Kern, Bakersfield win federal grants supporting energy technology

By John Cox

Bakersfield Californian, Tuesday, March 29, 2022

A pair of federal grants announced Tuesday will provide technical know-how to help Kern County's energy sector and other parts of the community confront some of the biggest challenges of the 21st century while also generating local employment.

Kern and Bakersfield were among only 22 communities nationwide to receive pledges of technical assistance help, known as Communities Local Energy Action Program grants, from the U.S. Department of Energy.

The county work will focus on carbon capture and sequestration — a nascent technology designed to help address climate change — while the city-led effort deals with cost-efficient use of energy and microgrids that allow facilities to operate even when power from utilities has to be shut off.

Both grants are expected to involve broad coalitions including government, nonprofits and the private sector, and as such were welcomed Tuesday by leaders of various local organizations.

The announcements were seen as big steps for local workforce development as well as a win for the county's B3K Prosperity economic collaboration that has worked to plan for new job creation as oil and ag wrestle with changing times.

Chancellor Sonya Christian of the Kern Community College District, which will play a role in both grants, said local campuses will work with industry to deepen their energy curricula while recruiting underrepresented workers.

She mentioned two specific proposals that could come of the grants: one would capture and store carbon dioxide from a boiler; the other would build a microgrid for teaching science and engineering students.

No money will flow locally from either grant. Rather, federal agencies such as the National Renewable Energy Laboratory will lend their expertise in consultations with local parties.

One reason for Kern's success was the county's continuing dependence on conventional energy for local jobs and tax revenue. Another factor, in the case of the carbon management grant, is the local presence of depleted oil reservoirs identified as ideal for storing carbon dioxide and potentially helpful for achieving California's goal of carbon neutrality statewide by 2045.

County officials said that project will lead to establishment of an industrial park somewhere in western Kern creating 10,000 construction jobs and 4,000 permanent jobs.

Lead planner Lorelei Oviatt said the coalition behind the effort will look for a property owner willing to host the project, which she estimated will eventually attract as much as \$100 billion in investment.

The facility would receive carbon by pipeline or rail and, using energy from a proposed solar array measuring as large as 30,000 acres, produce hydrogen energy and so-called green concrete. Carbon would also be injected deep underground as a way of gradually ridding the atmosphere of greenhouse gases.

"We will be the only place in California that we would do this kind of project," Oviatt told reporters at a morning news conference.

Similar projects have been proposed locally by oil producers seen as having the technical expertise, infrastructure and investment capability required for large-scale industrial work.

Money for the county-led project has not been identified, and people involved say it could come from a variety of sources, including government grants and private investment.

"This first step will provide the overview we need for setting the table for private sector investment in new and innovative carbon management technologies," county Board of Supervisors Chairman Zack Scrivner said at the conference.

The city-led grant is aimed at lowering costs for poor households as well as decarbonizing local agriculture. Bakersfield officials will work with the Kern Clean Cities Coalition, a group that includes Community Action Partnership of Kern, the Dolores Huerta Foundation and the Kern County Farm Bureau, as well as labor unions, chambers of commerce and the cities of Arvin, Shafter and Wasco.

In addition to work on microgrids, the grant is expected to reduce energy costs through greater use of zero-emission transportation, low-cost battery energy storage and community solar arrays that provide power for electric vehicles.

"Transitioning to an environmentally sustainable future is a must, but it must be done in a way that ensures that low-income and rural residents are not adversely impacted," Executive Director Camila Chavez of the Dolores Huerta Foundation said in a news release. "This partnership, which brings together industry, government, education and residents, will ensure that the most disadvantaged community members have a voice in the future of our community."