Finance: Sustainability Funding Award Application Example

About: This document is an example application for the Massachusetts Department of Housing and Community Development (DHCD) Sustainability Award, submitted by the Taunton Housing Authority for the Riverside Apartments Community Center & Clean Energy Resilience Hub. It outlines how the THA combined core community development needs with energy-efficient and resilient design elements, including solar, battery storage, EV charging, and high-efficiency HVAC systems.

Usage Description: Use this example application as a model for crafting your own funding request. It demonstrates how to:

- Connect sustainability upgrades to community priorities like youth programming, safety, and career development
- Provide supporting cost breakdowns, incentive assumptions, and resilience goals
- Frame the CCRH as a broader platform for equity, education, and climate justice
- Address grant program requirements including LEAN audit history, total development cost (TDC), and award category alignment

This example can be adapted for local, state, or federal programs and is especially useful where the integration of distributed energy resources and social services is a funding priority.

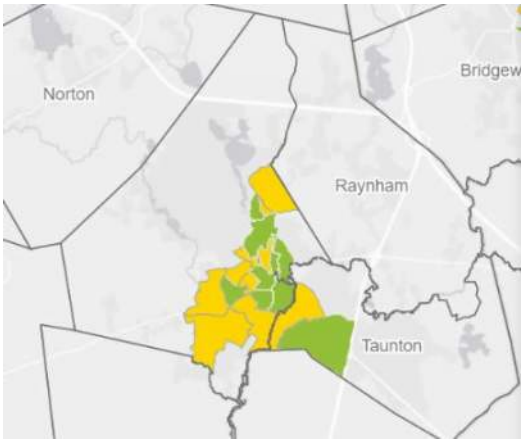
Riverside Apartments Clean Energy Community Center and Resilient Hub Project

(Riverside CCRH Project)

An Appeal to Make this Vision a Reality

1. *About City of Taunton*

Taunton is a small city with just under 60,000 residents. It was settled in 1637 as a town along the Taunton River and incorporated as a city in 1864. Its average household income in 2020 was $63,433, slightly below the US average household income and almost 25% below the Massachusetts average. The City is home to well established municipal services, regional transit services, industry, commercial businesses, vocational schools and has its share of brownfields, right of ways and landfills. More specifically Taunton has 12 public schools, a regional vocational school and community college. There are also 17 dedicated low-income housing facilities with over 1,000 residents. 51% of Taunton's population meets the Environmental Justice (EJ) Criteria as shown on the map.



2. *About Taunton Housing Authority*

The Taunton Housing Authority (THA) was established in 1948 to provide safe, decent, and affordable housing opportunities in the City of Taunton. Since then, the THA has remained committed to providing opportunities to people who experience barriers to housing because of income, disability, or special needs, in an environment that preserves personal dignity, and in a manner that maintains the public trust. A primary goal of the THA is to not only provide housing for low-income households, but also to improve housing and economic opportunities for residents through our programs.

The THA operates 17 facilities with over 600 dwellings and approximately 1,000 residents in the city. In some facilities, the residents are responsible for certain utilities. The THA is responsible for the balance. The portion that the THA is responsible for totals 1,300 MWh of electric power and 155,000 therms of gas per year. The THA paid $380,000 in utility bills in 2021. For reference, Massachusetts has 146,000 low-income housing units. There are about 2.4 million low-income housing units in the United States.

3. *About Riverside Apartments*

The Riverside Apartments on Paul Bunker Drive in Taunton is THA's second largest housing community

for low- and moderate-income individuals and families. It is home primarily to families of color. It is located near the Weir section of Taunton. Over the last few years, the complex has undergone many major renovations. Most recently, the site has benefited from a $10 million kitchen and bathroom replacement. The grounds have been professionally landscaped and offer residents a pleasant living environment. Riverside Apartments consists of 100 one, two, three, and four-bedroom apartments. Handicapped-accessible units are available on site. This sizable low-income

community has been without a community center or indoor gathering space for many decades. Community events are only held outdoors on the basketball court when the weather cooperates. When this happens, the only active outdoor play space in the area is taken out of service. Children of the community must be bussed to other facilities for camps and training.

