

Technology Advisory

Wyoming Integrated Test Center–Carbon (ITC-C) and XPRIZE

Update: Finalists to Be Announced April 9; Major Construction Complete on Test Center

What has changed?

XPRIZE Competition

Several months ago, the twelve (12) semi-finalists¹ that were chosen from among the 47 teams from seven countries who applied in the first round of the Carbon XPRIZE competition conducted demonstrations. The \$20 Million global prize for the winner of this competition is to develop and implement breakthrough technologies that will convert CO₂ emissions from power plants and industrial facilities into valuable products. The semi-finalists represent a great diversity of approaches to turn CO₂ emissions into valuable products, such as fish food, fertilizer, carbon nanotubes, and building material. They are pushing the boundaries of CO₂ utilization to create breakthrough solutions.

Out of the semi-finalists, five (5) finalists have now been selected to proceed to the Wyoming Integrated Test Center-Carbon (ITC-C).² The five 5 finalists will be announced April 9th during the Bloomberg New England Energy Summit in New York City.

The finalists will meet May 22-25 in Banff of Alberta, Canada and will have access to the ITC-C in Gillette, WY starting in June.

Progress on the ITC-C

Major construction on the test center has been completed (see: <https://www.youtube.com/watch?v=OcWrqbzLFt4&t=7s>). The project came in ahead of schedule and under budget thanks to efforts by Basin Electric Power Co-op. By December, all small bays were completed, and the large bay had only limited finish work to be done. Some minor specific additional work will need to be finished once a large test bay tenant is selected.

¹ See related [Tech Advisory](#) for listing of the semi-finalists and their areas of research.

² In addition to Basin providing the power plant site, the state of Wyoming is contributing \$15 million; Tri-State \$5 million; and NRECA \$1 million.

To celebrate site construction, there will be a ribbon-cutting ceremony at the ITC-C. The ceremony is scheduled for May 16th.

The following are pictures of the testing facility and associated new office building:



The Wyoming ITC-C, located at Basin Electric Power Cooperative's Dry Fork Station power plant, is the host site for testing NRG COSIA Carbon XPRIZE technologies. For more background information on the ITC-C, please see the Additional Resources at the end of this advisory.

NRECA is coordinating with the Wyoming Infrastructure Authority (WIA, <http://www.wyia.org/> and XPRIZE on a trip to Gillette, WY soon after the announcement of the finalists, for orientation presentations from local stakeholders and to perform site walk-throughs.



What Is The Impact On Cooperatives?

The Wyoming ITC-C will soon begin commercial operations. Electric cooperatives will receive unique benefits from the ITC-C by virtue of their financial commitment. Soon this state-of-the-art and pioneering research will look at converting the CO₂ into

marketable commodities – such as useful fuels, chemicals, fish food, carbon nanotubes, building materials, and other products.

Additional Resources

<http://www.wyomingITC.org>

April 2016 - [press release](#)

June 2016 - [Technology Advisory](#)

March 2017 - [Technology Advisory](#)

<http://carbon.xprize.org>

June 2016 - [video](#)

September 2016 - [Technology Advisory](#)

Contact for Questions

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