Center for Sustainable Business Growth

Progress Report; October – December 2016

Bridgeport Eco-Technology Park

The south and west ends of Bridgeport, where the Eco-Technology Park resides, have been the home of a significant portion of Bridgeport's historic manufacturing base serving the defense, petroleum, machine and paper products sectors. These areas of the City also house a regional solid waste incinerator, a wastewater treatment facility, and a closed municipal landfill. Many of the vacant sites have environmental impairments or are underutilized, as companies have downsized or moved to other locations.

Over the past four years, Bridgeport has become a leader in the emerging green economy and views the creation of an Eco-Technology Park as one of its highest priorities, both economically and environmentally. Some of projects in the Eco-Park and the companies we are attracting include:

• A Renewable Energy Facility: One of the key pieces of this development effort is a 22-acre renewable energy park located on the city's closed municipal landfill. It now houses over 9000 solar panels and 2 fuel cells and generates 5 megawatts of clean energy to the grid. The United Illuminating Company serves as the developer of this \$30 million project. The facility is complete and the renewable energy being shipped to the grid is helping to clean our air in the region.

Jobs during Construction: 90+ Jobs during Operations: minimal maintenance staff required

• **Dominion Clean Energy Generating Facility:** The largest fuel cell complex in the Western Hemisphere, a 15 megawatt facility on Railroad Ave, began operations in late 2013. FuelCell Energy of Danbury was the developer; the owner is Dominion Resources, Inc., a national energy company in Virginia. The project is supported by incentives from the Connecticut Energy Finance and Investment Authority; the renewable energy from that facility is being sold to Eversource under a long-term contract. Additionally, the City of Bridgeport provided local tax incentives to the project to help facilitate its development; even with these local incentives, the facility is one of the largest taxpayers per sq. ft. in the city.

Jobs during Construction: 125 Jobs during Operations: 2

 Fuel Cell at the University of Bridgeport: With the help of CSBG, the University of Bridgeport has completed installation of a fuel cell on campus, in conjunction with FuelCell Energy of Danbury. The project received incentives from the state's Low Renewable Energy Credit program and has taken UB off the grid, saving



the university money and reducing their carbon footprint. <u>Additional fuel cell projects</u> are in discussion with other potential users in Bridgeport as a result of our efforts at the Center for Sustainable Business Growth.

Jobs during Construction: 60+ Jobs during Operations: minimal maintenance staff required

• Bio-Fuels Production Facilities: The Eco-Technology Park also includes one new biofuels production facility, Tri-State Biodiesel, with the potential for a second one down the road; the first collects yellow and brown grease from restaurants, universities, hospitals, and food stores and converts the grease to a biofuel; their existing facility is permitted to produce up to 3 million gallons of biodiesel / year. Tri-State Biodiesel is now commissioning their expansion project to generate up to 13 million gallons / year, making it the largest biofuels production facility in New England. In Connecticut, the law requires that 20% of home heating oil must be derived from a biofuel by 2020, thereby reducing the burning of fossil fuels. A second opportunity is being explored by Tri-State Biodiesel --- growing algae indoors and converting it to a biofuel, another feedstock to reduce pollution in the home heating oil and transportation sectors.

Jobs during Construction: 50 Jobs Created for Operations: 35+

• Permeable Paving Company: Tri-State Flexi-Pave, a New York based company making a permeable paving product using recycled passenger tires, aggregate and a bonding agent, has recently opened up their New England Distribution and Installation headquarters in the Eco-Park as a result of CFSBG's recruitment effort. Their product is used for sidewalks, parking lots, walking paths, tree surrounds, playgrounds and other installations where storm water management is an important factor. It significantly reduces storm water runoff into overburdened sewer systems, reduces soil erosion, flooding and pesticides from entering waterways or wetlands (including the Long Island Sound), and requires little or no long-term

maintenance.

Jobs Created for Operations: 10 and growing

Green Depot is the nation's leading supplier of environmentally friendly building and lifestyle products, services and home solutions. Their mission is to make green building products readily accessible to homeowners

and builders so that sustainable practices can easily be adopted into standard construction operations. Green Depot has an active e-commerce site, 11 stores including New York, Seattle and Portland, and 20 distribution warehouses across the U.S.

