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TRUCKEE 2040
general plan + downtown specific plan

DRAFT Climate Action Plan Element

Town of Truckee | 2040 General Plan Update

Climate Action Plan Element

Contents

Introduction

Climate change is one the most challenging issues the Town of Truckee (Town) will face in the 21st Century. While climate change is a global issue, local communities play an important role in reducing greenhouse gas (GHG) emissions, which, in turn, provides a variety of other community benefits to residents and visitors. While State and federal agencies play a key role in setting policy and regulations regarding climate change, local governments and communities are responsible for supporting and implementing these policies to ensure GHG reductions are achieved locally.

The Town has adopted aggressive GHG emissions targets that reflect the seriousness of the climate crisis. In November 2017, the Town Council adopted Resolution 2017-58, setting long-term goals for emissions reductions and renewable energy. By 2030, the Town is aiming to have 100 percent of electricity used in municipal operations come from renewable sources, and by 2050 to ensure all energy use (e.g., electricity, home heating fuels, and transportation fuels) in the town come from renewable sources. Additionally, the Town aims to cut communitywide GHG emissions 80 percent from 2008 levels by 2040. The Town will work towards reducing emissions alongside communities around the world to reduce the impacts of climate change in the 21st century and beyond.

The Town recognizes that the natural environment in and surrounding the town supports the social and economic health of the community. Therefore, the Town believes that a concrete and meaningful action plan is necessary to safeguard the natural resources that are key to the identity and character of the town. The purpose of the Climate Action Plan (CAP) Element of the General Plan is to formalize the Town's commitment to reducing GHG emissions and mitigating the worst impacts of climate change. As part of this work, the Town will rely on the innovation, compassion, diversity, and strong networks of its residents to make serious and systemic change. To make sustainable progress for all, action will be required by every member of the community as well as by government agencies, businesses, faith groups, non-profit organizations, and others.

The CAP Element sets forth ambitious goals, policies, and actions to help the Town reduce GHG emissions while complementing and supporting goals, policies, and actions from other General Plan elements (e.g., Mobility Element, Land Use Element). The CAP Element also serves as one half of the Town's complete CAP document with the other half included as the CAP Implementation Guide (Appendix X of the General Plan). The CAP Implementation Guide provides information regarding the quantification of GHG reduction potential (i.e., GHG emissions reduced) for the CAP Element goals and policies. Combined, the CAP Element and CAP Implementation Guide serve as a complete CAP document that allows the Town to assess its current GHG emissions, establish targets and goals for emissions reductions, and identify and implement specific measures that reduce GHG emissions to achieve the established State and Town targets.

CAP and California Environmental Quality Act

The complete CAP document is structured to serve as a programmatic tiering document for analysis purposes as part of the California Environmental Quality Act (CEQA). A tiering document front-loads the analysis needed for most new development projects in the Town to decrease the time and money needed for project-level environmental analyses. For future projects that the Town determines are not exempt from CEQA and are subject to environmental review (e.g., an initial study/negative declaration or an a full Environmental Impact Report is required) and that seek to streamline the review process for analysis of GHG emissions impacts, projects can achieve streamlining pursuant to the provisions of Section 15183.5 by including all applicable GHG reduction measures in this CAP in the project's design and/or as mitigation measures in the environmental document, thus demonstrating that the project is consistent with CAP goals and policies and may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable.

Climate Change Background

This section provides an overview of the science of climate change as well as providing context on how the Town's efforts to reduce GHG emissions fits into the statewide regulatory framework regarding climate change. This section also provides an overview of the work the Town has already done and continues to do to reduce emissions at the local level, helping to achieve the States long-term GHG reduction goals.

Climate Change Science Overview

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space. A portion of the radiation is absorbed by the earth's surface, and a smaller portion of this radiation is reflected toward space. The absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. The earth has a much lower temperature than the sun; therefore, the earth emits lower frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect (Figure 1), is responsible for maintaining a habitable climate on earth.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-generated emissions of these GHGs in excess of natural ambient concentrations are found to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming.

