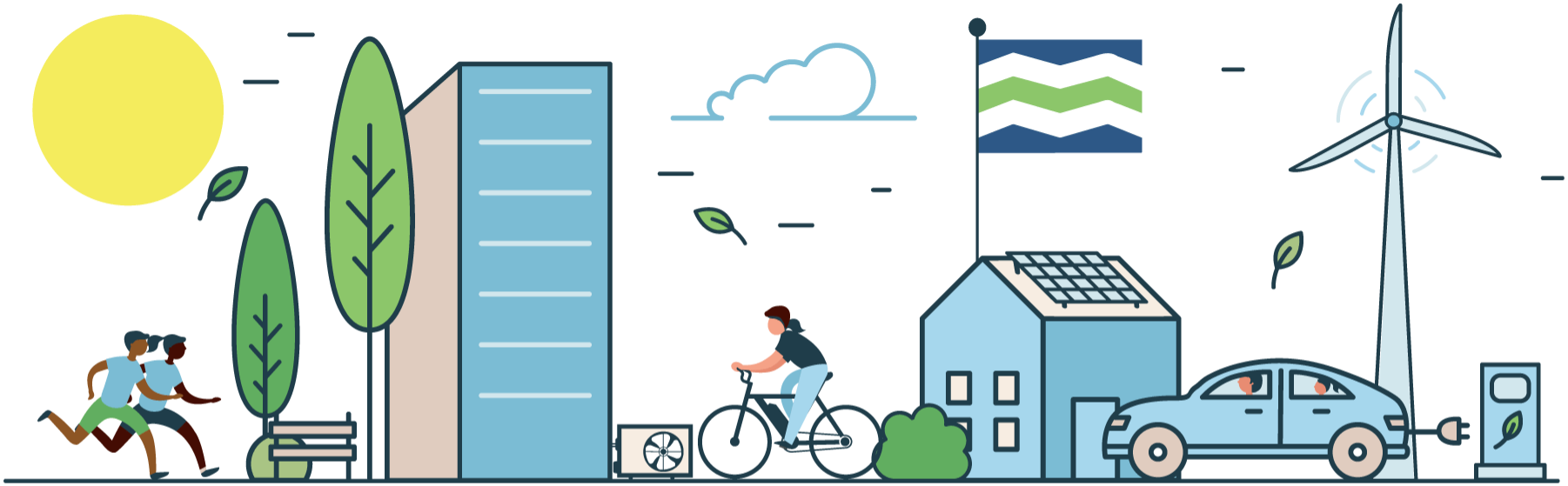

NET ZERO ENERGY

BURLINGTON VERMONT

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BURLINGTON VERMONT

About Burlington Electric Department (BED)

- Burlington's municipal electric utility
  - Public power since 1905
  - 118 employees, including the McNeil Generating Station
  - Third-largest electric utility in Vermont
- 21,000+ customers
  - 17,282 residential, 3,983 commercial and industrial
  - 5,500-6,000 residential accounts turn over each year
- Electricity facts:
  - Summer peak: ~65 MW; annual energy use: ~330,000 MWH
  - McNeil is the largest energy producer in Vermont with Vermont Yankee retirement
  - 100% of power from renewable generation as of 2014

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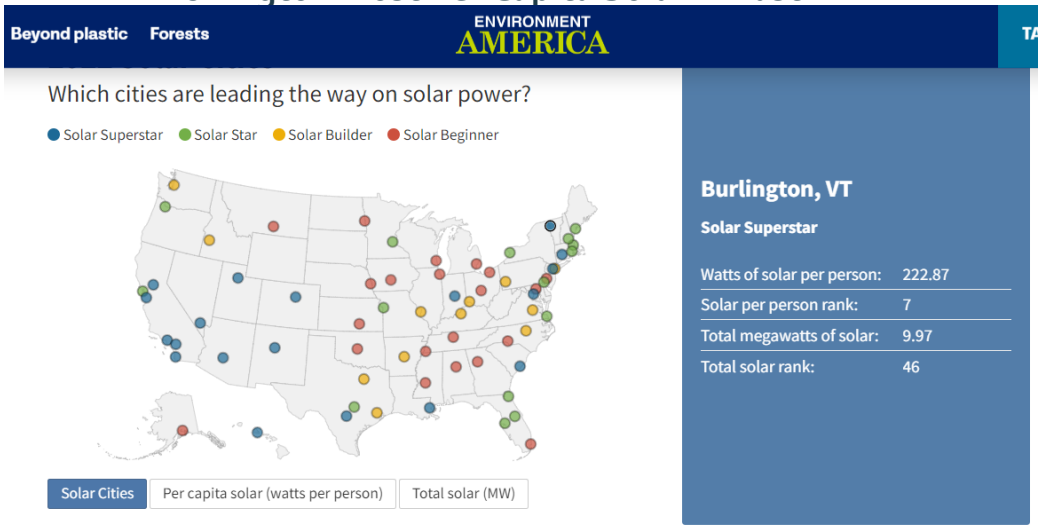
BURLINGTON Electric DEPARTMENT

