



Date: February 25, 2025

Honorable Mayor and Council Members:

Author and title: Erin Brewster, Sustainability Program Manager

Title: **Study Session on the Draft Existing Building Decarbonization Roadmap**

Jen Callaway, Town Manager

Recommended Action: Provide input on the draft Existing Building Decarbonization Roadmap and direct staff to develop a final Existing Building Decarbonization Roadmap for Town Council consideration.

Discussion: The Town of Truckee has committed to reducing community-wide greenhouse gas (GHG) emissions to 80% below 2008 levels by 2040. In May 2023, the Town Council adopted the 2040 General Plan Update, which included the Town's first Climate Action Plan (CAP). Truckee's CAP outlines a strategy to meet the Town's adopted GHG reduction goals, including 9 policies and 16 actions to reduce emission from building energy use, which is one of the largest contributors to Truckee's community-wide GHG emissions.

One of the actions included in the CAP is action CAP-7.H: Roadmap to Decarbonization. This calls for the Town to develop a policy roadmap to decarbonize existing buildings while supplementing costs and other burdens for vulnerable populations. This Existing Building Decarbonization Roadmap outlines strategies that the Town can implement to support the decarbonization of existing residential and commercial buildings. The primary goals of the Roadmap are to:



- Understand local barriers to building decarbonization and opportunities for local impact.
- Assist the Town in prioritizing its funding and efforts to target areas of highest impact and best supplement existing federal, State, and local programs.
- Identify areas where the Town is best positioned to effect change and avoid duplication of existing programs.
- Ensure the Town's building decarbonization strategy is equitable and designed with consideration to impacts on historically underserved communities.
- Outline an implementation timeline, including high-priority strategies for implementation in the next few years.

This Roadmap is just one part of the Town's broader climate action efforts, including those in the building energy sector. The CAP includes additional building decarbonization strategies that are outside the scope of this plan, including those focused on new construction, or those that would be implemented by utilities. Recognizing that building decarbonization requires a coordinated effort between all levels of government, utilities, community-based organizations, and other partners, there are many strategies that are best implemented by other entities. This Roadmap focuses on the areas where the Town can be most impactful due to some level of direct influence and/or control. Staff is seeking input from the Town Council on the types and relative prioritization of measures in the attached draft Roadmap.

I. Development of the Roadmap

To develop this Roadmap, Town staff began with an assessment of the Town's adopted GHG emissions reduction goals, renewable energy goals, and existing adopted plans. This included a review of the building decarbonization measures included in the Town's adopted CAP. Staff also analyzed state policies and planning documents related to GHG emissions reduction and building decarbonization, including the 2022 Scoping Plan developed by the California Air Resources Board, which outlines the State's strategy to achieve adopted statewide GHG emissions reduction targets, and the California Building Decarbonization Assessment developed by the California Energy Commission.

Another key step in developing this Roadmap was conducting an Existing Conditions Assessment of Truckee's building stock, household demographics, and energy use. This provides important insights into the decarbonization strategies that may be most effective in Truckee due to local conditions. Based on community and stakeholder input, staff also assessed the challenges and opportunities related to implementation of building decarbonization measures in Truckee, including financial barriers, cold climate decarbonization, and power outages.

Town staff used several methods to gather the community and stakeholder input on building decarbonization summarized in this Roadmap. In summer 2024, the Town conducted an online Community Building Energy Use Survey and hosted an in-person community workshop with interactive displays where attendees could provide input on topics related to building energy use and decarbonization measures. The survey and workshop were intended to assess community knowledge of and interest in a wide variety of building decarbonization measures, assess barriers to electrification, determine which types of programs could best address these barriers, and allow community members an opportunity to provide feedback on specific reach code options under consideration by the Town.

Town staff also received input on potential building decarbonization measures through the Reach Code Exploration process. A Stakeholder Committee including local experts in building decarbonization, staff from local utilities, representatives of the Contractors Association of Truckee Tahoe, and two Councilmembers was convened in spring 2022. The Town facilitated eight Stakeholder Committee meetings between May 2022 and November 2024, which included discussion of options to incentivize or mandate certain measures and the Town's overall approach to supporting building decarbonization. Stakeholder Committee members also provided input on specific types of building code amendments under consideration by the Town. Staff summarized the results of the Reach Code Exploration process and presented them to the Town Council for direction on December 10, 2024. At this meeting, Council directed staff to develop a heat pump air conditioning incentive program and reach code, which are included in this Roadmap.

Input from the community and stakeholder engagement process included the following general themes that shaped the recommendations included in the Roadmap:

- Concern over the cost of building decarbonization, including both initial cost and impact on energy bills
- A strong preference for voluntary strategies and opposition to a regulatory approach
- Desire for incentives or financing strategies to make decarbonization more affordable
- Concern over power outages and the impact of decarbonization measures on the resilience of households and businesses to outages, particularly in winter
- High interest in weatherization/efficiency measures and relatively low interest in electrification of heating, water heating, and cooking appliances
- A preference for flexible strategies rather than prescriptive mandates

In addition to these high-level themes, Town staff received more targeted community and stakeholder feedback on some specific policy and program proposals included in this document. More detail on the community and stakeholder input received is included in the draft Roadmap.

Additional community and stakeholder engagement will be necessary to develop and implement the measures included in this Roadmap. The goal is to ensure that Truckee community members are included, represented, and have the resources they need to participate fully in events and the decision-making process. As outlined in the Roadmap, the Town's approach to equitable building decarbonization should follow the principles of inclusion, diversity, equity, and accessibility (IDEA) at all stages of development and implementation of programs and policies.