They have completed the renovations of half of the 85,000 sq. ft. of space in an old foundry complex in the Eco-Park for their use and are open for business; they plan to lease out the remaining space to other green companies.

Jobs during Construction: 40-65 Jobs Created for Operations: 20 - 40

Park City Green: Another important component of the Eco-Technology Park is Connecticut's first
mattress recycling facility, Park City Green (PCG). In 2013, the Connecticut legislature passed the
first mattress stewardship law in the nation, requiring manufacturers to pay for the recycling of

mattresses sold in the state; the implementation of the law began in May 2015. PCG is now deconstructing more than 2,500 mattresses/ month and is expected to deconstruct 60,000 mattresses /year in 2017 and sell the component parts back into the recycled commodities market.

Jobs during Construction: 10 Jobs Created for Operations: 10 - 12 and growing

Other Eco-Technology Park Projects in Development

• **District Heating & Cooling Loop**: NuPower, LLC is developing an innovative clean energy project to capture waste heat from the Wheelabrator mass burn solid waste facility and other generating facilities in Bridgeport to create a district heating & cooling loop for both the Eco-Technology Park and for the downtown. This hot water loop, presently used in many European cities, has the potential to heat and cool six million square feet of commercial space with clean, renewable energy and at lower costs than conventional fossil power systems. The project is being designed and end users are being approached to sign purchase power agreements. And the Connecticut General Assembly provided a \$9 million grant to incentivize the project. It is expected to break ground in 2017.

Jobs during Construction: 50 Jobs Created for Operations: 20

 Green Workforce Housing: The Corvus Capital Group is moving forward with the renovation of three parcels of land along Railroad Avenue to convert several old factories (in the area called The Smile) to a mixed-use, green workforce housing development. Environmental remediation

and selected demolition of the property will begin shortly after financial close in December and Phase One construction of this 120 million+ investment is expected in the summer of 2017.

The total number of housing units when all phases are complete will exceed 325, with additional commercial space for retail amenities including a food store and a Charter school. The development will be built under a Project Labor



Agreement, with AFL-CIO Pension Funds as a primary source of funding, with additional support from the State of Connecticut.

Jobs during Construction: 200+ Jobs Created for Operations: 75+ (Including Charter School and Food Store)

Clean Fueling Station: Enviro Express, another company located in the Park, has a compressed
natural gas and liquefied natural gas fueling station on its property and has converted its diesel
trucks to natural gas. The owner of Enviro Express wants to expand his natural gas fueling
capabilities by adding gas storage capacity and when market conditions are right, build a clean
fuels retrofit facility to convert other older diesel trucks from other Connecticut and New York
companies to natural gas, using an adjacent property for this operation. This project will help
reduce air pollution in the I-95 corridor, presently designated as a non-attainment zone by EPA.

Jobs Created for Operations: 10

Anaerobic Digester for Sludge:

The City has selected a private company, Anaergia, Inc., to build an anaerobic digester at their west-side sewage treatment facility (also in the Eco-Park) --- to convert sewage sludge to methane gas and electricity to run its plant. Presently, the City sends 200 trucks a month to New Haven to burn its sludge, creating a huge carbon footprint along the route and at the New Haven burn facility. The Project has completed its state permitting process and the developers and the adjoining neighborhood have developed a Host Community Benefits



package. And the State recently approved a \$2 million grant to remediate the property and ready it for construction.

Remediation plans are being finalized so site clean-up can begin in early 2017.

