PROJECT UNDERSTANDING & APPROACH

Introduction

Concord has demonstrated its ambition to address climate change through greenhouse gas emissions and increasing resilience to unavoidable impacts. The 2020 Sustainable Concord: Climate Action and Resilience Plan provide a strong roadmap to achieve its 2050 goals. Town Meeting recommended to these goals in 2024 and recognized the growing urgency to achieve significant emissions reductions by declaring a climate emergency and setting interim goals for 2030 and 2040.

Concord shares the challenge of communities around the world and across the country to achieve emissions reductions at a scale and pace to meet the 2050 goal and increase resilience to climate impacts. It is not an easy task; over 16% of the time set to achieve the 2050 goals has passed. To put the town on the trajectory to achieve its emissions and resilience goals, it will be important to develop a focused implementation plan for the next five years that builds on the town's strengths, learns from its recent experiences, and develops the capacity to expand and accelerate actions. Weston & Sampson agrees with the scope of the Request for Proposals to focus on the next five years as a way to create momentum toward the 2050 goals.

Given the available time and budget, it will be critical to be hyper-focused on the tasks that will be key to developing a 5-year implementation plan. The objective of this project should be to create a 5-year plan that does not try to do everything but is strategic in the near term to enable Concord to make real progress at the needed pace and scale.

For the GHG reduction goal, decarbonization pathways are based on a framework of efficiency, electrification, and renewable energy. The proposed scope of the RFP is broad and long-term in perspective but also calls for a focus on the next five years. Weston & Sampson will discuss with the Town and the Climate Action Committee how best to structure work to make the most of the available time and budget. While our team is open to different approaches, it may make sense to focus on strategies and actions to achieve town-wide electrification in its building and vehicle stock. Electrification may be the determining factor in whether Concord achieves its goals. Concord needs to be on a pace to electrify approximately 20 percent of its buildings and vehicles every five years. It may also be important to frontload this pace as the easier buildings and vehicles are likely to convert first leaving the harder cases that will take more effort. This is not to say that efficiency and renewable energy will be ignored, but it may make sense to prioritize electrification. The strategies to electrify buildings and vehicles are understood, the challenge is creating effective policies and programs with sufficient technical and administrative capacity and financing as well as strong community and stakeholder support.

For climate resilience, Weston & Sampson would focus on developing a roadmap to address the risks of increasing temperatures and changes in precipitation patterns. The Town has actions in progress to address flooding and water resources

with the Integrated Water Resources Plan initiative and the recent MVP grant for the SUASCO Climate Collaborative. For the next five years, it may be that focusing on these initiatives should be the priority. To address the challenges of climate change impacts on heat vulnerability, biodiversity and landscape, and agriculture, Weston & Sampson will propose a process to bring our deep experience in community resilience planning into community and stakeholder engagement to identify effective actions for the next 5 years. For example, changes in temperature and precipitation patterns will affect forest ecosystems and various plant and wildlife species. There are organizations and state agencies working on these issues in Massachusetts. We could look at these organizations and agencies to provide guidance on appropriate local action.

Our approach to completing the scope of work is outlined by task below.

Scope of Work

PROJECT MANAGEMENT

Weston & Sampson will collaborate with the Town of Concord to manage this project effectively. Project Manager Robin Seidel, AIA, will establish clear lines of responsibility and communication, monitor individual task budgets and team member assignments, facilitate project meetings, interact with staff, and address project issues. Our key staff members will work collaboratively to drive the schedule and proactively maintain communication with project stakeholders.

We will hold thirty minute bi-weekly, virtual project meetings with town staff during active project periods to coordinate and collaborate on each major activity and project deliverable. More frequent progress updates can occur by email.

TASK 1: PROGRESS ASSESSMENT AND INITIAL PLANNING

Early project tasks will seek to understand the existing efforts Concord has undertaken, establish information gaps, and develop a robust stakeholder engagement plan.

Sub-task 1.1: Review 2020 CAP and Related Plans

Weston & Sampson will review relevant plans including the

- 2020 climate action and resilience plan,
- 2023 Hazard Mitigation Plan,
- 2018 GHG inventory,
- 2018 Envision Concord plan,
- 2017 CMLP Strategic Plan,
- 2019 MVP Planning Report,
- MAGIC Climate Resilience Report,

and other relevant reports the Town and the Climate Action Committee (CAC) may identify. Working with Town staff and the CAC, the team will also inventory existing polices, programs, and other actions that relate to the 2050 goals, as well as recent developments in state and federal policy and programs that influence the local context. For example, the Commonwealth's Large Building Energy Reporting Policy may provide useful data for buildings 20,000 square feet and larger. We will inventory the plans and reports for assumptions, actions, and other information that apply currently as well as where circumstances have changed. The plans and reports will be compared to the inventory of existing actions to assess progress toward the 2050 goals to date.

