



Little Liberia – A Phoenix Rising

Proposal from Bridgeport, CT



December 17, 2021

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ATTACHMENTS: Bridgeport Census Tracts 2010; Energy Data; Letters of Commitment

SUMMARY

A. TITLE Little Liberia – A Phoenix Rising

B. COMMUNITY NAME Bridgeport, CT

C. LOCATION

Bridgeport is situated in Fairfield County in the southwestern corner of the state along the coastline of Connecticut approximately 60 miles from New York City and accessible along the Metro North railroad line. The city's zip codes include: 06601 – 06615, 06650 and 06699. There are 38 census tracts (701 – 743 and 2572), all of which have been surveyed for this proposal regarding population, percent of low-income residents, average energy burden, and environmental justice indicators.

D. LEAD ORGANIZATION Greater Bridgeport Community Enterprises (“GBCE”)
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E. MISSION AND SELECTION

Founded in 2007, GBCE's purpose is the creation of green businesses and jobs as a means of pulling our disadvantaged neighbors out of poverty and into financial stability. GBCE first worked in training in construction trades related to weatherization retrofitting and getting Returning Citizens back to gainful employment through certifications in this work and organizing them into construction teams that it would supervise for contracts won through municipal bids for residential weatherization retrofitting. Its intent, which it has accomplished consistently, has been to employ low-income, disadvantaged Bridgeport residents and a large percentage of Returning Citizens.

F. ELIGIBILITY CRITERIA

With respect to the eligibility criteria, the following summarizes Little Liberia: A Phoenix Rising (“the Project”):

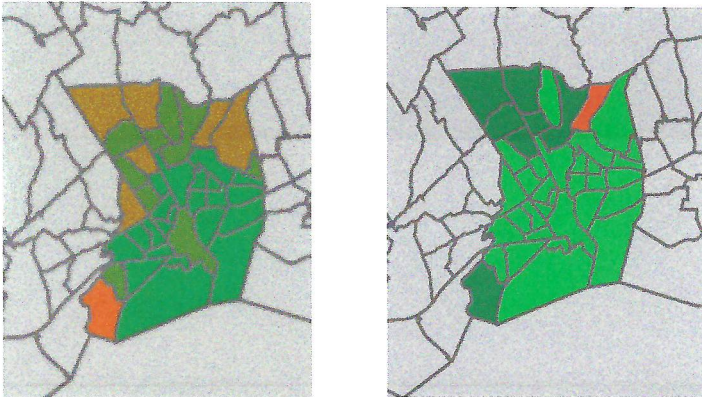
- **Low-Income** - nearly 75% of the population (i.e., over 108,000) is low-income – or 2.5 times the 30% eligibility requirement;
- **Energy Burden** – nearly 50% of households (i.e., approximately 24,000) have an energy burden of 6% or greater for household income; and
- **Environmental Justice Community** – Only 12,300 residents, or 8% of the population reside in sectors that escape the EJ screen, because they are predominantly white populations with fewer households with incomes below the federal poverty level.

Data shows that of the 38 census tracts that encompass the totality of the Bridgeport population (i.e., approximately 146,000 people), 22 tracts are “energy burdened” (i.e. 6% or greater of their household income spent on energy) – see Figure 1. It is worth noting that out of the total population of Bridgeport,

only 26,000 households can afford the energy bills they pay. The highest energy burdens are in tracts where area median incomes (“AMI”) are \$9,958 (15%), \$21,895 (10%) and \$21,851 (10%).

There is only one AMI census tract greater than 80%, with a majority of the population residing in low-income (i.e., less than 50% AMI) and moderate-income (i.e., 50-80% AMI) census tracts – see Figure 1.¹

Figure 1. Green-Line of Bridgeport by Energy Burden (left) and Area Median Income (right)



The price of energy is essentially the same for everyone, so the ability to stay within “affordable” guidelines is overwhelmingly a question of income.

G. ABSTRACT

Situated in the shadows of Harbor Station #3, a coal-fired power plant stands above a landmark on the National Register of Historic Places significant for its role as a stop in the Underground Railroad. In the forefront of the stacks are the last surviving homes of Mary and Eliza Freeman, located in a neighborhood in the South End of Bridgeport once known as “Little Liberia,” first settled by free African Americans and the Paugusset tribe.

Bridgeport is the largest city in Connecticut with 80% Black and Hispanic population, 75% of its residents are low-income, and 50% of low-income and nearly 100% of them, including moderate-income households, suffer from high energy burdens. Designated as both an environmental justice² and distressed community,³ Bridgeport has experienced environmental injustice and resulting negative economic impacts for more than 150 years.

The main objective of the Project is to establish grassroots, community-led clean energy plan which will use information-gathering activities such as neighborhood meetings and charrettes for presenting information on relevant energy technologies, surveying Bridgeport residents through polls, bringing together all facets of the Bridgeport community to define community objectives, relevant Pathways and creating a Roadmap to follow to meet community goals and objectives. Out of these steps and with the

¹ Low-income (<50% AMI) and moderate-income (50-80% AMI) definitions are consistent with the Community Reinvestment Act (“CRA”) of 1977

² Connecticut General Statutes 22a-20a

³ Connecticut Department of Economic and Community Development (“DECD”)

plan we will develop screens and processes for choosing programs and projects that will yield results sought by our community at large.

ENERGY AND ECONOMIC CHALLENGES AND OPPORTUNITIES

H. CHALLENGES AND OPPORTUNITIES

The following is a description of Bridgeport’s energy-related economic development challenges and opportunities, and some of the steps that the community has taken to address them:

Challenges

1. **Environmental Justice Community** – for as long as the state has been publishing these designations, Bridgeport has figured on the lists as a distressed and environmental justice community.
2. **Energy Burdened Community** – residents of Bridgeport are overwhelmingly energy burdened at 6.2% overall with some residents paying as much as 10-15% of their household income for energy costs according to 2019 ACS.
3. **Poverty Stricken Community** – poverty rate of Bridgeport is high at 21%,⁴ while the poverty rate for the Connecticut is 10%.
4. **English Language Proficiency** – nearly 16% of Bridgeport citizens are limited in English Proficiency.⁵
5. **Affecting Facilities** – there are eight (8) “Affecting Facilities” in Bridgeport causing pollution – all of them located in the southern part of the city in the poorest neighborhoods.
6. **Public Health** – asthma rates are high at 11% for children and adults.⁶
7. **Unemployment** – for the month of October 2021, Bridgeport had an 8.4% unemployment rate (not seasonally adjusted), in comparison to the state at 5.3%.⁷

Opportunities

8. **Diverse Community** – Bridgeport is a minority/majority community at nearly 80%.⁸ according to CT DEEP
9. **Non-Profits** – Bridgeport benefits from an extensive network of active non-profits intervening to support all aspects of family and community life, from education and youth organizations, to ReEntry, Food Policy, employment and training. As the history of Little Liberia teaches us, it is the diversity of the communities within Bridgeport that serve as the opportunity to overcome its challenges.
 - a. The BGreen 2020 project brought together a large number of community members from every sector of activity in the city: banks, non-profits, city government, hospitals, small business, regional planners, state representatives from economic development and energy

⁴ Connecticut Economic Resource Center (“CERC”) 2013-2017 reports.

⁵ DEEP (2020)

⁶ Connecticut Department of public Health (“DPH”)

⁷ Connecticut Department of Labor (“DOL”)

⁸ According to the Connecticut Department of Energy and Environmental Protection (“DEEP”)

and environmental protection. Out of this effort came new community-based initiatives in many sectors of city life for the betterment of our families:

- b. With public-private partnerships major clean energy projects were launched over the last 12 years and a substantial Weatherization program was implemented.
- c. The City's Energy Improvement District was created, the second in the state; and the position of Sustainability Coordinator was established.
- d. The Board of Education built a state-of-the-art high school complex, the Fairchild-Wheeler Interdistrict Magnet Campus housing 3 high school tracks: IT, Biotech and Aerospace
- e. To address the city's food deserts, the City Health Department launched a farmer's market campaign with our nationally-known non-profit, Wholesome Wave. The Green Village Initiative expanded its operations in Bridgeport and founded our first urban farm. The City also led in creating our first Food Policy Board with the Council of Churches in the lead.
- f. Groundwork Bridgeport launched tree-planting programs, clean up days, the building of walking and bicycle paths along our waterfront that weren't welcoming. There are now community centers and outdoor activity programs for both youth and adults that have grown out of these early efforts.
- g. Our Work Investment Board, The WorkPlace, created and operated numerous training programs in response to community and employer needs that have won national awards for their innovative approaches.
- h. Housatonic Community College for 5 years has operated a machinist program to put adult students into well-paying factory jobs. This year, it is opening an Entrepreneurship Center. Its certificate and degree programs successfully graduate 600 students a year.
- i. Bridgeport is fortunate to have 2 major hospital centers, each belonging to large, powerful medical groups: Yale New Health and Hartford Health groups. Each has strong ties to the community and provides a wide spectrum of services to our families. Both hospitals have programs for outreach into communities on family nutrition, and asthma recognition and treatment as important components of public health in our community challenged with very poor air quality and limited access to healthy foods.

I. PATHWAYS OF INTEREST

For more than a decade, Bridgeport has developed and implemented programs and projects in each of the pathways noted below, but without the benefit of a plan that's operational and inclusive of the citizens that reside in the community. There is no current or active plan to attach here.

The pathways, the Project is interested in investigating through the technical assistance provided by the Department of Energy ("DOE") include:

1. Clean Energy Planning and Development
2. Energy Efficient Buildings & Beneficial Electrification Planning & Development
3. Clean Transportation Planning & Investment
4. Community Resilience Microgrids
5. New or Enhanced Manufacturing

The Project is requesting technical assistance ("TA") from the DOE through its Communities LEAP Pilot for communities of Bridgeport to identify the best pathways forward to develop a roadmap or plan given the needs of the community. The pathways may be intertwined (e.g., microgrid and clean energy).

