

WMGLD Customer Info Session: Electric Vehicle Programs

Presented By:

Joe Collins – Business Analyst – Energy Services

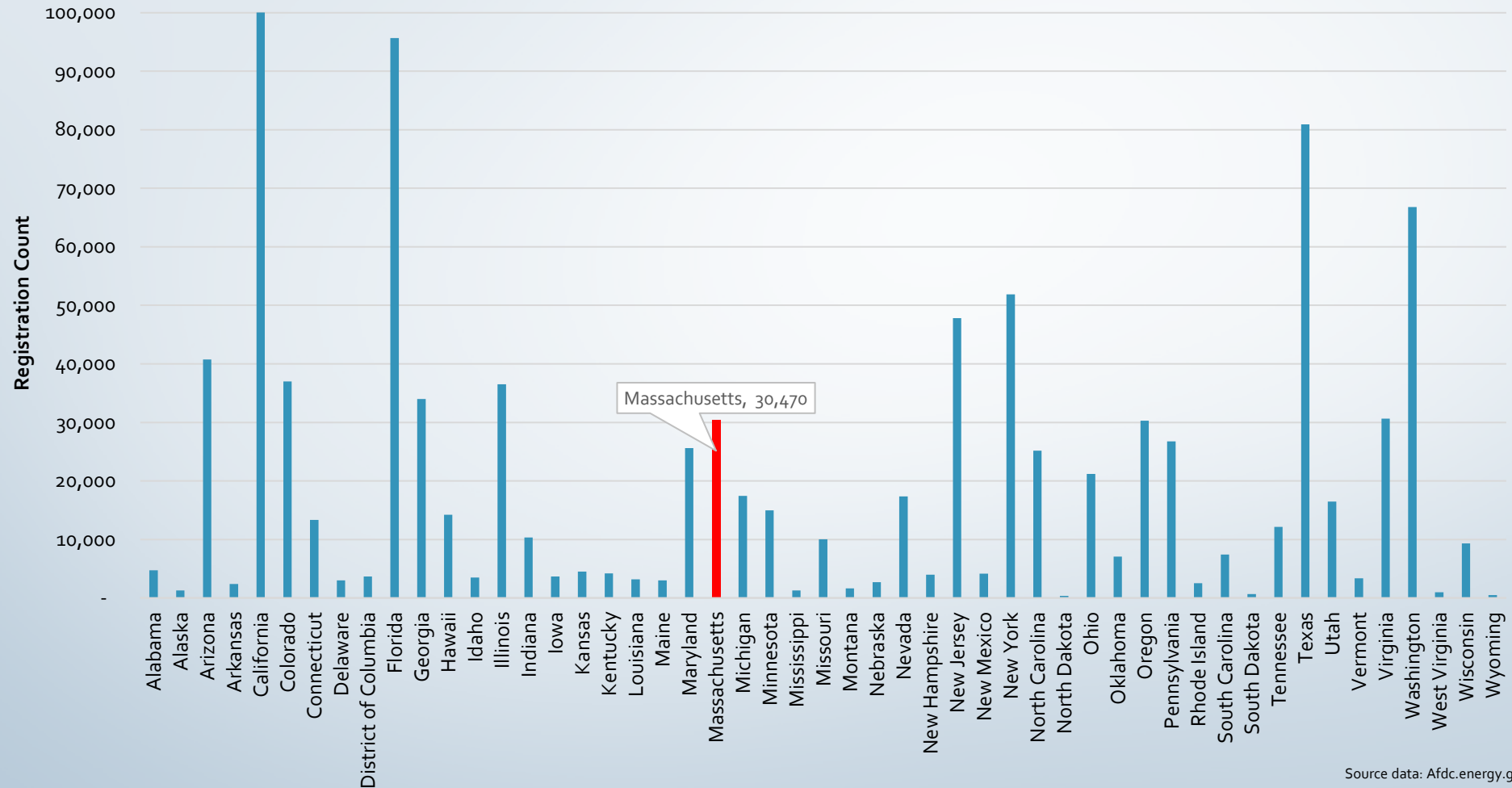
Wednesday, August 23 at 7:00pm

Purpose and Overview

- Overview of Electric Vehicle (EV) Charging in Town
- Educate our Customers on WMGLD EV programs
- Help our customers to best take advantage of our offerings
- How to figure out which program is the best fit