The Intergovernmental Panel on Climate Change (IPCC) is the scientific body charged with bringing together the work of thousands of climate scientists. In August 2021, IPCC released the Six Assessment Report which assess scientific, technical, and socio-economic information concerning climate change. In report, the IPCC states that observed increases in GHG concentrations in the atmosphere since around the year 1750 are unequivocally caused by human activities. As a result, each of the last four decades has been successively warmer than any decade that preceded it since 1850 (IPCC 2021). The Six Assessment report highlights key new insights into the importance of global climate tipping points, thresholds in the global climate (e.g., global temperatures) that, when exceeded, can lead to large changes in the state of the climate system with one impact rapidly leading to a series of cascading events with vast repercussions.

The Six Assessment report contains the body's strongest warnings to date on the causes and impacts of climate change. Importantly, the draft report notes that, in terms of solutions, "We need transformational change operating on processes and behaviors at all levels: individual, communities, business, institutions and governments. We must redefine our way of life and consumption (IPCC 2021)."

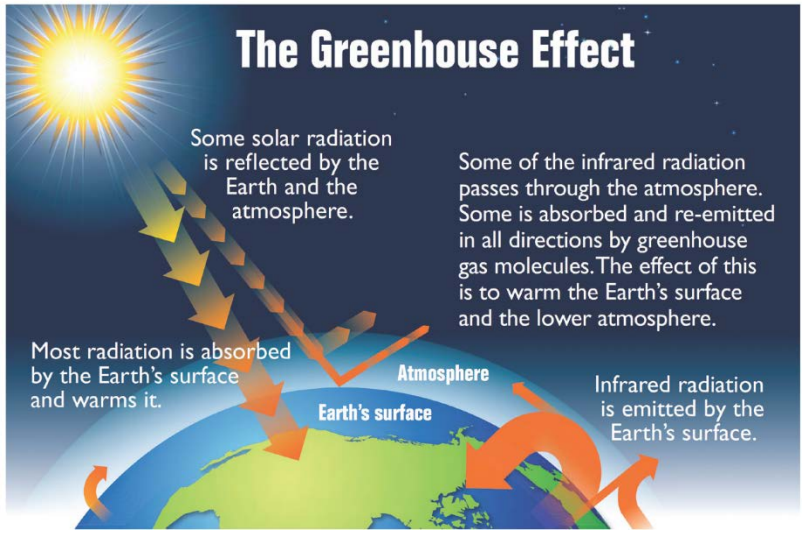

Figure 1: The Greenhouse Gas Effect

Reducing fossil fuel use in communities has many benefits in addition to reducing GHG emissions. For example, retrofitting homes and businesses to be more efficient creates local jobs, reduces energy costs, improves air quality, and improves community members' health. In addition, money not

spent on energy is more likely to be spent at local businesses, improving the local economy (American Council for an Energy Efficient Economy 2012).

California Climate Change Policy

California has led the charge to address climate change and develop statewide GHG reduction policies. These policies have driven the completion of GHG inventories at the local level to help understand local communities' contributions to the states' overall GHG emissions. Included below is a summary of the State's climate change related policies that establish targets for GHG reductions as well as individual laws and regulations that help reduce emissions from specific sources and help reduce emissions at the local level.

State Emissions Reduction Targets

In 2006, California passed Assembly Bill (AB) 32, the Global Warming Solutions Act, which charged the California Air Resources Board (CARB) with implementing comprehensive regulatory, reporting and market mechanisms to achieve quantifiable reductions in GHG emissions statewide. AB 32 requires the State to reduce GHG emissions to 1990 levels by 2020. In 2016 the State established an even more aggressive target with Senate Bill (SB) 32 which requires statewide emissions level to be reduced to 40 percent below 1990 levels by 2030.

