

City of Newton Climate Action Plan Second Annual Status Report

Accomplishments and Next Steps
September 19, 2022





“The City of Newton is **resolutely dedicated** to achieving **carbon-neutrality by 2050** by ensuring that every department and every City board, commission, and program incorporate meaningful and substantive actions to “Use Less and Green the Rest” by optimizing energy efficiency and eliminating our use of fossil fuels while encouraging all residents and businesses to do the same.”

– *Mayor Ruthanne Fuller’s Statement on Climate Action, June 3, 2021*

The Team



City Departments

- Mayor's Office
- City Council
- Schools
- Climate & Sustainability
- Planning
- Inspectional Services
- Public Works
- Public Buildings
- Transportation
- Assessor's Office

Partners

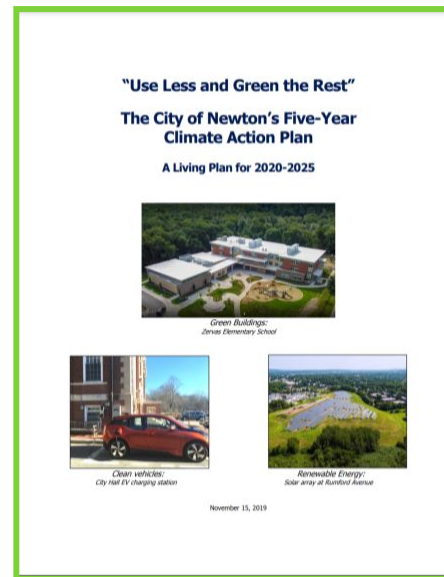
- Newton Citizens Commission on Energy
- Green Newton Building Standards Committee
- Green Newton
- HeatSmart Newton: New England Ductless and Muirfield Mechanical
- Home Performance Contractor Endless Energy
- EV Task Force
- 350 Mass-Newton Node
- CAP Implementation Strategy Group
- Mothers Out Front
- Volunteer Energy Coaches
- Eversource and National Grid
- ... and so many more!

The Plan



The City's 5-Year [Climate Action Plan \(CAP\)](#) outlines the steps the City will take from 2020-2025 to significantly reduce greenhouse gas emissions across the City to meet our goal of a carbon-neutral Newton by 2050.

- Adopted December 2019
- Set strategies, milestones, and metrics
- Categorized 60+ actions into 6 “Threads”
 - Administration
 - Clean/Renewable Energy
 - Green Transportation and Streetscapes
 - New Construction
 - Existing Buildings
 - Consumption and Disposal



A. Administrative Actions

Collaboration, Communication, Data



A. Administrative Actions



Focus Points: Collaboration, Communication

- **Building the Team**
 - Coordination with Eversource, National Grid, City, and NCCE, vetted installers, advocates
 - Coordinated legislative & outreach actions
 - First year of Energy Coach in the City
- **Communication**
 - Established Newton Climate Newsletter



Next Steps

- Expand use of **communications tools and strategies**
 - Newsletters
 - Website, social media
 - Reaching “beyond the choir” to communities not currently engaged
- Partner with **Village Bank** on micro-grant program to provide \$250-\$1000 to support local projects designed to reduce GHG emissions