Bridgeport is indeed an energy hub from the fossil fuels of the past to the technologies of today and the future including hydrogen fuel cells, solar PV, and offshore wind. Our projects include:

- **From Coal-Fired Power Plant to Natural Gas-Fired Power Plant** – PSEG retired its old 450 MW coal-fired power plant constructed in 1968 and replaced it with a state-of-the-art 485 MW combined cycle natural gas facility commissioned in 2019. This \$600 million investment created more than 350 construction jobs, and numerous operations and maintenance jobs going forward, added significant new tax revenues for the city, and improved air quality throughout the region.
- **Dominion Fuel Cell Park** – the largest fuel cell of its kind in the Western hemisphere, using a technology manufactured in Connecticut, was completed in 2013. It provides 15 MW of clean and reliable energy to the Connecticut grid every day, created over 125 jobs during construction and operations and maintenance support going forward, and generates significant tax revenues from the cleanup of a former brownfield for the City of Bridgeport.
- **Green Energy Park** – the local utility Avangrid, completed in 2014, a combination of projects including 5 MW of solar PV and fuel cells to the Connecticut grid, which created 90 jobs during construction, and will provide a generous annual lease payment to the city.
- **Combined Heat and Power Microgrid** – the City installed a combined heat and power (“CHP”) microgrid consisting of a 265 kW natural gas-fired reciprocating engine and 250 kW diesel-fired standby generator to back up the energy needs of key administrative and community service buildings, including town hall, a police station, and a senior center.
- **Offshore Wind Port** – Park City Wind is an 804 MW offshore wind project – the first project to be permitted by the Biden Administration – to be constructed in Vineyard Wind’s federally designated lease area (Lease Area OCS-A 0534). This lease area is located 23 miles off the coast of Massachusetts on the outer continental shelf in the midst of the strongest winds on the east coast. Park City Wind will bring clean, renewable, cost-effective energy to the residents of Connecticut. Its offices are located in Bridgeport where they will redevelop an 18.3-acre waterfront industrial property in the city that is currently underutilized and undeveloped as a port for the project. The site, known as Barnum Landing, will host hundreds of local workers hired to do critical foundation transition piece steel fabrication and final outfitting.
- **District Heating Loop and Fuel Cells** – NuPower, Inc. is developing a District Hot Water Heating & Cooling Loop using the waste heat from a recently approved fuel cell located in the Eco-Technology Park. This innovative system has the capacity to heat and cool all buildings in downtown Bridgeport and at the University of Bridgeport, taking many older polluting boilers and less efficient cooling systems offline. Final design is complete, financing is in place, and a new 10 MW fuel cell will begin construction in 2022 to anchor the project.
- **University of Bridgeport and Fuel Cells** – a local university in the South End’s Little Liberia neighborhood, is now off the grid, utilizing 1.4 MW of fuel cell generation to meet its electricity needs. And it will soon be heating and cooling its buildings with waste heat from the district heating and cooling loop, making the campus energy independent.

- **Solar for All** – PosiGen, a solar installation company based in New Orleans, LA, which serves lower income housing stock, opened its doors in Bridgeport for its Northeast headquarters in 2016 and is employing both Bridgeport residents and local electrical installation contractors. The company has deployed more than 1,300 projects in Bridgeport – the largest of any city or town in Connecticut – and become a “Top 5” installer and financier of residential solar PV and energy efficiency in the state. Their products and services eliminate the energy affordability gap saving between \$600-\$1,300 a year for participating low- to moderate-income families. Through the Green Bank’s residential solar programs, nearly 1,700 families have undertaken an energy assessment and installed roof-top solar PV systems – the most in the state.
- **C-PACE** – Bridgeport is the leading municipality taking advantage of the Connecticut Green Bank’s (“Green Bank”) Commercial Property Assessed Clean Energy (“C-PACE”) Program for businesses, nonprofits, and multifamily housing properties. Low interest financing has been awarded to Bridgeport businesses in record numbers.

These next two projects seem to have energy transition benefits, but also are two of the eight “Affecting Facilities” located in the energy-burdened, low-income neighborhoods of the South and West Ends of the City. Hopefully the DOE team can help the community to set up criteria that would screen proposed projects for their true energy saving or pollution-reduction qualities. If we have good screening criteria we can avoid making choices that seem “green” at first blush, but in reality would be disqualified if we applied the same measures as DEEP or other entities concerned with air quality or waste pollution.

- **Medical Waste Disposal** – Future Healthcare Systems CT, situated in our Eco-Technology Park, has installed a 156-kW solar unit on its rooftop, reducing its reliance on grid power and saving significant electricity cost. However, this is a facility that collects and disposes of medical waste.
- **Waste to Energy Facility** – EnviroExpress operated a now defunct compressed natural gas and liquefied natural gas fueling station; the business had converted its diesel trucks to natural gas. The company wanted to expand natural gas fueling operations and build a clean fuel retrofit facility to convert other older diesel trucks from Connecticut and New York companies to natural gas. This project would have helped reduce air pollution in the I-95 highway corridor, presently designated as a non-attainment zone by EPA. However, these operations were not successful and the current ownership collects and hauls refuse to a mass burning waste-to-energy facility across the street.

J. TRACK

Launch Track

K. BACKGROUND

History

Bridgeport, Connecticut is a minority-majority city, the largest municipality in the state, whose industrial background has left its residents a heritage of environmental, geographical and fiscal challenges. The city’s rich industrial history spans 200 years from its seafaring and manufacturing roots through the late 19th and early 20th century bloom of innovations such as the light bulb, the sewing machine, telescopic lenses and industrial machinery to its World War II heyday as the Arsenal of Democracy. Post War years saw continued innovation in manufacturing for less than a decade before “deindustrialization”

dismantled and moved this productive activity out of the city, the Northeast, and, eventually out of the U.S. to offshore destinations. Factories shut down and jobs were lost. Residents, who could afford to, moved to the suburbs. Bridgeport continued its economic decline through the rest of the 20th century, and to this day, struggles to support its residents economically. The decline has touched not only its economic life, but also inhibits the well-being of its families in their health and educational attainment while the impact of environmental pollution left over from its industrial days impacts all facets of economic and social advancement. As a coastal city, it is challenged with resilience issues arising from climate change that includes rising water levels, and as the I-95 corridor parallels the mid- 19th century Metro North railroad path, the pollution generated negatively impacts the health of the community.

Clean Energy Efforts

For the last dozen years, a coalition of municipal and business interests have worked to bring back economic activity through development of clean energy production projects. Over this time, nine (9) projects have been delivered with 2 still under development. In 2008, then Mayor Bill Finch initiated the BGreen 2020 project through Executive Order. A large committee of local and regional actors, brought together from all parts of the institutional community (e.g., Bridgeport Regional Business Council, Bridgeport Economic Development Corporation, hospitals, banks, major non-profits, Workforce Investment Board), was divided into groups including Green Land Use & Transportation, Green Energy & Buildings, Green Businesses, Jobs & Purchasing, and Green Marketing, Education & Outreach. These committees not only gave rise to plans for projects that were developed over the last 12 years, but have set the stage for the next push to establish the institutions and businesses needed to move the needle on job creation and cooperation between the community, businesses and local, state and federal officials to solve the economic and social problems that city residents still face today.

Energy Efficiency Efforts

In parallel, the City moved to bring weatherization to a broader swath of residents and businesses. At that time, our region's Community Action Program ("CAP") agency and Action for Bridgeport Community Development ("ABCD") delivered weatherization services to low- and moderate-income households in most of Fairfield county. ABCD (now Alliance for Community Empowerment) is based in Bridgeport and ran its weatherization program with state and federal funds. It was a hub for training for weatherization workers and outreach to the community with information on the benefits of weatherization for households. Serving more than 30,000 clients, ABCD ran the region's Energy Assistance program that managed subsidies to clients who qualified for this program and was exceptionally well-situated to educate, advise and weatherize the homes of thousands of Bridgeport families. GBCE learned weatherization contracting from ABCD staff, trained and hired teachers for weatherization classes, put together teams of workers graduating from those classes and delivered services to more than 100 homes in Bridgeport under contract to ABCD and the City of Bridgeport that reserved Community Development Block Grants ("CDBG") and American Recovery and Reinvestment Act ("ARRA") funding for weatherization in residents' homes. Under the ARRA funding (i.e., 2009–2011) GBCE trained 250 students in weatherization work including 2 classes in Building Performance Institute certifications.

Lost Opportunity to Reduce Energy Burden

These programs did not survive the post-ARRA period and, at this time, funding for weatherization from both state and federal sources is severely curtailed. However, the need for Bridgeport families is not.

The severe reduction of these programs is regrettable for our families because they are significantly "energy burdened" – such programs as weatherization would be an immediate antidote to that. Data shows us that of the 38 census tracts that encompass the totality of the Bridgeport population, 22 are

“energy burdened”. Those that are not are only a point below 6% with a couple of exceptions like our waterside neighborhood of Black Rock with the unique, lowest rate at 3% showing median household income of \$88,021. There are only 5 Bridgeport census tracts where less than 30% of the population are at or below the “low-income” designation (200% of the federal poverty-level). The cost of energy is essentially the same for everyone, so the ability to stay within “affordable” guidelines is overwhelmingly a question of income. Given that, the energy burden equal to or more than 6% of household income is not “affordable”, it’s worth noting that out of our total population of 146,000 (according to 2019 statistics), only 24,000 (16.4%) can afford the energy bills they pay. The highest burdens are in tracts where household median incomes are \$9,958 (15%), \$21,895 (10%) and \$21,851 (10%). Indeed, if you add up the energy burden rates for all 38 census tracts, the whole city is “energy burdened” at 6.2%.

Bridgeport is a “poor” majority/minority city with a small “grand list”, low educational attainment, old and cheap housing stock, high unemployment and high crime rate.

Table 1. Bridgeport and Other Cities and State Comparative Demographics – CT Economic Research Center

Race/Ethnicity 2013-2017	Black Non-Hispanic	White Non-Hispanic	Other Non-Hispanic	Hispanic or Latino	Population 2013-2017	Poverty Rate
Bridgeport	33.1%	21.4%	6.3%	39.2%	147,586	20.8%
Hartford	35.3%	15.0%	5.7%	44.3%	126,443	30.5%
New Haven	31.5%	30.3%	8.0%	30.4%	130,884	25.6%
New London	13.8%	45.2%	8.0%	33.1	27,147	28.3%
Waterbury	17.5%	34.4%	15.0%	33.2%	109,250	24.3%
State of CT	10.0%	68.0%	5.0%	16.0%	3,594,478	10.1%

Connecticut has the 2nd highest energy burden in the US. The table below shows that all of the state’s larger cities suffer the same demographic drawbacks demonstrating a high concentration of low-income residents living in urban settings such as Bridgeport. The high poverty rates in these cities, for instance, contrast with the low, state-wide rate.