Additionally, Executive Order S-3-05, signed in (2005), and Executive Orders B-30-15, signed in 2015, establish a long-range target of reducing GHG emissions 80 percent below 1990 levels by 2050. In 2018, Governor Jerry Brown signed Executive Order S-55-18, setting a target for the State to achieve carbon neutrality by 2045. The Executive Order is binding only on State agencies, and has no force of law for local governments; however, the signing of these Executive Orders sends a clear signal to the California Legislature and local jurisdictions on the long-range goal for California.

California Environmental Quality Act

Another policy driver for climate action planning in California is SB 97, which established that GHG emissions and their impacts are appropriate subjects for analysis under the CEQA. This law, passed in 2007, directed the State's Office of Planning and Research to develop CEQA guidelines on the mitigation of GHG emissions for agencies, such that they may follow appropriate standards on calculating GHG emissions from projects, determine potential significance, and implement mitigation measures if necessary and feasible.

As part of development of the Town's CAP, a CAP Consistency Checklist is being developed to support new development projects in complying with applicable CAP measures. The Checklist, in conjunction with the CAP, provides a streamlined review process for proposed new development projects that are subject to discretionary review that triggers environmental review pursuant to the CEQA. Analysis of GHG emissions and potential climate change impacts from new development is required under CEQA. The CAP is being developed to serve as a plan for the reduction of GHG emissions in accordance with CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to cumulative GHG emissions may be determined to be less than significant if it complies with the applicable measures in a "plan for the reduction of GHG emissions" (e.g., CAP). Under these provisions, if a project can show consistency with applicable GHG reduction measures, the level of analysis for the project required under CEQA with respect to GHG emissions can be reduced considerably (i.e., a detailed analysis of project-level GHG emissions and potential climate change impacts is not needed).

Energy-Efficiency and Renewable Energy Standards

California's Renewable Portfolio Standard (RPS) requires investor-owned utilities, electric service providers and community choice aggregators to increase procurement from eligible renewable energy resources. In 2018, SB 100 was passed requiring electricity utilities to procure 60 percent of electricity from renewable sources by 2030 and 100 percent from renewable and zero-carbon sources by 2045. In 2015, SB 350 was signed directing the State Energy Resources Conservation and Development Commission to establish statewide efficiency standards that will result in a doubling of energy-efficiency savings by 2030.

Every three years, the State updates the California's Building Energy Efficiency Standards (California Code of Regulations, Title 24, Part 6) to require new buildings to become even more energy-efficient than under

the previous code. According to the California Energy Commission, the most recent 2019 standards, which became effective in January 2020, will increase the efficiency of new construction by 25 percent for residential uses and 30 percent for nonresidential uses, compared to the previous 2016 Title 24 standards. In August 2021, the State adopted the 2022 Title 24 standards which will go into effect on January 1, 2023, further increasing energy efficiency in new residential and nonresidential development.

Vehicle Fuel Efficiency Standards and Electric Vehicles

In 2012, CARB adopted the Advanced Clean Cars program, which established coordination between CARB, the U.S. Environmental Protection Agency (EPA) and National Highway Traffic Safety Administration to set limits on the emission of smog-causing pollutants and GHGs for vehicle model years 2015 through 2025. Currently, CARB is working to set regulations for Advanced Clean Cars Part II focused on Zero Emissions Vehicles (ZEV). This regulation mandates that manufacturers increase the number vehicles available for sale that do not emit any exhaust, including battery electric, hydrogen fuel cell, and plug-in hybrid electric vehicles. Even compared to 2025 vehicles under the strictest criteria pollutant and GHG standards, ZEVs and plug-in hybrid electric vehicles are significantly lower emitting.

