

**Sustainability & Energy Commission (SEC)
Grand Haven, Michigan 49417**

**AGENDA
Grand Haven City Hall
519 Washington Street
Thursday, May 8, 2025**

(Note: Action Items in **Bold**)

Meeting called to order: Dan Small, Chair, called the meeting to order at 6:05 PM

Roll call: Jim Hagen, Jean Madden, Jim Mathews, Ryan Cotton, Patti Nelsen, and Nancy O'Neill, Discussion regarding the fact Andrei Skelly has requested an extended leave of absence... (**Outcome of this request TBD by the City Manager.**)

Staff Present: Eric Law, Administrative Liaison

Absent: Pamela Blough (sent an email about a conflict), Brittany Goode (sent an email about a conflict), and John Kinch.

Two Guests in Attendance: Erik Booth, BLP and Jan O'Connell, Sierra Club

Approval of previous meeting minutes: Dan Small made two small typographical suggestions and moved approval, Ryan Cotton supported. Unanimously approved.

Presentation on the *Grand Haven Board of Light & Power's* Utility Energy Plan and Sustainability Programs– Erik Booth: Erik Booth said he will be briefing the GH Tribune also on tonight's presentation if there is no objection. He reported on BLP's Environmental Impact and Recent Survey Results-- 518 participants, 135% increase over previous cycle. 77.5% of residents surveyed were aware of the state's carbon emission reduction goals with 72.4% of residents surveyed indicating awareness that the BLP has already decreased local carbon emissions from their electric generation by over 70% from 2005 levels. Erik Booth said the BLP is shifting from technical to customer relationship focus, emphasizing a "connection" over pure information. He noted high engagement on social media and positive feedback on outreach transparency. He acknowledged limited in-house PR resources; technical staff lead communication with support from a graphic designer and external editing for "humanizing" information. Erik Booth listed the various ways in which information is provided to the public, ranging from brochures, to presentations, to Chamber meetings, governing body updates, social media, website, etc. More details on existing programs follow:

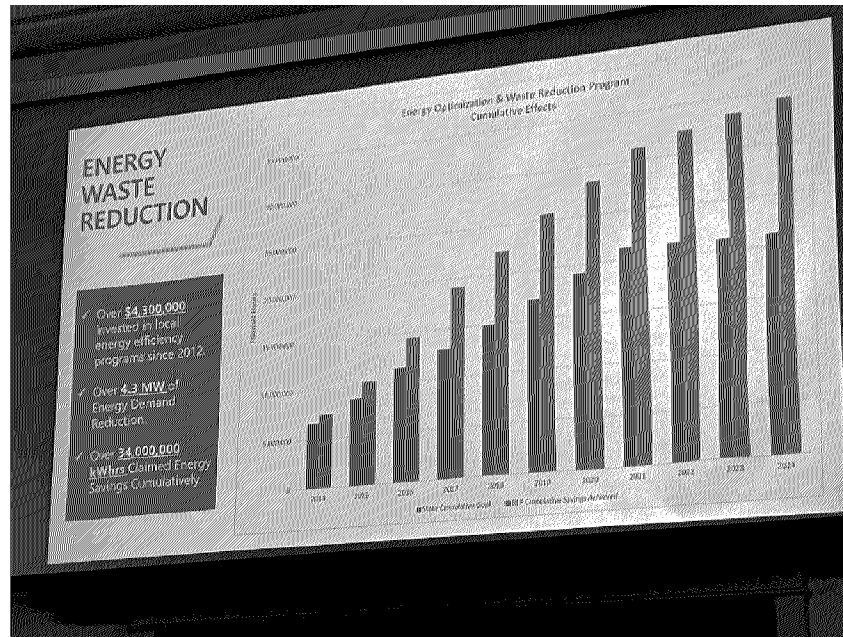
- **Renewable Energy:** Erik Booth reported that BLP achieved a 71% reduction in local carbon emissions from 2005 levels. This is well ahead of the MI Healthy Climate Plan's goals to reduce GHG emissions 28% below 2005 levels by 2025 and 52% by 2030. BLP is projecting an 85% reduction by 2035. This was largely

achieved by shutting down the coal fired power plant and moving to a diversified power supply portfolio. The renewable energy projects that the BLP has invested in have grown significantly from 8% of renewable energy purchases in 2016 to 26% of purchases in 2024. This number will continue to grow in the coming years with the addition of three new solar projects.

