

Smart-from-the-Start

Energy and Infrastructure Planning in Nevada



The Challenge

Avoiding the worst impacts of climate change requires the rapid transition of our energy, transportation, and industrial systems away from fossil fuel-based sources like coal and natural gas and towards carbon-free ones like geothermal, solar, and wind. Local, state, national, and international policies, and agreements, combined with a rapidly shifting consumer demand for products that embody environmental, social, and governance (ESG) principles, are driving a rapidly accelerating demand for the ingredients needed to achieve net-zero emission goals.

Nevada has a disproportionate supply of the ingredients needed for a clean energy future. The result is an unprecedented demand for new renewable energy generation, storage, and transmission, as well as for critical minerals like lithium that underpin transportation electrification and energy storage. Developing these resources will also transform Nevada's economy through tax income and high-paying jobs.

There is a cost. Transitioning to a decarbonized economy and the more sustainable and resilient future that people and nature need to survive will require hundreds of thousands of acres of land, and with that land, wildlife habitat, recreation opportunities, and cultural resources. In Nevada, where over three-quarters of the state is undeveloped federally managed public land, the magnitude of change could be enormous.

What is a Smart-from-the-Start Planning Approach?

A smart-from-the-start approach to energy and infrastructure planning is one that accelerates the clean energy transition while maximizing conservation values and promoting equitable and just outcomes for Nevada's diverse communities. The cornerstone of this approach is identifying the places where projects will have the least impact as possible on natural lands, cultural resources, recreation opportunities, and other important conservation values.

With its Mining the Sun program, The Nature Conservancy is exploring opportunities to build renewable energy on active and former mine lands, brownfields, and other previously disturbed areas. We are working closely with state and federal agencies, tribes, local communities, private landowners, utilities, mining companies, and energy developers to implement Mining the Sun pilot projects.

Maximizing the energy efficiency and distributed energy generation capabilities of urban areas is another smart-from-the-start approach. Places like Las Vegas and Reno are a continuously expanding opportunity for rooftop solar, heat pumps, microgrids, and other energy-related technologies. Generating electricity at the same location where it is used eliminates the need for transmission. This avoids land conversation for new transmission lines and increases energy efficiency by eliminating energy lost during transmission.

Benefits

- ✦ A smart-from-the-start approach identifies, prioritizes, and incentivizes locations with the best opportunities for multi-part beneficial outcomes for nature, people, economies, and the climate.
- ✦ Accelerating renewable development on already impacted lands helps conserve undisturbed lands for wildlife, tribal cultural values, and recreation opportunities. Avoiding the conversion of undisturbed lands also retains the ecosystem services they provide, like stormwater management and filtration, carbon sequestration, and extreme heat mitigation.
- ✦ Smart-from-the-start planning generates value for all parties by recognizing and elevating diverse perspectives. Synthesizing this knowledge leads to improved coordination and implementation decisions with broader support for projects. This can lead to shorter permitting and implementation timelines. Any cost savings realized from faster permitting schedules reduces the burden on electricity ratepayers.
- ✦ Revitalizing previously disturbed sites is an economic benefit for local communities because it brings new property tax revenue and the potential for local job creation. Importantly, a smart-from-the-start approach ensures that communities share the economic and social costs and benefits equitably.

Nevada as a Smart-from-the-Start Leader

Nevada is a key state in the Western energy market with many of the Western grid's largest transmission interconnections already sited or planned in Nevada. Having a smart-from-the-start plan provides a solid baseline for engaging in broader discussions and negotiations with other states and regions about Nevada's contributions to the West's clean energy transition.

At the same time, Nevada can be a model for Western states by developing clear recommendations on establishing a smart-from-the-start approach to statewide renewable energy infrastructure planning for a clean energy future. The state has already demonstrated its commitment to smart-from-the-start principles. The 2020 Nevada Climate Strategy highlighted the need for smart from the start planning and the State Land Use Planning and Advisory Council endorsed the concept in July 2021.



For more information about The Nature Conservancy in Nevada's efforts to advance smart-from-the-start energy planning, please connect with our team.

Jaina Moan

External Affairs Director and Climate Program Lead

jaina.moan@tnc.org
(702) 737-8744 x 3138

Peter Gower

Strategy Director for Energy, Infrastructure and Land Use

peter.gower@tnc.org
(775) 446-5525