



Energy Reduction Plan

In Fulfillment of Criteria 3 for the
Massachusetts Green Communities Grant
Program Application

July 2022 (with 11/18/22 updates)

Table of Contents

I.	Purpose and Acknowledgements	3
II.	Executive Summary	3
III.	Energy Use Baseline Inventory	5
IV.	Energy Reduction Plan	12
V.	Onsite Renewable Energy Projects and Renewable Energy.....	17
VI.	Appendix A: Letters from the General Government and School District Verifying Adoption of the ERP	18
VII.	Appendix B – List of Attachments	19

I. Purpose and Acknowledgements

The Town of Wakefield has completed and adopted this Energy Reduction Plan (“ERP”) for submission to the Massachusetts Department of Energy Resources (DOER) in fulfillment of Criteria 3 of the requirements for Green Community designation.

We attach, as Appendix A, a letter from our Town Administrator Stephen Maio verifying the Town Council’s adoption of this Energy Reduction Plan, as well a letter from the School Superintendent Doug Lyons confirming endorsement of the Plan.

Preparation of this ERP has been a collaboration of Town Officials, School Department representatives, Municipal Utility staff, and other energy professionals and volunteers. They include:

- Stephen Maio, Town Administrator
- Julie Smith-Galvin, Chair of the Town Council
- Joseph Conway, Director of Public Works
- Ann Waitt, Business Manager of Public Works
- Benjamin DeChristoforo, Inspector of Buildings
- Doug Lyons, Superintendent of Schools
- Suzy Veilleux, Chair of the School Committee
- Tim O’Brien, Director of Facilities
- Peter Dion, General Manager of the Wakefield Municipal Gas and Light Department
- Jeff Morris, IT Manager of the Wakefield Municipal Gas and Light Department
- Jen McDonald, Wakefield Content and Communications Manager
- Erin Kokinda, Wakefield Community and Economic Development Director
- Matthew Siska, GDS Associates
- Jennifer Kallay, Chair of the Wakefield Municipal Gas and Light Department Board
- Myra Sessions, Chair of the Wakefield Environmental Sustainability Committee

Technical support and drafting assistance were provided by Cara Goodman at the Metropolitan Area Planning Council (MAPC).

II. Executive Summary

The Town of Wakefield has a population of about 27,000 people, as of the 2020 census. It is governed by a seven-member Town Council and managed by a Town Administrator. The town is approximately 7.9 square miles, located about 12 miles north of Boston.

Wakefield has made several energy-related investments over the past decade. The Town engaged with an ESCO to implement energy efficiency at several municipal buildings. The Town replaced its streetlights with LEDs several years ago. Three public electric vehicle chargers were installed in the Downtown Business District last year, the same year in which the Town acquired its first electric vehicle for municipal use. Solar panels are installed on two Water Department buildings.

Municipal Energy

Buildings

Wakefield is served by Wakefield Municipal Gas and Light Department (WMGLD) for both natural gas and electricity service. Wakefield manages 23 municipal buildings in their portfolio, which account for 75% of their total municipal energy use. Natural gas use accounts for over two thirds of the total building energy use.

Vehicles

Wakefield has a total of 138 vehicles across all municipal and school departments. Most vehicles belong to the DPW and the Police and Fire Departments. Most vehicles are either heavy duty or for emergency use and are exempt from the Fuel-Efficient Vehicle Policy. In FY 2021, municipal vehicles used a combined 66,993 gallons of gasoline and 36,506 gallons of diesel, making up 16% of total municipal energy consumption.

Water and Wastewater

Wakefield operates one water treatment plant and a total of 10 pumping stations. Together, these account for about 4% of municipal energy use.

Summary of Municipal Energy Users

Buildings	Number
Oil Heat	1
Natural Gas Heat	19
Electric Heat	0
No Heat	3
Water and Sewer Infrastructure	11
Wastewater Treatment Plant	0
Drinking Water Treatment Plant	1
Pumping Stations	10
Vehicles	138
Non-Exempt	22
Exempt	116
Streetlights	2,749
Traffic Signals	7 accounts