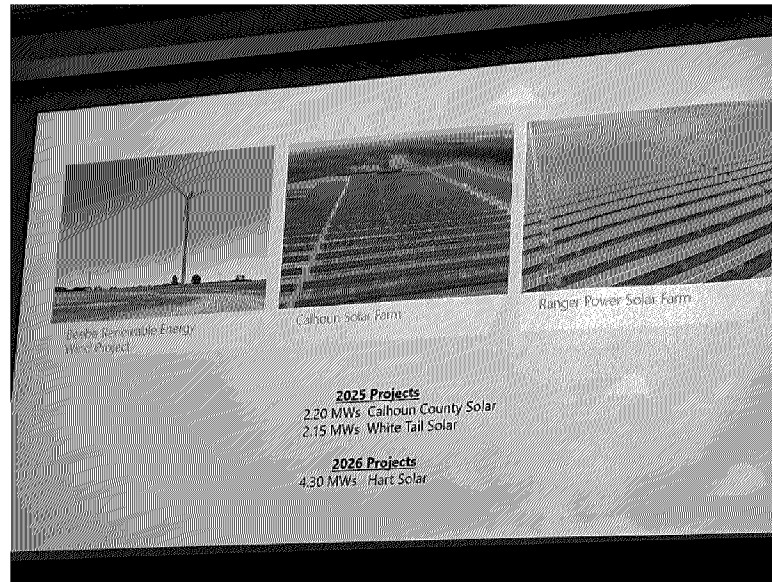
- **Energy Optimization & Waste Reduction:** Since 2012, BLP spent \$4 million for energy efficiency which reduced energy demand by 4.3 megawatts (compare this to the average load of 31 megawatts). Over 34,000,000 kilowatt hours of claimed energy savings cumulatively have been achieved which represents more than 10% of annual electric sales. These results outperformed state-mandated energy savings.

See slides presented below:





- **Residential Efficiency Outcomes:** Erik Booth reported multiple activities, including 25 incentives, such as adding rebates for EV chargers in 2023. Further, the Community Action Agency partnered with BLP to assist in installation of high cost items, like Rim Joist and various insulation locations, for income-qualified residents at River Haven. BLP did two rounds and 8-10 homes participated (BLP actually went to River Haven and spoke to residents directly and gave pizza and energy savings kits away as incentives).
- **Relatedly, commercial and Industrial users** can take advantage of over 80 different incentives. A listing of over 40 non-profit, commercial and industrial customers who have taken advantage of these programs was shared.
- **New State Requirements:** Public Act 235 is requiring all utilities in the state to meet 15% of their energy from renewable resources by 2029, 50% from 2030-2034, and 60% thereafter. PA 235 is also requiring a clean energy mandate of 80% from 2035-2039 and 100% in 2040 and thereafter. Public Act 229 will be requiring a 1.5% energy waste reduction performance standard annually beginning in 2026 (the previous standard was a 1% reduction from the previous year's electric sales). The energy waste reduction program is also required to develop a program specifically targeted to low income households.
- **Voluntary Green Energy and Other Solar Programs:** See slides below:



Erik Booth asked for questions.

Ryan Cotton thanked Erik and the BLP for these great outcomes. He asked about larger rebates for gasoline powered lawn equipment, vehicles, and other carbon-burning reduction improvements like some other places? Specifically, could new rebates get added for “Ororo electric vests” that allow people to wear and keep their thermostats several degrees lower? A: BLP follows the Michigan Public Service Commission’s Michigan Energy Measure Database (MEMD) list of programs that they will accept for rebates. A third party will be required to audit the program to ensure compliance with the standards of the MEMD. It is a pretty prescriptive program.

Ryan Cotton asked if anything precludes the public utility from going above and beyond the state’s rebate lists? A: No, yet the local utility customers would need to pay for it then (**Editors note:** Meaning if enough customers wanted it, and the Board approved it, then more rebates could be done.)

Ryan Cotton suggested that customers might, especially if a credit for the BLP could be achieved in the legislation for reducing gas usage. (**Editor’s Note:** See the listing at the end of these Minutes regarding more research done comparing residential customer rebates available from other public utilities to BLP’s list of rebates. The green font in this list indicates that the particular rebate noted is available elsewhere.)

Jim Hagen asked about metrics on rebates ? A: Erik said it could be done with some creativity so as to make useful/readable.