Electric Vehicles By the Numbers

All-Electric Vehicle Registrations by State (As of December 31st, 2021)

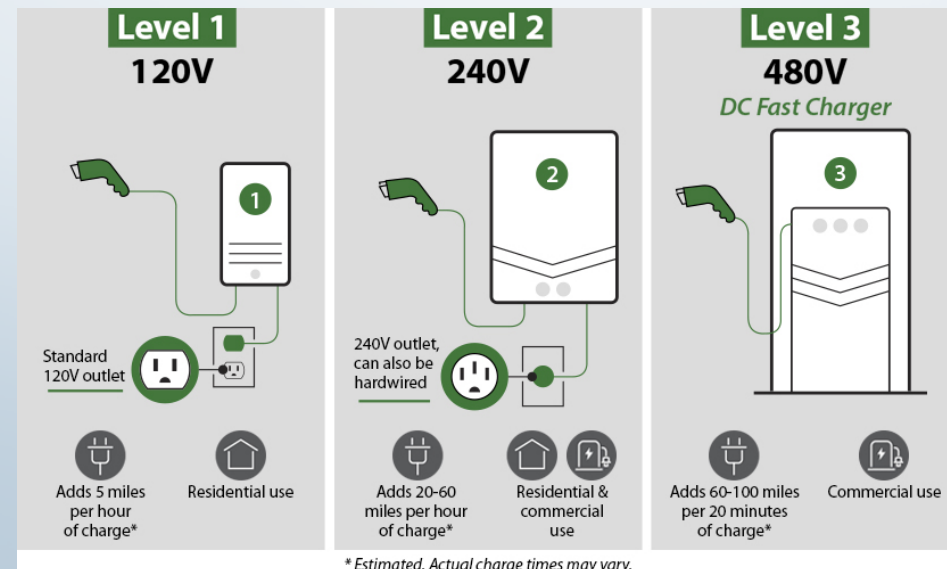


Source data: afdc.energy.gov/data

- #12 in all-electric vehicle registrations
- Massachusetts has committed to 750,000 electric vehicles by 2030

Electric Vehicle Charging Terminology

- Three types of chargers
 - **Level-1** (Wall Plug) – Lowest output, can plug into wall outlet
 - **Level-2** (208/240V) – Highest output for traditional residential applications
 - **DC Fast Charger** – Commercial grade high output chargers
- **Peak Times** – refer to the time of day where electricity usage (as a Town, Region, State, etc.) is at it's highest (usually from 4pm-9pm)
- **Time-of-Use Rate** – refers to an alternative rate structure that charges customers less money for electricity used during Off-Peak hours and more during Peak Times



Source: Central Hudson




Wakefield Public Chargers

- Over the course of the last four years WMGLD has installed public chargers at 4 different locations in town
 - ***New*** Head of the Lake - Quannapowitt Pkwy (2 DC Fast Chargers)
 - Lincoln St. Public Parking – 9 Lincoln St (DC Fast Charger)
 - Veteran's Field – 42A North Ave (Level-2)
 - Civic Center – 467 Main St. (Level-2)
- Chargers are visible on Plug-Share and the Chargepoint App

WMGLD EV Charging Programs

- Separate Meter EV Time-of-Use Rate and upgrade incentive
 - Newest offering
 - Highest long-term savings potential
- Connected Homes
 - Lowest commitment and investment
- Free Level-2 Charger with 3-year scheduled charging agreement
 - Good value with one-time savings (value of charger)



Electric Vehicle Meter Time-of-Use Rate

The Electric Vehicle Meter Time-of-Use Rate program (EVM-TOU) is an **optional** residential rate structure for customers with a separate meter installed for the sole purpose of Electric Vehicle (EV) charging. EVM-TOU offers customers discounted rates during specified hours of the day to encourage charging off-peak. Peak times may be subject to annual changes, however current peak times are 4:00pm-9:00pm. Charging scheduled outside of the time period listed, will receive a discounted rate. If a customer charges during the time period listed as "peak times", the customer will pay a premium for any kWh used during that period.