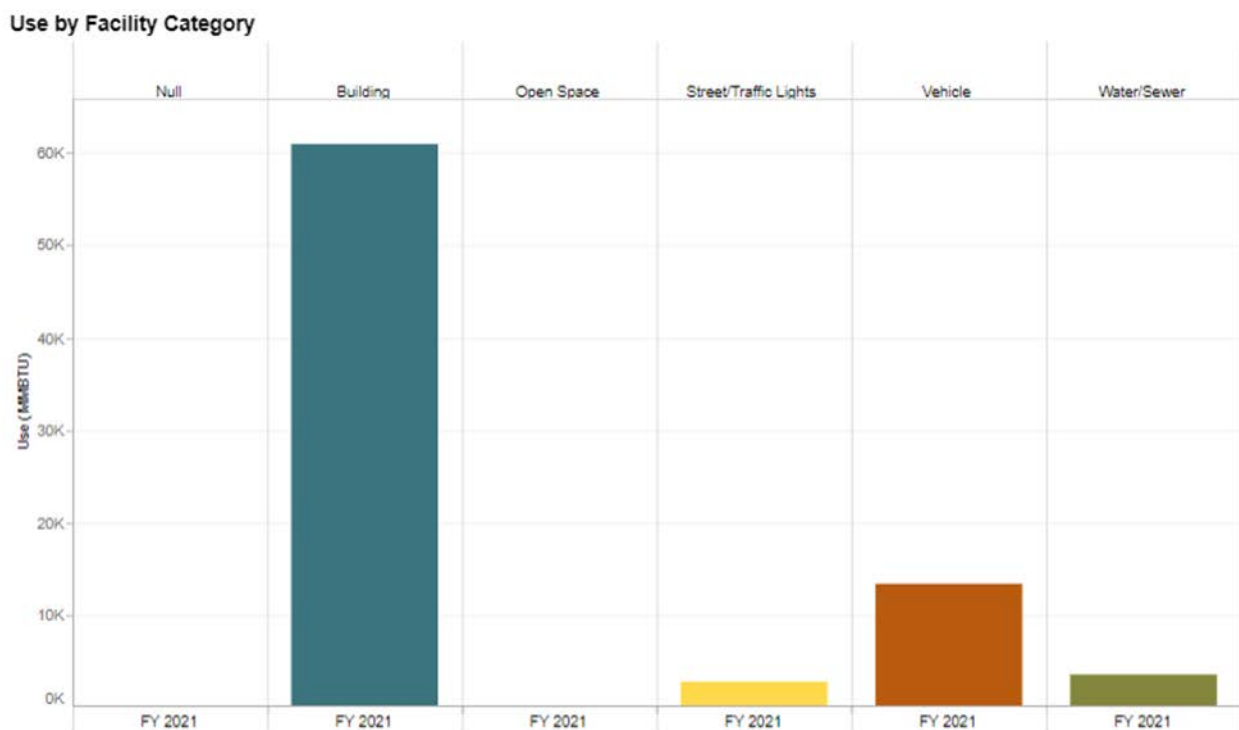
Energy Use Baseline and Plans for Reductions

This ERP commits Wakefield to reduce energy use in municipal facilities by at least 20% compared to Fiscal Year 2021 over five years. Wakefield has chosen the most recent complete fiscal year, FY2021

(July 2020-June 2021), as its baseline year. This Energy Reduction Plan will apply to FY2023 – FY2027 (July 2022-June 2027), representing the 5-year period following adoption of the plan in July 2022.

The table below, based on energy use information extracted from MassEnergyInsight, shows the Town of Wakefield’s energy use during FY2021 in MMBTUs.

Summary of Municipal Energy Use Baseline



III. Energy Use Baseline Inventory

The Town of Wakefield will be using MassEnergyInsight as its inventory tool. Initial MEI set ups of all Town buildings and other accounts have been completed. All energy use is accounted for in the system, including vehicle fuel, heating oil, and solar PV production.

Because comprehensive energy use data has never previously been available to Town departments for the buildings and facilities they manage, there is great interest in having access to MEI. Anticipated regular users include: WMGLD, the Town’s Facilities Director, and the Department of Public Works.