Social and Environmental Impact from Clean Energy and Energy Efficiency – The Old Plan

So, what has the commitment to building clean energy projects in the City brought to our residents to relieve the energy burden? We don’t know! Following the convening of the BGreen2020 initiative, an Energy Efficiency and Conservation Plan that published in August 2010 by the Regional Plan Associates of Stamford, Connecticut. The focus of the plan was reduction of energy usage with transition to cleaner energy. Carbon emissions were to be reduced by 10% by 2020 in step with state goals. This aggressive carbon reduction plan would meet its goals by: using green building strategies to obtain faster, near-term results; increasing renewable energy production and usage that would impact business development and job creation in the sector; reducing transportation emissions by electrifying busses and providing electric charging stations for cars as well as encouraging walking and biking as alternative means of transportation; and, finally, emphasizing smart growth like Transit Oriented Development that relieves the energy expense of transportation and other sources through infrastructure efficiencies. The annual savings were to be \$225 MM in energy costs, including the creation of 6,900 FTEs.

By contrast, today’s business and neighborhood communities have found common ground in looking forward to economic and energy development that focuses on the benefits workforce development and job creation would have on our families, city and region.

The Energy Efficiency and Conservation Plan anticipated the reduction of GHGs over a ten-year period, with goals achieved (or not) by 2020. There has never been a follow up study to measure the results although the plan had intermediary targets for actions and program results in interim years. The focus of the Plan was GHG emission reduction; there was no mention of reduction of the energy burden on residents. Economies for the City of Bridgeport were foreseen as energy efficiency measures were designed for government buildings, schools and libraries as opposed to the impact on its residents.

Lessons Learned from the Old Plan – Beyond Institutions and Towards the Community

There are a couple more lessons learned from the Plan that are instructive to the upcoming planning efforts through the Project, including:

1. The Green Building recommendations were considered the most effective, giving best and fastest results reducing GHGs and economic growth projections;
2. Land Use and Transportation were to yield the second-best results for reduction of GHGs; and
3. Renewable Energy bore the highest cost and investment for the least favorable outcome within the 10-year projected period.

For this last stated position, it is now thought that the cost of renewable energy can be brought down over time, and that easy access to affordable financing can make it competitive with other fuels. With the stable of clean energy projects, the Project should be looking at this closely to see what benefits it may bear on the energy burdens of the residents of Bridgeport. Discussions with energy experts reveal that our local projects (fuel cells, solar farms) may not benefit the local population except very indirectly since our utilities are only in charge of and billing “distributed energy”. The cost per kWh is not controlled by entities at the table with an interest in reducing energy burdens of Bridgeport residents.

It's worth noting that the majority of clean energy projects for which Bridgeport is well-known in energy circles, are, so far, conceived and built by energy producers in collaboration with Bridgeport's government and city institutions thus satisfying the vision of corporate investors and the city – and not residents in the community. With the development of a Roadmap with input and origination from the “grass roots” community, it's hopeful that projects will be aligned with community needs. This should directly aim at the reduction of the energy burden, but also address the need for workforce development, growth of minority-led businesses and organizations, employment in energy industries and opportune siting of future projects. For instance, the Vineyard Wind project is highly anticipated by the corporate/institutional community looking at major opportunities for business development which the “grass roots” community hopes will also bring job and income opportunities to them. We don't know the beneficial impact of this project on our community or if it addresses our most pressing needs.

TRANSFORMATIVE IMPACT OF REQUESTED TECHNICAL ASSISTANCE

L. DESCRIPTION OF TECHNICAL ASSISTANCE NEED

The following is a description of the technical assistance needed to launch clean energy-related economic development:

1. **Focus** – choose the best pathway(s) given our strengths, weaknesses and opportunities.

2. **Engagement and Coordination** – bring together institutional actors and the broad community. Find and achieve common ground (e.g., everyone gets excited when discussing job creation and expansion of enterprises that create jobs).
3. **Justice 40 and Build Back Better** – work under the overarching principles of ensuring that no less than 40% of the investment and benefits inure to underserved communities (i.e., Justice 40) and improve conditions for high-quality family-sustaining jobs through workforce and economic development to get the best plan for Bridgeport and the best cooperation across all communities including business, education, social services sectors and others.
4. **Measurable Impact** – learn how to understand the impacts of utility-led projects. For example, how do we avoid the clash of profit-driven plans vs. community-driven plans. This Roadmap has to be community-driven!
5. **Sustainable Plan** – produce a plan that has both short-term programs, projects and benefits, especially for reducing energy burdens and negative environmental impacts and creating jobs and supply-chain opportunities, as well as longer-term projects and investments.
6. **Capacity Building** – leave the community with the techniques and methods to keep the Roadmap updated and relevant.
7. **Communication** – leave the community with methods to keep its citizens informed and knowledgeable about energy technical developments that will be beneficial to their concerns.

M. ANTICIPATED COMMUNITY-WIDE ENGAGEMENT AND BENEFITS

As the community identifies the various pathway(s) of focus within the Roadmap, we anticipate that the project will result in the following benefits as a result of the TA:

- **Economic Opportunities** – creation of local jobs and growth and development of minority-led local businesses resulting from the deployment of renewable energy and energy efficiency projects to build wealth.
- **DEI Opportunities** – engagement of the diverse members within our communities to get involved in the planning process to increase investment in the local green economy.
- **Stakeholder Engagement Opportunities** – enabling local families and businesses to take advantage of the resources available and technologies being deployed to reduce energy burden and increase resilience.
- **Underserved Communities Opportunities** – ensure that the community plan is inclusive of reducing energy burden, increasing resilience, and building wealth for all of Bridgeport.

To monitor and evaluate the realization of these benefits, we will be collecting data with respect to investment and deployment to discern the equity, energy, economy, and environmental benefits inuring to the community.

TEAM COMPOSITION

N. MULTI-STAKEHOLDER TEAM

The following is a breakdown of the organizations applying as the community multi-stakeholder team – see Table 3.⁹

Table 2. Multi-Stakeholder Team Leaders and Contact Information

Greater Bridgeport Community Enterprises¹⁰ Adrienne Farrar Houël President and CEO houel@greenteambpt.com (203) 209-6915	Operation Fuel¹¹ Brenda Watson Executive Director Brenda@operationfuel.org (860) 243-2345 x3302
Bridgeport Regional Business Council Jeff Leichtman Sustainability Consultant Jeff@globalisllc.com (203) 464-2005	Connecticut Green Bank¹² Bryan Garcia President and CEO bryan.garcia@ctgreenbank.com (860) 257-2170

For a description of the qualifications of the individuals within each organization, please see the attached resumes.

O. ORGANIZATIONAL DESCRIPTIONS

Greater Bridgeport Community Enterprises

The mission of the GBCE is to create jobs, by creating and expanding green businesses and provide training in the growing green economy so families throughout the region can achieve economic self-sufficiency while creating more sustainable communities. GBCE is poised for rapid growth and expansion through deepening collaborations with current partners. GBCE anticipates opening new green low-tech, labor-intensive enterprises to create jobs for unemployed disadvantaged residents. Its current and future enterprises will all embody the “triple bottom line” of environmental sustainability: social good in hiring disadvantaged residents; economic development to address unemployment and poverty; to build the tax base for Bridgeport; and to revitalize the city’s neighborhoods. Its current activity has created 20 jobs that put more than \$500,000 in salaries back into the local community every year.

GBCE’s key operation is mattress recycling. Since 2012, GBCE has advocated for reduction of the waste stream through reuse and recycling of key components. In support of DEEP’s push for adoption of mattress recycling legislation, GBCE initiated a pilot program and “proof of concept” operation in mattress recycling. At first marketing to retail, educational institutions and municipalities, GBCE built a

⁹ It should be noted that the stakeholders provided multiple comments into the Communities LEAP Pilot on August 6, 2021 and October 12, 2021.

¹⁰ Woman and minority-led organization

¹¹ Woman and minority-led organization

¹² Minority-led organization

social venture that employed mostly Second Chance residents of Bridgeport. As of today, employing 20 people, GBCE fulfills a contract for recycling mattresses and box springs for the western half of the state, and in separate contracts, recycles units coming from retailers and housing out of state.

As lead organization, GBCE will *convene, interpret, research, inform and document* the activities of the applicant team and community in identifying Bridgeport's opportunities to use energy technologies to address community needs in reduction of energy burdens and attainment of expressed economic development goals. GBCE will assist in outreach to involve as many sectors of the Bridgeport population as possible in the planning process and coordinate meetings and discussions to define pathways and a Roadmap of actions to achieve future goals.

Operation Fuel

Operation Fuel ("OF") is the country's oldest fuel fund, serving as a model across the United States. Its primary purpose is to provide year-round emergency energy assistance to every city and town in Connecticut, aided by our statewide network of local fuel banks. OF is the primary source of energy and utilities assistance for low- to moderate-income households who are struggling financially and have exhausted other options. Operation Fuel fills the gap for Connecticut's most vulnerable residents – children, senior citizens, working families, and people with chronic medical conditions. OF helps people keep their homes warm and their lights on, power cooking appliances and medical equipment, store food and medications at safe refrigerated temperatures, and have access running water for drinking, bathing, and laundry.

Last year OF provided fuel support to 629 disadvantaged, energy-burdened households in Bridgeport. Looking forward, OF will expand services to focus on Healthy Homes, eliminating barriers to weatherization retrofits and improving health outcomes for low-income families. OF will also approach the reduction of heating costs by installing heat pumps that are energy efficient and low-cost to operate, thus bringing a structural solution to relief of families' energy burden while reducing the polluting effects of burning fossil fuels: heating oil and gas. As GBCE's partner in leading energy planning efforts, OF will keep its focus on the role of Justice 40 in all proposed programs and projects, reach out to its clients to determine needs in reducing their energy and related health burdens, assist in informing the Bridgeport community on what technologies could be brought to bear on resolving energy-related issues, and assist in documenting, statistically and anecdotally, projected outcomes of actions and programs recommended through the Roadmap laid out by the planning process.

Connecticut Green Bank

The Connecticut Green Bank is the nation's first state level green bank. Established by the Connecticut General Assembly in July 2011, as a quasi-public agency, the Green Bank supports the Governor's and Legislature's energy strategy to achieve cleaner, affordable, and more reliable sources of energy while creating jobs and supporting local economic development. The mission of the Green Bank is to confront climate change and provide all of society a healthier and more prosperous future by increasing and accelerating the flow of private capital into markets that energize the green economy. In an effort to reduce the energy burden on vulnerable communities, the Green Bank, in collaboration with the private sector, develops programs to make capital affordable and accessible to finance clean energy and environmental infrastructure improvements.