4. *About the Riverside Community Center & Clean Energy Community Resilience Hub (CCRH)*

A Riverside Apartments Community Center has been in the conceptual stage for some time. In 2021 the THA secured funding on the order of $2.4 Million through the City of Taunton, the Massachusetts Executive Office of Housing and Livable Communities (EOHLC) and the US Housing and Urban Development (HUD) to design and build the center. Early in 2023 the THA with Beacon Climate Innovations (BCI) secured a small grant from the MassCEC Empower program to conduct a comprehensive study of integrating resilience and sustainability features into the center – effectively establishing the landmark Clean Energy Community Resilience Hub (CCRH) in Taunton. Thus far the study has held two open listening sessions and collected two surveys with the residents of Riverside Apartments about the CCRH. Security and career opportunities for children ranked as the highest priorities (above personal health and climate threats)[1]. This feedback has helped forge a vision for a thriving community center that offers safe spaces for children to explore learning, playing, and hobbies, teenagers to develop life and career skills and adults to forge stronger community connections. The center will embed technologies and best practices that serve this vision, giving opportunity for residents to familiarize themselves with the deployment, operation, and maintenance requirements of energy systems - while neutralizing the facility's carbon footprint, demonstrating sound economics, and delivering resilience[2] against disruptions.

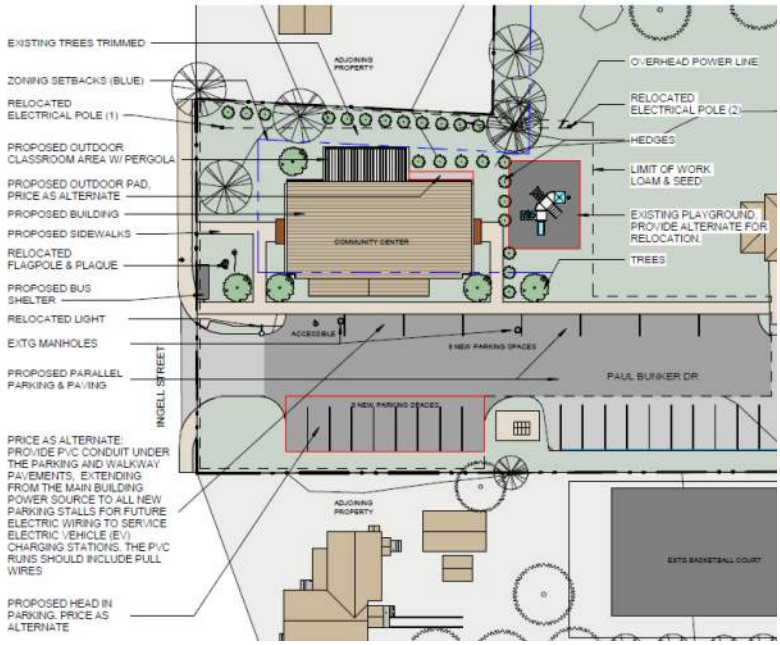
BCI has made recommendations to the facility architect on ways to make the facility "CCRH" ready. Recommendations included building orientation and roof slope to optimize solar access, weatherization to minimize energy demand, running conduit and incorporating concrete pads for energy storage/heat pump equipment/EV Charging and modestly expanding facility footprint to create additional space to store emergency supplies include showers in the bathrooms.

The architect's most recent design came back with a 3,250 square foot, "CCRH ready" facility along with some additional parking spaces and modest landscaping and an estimated base price of $4.6M ($1,425 PSF) including design contingencies, general requirements, bonding/insurance, overhead/profit, and

[1] Reports on these meeting, surveys and findings has been provided to the MassCEC Empower program and are available upon request to the THA.
[2] Ability to absorb and recover quickly from disruptions.

escalation (2024)[3]. Of this number roughly $650K can be attributable to CCRH related features – including a high efficiency 10-ton HVAC heat pump, solar optimized roofing, dedicated EV charging conduit/circuitry and equipment pads. This estimate is more than $2 Million above secured funding to date.