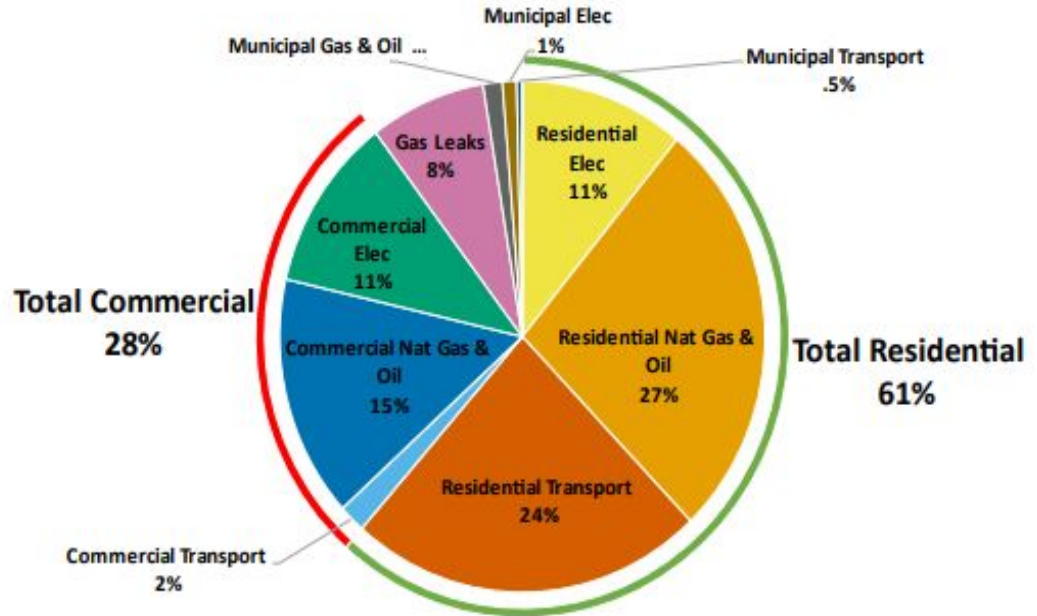
A. Administrative Actions

Focus Point: Data

- Updated the GHG inventory (NCCE)
- Tracking municipal energy data, residential projects, etc.

Next Steps:

- Develop an integrated system for **tracking and reporting** progress using a diversity of data sources



B. Clean Energy

Newton Power Choice, Municipal Energy Projects

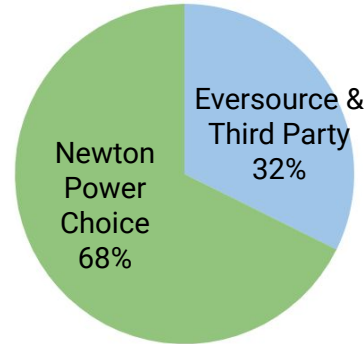


B. Clean Energy

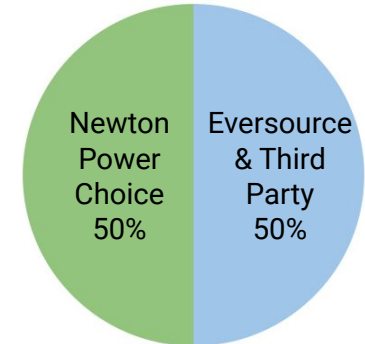
Focus Point: Newton Power Choice

- 82% MA Class I RECS as default; highest of any municipality in the State (expires Jan. 2024)
- Participation:
 - 23,350 (68%) Newton households
 - 2,300 (50%) commercial customers
- Lower rates than Eversource basic service for all of 2022
- **Next Steps:** Publish RFP for third contract in late 2023

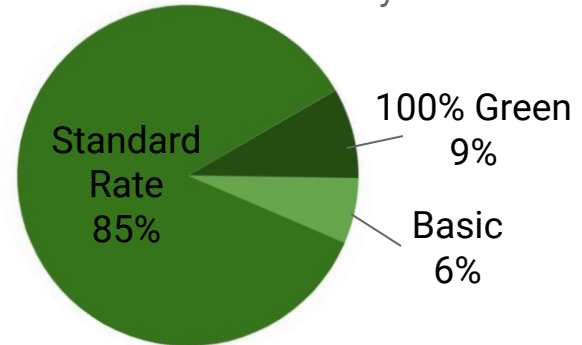
Residential Accounts



Commercial Accounts



NPC Residential Accounts by rate



B. Clean Energy



Focus Point: Municipal Energy Projects

- 18 total solar projects online =
5 million kWh/yr (equivalent to 25% City's total electric use)
- 6 of 17 Solar Phase 3 locations built (7 in progress)
- City REC Contract
 - RECs for 10% of our electricity use
 - Expires Nov. 2024

Next Steps:

- Complete the construction of 7 Phase 3 solar projects
- New REC contract for City accounts