The Green Bank is partner to GBCE and OF in the planning process. It has operated invaluable programs for energy upgrades for commercial, industrial and residential buildings in Bridgeport. It has participated in the financing of every major clean energy project in the City of Bridgeport for the last

dozen years. On the residential front, the Green Bank, in partnership with PosiGen, has financed through “Solar for All” more than 1,300 solar arrays for city families. Through its deep commitment to reduction of the use of fossil fuel, the financing of projects that will reduce the energy costs of families, businesses, municipalities and state entities, the Green Bank’s mission is critical to identifying impactful projects and helping all members of planning committees to understand the financing mechanisms to put into place to realize the full potential of projected programs and projects. With its experience in working in distressed, environmental justice communities throughout the state and in its role as national example of employing finance to resolve climate change issues, the Green Bank will bring real-life solutions to implementing our planning process and realizing targeted energy goals and projects.

Bridgeport Regional Business Council

The mission of the Bridgeport Regional Business Council (“BRBC”) is to increase the economic opportunities for the people of the area by working to create an environment for business expansion, retention and recruitment that will result in jobs and tax base growth in an environmentally sustainable manner. Through its three Chambers of Commerce, over 800 business and not for profit members, and many leadership programs, the BRBC is positioned to work closely with GBCE and the Project team on this technical assistance effort. BRBC is committed to working on the development of an aggressive and results-oriented energy policies and projects to impact energy pricing and usage as a significant economic and environmental issue in our state.

As a partner in the planning process, the BRBC’s role will be to bring energy generators and manufacturers together to build supply chains that produce and furnish goods and services to the energy marketplace. This supply chain is expected to create jobs and opportunities to train and employ disadvantaged Bridgeport residents in skills relevant to the manufacturing, construction and services needed in the emerging clean energy sector. The BRBC will also bring in The WorkPlace, Inc., our award-winning Workforce Investment Board, to develop appropriate training programs for manufacturers, builders, and energy service providers and recruit low-income, unemployed community members for training and placement. Local universities, including Housatonic Community College, have talented people and programs, including an excellent machinist certification program and a manufacturing degree program, that can be tapped to create additional courses to train and place graduating, certified students with supply chain member companies. The BRBC is also continuing to expand its manufacturers’ collaborative clustered in Bridgeport but also including neighboring towns that are members of our Metro Council of Governments.

P. PRIMARY CONTACTS

Please see Table 3 above under Section N. And, see also letters of commitment.

Q. LOCAL GOVERNMENT AUTHORITY

There are two governmental entities, including the City of Bridgeport and the Connecticut Green Bank – please see letters of commitment attached.

R. DESCRIPTION OF SUFFICIENT AUTHORITY AND INFLUENCE

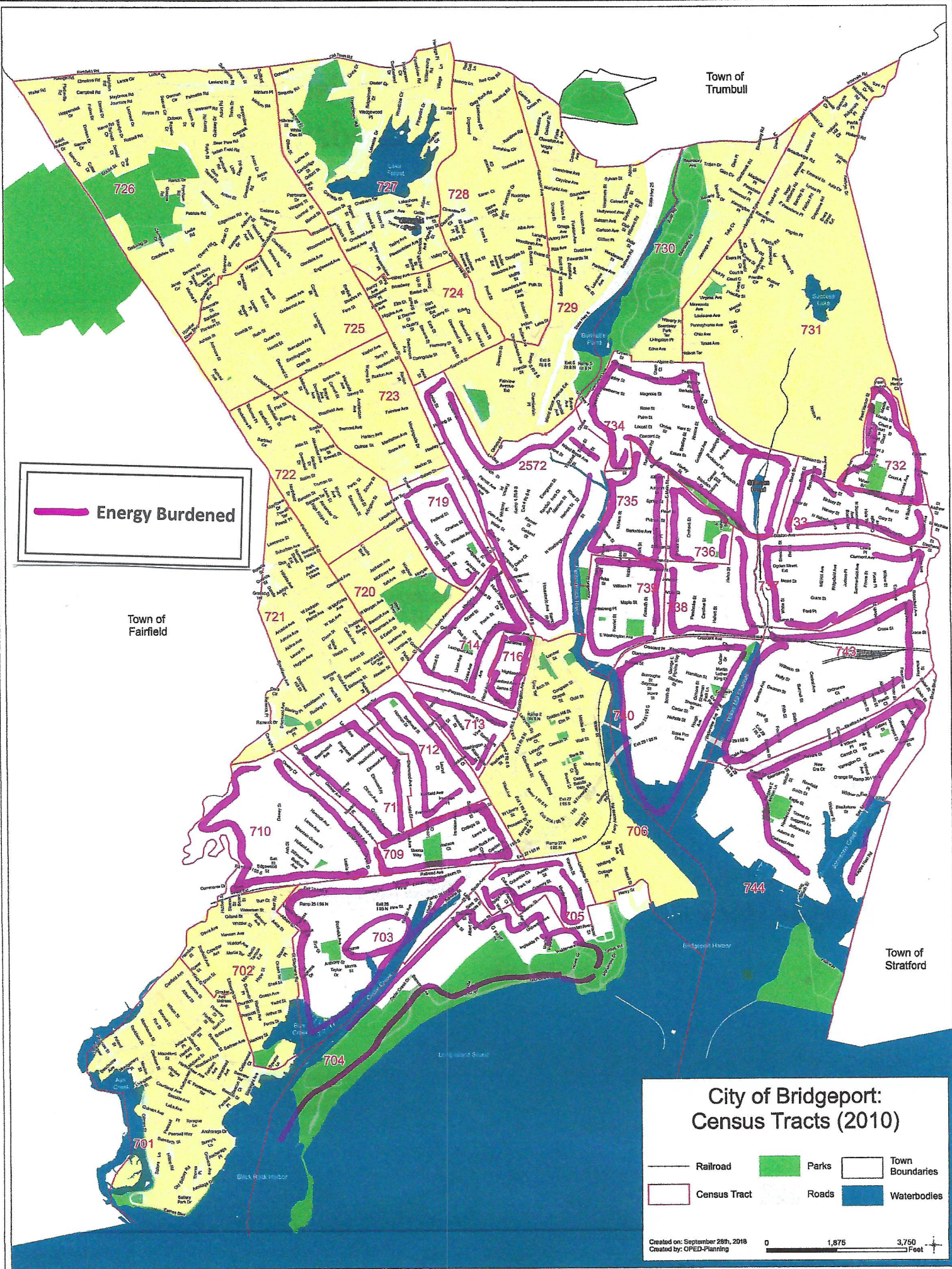
Sufficient authority and influence reside in the newly formed Bridgeport Regional Energy Partnership. The four submitting organizations, supported by the City of Bridgeport, have launched the creation of this organizational collaborative infrastructure necessary to support planning, developing and implementing energy programs and projects for which the Project will solicit TA and financial support from state and federal entities.

In anticipation of submitting this Project within the Communities LEAP process the submitting organizations convened a meeting of interested parties in the energy sector to discuss upcoming state and federal opportunities for which the City of Bridgeport should be prepared. On November 3, 2021, they met with regional energy generators including Avangrid, NuPower, Vineyard Wind and Fuel Cell Energy, as well as the Connecticut Center for Advanced Technology to discuss upcoming opportunities. The agenda for this meeting was to gain support for creating an organizational infrastructure that could apply for, receive financial investment for and manage programs and funds to create the Bridgeport center for energy programs and projects that would expand our influence in the energy sector leveraging collective expertise for local economic and community development. We are beginning a movement to create sufficient authority and influence to attract funding, create and execute energy programs and projects under the overarching frameworks of Justice 40 and Workforce Development.

In parallel, GBCE and Operation Fuel convened a group of community members representing grassroots social service, education, parent, housing, neighborhood and policy groups to inform them of energy investment opportunities for Bridgeport on condition that we could put into place an organizational infrastructure with broad-based community participation. We are focused on explaining its role in program development and planning our energy future based on the Justice 40 initiative launched by the Biden Administration and its application to DOE programs and the Community LEAP Pilot. These meetings will continue as we gather more community participants and have them join the Bridgeport Regional Energy Partnership to represent community interests. The BREP expects to set up the following committees which community members will join: Energy Efficiency to Reduce Energy Burdens; Clean Energy Planning & Development Including Resiliency & Transportation; Enhanced Manufacturing, Energy Focused Workforce & Supply Chain Development.

The BREP has adopted this mission statement: *The mission of BREP is to lessen the energy burden of Bridgeport families and increase the opportunities to create local jobs in the new energy-efficient-focused economy. We will do so by promoting government and private investment in safe and environmentally responsible projects that reduces energy consumption through conservation, creates a clean energy economy that minimizes carbon emissions and maximizes renewable energy generation, and lowers the health risks and environmental impacts on our residents.*

The four partners will continue to grow the BREP and educate everyone on the role of Justice 40 in the development of energy policies, planning, programs and projects. In the meantime, all communities in our diverse city will come together to promote the building of our energy workforce/manufacturing pipeline. Everyone wants to work together to create jobs and open pathways to those jobs through education and training.