Erik Booth said that BLP will be spending approximately \$5 million on renewable energy next year and the new energy waste reduction program is anticipated to cost roughly \$1 million per year..

Ryan Cotton asked if coal or gas generation is now more expensive than solar? A: Renewable projects are largely energy projects which means that capacity costs (which have to be obtained from other resources) also have to be added into the cost of energy. The BLP diversifies the communities power supply portfolio to balance reliability, affordability, and sustainability. Hard to say given that BLP is engaged in 20-year fixed term agreements. Ryan Cotton said he had read in the NYT that the economics of solar panels had now switched to new solar being able to be produced cheaper. If so, it would be great if the Green Energy Program was made to be the same pricing? See this link:

<https://www.pv-tech.org/solars-ascendancy-how-crystalline-silicon-will-dominate-global-energy-by-2050/>

Energy Task Force Update – Ryan Cotton reported on the following Actions/Recommendations Associated with Approval of the Community Energy Plan:

1. Ferrysburg

- a. A Residential Energy Advisor program is being considered. Garry Post from the Ferrysburg Planning Commission is part of a task force
- b. On-Bill Financing is requested by Mayor Carlson
- c. 50 plus trees are being donated for planting this fall via the **Plant Up and Fly Right** C3 program –native species requested.
- d. WAWL and WGHN Radio Stations offered interviews to Mayor Carlson re: above program

2. Grand Haven City

- a. A Residential Energy Advisor is being considered as presented to Ashley Latsch by Ryan Cotton and others. An Anonymous Donor has come forward for half of a small pilot program. **Garry Post and Ryan Cotton are reviewing contract ideas and/or 1099 consultant ideas.**

3. Grand Haven Township

- a. Voted no 5 -2 citing concerns about solar on farm fields and lack of dependent electronic energy vehicles, although there is some discussion about bringing up again. (Editor's Note: The GHT Board subsequently approved the plan with amendments regarding no solar on agricultural land and no use of electric vehicles in the emergency vehicle fleet. Approved 6-1. **The Board's desire is to receive help on getting retrofit grants and weatherization grants for lower bills and more affordable housing.**)

Consumers Energy and their Home Energy Analysis Discussion: Jim Hagen researched what Consumers does for their gas customers, inclusive of mobile home and apartment homes. They accomplish an energy survey and provide easy solutions including foam inserts for outlets, faucet aerators, improvements for drafty doors, etc.... Why not get them to feature energy audits here also? Get testimonials like BLP does on their Facebook page? Approve a resolution and encourage Tri Cities customers to get on board? After discussion, the problem was determined to be that Consumers does not serve gas to Grand Haven; Michigan Gas does. They need to be approached about doing something similar with their programs. (Note:

SEMCO Gas does a program in Holland too. According to MI Gas's website, they will only do on-line tips. See [Energy Analysis | Michigan Gas Utilities](#), yet a web search revealed if you contact their affiliated agency "Efficiency United" they will do a home assessment: [Home Energy Assessment | Efficiency United — Michigan Solutions, Michigan Savings](#))

Forest Management Update: Jean Madden suggested that the Forest Management newsletter could become the "Sustainability and Energy Newsletter" that might then be excerpted by "Shyla" to put on the City's site. Everyone agreed by acclamation and Jean Madden said she would start doing it. She also reported that Derek Gadjos is now the official manager of the Community Energy Plan as one of his projects. He is the project manager for Harbor Island as well and mentioned that one of his first goals is to connect with the BLP.

Regarding former projects, Jim Hagen inquired whether DPW had ever worked on solar projects. **A: Unknown.**

Update on DNR Presentation to City Council work session—Jim Mathews and Jean Madden: Jim Mathews said there is an MDNR presentation scheduled for the June 16th City Council Work Session and that Nik Kalejs is available. Unfortunately, Chad Stewart has a conflict. They reported that without management, the deer herd will increase by 43% annually! James Hagen said the timing is right for a City Council vote. Jim Mathews said there are likely several hundred deer within the city limits. The drone flew over wooded areas, and the Forest Management Subcommittee hired a truck with thermal imaging sensors to count deer visible from city streets to get as accurate a count as possible. However, there were many key areas the thermal imaging camera could not reach (behind the Church of the Dunes, and areas of Highland Park are just two examples). The MDNR said drone counts are typically low. MDNR said cities should not manage to a specific number, as it's hard to get a precisely accurate count of the deer. Instead, they should manage to a goal... such as improved forest understory. Dan Small pointed out that north of the River was not included in the survey, so the actual number of deer may be significantly greater than the count suggests.

