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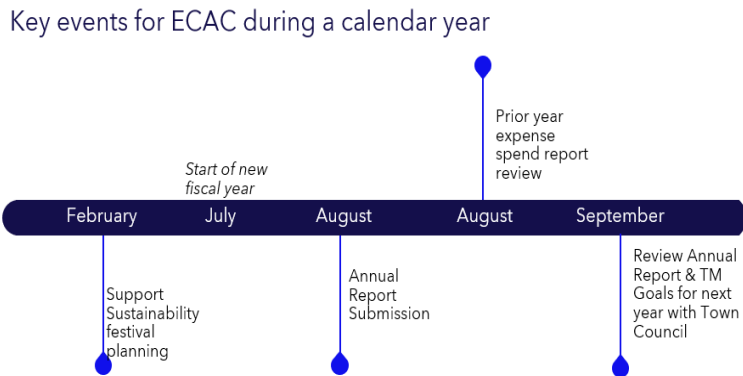
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1.0 SUMMARY

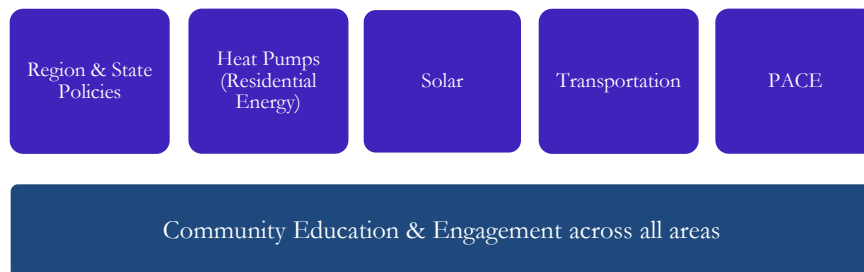
The Energy and Climate Action Committee (ECAC) is pleased to report on our work in fiscal year 2023. Starting this year, the Annual ECAC report will be submitted at the end of the town’s fiscal year to ensure there is adequate time to support the Council in the creation of town manager goals for the following year. We hope that ECAC can be seen as a resource to the Council to help ensure the climate lens is applied and to provide any research or support during the budgeting process. We welcome any questions from the Council about ECAC on the [Climate Action, Adaptation and Resilience Plan \(CAARP\)](#). Additionally, we are excited to support the town staff as needed to prioritize projects, form workgroups, and identify outreach and policy levers that will support implementation.

Below timeline shows key priorities for ECAC during a given calendar year to enable a consistent and regimented approach to improve collaboration with the town and the community.



The CAARP sets the stage for the implementation of climate actions in the near term and beyond, which will be necessary for the Town of Amherst to meet the ambitious targets adopted by the Town Council in 2019. In line with the implementation of climate actions outlined in the CAARP and Town Manager Goals, ECAC prioritized five focus areas in FY23 to drive to 25% reduction in GHG emissions below 2016 levels by 2025. Actions related to colleges and universities are not included in this report because they have their own climate action plan.

We have also strived to work cooperatively with the town and the community to raise climate awareness and put environmental justice at the forefront of our decisions. We are encouraged by the increased awareness and support in the community to address climate change. Below are the five focus areas:



As noted in our 2020 report, a major theme in the CAARP is our belief that the Town needs to take our climate future into account in all decisions, particularly focusing on environmental justice initiatives that serve Black, Indigenous, and People of Color, and low-income community members as we reduce greenhouse gas emissions and increase Amherst’s climate resilience. We emphasize this area as a continued

priority and would welcome collaboration with the council, town staff, and other committees and community groups to ensure we address and mitigate any effects on the vulnerable.

2.0 REGION & STATE POLICIES/TRENDS

Amherst has fulfilled or made progress on previous policy initiatives that are important in meeting our emissions reductions and that were innovations at the regional and even state level at the time they were adopted. Many sections of the CAARP include the role of the Town government to advocate for regional and state policies as a critical way to advance our progress toward our goals. For this reason, the ECAC has added to our own work a focus on "Region and State Policies." This was done to gain a wider perspective on our work, to create awareness and to level our own expectations. And because we believe Amherst should be at the forefront of climate decisions, we hold out the hope that our Town's actions can be a beacon for change and action in Western Massachusetts and the state.