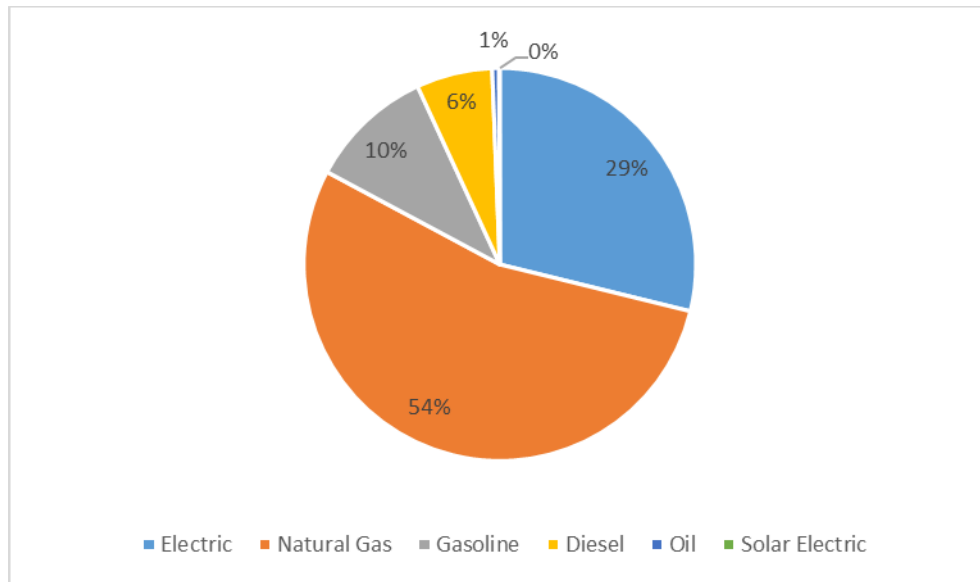
The table below shows the five buildings that use the greatest amount of energy in Wakefield currently. Four of these five buildings are included in this ERP as target facilities for significant energy efficiency measures. Galvin Middle School, while not targeted in this ERP, may be included in future efficiency planning.

Top 5 Energy Consuming Facilities		
Facility	MMBTUs	Percent of FY2021 Baseline
Wakefield High School	20,526	25%
Galvin Middle School	8,304	10%
Public Safety Building	5,464	7%
Dolbeare Elementary School	4,924	6%
Woodville Elementary School	4,812	6%
Total FY 2021 Usage for Top 5	44,030	54%
Total FY 2021 Usage Baseline	80,792	100%

Currently, the Public Safety building is in the middle of a significant renovation project that includes comprehensive energy efficiency upgrades throughout the building. Wakefield High School is planned to be replaced in about 5 years, towards the end of the ERP timeframe. Dolbeare and Woodville Elementary Schools are targeted to receive significant energy upgrades, as identified by the recent audits.

The figure below shows the breakout of energy use by fuel type. In the baseline year, natural gas was by far the largest source of energy used, making up 54% of total energy. The second largest source was electricity, making up 29% of the total use in the baseline year. Gasoline made up 10%, diesel made up 6%, oil made up 1%, and solar made up less than 1%.

Wakefield Energy Use by Source, FY 2021



Wakefield currently owns and receives power from two solar arrays atop two Water Department buildings. One is a 25-kW array that was installed in September 2020. Another solar array on a second Water Department building was installed in June 2022.

Table 3: Wakefield's Energy Use Baseline FY2021. Table 3a: Native Fuel Units. Table 3b: MMBTUs.

ERP Guidance Table 3a - Municipal Energy Consumption for 2021 (Native Fuel Units)

		2021				
		Electric (kWh)	Gas (therms)	Oil (gallons)	Gasoline (gallons)	Diesel (gallons)
Null	Dolbeare Elementary School ..	26				
	Total	26				
Building	Galvin Middle School	1,065,600	46,680			
	Beebe Library	271,560	11,020			
	Americal Civic Center	130,240	10,818			
	Nahant Street Yardwaste Faci..	0				
	Hurd School	5,222	8,409			
	McCarthy Senior Center	77,840	14,511			
	Town Hall	164,240	9,025			
	Forest Glade Cemetery Office	1,720	1,604			
	Public Safety Building	635,920	32,938			
	Greenwood Fire Station	46,665	4,360			
	Albion Cultural Exchange	3,424	2,154			
	West Ward School	8,141	1,083			
	Doyle Early Childhood Center	75,120	11,670			
	Wakefield High School	1,352,240	154,608	3,250		
	Wakefield High School Landri..	43,280				
	Woodville Elementary School	517,280	30,473			
	Dolbeare Elementary School	583,040	29,351			
	Walton Elementary School	109,440	14,594			
	Greenwood Elementary School	92,800	17,953			
	Nahant Street Yardwaste Faci..	447				
	Forest Glade Cemetery Garage	1,001	1,859			
	Public Works Facility Vehicle ..	90,560	14,395			
	Public Works Facility Repair S..	89,662	4,831			
	Total	5,365,442	422,336	3,250		
Open Space	Mapleway Playground Restro..	133				
	Veterans Field EV Charger	2,611				
	Lincoln Street EV Charger	4,050				
	Wakefield Rockery	8,292				
	Wakefield Bandstand	498				
	Sylvan Avenue Tree Nursery	35				
	Greenwood Commuter Parkin..	37				
	Tree Nursery	148				
	Wakefield High School Tennis..	18,553				
	Wakefield High School Beasle..	24,938				
	Moulton Playground Restroom	920				
	Total	60,215				