B. Clean Energy



Next Steps: Municipal Energy Projects

- Continue to implement Solar Phase 3 with Ameresco undertaking 7 projects:
 - Cabot School rooftop
 - Angier School rooftop
 - Wheeler Road canopy
 - Brown Middle School canopy
 - Memorial Spaulding canopy
 - Ed Center canopy
 - Pleasant St. parking lot canopy
- Solar on the Community Farm barn
- Discuss City's next REC contract



C. Green Transportation & Streetscapes

Infrastructure, Moving Around



C. Green Transportation & Streetscapes



Focus Point: Infrastructure

- Bike Infrastructure
 - 16 Bluebikes stations
 - 3 Park & Pedal stations
 - Beacon and Parker Street bike lanes
 - 2-way Carriageway (Complete)
 - Bike racks in village centers and at schools
- Complete Street Design Projects
 - Albemarle Traffic Calming and Bike Lane (Installation 2023)
 - Carriageway redesign (Construction 2023)
 - Washington Street Redesign (Design begins Fall 2022)
- EV charging stations
 - 8 new stations, 19 total stations
- Street and Park trees
 - Planted over 900 new trees
 - Increased frequency of young tree watering



C. Green Transportation & Streetscapes



Focus Point: Moving Around

- **NewMo:** ~275 shared rides per day in hybrid vehicles. More than 1250 trips per week. Transitioning to EV fleet beginning 2022
- **Electrifying the City Fleet:** All non-emergency sedans are EVs (36 vehicles)
- **Encouraging private adoption of EVs and chargers:** Via 4 Our Future, requirement in new parking lot construction



C. Green Transportation & Streetscapes



Next Steps

- Install **more EV chargers** in public parking lots
- Continue to explore **electric school bus** options
- Advance **bike and complete streets** projects
- **Electrify NewMo fleet and expand NewMo**
- Promote Eversource **Make Ready Program to private parking lot owners**
- Continue **tree planting** efforts by planting 700 to 800 trees annually



D. New Construction/Major Renovations

Public & Private Buildings, Legislative Efforts



D. New Construction/Major Renovations



Focus Point: Projects Under Way

- **Public Buildings Projects** in design or construction:
 - NewCal
 - 150 Jackson Rd (Lincoln-Eliot Elementary School)
 - NECP
- Implementation of **Sustainable Development Design Requirements** (Ch. 30 §5.13)
 - 50 Jackson
 - Riverside
 - 1114 Beacon St
 - 2Life Opus
 - 967 Washington St
- Over 500 **Passive House** units permitted



D. New Construction/Major Renovations



Focus Point: Legislative Efforts

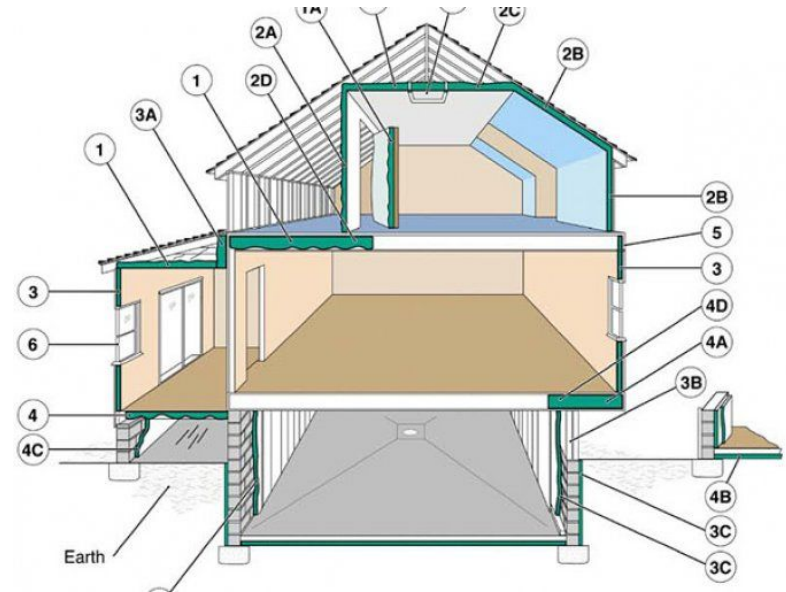
- **City**
 - **Electrification Home Rule Petition:** Passed!
 - Sustainable Design **improvements** in development
 - **Embodied Carbon** analysis
 - **EV charging** increase
 - Village center **zoning redesign** in development
- **State-level advocacy**

