Ward 1 Neighborhood Planning Assembly (NPA)
Wednesday, March 11, 2026
In-person at the Friends Meeting House, 173 North Prospect Street
And Zoom online:
https://zoom.us/j/96245939050
Webinar ID: 962 4593 9050
Or by phone: +1 929 205 6099 ID = 962 4593 9050

Facilitator: Carol Livingston Recorder: Gretchen Platt

6:15 - Welcome and Food (Namaste Kitchen Express)

6:30 - Formal Start - project & review agenda & participation guidelines
Introductions & Announcements: share events, meetings, activities of interest to Ward 1 community.

6:40 - Speakout - an opportunity to raise concerns & appreciations about Ward 1 community

6:55 - NPA business
Introduce slate of Steering Committee members to be voted on at April's meeting and solicit interest in new SC members - 10
Annual priorities for City Council consulting with NPA - 20
NPA budget - ideas for spending the remaining balance ($1000) - 10

7:35 - City Council update - Allie Schachter & Carter Neubieser

7:55 - Burlington School Commission update - Matt Price & Gary Golden

8:05 - Reducing fossil fuel use at home - Jacob Flanagan

8:30 - Adjourn

Ward 1 NPA Steering Committee
Carol Livingston carol.livingston1951@gmail.com,
Jonathan Chapple-Sokol chapplesokol.npasc@gmail.com,
Sam Doherty samcharlesdoherty@gmail.com
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Rob Gutman rgutman@gmail.com

Participation Guidelines:

The Ward 1 NPA is sustained by community involvement and encourages engagement at our monthly meetings per the following guidelines:

1. We are collectively responsible for following the NPA Meeting Agenda as closely as possible regarding both presentation/discussion topics and time.

2. Participants at the NPA will act in a positive, courteous manner that respects all of those present (both participants and presenters/guests) and their differing opinions, experiences and perspectives.

3. Any attendee requesting to speak who has not yet spoken at a meeting will be called on before others who have already had a chance to speak. Priority is given to Ward 1 residents.

4. Whenever speaking, please be sure to project your voice and use the provided microphone if provided.

5. If the facilitator feels the need to redirect activity in the room based on these guidelines, the facilitator will do so per point number 1 above.

Ward 1 NPA: To be discussed at Meeting on March 11, 2026

A. Annual priorities for City Council

1. Development agreements and MOUs with UVM and UVMMC
2. Traffic management that could impact pedestrians
3. Tax burden redistribution
4. Advisory Group/Ad Hoc Committee Recommendations
5. Use of parks and development of open space
6. Municipal development plan
7. Others?

B. Ideas for spending our account balance ($1,000) by May 31, 2026:

[NPA expenditures must address at least one of the following:
1. Promoting the NPA
2. Providing residents with information about City programs/activities
3. Gaining input from residents about City needs]

1. Outreach - distribute flyers
2. Welcome sign to neighborhood
3. Beautification project
4. Community garden
5. Schmanska Park amenity
6. Community Event
7. Little Free Libraries - repair, renovate, create
8. Bus stops - benches
9. Workshops teaching a skill: gardening, pickleball; nature walk; Centennial Woods
10. Update of Zine publication (less than $500)

Fossil Fuels

How to stop burning them in your home

Why it is Important

Fossil Fuel appliances are:

Big ticket items

- They last a long time (hopefully)
- Locks us in to that fuel for a long time

Stuck With It

Just need 1 appliance that uses fossil fuels and we are stuck maintaining the infrastructure for that fuel.

- There is a cost just maintaining access to a fuel
- Incentivises using that fuel for more than one appliance

Why make a plan to replace them Now?