Street/Traffic Lights	Salem @ 128N Traffic Light	1,236				
	Farm Street Traffic Sign	190				
	Farm Street Traffic Sign - WHS	18				
	Wakefield High School Tennis..	154				
	Colonel Connelly Park Street ..	644				
	Salem @ Montrose Traffic Light	1,489				
	Salem @ Pleasure Island Roa..	1,832				
	Parker Road Street Lights Nor..	169				
	Parker Road Street Lights So..	173				
	Audubon Road @ Colonial Tr..	1,521				
	Dolbeare Elementary School ..	38				
	Street Lights	736,499				
	Traffic Lights	50,233				
	Total	794,196				
Vehicle	Vehicles - Diesel				36,506	
	Vehicles - Gasoline			66,993		
	Total			66,993	36,506	
Water/Sewer	Farm Street Pumping Station	300,640	1,898			
	West Park Drive Pumping Stat..	34,402				
	Lake Avenue Pumping Station	6,767				
	Central Street Pumping Station	7,572				
	Central Street Street Light	0				
	Broadway Street Garage	33,464	1,292			15,166
	Broadway Street Filter House	12,277	2,764			
	Broadway Street Parking Lot ..	3,782				
	Broadway Street Treatment Pl..	138,120	3,986			
	Plaza Road Pumping Station	3,125				
	Linden Street Pumping Station	10,776	1,171			
	Findlay Street Pumping Station	3,979				
	Montclare Avenue Pumping St..	30,193				
	Jordan Avenue MWRA Meter ..	72				
	Audubon Road Pumping Stati..	17,679				
	Lakeview Avenue Pumping St..	3,560				
	Broadway Street Generator		2,722			
	Total	606,408	13,833			15,166
Grand Total		6,826,287	436,169	3,250	66,993	36,506

ERP Guidance Table 3b - Municipal Energy Consumption for 2021 (MMBTU)
Please make sure that any data submitted to DOER contains complete Data!

		2021						Total
		Diesel	Electric	Gas	Gasoline	Oil	Solar Electric	
Null	Dolbeare Elementary School ..		0					0
	Total		0					0
Building	Galvin Middle School		3,636	4,668				8,304
	Beebe Library		927	1,102				2,029
	Americal Civic Center		444	1,082				1,526
	Nahant Street Yardwaste Faci..		0					0
	Hurd School		18	841				859
	McCarthy Senior Center		266	1,451				1,717
	Town Hall		560	903				1,463
	Forest Glade Cemetery Office		6	160				166
	Public Safety Building		2,170	3,294				5,464
	Greenwood Fire Station		159	436				595
	Albion Cultural Exchange		12	215				227
	West Ward School		28	108				136
	Doyle Early Childhood Center		256	1,167				1,423
	Wakefield High School		4,614	15,461		452		20,526
	Wakefield High School Landri..		148					148
	Woodville Elementary School		1,765	3,047				4,812
	Dolbeare Elementary School		1,989	2,935				4,924
	Walton Elementary School		373	1,459				1,833
	Greenwood Elementary School		317	1,795				2,112
	Nahant Street Yardwaste Faci..		2					2
	Forest Glade Cemetery Garage		3	186				189
	Public Works Facility Vehicle ..		309	1,440				1,748
	Public Works Facility Repair S..		306	483				789
	Total		18,307	42,234		452		60,992
Open Space	Mapleway Playground Restro..		0					0
	Veterans Field EV Charger		9					9
	Lincoln Street EV Charger		14					14
	Wakefield Rockery		28					28
	Wakefield Bandstand		2					2
	Sylvan Avenue Tree Nursery		0					0
	Greenwood Commuter Parkin..		0					0
	Tree Nursery		1					1
	Wakefield High School Tennis..		63					63
	Wakefield High School Beasle..		85					85
	Moulton Playground Restroom		3					3
	Total		205					205