- In 2018, we were early adopters of a Zero Energy Municipal Building Bylaw, which gained the attention of state and regional policy makers. In FY23, the Town developed the plan and residents approved the financing for the first municipal building since the passage of the bylaw.
- Also in 2018, a group of staff and residents began the research and development of a proposal to pursue a unique inter-municipal electricity aggregation. Under a Memorandum of Understanding (MOU) with neighboring communities the City of Northampton and the Town of Pelham, Amherst and its partner communities entered into an agreement with Mass Power Choice, Inc. to develop an inter-municipal community choice aggregation. The fruition of that work is noted this year with the development of the aggregation application to the Department of Public Utilities by the consultants, MassPowerChoice, including the launch of the [Valley Green Energy website](#).

In the past year, other municipalities have led the way in developing new policy innovations in FY23:

- Specialized Code – As of June 1st 2023, [17 municipalities](#) in Massachusetts have voted to adopt the more stringent Specialized Opt-in Code which will go into effect in those locations as early as January 2024 reducing building emissions. Building emissions remain the top contributor in Amherst.
- Northampton's new carbon-neutral goal and use of ARPA funds to establish an office of Climate Action and Project Administration with a new Director position.

What's needed from the Town?

- To realize the 2025 climate goals, the Town will need to accelerate the level of support for the Department of Sustainability. Hiring support staff and a grant writer to support programs will free the Director to plan and work across departments to increase the pace of the transition needed to lead residents and businesses to reduce their carbon emissions.
- An increased collaboration between the Town Council and ECAC through ECAC's participation in Town Council meetings. Examples can include presenting the ECAC annual report to the Town Council, presenting ECAC's recommendation for Town Manager goals, or educating the Town Council on various topics.
- As quickly as possible, adopt the Specialized code for a July 2024 start.
- Work with our state legislators to lobby the Department of Public Utilities to speedily approve the Valley Green Energy aggregation.
- Leverage IRA funds for municipal projects.
- Adoption of New Climate Bank to fund building retrofits in affordable housing projects.

3.0 SECTOR – HEAT PUMPS

Accomplishments:

This year the ECAC launched an education campaign to alert the community about incentives and rebates for energy efficiency and decarbonization in residences, including heat-pump installation. This included a public viewing of “[Heat Pumps: What, Where, and How Much](#)” by the Green Energy Consumers Alliance and Abode Energy Services, and culminated in a [heat pump Q&A panel](#) featuring a local expert and ECAC members. The latter event attracted 20 participants indicating clear community interest in this topic. Both topics have over 125 views on YouTube.

What’s needed from the Town?

Buildings are the biggest contributors of carbon emissions in Amherst and must remain a top priority. Our ask is to provide funding for projects related to reducing emissions in residential buildings. With guidance from ECAC, the town is preparing an RFP for a heat-pump conversion program that we hope to see in place in the next calendar year.

