



Department of Conservation & Natural Resources

Joe Lombardo, Governor James Settelmeyer, Director Charles Donohue, Administrator

February 3, 2023

To: State Land Use Planning Advisory Council

From: Scott Carey, AICP, State Lands Planner

RE: Update on Renewable Energy and Consideration of Scoping Comment Letter for

Western Solar PEIS/RMP

Background

In 2019, the Nevada Legislature approved Senate Bill 254 which mandated that 50% of Nevada's energy must come from renewable energy or energy efficiency measures by 2030. The Legislature also declared that it is the Legislature also declared it is the policy of the State of Nevada to:

- 1) Encourage and accelerate the development of new renewable energy projects for the economic, health and environmental benefits provided to Nevadans.
- 2) Become a leading producer and consumer of clean and renewable energy, with a goal of achieving by 2050 an amount of energy production from zero carbon dioxide emission resources equal to the total amount of electricity sold by providers of electric service in Nevada.
- 3) Ensure that the benefits of the increased use of portfolio energy systems and energy efficiency measures are received by the Nevada residents. Such benefits include, without limitation, improved air quality, reduced water use, a more diverse portfolio of resources for generating electricity, reduced fossil fuel consumption and more stable rates for retail customers of electric service.

In recent years all throughout Nevada large scale renewable energy projects have been constructed, while many more are currently under construction or proposed. With some much development taking place throughout the state, it can often be challenging to track the size and location of these projects. To staff's knowledge there is not a single official source that has tracked the amount of renewable energy that has been developed or that is proposed and where is located. It is staff's best estimate that there are currently over 6,000 MW of proposed renewable energy development that is proposed over several hundred thousand acres around the state. To help better understand the land use planning implications of this type of development, staff wanted to share the following resources with the Council.

- 1) Nevada State Clearinghouse. This program is housed within the State Land Use Planning Agency and since 1989 has served as the single point of contact for the State of Nevada for all National Environmental Policy Act (NEPA) projects. In addition, the Clearinghouse works closely with the Public Utilities Commission of Nevada to track proposed renewable energy projects through the Utility Environmental Protection Act (UEPA) process. On the Clearinghouse website you can search for types of energy development or search for projects in a particular area of the state. For more information to sign up to receive email notification of energy projects please visit https://clearinghouse.nv.gov/.
- 2) Solar Energy Environmental Mapper: This is an interactive mapping tool development by the Federal Government that provides access to access to information relevant to siting of utility-scale solar projects in the southwestern United States. Users can view map layers that were used to create the maps and conduct some analyses in the Solar Energy Development PEIS as well as map layers showing land use decisions associated with the Bureau of Land Management's Solar Energy Program. For more information or to view the mapping tool please visit https://solarmapper.anl.gov/index.cfm.
- 3) Geospatial Energy Mapper: This is another interactive mapping tool developed by the Federal Government to assist agencies, energy developers, and the public understand the location of existing energy infrastructure and the potential for new energy projects throughout the country. This tool provides a lot of helpful information and data layers that can be a good resource to determine the land use planning implications of all types of energy development. For more information to view the mapping tool please visit https://gem.anl.gov/.
- 4) Nevada State Solar Spotlight: Last year the Solar Energy Industries Association published a handout that details the solar industry in Nevada. A copy of the handout is attached to this memo.

Following the presentation, the Council is encouraged to share any information about the land use planning implications of renewable energy projects within their respective jurisdictions. The goal of this agenda item is to have a high-level discussion about renewable energy in Nevada overall and how these projects are affecting local land use plans. For the purposes of this agenda item the Council is asked to not focus on or take a position on any specific project or proposal. If the Council would like to take a deeper look at or develop statewide land use planning policy related to this issue, members are encouraged to request a future agenda item.

Recommendation: Staff recommends that the Council review the information provided in this about renewable energy development in Reno. Following the presentation, members of the Council are encouraged to share any information about the land use planning implications of renewable energy projects within their respective jurisdictions.

STATE SOLAR spotlight

Nevada

Ranks 6th

Total solar installed (MW)

5,039.90

638.4 MW in 2021

Growth projection over the next 5 years (MW)

Ranks 5th

18,229



Solar jobs in the state¹

7,193

Ranks 9th in 2021



Enough solar installed to power

873,341 homes

Percentage of state's electricity from solar²

22.89%



111

solar companies are currently operating in California³



15 manufacturers



41 installers/developers



55 other companies

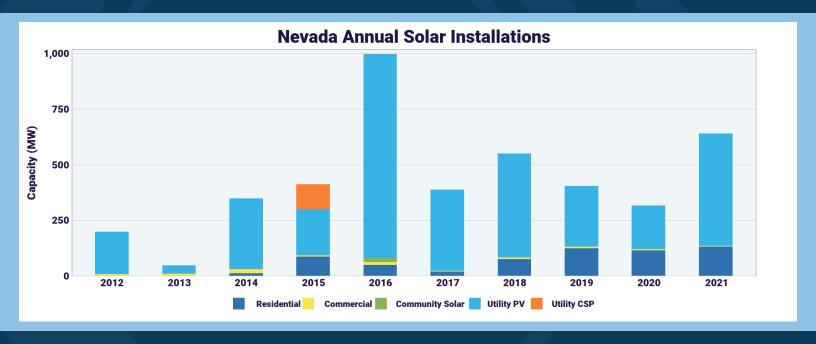
Value of the state solar market

\$9.1 billion

with \$870.89 million invested in 2021

Price decline over the last ten years

52%





STATE SOLAR spotlight

Nevada

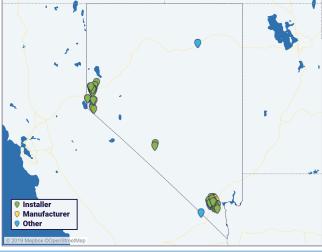
Ranks 6th

More information about solar energy in Nevada4

- Moapa Southern Paiute Solar Project in Maiute was developed by First Solar and came online in 2016. This 344.3 MW project produces enough electricity to power 54996 homes. Moapa Southern Paiute Solar Project in Maiute was developed by First Solar and came online in 2016. This 344.3 MW project produces enough electricity to power 54996
- Apple, Switch, and Wynn Las Vegas have all gone solar in Nevada. Apple's 251 MW
 Techren II project in Boulder City is one of the largest corporate projects in the state.
- At 782.5 MW, Copper Mountain in Boulder City is among the largest solar installations in Nevada. Completed by Sempra in 2012-2021, this solar project has enough electric capacity to power more than 124991 homes.

Solar Companies in Nevada







References

All data from SEIA/Wood Mackenzie Power & Renewables, Solar Market Insight© unless otherwise noted: https://www.seia.org/smi

¹National Solar Jobs Census 2020: https://www.seia.org/research-resources/national-solar-jobs-census-2020

²Energy Information Administration, Electric Power Monthly: https://www.eia.gov/electricity/monthly/#generation

3SEIA, National Solar Database: https://www.seia.org/research-resources/national-solar-database

⁴SEIA, Solar Project Tracker (includes Solar Means Business: https://www.solarmeansbusiness.com, Major Solar Projects List: https://www.seia.org/research-resources/major-solar-projects-list and Solar in Schools: https://www.seia.org/research-resources/brighter-future-study-solar-us-schools-0