Subtask 1.2: Develop a Community and Stakeholder Engagement Plan

Small group discussions in Easthampton, MA

The success of the CAP Update will depend on being able to meaningfully involve the community and key stakeholders in the process. Attaining the 2050 goals requires residents, businesses, and institutions to join with the Town in the effort. Therefore, all parties need to be involved in creating the actions in order to build commitment to implementing the actions. Weston & Sampson prioritizes the empowerment of stakeholders, residents, and community organizations early in the process by:

Being diligent and intentional about the composition of stakeholder groups so that it reflects the community in demographics, neighborhoods, community knowledge, and more.

Defining project equity goals, success metrics, and evaluating whether equity goals were met by tracking information such as attendance at meetings and participation in surveys. Weston & Sampson recognizes that Concord has "hard to reach" segments of the community and utilizes appropriate equitable engagement modifiers such as translation and customized meeting times and locations to better engage these populations.

Identifying approaches to engage residents with the understanding that time and resources have been stressed by COVID-19 and actively working to overcome barriers to participation.

Understanding the community context and local initiatives through interactive engagement techniques focused on listening and collecting stories, ideas, and input from residents, businesses, and other stakeholders.

Avoiding "planning fatigue" by building on previous and ongoing efforts, leveraging local expertise, and empowering residents to continue considering climate action and resilience beyond the duration of the project.

We will work with town staff to design a collaborative engagement plan. We anticipate beginning this collaboration during one of our early regular check-in meetings to discuss previous successful engagement strategies that have been employed in Concord and propose additional options based on our experience. Then a draft engagement plan will be developed for the Town's approval.

TASK 2: INITIATE STAKEHOLDER ENGAGEMENT

Weston & Sampson will execute the agreed upon engagement plan, which is assumed to include the following (or equivalent alternatives) which will be distributed throughout others tasks:

- Eight (8) stakeholder interviews
- One (1) in-person and one (1) virtual meeting with town department staff
- Two (2) in-person meetings and two (2) virtual meetings with the CAC
- Two (2) community workshops, forums, or events which are held in-person and virtually at different times

(four events total). We have found that hybrid meetings present challenges for virtual attendees to fully engage and propose hosting the same meeting twice, offering more flexibility and opportunities to participate.

- An ArcGIS Experience page, Hub site, or dashboard hosted in Concord's ArcGIS environment for continued access during and beyond the project duration.
- Web content and/or social media post for advertising public events

TASK 3: ACTION IDENTIFICATION

Subtask 3.1: Evaluate 2020 Actions

The team will review the actions recommended by the 2020 plan and evaluate their status in terms of completion, relevance, and need for modification. The evaluation will take into consideration input from Town staff, the CAC, and stakeholders.

Subtask 3.2: Identify best, innovative, and emerging practices

Weston & Sampson has worked with numerous communities in Massachusetts to develop climate action plans that address both climate mitigation and resilience. As our firm operates in all states along the East Coast from Maine to Florida, we have also worked with many communities outside Massachusetts to develop climate action and/or resilience plans, urban forest master plans, extreme temperature risk analysis, and other related projects. Through this work we have developed a rich bank of effective climate strategies and actions. Team members also participate in several professional organizations representing practitioners where we learn about best practices across the US and abroad.

The team will develop a spreadsheet-based matrix to summarize possible actions. The matrix will include the high-level emission reduction potential, scale of adaptation potential, and co-benefits of each action. A process will be created to gather input on the potential actions from Town staff, the CAC, and the public. This is a

