

San Joaquin Valley ready to deliver energy

The state wants 33% of its power need by 2020 to come from renewable sources.

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By Sanford Nax / The Fresno Bee

The \$787 billion federal stimulus package could help make the San Joaquin Valley a leader in alternative energy.

Millions of energy-related dollars are headed to California through a variety of government programs. At least one expert thinks it is a golden chance to create jobs in solar and other types of renewable energy, and to make the Valley more self-sufficient -- if it is done right.

"This is a once-in-a-lifetime opportunity," said Paul Johnson, executive director of the San Joaquin Valley Clean Energy Organization. "There is significant funding and the Valley is well-positioned to pursue it."

Millions of dollars will be available for everything from weatherizing low-income housing to developing alternative-energy programs.

The Valley is already in the running for solar and power projects that could bring more than 75 jobs, but the potential for more through the stimulus is strong, said Steve Geil, president of Economic Development Corp. serving Fresno County.

"We are dealing with a company right now that wants to use cattle waste, another one that wants to do thermal that uses selenium-tainted water on the west side and there is a company we are meeting with that can take waste from Fresno and convert it to renewable energy" and organic fertilizer, Geil said.

Some consultants contend the Valley is one of the few places in the nation with all the elements crucial to developing sustainable alternative energy: land, water, agriculture, ample sun and a large metropolitan area.

Abundant sun is a catalyst for large-scale solar projects near Mendota and the Carrizo Plains. Tens of thousands of dairy cows generate huge potential for development of biomass facilities. And the Tehachapi Pass above the southern San Joaquin Valley is one of the largest producers of wind energy in the world.

Adding to the healthy mix is local brainpower: Fresno State already is a leader in water technology research and University of California at Merced is a "green" campus, both in construction and through its energy research institute, which has a heavy focus on solar energy.

The missing ingredient, apparently, has been money.

"There are a lot of projects queued up in the Valley that could happen in the next several years," said Mark Stout, director of renewable technology planning at solar developer Cleantech America Inc. "But the capital markets have gone sideways."

Not everything has come to a standstill -- perhaps due in part to the state's goal of having 33% of its power need come from renewable sources by 2020. San Francisco-based Cleantech plans a solar-power farm outside Mendota that is expected to generate five megawatts, enough electricity to power about 7,800 homes, to sell to Pacific Gas & Electric Co.

Cleantech also has announced plans to build 80 megawatts of solar-power generation in the Valley by 2011.

Another solar company, Ausra, plans a 177-megawatt plant on the Carrizo Plains in southeastern San Luis Obispo County. PG&E has contracted to buy the electricity from that \$550 million plant, scheduled to go online in 2011.

Tapping cows

Then there is EarthRenew, a Canada company that has opened a regional office in Fresno with five employees. It has a plant in British Columbia that this year will process about 70,000 tons of fresh raw manure into organic pellets for sale to farms, golf courses, soil reclamation businesses and others.

The system uses a gas-powered turbine that generates enough electricity for 4,000 homes and can be sold to the energy grid. The WasteRenew process "cooks" the manure, thus eliminating steroids, antibiotics and other undesirable material, and produces nutrient-rich fertilizer that is sold.

Chief executive officer and founder Christianne Carin was in Fresno recently to promote the business. EarthRenew is working on five permits in the nation, including two on feedlots or dairies in the San Joaquin Valley.

The company calls that program WasteRenew. It also has applications that replace burners in food processing and other industries, plus technology to desalinate saline ponds.

Carin was in Washington, D.C., in recent days, lobbying for dairy farmers and others to benefit from the technology. "We are trying to stimulate the stimulus package," she said during her visit to Fresno. "There is lots of money for research like this."

Stimulating the source

Some of the money for renewable energy projects could come from \$338 million in grants that California gets from the stimulus package. Cities with

populations over 35,000 and counties over 200,000 can use the grants to help develop programs.

The program was authorized in 2007, but never funded until the stimulus was approved. "It is really important because for the first time it allows local jurisdictions to develop programs for energy efficiency," said Wayne Waite, regional energy representative for the federal Department of Housing and Urban Development.

In addition, the stimulus package is increasing the amount of money devoted to weatherization projects statewide from \$200 million to \$5 billion. It is estimated that every \$1 million expenditure creates up to 50 jobs, many of which are likely to be filled by former or retrained construction workers.

Officials in Kern County, for example, are training youths and others to become electricians skilled in maintaining solar panels.

Some also could learn to perform energy audits and make houses more energy efficient through weatherization upgrades. "Some areas are already collaborating," Nicole Parra, the former legislator who recently was named a regional development director by Gov. Arnold Schwarzenegger, told community activists on Fresno's west side last week.

Clearing the way

Johnson, the executive director of the San Joaquin Valley Clean Energy Organization, and others add a warning: rapid expansion here isn't without hurdles.

Geil, president of the economic development corporation in Fresno County, said green projects need to receive permits more quickly: "Most of the companies that come here are not prepared for all the hoops to jump through. It is harder and longer in California."

Rollie Smith, HUD's field director in Fresno, said Valley organizations must be organized to ensure they get as much money as they can -- and to make sure it stays here.

Community activist Amy Chubb said, "The recovery and reinvestment act is the last best chance to get the community moving again."

Johnson notes that the money must be spent quickly, which increases the risk of it being used ineffectively. "That's a challenge," he said. "It is like building and flying an airplane at the same time."