An additional $1M (estimated) - before any government incentives/rebates - would make the facility carbon net zero (or even negative) with 72-hour grid outage resilience. Of that $1M, an estimated $600K would be eligible for rebate through low-income Inflation Reduction Act (IRA), Commonwealth and utility incentive programs. These integrated distribute energy resource (DER) systems could produce as much as $60K per year in savings/revenue opportunities. Against the investment, that represents a 6-to-7-year payback on systems that have another 5 to 20 years of service life (or more) in them. These economics could make community and 3rd party ownership of the DERs feasible.



In addition to serving the community, the planned Riverside Community Center will serve as an office for the Riverside program coordinator and a local community-based organization (CBO) - True Diversity, dedicated to supporting local youth educational and career development. The Taunton-based Bristol-Plymouth Vocational School intends to interface with the development, construction, operation, and use of the facility in several different ways – to the benefit of the community, the students, and the school itself. Most significantly, it is envisioned that the Center will be guided by an active residential advisory committee (RAC), of which representatives of several families have expressed strong interest in joining. Finally, a Riverside Apartments Community Center that embodies these social and technical attributes will serve as the model for at least eight (8) other EJ CCRH locations identified by the City of Taunton and TMLP in a Grid Resilience Innovation Partnership (GRIP) application to the US Department of Energy.

5. *Funding Discussion*

The THA is striving to develop a clear "line-of-sight" to full project funding on the order of $5.6M[4] by mid-January of 2024. To avoid pending "claw backs", the existing funding of the $2.4 Million must be committed by Q4 of 2024. Without an expansion of that funding, a significant scale back of the project is

[3] Design Contingencies, General Requirements, Bonding/Insurance/Overhead-Profit/Escalation represents 39% of total cost, or $552 PSF.
[4] Before IRA, Commonwealth, and local utility incentives

expected. This likely translates to an earlier design resulting in square footage reduction of 50% and no beneficial provisions for resiliency, electrification, and sustainability.

The THA and its team are seeking 2nd and 3rd opinions on the cost estimate that may reduce that target raise. At the same time, it firmly believes that there is a creative patchwork of funding vehicles and sources to bridge the gap. This is because the project represents a cornerstone for so many facets of an equitable transition to a resilient, decarbonized energy system. The THA is hoping that prospective funding sources will recognize the value that this project can have to their respective missions, whether it be low-income housing, workforce development, local economic development, education, youth development, technology commercialization, climate adaptation and/or community development. The THA is open to working with sources from the public (federal, state, local) and private (e.g., foundations - philanthropic, institution – local banking, business). While THA is restricted from taking on debt directly, it recognizes that there are creative financial vehicles that could play a role in closing the gap and give opportunity for community ownership with reasonable returns (e.g., crowdfunding).

Cost & Funding Summary

- Estimated building cost ~$**4.6M**
  (3,250 sf, CCRH Ready)
- Estimated CCRH features **~$1.0M**
  (e.g., solar, battery, microgrid, geothermal, etc.)
- Total Estimate **~$5.6M**
  ($4.6+$1M)
- Incentives for CCRH features **~$0.6M**
  (IRA, Mass, Local Utility rebates etc.)
- Total net cost **~$5.0M**

The building must be funded through the THA. They have ~$2.4M secured and looking to secure the ~$2.2M balance by Nov.1 2023.

The CCRH systems can be funded through community/third party owners. The estimated $1M investment should receive ~$600K in rebates, credits and produce savings/income on the order of ~$60k/yr. Payback is ~ 7 years.

