
Executive Summary

The American Jobs Project was borne out of two tough problems: the loss of middle-class jobs in America and Congressional paralysis. It seeks to address these problems by taking advantage of one of the biggest market opportunities of our era—the advanced energy sector—and to do so at the state, not the federal level. Policymakers who leverage the unique strategic advantages of their state to grow localized clusters of interconnected companies and institutions are poised to create quality jobs.

Nevada is well-positioned to benefit from the growing demand for advanced energy given the state's strengths in advanced manufacturing and engineering, its abundant natural resources, and its proximity to major markets. There has already been significant investment in advanced energy in Nevada: over \$6 billion has been invested in advanced energy products, bringing approximately 1,500 MW of new renewable generation on-line since 2011.^{11,12} Opportunities to leverage this momentum to further serve growing regional, national, and global markets offer real benefits for Nevada's economy and good-paying jobs for the state's residents.

Extensive research and interviews with local stakeholders and experts have resulted in identifying two economic clusters showing particular promise: solar energy and batteries.

There are several barriers hindering Nevada's advanced energy industries and preventing supply chains from reaching their full potential. Nevada must address these roadblocks to grow the state's advanced energy sectors and realize economic gains. To take full advantage of these opportunities, Nevada's policymakers can implement policies that increase demand for solar energy applications and battery technologies and help the state's businesses grow, innovate, and outcompete national and international competitors. Indeed, with the right policies, Nevada can strengthen these two clusters and support an annual average of over 28,000 jobs.

This project serves as a research-based guide for state and local leaders who seek to develop smart policies focused on leveraging the state's resources to create good-paying, skilled jobs. The number of jobs created is highly dependent on action taken by state and local policymakers. With concerted effort at the state and local level, more businesses that sell advanced energy products and services will take root in the state. Employees in the advanced energy sector will spend their earnings in the local economy at grocery stores, restaurants, and other neighborhood



businesses, and those local establishments will in turn need to hire more employees to satisfy demand. This creates a multiplier effect throughout Nevada's economy, where a single dollar spent in a community will circulate through local businesses and their employees numerous times.

Summary of Policy Recommendations

The analysis presented in this report culminates in four thematic sets of recommendations for Nevada policymakers. Each set of recommendations identifies opportunities for barrier removal and future growth opportunities in the advanced energy sector. While the recommendations are intended to be complementary, each can also be viewed as stand-alone options.

Solar Technology

Strengthen and Expand Property Assessed Clean Energy (PACE): Institute a loan-loss reserve program and create a Property Assessed Clean Energy (PACE) toolkit. PACE financing mitigates the high upfront cost of solar by allowing property owners to finance investments in solar panels with a loan that is repaid through their property tax bills.

Expand the Renewable Energy Tax Abatement Program to Include Manufacturing: Provide partial sales and use tax and property tax abatements to renewable energy manufacturers. Tiered incentives could be added to the program to attract large investments.

Recruit Foreign Direct Investment: Attract foreign companies to boost solar investments within Nevada. Foreign investors can bring manufacturing expertise and resources that are currently lacking in the state's solar economy.

Promote Solar on New Homes: Require homebuilders to either install solar systems on new construction homes or make new houses solar-ready.

Battery Technologies

Expand PACE to Include Battery Systems: Allow property owners to finance battery systems through PACE programs. PACE financing mitigates the high upfront cost of battery systems by allowing property owners to finance their investment with a loan that is repaid through their property tax bills.

Expand the Renewable Energy Tax Abatement Program to Include Battery Deployments and Manufacturers: Extend the existing Renewable Energy Tax Abatement program to allow battery deployments and manufacturers to qualify for partial

sales and use tax and property tax abatements. Tiered incentives could be added to the program to attract large investments.

Use ESCOs to Upgrade Public Fleets: Allow public entities to use performance contracting to upgrade their fleet vehicles. Existing law only allows performance contracting for energy efficiency upgrades to buildings.

Properly Define the Value Utility-Scale Batteries Add to the Grid: Determine whether batteries are a more cost-effective investment than other resources and encourage utility-scale battery manufacturers to invest in Nevada by establishing the proper valuation for energy storage technologies.

Innovation Ecosystem and Access to Capital

Create a Venture Capital Fund of Funds: Launch a private or state-seeded fund of funds to attract the nation's top venture capitalists to Nevada. In addition to providing capital, leading venture capital firms would also bring knowledge, discipline, and expertise to Nevada's entrepreneurs.

Create an Equity Crowdfunding Hub: Streamline entrepreneurs' access to capital through an online platform managed by the state or a state university. Matching grants could help battery and solar energy companies secure funding.

Bolster Nevada's Innovation Centers to Create Innovation Districts: Use tax increment financing to create an innovation district focused on advanced energy. Innovation districts foster collaboration between private enterprises, universities, local governments, and foundations.

Workforce Development

Promote Manufacturing Apprenticeships: Create new job opportunities by providing incentives for companies to hire and train apprentices. Youth apprenticeships could be linked to high school and community college programs.

Establish Early College Programs to Improve STEM Education: Expand early colleges throughout the state, allowing high school students to earn college credits. Industry-specific programs could address the state's existing battery and solar technology skills gaps.

Promote Higher Education Programs in Advanced Energy: Establish an interdisciplinary energy engineering major. Additionally, graduate programs in law and business could add classes focused on energy topics, such as energy law and energy finance.

