Energy/Climate and Renewable Sources. For more information: www.regionalsummit.org

Key Takeaways

Current Regional Innovation Ecosystem

This region incorporates 4 DOE national laboratories and dozens of other federal R&D facilities such as NOAA, NIST, NCAR, USDA labs, extension agencies, etc. The unique characteristics of the region include a large land area requiring a different approach to power transmission than in the more densely populated areas on the East and West coasts. The large reserves of fossil energy provides the motivation for production with the lowest possible environmental impact, and emphasizes the long term needs for CO₂ capture, sequestration and/or reuse. The region has significant capacity for biofuels, particularly advanced biofuels, but is challenged with a relatively arid environment that is water constrained in many regions. Cultivation of biofuels/biomass is challenged by the latitude variation of the region extending from the Mexican to Canadian borders.

Building a Broader Ecosystem

A large portion of the U.S. fossil and renewable energy resources reside in this region. The region has a low population density, extensive agriculture resources, large federal and tribal land footprints, and faces significant water challenges. In addition, other factors related to ecosystems, public policy, techno-economics, and human factors must be addressed as the region develops and implements a clean energy technology innovation strategy.

Major Takeaways: Colorado Energy Research Collaboratory (continued)

Key Takeaways (continued)

- Opportunities & Priorities**

Commercial deployment of energy technologies is required to have impact at a large scale. The opportunities for collaboration between industry and research communities are critical in developing and deploying next generation energy innovations at a large scale in this region. Industrial scale up of clean energy technologies in the region is challenged by regulatory uncertainty around market signals on CO₂ emissions as well as incentive programs for renewable energy or CO₂ capture, sequestration or reuse programs. The research institutions in the region can be harnessed to stimulate the development of next generation energy products, but industry access to research institutions needs to be improved.

- Challenges**

At the summit, participants discussed how the region can align anticipated research topics with state policies that become key drivers of deployment. Many of the states in the region have renewable portfolio standards, but these are primarily being fulfilled by build out of proven solar and wind technologies. The states could help to spur innovation by encouraging adoption of innovative new technologies for at least a portion of procurements to meet RPS goals. As it relates to improving industry participation, we will be forming an industry advisory group to further address this challenge.

- Next Steps**

This region is rich in conventional energy resources, renewable energy resources, research and intellectual capacity, and a robust energy industry. The general consensus is that the four topics proposed are relevant and vital for the region. However, additional items for further consideration may include the role of energy efficiency, geopolitical, cultural, social and behavioral issues. The reports on the four breakout sessions contain many novel ideas around regional innovation. Using these comments, we plan to pursue future ways to partner by using our summit's data to craft a regional plan. At the summit, breakout groups were already deciding where they would host specific topic-area workshops so they could identify who the players should be in this regional multi-state endeavor. Researching best practices in the formation of a governance model, our goal is to create an effective organizational structure for our regional entity. We have already begun to create a 501(c)(3) organization that be used to form the North Central and Intermountain West regional partnership.