

Heat Pump Summary
Submission for 12 points
June 14th, 2022
Town of Bedford

Description of Installation (See attached doc "3rd submission variable refrigerant flow product data")

Bedford Hills Community House owned by Town of Bedford

Location: 74 Main St, Bedford Hills, NY 10507

Installed on 11/15/21

Installed by J & M Heating and Air conditioning (pg. 2 of attached doc)

Size and Specification or purchase documents (see pg. 6 of doc "Materials List" below)



Material list

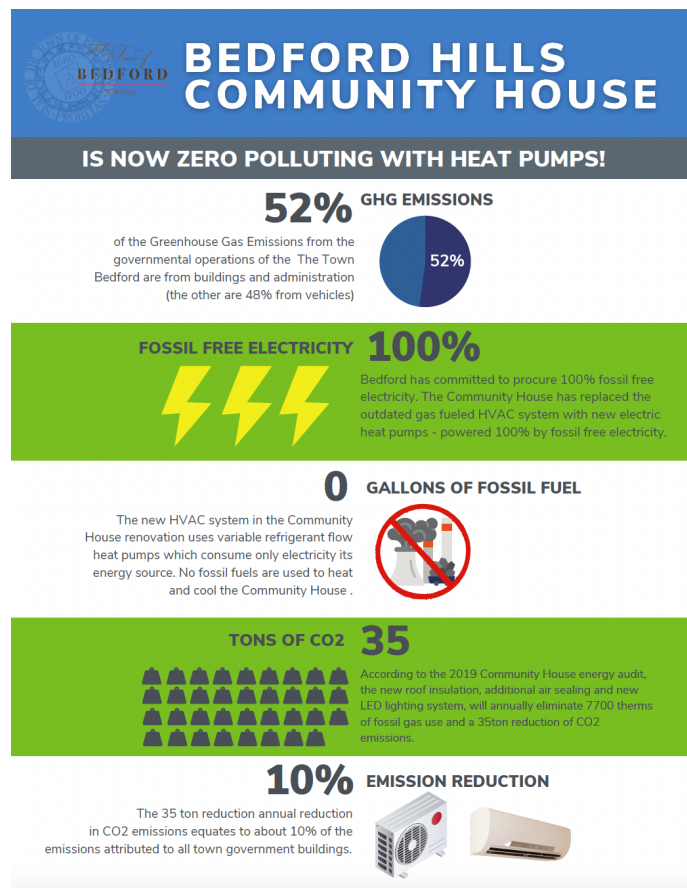
Model	Quantity	Description
RXYQ240XATJA	2	VRV-IV-X -A (208-230V)
FXAQ07PVJU	24	FXAQ - Wall Mounted Unit
FXAQ12PVJU	1	FXAQ - Wall Mounted Unit
FXAQ24PVJU	11	FXAQ - Wall Mounted Unit
KHRP26A22T9	23	Refnet branch piping kit
KHRP26A33T9	5	Refnet branch piping kit
KHRP26M72TU9	4	Refnet branch piping kit
KHRP26M73TU9	2	Refnet branch piping kit
DCM601A71	1	intelligent Touch Manager (iTM)
BHFP22P100U	2	Outdoor Multi Connection Pipe Kit - VRV P Series HP
BRC1E73	36	new Navigation Remote Controller
DCM014A51	1	ITM BACnet Server Gateway Option

Remarks

Note: Upon depletion of inventory of current REFNET models, order of current REFNET models will be substituted with the new upgraded -A models with no additional fee.

Piping	Liquid ft	Suction ft	Total ft
1/4"	236.0	0.0	236.0
3/8"	450.0	0.0	450.0
1/2"	28.0	236.0	264.0
5/8"	77.0	349.0	426.0
3/4"	0.0	37.0	37.0
7/8"	0.0	64.0	64.0
1 1/8"	0.0	48.0	48.0
1 3/8"	0.0	57.0	57.0

Educational Signage



In 2017, the Town of Bedford's operations generated 1702 tons of CO2 emissions. 47% of these emissions came from vehicles (801 tons) and 52% from the buildings and operations of the town (901 tons). With the Town's commitment to procure New York Power Authority (NYPA) 100% fossil free electricity, the Town will be able to leverage this essential resource by converting old and outdated gas or oil fueled HVAC equipment in town government buildings to efficient, comfortable and healthy electric based heating and cooling systems (HVAC).

The design of the new HVAC system in the Bedford Hills Community House renovation will use variable refrigerant flow heat pumps which only use electricity for their energy source. No fossil fuels will be used to heat and cool the Community House after the renovation is complete and fossil free power is secured. According to a 2019 energy audit of the building provided by ERS, with new roof insulation, additional air sealing and a new LED lighting system, the town should see the elimination 7700 therms of fossil gas use of and a 35ton annual reduction of CO2 emissions which equates to about 10% of the emissions attributed to all town government buildings.

Press release/Activities announcing the installation for public education

The Town of Bedford scheduled a celebration on February 8, 2022 to announce all of the Clean Energy Communities accomplishments including the new electrified renovation of the Bedford Hills Community House.

See attached town meeting minutes, page 17 which says,

“RESOLVED that the Town Board does hereby set a work session on the Bedford 2030 on the Climate Action Plan and Clean Energy Communities Celebration for Tuesday, February 8, 2022 at 6:00pm to be held via videoconferencing and in person at the Town House, 321 Bedford Road, Bedford Hills, New York.

<https://bedfordny.gov/town-board-meeting-public-notice-3/>

Here is an announcement on the Town website that states the achievement as well as the Town's celebration!

<https://bedfordny.gov/town-ties-for-1-in-state-as-a-clean-energy-community-by-taking-climate-action/>

NYSERDA completion of the Clean Energy Communities Clean Heating and Cooling Demo for additional 3 points

See attached email from NYSERDA confirming the Clean Heating and Cooling Demo.

Description of Implementation

We are looking to achieve 9 points plus an additional 3 for the completion of the CEC NYSERDA Clean Heating & Cooling campaign. A brief description of the heat pump installation can be found in the summary doc which outlines the location, installation date, size, and specification or purchase documents. This information is taken from the attached “3rd Submission Variable Refrigerant Flow Product Data” which gives a brief overview of the installation details on page 2 and the size and specifications can be found on page 6.

In the summary document, on page 2, there are pictures of posted educational signage, public meeting minutes which mentions a planned celebration as well as a public link to The Town of Bedford's website which states the new installation of the heat pump as well as the celebration.

For the three additional points, attached is the email confirmation of the NYSERDA Clean Heating and Cooling Demo.