D. New Construction/Major Renovations



Next Steps

- Public Buildings continues to plan for **electric, efficient buildings**
 - Planned projects: Main library, Peirce, Franklin, Countryside, Horace Mann
- **Sustainable Development Design updates** to be finalized, presented to City Council
- **Stretch code**
 - New stretch code - goes into effect January 1, 2023
 - Specialized Opt-in stretch code - available for adoption December 2022
- 10-community **electrification pilot**
- **Rep. Khan's bill to require electrification** of all new construction and substantial renovations statewide



E. Existing Buildings

Municipal, Residential, and Commercial



E. Existing Buildings

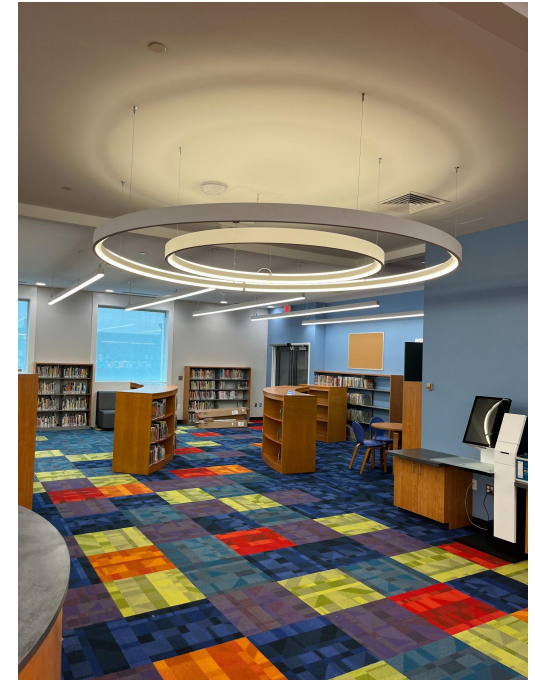


Focus Point: Municipal Buildings

- **Master planning** to identify opportunities for electrification
- **Heat Pumps**
 - Auburndale Library
 - HHS Dept
 - Oak Hill Addition
- **LED lighting**
 - Library children's room
 - South High School
 - NECP LED lighting
- **Phased Decarbonization**
 - Fire Station 1

Next Steps

- Analyze embodied carbon
- Affordable Housing Climate Resiliency Grant Program

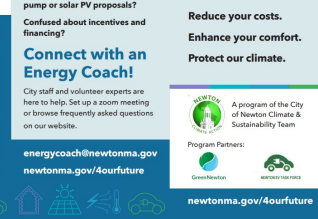
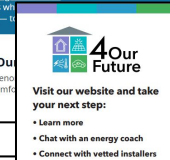
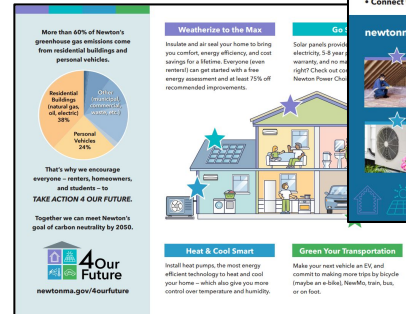
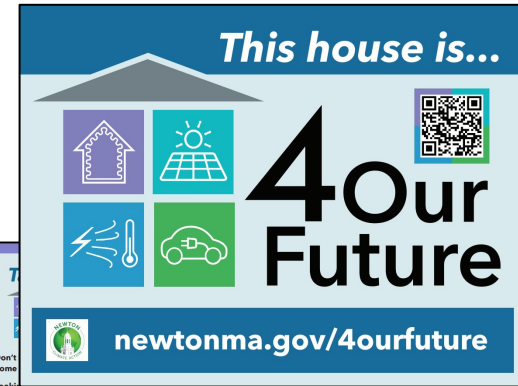
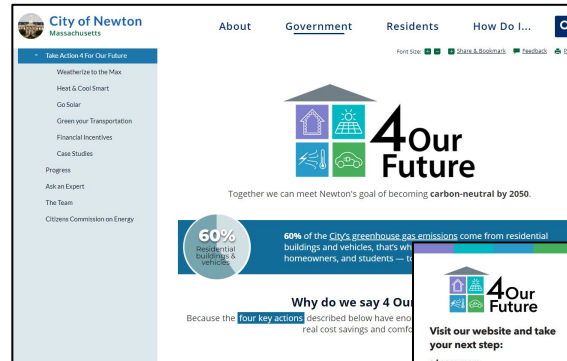