EV Charger Program	Rebate Amount	Requirements
EV (Non-Hybrid)	Free - Up to \$650 Value	100% EV
Plug-In-Hybrid 18KW Battery	\$300	18 KW
Plug-In-Hybrid 9KW Battery	\$200	9KW

EV Separate Meter Charging Program

- Separate Meter installed exclusively for residential EV charging
- Allows enrollment into special EV time-of-use electric rates (EVM-TOU)
- Time-Of-Use Structure
 - **\$0.05 per kWh reduction** off the fixed piece of the energy charge for **off-peak charging**
 - **500% increase** of per kWh energy charge (fixed) for **on-peak** charging (\$0.454 per kWh using current energy charge) – **Currently On-Peak is defined as 4:00pm – 9:00pm**
 - **1-Year minimum** for using this rate structure if you receive an incentive for upgrades

EVM-TOU Rate Bill Example

Account #

Statement Number:

Statement Date: 07/31/2023

Service Address:

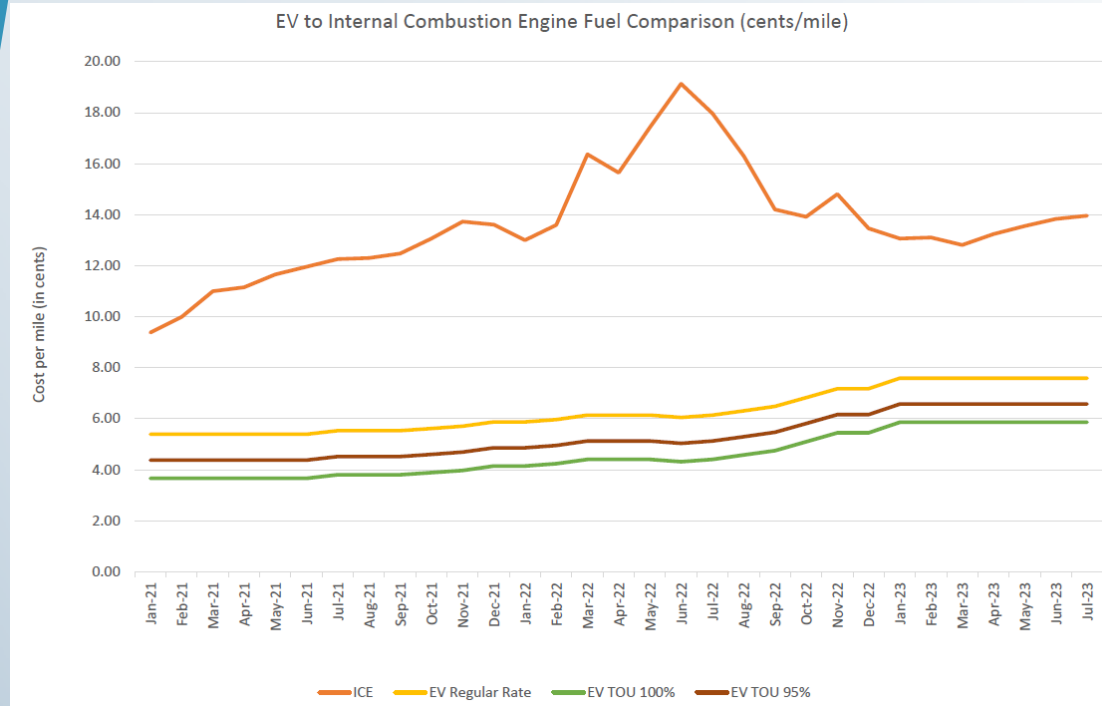
METER READINGS

Serv	Meter	Read Type	Read Dates			Readings			Mult.	Total		
			From	To	Days	Previous	Present	Demand		kwh/ccf	Demand	Rate
C		A	06/07/23	07/09/23	32	51045	51918		1.0000	873		CHK
E		A	06/07/23	07/09/23	32	36480	37097		1.0000	617		LA
S		A	06/07/23	07/09/23	32	32782	33273		1.0000	491		LA-S
G		A	06/07/23	07/09/23	32	9395	9400		1.0000	5		GH-R
T	T1234567	A	07/19/23	07/31/23	12	0	100		1.0000	100		LA_TOU_OFF
T	T1234567	A	07/19/23	07/31/23	12	0	50		1.0000	50		LA_TOU_ON