Conclusion: The goal for the council is to implement a process whereby the city manager can administer deer management starting this fall and proceeding as needed, using agreed-upon metrics, without requiring a council vote each year.

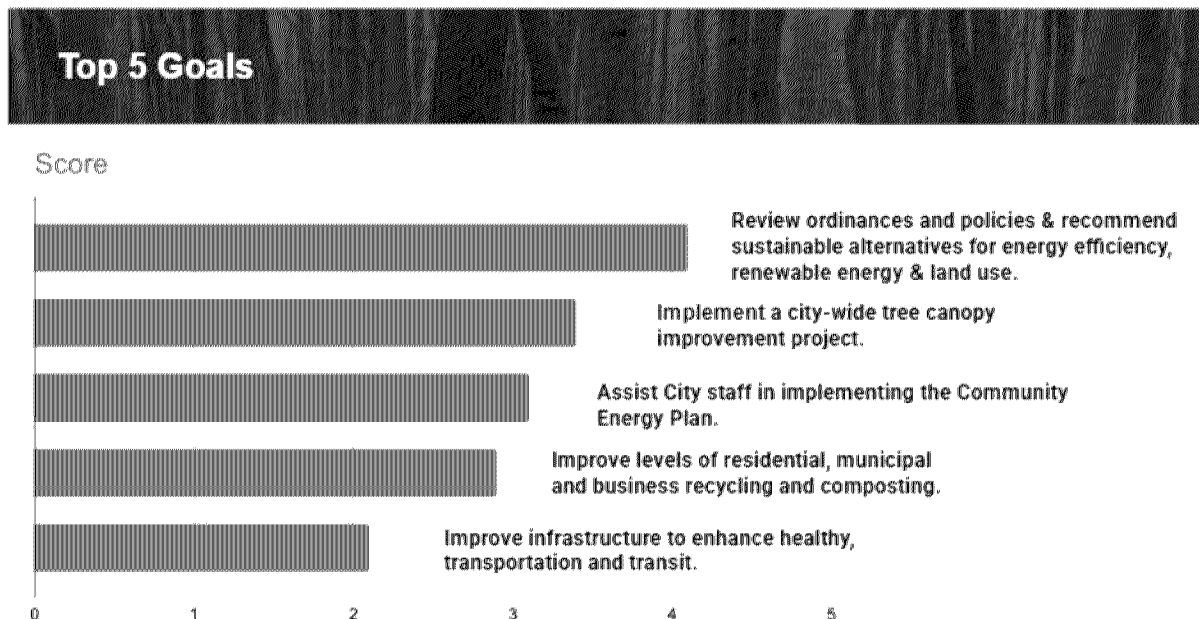
Introductory Discussion of a potential "Green Bond" to address continuous deer management, diseased tree management, invasive species, erosion control, and 40% tree canopy—Ryan Cotton: A comprehensive plan to address citywide tree needs to be accomplished once the deer management is figured out. Increasing the number of trees to a 40% tree canopy would be the goal starting with an updated tree inventory and following up with an arborist and the above outcomes.

\$7 million over ten years is the total potential cost if done well. This can be afforded via a publicly voted bond since \$1.3 million per year in debt service is coming off the City's debt load starting with final payments made in 2028 and 2029. The group said the ballot idea and the idea of comprehensively caring for trees is complimentary to the City's green reputation. Note: The bond should cover disease and invasive species on private property as well so benefit

would be received citywide. Ryan Cotton explained the situation of his neighbor who spends \$300 per year on managing hemlock disease in his backyard. Further discussion of this bond should occur after the Public Safety bond and the deer management system has been started.

Key Learnings from the City Trail System Grant submission. Contract Grant Writer discussion. No discussion or action.

Next Steps – Top Five SEC Priorities – Jean Madden: The top vote getter was to review the city's environmental-related policies. The second highest goal was to implement the citywide tree canopy, etc. See below:



Jean suggested that we each step up or nominate folks who can join our commission and help accomplish these priorities. **Recruit volunteers for each of the top 5 priorities at the next meeting.** Ryan Cotton said he would work on the Tree Canopy goal.