CITY OF BURLINGTON VT ORGANIZED FEB. 21 1865

Burlington Most Per Capita Solar in East



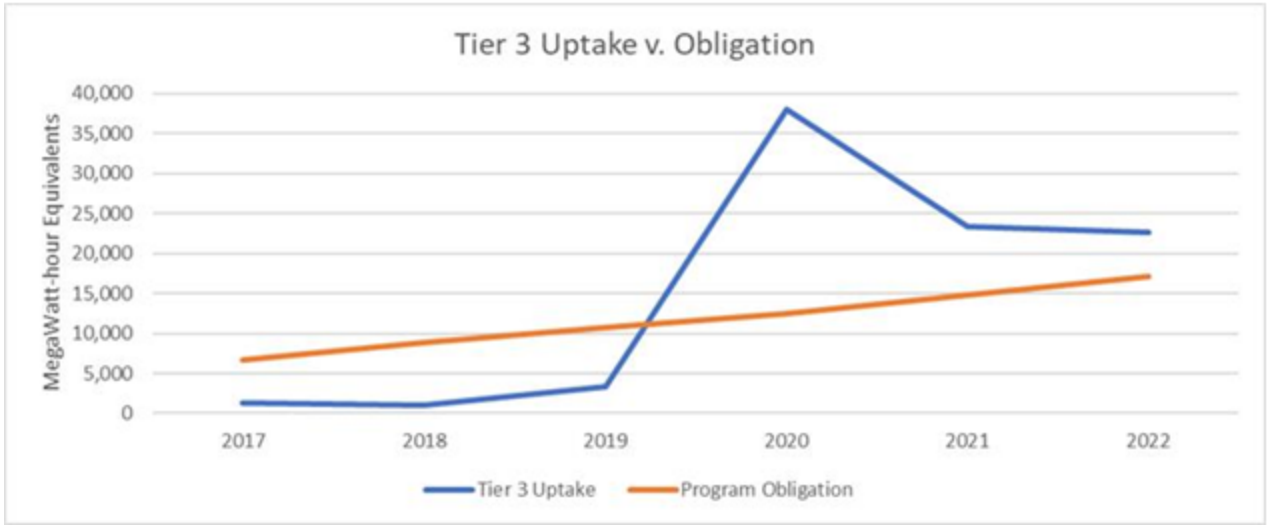
Top cities for solar per capita

1. Honolulu, HI
2. Las Vegas, NV
3. San Diego, CA
4. Albuquerque, NM
5. San Jose, CA
6. San Antonio, TX
7. Burlington, VT
8. New Orleans, LA
9. Phoenix, AZ
10. Washington, DC

