

Innovation and Commercialization for a Regional Energy Workforce

July 31, 2020

Innovation and Commercialization for a Regional Energy Workforce (i-CREW)

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I-CREW: Jobs, Innovation, Connectivity and Commercialization



i-CREW is a U.S. EDA-funded program focused on clean energy as an emerging economic opportunity to create and retain jobs, enhance commercialization and innovation, and foster regional connectivity.

Program Goals:

- Economic development, including rural, economically disadvantaged, and Native American communities
- Workforce development (education, job training and retraining)
- Clean energy entrepreneurship
- Clean energy business assistance
- Clean Energy Roadmap





Program Team

ARROWHEAD CENTER®

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BE BOLD. Shape the Future. College of Engineering



North American Intelligent Manufacturing Initiative



BE BOLD. Shape the Future. College of Agricultural, Consumer and Environmental Sciences Indian Resources Development





Workforce Development

Goal 1: Expand Workforce Development through NMSU and Community College Programs

- Academic classroom education and training
- Experiential, hands-on education and training (apprenticeships, internships, Co-Op, design projects)
- Short courses and workshops for existing workforce (e.g. clean energy codes and standards, integration of clean energy technologies)
- Measure the impact of associated green jobs



Education and Workforce Development





Innovation and Commercialization

Goal 2: Accelerate Technology Innovation and Commercialization

- Create Sector-Based Entrepreneurship Training
 - Energy Sprint Business Accelerator
 - Entrepreneurial training statewide
 - Enterprise advisor and information network
- Advance emerging clean energy technologies for potential commercialization
- Tech-Match (e.g. match promising technologies with licensees)





Entrepreneurship and Energy Sprint





Goal 2: Expand outreach to businesses and communities

- Technical services to businesses and communities (e.g. energy efficiency, clean energy integration)
- Outreach for integration of clean energy emerging technologies
 - Transportation (e.g. electric vehicles)
 - Housing
 - Grid modernization
- Collaborative partnerships
 - Government agencies Native American Communities
 - Non-government organizations



Clean Energy and Business Assistance

- National Laboratories
- Universities
- Business and industry
- Utilities and Rural-electric cooperatives





Goal 3: Develop Statewide Clean Energy Road Map led by i-CREW partner, North American Intelligent Manufacturing Initiative (NAIMI)

- Regional and community working groups (e.g. statewide mission with localized relevance
- Alignment with NM Energy Transition Act

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- Adoption of clean energy technologies
- Engagement in clean energy workforce development
- Champion entrepreneurial clean energy start-ups and expansion of existing businesses





Initiative





Anticipated Impacts

- Clean Energy Roadmap
 - Statewide connectivity
 - Identification of sector needs and opportunities
 - Identification of barriers and challenges
- Business Outreach
 - Number of businesses assisted
 - Number of small businesses assisted
 - Geographic impact

- Energy Sprint Business Accelerator
 - Number of startup companies
 - Number of technologies licensed
 - Number of jobs created
- Education
 - Number of individuals trained
 - Number of workshops held
 - Number of new courses offered





Program Sustainability

I-CREW builds on statewide efforts to advance a clean energy economy. Long-term sustainability of the program focus areas is anticipated given NM's commitment to clean energy and workforce development.

Specific areas of alignment for long-term sustainability include:

- University System Support: I-CREW contributes to NMSU's strategic goals and Community College workforce training role.
- Electric Utility Support: I-CREW is relevant for technology innovation, job creation, and workforce development important to utilities.
- Arrowhead Center: I-CREW is bolstered by Arrowhead's diverse range of public and private funders.
- State Agencies: Various programs and projects are dedicated to the benefits of clean energy and a diversified state economy.
- Formalize the NM Beneficial Electrification League to advance statewide clean energy economy.