Review Grand Haven City/BLP Tree Trimming Policy and Other High Priority SEC Goas: Ryan Cotton said that tree removal is important for public safety and to not have people killed, yet we do not have an arborist and at least we could do is have a discussion and review and/or help develop a balanced policy.

Jim Hagen said the tree in front of a house on Grand was treated like right-of-way clearing in a rural area and the tree had been there for 75 years. Limbs could be trimmed as a fix, not necessarily full scale removal! It seemed to the group that Asplundh needed more guidelines. **Eric will reach out to the BLP to inquire about Asplundh.**

The group's conclusion was to start by meeting with Ashley. The group should include Jean Madden, Eric Law, Jim Hagen, and Ryan Cotton to get her direction. **Jean Madden said she would set up a meeting to prioritize SEC Commission's five goals and clarify**

expectations. Suggestion made: Seek clarification of official policies (or lack thereof) and propose that written guidelines be put in place to balance efficiency with preservation.

SEC Secretary Discussion: The City Council has an AV system to record the meeting and use AI could be used to take care of minutes that way! Meanwhile, Patti and Ryan Cotton will share. Jean had set up a software trial for the meeting that she asked all to evaluate.

SEC Co-Chair: Ryan Cotton and Jean Madden were nominated by Dan Small and Patti Nelsen, respectively. Ryan Cotton respectfully declined. Moved by Dan Small supported by Patti Nelsen, Jean Madden was unanimously elected as co-chair.

Final Call to the Audience: Jan O'Connell said she was excited about Council approval of the CEP support of the CEP. She said she will do whatever she can do to help.

Adjournment: Dan Small and Jim Mathews moved respectively and meeting adjourned at 7:55 PM.

Further Research on Comparative Electric Utility Residential Rebate Programs

(Note: Green font highlights signifies rebates offered elsewhere, in addition to BLP's current rebates.)

Grand Haven BLP Residential Rebates& Total Incentive Ranges

Residential Efficiency Programs

✓ Over 25 different incentives.
✓ Began offering EV Charger Rebates in 2023

Air Conditioning	Building Envelope
Central AC	Ceiling Insulation
Air Source Heat Pump	Attic Hatch Insulation
Minisplit Heat Pump System	Wall Insulation
Whole Home Dehumidifier	Basement Insulation
Appliances - Energy Star	Crawlspace Insulation
Refrigerator	Rim Joist Foam Insulation
Freezer	Energy Star Windows
Clothes Washer	Energy Star Patio Glass Doors
Electric Clothes Dryer	Energy Star Doors
Heat Pump Clothes Dryer	Door weatherstripping
Portable Air Purifier	Smart Energy Thermostat
Dehumidifier	
Personal Computer	
Computer Monitor	
Television	
Smart Surge Protector	

Note: More incentives on rebate form

Air Handling

- Central AC: \$125 to \$250
- Air Source Heat Pump: \$125 to \$600
- Minisplit Heat Pump System: \$60 to \$370
- Whole Home Dehumidifier: \$250
- Room AC: \$35 to \$45
- Smart Energy Thermostat: \$100

Appliances: Energy Star

- Water Heater: \$300
- Refrigerator: \$35
- Freezer: \$25
- Clothes Washer
- Electric clothes dryer: \$25- \$35
- Heat clothes dryer: \$75
- Portable air purifier: \$30
- Dehumidifier: \$30
- Personal computer and/or monitor: \$15
- Television: \$30
- Smart surge protector: \$10

Building Envelope

- Ceiling insulation: Varies
- Attic insulation: Varies
- Wall insulation: Varies
- Basement insulation: Varies
- Rim joist foam insulation: \$0.02/sf of conditioned floor space
- Energy Star Windows & Energy Star Patio Doors: \$15 to \$30
- Energy Star Doors: \$20
- Door Weatherstripping: \$4

EV Charger (Level 2 Charger): \$500

Michigan Gas Utilities (Grand Haven) Rebates (Unclear to me if can double-up...)