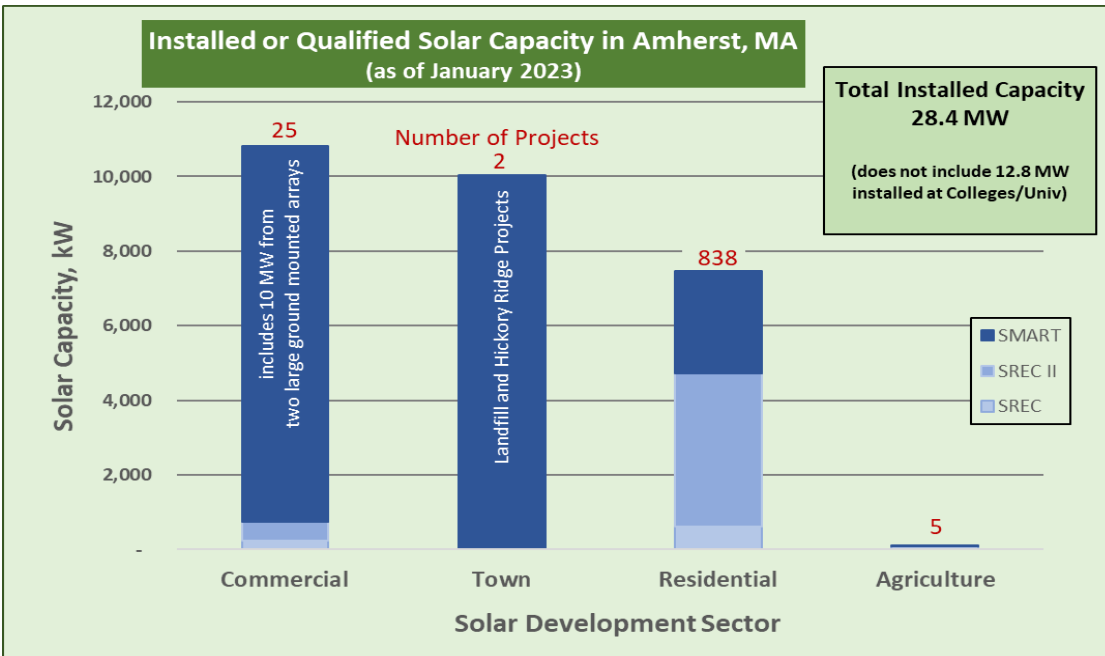
4.0 SECTOR – SOLAR

Accomplishments:

- The town successfully led the construction of a solar landfill project located at the North Landfill (740 Belchertown Road) that went on-line in August. Solar generated from this 4 megawatt (MW) installation will address over 50% of the town’s municipal electricity usage.
- The town created the Solar Bylaw Working Group (SBWG) to help develop a solar bylaw for the town. ECAC participated in bi-weekly SBWG meetings to create a draft bylaw for the Town Manager and Town Council by Fall 2023.
- ECAC prepared a [memo](#) for the Town Manager, Town Council, and the SBWG to inform these groups on the potential scale for ground-mounted solar the town might want to accommodate by 2050 to provide reasonable contributions to the state projections for ground-mounted solar capacity needs.
- The town hired GZA Geotechnical, Inc. to conduct a community-wide solar assessment and get a pulse on solar installation interest in the community. This led to the creation of an interactive GIS mapping tool located on the town’s website that identifies the locations in town most likely suited for rooftop or ground-mounted solar. (<[solar mapping link](#)>) ECAC provided support to the Town on the GZA Geotechnical assessment methodologies and evaluation of results. Results of the Solar Assessment Report can be found [here](#).

Metrics:

As of January 2023, and based on state Department of Energy Resources solar program data, the town of Amherst has installed or qualified 838 residential solar projects amounting to 7.4 MW, and 32 non-residential projects amounting to 21.0 MW. Colleges and universities are not included in this analysis because they have their own solar and climate plans.



Data collected from [DOER site](#). The analysis considered qualified projects from the RPS Solar Carve-out, RPS Solar Carve-out II, and Solar Massachusetts Renewable Target (SMART) programs.

What’s needed from the Town?

- Continued leadership with ECAC support to develop a strategic plan to install solar projects on town facilities, including schools and associated parking lots.
- Continued engagement with the community given a high level of interest.