Energy Burdened

Town of Fairfield

Town of Trumbull

Town of Stratford

**City of Bridgeport:
Census Tracts (2010)**

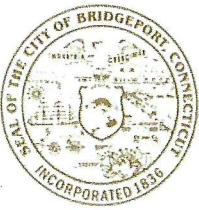
Railroad	Parks	Town Boundaries
Census Tract	Roads	Waterbodies

Created on: September 29th, 2018
 Created by: OPED-Planning

0 1,875 3,750 Feet

**Backup to Figure 1
Bridgeport Energy Data
Base 2019**

TRACT CODE	Total Population	Total Households	Median Income	Average Energy Burden	Percent Low Income	Environmental Justice Indicators	Environmental Justice Community Screen	Race/Ethnicity
Census Tract				Percent of Income spent on Energy Costs (Average for the Census Tract)	Percent of Census Tract Total Population at or Below Low-Income (200% the Federal Poverty Level)	Number of EPA EJSSCREEN Environmental Justice Indicators within 60th percentile	Five or more EPA EJSSCREEN Indicators within 60th percentile	
703	1,388	429	\$ 9,958	15	94.5%	11	Yes	Majority Hispanic
738	2,195	757	\$21,851	10	75.1%	11	Yes	Majority Hispanic
716	2,607	751	\$21,895	10	74.8%	11	Yes	Majority Hispanic
705	1,855	736	\$24,342	9	62.0%	11	Yes	No Majority Race
709	2,886	883	\$35,492	7	67.1%	11	Yes	Majority Hispanic
740	2,137	662	\$39,737	7	65.6%	11	Yes	Majority Hispanic
736	2,423	687	\$34,450	7	64.2%	11	Yes	Majority Hispanic
712	5,508	1,801	\$24,271	7	63.2%	11	Yes	No Majority Race
737	4,391	1,587	\$40,075	7	61.3%	11	Yes	Majority Hispanic
714	3,632	1,148	\$40,245	7	60.0%	11	Yes	Majority Hispanic
713	2,699	1,127	\$27,072	7	60.0%	11	Yes	No Majority Race
735	3,432	1,152	\$38,560	7	58.9%	11	Yes	Majority Hispanic
744	4,536	1,454	\$46,716	7	57.2%	11	Yes	No Majority Race
710	3,446	1,097	\$48,148	7	51.7%	11	Yes	Majority Hispanic
739	3,872	1,170	\$35,163	7	46.6%	11	Yes	Majority Hispanic
704	1,480	441	\$35,313	7	34.1%	11	Yes	No Majority Race
743	4,978	1,549	\$40,637	6	54.7%	11	Yes	No Majority Race
711	4,939	1,344	\$48,500	6	53.4%	11	Yes	No Majority Race
719	4,949	1,546	\$42,969	6	51.1%	11	Yes	No Majority Race
733	3,568	1,387	\$34,172	6	48.8%	11	Yes	No Majority Race
2572	4,096	1,420	\$50,915	6	45.4%	11	Yes	No Majority Race
734	4,025	1,366	\$52,917	6	41.2%	11	Yes	Majority Hispanic
706	2,556	1,392	\$23,598	5	54.9%	11	Yes	No Majority Race
732	2,695	1,167	\$49,446	5	45.2%	11	Yes	Majority Hispanic
724	3,023	929	\$59,014	5	43.2%	11	Yes	No Majority Race
728	5,608	1,719	\$52,607	5	42.6%	11	Yes	No Majority Race
720	3,518	1,216	\$52,909	5	41.3%	11	Yes	No Majority Race
722	3,884	1,543	\$49,402	5	37.0%	11	Yes	Majority White
702	3,880	1,639	\$42,688	5	35.2%	11	Yes	No Majority Race
725	5,671	2,007	\$65,113	5	31.5%	11	Yes	No Majority Race
729	4,546	1,405	\$63,618	5	26.8%	11	Yes	Majority Black
731	6,074	2,415	\$37,802	4	47.3%	10	Yes	No Majority Race
727	3,883	1,225	\$75,799	4	37.8%	11	Yes	No Majority Race
723	5,630	1,722	\$64,662	4	32.2%	11	Yes	No Majority Race
721	5,224	2,327	\$56,009	4	27.6%	11	Yes	No Majority Race
726	7,335	2,558	\$63,141	4	19.5%	1	No	Majority White
730	2,104	588	\$91,500	4	18.7%	11	Yes	No Majority Race
701	4,966	2,292	\$88,021	3	24.6%	1	No	Majority White
Total	145,639	50,638	\$45,493	6.21	48.9%	-	-	-



OFFICE OF THE MAYOR
CITY OF BRIDGEPORT, CONNECTICUT
999 BROAD STREET
BRIDGEPORT, CONNECTICUT 06604
TELEPHONE (203) 576-7201
FAX (203) 576-3913

JOSEPH P. GANIM
Mayor

December 17, 2021

Adrienne Farrar Houël, President and CEO
Greater Bridgeport Community Enterprises
459 Iranistan Avenue
Bridgeport, CT 06605

RE: Letter of Support for the Greater Bridgeport Community Enterprises Technical Assistance Request to the U.S. Department of Energy's Communities LEAP Program

Dear Adrienne:

The City of Bridgeport is delighted to provide this letter of support for the Greater Bridgeport Community Enterprises' (GBCE) proposal requesting assistance from the U.S. Department of Energy's Communities LEAP program. As a disadvantaged community with residents and small businesses paying a disproportionate amount of money for energy, Bridgeport would benefit greatly from the DOE's help in developing a comprehensive clean energy plan for our community.

The city has been a leader in sustainable development and renewable energy generation for more than a decade, transcending two different Mayoral administrations. This commitment comes from the grass roots and has served our community well. We have created hundreds of green jobs, had one of the first green collar job training programs with over 600 trainees and 400 job placements back in 2012, developed an Eco-Technology Park that included the east coast's first mattress recycling facility and a green energy park on a closed municipal landfill (including 5 MWs of solar and fuel cell power), expanded our park system, significantly increased our recycling rates, and are now developing a district hot water heating and cooling loop using waste heat from a 10 MW fuel cell project that will heat and cool buildings throughout our downtown, modeled after similar systems in Denmark and other European cities.

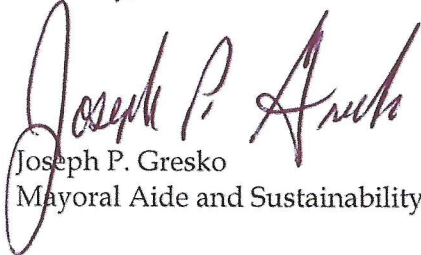
In 2010, in conjunction with the Regional Plan Association of New York, New Jersey and Connecticut, we developed a comprehensive energy plan focused exclusively on reducing greenhouse gas emissions and energy efficiency. While the 2010 plan was appropriate for that period, it failed to address the important energy burden and job creation issues required today. And with the enormous changes in technology, it failed to anticipate how technology could be used to improve grid resilience and inspire the emerging energy economy of today. The city has historically worked in partnership with the business community and community-based

organizations to build consensus on public policy issues; we are proud of our willingness to take advantage of the local talent and activism we have. This energy effort will be no different and is quite timely as we have recently formed a Bridgeport Regional Energy Partnership with several key energy stakeholders . . . to focus on reducing the significant energy burdens faced by many of our residents and the small businesses that serve them. If we are fortunate to get help from the DOE technical assistance program, our plan will better meet our intended goals and the city will use its resources to make sure the plan is implemented.

I will lead our energy collaboration with GBCE. I presently serve as a Mayoral aide and the city's part time sustainability coordinator. Additionally, I am also a State Representative in the neighboring Town of Stratford. In that legislative capacity, I am the co-chairman of the General Assembly's Environment Committee and as such can make sure that the work we do is shared with other communities in Connecticut. But because my state legislative commitment takes me away from Bridgeport on state business, Mayor Gamin and the Bridgeport City Council have agreed to hire a full-time sustainability coordinator to elevate our efforts and help me manage this critical function in city government.

The City of Bridgeport is committed to work with GBCE, the Connecticut Green Bank, the Bridgeport Regional Business Council and Operation Fuel on this important issue. Energy can be an economic driver for our community but only if we find ways to reduce the energy burden on our residents and make sure the benefits from the emerging energy economy are equitably distributed. DOE can certainly help us do just that.

Sincerely,

A handwritten signature in dark ink, reading "Joseph P. Gresko". The signature is written in a cursive style with a large, looping initial "J".

Joseph P. Gresko
Mayoral Aide and Sustainability Director

75 Charter Oak Avenue, Suite 1 - 103, Hartford, CT 06106
T 860.563.0015
ctgreenbank.com



December 17, 2021

Adrienne Farrar Houël
President and CEO
Greater Bridgeport Community Enterprises
459 Iranistan Avenue
Bridgeport, CT 06605

RE: Letter of Support for the Greater Bridgeport Community Enterprises Technical Assistance Request from the U.S. Department of Energy's Communities LEAP Pilot

Dear Adrienne:

On behalf of the Connecticut Green Bank ("Green Bank"), I am providing this letter of support for the Greater Bridgeport Community Enterprises ("GBCE") submission into the U.S. Department of Energy's ("DOE") Communities LEAP Pilot ("Pilot"). As a low-income, energy burdened, and environmental justice impacted community, Bridgeport is an excellent location for technical assistance through the Pilot to identify suitable pathways for a comprehensive clean energy plan.

With the mission of the Green Bank "to confront climate change and provide all of society a healthier and more prosperous future by increasing and accelerating the flow of private capital in markets that energize the green economy," we are committed to supporting this submission by GBCE into the Pilot, and ensuring its successful implementation.

Of the over 145,000 residents and 50,000 households living within this distressed community, an overwhelming majority are situated within census tracts that are less than 50 percent of median income (i.e., low income) with over 6 percent of their household income spent on energy (i.e., energy burden). Bridgeport is the location of Harbor Station Unit 3, the last coal-fired power plant in Connecticut. This power plant is located in a once thriving and prosperous African American and Native American community known as "Little Liberia" – which is recognized for its historic importance as part of the Underground Railroad where the Paugussett Tribe would transport escaped slaves by canoe across the Long Island Sound. Bridgeport is also the location of one of the largest grid-tied fuel cell installations in the United States in 2013 (i.e., 15 MW – Dominion Fuel Cell Park), where "Solar for All" began through the establishment of the Northeast headquarters of PosiGen in 2016, and the port of the first permitted offshore wind project in the Northeast in 2021 (i.e., 800 MW – Vineyard Wind).

The Green Bank is a partner to Bridgeport. Through our "Solar for All" campaign with PosiGen, we have eliminated the energy affordability gap of participating families and created jobs in the community – making Connecticut a "solar with justice" state. As we look ahead towards the transition from net metering to a tariff-based compensation mechanism for solar PV and implementing a battery storage

incentive program to deliver 580 MW of deployment by 2030, the DOE's Justice 40 objectives have been instituted into the public policy and program design through targets and additional incentives.¹ On behalf of the Green Bank, we look forward to working with the GBCE, and its partners like Operation Fuel and the community, with technical assistance from the Pilot, to assemble a comprehensive clean energy plan. From there, we can enable public and private investment and deployment of clean energy to realize benefits for the residents of the environmental justice community.

We look forward to supporting GBCE this successful technical assistance request to the DOE.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bryan Garcia', with a long horizontal flourish extending to the right.