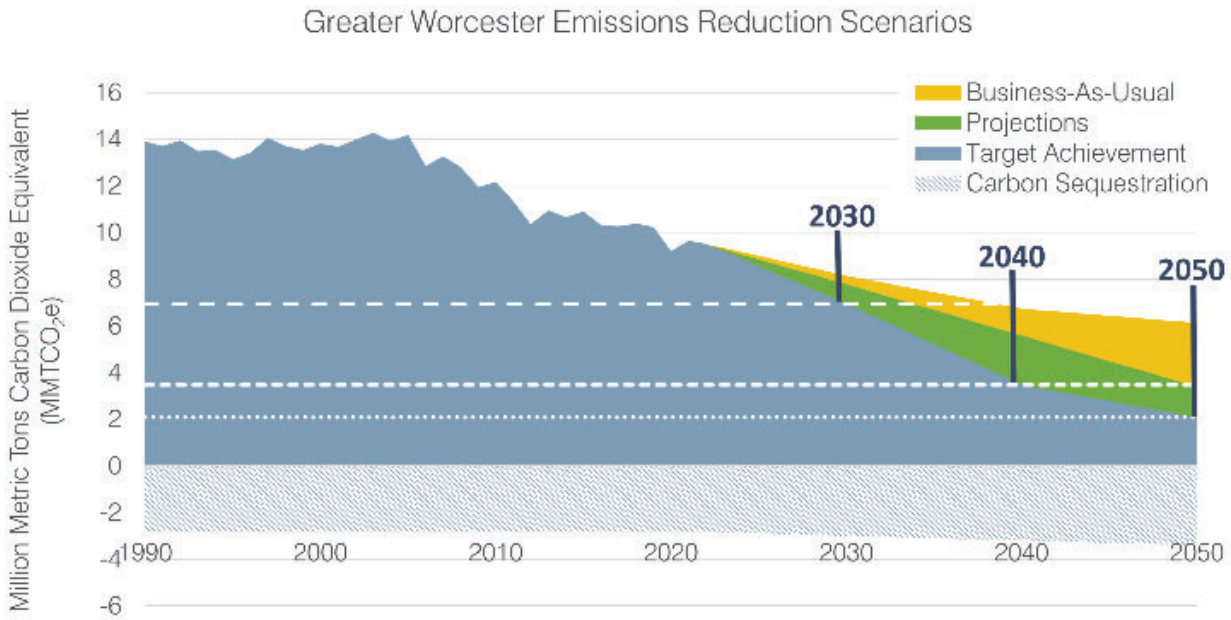
critical point for stakeholder input and can include interviews and a community workshop (offered in-person and virtually). Through the online platform created under Task 2, the team will create a means for interested community members who cannot attend meetings to learn about the project as it develops and provides a continuous method to collect input. ArcGIS platforms are some of Weston & Sampson's preferred online platforms due to their ease of use for Town staff and community members, if available. The online platform will host draft documents for review, information about upcoming engagement opportunities, and can include an embedded input form to gather feedback on draft actions or other information. The matrix will be updated to reflect Town, CAC, and community input.