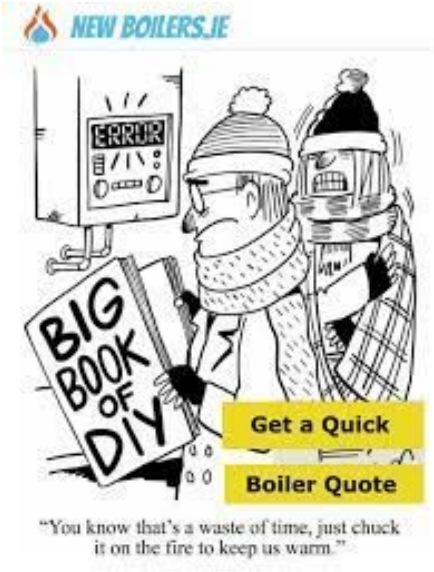
Great Options

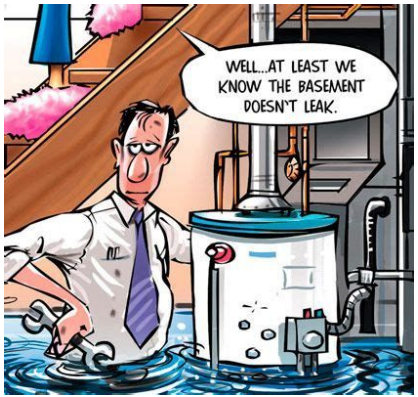
Lots of great options and Incentives that weren't available before

Otherwise, Emergency!

Most people replace these appliances when they break

- When it is an emergency it is hard to change to something else





The Things

What are we talking about?

In Your Home (4)

- Dryer
- Stove
- Hot Water Heater
- Furnace/Boiler

Outside Your Home (~2)

- Car
- Lawn equipment

Other Important things we won't talk about

- Efficiency
- Biofuels

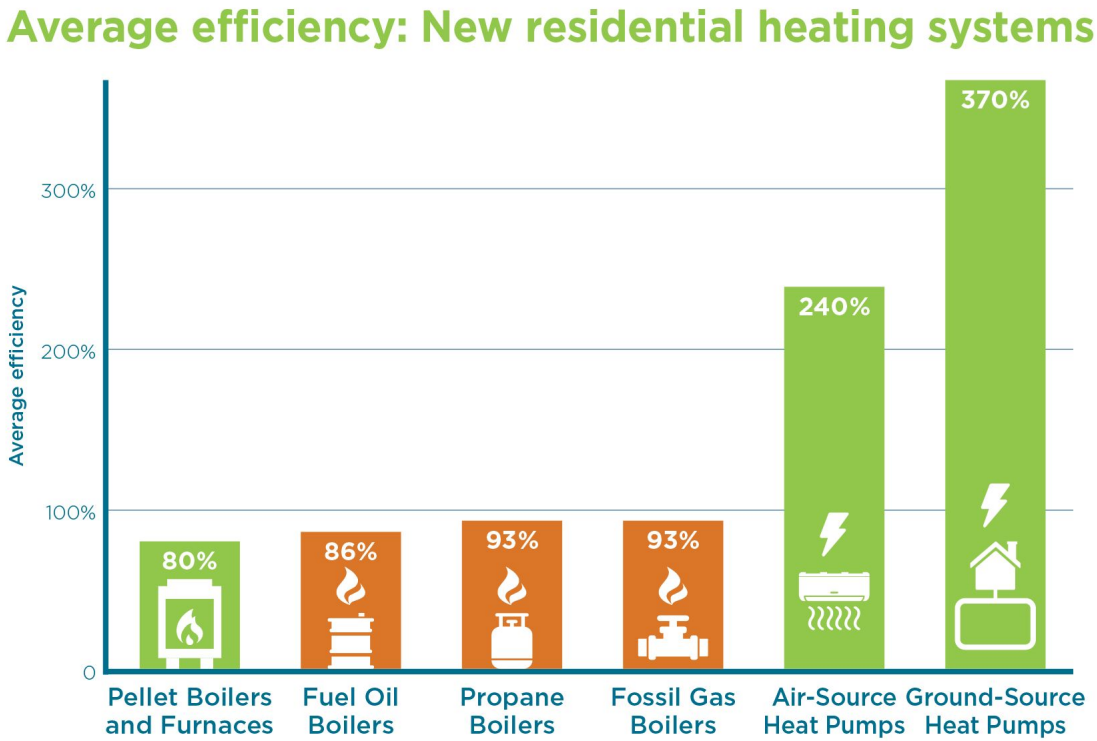
Heatpump, Heatpump, Heatpump

How much heat

Could a heatpump heat

If a heatpump

Could pump heat



Sources: Pellet stoves, air-source heat pumps, and fuel oil, propane, and fossil gas boiler efficiencies: Vermont Public Utility Commission, TAG Tier III Annual Report, 2021. Ground-source heat pumps: US Energy Information Agency, "Updated Buildings Sector