Bryan Garcia
President and CEO

Attachments: Our Solutions fact sheet
Decennial Societal Impact Report fact sheet

¹ Renewable energy tariff will provide over 20 years \$0.0250/kWh for low income or \$0.0125/kWh for households located in distressed communities (i.e., Bridgeport) for every kWh produced from a Class I renewable resource (e.g., solar PV) will reduce energy burden and GHG emissions. An upfront battery storage incentive of \$400/kWh for low income or \$300/kWh for households located in distressed communities will increase resilience from the impacts of climate change (e.g., grid outages).

BRYAN T. GARCIA

75 Charter Oak Avenue • Hartford, CT 06106 • 860-257-2170 • bryan.garcia@ctgreenbank.com

LEADERSHIP • PUBLIC-PRIVATE PARTNERSHIPS • INVESTMENT

Provide support to the Greater Bridgeport Community Enterprises to identify clean energy pathways for the environmental justice communities of Bridgeport to increase investment and deployment of clean energy in order to benefit our most vulnerable communities by creating jobs, reducing energy burden, and increasing resilience.

SELECTED EMPLOYMENT HISTORY

2011 – Current Connecticut Green Bank

Hartford, CT

President and CEO

Mobilized over \$2.1 billion of investment into Connecticut's green energy economy from 2012 through 2021 while achieving a leverage ratio of 7:1 of private to public funds, created over 25,000 direct, indirect, and induced job-years by reducing the energy burden on over 60,000 households and businesses through the deployment of nearly 500 MW of renewable energy, lifetime savings from energy efficiency of 64.1 million MMBtus, and reduced nearly 10.0 MMTCO₂ over the life of the projects. Amplified investments in vulnerable communities – “parity” for low-to-moderate-income and “beyond parity” for communities of color making Connecticut a “Solar with Justice” state. The Connecticut Green Bank was recognized by the Harvard University's Kennedy School's Ash Center with its most prestigious award, the “Innovations in American Government Awards” (July 2017).

2007 – 2011 Yale University – Center for Business and the Environment

New Haven, CT

Program Director

Responsible for the start-up, growth, and management of the Center including fundraising, endowment management, strategic planning and execution, and administering financial and human resources of the organization. Improved the rankings of the university's green MBA program from 21st in the world to 3rd in three years.

2007 - 2011 Earth Markets, LLC

Cromwell, CT

Co-Founder and Chief Community Officer

Developed the concept for a residential energy efficiency service organization that made it easier and more affordable for households to use energy efficient products and services by engaging them within their communities to act at their homes. Won a \$4.2 million grant from the U.S. Department of Energy to launch the *Neighbor to Neighbor Energy Challenge*, reaching more than 1,300 homes in 14 communities, transacted white tags, and created a Clean Energy Corps.

2000 – 2007 Connecticut Innovations – Connecticut Clean Energy Fund

Rocky Hill, CT

Director, Energy Market Initiatives

Senior staff member responsible for overseeing one of the primary goals of the organization – to advance knowledge and awareness of the benefits and availability of clean energy. Developed a renewable energy credit trading program that engaged residents, businesses, and institutions to support and purchase clean energy. This program won the “Green Power Pilot Award” from the EPA and DOE in 2006. Awarded with a Connecticut Climate Change Leadership Award by Governor Jodi Rell and Commissioner Gina McCarthy in 2007 for my public service to the state.

EDUCATION

New York University, Leonard N. Stern School of Business

Master's in Business Administration (M.B.A.), Finance (June 2004)

New York University, Robert F. Wagner Graduate School of Public Service (Sargent Shriver Scholar)

Master's in Public Administration (M.P.A.), Public and Non-Profit Management (May 2001)

Yale University, School of Forestry & Environmental Studies

Master of Environmental Management (M.E.M.), Industrial Ecology (May 2000)

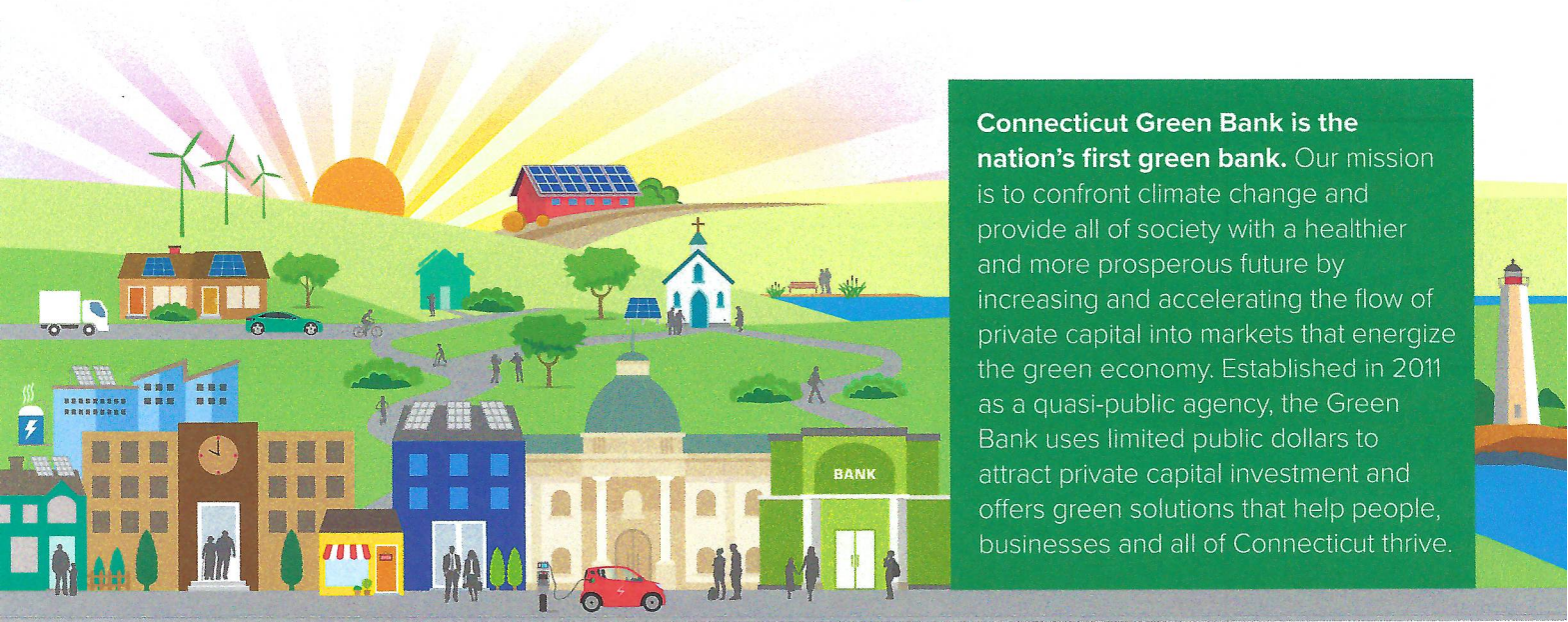
University of California at Berkeley, School of Natural Resources

Bachelor of Science (B.S.), Political Economy of Natural Resources (May 1994)

VOLUNTEER ACTIVITY

Board of Directors – serve on the Board of Directors of Energy Foundation, Sustainable CT, Institute for Sustainable Communities, and the Center for Sustainable Energy

Advisory Boards – serve on the Advisory Boards of the Secretary of Energy Advisory Board, Yale Center for Business and the Environment, and University of Connecticut School of Engineering



Connecticut Green Bank is the nation's first green bank. Our mission is to confront climate change and provide all of society with a healthier and more prosperous future by increasing and accelerating the flow of private capital into markets that energize the green economy. Established in 2011 as a quasi-public agency, the Green Bank uses limited public dollars to attract private capital investment and offers green solutions that help people, businesses and all of Connecticut thrive.

our solutions

The Green Bank is helping Connecticut flourish by offering green solutions for homes and buildings, and by creating innovative ways to invest in the green economy.



homes

Empowering all Connecticut families and households with accessible and affordable green solutions that bring them comfort and security. Find incentives for battery storage or use the Green Bank's flexible financing to reduce costs with health and safety improvements and the newest energy efficient technologies.



buildings

Creating stronger, more resilient communities with green solutions for buildings of all types, from businesses and nonprofits to multifamily housing and local government. Leverage Green Bank financing to save money and realize the benefits of more modern, sustainable buildings.



investments

Securing a healthier planet with smart ways for individuals and businesses to invest in green solutions – and our future – while also earning a return. Energize the green economy by investing in it today. Buy a Green Liberty Bond, invest through a crowdfunding offering, or join the movement by finding other ways to invest.

Get Started. Call 860.563.0015 or visit ctgreenbank.com

08-21

Decennial Societal Impact Report

FY12
FY21

Since the Connecticut Green Bank's inception through the bipartisan legislation in July 2011, we have mobilized more than **\$2.14 billion of investment** into the State's green economy. To do this, we used **\$288.4 million** in Green Bank dollars to attract \$1.85 billion in private investment, a leverage ratio of **\$7.40 for every \$1**. The impact of our deployment of renewable energy and energy efficiency to families, businesses, and our communities is shown in terms of economic development, environmental protection, equity, and energy (data from FY 2012 through FY 2021).

ECONOMIC DEVELOPMENT

JOBS The Green Bank has supported the creation of more than **25,612** direct, indirect, and induced job-years.



TAX REVENUES

The Green Bank's activities have helped generate an estimated **\$107.4 million** in state tax revenues.



\$52.8 million
individual income tax

\$27.5 million
corporate taxes

\$27.1 million
sales taxes

ENERGY

ENERGY BURDEN

The Green Bank has reduced the energy costs on families, businesses, and our communities.



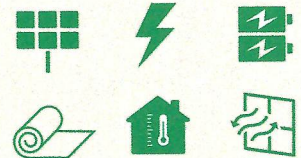
57,000+
families



6,000+
businesses

DEPLOYMENT

The Green Bank has accelerated the growth of renewable energy to more than **494 MW** and lifetime savings of over **64.1 million MMBTUs** through energy efficiency projects.



ENVIRONMENTAL PROTECTION

POLLUTION The Green Bank has helped reduce air emissions that cause climate change and worsen public health, including **9.3 million pounds** of SO_x and **10.7 million pounds** of NO_x.