Street/Traffic Lights	Salem @ 128N Traffic Light		4				4
	Farm Street Traffic Sign		1				1
	Farm Street Traffic Sign - WHS		0				0
	Wakefield High School Tennis..		1				1
	Colonel Connelly Park Street ..		2				2
	Salem @ Montrose Traffic Light		5				5
	Salem @ Pleasure Island Roa..		6				6
	Parker Road Street Lights Nor..		1				1
	Parker Road Street Lights So..		1				1
	Audubon Road @ Colonial Tr..		5				5
	Dolbeare Elementary School ..		0				0
	Street Lights		2,513				2,513
	Traffic Lights		171				171
	Total		2,710				2,710
Vehicle	Vehicles - Diesel	5,074					5,074
	Vehicles - Gasoline				8,307		8,307
	Total	5,074			8,307		13,381
Water/Sewer	Farm Street Pumping Station		1,026	190			1,216
	West Park Drive Pumping Stat..		117				117
	Lake Avenue Pumping Station		23				23
	Central Street Pumping Station		26				26
	Central Street Street Light		0				0
	Broadway Street Garage		114	129		52	295
	Broadway Street Filter House		42	276			318
	Broadway Street Parking Lot ..		13				13
	Broadway Street Treatment Pl..		471	399			870
	Plaza Road Pumping Station		11				11
	Linden Street Pumping Station		37	117			154
	Findlay Street Pumping Station		14				14
	Montclare Avenue Pumping St..		103				103
	Jordan Avenue MWRA Meter ..		0				0
	Audubon Road Pumping Stati..		60				60
	Lakeview Avenue Pumping St..		12				12
	Broadway Street Generator			272			272
	Total		2,069	1,383		52	3,504
Grand Total		5,074	23,291	43,617	8,307	452	80,793

IV. Energy Reduction Plan

Wakefield worked with GDS Associates to perform comprehensive energy audits in the 17 largest and most energy consuming municipal buildings which identified a wide variety of opportunities for energy efficiency measures. Audits were performed in the fall of 2021, and these were used as the basis for most of the savings estimates in this plan. Attached are the comprehensive "Summary Workbook" detailing all measures and savings, as well as building-specific calculation books that provide further detail about the recommendations for each building.

The Town of Wakefield has identified and is planning for energy use reductions in at least seven buildings, that will contribute to a combined 15,943 MMBTU in savings, or 20% of total municipal energy reduction over the next five years. The table below summarizes the current use and planned reductions, by facility category.

Summary of Municipal Energy Use & Reductions				
Facility Category	MMBTU Used in Baseline Year	% of Total MMBTU Baseline Energy Consumption	Projected Planned MMBTU Savings	Savings as % of Total MMBTU Baseline Energy Consumption
Non-Weather Normalized				
<i>Buildings</i>	60,992	75.5%	15,943	20%
<i>Vehicles</i>	13,381	16.6%		0%
<i>Street/Traffic Lights</i>	2,710	3.4%		0%
<i>Open Space</i>	205	0.3%		0%
<i>Water/Sewer/Pumping</i>	3,504	4.3%		0%
Total Non-Weather Normalized	80,792	100.0%	15,943	20%
*Savings are not weather normalized and can only be compared against other data that is not weather normalized.				

Overview of Goals by Year

Year 1

In the first year, Wakefield plans to make upgrades in four buildings – Town Hall, the Americal Civic Center, the Dolbeare School, and the Public Safety Building. The Public Safety Building upgrades will be included as part of a pre-planned construction project, while the other three will leverage funding from the initial Green Communities grant. In most cases, the Town is planning to address all identified savings opportunities at once, to achieve maximum efficiencies.

