



Energy Nexus primes Valley to be World's Renewable Energy capital

By **Brett Miller** -March 20, 2017



(L_R) State Senator Ben Hueso, IID General Manager Kevin Kelley, and State Assemblyman Eduardo Garcia participate in a panel discussion concerning the future of geothermal development and its impact on the Salton Sea Thursday afternoon at the Imperial Palms Resort.

HOLTVILLE — Leaders and representatives within the renewable energy industry attended the 10th annual Imperial Valley Renewable Energy Summit March 15-17. Hosted by the Imperial Valley Economic Development Corporation (IVEDC), the “Energy Water Nexus” aimed to promote utility-scale energy development from the Valley’s vast potential for solar, geothermal, wind, and biomass energy production.



The event saw strong attendance, lending credence to the Valley's push to be seen as a region that will lead in renewable energy production, and not just in the state of California.

"I do think the Imperial Valley could be the renewable energy capital of the world," said Ian Crawford, representative of the Geothermal Resource Council, who flew down for the summit from Sacramento.

"Between geothermal, solar, wind, and algae, it's all here," Crawford said.

Geothermal has acquired a more respectable status lately among renewable energy sources. Crawford noted that solar and wind were among the most affordable solutions for many years, but with the recent improvement of technology, geothermal has become a top contender, due to its relatively small environmental footprint and ability to consistently produce power regardless of weather or sun positioning.

Yet, the Valley has been described as "enviable" for its prime conditions for solar and wind. With an average of 360 days of sun per year and the majority of available land having a 1-degree slope, installment of solar panels is nearly ideal.

According to IVEDC, the total output potential for renewable energy in the Valley could be as high as 42,000 MW, which is enough to power an estimated 31 million California homes. Typically, 1 MW is said to be enough to power 1,000 homes, but for Californians' energy use, 750 homes is seen as more accurate.

Currently, the Valley is producing 725 MW of geothermal energy, 1,200 MW of solar energy, and 265 MW of wind energy. While solar energy currently leads the pack, concerns have been raised about maintaining a base power level when the sun is down. In response, the IID has begun to move towards energy storage solutions.



“But battery storage is expensive, and from a balancing or integration standpoint, geothermal is cheaper,” said Andy Horne, Imperial County deputy executive officer for natural development.

Currently, 21 geothermal plants are in operation within the Imperial Valley, although none have been built within the last six years. That might soon change, as the Australian-based company Controlled Thermal Resources is planning on building the largest geothermal plant in the United States, with a proposed output of 250 MW, within the Imperial Valley.

Proponents have pointed out that the land immediately surrounding the Salton Sea has been a prime location for geothermal, and the construction of renewable energy plants upon the exposed playa might contribute to dust suppression efforts as the sea’s water level continues to recede.

The conference included a panel discussion addressing the interplay between renewable energy projects in the Valley and community development and health safety, especially related to the preservation of the Salton Sea. The panel included California Senator Ben Hueso, Assemblymember Eduardo Garcia, IID General Manager Kevin Kelley, Imperial County Chief Executive Officer Ralph Cordova, Procopio consultant Tim Duane, and the California Secretary for Natural Resources, John Laird.

Funding to ensure that the Salton Sea area does not continue to pose a health hazard was addressed by both Garcia and Hueso. While the state of California is seeing substantial budget cuts for the upcoming fiscal year, Garcia was confident that funding could be directed to the Salton Sea’s preservation, if not from California’s general fund, then from other sources.



“We’ve got to look everywhere. No rock should go unturned,” said Garcia. “Senator Hueso has a proposal to put a bond out that would address all of the state’s obligations when it comes to a lot of these water settlement agreements.”

Meanwhile, lawmakers in California have made the state’s renewable energy portfolio requirement standard 50 percent by 2030, and is expected to increase that requirement to 100 percent. Development of various renewable energy plants near the Salton Sea might be a crucial step toward that goal.

“They are all good sources of renewable energy,” said Horne of these plant developments. “And many will also provide dust control for the exposed shoreline.”