6. Contact Information

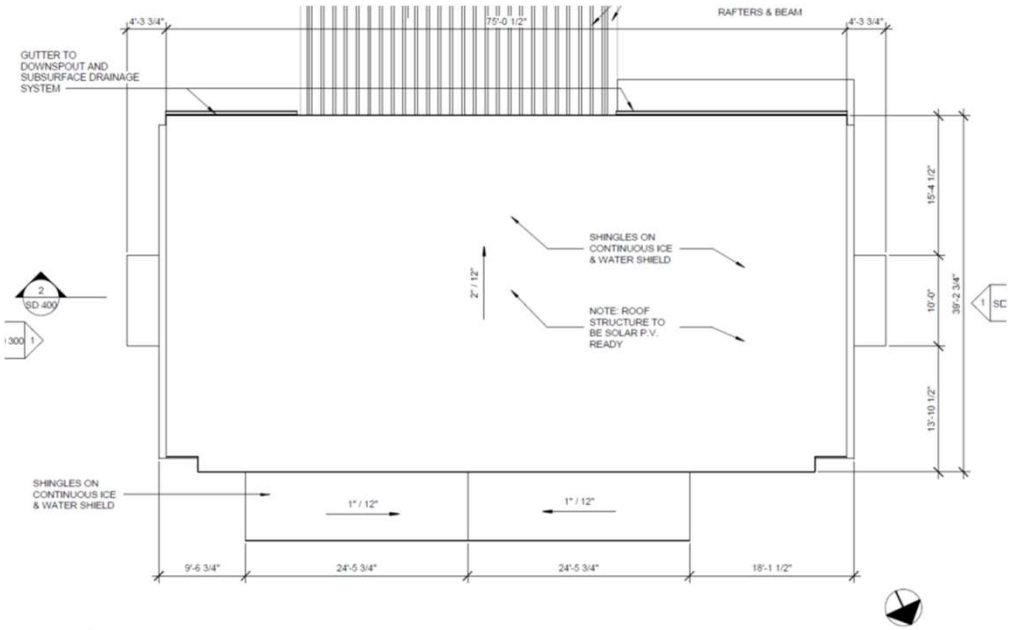
The THA is looking for partners that can help make the holistic vision for the Riverside Apartment Community Center and Clean Energy Resilience Hub a reality and in doing so seed launch pads for widespread adoption of opportunity enabling CCRHs in EJ Communities across the Commonwealth, region, and nation. If you believe that your organization can be of some help to this endeavor and benefit from its success, please reach out to one of the following to start a conversation and exchange more information.

- Colleen Doherty, Director of the Taunton Housing Authority, cdoherty@tauntonhousing.com
- Moneer Azzam, Principal of Beacon Climate Innovations, mazzam@beaconclimate.com
- Vanessa Fox, Principal of Sovations, vfox@sovations.com
- Tanya Lobo, CEO of True Diversity, tanya@truediversityma.org

Basic Costs

	L (ft)	W (ft)	sf	cost	Possible IRA Incentive			
PV Array Roof Area Calc	39	75	2,925					
	$/sf							
Roof Cost	$ 26.72			$ 78,150	0%	$	78,150	
Edge distance to PV	2.5	2.5						
PV Array	34	70	2,380					
	wpsf	watts						
PV Eff	18	42,840						
	$/w							
PV Cost	$ 3.00			$ 128,520	40%	$	77,112	*low income (50% if made in America)*
	Cap/kWh	Rate						
Battery	300	$ 1,410		$ 423,077	40%	$	253,846	*low income (50% if made in America)*
	Enegy sys	% adder						
Micro Grid Controls & Wiring	$ 585,197	15%		$ 87,780	40%	$	52,668	*low income (50% if made in America)*
Equipment Pad				**$ 9,871**	40%	$	5,923	*possible that pad can be consider battery*
Tree Trimming/Removal				**$ 1,614**	0%	$	1,614	
HVAC (installed)	Tons	Cost/ton						
Capacity VRF	10	$26,324		**$ 263,235**	40%	$	157,941	*low income (50% if made in America)*
EV Charging Provisioning				**$ 44,210**	0%	$	44,210	
Provisioning and HVAC				**$ 397,080**		$	**287,838**	
Distributed Energy Resource Costs (DER)				$ 639,376		$	383,626	
Base CCRH Sub Total				$ 1,036,456		$	671,463	
Adders								
Geothermal Well adder				**$ 260,800**	40%	$	156,480	*low income (50% if made in America)*
EV Charging Equipment (two Chargers)				$ 24,000	40%	$	14,400	*low income (50% if made in America)*
	Cap/kWh	Rate						
Generator* (gas) adder	25	$ 1,344		$ 33,600	0%	$	33,600	
Adder Sub Total				$ 318,400		$	204,480	
Grand Total				**$ 1,354,856**		$	**875,943**	

* Average Generator Cost: By Type And Size – Forbes Home



APPLICATION FOR SUSTAINABILITY AWARDS (SUS)

Please submit separate form for each award. If the project is across more than one development, provide information for all developments. Awards are for a minimum of $1,500 and a maximum cumulative awards of $150k per LHA over two years except if the LHA is in a Municipal Light Territory. If the latter, the maximum is $150k per year.