- Town Hall - Interior & exterior lighting upgrades, low flow faucets, HVAC pump upgrade, heat pump water heater
- Americal Civic Center - Lighting upgrades, weatherization, insulation, low flow fixtures, heat pump water heaters
 - There is also a potential to install solar on this building after a planned roof replacement
- Dolbeare School – HVAC condensing units and VFDs, interior & exterior lighting, heat pump water heaters
- Public Safety Building - New boilers, new chiller, interior and exterior lighting, lighting controls, weatherization, low flow fixtures, vending machine controls (done as part of larger construction project at this building)

Year 2

In the second year, Wakefield intends to request a grant to electrify the heating system at the Woodville school, replacing the boiler with a heat pump system.

- Woodville Elementary School - boiler replacement with heat pump system

Year 3

In the third year, Wakefield plans to address all the other measures at the Woodville School, as identified by GDS (following the more urgent boiler replacement). Wakefield also plans to implement all recommended measures in the Greenwood Elementary School.

- Woodville Elementary School - HVAC upgrades, interior and exterior lighting, heat pump water heater
- Greenwood Elementary School – radiator control valves, heat pump water heater, insulation, steam trap survey, interior & exterior lighting

Year 4

In year 4, Wakefield will address the last recommendation for the Dolbeare School, the RTU replacement.

- Dolbeare School – RTU replacement

Year 5

In the fifth year, it is anticipated that the new Wakefield High School will be completed. This project is planned to be significantly more efficient than the existing high school and provide large energy savings along with a more modern and comfortable building for students and staff.

- Wakefield High School – new building complete

Summary of Projected Energy Savings by Building

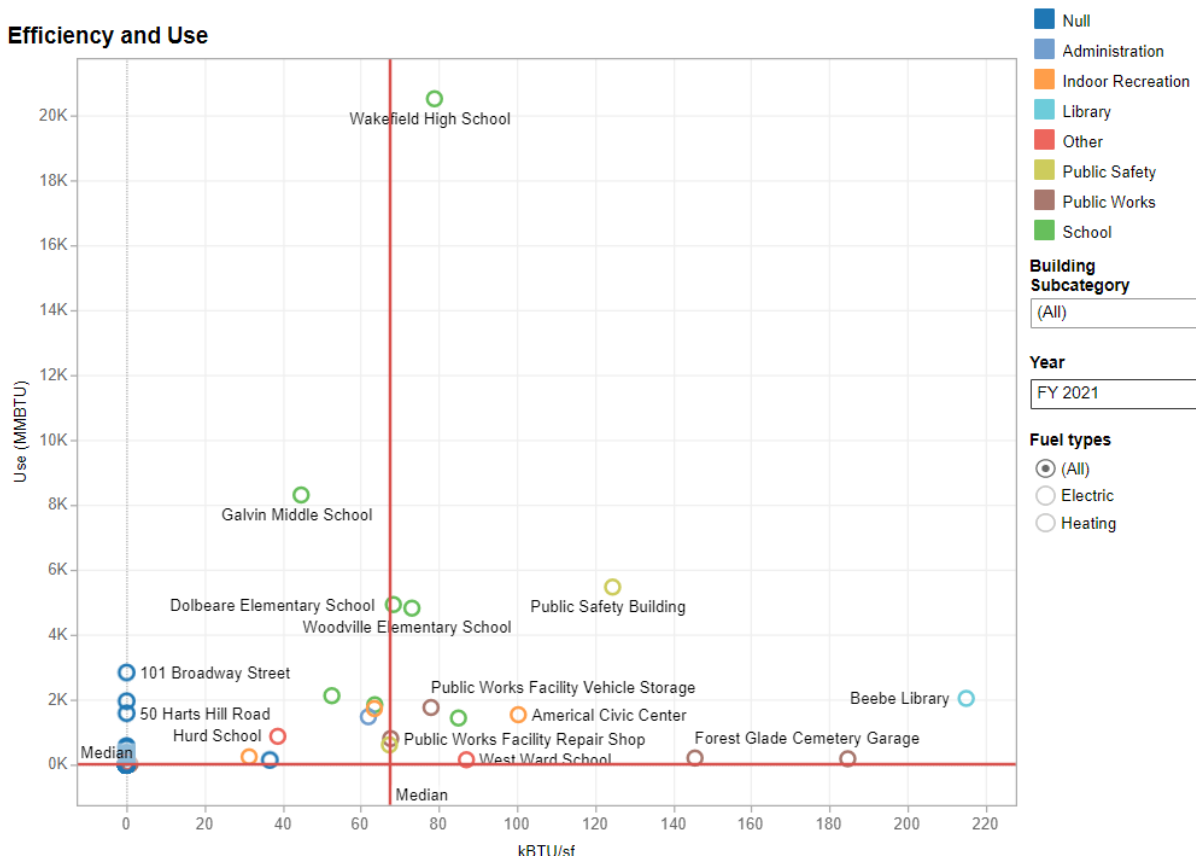
Energy Improvements	Projected MMBTU Savings	MMBTU Usage	Savings % of Building Usage	Savings % of Town-Wide Savings
Public Safety Building	1,620	5,464	30%	10.2%
Town Hall	99	1,463	7%	0.6%
Americal Civic Center	60	1,526	4%	0.4%
Woodville Elementary School	2,155	4,812	45%	13.5%
Wakefield High School	10,884	20,526	53%	68.3%
Dolbeare Elementary School	596	4,924	12%	3.7%
Greenwood Elementary School	528	2,112	25%	3.3%
All Other Accounts	-	39,966	0%	
Total (all accounts)	15,943	80,793	20%	100.0%