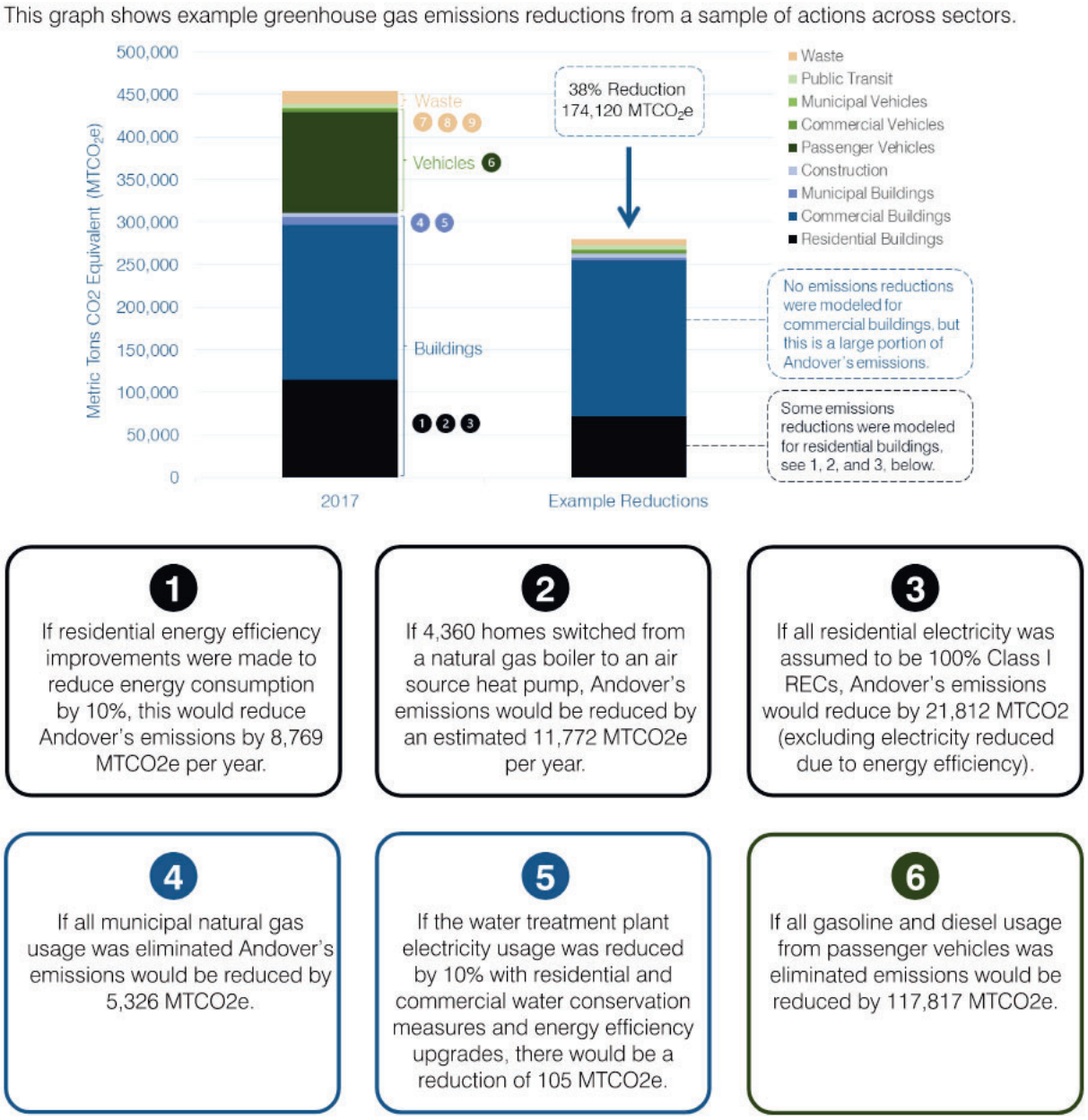
TASK 4: EMISSIONS REDUCTION AND ADAPTATION PLANNING

Subtask 4.1: Prioritize actions

The matrix developed during Task 3 will be revised to include sufficient detail for informing action prioritization for costs, benefits, implementation timelines, barriers, and tradeoffs. This may include high level ranges or broad categories which will be refined and further detailed during Subtask 4.2 and Task 5 after an initial prioritization process has been completed. In our experience, we have found that conducting a thorough emissions reduction analysis is best done for near-final priority actions to inform target development, especially given that the existing GHG inventory and previous emissions analyses are likely sufficient to gauge the scale of reductions for a given action.

Weston & Sampson will hold meetings with the CAC and Town staff to review and prioritize the actions. A community





Example of GHG calculations developed by W&S

workshop will also be held which will involve a participatory process for attendees to indicate their priorities. The online platform will also provide a means to enable the public to vote or rank and comment on the proposed actions. Using all the input, Weston & Sampson will further revise actions as needed and finalize the prioritization of the actions for final review of the Town and CAC.

Subtask 4.2 Carbon Valuation and Economic Analysis

Weston & Sampson will review past wedge analyses and other emissions and cost data provided by the Town to determine an

updated quantification process that is most valuable and informative for the 5-year period covered by this plan update and consider the longer-term progress toward net-zero goals and targets. From our work across the Greater Boston region, we are familiar with a variety of high-quality data sources and quantification approaches which we will leverage for this analysis.

Weston & Sampson strives to create resources for communities and committees which can be easily updated and modified as conditions change. We are currently working with MAPC to develop simple, spreadsheet-based tools to quantify emissions reductions using input data that is publicly available, or easily accessible to municipalities. Longer term emissions projection scenario development relies on a variety of factors like regional renewable energy generation, state and federal policy, etc. and can have high levels of uncertainty and quickly become outdated. Focusing on quantification of individual actions in terms that can be easily understood by the public may be more suitable for this plan update.

Emissions estimates can be coupled with carbon valuations to compare costs and benefits. Weston & Sampson will collaborate with the Town to determine and appropriate approach using best practices and local examples. For example, Boston and Cambridge are using $234 per metric ton as the alternative compliance payment under their building emission reduction ordinances (BERDO and BEUDO).