E. Existing Buildings



Focus Point: Residential buildings, outreach

- Established **4 Our Future Campaign**
 - Refining **strategy** to four structural, residential actions: weatherization, heat pumps, green transportation, solar
 - Development of **promotional materials**: flyers, website, yard signs
 - **Outreach events**: Webinars, tabling, presentations to community groups
- **Participation at DRTs** to encourage sustainability for special permit projects of all sizes



E. Existing Buildings



Focus Point: Residential Buildings, support

- **HeatSmart** contractors Muirfield Mechanical, New England Ductless
 - Partner since 2020
 - Education as well as installs



	Initial Interest	Site Visits	Proposals	Contracts Signed	Total Installs
NE Ductless	405	286	257	121	113
Muirfield	358	130	111	35	30
TOTAL	763	416	368	156	143

E. Existing Buildings




Focus Point: Residential Buildings, support

- Partner Home Performance Contractor **Endless Energy**
 - Contract signed this summer
 - Provides home energy assessments, weatherization, guidance on 4 Our Future actions

Newton 4 Our Future

A bold vision for climate action
From Endless Energy and the city of Newton

 **Endless Energy**
— Your Energy Efficiency Experts —



*Reduce your costs, improve your comfort, **save our climate!***

508.686.7960

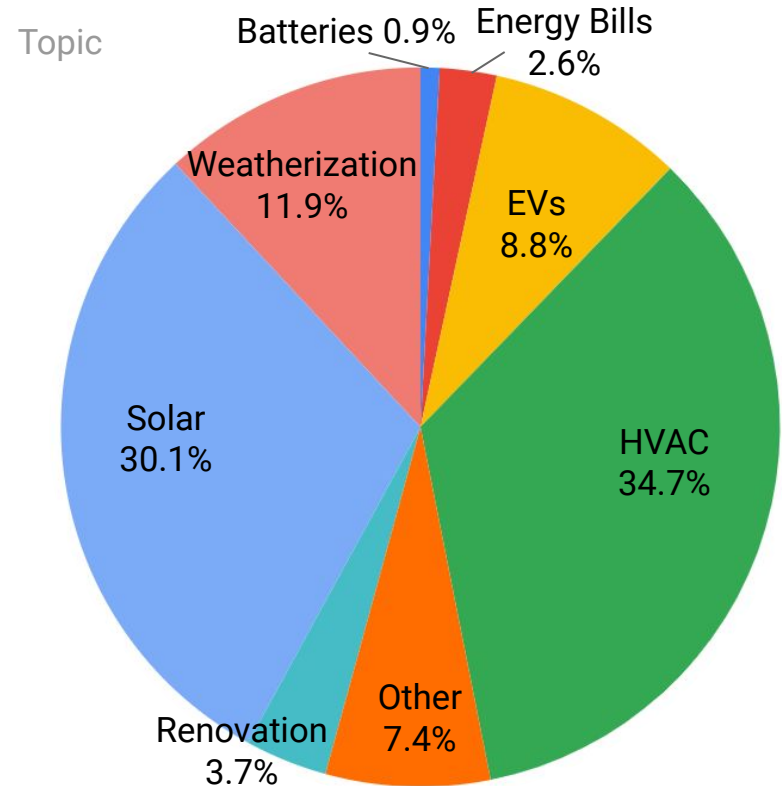
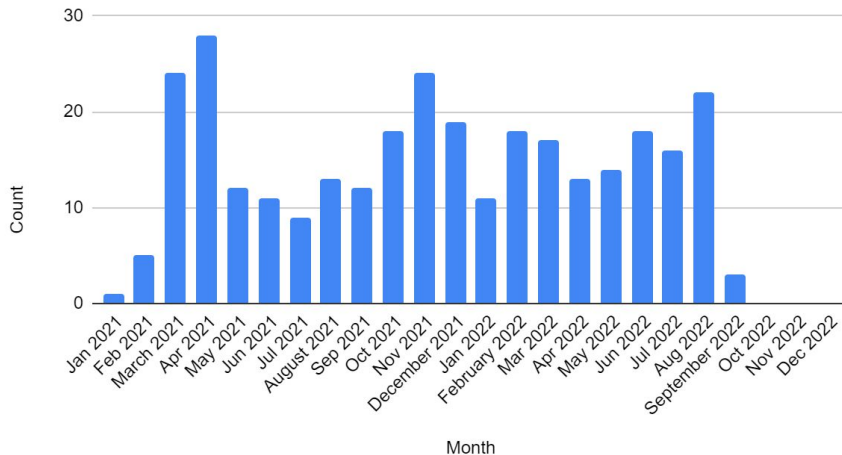
E. Existing Buildings