Submittals should go to:
Greg Abbe at: gregory.abbe@mass.gov
with cc to: simone.early@mass.gov
your DHCD Project Manager and
your RCAT Project Manager if a PLHA

Include in the Email Subject Line the title: **Sustainability Award Request & your LHA Name**

Please refer to the "Sustainability Award Category List" for components and projects which may qualify for funding and the requirements for each.

The availability of funds is subject to Sustainability Funding in each year, and therefore not all "qualifying" projects will be funded.

BACKGROUND INFORMATION	
Housing Authority Name	Taunton Housing Authority
Today's Date of Application for SUS – Energy	11/15/2023
Submitted by: Name and Title	Molly Parris, Modernization Project Manager
Executive Director's Name (if not submitter)	Colleen Doherty
Executive Directors email	cdoherty@tauntonhousing.com
Development Name	Riverside Apartments
Development #	200-01
# of Buildings in development	Eighteen (18)
# of Buildings impacted by this renovation	Eighteen (18) - Community Building serves all.
# of Units in development	Seventy-eight (78)
# of Units impacted by this renovation	Seventy-eight (78) - Community Building serves all.
Name of RCAT PM, if PLHA	John Massey
Email address of RCAT PM, if PLHA	jmassey@tauntonhousing.com
DHCD PM	Steven Garuti
DHCD Architect or Engineer	James McCurdy
Chair of Board of Commissioners	Alan Pelletier

UTILITY PROVIDERS	
Name of electricity provider (if in Municipal Light Territory, indicate "Muni")	Taunton Municipal Light Plant (TMLP)
Name of gas provider (indicate if "None")	Eversource
Primary source of heat (electricity, gas, oil or propane)	Gas boilers for forced hot water convector radiators

LEAN ENERGY AUDIT Note: energy audit which evaluated *requested component* must have been within the past 4 years in order for the project to quality for SUS funding[1]. This is required to be filled out even if submitting an application for doors, indoor air quality improvements, toilets or exterior improvements. Even though LEAN doesn't typically pay for these items, it will give a fuller understanding of your overall sustainability.	
Name of LEAN Administrator for **electric components** Examples: Action Inc. for NGrid; ABCD for EverSource, Community Action for WMECO (Western MA) and Cape Light Compact	(Municipal TMLP)
Name of LEAN Administrator for **gas components, if different from electric components** Examples: Action Inc. for NGrid; ABCD for EverSource, WMECO, Columbia Gas and Berkshire Gas	ABCD
Name of contractor who installed components paid for by LEAN: i.e. RISE Engineering is often hired by Action, Inc.; ClearResult is often hired by ABCD	*not applicable (N/A)*
For all dates below, provide month and year of signed contract. If you only have date of component(s) installation, provide those dates and indicate as such.	
Date of most recent **electric energy audit** *for this development*	*none, municipal utility*
Date of most recent electric energy audit for the **specific component**, if different than above	*N/A*
Date of most recent audit for **Air Source Heat Pumps** only, if relevant	*N/A*
Date of most recent **GAS audit** if one was done for boiler/furnace/domestic hot water and/or air sealing/insulation if heated by gas. **Muni's** are required to have a gas audit if any gas components are being requested.	No gas components proposed for new construction.
Indicate if specific component requested was partially – but not completely installed by LEAN. *Provide details* – i.e. interior lighting was provided, but not parking lot pole lighting, even though LHA requested pole lighting to be evaluated.	
Indicate if specific component was rejected by LEAN because it wasn't cost-effective, or reason was not given.	