CURRENT CHARGES

Avg. Daily Electric Usage			Avg. Daily Gas Usage			ELECTRIC CHARGES	Rate	Usage	Charges
Month	KWH	Avg	Month	CCF	Avg				
Jul-23	767	14.20	Jul-23	10	0.19	Customer Charge	8.00		7.67
Jun-23	352	11.35	Jun-23	6	0.19	Distribution Charge	0.0442	767	33.90
May-23	470	14.69	May-23	46	1.44	Energy Charge	0.1683	617	103.84
Apr-23	527	17.00	Apr-23	130	4.19	Energy Charge (Off-Peak)	0.1183	100	11.83
Mar-23	646	23.07	Mar-23	174	6.21	Energy Charge (On-Peak)	0.5315	50	26.58
Feb-23	793	24.78	Feb-23	242	7.56	Energy Conservation Charge	0.0070	767	5.37
Jan-23	756	24.39	Jan-23	208	6.71	Green Choice	0.0183	767	14.07
Dec-22	542	19.36	Dec-22	110	3.93	Solar Energy Credit	-0.16830	491	-82.64
Nov-22	525	16.41	Nov-22	18	0.56	Total Charges			120.62
						Prompt Payment Discount			-3.39
						Total Electric if paid by 08/21/23			117.23

TOU Financial Benefits



EVM-TOU Monthly Savings Calculator					EVM-TOU Annual	
Monthly kWh usage	Percentage Off-Peak Charging				Annual kWh	Annual Savings
	100%	95%	90%	85%		
500	\$ 25.00	\$ 14.67	\$ 4.34	\$ (5.99)	6000	\$ 300.00
450	\$ 22.50	\$ 13.20	\$ 3.91	\$ (5.39)	5400	\$ 270.00
400	\$ 20.00	\$ 11.74	\$ 3.47	\$ (4.79)	4800	\$ 240.00
350	\$ 17.50	\$ 10.27	\$ 3.04	\$ (4.19)	4200	\$ 210.00
300	\$ 15.00	\$ 8.80	\$ 2.60	\$ (3.59)	3600	\$ 180.00
250	\$ 12.50	\$ 7.34	\$ 2.17	\$ (3.00)	3000	\$ 150.00
200	\$ 10.00	\$ 5.87	\$ 1.74	\$ (2.40)	2400	\$ 120.00
150	\$ 7.50	\$ 4.40	\$ 1.30	\$ (1.80)	1800	\$ 90.00
100	\$ 5.00	\$ 2.93	\$ 0.87	\$ (1.20)	1200	\$ 60.00
50	\$ 2.50	\$ 1.47	\$ 0.43	\$ (0.60)	600	\$ 30.00

= If you are a home owner, look into our Connected Homes Program. This program offers a \$10 month incentive a month to enroll qualifying chargers into a peak savings program. To learn more visit: <https://nextzero.org/wakefield/connected-homes/>

- Using historical data (From EIA), average savings on the EVM-TOU vs ICE would be \$0.09 per mile since Jan 2021
- Important to evaluate monthly EV charger usage and ability to charge exclusively off-peak

EVM-TOU Requirements and Restrictions

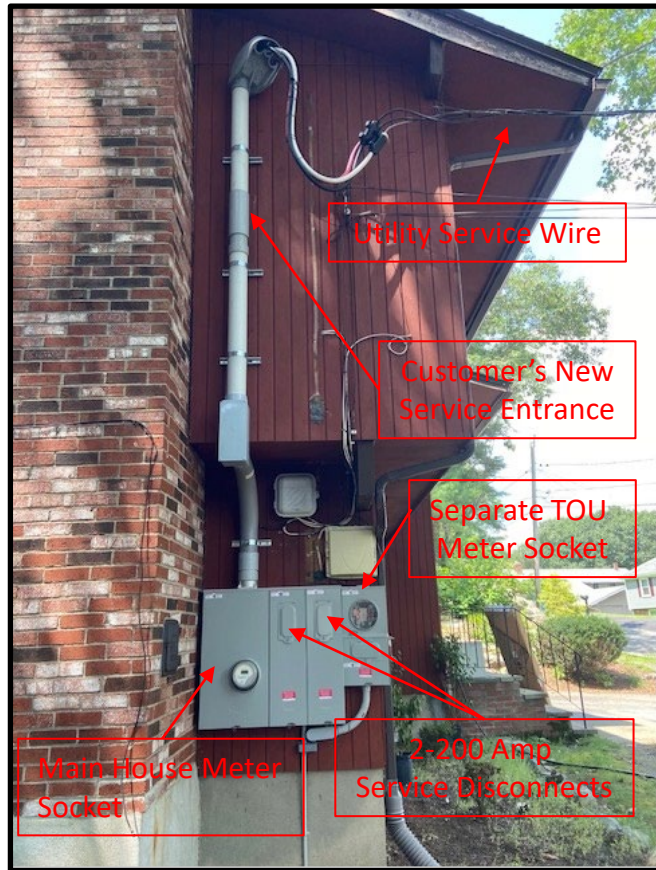
Steps:

1. Fully Understand how Time of Use works (Recommended that you review EVM-TOU Guide at <https://wmgld.com/wp-content/uploads/2023/06/EVM-TOU-Upgrades-Comprehensive-Guide.pdf>)
 2. Contract licensed electrician to install any additional upgrades needed as well as the charger
 3. Go to https://wmgld.com/customer-service/list_of_forms/ to fill out an EVM-TOU Application form
 4. Once EV charger and panel is set up for the separate meter, WMGLD will set up a time to install the TOU Meter
 5. To submit for reimbursement of service upgrade costs up to \$1,250, you must follow the instructions and attach the necessary documents on our EVM-TOU Upgrades Rebate Form located at <https://wmgld.com/energy-programs/electric-vehicle-programs/>
 6. Once rebate is reviewed and approved from WMGLD you will receive a credit on your bill of \$1,250 (generally within 4-6 weeks)
- **If you have your EV enrolled in Connected Homes or are currently in our 3-year charging agreement program already, you cannot enroll in this program**

Electric Service Upgrade example 200 amp to 400 amp.

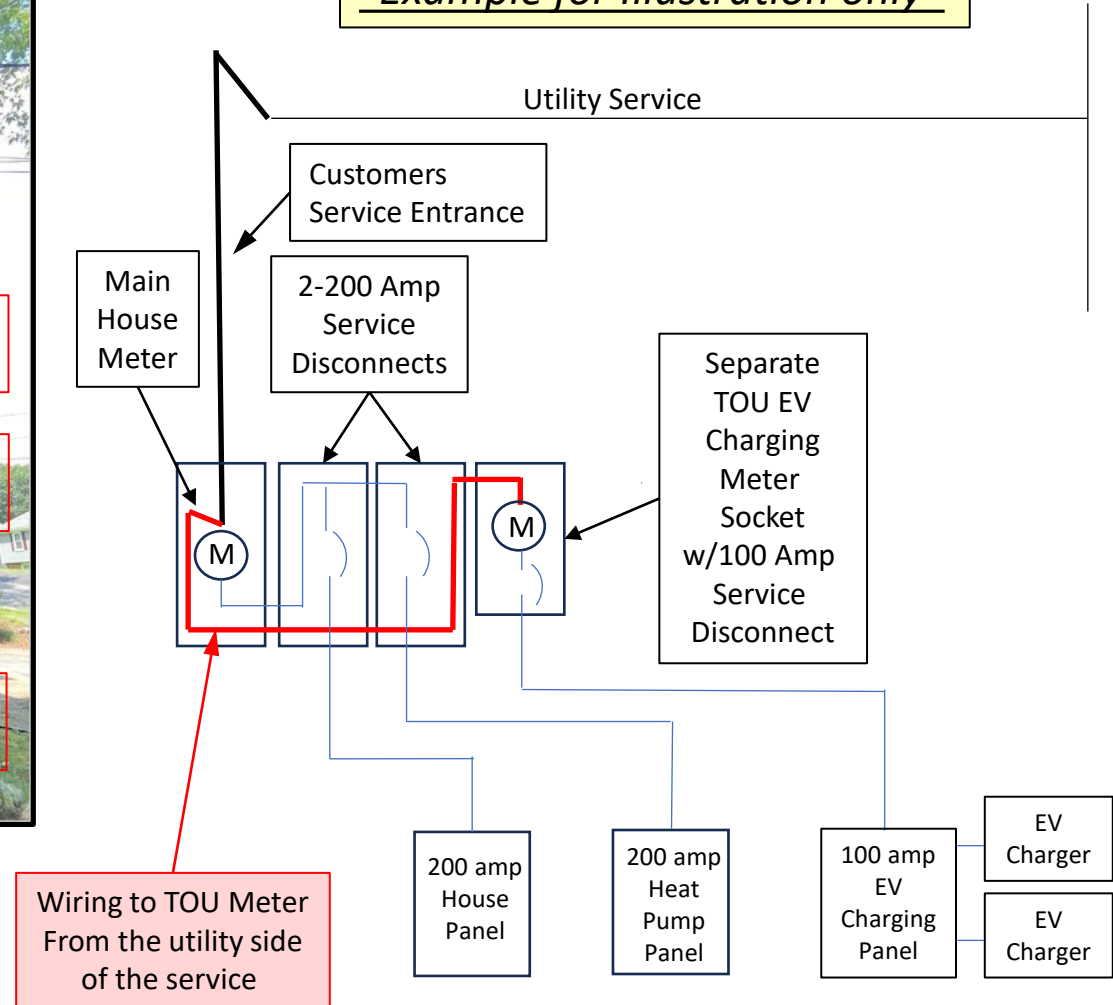
Reason for upgrade:

- Installation of heat pump units
- Installation of electric vehicle chargers, set-up for Time Of Use metering (TOU)



Example of Electric Service
And
Metering Upgrade

"Example for Illustration only"



Alternative EV Programs – Connected Homes

- Connect qualifying Smart Devices to our Connected Homes program
 - Enrolled devices are controlled during monthly peak events
 - Customer can override command and forgo the benefit that month
 - Monthly rebate on your bill for accepting commands
 - One of two Level-2 charger brands, ChargePoint or Juicebox (Emporia coming soon)
 - Cannot have EVM-TOU rate or be within the 3-year charging agreement to enroll your EV charger
 - You can hook up other Smart Devices (excluding EV chargers) and be in another EV program

Smart Device	Eligible Brands	Monthly Incentive
Battery	Generac	\$30
Battery	Sonnen	\$30
Electric Vehicle Charger	ChargePoint	\$10
Electric Vehicle Charger	Enel X JuiceBox	\$10
Electric Hot Water Heater	GE	\$5
Electric Hot Water Heater	Rheem	\$5
Mini-Split Controller	Flair	\$5
Mini-Split Controller	Sensibo	\$5
Wi-Fi Thermostat	Visit NextZero.org	\$5



**Cut Your Carbon Footprint,
Earn Monthly Rewards**

Wakefield Municipal Gas & Light Department customers are eligible to earn rewards when they enroll their smart devices into the NextZero Connected Homes Program. Eligible devices include select home batteries, electric vehicle chargers, electric hot water heaters, mini-split controllers, and WiFi thermostats.

Visit www.NextZero.org/Wakefield to start earning.

www.NextZero.org/Wakefield

Alternative EV Programs – Scheduled Charging

- Free ChargePoint Level-2 Charger
- Sign up for 3-year Charging Agreement
 - Charger is reduced to level-1 output during peak times during non-holiday weekdays
- Cannot take advantage of other EV programs during the 3-year Charging Agreement
 - Customers should join Connected Homes or consider the EVM-TOU once agreement elapses
- Sign up process for this program is at <https://wmglid.com/ev-smart-charging-form/>
- Requirements/steps:
 - Sign Charging Agreement and fill out Online Application
 - Proof of EV ownership submitted with Application
 - WMGLD approves application
 - Licensed Electrician must pick up charger from WMGLD
 - Sign up the installed EV charger for scheduled charging

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SCHEDULE YOUR ELECTRIC VEHICLE CHARGING
GET A FREE OR DISCOUNTED CHARGER

Scheduled charging allows light departments to better manage their electric loads. Wakefield Municipal Gas and Light Department customers can earn a free or discounted charger if they enroll in the NextZero Scheduled Charging Program.

Learn More
www.NextZero.org/Wakefield

NEXTZERO
EXPERIENCE WHAT'S NEXT

Benefits of EV Programs

Positively impacting the environment through supporting decarbonization and electrification

Assisting WMGLD in managing peak electricity usage on the grid

Offering customers an opportunity to save money on their utility bills



Questions?