ENERGY ACTION NETWORK

Incentives

Burlington Electric Department (BED) Rebates

- To switch from fossil fuels appliances to Electric
- To switch to more efficient electric appliances

~~**Inflation Reduction Act (IRA) Tax Credits**~~

- ~~Renewables, Heatpumps, insulation, electrical upgrades, EVs~~

~~**Inflation Reduction Act (IRA) Electrification Rebates for Low/Moderate Income (LMI)**~~

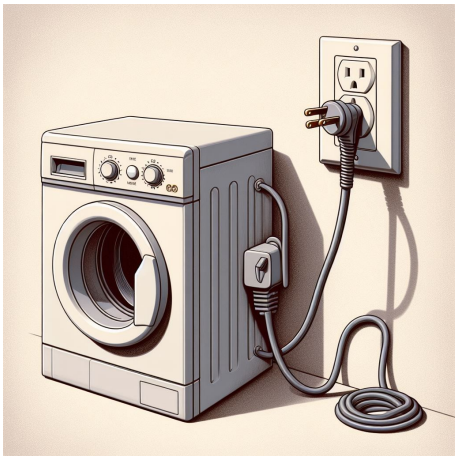
- ~~VT gets $58,555,020 to dole out~~
- ~~Not available yet! Still working out procedures~~

Dryer

Electric Dryer

- If you already have one your already done!
- If you are replacing a gas dryer
  - Purchase cost is the same as a gas dryer
  - Need an electrician to install a 240V outlet
  - Could trigger need for an electrical service upgrade

- No Incentives



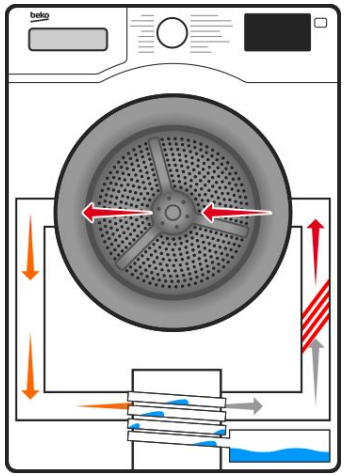
Dryer

Clothesline

- By far the cheapest option
- Takes some more time
- Need space inside in the winter

- No Incentives

Dryer



Heatpump dryer

- Looks and feels like any other dryer
  - Works like a dehumidifier
- Many can plug into standard 120V outlet
- No vent needed
- Often come as washer/dryer combo
- Has condensate that needs to be emptied
- Takes longer to dry

Makes it a great option for apartments

Let's talk about the $

- Uses ~40% less electricity than conventional electric dryer
- Likely don't need any electric upgrades
- $400 Rebate from BED
- ~~$860 LMI Incentive from IRA - Still pending~~
- Costs twice as much as electric or gas dryers
  - But BED rebate gets us back down to striking range

BED
- $200 - Hybrid Heatpump
- $400 - Full Heatpump

IRA
- ~~*up to $860 LMI Incentive from IRA~~

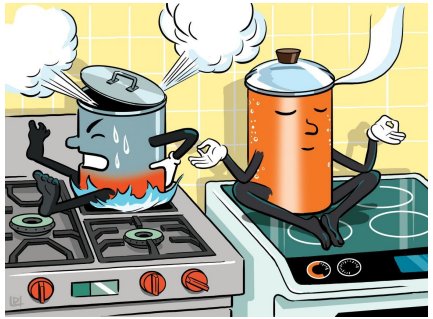
Stove

Electric Stove

- If you already have one your already done!
- If you are replacing a gas stove
  - Purchase cost is the same as a gas stove
    - Starts ~$500
  - No CO emissions into your home
  - Need an electrician to install a 240V outlet
  - Could trigger need for an electrical service upgrade