[1] The LEAN program will evaluate and consider installing the following components: **ELECTRIC:** Lighting – all locations in and outside building(s) except emergency lighting; refrigerators; showerheads. **GAS or ELECTRIC, depending on fuel type:** Air sealing & insulation – all locations (attic, attic hatches, walls, basement ceilings); HVAC systems (boilers/furnaces/domestic hot water/air source heat pumps); weather-stripping on doors. Windows and exterior doors are **not covered** except in extreme cases of extremely high electric use for heating. Aerators for faucets should not be accepted by a LHA because they are often quickly removed by tenants, which removes any water flow control at all.

PROJECT DETAILS	
Sustainability Award Category: Water, Building Envelope, HVAC, Lighting, Refrigerators, Indoor Air Quality or Exterior (if the category is Water, attach the Water Application for Toilets & Showerheads	Water, Building Envelope, HVAC, Lighting, Refrigerators, Indoor Air Quality
Describe urgency of project and comment on why you are requesting funds at this time. Reference any relevant implications on energy-use, and envelope or HVAC system durability.	Project is very urgent due to contributing outside ARPA funding and programming needs. Intended to be resiliency "hub." Requesting SUST relief to accommodate cost increases for Sust/Resilent design.
Indicate if requested award is stand-alone, or one component of a larger project[2]	Component of larger project
A. If stand-alone: 1) Provide details of project and # of items – *e.g. 20 exterior doors or 3 boilers in 2 buildings*	
2) Estimated Construction Costs (from CPS or consultant)	$
3) Estimated % soft costs and $ soft costs	% and $ 0%
4) Estimated TDC	
5) FISH number if assigned	
6) Name of project & CPS # (**required**)	
B. If part of a larger project: 1) Provide details of larger project and # of items – *e.g. roof replacement on 9 of 10 buildings*	Demolish existing small circa 1949 community building and construct new family community building in its place.
2) Estimated Construction Cost of larger project (without Sustainability component)	$ 3,593,240 ($4,477,916 w/ sust. c
3) Estimated soft costs of larger project (only non-Sustainability components if there are separate soft costs identified for Sustainability component)	$ 470,180 (entire project, no separa
4) Provide details of Sustainability component and # of items – *e.g. air sealing and insulation in 9 of 10 buildings with new roofs*	Sustainability components integrated into all building systems - High efficiency construction/materials/appliances, PV,
5) Estimated Construction Cost of Sustainability component	$ 1,354,856
6) Estimated $ soft costs of Sustainability component, if separately identified	% and $ *Not separately identified*
7) Estimated TDC of Sustainability component	**$** *1,354,856*
8) Estimated TDC of entire project (non-Sustainability + Sustainability TDC)	$ 4,948,096
9) FISH number if assigned	293115
10) Name of project & CPS # (**required**)	293-200-01-S01-20-894

[2] For example, if new roofs have already been installed, and **afterwards** Air sealing and insulation is requested, this award needs to be a separate project, with a separate CPS and FISH #'s. If Air Sealing and Insulation is spec'd within the original Scope of Work, it will use the CPS and FISH #s of the larger project.

Indicate whether Force Account Labor will be used	No
FY of request – i.e. FY20 if bidding is expected before April 30th, 2020 and FY21 if bidding is expected after April 30th, 2020	FY 24-25
Expected CSC – season (winter, spring, summer or fall) and year	Unknown

AWARD APPROVAL PROCESS	**Responsible Party**
1) The Project will be reviewed by DHCD to see if it meets the requirements of Sustainability Funding. If the requirements are met, an award will be made based on available funding for the funding year requested.	**DHCD Sustainability Program Developer**
2) If the awarded project becomes a new component of an existing FISH project, the TDC will need to be adjusted in the project budget **and** the title of the project changed to reflect the award.	**DHCD Project Manager**
3) If awarded project is for a new project, a CPS Project needs to be created and a revision to the capital plan made. A new FISH# will be generated in the revision process.	**RCAT Project Manager or LHA**
4) The title of **ALL** projects with Sustainability Awards must be created with and/or changed to reflect the award year and Sustainability Title, i.e. FY19 Sustainability – Energy, *Component & # (i.e. Doors (20)).*	**DHCD Project Manager**
5) For exterior door projects, provide the draft tenant letter described in the Sustainability Award Category List.	**RCAT Project Manager or LHA**