In January 2018, then-Governor Jerry Brown unveiled a goal to increase the number of EVs on California roads to 1.5 million by 2025 and 5 million by 2030 (Rogers 2018). At the time of the announcement, EVs represented approximately 2 percent of the total fleet, or 350,000 vehicles, and about 7 percent of all new vehicle sales in the State. Furthermore, in 2019, the CARB began a study to identify strategies to significantly reduce transportation-related fossil fuel demand and emissions in the State, including transitioning to zero-emission vehicles, as part of the State's goal to achieve carbon neutrality by 2045 (California Environmental Protection Agency 2019). Furthering this initiative, in September 2020, Governor Gavin Newsom signed Executive Order N-79-20, setting the goal that by 2035, 100 percent of the new passenger cars and trucks sold in California will be zero-emission vehicles (Office of Governor Gavin Newsom 2020).

Reducing Vehicle Miles Traveled

SB 375, signed by Governor Schwarzenegger in 2008, works to better align regional transportation planning efforts, regional GHG emissions reduction targets, and land use and housing allocations. SB 375 requires Metropolitan Planning Organizations (MPO) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy, showing prescribed land use allocations in each MPO's Regional Transportation Plan (RTP). CARB, in consultation with the MPOs, provides each affected region with reduction targets for vehicle miles traveled (VMT) and GHGs emitted by passenger cars and light trucks in their respective regions for 2020 and 2035. Progress toward these targets is then achieved through the development and subsequent implementation of a fiscally constrained programs, projects, and services. In 2013, Governor Brown signed SB 743 into law which stated criteria for determining the significance of transportation impacts must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." To meet this requirement, the CEQA Guidelines identify VMT as the preferred CEQA transportation metric, rather than auto delay, level of service, or other similar measures of vehicular capacity or traffic congestion.

Organic Waste Reductions

In September 2016, SB 1383 was adopted, setting methane emissions reduction targets for California in a statewide effort to reduce emissions of short-lived climate pollutants. The law sets the following targets for reducing methane emissions associated with organic waste:

Reduce organic waste disposal 50 percent by 2020 and 75 percent by 2025.

Rescue for people to eat at least 20 percent of currently disposed surplus food by 2025.

SB 1383 also requires local jurisdictions to conduct education and outreach on organics recycling to all residents, businesses (including those that generate edible food that can be donated) haulers, solid waste facilities, and local food banks and other food recovery organizations.

Federal Climate Change-Related Regulation

In addition to the State legislation discussed above, several federal policies also help reduce GHG emissions from activities in the town. In 2016, the U.S. EPA and NHTSA adopted fuel efficiency standards for medium- and heavy-duty vehicles which focus on vehicle and engine performance standards for model years 2018-2027 for certain tractor-trailers and model years 2021-2027 for semi-trucks, large pickup trucks, vans, and all types

and sizes of buses and work trucks. EPA Off-Road Compression-Ignition Engine Standards. (40 CFR Part 89). This regulation establishes federal standards for the phasing in of EPA diesel engine tiers for off-road compression ignition equipment. The regulation serves to reduce emissions by integrating engine and fuel control systems to achieve emissions reductions and requiring equipment manufacturers to produce engines with advance emissions control technologies.

Town of Truckee Climate Change Initiatives

As mentioned above, in November 2017, Town Council adopted Resolution 2017-58, setting long-term goals for emissions reduction and renewable energy. Prior to the development of the Town's first CAP, the Town has taken considerable steps to reduce GHG emissions. Included below is a brief discussion of these efforts.

Energy Conservation

Between 2010 and 2012, the Town implemented energy efficiency upgrades at municipal facilities. This included upgrading light fixtures; adding daylight controls for lighting systems; installing pipe insulation on hot water piping; implementing network thermostats for control of water-source heat pumps; and implementing occupancy-based lighting fixtures. In 2019 the Town completed a follow-up energy efficiency audit of all municipal facilities. Between 2019 and 2021 the Town implemented a suite of energy efficiency upgrades including conversion of all light to efficient LEDs. The Town has also authorized participation in four Property Assessed Clean Energy programs that help to assess and finance energy efficiency and renewable energy upgrades for residential and nonresidential buildings in the Town.

