
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 clusters of interconnected companies and institutions are poised to create quality jobs.

A strong advanced energy economy has already taken hold in Iowa and the sector is poised for growth. In 2014, the Iowa Partnership for Economic Progress published a yearlong study to analyze the state's economy and chart a strategic direction for future development. The study concluded that the renewable energy industry is one of the state's leading economic drivers.¹¹ The report outlines two key elements of future economic development in Iowa: (1) "geographically localized concentrations of firms in related sectors" that engage in business with each other and (2) support for technology and innovation.¹²

Wind power currently dominates the state's advanced energy industry. A range of businesses have set up shop in Iowa to take advantage of existing wind resources, the state's competitive business climate, and its strong manufacturing culture. Iowa-based companies contribute to the sector throughout the entire supply chain, including engineering and research, manufacturing and assembly, installation, sales, and distribution, as well as finance, legal, and other professional services. This type of cluster-based development enables logistical cost savings and efficiencies that give firms a competitive advantage in national and global clean energy technology markets.

Iowa has started exploring solar energy options. A cluster-based approach could leverage the state's substantial existing solar resources and create lucrative job opportunities for residents. Given Iowa's proven success in cluster-based advanced energy development, the state could galvanize these strengths to enhance existing and emerging advanced energy industries, such as solar. Facilitating growth and development would help active energy sectors innovate, retain, and attract businesses to Iowa, and create good-paying jobs in the state.

Moving forward, the advanced energy industry will contribute to the Iowa's overall economic vitality. Greater investment in energy efficiency and renewable energy could propel a 10 percent growth in advanced energy jobs by 2020.¹³ By encouraging technological



innovation in the wind and solar sectors, the state will be able to satisfy the demand for advanced energy products from a strong in-state market, and become a key player in regional, national, and international markets. To facilitate growth, Iowa policymakers could enact policies that increase demand for wind and solar in the state and help Iowa businesses remain competitive. Indeed, with the right policies, Iowa's wind and solar industries can support up to 18,000 jobs annually between 2016 and 2030.

This project serves as a research-based roadmap for state and local leaders who seek to develop smart policies focused on leveraging Iowa's resources to create skilled, good-paying jobs. The number of jobs created is highly dependent on action taken by state and local policy makers. Concerted effort at the state and local levels can create an environment that attracts advanced energy businesses to take root in Iowa. Employees in the advanced energy sector will spend their earnings in the local economy at grocery stores and restaurants, and those local establishments will need to hire more employees to satisfy demand. This creates a multiplier effect throughout Iowa's economy, where a single dollar spent in a community circulates 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 Iowa's leaders. Each set of recommendations identifies opportunities for barrier removal and future growth in the solar and wind 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. These recommendations chart a course for Iowa policymakers to create and enhance jobs in the advanced energy sector.

Wind Technology

Require Integrated Resource Planning and Collaboration: Fostering collaboration of investor-owned utilities, municipal utilities, rural cooperatives, and community stakeholders by implementing Integrated Resource Plans (IRPs). IRPs encourage energy providers to meet forecasted annual peak and energy demand through a combination of supply-side and demand-side resources that guide future generation, energy efficiency, transmission, and distribution investments.

Attract Wind Turbine Assembly Companies: Expanding Iowa's role in the wind supply chain by drawing additional turbine manufacturers to the state through the development of various incentive programs.

Modernize Transport Pathways to Improve Wind Turbine Export:

Removing key transportation barriers by optimizing roadways and waterways in Iowa for wind transportation.

Encourage Distributed Wind Turbine Deployment:

Expanding the production of distributed wind energy into the local market through distributed generation carve-outs, a small wind tax credit, and an anemometer loan program.

Encourage Foreign Direct Investment:

Drawing in foreign companies to boost wind investments within Iowa. Iowa can utilize its tremendous access to waterways to export wind products.

Solar Technology

Enable PACE Financing:

Mitigating the high upfront costs of solar for customers by allowing property owners to finance investments in solar panels with a loan that is repaid through their property tax bill.

Establish Refundable Tax Credits for Public Entities:

Allowing public entities such as schools, hospitals, municipalities, and rural cooperatives to directly benefit from solar investment and production tax credits.

Improve Solar Net Metering:

Ensuring that all Iowans have equal access to solar energy development opportunities by extending the net metering requirement to municipalities and rural cooperatives, increasing the net metering cap or instituting a capacity limit, and allowing aggregate and virtual net metering.

Enact Legislation Establishing Third-party Solar Financing:

Creating policy certainty and market stability by codifying the Iowa Supreme Court's holding allowing third-party solar within the state.

Enable Local Communities to Benefit From Community Shared Solar Projects:

Allowing 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.

Innovation Ecosystem and Access to Capital

Allow Capital Gains Tax Exemption for Early-stage Investors:

Allowing investors to fully realize all capital gains from investments in early-stage solar and wind companies serves as an incentive for investment.



Establish a Matching Grant Program for Awardees that Receive Federal Funding: Assisting businesses moving to the commercialization stages of their businesses by matching federal incentive programs. Iowa can create efficiencies in administering the grant program by coupling its initiatives with federal programs.

Create an Equity Crowdfunding Hub: Building venture capital investment in Iowa by allowing larger numbers of investors to contribute small amounts through an online investment platform.

Workforce Development

Create Tax Credits to Promote Employment and Training Opportunities in Advanced Energy: Establishing a system that provides tax credits to employers who employ qualified workers and who offer specialized training to workers.

Encourage Apprenticeships in the Wind and Solar Industry: Establishing a specific tax credit to incentivize apprenticeships that promote industry-recognized certifications.

Establish a Renewable Energy Education Strategic Fund (REESF) for Targeted Curriculum Enhancement and Pre-Employment Training: Creating clear pathways for young workers to pursue careers in renewable energy. A targeted curriculum can be used by educational institutions to train workers to meet the developing needs of local businesses, making the candidates much more attractive for future employment.

Upgrade Worker Skills Through Stackable Credentials: Generating a stackable credential system whereby Iowans can continually develop their technical skills to meet evolving workplace needs.