TASK 5: IMPLEMENTATION PLAN UPDATE

Subtask 5.1: Update and Add Action Implementation Blueprints

With the prioritized actions agreed upon by

Example Action details in Andover's Climate Action Plan developed by W&S

Town staff and the CAC, the Team will draft updates to the implementation blueprints which may be relevant from the previous plan and draft blueprints for new actions. The implementation blueprints will detail the

- key steps,
- costs to implement,
- responsible parties,
- key partners,
- financial resources needed,
- equity considerations, and
- co-benefits.

A draft implementation plan will be shared with the Town and CAC. This feedback process may be in the form of a shared, editable Microsoft Word file which can capture comments and in-line text edit suggestions from many people in a streamlined way.

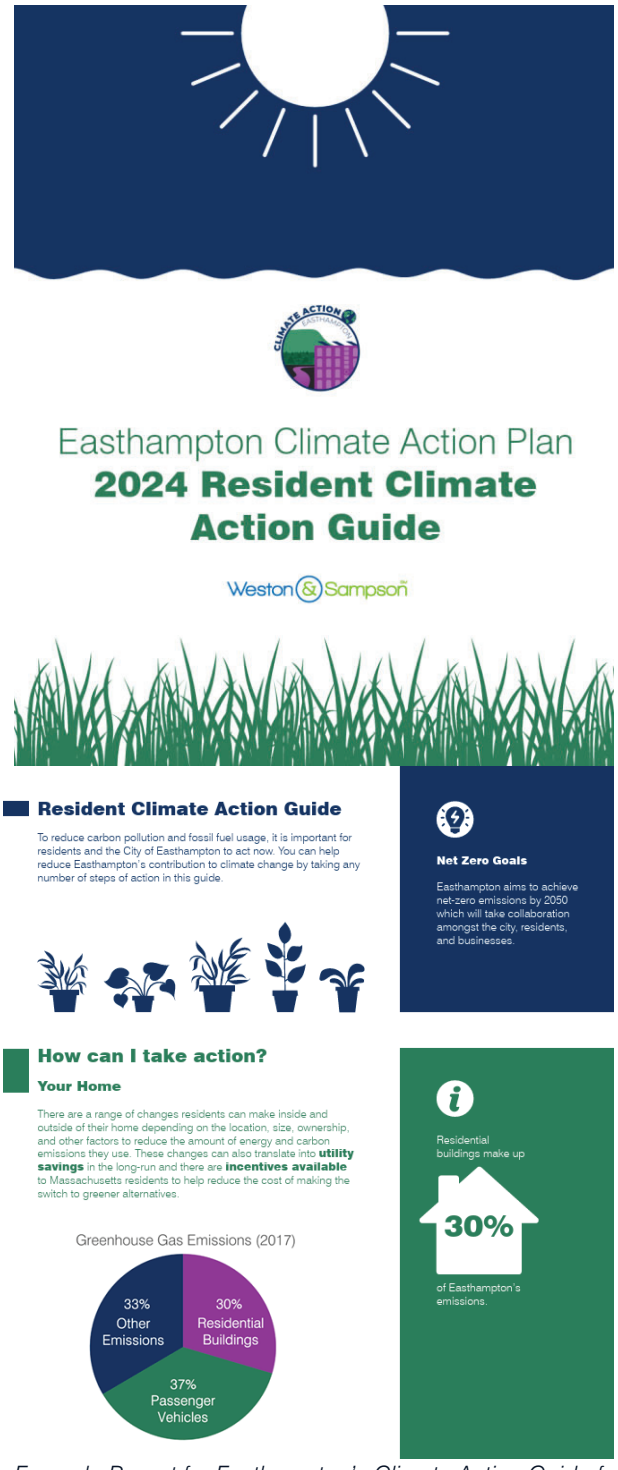
Subtask 5.2: Establish a Monitoring System

Weston & Sampson will design and set up a tool for monitoring and evaluating progress towards goals which enable ongoing community engagement. This can be done using the ArcGIS online platform, a tool Concord likely already has access to and is familiar with. Weston & Sampson will coordinate with Town staff and the CAC to understand what information should be included and what functionality may be most useful.