Thermostat	Save up to \$50
High-Efficiency Natural Gas Boiler	Save up to \$600
High-Efficiency Natural Gas Furnace	Save up to \$350
Boiler Reset Control	Save up to \$50
Heating System Tune-Up	Save up to \$50

Insulation	Save up to \$250
Air Sealing	Save up to \$100
Duct Sealing	Save up to \$200

Clothes Dryer	Save up to \$20
Clothes Washer	Save up to \$25
Dishwasher	Save \$10

High-Efficiency Water Heater	Save up to \$100
Tankless Water Heater	Save up to \$275

Apply by Mail

Window Replacement	Save \$20 each (no max)
Exterior Door	Save \$100

Holland Board of Public Works

Qualified central **air conditioning** units and **heat pumps** including mini-splits

Programmable thermostats

ENERGY STAR® refrigerators, electric clothes dryers and washing machines, heat pump dryers, dishwashers, dehumidifiers, and electric heat pump water heaters

Electric **lawn tools**

Induction cooking appliances

Home **electric panel** upgrades

Apply For The Holland Energy Fund Rebates: Submit an application for the **Holland Energy Fund** rebates

Receive a 5-20% rebate on projects up to \$30,000, saving **up to \$6,000** for your home energy improvements. There is no minimum project cost for this rebate. You must complete the Home Energy 101 visit to be eligible to receive your rebate payment.

Cherryland Cooperative



Cherryland Electric Cooperative 2025 Residential Rebates

New Appliances		
Clothes Washer Electric	Energy Star Rated	\$20
Clothes Dryer	Energy Star Rated	\$20
Refrigerator/Freezer	Energy Star Rated 10 cubic feet or larger	\$20
Dehumidifier	Energy Star Rated	\$20
Air Purifier	Energy Star Rated	\$50
Induction Stove/Cooktop	New construction or fuel switch from natural gas or propane	\$500
Electric Vehicles		
New, Used, or Leased Excludes Hybrids	Must replace gas vehicle/registered to address served by Cherryland	\$250
Residential Level 2 Charging Station	Must be permanently installed energy star smart charger with data capability & requires licensed electrician and electrical permit.	\$500
HVAC		
Electric Water Heater (Storage)	New construction or fuel switch from natural gas or propane	\$500
Electric Water Heater (Storage)	New construction or fuel switch from natural gas or propane	\$500
Heat Pump Water Heater	New construction or fuel switch from natural gas or propane. 2.0 EF or higher	\$500
Mini Split System	Minimum SEER rating 16 SEER2 (17.0 SEER) 7.1 HSPF2 (9.0 HSPF) per outdoor unit	\$500
Well-Connect Heat Pump		\$1,000
Air Source Heat Pump (Centralized)	New, no replacement. No prior central air conditioning. 7.1 HSPF2 (8.5 HSPF) rating; Minimum 14.30 SEER2 (15.0 SEER)	\$1,000
Ground Water Heat Pump	New, no replacement. Minimum EER rating of 19.0	\$2,000
Refrigerator/Freezer Recycling		
Refrigerator/Freezer	Free pickup. 2014 model or older, 10-27 cubic ft, in working condition	\$0

What is new above as compared to BLP is the **Induction Stove**, and **New, Used, or Leased Electric Vehicles**. See below:

Traverse City Light and Power Utility

New rebates from the Traverse City public utility are the Mowers, other Lawn Tools, Snow Blower, Solar Panel, Electric Bikes, Solar Hot Water Heater, and the Induction Stove. See below:

ELECTRIC LAWN TOOLS		SOLAR/EV CHARGING	
Push Lawn Mower	\$200	Solar Panels	\$250/kW
Riding or Autonomous Mower	\$500	EV Charging Station	\$500
Multi-Head System Lawn Tool <small>Must include power head</small>	\$250		
Individual Lawn Tool	\$50		
Snow Blower	\$200		
<small>*All electric lawn equipment must be replacing gas</small>			
E-BIKES		RECYCLING	
E-Bike (participating retailers only)	\$300	Refrigerator/Freezer	\$75
		Dehumidifier/Rm AC	\$10
HVAC			
Cold Climate Heat Pump Ducted Split System <small>SEER2 >= 15.2, EER2 >= 9, HSPF2 >= 8.1, COP of 1.75 or greater at 5 degrees</small>		\$3,000/System	
Heat Pump Ducted Split System <small>SEER2 >= 15.2, EER2 >= 9, HSPF2 >= 8.1</small>		\$1,500/System	
Ductless Mini-Split Heat Pump <small>SEER2 >= 16, EER2 >= 9, HSPF2 >= 8.5</small>		\$1,000/System	
Wi-Fi Connected Thermostat <small>Must be connected to Wi-Fi</small>		\$75	
Heat Pump Water Heater <small><= 55 gallons, UEF >= 2.2</small>		\$1,000	
Solar Hot Water Heater <small>New installation</small>		\$500	
APPLIANCES			
ENERGY STAR Heat Pump Clothes Dryer		\$200	
Induction Stove		\$750	
ENERGY STAR Air Purifier <small>\$30: CADR 50-150, \$65 CADR 150+</small>		\$30 - \$65	
ENERGY STAR Freezer		\$20	
ENERGY STAR Refrigerator		\$20	

Green Mountain Power, Vermont

Electric Vehicles: Incentives for purchasing or leasing an EV and

Level 2 home charger.