In 2018, the Town installed solar-powered pedestrian crossing lights on Brockway Road and has since installed solar lighting in the Envision DPR project and Stockrest Springs roundabout. Solar lighting has also been installed on the Soaring Way/Joerger Drive/Raley's roundabout, which was built as a requirement of the private development. The Town has initiated conversations with the Truckee Donner Public Utility District (TDPUD) on increasing their renewable portfolio to 100 percent. This process will kick start TDPUD's "green" program that will be marketed to other businesses, organizations, and individual users in the future. The green program and the Town's leadership will help Truckee reach its goal of 100 percent renewable electricity.

Transportation

In 2015, the Town updated the Truckee Trails and Bikeways Master Plan (originally adopted in 2002), which includes goals and policies to guide expansions and maintenance to pedestrian and bike infrastructure and support facilities aimed at increasing bicycle and pedestrian trips in Town.

In 2017, the Town conducted a Long-Range Transit Plan that outlines establishing new neighborhood routes and connections, providing extended service hours, and expanding Dial-A-Ride services. Since that time, the Town has also transitioned to a "Fare-Free" system for trips on the Truckee Local routes as well as the State Route (SR) 89 and SR 267 routes operated in partnership with Placer County. Providing "Fare Free" service is a critical step in removing social and economic barriers to transit and significant step in increasing the overall attractiveness and viability of transit for all demographics.

As part of a Transportation Demand Management (TDM) Program, the Town has implemented 9-80 work schedules for its staff to reduce employee trips to town hall and an incentive program for employees using alternative transportation (e.g., bikes). The Town has also made a conscious effort to promote and encourage the use of virtual meetings for both staff and external participants to reduce VMT generated by daily Town business. Broader and more comprehensive TDM programs are a proven means to single occupancy vehicle trips and associated VMT in a cost effective and environmentally responsible manner.

In 2012, the Council approved the purchase of a John Deere 644K Hybrid loader for the Public Works snow removal operations that utilizes a smaller diesel engine to power a generator to an electric motor that drives the loader. In tests of this new technology the Town, on average, realized an 18 percent decrease in diesel fuel consumption with the same amount of production as a conventional non-hybrid loader. With the success of the first Hybrid loader purchase and operational efficiencies, all of the subsequent loader replacements have been Hybrid loaders. Currently eight out of the ten Public Works Roads and Snow loaders are Hybrid loaders.

In 2016, the Town purchased a zero-emission electric motorcycle and electric utility vehicle for the Police Department. In fiscal year 2020-21, the Town purchased one electric vehicle (EV) for the town fleet and converted all sixty-one diesel vehicles in the municipal fleet from fossil fuel diesel to renewable diesel, which is derived from plant-based feedstock and provides an approximate 57 percent decrease in carbon emissions compared to fossil fuel diesel. In fiscal year 2021-22, the Town installed three EV charging stations at town hall for fleet, employee, and public use. In 2020, the Town was awarded a California Department of Transportation (Caltrans) grant for the Innovate Gateway process to study opportunities for new housing options, economic development strategies, sustainable mobility improvements, and quality of life enhancements with the goal of reducing VMTs on Interstate 80.

Waste Reduction and Recycling

In 2018. the Town updated its waste and recycling services to improve diversion rates under a new franchise agreement with its waste hauler. Truckee residents will move from using colored plastic bags to wheeled carts for their recyclables and yard waste, saving up to 3 million plastic bags over the next 10 years. The Town has developed a sustainability-oriented website, Keep Truckee Green, which provides residents with a recycling guide and other information about solid waste services and greenhouse gas reduction. Through the site, the Solid Waste Division sends out monthly newsletters with tips and event announcements. The Town has also begun outreach efforts and introduced the Feed Truckee food recovery program to reduce organic waste and increase food recovery as part of reaching the targets set forth in SB 1383.