As shown in the table above, by implementing all planned projects, Wakefield can achieve a total of 20% overall energy savings across all municipal facilities within five years.

Areas of Least Efficiency/Greatest Waste

Mass Energy Insight's "Buildings to Target" view is helpful in identifying areas of least efficiency and will be used when planning future energy projects after those listed here are complete in the initial 5-year timeframe.

Efficiency and Use



** Points further to the right have a higher energy use per square foot (i.e., less energy efficient). Points higher up use more total energy. Red lines show the medians for the town's buildings.*

Energy Use Intensity (EUI) is a measure of the energy used per square foot, with lower EUIs indicating more efficient buildings. Buildings with a higher EUI generally have more opportunities for cost-effective energy efficiency upgrades.

The median EUI of all buildings in Wakefield is 67 kBtu per square foot. The largest user in town, the High School, had an EUI of 65 in FY19 and 79 in FY21. COVID is the likely cause of changes in EUI for municipal buildings in FY19, FY20, and FY21. Lower EUIs coincided with periods when buildings were closed to the public and higher EUIs coincided with periods when the buildings were reopened to the public and subject to new ventilation requirements.

Any buildings with high usage or above the median efficiency present the best opportunities for savings, as shown in the top right section of the graph.

Energy Conservation Measures

All the energy conservation measures listed here are detailed in the attached spreadsheet, in "Table 4 – Energy Conservation Measures". A snapshot of the spreadsheet is included here as an overview of all planned measures. Please see attachment for full energy and cost details and proposed timing.

