
Executive Summary

The American Jobs Project was borne of two tough problems: 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 sectors of interconnected companies and institutions are poised to create quality jobs.

Pennsylvania has a strong foundation in the advanced energy sector with approximately 57,000 full-time jobs in more than 4,000 clean energy businesses.¹¹ Extensive research and more than forty interviews with local stakeholders and experts in Pennsylvania have resulted in identifying two economic clusters showing particular promise: smart buildings and solar.

Tremendous growth opportunities exist in Pennsylvania’s advanced energy economy, including the expansion of the smart building and solar sectors. To take full advantage of these opportunities, Pennsylvania policymakers can adopt strategic policies to help the commonwealth’s businesses grow, innovate, and outcompete regional, national, and global competitors. Indeed, with the right policies, Pennsylvania’s smart building and solar industries can support as many as 11,600 jobs per year through 2030.

This project serves as a research-based roadmap for state and local leaders who seek to develop smart policies that leverage Pennsylvania’s resources to create skilled, good-paying jobs.

Summary of Policy Recommendations

The analysis presented in this report culminates in four thematic sets of recommendations for Pennsylvania’s policymakers. Each set of recommendations identifies opportunities for barrier removal and future growth in the smart building and solar sectors. While the recommendations are intended to be complementary and would be powerful if adopted as a package, each can also be viewed as a stand-alone option. Taken together, these recommendations chart a course for Pennsylvania leaders to create and enhance jobs in the advanced energy sector.



Smart Building and Energy Efficiency

Implement State Energy Efficiency Benchmarking and Disclosure Policy: Establish city-level benchmarking programs throughout the commonwealth in order to monitor building energy performance, encourage smart building investments, and achieve environmental benefits.

Increase Compliance and Update Building Codes: Adopt the most recent residential and commercial building codes and establish a strong compliance plan in order to expand the market for energy-efficient structures.

Enable PACE Financing: Encourage energy efficiency upgrades and smart building projects by allowing Pennsylvania property owners to finance investments with a loan that is repaid through their property tax bill.

Use Competition to Encourage Small Businesses to Participate in Capacity Market Auctions: Incentivize small- and medium-sized businesses to jointly auction their future savings in PJM's capacity market by hosting a state or local competition.

Solar

Create an Online Crowdfunding Platform to Support Solar Projects: Support solar projects for schools, hospitals, and community centers by creating an online crowdfunding platform to pool public donations.

Establish a Statewide Model for Streamlined Permitting Processes: Reduce the soft costs of installing solar by simplifying permitting processes and lowering permit fees throughout Pennsylvania.

Enable Local Communities to Develop Solar Projects: Allow customers to pool resources and invest in a single shared renewable energy system, especially in areas without adequate sunlight for individual solar systems and for customers based in multi-unit buildings.

Establish a Distributed Generation Carve-out: Mandate that a portion of electricity be procured from distributed generation projects to encourage in-state production of renewable energy and diversify Pennsylvania's fuel mix.

Innovation Ecosystem and Access to Capital

Create an Intrastate Securities Exemption for Equity Crowdfunding: Spur innovation, economic activity, and small business growth by creating an intrastate securities exemption for equity crowdfunding. The exemption will expand the pool of investors that could finance Pennsylvania startups.

Establish an Early-Stage Capital Gains Tax Exemption: Increase the flow of venture capital and incentivize investors by establishing a capital gains tax exemption for investments in early-stage Pennsylvania companies.

Facilitate Partnerships within the Energy Innovation Ecosystem: Attract public and private research funds and venture capital to Pennsylvania by aligning advanced energy sector efforts and establishing collaborative partnerships among various stakeholders.

Workforce Development

Incentivize Businesses to Create More Apprenticeship Opportunities: Provide tax incentives and additional support to companies that hire and train apprentices. Increasing apprenticeship opportunities will help meet employer demand for trained workers and prepare Pennsylvanians for jobs in advanced energy sectors.

Develop Certificate and Degree Programs around High Performance Buildings: Collaborate with Pennsylvania universities and technical colleges to create certificate and degree programs that prepare students for jobs in the smart building and energy efficiency sector.

Provide Pathways for Adults to Return to College: Establish a program that enables adults to pursue higher education and supports companies that offer educational opportunities to their workers.