Focus Point: Residential Buildings, support

- **Energy Coaching:** support through residential projects
 - Energy Coach website, coaching sign up, and Q&A established
 - Over 300 coaching consults as of September 2022

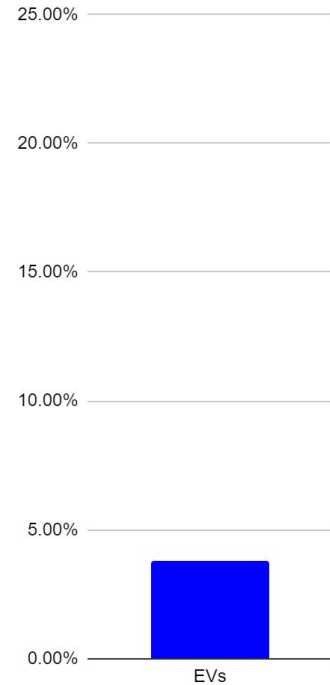
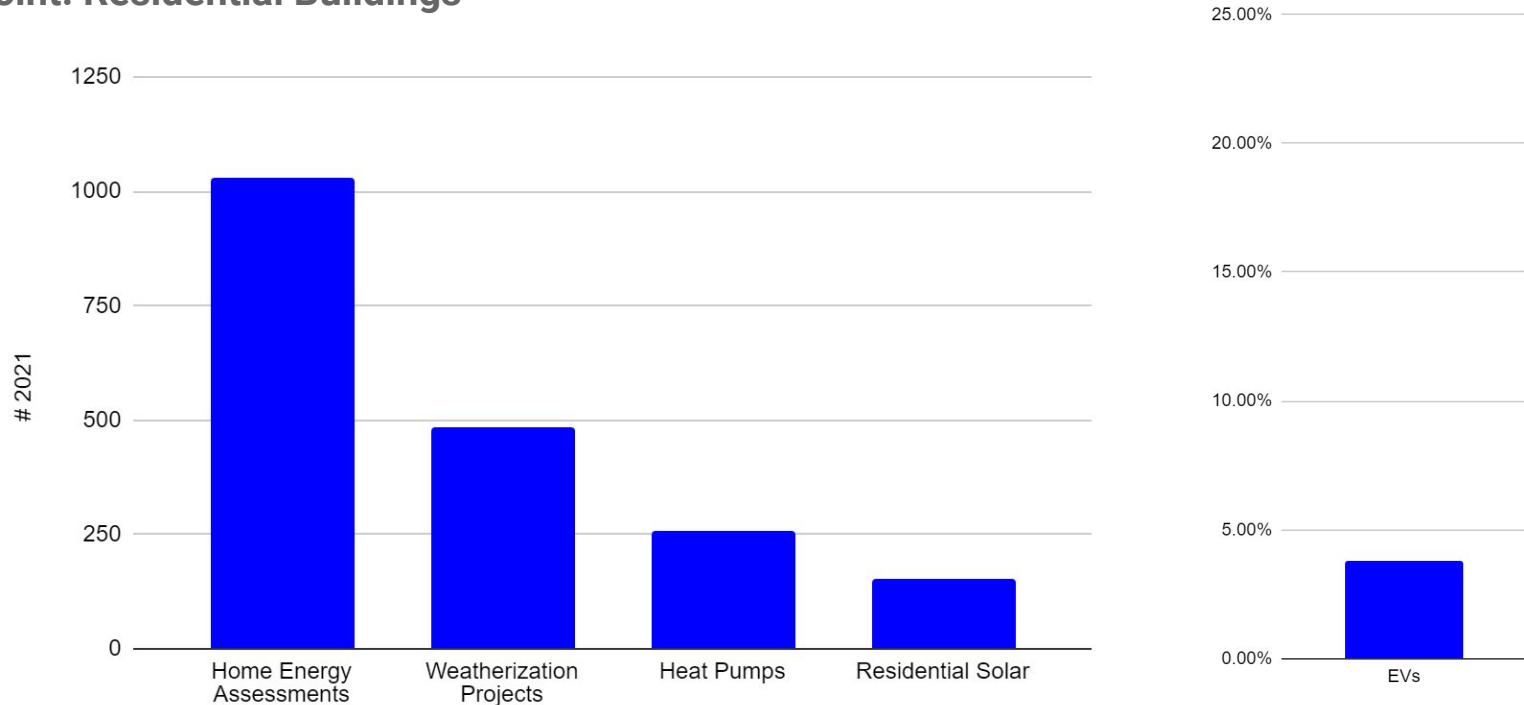
Coaching Consults per Month