9.9 MILLION
tons of CO₂ :



163 MILLION
tree seedlings
grown for 10 years

OR



2.1 MILLION
passenger vehicles
driven for one year

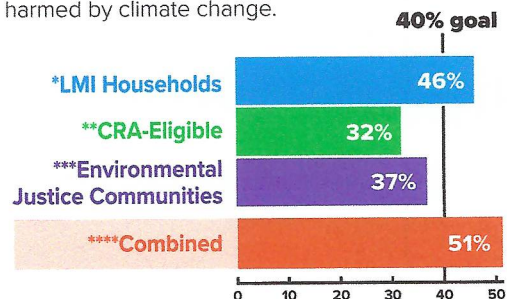
PUBLIC HEALTH The Green Bank has improved the lives of families, helping them avoid sick days, hospital visits, and even death.



\$298.1 – \$674.1 million of lifetime public health value created

EQUITY

INVESTING in vulnerable communities, The Green Bank has set **goals to reach 40% investment** in communities that may be disproportionately harmed by climate change.



*LMI Households – households at or below 100% Area Median Income.

**Community Reinvestment Act (CRA) Eligible – households at or below 80% of Area Median Income and all projects in programs designed to assist LMI customers.

***Environmental Justice Community means a municipality that has been designated as distressed by Connecticut Department of Economic and Community Development (DECD) or a census block group for which 30% or more of the population have an income below 200% of the federal poverty level.

****Combined Vulnerable Communities include LMI, CRA and EJC.



Winner of the 2017 Harvard Kennedy School Ash Center Award for Innovation in American Government, the Connecticut Green Bank is the nation's first green bank.

Learn more by visiting ctgreenbank.com/strategy-impact/impact

www.ctgreenbank.com © 2021 CT Green Bank. All Rights Reserved
Sources: Connecticut Green Bank Annual Comprehensive Financial Reports.



**BRIDGEPORT
REGIONAL
BUSINESS COUNCIL**
BRIDGEPORT | STRATFORD | TRUMBULL
CHAMBERS OF COMMERCE

Together we are the **BRBC!**

December 16, 2021

Adrienne Farrar Houël
President and CEO
Greater Bridgeport Community Enterprises
459 Iranistan Avenue
Bridgeport, CT 06605

RE: Letter of Support for the Greater Bridgeport Community Enterprises Technical Assistance Request to the U.S. Department of Energy's Communities LEAP Pilot

Dear Adrienne:

The Bridgeport Regional Business Council is pleased to provide this letter of support to the Greater Bridgeport Community Enterprises' (GBCE) submission requesting assistance from the U.S. Department of Energy's (DOE) Communities LEAP program. As an energy burdened and disadvantaged community, Bridgeport, with its significant commitment to sustainability, can benefit greatly from the DOE's expertise to help identify meaningful and measurable opportunities to create a comprehensive clean energy plan and strategy.

The mission of the Bridgeport Regional Business Council (BRBC) is to increase the economic opportunities for the people of the Bridgeport Region by acting to create an environment for business expansion, retention, and recruitment that will result in jobs and tax base growth in an environmentally sustainable manner. Through its three Chambers of Commerce, over 800 business and not-for-profit members, and many leadership programs, the BRBC is positioned to work closely with GBCE and the DOE on this technical assistance for planning effort. Energy policy, pricing and usage is a significant economic and environmental issue in Connecticut; our state ranks second in having the highest energy rates of all fifty states and energy drives corporate decision-making, challenges municipal budgets, and impacts the health and environment in our communities.

For the past 13 years, City of Bridgeport and the Bridgeport Regional Business Council have been leaders in promoting energy conservation, developing innovative clean energy projects, and attracting green energy businesses to the city. Our public – private partnership, known as **B Green 2020**, brought over 100 organizations together to create one of the most comprehensive sustainability plans in the country. We worked to close one of the state's largest coal-fired power plants, created nearly 35 MWs of renewable energy generation, maximized our use of energy efficiency incentives, significantly increased our recycling rates, began replacing diesel buses with electric ones, and increased our tree canopy to help reduce our greenhouse gas emissions. But much more needs to be done, particularly to reduce the energy burdens facing our residents, many of whom are at or below federal poverty guidelines, and to increase the job creation potential in the energy sector.

Over the years, the BRBC has often played the role of civic facilitator . . . to bring the public, private and not-for-profit sectors together with community groups around key policy concerns. We did it for education

BRIDGEPORT REGIONAL BUSINESS COUNCIL (BRBC) | WHERE COMMERCE & COMMUNITY CONNECT

CHAMBERS OF COMMERCE: Bridgeport, Stratford, and Trumbull

LEADERSHIP PROGRAMS | NETWORKING GROUPS: Business Referral Network (BRN) | CEO Peer Group | Leadership Greater Bridgeport

THRIVE: Emerging Leaders | Women's Leadership Network

ECONOMIC DEVELOPMENT AFFILIATE: Bridgeport Economic Development Corporation

10 MIDDLE STREET, 14^{FL} | BRIDGEPORT, CT 06604 | P: 203.335.3800 | F: 203.366.0105 | www.brbc.org

reform and sustainability issues in the early 2000s and today we are convening leaders in both the manufacturing and energy sectors. Our alliance for manufacturing is looking at how we might identify supply chain opportunities in not only our active defense, healthcare, machine, tools, and polymer industries in Connecticut, but also in the emerging wind energy market, as Connecticut has committed to purchase over 800 MWs of power from the Vineyard Winds project off the coast of Massachusetts, with Bridgeport slated to be one of the offshore wind hubs for that project.

In early November 2021, we held the first meeting of the Bridgeport Regional Energy Partnership. It was composed of city and state officials, business leaders, local energy generators, and community-based organizations to see how we could use our history of innovative energy project development to relieve the significant energy burden local residents and small businesses face, help create living wage jobs in the emerging energy marketplace, and not only reduce the financial burden mentioned above, but also lower the health and environmental risks faced by greenhouse gases and ground level carbon emissions that have elevated asthma rates in our community.

Our collaboration with GBCE on energy issues will be led by Jeff Leichtman, our long-time sustainability consultant, with my active participation. In his illustrious career, Jeff has served at all three levels of government, spent 27 years in the energy, environmental and sustainability space with the Bechtel Corporation, and was one of the original authors of Bridgeport's award-winning B Green 2020 Sustainability Plan in 2010.

We are excited to collaborate with GBCE, the City of Bridgeport, the Connecticut Green Bank and Operation Fuel on this critical effort. With DOE's wide range of expertise, Bridgeport, once known as the *Arsenal of Democracy* during World War II, can become an *Arsenal for Energy Innovation* in 2022!

Most Respectfully,

Sincerely,

A handwritten signature in blue ink, appearing to read "Dan Onofrio".

Dan Onofrio
President and CEO



**Global
Infrastructure
Strategies, LLC**

60 Silo Hill Road, Madison, CT 06443
Tel. (203)421-8390; Cell (203)464-2005

Global Infrastructure Strategies provides strategic issues management, government affairs, communications, and community relations services to help both the public and private sectors develop, site, and build complex infrastructure projects in a cost effective and sustainable manner. Created in early 2005, Global Infrastructure Strategies brings together a wealth of knowledge and experience in the energy, water, transportation, retail, housing, and environmental markets. Its Managing Director, Jeff Leichtman, has worked on complex public policy and political issues for more than 40 years.

Jeff began his career in government, working in the executive and legislative branches at the local, state, and federal levels for public officials in the State of Connecticut. He joined the Bechtel Corporation, one of the world's premier project management, engineering, and construction companies in 1987 where he spent twenty-eight years managing government affairs, strategic communications, and community relations programs; 17 years as a full-time employee and 11 years as a primary consultant. He played a major role in siting numerous industrial facilities including power plants, transportation facilities, retail projects and renewable energy parks; helped re-write their environmental guidelines; and established sustainable development as a core principle within the company.

Since returning to his home state to raise his two children, Jeff has been working with local, regional, national, and international clients on economic development, sustainability, and resiliency planning issues, as well as siting complex infrastructure projects. He is the co-author of ***B Green 2020***, Bridgeport Connecticut's comprehensive sustainability initiative and serves as the Private Sector Program Manager for the Bridgeport Regional Business Council to implement the city's Eco-Technology Park and other sustainability initiatives. He also served on the Board of Directors of Park City Green, Connecticut's first Mattress Recycling Facility.

Jeff received his undergraduate degree in history & political science from the University of Connecticut and has a master's degree in Community Organization and Planning from the University of Connecticut. He now resides in Madison where he raised his two children.



OPERATION FUEL

Powering Connecticut Households Since 1977

December 17, 2021

Adrienne Farrar Houël
President and CEO
Greater Bridgeport Community Enterprises
459 Iranistan Avenue
Bridgeport, CT 06605

RE: Letter of Support for the Greater Bridgeport Community Enterprises Technical Assistance Request from the U.S. Department of Energy's Communities LEAP Pilot

Dear Adrienne:

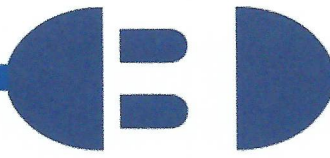
I am providing this letter of support for the Greater Bridgeport Community Enterprises ("GBCE") submission into the U.S. Department of Energy's ("DOE") Communities LEAP Pilot ("Pilot"), on behalf of Operation Fuel. Bridgeport is an ideal location for technical assistance through the Pilot to identify suitable pathways for a comprehensive clean energy plan. Bridgeport has a high percentage of low-income residents with energy burdens as high as 30% of their income. Bridgeport has also been identified as an environment justice community.

Operation Fuel's mission is to ensure equitable access to energy for all by providing year-round energy and utility assistance, promoting energy independence, and advocating for affordable energy. Operation Fuel supports the Greater Bridgeport Community Enterprises submission and will work in partnership with them to ensure its success implementation.

Bridgeport's residents experience a high energy burden and the City is an excellent candidate for a clean energy plan. According to the studying, "Mapping Household Energy & Transportation Affordability in Connecticut October 2020," authored by Justine Sears & Leslie Badger, they estimated "that the average household in Connecticut spends a total of \$2,899 on building energy and has a mean building energy burden of 4% (Figure 1, Table 3). In twenty percent of Connecticut's census tracts, the mean building energy burden is at or above the affordability threshold of 6%. According to the LEAD study tool, the energy burden for Bridgeport is 5% but some census tracks within Bridgeport have a energy burden as high as 10% of the family's household income.

When broken down by income level, the energy burden among low-income households is more apparent. According to Operation Fuel's 2016 Apprise study found more of the income of poor households goes toward energy costs. "Households with income less than the poverty line have energy bills that are about 10% lower than households with incomes at or above 200% of the poverty line. However, because their income is lower, their average energy burden is over 30%." According to the 2019 Census, 21.8% of Bridgeport's population falls below the poverty line.