Top cities for total solar

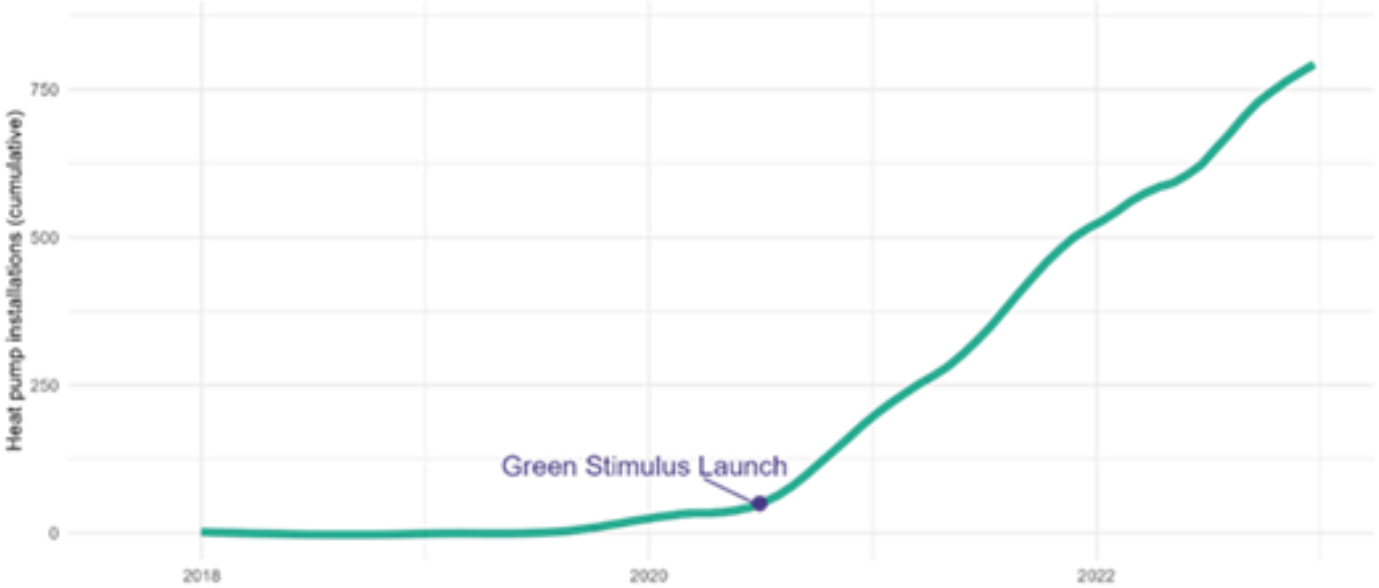
1. Los Angeles, CA
2. San Diego, CA
3. Las Vegas, NV
4. Honolulu, HI
5. San Antonio, TX
6. New York, NY
7. Phoenix, AZ
8. San Jose, CA
9. Albuquerque, NM
10. Washington, DC

https://environmentamerica.org/resources/shining-cities-2022-2/



BED's Tier 3 annual performance for program uptake vs. annual obligation. Note that 2022 Tier 3 Program Obligation and Uptake are not final. For the 2022 Tier 3 Uptake, more measures may be entered for 2022 and the claims must be submitted to the PUC and DPS for verification. The 2022 Program Obligation is based on twelve months of sales ending 11/30/2022 and will slightly adjust when actual December 2022 sales are available.

Tier 3 Residential Heat Pump Installations



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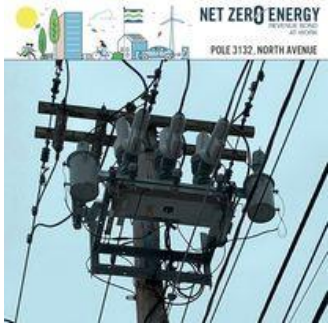
2030 Vision: Make Burlington a Net Zero Energy city by eliminating fossil fuel usage across electric, thermal, and ground transportation sectors. www.burlingtonelectric.com/nze.



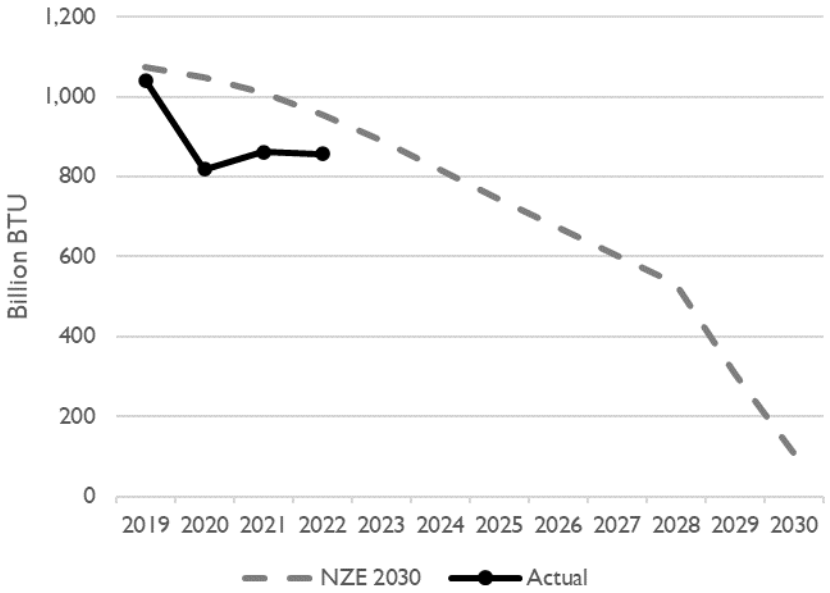
The Net Zero Energy Roadmap was adopted by the City Council in September 2019.Burlington's Net Zero Energy Roadmap is the most ambitious local climate change plan in the nation that BED is aware of, *recognized by the Smart Electric Power Alliance as the "first US Net-Zero 2030 plan."*

All Departments of the City play a role in supporting implementation. Synapse Energy Economics provides the Roadmap updates, draws from BED, VGS, DMV, and Vermont and Chittenden County travel data.