II. Overall Approach to Building Decarbonization

The approach to decarbonization in the Roadmap is centered around highly efficient electrification, which was identified by state agencies as the most feasible, effective, and cost-effective strategy for building decarbonization in California. This is a somewhat different approach than the Town's adopted CAP, which relies heavily on the use of renewable natural gas (RNG) to reduce community-wide GHG emissions from building energy use. State agencies have determined that RNG is one of the most expensive and least feasible strategies for building decarbonization, and unlikely to achieve a fully decarbonized gas system due to practical constraints on RNG production. Better aligning the Town's building decarbonization strategy with the State's approach will ensure that Truckee's residents and businesses are prepared for anticipated changes in statewide policy, are well-positioned to take advantage of local and state funding opportunities and are not left behind as the State focuses on programs supporting efficient electrification.

Based on community and stakeholder input, the Roadmap proposes a strategy to encourage and support voluntary adoption of decarbonization measures to the greatest extent feasible. This includes improved climate action and resilience planning, enhanced education and engagement initiatives, incentives and financing strategies, upgrade programs, and policy and regulation measures as needed to achieve the Town's adopted climate action goals. In most cases, the Roadmap focuses on voluntary measures and incentives in the short- and mid-term. The goal is to address barriers to decarbonization, build local confidence in electrification, and provide residents and businesses with the support they need to implement decarbonization measures in a way that best suits their individual needs. Long-term measures include a small number of regulatory strategies that can be considered if voluntary measures alone are unable to achieve the Town's building decarbonization and climate action goals. These are intended as an example of the Town's options for a regulatory approach if needed in the future but are not recommended as a primary strategy for achieving the Town's goals.

The Roadmap outlines key equity considerations in implementing building decarbonization locally in Truckee and includes a set of Equity Principles to guide the Town's building decarbonization strategy. These principles are aligned with the Town's IDEA framework for inclusion, diversity, equity, and accessibility to ensure an equitable approach to community engagement as Roadmap measures are developed. Building decarbonization has the potential to offer enormous health benefits to the community and individual households, yet there are still many equity concerns that need to be considered while developing policies and programs. By prioritizing equity, the Town can ensure that the benefits of building decarbonization extend to those who need them most, mitigating existing disparities in living conditions and health outcomes.

III. Town Council Input and Next Steps

Town staff are requesting input from Council on the draft Roadmap, primarily on the following:

- The overall proposed approach to achieving building decarbonization.
- The strategies included (or not included) in the Roadmap.
- The general prioritization and phasing of these strategies.

This input will be used to revise the draft Roadmap and develop a final version, which will be presented to the Town Council for adoption as a consent item, unless staff receives alternative direction from

Council. The final Existing Building Decarbonization Roadmap will serve as an overall guiding document to prioritize programs and policies for inclusion in future Council Priorities Workplans.

Staff are not seeking direction from the Town Council at this stage on specific criteria to be included in any policy or program, as those will be determined at a later stage. The Roadmap provides an overview of many of the criteria that can be considered if and when the Town Council directs staff to begin work on each measure. Determining those details is in many cases a substantial effort that will require extensive research and community and stakeholder input.

This Roadmap is intended to be an evolving document that is updated periodically as the Town conducts GHG emissions inventories and updates the Climate Action Plan. Two of the measures included in this Roadmap – the Equitable Funding Strategy and the Energy Resilience Plan – are expected to identify additional measures recommended for implementation. Additional adjustments to the Town’s building decarbonization strategy may be needed due to changes in state policy or programs, new technologies, or other factors.

IV. Implementing the Roadmap

This Roadmap represents a recommended pathway for the Town to follow as it begins the journey towards efficient, comfortable, and healthier carbon-free buildings. Using the final adopted Roadmap as a guide, Town staff will make recommendations about which measures to include as each 2-year Council Priorities Workplan is developed. A rough implementation timeframe has been included for each measure in the Roadmap as an indication of relative priority and sequencing of measures.

A high-level estimate of required staff capacity (after accounting for use of consultants) is included with each measure in the Roadmap, along with an estimate of the cost for development and implementation. Some measures included in the Roadmap require additional staff capacity for development and implementation, particularly those in the mid-term or long-term ranges. Staffing and funding needs for each measure can be considered by the Town Council as part of the development of both the Council Priorities Workplan and annual budgets.

It’s important to acknowledge that the Town cannot achieve adopted climate action targets, including building decarbonization goals, on its own. Continued close collaboration with local utilities, other public agencies, community-based organizations and regional partners, both directly and through the Climate Transformation Alliance, will be critical to success.

Summary: Staff is seeking input from the Town Council on the types and relative prioritization of measures in the attached draft Roadmap. Following Town Council feedback at this study session, staff anticipate incorporating Council feedback into the draft and bringing a final Roadmap to Town Council for adoption on consent in early spring 2025.

Priority:

<input type="checkbox"/> Enhanced Communication	<input checked="" type="checkbox"/> Climate and Greenhouse Gas Reduction	<input type="checkbox"/> Housing
<input type="checkbox"/> Infrastructure Investment	<input type="checkbox"/> Emergency and Wildfire Preparedness	<input type="checkbox"/> Core Service

Fiscal Impact: There is no direct fiscal impact from consideration of the draft Roadmap or adopting a final Existing Building Decarbonization Roadmap, as it does not commit the Town to implementing any or all of the measures recommended for further consideration. If the Town Council decides to move forward with consideration of any measure, the associated costs for both development and implementation of the measure will be assessed at that time.

Public Communication: Agenda posting, social media posts, and emails sent to community members who signed up to receive updates about the Town’s sustainability or building decarbonization initiatives. Additionally, Town staff solicited input on building decarbonization initiatives, and some specific program

or policy recommendations included in the Roadmap through an online community building energy use survey, eight Reach Code Stakeholder Committee meetings, and three community workshops.

Attachments:

1. Draft Existing Building Decarbonization Roadmap