TASK 6: FINALIZE AND PRESENT UPDATED PLAN

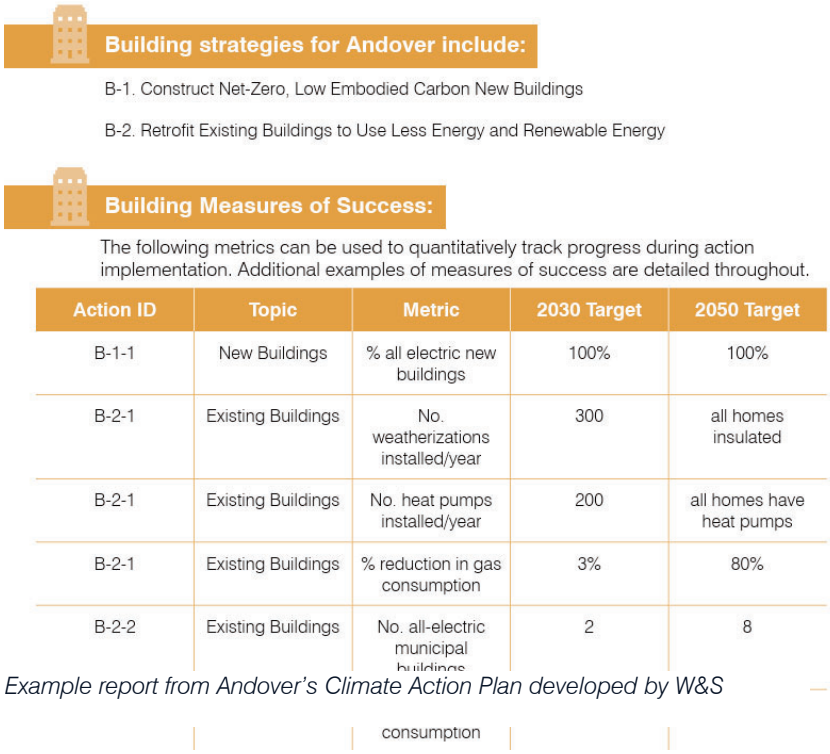
Weston & Sampson will compile work completed in previous tasks and draft a complete plan including:

- Details of community's climate challenges and opportunities
- Highlights and key data from Concord's GHG inventory
- Description of the planning process



Example Report for Easthampton's Climate Action Guide for Residents developed by W&S

- Description of Concord's goals and vision for addressing climate change



Building strategies for Andover include:

B-1. Construct Net-Zero, Low Embodied Carbon New Buildings

B-2. Retrofit Existing Buildings to Use Less Energy and Renewable Energy

Building Measures of Success:

The following metrics can be used to quantitatively track progress during action implementation. Additional examples of measures of success are detailed throughout.

Action ID	Topic	Metric	2030 Target	2050 Target
B-1-1	New Buildings	% all electric new buildings	100%	100%
B-2-1	Existing Buildings	No. weatherizations installed/year	300	all homes insulated
B-2-1	Existing Buildings	No. heat pumps installed/year	200	all homes have heat pumps
B-2-1	Existing Buildings	% reduction in gas consumption	3%	80%
B-2-2	Existing Buildings	No. all-electric municipal buildings	2	8

Example report from Andover's Climate Action Plan developed by W&S

- Analysis of climate vulnerabilities and GHG emission reduction potential
- Description of priority climate solutions
- Clear set of actions with implementation details and metrics to measure progress
- Community engagement strategies for implementing plan

The plan will be made consistently with other planning efforts. The draft plan will be shared with the CAC and Towns staff to gather input, possibly in the form of a shared, editable file. It will also be available online and shared more widely with stakeholders to gather comments in a survey format. Weston & Sampson will conduct two rounds of revision before designing the final plan. Our Visualization Specialist will design a plan which is consistent with existing branding and is visually accessible and pleasing.

Weston & Sampson will develop communication materials and update the online engagement platform to include the final documents. We will also support Town staff in presenting the final plan for approval and adoption by the Select Board.

DELIVERABES:

Weston & Sampson will prepare the following deliverables:

- Interim report on targets and 2050 net-zero goal
- Draft and Final Climate Action and Resilience Plan, including an Executive Summary. Up to two (2) drafts will be developed.
- Action development and prioritization matrix
- Plan summary in PowerPoint
- Web and social media content for project introduction, engagement opportunities, and key project points including action development, prioritization, draft and final plan.
- Progress tracking tool

As needed and practicable throughout the project, Weston & Sampson will also provide:

- Meeting facilitation, agendas, notes, and presentation materials
- GHG Reduction analysis and vulnerability data
- Bi-weekly progress updates by phone, with email updates more frequently, as needed