

Broadband USA Applications Database

Applicant Name: Keystone Energy Technology Enterprise Center, Inc.

Project Title: KETEC Broadband Sustainability Project

Project Type: Sustainable Adoption

Executive Summary

Because this project will ensure the sustainability of the entire KETEC effort, it means that KETEC will bring new businesses and institutions to the area who will require broadband services. This will create jobs for residents, heightening the awareness of how connecting to broadband can improve their lives and increasing the level of family wealth in the area to make broadband more affordable to population segments that found it previously unaffordable. KETEC's ultimate mission is to reduce the world's carbon footprint, produce carbon credits, and assure that the US offers the model for worldwide energy advancement. KETEC will enable existing small businesses and start-ups to become financially viable and spur regional economic development. The KETEC concept is unique, in that it will be the only incubator in Pennsylvania that will exclusively target the renewable/alternative energy technology market thereby enhancing its ability to leverage this niche sector in developing tech-based economies.

KETEC's mission is consistent with the national policy on renewable energy. It will stimulate economic development through investment in renewable energy. As the nation continues to search for ways to limit our dependence on foreign oil, this incubator will focus exclusively on research and development companies associated with renewable energy.

The purpose of the program is to enable existing small businesses and start-ups to become financially viable and to spur regional economic development. This, in turn, will enable accomplishment several key objectives including:

- Develop "green" technology for renewable energy.
- Develop and demonstrate alternative energy systems applicable to high performance buildings.
- Creating jobs and wealth.
- Fostering an entrepreneurial climate.
- Technology commercialization.

- Diversifying local economies.
- Business creation and retention.
- Building or accelerating growth of local industry clusters.
- Develop design methods, models and tools for renovation of conventional buildings to high performing buildings.
- Encouraging women or minority entrepreneurship.
- Community revitalization.

The KETEC concept is unique. There are more than 1,400 incubators in the United States; about 40% of these are “technology incubators”. KETEC is the only known incubator that will exclusively target the renewable energy technology market and technology innovations for improving building energy utilization efficiency with alternative energy sources. Buildings are the major end-use systems of primary energy in the United States. The concept is consistent with the emerging national policy on renewable energy; it is aligned with President Obama’s and Governor Rendell’s strategy to stimulate economic development through investment in renewable energy. A major system component will be the broadband capabilities coupled with telepresence for creating a 21st century communications for renewable energy development.

The KETEC management team is unique. Its concept was initiated by the KETEC Working Group - an ad-hoc group of 20+ regional professionals with critical hands-on expertise in areas such as program management, science and engineering, finance and accounting, corporate law, business development, academia and renewable energy technology. The working group combines advanced scientific and technological knowledge with sharp business sense, intimate knowledge of the region, and most of all, decades of combined experience in all the realms needed by the KETEC program.

The location of the KETEC incubator will spur economic growth throughout Northeastern Pennsylvania. Located in Mount Carmel, it is near the geographical center of the seven-county anthracite coal region; it borders the Marcellus Shale formation; it neighbors the world’s first coal gasification facility; its proximity to abundant farm land in rural Pennsylvania will facilitate the use of renewable biomass, as well as the conduct of R&D in the area of renewable biomass. Within sight of the KETEC incubator is a newly constructed wind farm. A nearby existing coal gasification operation will encourage R&D in clean coal technology. Mount Carmel is within 150 miles of major population centers such as Philadelphia, New York, Baltimore and Washington, DC.

KETEC is working closely with area Career and Technology Centers and Luzerne County Community College (LCCC) to provide workforce development for the renewable energy occupational and vocational trades. The LCCC Northumberland Center will be the hub for renewable energy workforce development. In collaboration with regional high schools, universities and industry, the College will work to establish an energy technology curriculum that meets requirements for energy technology-related jobs. The development of the broadband aspects through KETEC are critical to the success of this program.

Funding for start-up of KETEC will be obtained via competitive grants at the state and federal level. A detailed financial model has been developed to facilitate financial forecasting and identification of funding requirements. The model allows for sensitivity analysis of key variables such as cost per square foot, tenant revenue, management costs, rent, break-even analysis, etc.

The KETEC incubator has already attracted entrepreneurial business initiatives. As these businesses mature and graduate from the incubator they will be assisted in relocating to one of the many industrial parks throughout northeastern Pennsylvania. The real benefit of the KETEC and broadband development will be realized through its impact on local economies.

One example is the SEEDCO Industrial Park, located in Mount Carmel Township and Coal Township. The park provides 1,000+ acres of industrial-zoned land. Businesses that graduate from the KETEC Incubator will be assisted and encouraged to establish manufacturing facilities in SEEDCO. Two businesses have already committed.