Home Energy Storage: Rebates for battery storage systems to improve energy resilience.

Heating & Cooling: Discounts on **heat pumps** for efficient home heating and cooling.

Home & Yard: Rebates for **electric lawn equipment** and **other energy-saving home upgrades**.

Efficiency Vermont provides an **Income Bonus Rebate** for eligible households purchasing ductless **or whole-home heat pumps**.

New energy or fuel saving appliances, such as **wood pellet boilers** or heat pumps.

Burlington, VT Electric Department

High-Performance Circulator Pumps – up to \$600 off **at time of purchase**.

Heat Pump Heating & Cooling System – up to an additional \$650 off

Heat Pump Water Heaters purchased at HVAC Distributor – up to \$800 cash back

LEDs for Indoor Growing – up to \$100 per fixture

Pellet Stoves – up to \$400 off at time of purchase Rebate and Product Information

Wood Stoves – up to \$400 off **at time of purchase**

Electric Bikes (Instant \$600 rebates)

Electric Mowing

Electric Leaf and Snow Blowing, and other Lawn tools

Electric Chainsaws

Battery Recycling

See below also:



LAWN CARE

ELECTRIC LAWN MOWERS (RESIDENTIAL)

Because many conventional gas and diesel lawn mowers do not have strong emission controls, they are widely recognized as a major source of smog-forming air pollution. In fact, a 6HP diesel or gas mower running for an hour creates the equivalent emissions of driving your car 160 miles. (source)



Not only do old-fashioned lawn mowers burn fossil fuels, they also create ground-level ozone and haze. And, an estimated 17 million gallons of gas is spilled each year as we refuel the mowers, which can pollute drinking water.

Receive up to \$300 toward the purchase of a new electric ride lawn mower.
Receive up to \$150 toward the purchase of a new electric push lawn mower.

Switching to an electric lawn mower can significantly reduce the number of toxic pollutants directly released into the air. And since Burlington runs on 100% renewably-sourced energy, there is an environmental benefit to mowing with an electric mower.

Burlington Electric Department wants to help you make the switch. We are offering a \$75 rebate on the purchase of a new electric lawn mower (\$150 for income-qualifying customers). See terms and conditions.

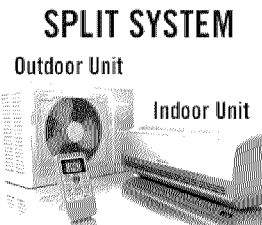
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- Electric Lawn Mowers (Commercial)
- Electric Leaf Blowers
- Electric Chainsaws & Trimmers
- Electric Snow Blowers
- Battery Recycling
- Additional Resources



MINI-SPLIT HEAT PUMP

- Heats & cools specific rooms.
- Ductless. Inexpensive to install.
- Mini-splits can provide an easy-to-install heating and cooling solution for buildings without ductwork for rooms that were not previously conditioned.
- Mini-splits can be more affordable than other heat pump system types, so can serve as a more accessible way for some building owners to strategically electrify and reduce their carbon footprint.
- For cooling, a Mini-splits may cost 40% less to operate than room air conditioners of equivalent capacity.
- Some of the latest Mini-splits models can provide space heating without fossil fuel backup at very low outdoor temperatures.
- Mini-splits can last 12 – 15 years, depending on the installation location and exposure of the outdoor unit.



Rental Properties

REFRIGERATOR FOR RENTAL PROPERTIES

Rebate Amount

- ENERGY STAR® Certified: \$150
- ENERGY STAR® MOST EFFICIENT Certified: \$250

Heat pumps provide energy-efficient heating *and* cooling and work well in cold climates. Switching to electric heat pump technology will reduce your fossil fuel usage. Burlington Electric Department offers rebates of up to 75% of installed cost.

