

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 and energy efficiency sectors—and to do so at the state, not the federal, level. State and local leaders who leverage the unique strategic advantages of their state and region to grow localized clusters of interconnected companies and institutions are poised to create quality jobs. This report serves as a strategic guide to support those efforts.

Extensive research, interviews, and roundtables with stakeholders and experts in Minnesota have identified energy efficiency as a high potential area in the state. The energy efficiency sector can move technological innovation forward, create middle-class jobs for Minnesota, and elevate Minnesota companies in the global marketplace.

Minnesota is well positioned to benefit from rising global demand for energy efficiency products given its base of 450 companies, leading research universities with expertise in energy efficiency technology, strong innovative workforce, and attractive business climate. Opportunities to leverage these strengths and momentum to further serve growing regional, national, and global markets offer vast potential benefits for the state economy and Minnesota residents.

However, there are several barriers hindering Minnesota's energy efficiency progress and preventing the industry from reaching its full potential. These barriers to growth range from policies that discourage capital investments to lack of access to capital for growing businesses, a shortage of skilled workers, and changing workforce demographics.

To take full advantage of the existing opportunities, state leaders can pursue strategies to solidify the foundation for industry growth and to help Minnesota businesses grow, innovate, and outcompete regional, national, and global competitors. With forward-thinking policies, Minnesota's energy efficiency industry can support over 26,000 direct, indirect, and induced jobs annually through 2030. These direct jobs will spark local job growth and economic development as employees spend their earnings in the local economy.

Summary of Recommendations

The analysis presented in this report culminates in recommendations for Minnesota's leaders based on best practices in the United States and abroad. Each recommendation identifies opportunities for barrier removal and future growth in the energy efficiency sector. While the recommendations are intended to be complementary and would be more powerful if adopted as a package, each can also be viewed as a stand-alone option.

Incentivizing Energy Efficiency Investments

Policy 1: Institute Energy Benchmarking and Disclosure for Public and Commercial Buildings to Encourage Efficiency Upgrades.

A statewide requirement will help monitor building energy performance, illuminate potential energy savings opportunities, and achieve environmental benefits. Minnesota legislators could strengthen the B3 Benchmarking Program by requiring participation and covering both public and commercial buildings. *Key players: Governor's Office, Minnesota Legislature, Minnesota Department of Commerce, Minnesota Department of Administration, building administrators.*

Policy 2: Update Utility Combined Heat and Power (CHP) Policies to Incentivize CHP Implementation.

Minnesota has a large, untapped energy savings potential in CHP, but barriers include confusing standby rates, inconsistently applied interconnection standards, and a lack of financial incentives. Minnesota regulators could update utility policies to incentivize and streamline projects. *Key players: Minnesota Public Utilities Commission, Minnesota Department of Commerce, gas/electric utilities, consumers.*

Increasing Access to Capital for Business Development

Policy 3: Establish a Fund of Funds to Stimulate the Investment Environment.

A state-initiated fund of funds could bolster Minnesota's investment environment and provide critical capital for early-stage ventures and small businesses in the state's clean energy economy. Minnesota could sell insurance premium tax credits to leverage insurance companies for investment capital. *Key players: Governor's Office, Minnesota Legislature, Minnesota Department of Employment of Economic Development, private investors, venture capital firms, insurance companies, businesses, entrepreneurs.*



Policy 4: Offer Working Capital Loans to Support Small Clean Energy Business Operations. Current state grants and subsidies are primarily dedicated to financing deployment of clean energy technology, but do not directly support the companies that innovate and manufacture these products. To ensure longer-term financial security, Minnesota could either provide direct loans or increase access to private loans through credit enhancements. *Key players: Governor's Office, Minnesota Legislature, Minnesota Department of Commerce, lending companies, small businesses.*

Strengthening Workforce Development for Energy Efficiency Jobs

Policy 5: Develop Degree and Certificate Programs on High Performance Buildings. Technological innovation in the building efficiency sector requires an adaptive, skilled workforce. Minnesota's colleges and universities could ensure Minnesotans are prepared for the jobs of the future by developing cutting-edge programs. *Key players: Minnesota Department of Employment and Economic Development, Minnesota State Colleges and Universities, regional economic development organizations, educational institutions, nonprofits, businesses, local communities.*

Policy 6: Establish an Industrial Assessment Center in Minnesota to Increase Access to Efficiency Training and Technical Assistance. As part of an effort under the U.S. Department of Energy, industrial assessment centers (IACs) provide free energy audits and efficiency recommendations for small and medium-sized manufacturers. Because faculty and students conduct services, IACs offer a unique skills training resource for students. Minnesota could explore options to establish this technical and educational resource on a university campus. *Key players: University of Minnesota, Minnesota Department of Employment and Economic Development.*

Policy 7: Develop Employee Engagement and Retention Strategies to Support Minnesota's Changing Workforce. Minnesota faces a severe workforce shortage due to an aging population and underutilization of minority groups. To best capture the value and expertise of these groups, Minnesota could convene stakeholders to develop a diversity and inclusion toolkit that offers engagement and retention strategies for businesses and employment centers. *Key players: Minnesota Department of Employment and Economic Development, One Stop Shop for Seniors, WorkForce Centers, regional economic development organizations, employers, employees.*

Recruiting and Expanding Energy Efficiency Companies

Policy 8: Organize an Energy Efficiency Business Association to Drive Cluster Development. Minnesota has an expansive value chain dedicated to energy efficiency, yet the state lacks an organized business association. Through greater collaboration and cooperation, business leaders could share knowledge and resources, maintain a supply chain database, and advocate for business interests, among other activities. *Key players: Businesses.*

Policy 9: Target Foreign Direct Investment to Expand the State Energy Efficiency Value Chain. Foreign direct investment is when an international business locates operations in the state or buys a stake in an in-state company. State and local leaders could conduct targeted investment missions to address supply chain gaps and expand employment opportunities for Minnesotans. *Key players: Minnesota Department of Employment and Economic Development, Minnesota Trade Office, regional economic development organizations, University of Minnesota, businesses.*