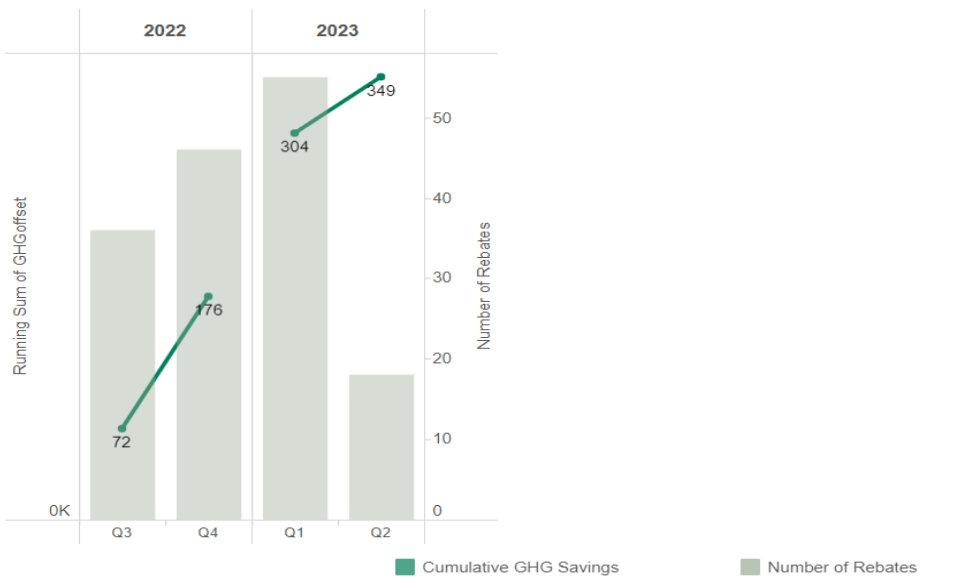
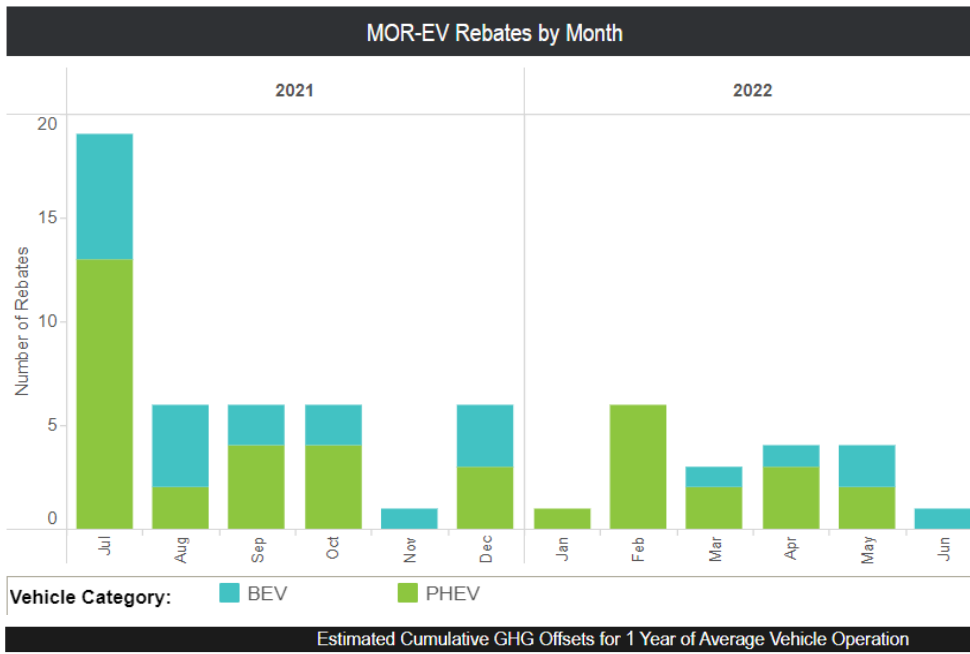
5.0 SECTOR – TRANSPORTATION

Accomplishments:

- Hosted two education series speakers: Erin Convery, transportation planning manager for the city of Durham, NC speaking on transport sustainability and equity and Devan DiLibero from the Green Energy Consumer’s Alliance presenting on Electric Vehicles 101. Electric Vehicles 101 session has over 120 views on YouTube.
- Presented current work and introduced the CAARP to the Transportation Advisory Committee (TAC) to initiate closer collaboration between the two town committees.
- ECAC facilitated community engagement to advocate for more electric buses. Funding was approved to purchase an additional electric bus.

Metrics:

- Amherst residents who have applied for EV rebates in FY23:



Data collected from [MOR-EV](#)

What's needed from the Town?

- Residential & Town fleet data – Data on number of electric and gas vehicles registered in the town including model and year built.
- Data on bus ridership.
- Establish timeline to transition to an all-electric town fleet.
- Install a DC Fast Charge in FY24.
- Re-establish an e-bike network.

6.0 SECTOR - PROPERTY ASSESSED CLEAN ENERGY (PACE)

PACE Massachusetts is an innovative program administered by the Massachusetts Development Finance Agency to help property owners finance energy improvements to their property. In August 2022, the legislature amended PACE to expand the availability of PACE financing. Mass Development is in the process of developing new eligibility guidelines that have delayed ECAC's efforts to coordinate with local business organizations to encourage them to sponsor information sessions for local owners and developers. ECAC has already reached out to some organizations and once Mass Development completes the development of its guidelines, ECAC intends to move forward expeditiously to facilitate the dissemination of information to local property owners and developers and to encourage their participation in PACE.

What's needed from the Town?