E. Existing Buildings



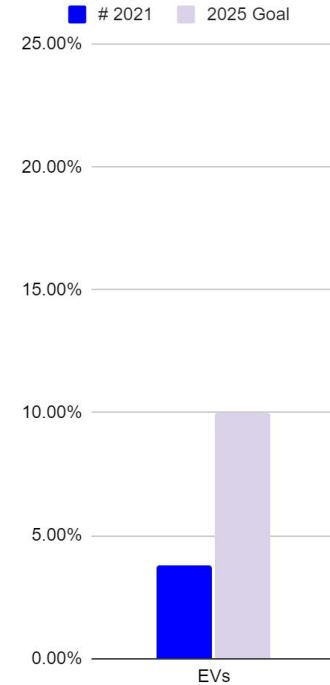
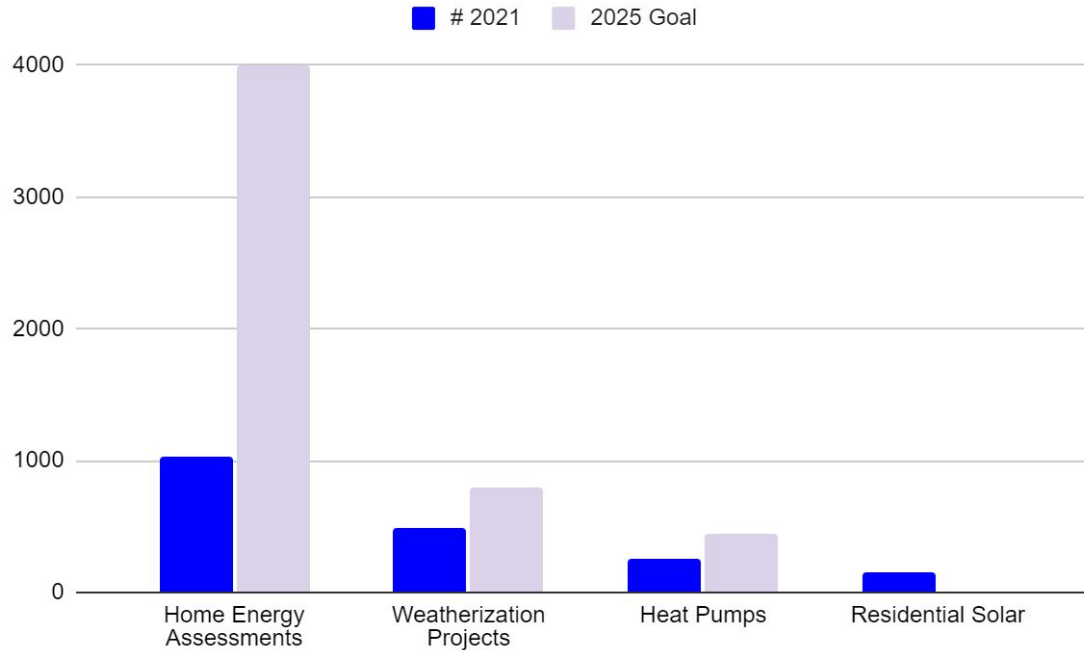
Focus Point: Residential Buildings