- No Incentives

Stove



Induction Stove

- Knocks the socks off gas and tradition electric
  - Cooks faster
  - More responsive
  - Can set to lower temperatures
  - Even heat
  - Easy to clean
  - Safer
- If you are replacing a gas stove
  - Costs twice as much as electric or gas stove
  - No CO emissions into your home
  - Need an electrician to install a 240V outlet
  - Could trigger need for an electrical service upgrade
  - Requires the use of steel or iron pots
    - If a magnet sticks to the bottom they work

Because surface never gets super hot you can clean spills while still cooking

BED

- **$200**

IRA

- ~~*up to $840 rebate for LMI~~

Stove

Induction Hot Plate

- Inexpensive $60-$200
- Works on 120V outlet
- Can supplement use of existing stove
- Portable, can use in other locations

- No Incentives

Stove

Other ways to Cook without fossil fuels

Can usually find one for free when college students leave, or for cheap at a reuse store

- Microwaves
  - super efficient!
- Electric Kettles
  - Fastest way to heat up water! (https://www.youtube.com/watch?v=RpoXFk-ixZc)
- Toasters
- Toaster Ovens
  - more efficient/faster than heating up a full size oven
- Air Fryers
- Crock Pots
- Rice Cookers
- Bread Machines

- No Incentives

Hot Water Heater

Types of Electric Hot Water Heaters

- Resistive
  - Cheap to buy, expensive to operate, fast reheat
  - Needs 240V circuit
- Hybrid (both resistive and heatpump)
  - More expensive to buy, less expensive to operate, fast reheat
  - Needs 240V circuit
  - Some dehumidification
- Heat Pump
  - More expensive to buy, cheap to operate, slowest to reheat
  - Can plug into 120V outlet
  - Some dehumidification

What determines how much hot water I have?

- Tank size
- Re-heat power
- Water temperature

Heatpumps heat water up slower than electric resistance or gas so to compensate a larger tanks size and/or setting the tank to a higher temperature is used to achieve the same amount of hot water.

-higher tank temperatures don't mean scalding tap temperatures. Modern Heat pump hot water heaters have mixing valves so that extra hot tank temperatures are mixed with cold water so tap temps are within expectations (if set correctly).

Heatpump hot water heaters BED

- **$500-$800 (depends on efficiency),**
- **+$400 for LMI**
- **+$300-$600 through contractor (depends on efficiency)**

~~IRA~~

- ~~***30% of cost tax credit ($2000 cap/yr) incentive from IRA**~~
- ~~***up to $1750 rebate LMI Incentive from IRA**~~

Lease/On Bill Financing

More Exciting than the Title and Image suggests!

- VGS leases Heatpump hot water heaters
  - Lease payments are added to the gas bill
  - VGS owns it and therefore if it breaks they fix it (and it is usually faster for them to come out to your house than a plumber)
  - Great option for landlords/renters
- VGS Also leasing Hybrid centrally ducted heatpumps
  - But only the ones that still have backup gas and aren't cold climate rated, aka don't do much :(
- BED on-bill financing for commercial customers
  - For ventilation, emergency swap outs, facada alterations. (limited fed covid money)
- VHFA - Weatherization Repayment Assistance Program (WRAP)
  - Pay on your utility bill
  - Can add in costs for heat pumps and hot water heating to a weatherization project

Furnace/Boiler

Types of Electric Heating Systems

- Resistive
  - Cheap to buy, expensive to operate, fast reheat
  - VT efficiency code prohibits resistance heat for most applications
- Hybrid (both resistive and heatpump)
  - More expensive to buy, less expensive to operate, fast reheat
  - Includes Air Conditioning
- Heat Pump
  - More expensive to buy, cheap to operate, slowest to reheat
  - Includes Air Conditioning

Electric Resistance Heaters

- Baseboard
  - Electrician installs
  - Except in special cases, not allowed by VT efficiency code
- Space heaters
  - Super cheap to buy $30-$100
  - Super expensive if heating whole house
  - Really great to heat one room

- No Incentives

Heatpumps

So Many different kinds!