Greenhouse Gas Inventory and Forecast Summary

In 2018, the Town completed the Community-Wide and Municipal-Operations 2016 GHG Emissions Re-Inventory. The inventory includes a comparison of the Town's 2008 GHG inventory with an updated GHG emissions inventory for the year 2016. Truckee's baseline GHG emissions inventories use 2008 for the base year; 2008 was selected because it is one of the earliest years for which relatively comprehensive data is available, and its usage is consistent with the 2008 baseline used in the Truckee Donner Public Utility District GHG Emissions Inventory.

GHG emissions in the Town's inventory are calculated using a metric known as a "carbon dioxide equivalent". "Carbon dioxide equivalent" (CO_2e) is a way to equalize the different potencies of the six internationally recognized GHGs (carbon dioxide, methane, nitrous oxides, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride). For example, methane has 28 times the potency of carbon dioxide; therefore, 28 metric ton CO_2e (MT CO_2e) could be 28 metric tons of carbon dioxide or 1 metric ton of methane (IPCC 2014).

Below is a summary comparison of the 2016 and 2008 GHG emissions inventories. All estimates for the 2008 and 2016 GHG emissions inventories were completed following the Local Government Operations Protocol and the United States Community Protocol. More information on the boundaries used to determine which emissions were included and the protocols used in the development of the inventories can be found in Appendix XX.

Community-Wide GHG Emissions Summary

Community-wide GHG emissions in the town are generated through a variety of activities by residents, businesses, and visitors. A description of emissions associated with each category (organized by total contribution to community-wide GHG emissions, from biggest to smallest) are defined below.

Residential and Non-Residential Building Energy: electricity and natural gas use from all residential and non-residential buildings.

Community Transportation: fuel combustion in on-road vehicles, which include passenger vehicles (i.e., cars and light-duty trucks) and medium- and heavy-duty trucks. Fuel consumption is generally tied to the fuel efficiency and fuel source of vehicles, along with number of miles driven; and fuel combustion associated with vehicles, heavy equipment, and machinery operating off paved roads.

Community Solid Waste: fuels combusted in the equipment used to process waste, and from gases released as waste in landfills decays over time.

Potable Water Services: consumption of water in buildings and landscaped areas, the conveyance, treatment, and distribution of water from its source to the end user.

Wastewater Treatment: generation and treatment of wastewater.

In 2008, Truckee's residents and businesses emitted an estimated 230,349 $MTCO_2e$. In 2016, the community's emissions decreased by approximately 33 percent to 153,268 $MTCO_2e$ primarily due to TDPUD increasing the percent of renewables in their portfolio from 4.5 percent in 2008 to 60 percent in 2016. This greatly exceeds the 2016 RPS which requires that utilities' portfolios have 25 percent renewables, the 30 percent required in 2020, and the 50 percent required in 2030. This was the main driver behind reduced emissions in 2016. Figure 2 summarizes the community-wide GHG emissions included in the Town's inventory. The largest contributor to community emissions in the inventory is residential energy use, followed by community transportation, which includes on-road passenger, freight and public transit vehicles as well as off-road vehicles and mobile equipment.

In addition to the emissions shown in Figure 1, several information items were recorded separately from the community total to avoid overlap with other reported emissions or excluded from GHG inventories by USCP guidance. Truckee's community-wide inventory information items include electric on-road vehicles, transit vehicles, and the collection and transportation of community-generated solid waste because emissions from these activities are counted elsewhere in the inventory. Also reported as an information Item is the biogenic CO_2 produced from wood burned for home heating and from combustion of wastewater treatment digester gas. Biogenic CO_2 is not included in GHG emissions inventories because the same CO_2 would be produced if the wood or biogas (or other organic material) were left to decompose naturally.

Municipal Operations GHG Emissions Summary

GHG emissions are also generated specifically from municipal operations. Although discussed separately here, all emissions generated from municipal operations are considered a subset of community-wide emissions. Therefore, the community-wide emissions discussed above serve as the estimate for the town's total GHG emissions. A description of emissions associated with each category of the Town's municipal operations is listed below (organized by total contribution to municipal operations; GHG emissions, from biggest to smallest) are defined below.