OPERATION FUEL

Powering Connecticut Households Since 1977

Last year, Operation Fuel provided \$456,579 energy assistance to 629 households in Bridgeport helping low- and moderate-income families pay their utility costs. We have provided emergency energy assistance to Bridgeport for many decades and plan to continue in the future. In addition, Operation Fuel is launching a Better Homes and Buildings Program in which we will install heat pumps in homes to reduce energy burden and lower the carbon footprint of low- and moderate-income homes that often can not afford the upfront costs of more energy efficient home systems.

We look forward to working the Greater Bridgeport Community Enterprises, Connecticut Green Bank and other community partners to create a clean energy plan for Bridgeport and support the success of this important initiative.

Sincerely,

Brenda Watson,
Executive Director



BRENDA WATSON

75 Charter Oak Avenue, Hartford, CT 06106 | 860-888-4478 | brenda@operationfuel.org
<https://www.linkedin.com/in/brenda-watson-a8455a42/>

LEADERSHIP • ORGANIZATIONAL DEVELOPMENT • ENERGY AFFORDABILITY EXPERT

Provide support to the Greater Bridgeport Community Enterprises to identify pathways to reduce energy burden for the environmental justice communities of Bridgeport and to support clean energy and benefit this communities by providing energy grants, clean energy solutions and reducing energy burden.

SELECTED EMPLOYMENT HISTORY

EXECUTIVE DIRECTOR | OPERATION FUEL | FEBRUARY 2018-PRESENT

Responsible for design, development, analysis, evaluation and implementation of the policies, goals and priorities of the strategic plan developed by the Board of Directors. Strategy and Program management of existing programs and identify new programs ensuring they fit within the mission and resources. Develop and implement an annual operating plan, fostering collaborative relationships with other agencies and build coalitions. Responsible for development of fundraising plan with the support of the development director. Manage the agencies \$4million dollar budget by working closely with the finance director, ensure the development and maintenance of sound financial policies and practices. Responsible for policy and public relations and statewide advocacy of energy assistance issues. Develop and leverage partnerships within the energy sector. Developed Connecticut's first water utility assistance program.

DIRECTOR OF COMMUNITY PROGRAMS | OPERATION FUEL | JANUARY 2010- FEBRUARY 2018

Manage 105 volunteer intake sites in CT, assist Executive Director with research, implementation of public events and meetings, manage and analyze program data, supervise office staff and provide work plans to ensure that fuel bank volunteers are properly trained, evaluate program staff, represent the interest of agency and clients, develop healthy partnerships with community organizations and the business community, develop opportunities to collaborate with community and business partners. Public speaking: radio and television, large and small audiences. Work directly with lobbying consultant to secure funding at state level. Develop and manage policy initiatives. Work directly with media consultant to determine radio and print media outreach. Developed Homeless Intervention and Prevention Program, responsible for acquiring fee for service contract with Eversource. Managed studies: Energy Affordability Gap Study and Meeting the Energy Needs of Low-Income Households in Connecticut Report. Coordinate statewide energy assistance conference, 300 attendees.

TRANSPORTATION PLANNER | CAPITOL REGION OF COUNCIL OF GOVERNMENTS | JAN 2007-DEC 2010

Assisted with public involvement and communications for the Transportation Department, assisted with the development of Bike/Pedestrian Plan for Greater Hartford region, assisted with the management of large consulting contracts, worked on the Safe Routes to Schools project, The Griffin Corridor Study, developed CROCG's annual pedestrian survey.

Education

MA, PUBLIC POLICY | TRINITY COLLEGE, HARTFORD, CT

BA, POLITICAL SCIENCE | FLORIDA MEMORIAL UNIVERSITY

Volunteer Activity

Served on the Governors Transition Team for Energy Policy, Water Planning Council-Advisory Committee Member, Chair of Low Income Energy Advisory Board, Greenbank Board of Directors, Energy Efficiency Board, CT Green Buildings Coalition Board
Former National Energy Utility Affordability Coalition (NEUAC) Board Secretary, Past Connecticut League of Conservation Voters Board member.

COMMUNITIES LEAP PILOT
GBCE TEAM LEADER: ADRIENNE FARRAR HOUËL
459 Iranistan Avenue, Bridgeport, CT, 06605
Cell: (203) 209 6915
houel@greenteambpt.com

SUMMARY

Senior Executive with varied, extensive management experience. Concentration on program development and project management. Skilled in leadership of organizational projects from definition of objectives to implementation. Excellent communication skills, team leadership, coordination abilities. Harvard MBA. US citizen, fluent French.

EXPERIENCE

- Present ***GREATER BRIDGEPORT COMMUNITY ENTERPRISES, Inc., Bridgeport, CT***
12/2006 **President/CEO** of community development corporation that creates green businesses, jobs and trains low & moderate income persons for placement in those jobs; Founder of the corporation and creator of the programs including Brownfields Revitalization, Energy Conservation & Weatherization, Deconstruction, Reuse and Recycling. Created Green Team Enterprise that contracted for abatement, weatherization & deconstruction jobs & Park City Green mattress recycling operation. Recent program development in recycling of used books and creation of urban farms, including hydroponic projects on former Brownfields in Bridgeport neighborhoods considered food deserts. Working to develop Zero Waste projects within Northeast Hub of national Sustainable Work Program and the Cascade Alliance under St. Vincent de Paul (SVDP) of Lane Co. OR, leader in non-profit social ventures financed in part by Robert Wood Johnson Foundation.
- 3/2006 ***ACTION FOR BRIDGEPORT COMMUNITY DEVELOPMENT, Inc., Bridgeport, CT***
2004 **Director of Research and Development** – Aligned funding opportunities to meet agency objectives. Responsible for Program design and grant writing. Developed initiatives in: Educational Reform creating systems for change across all community sectors (Created and animated CT Regional Initiative for Closing Educational and Economic Gaps (CRI); Created and funded Career ladders in construction and environmental remediation industries, Family Financial Planning programs and Affordable housing construction programs. Worked with Head Start program director to develop nutrition programs for parents in all 11 day care centers managed by ABCD. Also created revenue-producing programs based on confirmed agency competencies. Raised \$1M in 2 years.
- 2011 ***THE SABLE GROUP, Inc., Villa Nova, PA***
2001 **Partner** - Consultant on missions for strategy definition, program development and implementation, change management, diversity training. Lead consultant for Public Sector, Not-for-Profit corporations; contracts include diversity training for Lockheed Martin, State of CT ICIC Connect Partnership, The Retail Initiative, Bridgeport, CT; Kellogg Foundation Urban Initiatives, Battle Creek, Michigan. 2008-2009 client: Housing Authority of New Haven – resident pre-employment training and placement; trainer for Resident Owned Businesses in best business practices – 2012/13.

Summary of International Experience

- 2001 ***IPSUM INTERNATIONAL, Ltd., Swords, County Dublin, Ireland***
1998 **Chief Operating Officer** - With Vision International team created international B2C Internet-sales, direct marketing firm.
- 1996 ***MADISON DEVELOPPEMENT FONCIER, SA., Boulogne, France***
1988 **Founding President and General Manager** - Real estate development in Paris Region;

- 1988 **GALLICA FRANCE S.A., Saint Germain-en-Laye, France**
- 1983 **General Manager** - Co-founder real estate development company, built residential property in Paris Region
- 1983 **KAUFMAN & BROAD SA, LES NOUVEAUX CONSTRUCTEURS SA, Paris, France**
- 1973 **Financial Director** - For KB, French subsidiary of major American residential, commercial real estate developer and LNC, major French real estate development company.

EDUCATION

- 1973 **MBA - HARVARD BUSINESS SCHOOL**, Boston, MA - General Management, Finance
- 1966 **BA - ANTIOCH COLLEGE**, Yellow Springs, OH - US and European History, Political Science

HONORS & AFFILIATIONS

Current:

United Way of Coastal Fairfield County - Core Leadership Team of Bridgeport Prospers - 2014
 Yale New Haven Health/ Bridgeport Hospital – Board Member since September 2017
 Eliza and Mary Freeman Center for History and Community – Founding member 2010
 Minority Business Association – Center for Joint Ventures – Board Member 2020
 Connecticut Green Bank – Named to the board by the Governor of CT, Sworn in March 2021

Past Board Affiliations:

Housatonic Community College Foundation – Board Member/ Vice President 2015-2020
 CT Trust for Historic Preservation, Trustee – member 2003 – 2018, Secretary/Vice Chair 2010-18
 CT Permanent Commission on the Status of Women –past Chair – member 2003-2014
 B-Green 2020 – City of Bridgeport Executive & Advisory Committee –Green Businesses, Jobs & Purchasing Committee – member 2008 - 2015
 Eastern Fairfield County United Way, Co-Chair of “Operation Graduation” - 2009
 City of Bridgeport Energy Improvement District - Chair - member 2010-15, Commissioner 2018-19
 Governor’s Working Committee on Modernizing Recycling in CT – Co-Chair, 2012
 Green Jobs Committee – CT Department of Labor and Department of Energy and Environmental Protection – 2012
 Community Capital Fund, Inc (now Capital 4 Change), Vice-President Board of Managers – member 2003 - 2013
 Girl Scouts of CT– Bd of Directors; 3rd Vice Chair – member since 2004; Board Development 2012
 Wholesome Wave Foundation - Vice Chair/Secretary - Board of Directors June 2009 - 2016
 Advisory Committee to Secretary of U.S. Department of Agriculture on Beginning Farmers & Ranchers – 2013 for 2-year term; 2016 for 1-year term
 Bridgeport Economic Development Corporation – Vice Chair – 2003-2006

Awards:

ABCD Community Service Award – 2003
 Al-Aziz Islamic Center Award – Women as Positive Examples in the Community – 2004
 Girl Scouts of America, Housatonic Council – Woman of Distinction Award – 2005
 United Way of Eastern Fairfield County – Spirit of Caring Award – 2007
 Purpose Prize Fellow (Encore Careers) – 2010
 National Assoc. of Negro Business and Professional Women's Club – Greater Bridgeport – 2014
 The WorkPlace, Inc. – Professional of the Year – 2016
 United Way of Coastal Fairfield County – Lifetime Excellence Community Engagement Work- 2017
 CT Women’s Hall of Fame – Honoree – 2019
 CT Green Building Council – Trailblazer Award – 2021
 CT League of Conservation Voters – Environmental Achievement; Community Impact - 2021