E. Existing Buildings



Focus Point: Residential Buildings



E. Existing Buildings



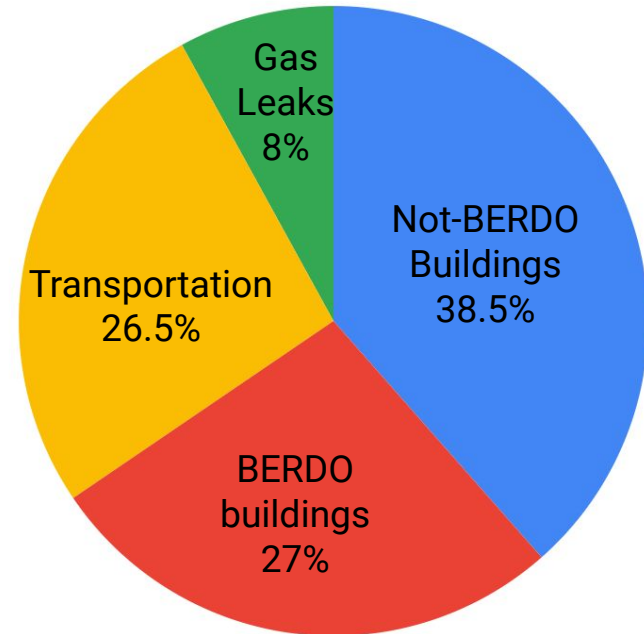
Focus Point: Commercial Buildings (BERDO)

- **BERDO**
 - City Council resolution **supporting the development of a BERDO** (April 19, 2022).
 - 400 buildings (205 owners) account for 27% of Newton's GHG.
 - 280 Commercial Bldgs and 120 Residential Bldgs
 - BERDO update to follow this presentation

Next Steps

- **BERDO:** Continue to work on technical issues, hold discussion sessions, draft ordinance language, share with City Council

Newton GHG Emissions



F. Consumption & Disposal

Waste Reduction



F. Consumption & Disposal



Focus Points: Waste Reduction

- **Black Earth Compost** curbside collection subscription program – 2,711 participating households
- **Organics drop-off** at Resource Recovery Center
- **Solid waste reduction** through bulky item fee
- **Recycling education** to reduce contamination
- **Increased textiles recovery** through curbside collection and drop-off boxes at Newton Public Schools



Next Steps

- **Mattress recycling** program coming October 2022
- Increase **food waste diversion**
- Long-term **planning**

NEWTON RECYCLING

Your source for information on how to reduce, reuse, and recycle in Newton, MA.

CITY OF NEWTON
DEPARTMENT OF PUBLIC WORKS
DIVISION OF SUSTAINABLE MATERIALS MANAGEMENT



Climate & City Council 2022-2023

Climate & Sustainability Team Initiatives

- BERDO
- Opt-in Stretch Building Code
- Embodied Carbon
- EV Charging
- Participate in 4 Our Future Outreach
- Support City advocacy efforts at the state level

Other Initiatives Relating to Climate

- Zoning Redesign
- MBTA Communities Law
- Building Projects
- Affordable Housing Climate Resiliency
- And more!

Thank you