ECMs				Status	
Category (Select one from drop-down)	Building/Site Name	Energy Conservation Measure Name	ECM Type (select one from drop-down)	Status (select one from drop-down)	Status Date (Completed with month/year or planned month/year)
Buildings	Town Hall	Lighting Upgrades	Interior Lighting	Planned	9/30/2022
Buildings	Town Hall	Low Flow Fixture	Hot Water	Planned	9/30/2022
Buildings	Town Hall	Exterior Lighting Upgrades	Exterior Lighting	Planned	9/30/2022
Buildings	Town Hall	Variable Speed Fan or Pump Motor	Pump/Motor/Drive	Planned	9/30/2022
Buildings	Town Hall	Heat Pump Water Heater	Hot Water	Planned	9/30/2022
Buildings	Americal Civic Center	Lighting Upgrades	Interior Lighting	Planned	9/30/2022
Buildings	Americal Civic Center	Weatherization	Weatherization	Planned	9/30/2022
Buildings	Americal Civic Center	Insulation	Hot Water	Planned	9/30/2022
Buildings	Americal Civic Center	Low Flow Fixture	Hot Water	Planned	9/30/2022
Buildings	Americal Civic Center	Heat Pump Water Heater	Hot Water	Planned	9/30/2022
Buildings	Public Safety Building	New Condensing Boilers	HVAC	Planned	9/30/2022
Buildings	Public Safety Building	New Chiller	HVAC	Planned	9/30/2022
Buildings	Public Safety Building	Interior Lighting	Interior Lighting	Planned	9/30/2022
Buildings	Public Safety Building	Weatherization	Weatherization	Planned	9/30/2022
Buildings	Public Safety Building	Low Flow Fixture	Hot Water	Planned	9/30/2022
Buildings	Public Safety Building	Vending Machine Controls	Other	Planned	9/30/2022
Buildings	Public Safety Building	Exterior Lighting	Exterior Lighting	Planned	9/30/2022
Buildings	Public Safety Building	Lighting Controls	Interior Lighting	Planned	9/30/2022
Buildings	Woodville Elementary School	AHU-1,2,3 VFDs - Single Zone VAV Conversion	Pump/Motor/Drive	Planned	9/30/2024
Buildings	Woodville Elementary School	Interior Lighting	Interior Lighting	Planned	9/30/2024
Buildings	Woodville Elementary School	Heat Pump Water Heater	Hot Water	Planned	9/30/2024
Buildings	Woodville Elementary School	Exterior Lighting	Exterior Lighting	Planned	9/30/2024
Buildings	Woodville Elementary School	Boiler to A2WHP	Fuel Conversion	Planned	9/30/2023
Buildings	Woodville Elementary School	EC Motors on Uvs	HVAC	Planned	9/30/2024
Buildings	Woodville Elementary School	High Efficiency RTU	HVAC	Planned	9/30/2024
Buildings	Wakefield Memorial High School	New Building	Comprehensive	Planned	9/30/2026
Buildings	Dolbeare Elementary School	Implement (DCV)	HVAC	Planned	9/30/2022
Buildings	Dolbeare Elementary School	Replace HVAC-1&2 Condensing Units	HVAC	Planned	9/30/2022
Buildings	Dolbeare Elementary School	Distribution Pump VFDs	HVAC	Planned	9/30/2022
Buildings	Dolbeare Elementary School	Interior Lighting	Interior Lighting	Planned	9/30/2022
Buildings	Dolbeare Elementary School	Heat Pump Water Heater	Hot Water	Planned	9/30/2022
Buildings	Dolbeare Elementary School	HVAC-2 VFDs-Single Zone VAV Conversion	HVAC	Planned	9/30/2022
Buildings	Dolbeare Elementary School	Exterior Lighting	Exterior Lighting	Planned	9/30/2022
Buildings	Dolbeare Elementary School	EC Motors on UVs	HVAC	Planned	9/30/2022
Buildings	Dolbeare Elementary School	High Efficiency RTUs	HVAC	Planned	9/30/2025
Buildings	Greenwood Elementary School	Interior Lighting	Interior Lighting	Planned	9/30/2024
Buildings	Greenwood Elementary School	Thermostatic Radiator Control Valves	HVAC	Planned	9/30/2024
Buildings	Greenwood Elementary School	Heat Pump Water Heater	Hot Water	Planned	9/30/2024
Buildings	Greenwood Elementary School	Insulation	HVAC	Planned	9/30/2024
Buildings	Greenwood Elementary School	Steam Trap Survey	HVAC	Planned	9/30/2024
Buildings	Greenwood Elementary School	Exterior Lighting	Exterior Lighting	Planned	9/30/2024

Program Management Plan for Implementation, Monitoring and Oversight

Responsibility for project implementation, monitoring, and oversight will reside with the Town Administrator, who will delegate responsibility for the projects at various buildings to the DPW and the School Facilities Manager. WMGLD will provide data and IT support to the Town to populate MEI accurately. The Town Council will appoint a lead to coordinate development of the annual reports with members of the Environmental Sustainability Committee. The report will be reviewed with a core team consisting of one representative from DPW, WMGLD, Schools, and Facilities Management.

Summary of Long-Term Energy Reduction Goals - Beyond 5 years

As the five-year period of this plan ends, and the new, highly efficient High School is anticipated to begin operating, Wakefield will assess current energy use in all buildings. Wakefield will prioritize buildings with higher usage and lower efficiency and examine all buildings with new measures to ensure that savings are being realized. After this assessment, Wakefield will identify another group of buildings to implement the next set of efficiency measures.

V. Onsite Renewable Energy Projects and Renewable Energy

Wakefield currently owns and receives power from two solar arrays atop two Water Department buildings. One is a 25-kW array that was installed in September 2020. Another solar array on a second Water Department building was installed in June 2022. Reporting for this second solar array was not available at the time this plan was developed and therefore not included in the data.

VI. Appendix A: Letters from the General Government and School District Verifying Adoption of the ERP

VII. Appendix B – List of Attachments

1. Attachment 1 – Excel Spreadsheet “Guidance Tables for Criterion 3”
2. Attachment 2 – GDS Audit Documentation