



Minnesota Renewable Energy Proof of Concept Center Planning Grant

The Minnesota Renewable Energy Proof of Concept Center (RePoCC) provided the nexus for a well-defined industry cluster of renewable energy businesses, proven higher education research institutions, and committed state and regional economic development agencies. The catalyst for this economic awakening has been a broad, fast-paced 18-month planning grant funded by U.S. EDA. Later in the planning process, the initiative's title transitioned to a more manageable *Renewable Energy Innovation Project* (REIP) as an implementation strategy for moving the state's vast renewable energy into a globally competitive future.

In 2011, Region Five Development Commission (R5DC) and the Minnesota High Tech Association jointly submitted an i6 Green Challenge Grant application that reached regional finalist status, but was not among the six projects funded across the nation. Subsequently, EDA urged Minnesota to seek a planning grant to bring together the state's renewable energy stakeholders.

Despite Minnesota's strong history of creating and expanding new businesses, the state lacks well-defined processes and relationships among emerging renewable energy sectors. These include solar electric, solar thermal and integrated technologies for energy storage, as well as various targeted bio-based technologies that can tap the state's abundant biomass resources from agriculture and forestry. Broadly defined, "renewable energy" technologies contribute to sustainability, reducing dependence on fossil fuels and mitigating against greenhouse gases. For purposes of this initiative, we retain this broad definition while recognizing the need to focus primarily on the rapid commercialization of emerging technologies with the promise for long-term economic stimulus and job creation.

R5DC and Minnesota DEED submitted the request for an EDA planning grant bolstered by several commitments from collaborating agencies. Federal funds and matching public and private resources totaling \$300,000 were extended for one year, later extended to 18 months ending April 1, 2014. This project did *not* create another entity, but aimed to better coordinate and rationalize existing economic development efforts for applied research and significantly broaden commercialization. The overall mission is to build a statewide renewable energy business cluster that competes effectively for federal and other funding resources in the future, and more importantly, strives for extensive global reach.

Initial focus of the planning grant emphasized broad participation in working groups geared toward these key REIP priorities:

- Research, technical assistance and commercialization of energy technologies;
- Business services and entrepreneurial support;
- Stronger private sector engagement;
- Reform and coordination of state energy policies and programs;
- Expanded access to capital investment;
- Identification of priority markets for export;
- Improved metrics for measuring and branding the Minnesota-based renewable energy sector; and
- Solidify the working model for a Renewable Energy Innovation Project, and adopt a strategy for full funding.

R5DC and DEED are planning grant partners and served as conveners for the initial meetings of the working groups. Committed representatives of private, public and advocacy organizations serve on a core advisory group that will guide and evaluate the project as it moves forward. Members who committed time to this initiative include: U of M-Duluth Natural Resources Research Institute, Minnesota Solar Energy Industries Association, Blue-Green Alliance and Foundation, Bio-Business Alliance of Minnesota, and private sector renewable energy specialists.

Beneficiaries of this planning grant and the subsequent Proof of Concept Center formation include: entrepreneurial businesses specializing in renewable energy innovation, integrating conservation and energy efficiency, firms that design, engineer, construct and commission energy systems, others who provide angel investing and other financial assistance for these endeavors, higher education research entities achieving commercialization, and spin-off firms with a role in associated expansion and marketing with a potential for substantial global reach. Ultimately, a thriving new cluster will trigger steady sector growth, benefiting all Minnesotans by fueling a diversified state economy and resulting in a broader, more-stable expansion of the tax base.