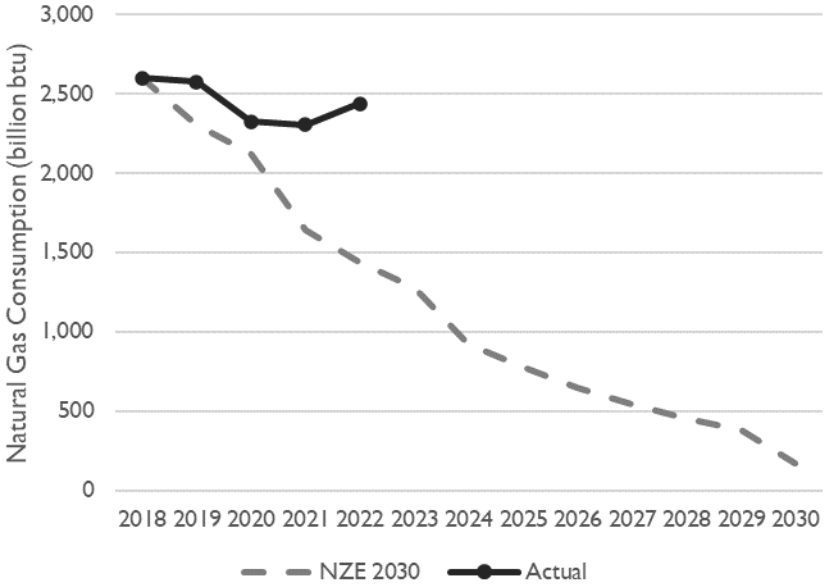
NET ZERO ENERGY
BURLINGTON VERMONT

Synapse Energy Economics Net Zero Energy Roadmap Update for 2023 – Commissioned by BED

Gasoline and Diesel Consumption – Ahead of Ambitious Roadmap Pace



Total natural gas consumption all sectors (not weather normalized)