- But the outside compressor probably looks something like this
- Cold climate models rated to work in -15F temps
- Can integrate electric resistance backup

Window Unit

- Like your window AC but can provide heat as well
  - Options for 120V (normal wall outlet) and 240V
  - $500-$3000
  - Great option for renters/trailers/smaller areas
  - Not super common yet. More and better options are coming to market
    - Efficiencies/capabilities can vary greatly model to model
- Typical style
  - Likely cheapest, somewhat loud
- Saddle style
  - More efficient and quiet. Also leaves more of your window for use
- “Portable” style
  - Works in windows the other two can’t fit in
  - Louder and less efficient (the double hose versions are more efficient than the single hose versions)

BED

- $100 (energy star most efficient)

~~IRA~~

- ~~*30% of cost tax credit ($2000 cap/yr) incentive from IRA~~
- ~~*up to $8000 rebate LMI Incentive from IRA~~

Mini Split

- Most common
- Most efficient
- Typically just one room but can do multiple rooms as well
- Don’t work well with small rooms (<10’x10’)
- The one most contractors are used to

BED

- **$1350-$5450 (depends on tons)**
- **+$500 for LMI**
- **+$1000-$2000 through contractor (depends on tons)**

IRA

- ~~*30% of cost tax credit ($2000 cap/yr) incentive from IRA~~
- ~~*up to $8000 rebate LMI Incentive from IRA~~

Furnace Replacement (Centrally ducted)

- Straight swap in replacement for a gas furnace
- Fewer experienced contractors
- Existing ducts may need to be upsized

BED

- **$1250-$6250 (depending on efficiency)**
- **+$400 for LMI**
- **+$1000-$2000 through contractor (depending on efficiency)**

IRA

- ~~*30% of cost tax credit ($2000 cap/yr) incentive from IRA~~
- ~~*up to $8000 rebate LMI Incentive from IRA~~

Old Furnace Replaced With Heatpump Heat Exchanger

Boiler Replacement

(Hydronic - baseboard or radiant floor)

- swap in for a gas boiler
  - Likely need to swap out radiators as well
- Very few experienced contractors in VT
  - More common in UK and Australia

BED

- **$2000/ton**
- **+$400 for LMI**

IRA

- ~~***30% of cost tax credit ($2000 cap/yr) incentive from IRA**~~
- ~~***up to $8000 rebate LMI Incentive from IRA**~~

Questions

Resources/Thanks To

- **Burlington Electric Department**
  - https://www.burlingtonelectric.com/rebates
  - Brian
- **Rewiring America**
  - https://www.rewiringamerica.org/app/ira-calculator
  - Great compilation of the IRA incentives
- **Technology Connections Youtube**
  - https://www.youtube.com/watch?v=CVLLNjSLJTQ&t=2s
  - Great resource explaining how this technology works and its pros and cons
- **Mr. Electricity**
  - https://michaelbluejay.com/electricity/
  - Outdated but awesome website explaining how you can save on utility bills
- **Energy Action Network**
  - https://eanvt.org/annual-report/
  - Incredible organization that, among other things, tracks VT's progress in reducing GHG emissions

Fossil Fuel Free Pledge

I, the undersigned, pledge that I will no longer purchase

Fossil Fuel Dependent Equipment

(appliances, heating systems, vehicles, etc)

I pledge that I will be **proactive** in identifying how I will transition away from my current fossil fuel burning equipment so that when the opportunity arises **I am prepared** and do not have any excuses to break my pledge. If I find that there is no possible way for me to not buy fossil fuel burning equipment I pledge to buy the most efficient option available and buy it used if possible.

https://www.fossilfuelfreeequipmentpledge.org/

Insulation

- Plastic windows
- Window Inserts
- curtains
- Latch windows
- Caulk window trim
- Spray foam holes
- Door seals
- Threshold sweep
- New windows
- New doors
- Basement insulation
- Attic insulation
- Wall insulation
- White roof

Heat flows 3 ways

1. Conduction
2. Convection
3. Radiation

Special Loans

- Efficiency Vermont - Home energy Loan
  - Low to no interest for low and moderate income households

NPA 2&3 march 2024 presentation
https://www.youtube.com/watch?v=xbRU01bRKvU&list=PLljLFn4BZd2N95y-kUzewx0ZN0Tf8rLo_&index=2