Ground-Source Heat Pump
Preferred Heat Pump Installer Network
Electric Panel Upgrades

Induction Cooking

Bathroom Fans

Heat Recovery Ventilators

INDUCTION COOKTOP

Rebate Amount: up to \$200

Have the following items ready:

- Your Burlington Electric Department account number. It is printed on your monthly bill.

[A list of approved induction cooktops](#)

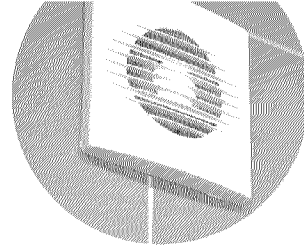
BATHROOM FANS REQUIRE CONTROLLERS

The time that someone is occupying the bathroom does not always provide sufficient run time for the fan to eliminate bathroom humidity or contaminants. You will need to install a smart controller that uses a timer to provide adequate time for the fan to run after you leave the bathroom. A controller must be installed to qualify for a BED rebate.

Product Options

The following are just a few of many options for controllers for your bathroom fan. Countdown timers do not qualify.

- Energy Star qualified fan + AirCycle SmartExhaust
The SmartExhaust is a wall switch that replaces your current wall switch. It features a built-in timer that ensures your fan runs for a minimum amount of time everyday.
- Panasonic WhisperGreen Select + any of Panasonic Plug 'N Play modules (FV-VS15VK1, FV-MSVK1 or FV-CSVK1)
The WhisperGreen fan allows the use of specialized modules that add timer, occupancy detection, and humidity detection functionality to your fan.



HEAT RECOVERY VENTILATOR (HRV) AND ENERGY RECOVERY VENTILATOR (ERV)

There are two types of whole home ventilation: HRV and ERV. The main difference is that an HRV transfers sensible heat (i.e. temperature) from one airstream to another, while ERVs transfer both sensible heat and latent heat (i.e. temperature plus the energy trapped in the air's moisture). There is no universally accepted solution for homes in Vermont. Some units (i.e. Zehnder) have the capability to swap an HRV and ERV core if you later decide that you'd like the other type of system.



\$600 E-BIKE REBATE

PURCHASE LOCALLY FOR AN INSTANT REBATE

If you are a current Burlington resident (or purchasing on behalf of a Burlington business), bring your ID along with a piece of mail with your name and Burlington address to receive a \$600 point-of-sale rebate on an e-bike. The rebate may be redeemed at a participating retail shop. Income-qualified customers will receive up to an additional \$250.



City of Fort Collins, Colorado Utilities

Solar & Energy Storage Rebates: Up to **\$1,000** for residential **solar photovoltaic (PV) installation** and up to **\$1,500** for **battery storage**.

Epic Homes Program: Provides **rebates** and **low-interest financing** for home energy efficiency upgrades.

Efficiency Works Online Store: Instant rebates on **smart thermostats, LED lighting, and more.**

Peak Partners Program: Helps **reduce electricity consumption during peak hours.**

Free home efficiency assessments: Larimer County Conservation Corps (LCCC): Offers

Refrigerator & Freezer Recycling: Schedule a **free pickup** to recycle old appliances.

North Dakota, Xcel Energy

Alt. Veh. Refueling Tax Credit

Home wiring

See below:

Residential Rates	EV Accelerate At Home	Optimize Your Charge
Incentive Description	Incentive Description	Incentive Description
TOLL DISCOUNT	TAX CREDIT	REBATE
\$250	\$1,000	\$1,200
MnPASS EV Incentive	Alternative Fuel Vehicle Refueling Property Credit	Home Wiring Rebate

Sunnyvale, CA (city initiatives and Silicon Valley Clean Energy (SVCE))

- **SVCE Home Rebates:** Up to **\$8,750** for upgrading to **electric appliances**, plus an additional **\$4,250** for income-qualified customers.
- **FutureFit Homes Program:** Helps homeowners switch to **energy-efficient alternatives**, with rebates **up to \$8,000**, plus an extra **\$5,000** for income-qualified customers.
- **Home Energy Score Rebate:** Get \$200 for an energy efficiency assessment.
- **Solar & Battery Rebates:** Federal tax credits of **up to 30%** for solar installations.

- **Multifamily Home Rebates:** PG&E offers rebates for **energy-efficient upgrades** in multifamily properties.
- **Property Assessed Clean Energy (PACE) Financing:** Finance 100% of **energy-efficiency project costs** with no upfront payments.