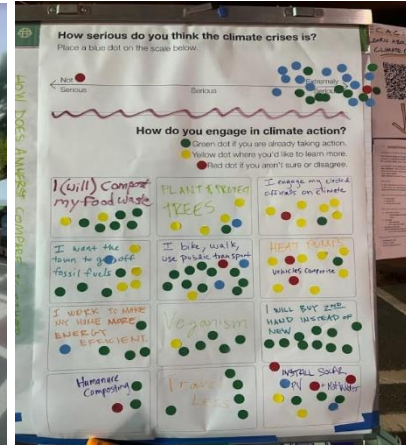
Robust participation in the PACE program by local property owners, developers and businesses will reduce emissions from buildings which, as noted earlier, remains one of ECAC's top priorities. To that end, we request the town find ways to encourage owners to utilize PACE to finance improvements designed to both reduce energy consumption, and to install renewable energy systems.

7.0 OTHER ACCOMPLISHMENTS

1. Rental Property Energy Efficiency: Since renters make up more than half of the resident population in Amherst, and renters typically pay their own utility bills but have little to no influence on the energy efficiency of their rental units, ECAC developed and proposed new energy efficiency requirements for the new rental property registration bylaw under development by the Town Council. Recommended proposals by ECAC were:
 - a. Collect additional energy efficiency related information on rental property buildings on the annual rental permit application (information not otherwise available).
 - b. Require rental property owners to get MassSave energy audits of their residential rental properties.
 - c. Require rental property owners of parcels that contain 5 or more dwelling units to report aggregated energy usage using the EPA Portfolio Manager platform.These proposals were dropped from the draft rental registration bylaw in Spring 2023. ECAC is exploring ways to add new provisions to the bylaw in the coming year.
2. ECAC wrote an [Op-Ed](#) which was published on March 31st in support of the proposed net-zero elementary school. Citizens of Amherst voted in favor to fund the creation of a new public elementary school on May 2nd.
3. The town partnered with Family Outreach of Amherst to secure grant funding through the Massachusetts Clean Energy Center (MassCEC). Funds are being utilized to engage select community members in the administration of a rental survey on rental building energy efficiency. Information gathered from the survey will be incorporated into a final report that will serve to provide baseline information on tenants' collective experiences of building efficiency.
4. ECAC sponsored outreach presentation "Weatherization and Insulation Wednesday" on December 7th, 2022.

8.0 COMMUNITY ENGAGEMENT

- ECAC initiated an education series to help educate the community:
<https://www.youtube.com/playlist?list=PLcnmFtV6BPFpPoW4CtaX0t-r2-Xz40th>
- Block Party Sept 15th, 2022



- Sustainability Festival, April 22nd, 2023



- GZA Geotechnical, Inc conducted community outreach to gather information on residential opinion on solar development resulting in responses from over 500 community members.
- The Fort River Farm Community Garden located in the Fort River Farm Conservation Area was established in collaboration with the Collaborative for Educational Services' Healthy Hampshire initiative. The Fort River Community Garden Circle comprised of community members, staff and representatives from Healthy Hampshire met regularly to prepare the soil, delineate plots, install infrastructure, organize and oversee its first season of gardening.

9.0 TOWN MANAGER GOAL INITIAL RECOMMENDATIONS FOR CALENDAR 2024

Achieving the climate goals outlined in the CAARP requires every town department, with some urgency, to consider how its activities impact the climate, and to find ways to mitigate, reduce, or reverse those impacts both within the town government and the larger community. In the next year, the ECAC looks forward to working with the town manager and department heads to continue this important work. In that spirit, we offer these initial recommendations, with the expectation of additional input and feedback as specific goals are developed.

Recommendations:

1. Adoption of the Specialized Building Code by Dec 2023 for implementation by July 2024.
2. Implement a PACE program for multifamily and business retrofits and new construction.
3. Advocate for prompt approval by the Department of Public Utilities and prepare for the implementation of Valley Green Energy aggregation.
4. Install an Electric Vehicle DC fast-charge station.
5. Establish a Residential Heat Pump program and establish a training program for community champions.
6. Fund energy efficiency retrofits in multi-family apartment complexes.
7. Re-establish an e-bike network.
8. Interview questions for town committee and other appointments should include questions addressing climate goals and justice.
9. Meet with each department head to discuss and review relevant climate impacts and, with help and input from ECAC members, discuss ways to mitigate, reduce, or reverse those impacts.

10.0 REFERENCES

1. [Climate Action, Adaptation and Resilience Plan \(CAARP\)](#)
2. [ECAC Education Series](#)
3. [GZA Solar Assessment Report](#)
4. GIS Mapping Data
5. [Installed solar in Amherst](#)
6. [Residents who have applied for EV rebates in FY23](#)