Buildings and Facilities: electricity and natural gas use from all Town buildings and facilities.

Vehicle Fleet: fuel combustion in off-road and on-road vehicles associated with the Town's vehicle fleet, which include passenger vehicles (i.e., cars and light-duty trucks) and medium-duty trucks.

Government Generated Solid Waste: fuels combusted in the equipment used to process waste, and from GHGs released as waste in landfills decays over time from waste generated by Town operations.

Government Generated Solid Waste: fuel combustion in on-road vehicles associated with employee commutes for Town staff.

In 2008, the Town's municipal operations emitted 2,519 $MTCO_2e$ reported in this municipal-operations inventory. In 2016, these emissions decreased 12 percent to 2,208 $MTCO_2e$. As shown in Figure 3, the largest sources of emissions within the 2008 and 2016 municipal-operations inventories are the Vehicle Fleet, and Buildings and Facilities. In addition to the emissions included in Figure 3, the following informational items were recorded: biogenic CO_2 emissions resulting from biodiesel combustion by the Public Works Department, and emissions from community-generated solid waste at the Train Depot and Downtown trash cans which is collected by the Town but generated by the community rather than municipal operations.

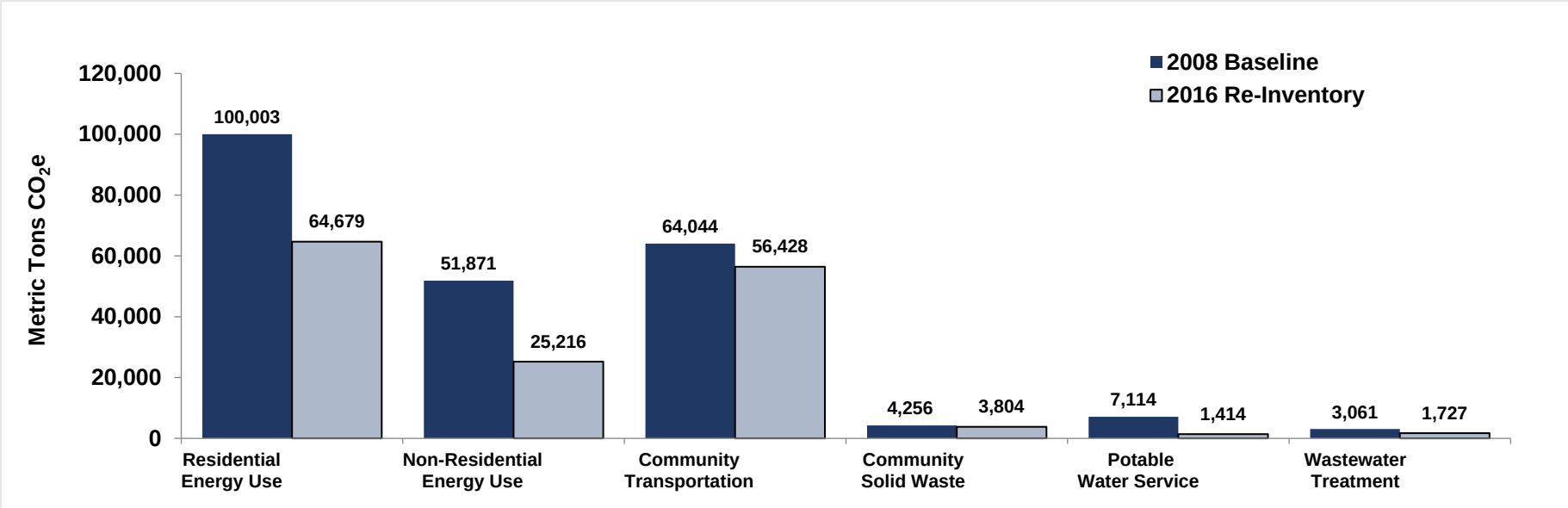

Figure 2: 2008 & 2016 Community-Wide GHG Emissions ($MTCO_2e$)