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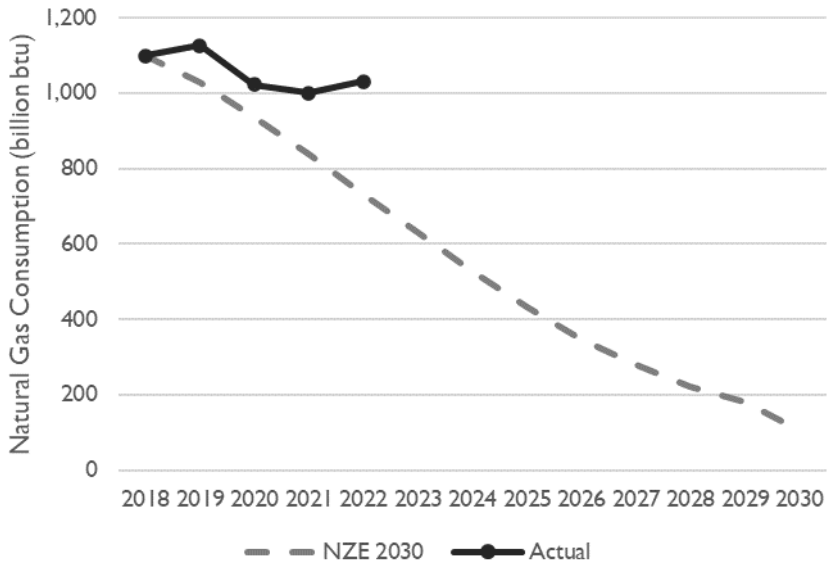
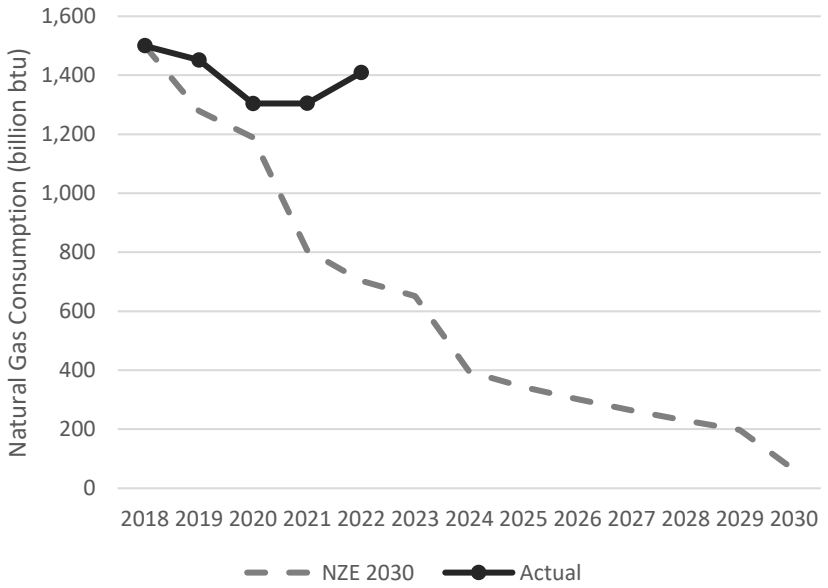
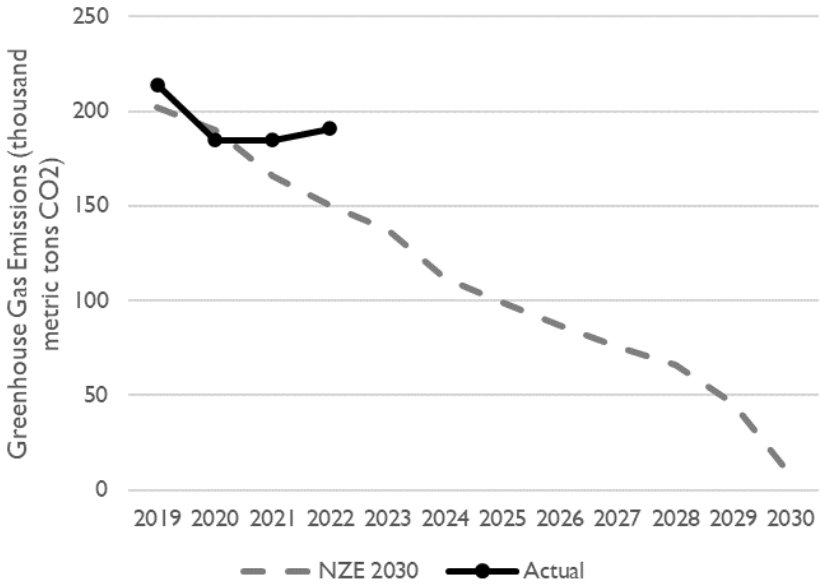
Residential Sector Natural Gas Use



Commercial Sector Natural Gas Use



GHG emissions:
Thermal and Ground Transportation 2019-2022



NET ZERO ENERGY
BURLINGTON VERMONT

Key Takeaways from 2022 Roadmap Update:

- ❑ Fossil Fuel Use and Greenhouse Gas Emissions in 2022 in Burlington experienced a mild rebound compared to pandemic-impacted 2020.
- ❑ Nationally, emissions in 2022 were up 1.3% compared to 2021, and emissions were up 6.5% in 2021, compared to 2020. Burlington 2022 emissions were up 3.2% compared to 2020.
- ❑ However, Burlington emissions were still down 11.2% (191 thousand metric tons) in 2022 compared to 2018 levels (215 thousand metric tons);

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Key Takeaways from 2022 Roadmap Update (continued):

- On positive side, Burlington remains ahead of Roadmap pace in ground transportation sector, with fuel consumption 10.6% lower than the NZE 2030 benchmark. This is due to continued reduce vehicles, and vehicle miles traveled coming out of the pandemic, along with increases in EV adoption;
- Natural gas, particularly commercial sector, drove much of the rebound in emissions. Factors could include weather, additional usage for building ventilation, and new construction units (pre-renewable heating ordinance) coming online;
- While we have made significant progress on strategic electrification, not yet on pace for the Roadmap goals for heat pumps and EVs;

Key Takeaways from 2022 Roadmap Update (continued):

- ❑ Building policies locally – rental weatherization, new construction renewable heating, and carbon pricing – will also begin to impact data in coming few years.
- ❑ District energy would make significant impact in reducing commercial sector fossil fuel use in buildings.
- ❑ Inflation Reduction Act incentives will provide a boost to EV and heat pump adoption.