Jobs during Construction: 50-75 Jobs Created for Operations: 5-8

• Hospital Waste Processing Facility: Approved Medical Waste in Mount Vernon has received City and CSBG support to build, own and operate a medical waste processing facility to autoclave (sterilize), recycle and dispose of non-hazardous medical waste in the Eco-Technology Park. Presently, the state's hospital waste goes to a transfer station in Middletown, is shipped to Rhode Island to be autoclaved, then goes to Massachusetts to be safely incinerated, creating a huge carbon footprint in transit. This facility will reduce that carbon footprint, create local jobs and reduce the potential liability for Connecticut hospitals and other medical facilities. The project has received city approval; the developer has purchased a building in the Eco-Technology Park; the State Department of Economic & Community Development has provided a low interest, forgivable loan to support this effort; the developer has received their environmental permits for the project from DEEP; and building renovation is nearly complete, with operations expected to begin in March 2017.

Jobs during Construction: 20 -25 Jobs Created for Operations: 25



As President Barak Obama so eloquently stated in his 2nd Inaugural address, we can't cede the creation of our next generation of clean, renewable energy to others . . . we must claim it." Through this Eco-Technology Park Bridgeport is doing its part to claim the jobs and economic vitality these clean energy facilities and new green companies create

Eco-Technology Park & Related Activities / Progress in the July - September 2016 Timeframe

- Continued planning for the 2nd Phase of the West End MDP; Milone & MacBroom was selected to create a vision and action plan for the MDP and prepare materials for City Council approval. BEDCO is taking the lead to create this action plan for City Council consideration and is coordinating its work with the State Resiliency Planning Office, as many parts of the Park are in a 100 year flood plain and mitigation will be required; funding commitments for that mitigation are in place and plans are being developed.
- Continued to work with Future Healthcare Systems CT on their medical waste processing facility. Working with UI and an energy efficiency contractor to finalize electric & gas efficiency incentives available to the project and have set up meetings with local and regional hospitals to introduce them to the project. Renovation of facility is nearly complete and is expected to come online in March 2017, creating 25 jobs initially and growing to 50 in three years.
- Continue to connect several employers to the Workplace Inc. for job incentive support. Tri-State Biodiesel, Green Depot, Future Healthcare Systems CT, Cherry St. Lofts, the CT Environmental Justice Coalition and PT Partners are all taking advantage of either getting incentives for their businesses or referring their people to the Workplace for job opportunities.
- Continued to work with Sea Green Organics to identify manufacturing space in the Eco-Technology Park for their operations. Sea Green Organics converts algae to liquid organic fertilizer used on commercial and residential properties, golf courses and other facilities seeking greener and healthier landscaping and lawns.

- Worked with Park City Green and the Town of Fairfield to include them in the program and have helped PGC expand their service territory to New Haven and Hartford counties.
- Assisted the Justice Education Center find space to train at-risk youth from Bridgeport; first group of trainees finished their session in December. Center for Sustainable Business Growth staff will help identify work opportunities with Eco-Technology Park companies; BRBC will receive a small portion of the grant proceeds to assist with employer referrals.
- ➤ Began helping O&G refine their proposal to create a materials reuse facility in the Eco-Technology Park. The facility will be an enclosed operation at the end of Wordin Ave and be well landscaped and maintained. The project will go to the Planning & Zoning Commission in February for review. As a result of this effort, O&G has agreed to improve the operations of their Bostwick Ave facility, also in the Eco-Technology Park.
- Continued to work with Bridgeport Biodiesel on plant expansion; construction is finished and facility commissioning of the new units is complete. Production will now ramp up to 13 million gallons/year. An event will be held to celebrate the successful expansion of the facility during Earth Week in April 2017.
- ➤ Worked with representatives of the Kingdom International Economic Development Corporation on a symposium at the University of Bridgeport in late October to introduce Saudi and other country projects and product sales opportunities to Bridgeport businesses; similar forums will be held in New Haven and Hartford. More than 150 international visitors will be coming to Connecticut for a week long set of meetings. The Bridgeport events will include a tour of the Eco-Technology Park and a panel discussion of green business and renewable energy technologies that can be replicated in Saudi Arabia and other countries that are joining this tour.
- Began developing a concept and budget to design and build a Gateway to the Eco-Technology Park. Met with State Representative Ezequiel Santiago to complete a State Bond Commission application for the Gateway and present it to the Bridgeport Legislative Delegation.