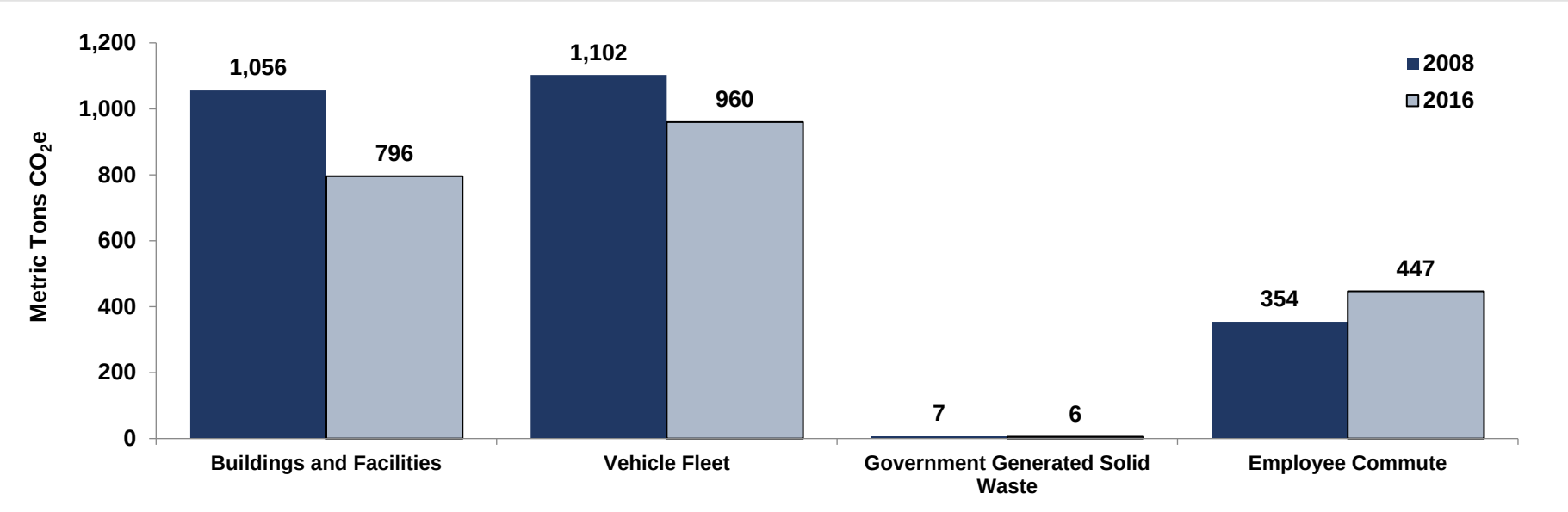

Figure 3: 2008 & 2016 Community-Wide GHG Emissions ($MTCO_2e$)

Emissions Forecast

To understand what annual GHG emissions will look like in the future, two emissions growth scenarios have been modeled. The first forecast scenario used is referred to as the "business-as-usual" (BAU) forecast and assumes that no State or federal legislative actions, as discussed above, are implemented to reduce GHG emissions. The BAU forecast does not account for any GHG emissions reductions associated with the implementation of the CAP, or legislative actions. The BAU forecast is based on the population, employment, housing, non-residential development, and vehicle miles traveled projections of the General Plan. The second forecast scenario, referred to as a Legislative-Adjusted BAU (ABAU) forecast, accounts for the effects of existing State and federal law and regulations on future community-wide emissions for the Town. These scenarios have been calculated out to the target years of 2030 and 2040 as well as to the State's long-term target years of 2045 and 2050. The emissions forecasts allow the Town to assess the effectiveness of various GHG reduction strategies over time while also providing a snapshot of how annual emissions levels will likely change under the two scenarios.

By modeling BAU and ABAU emissions out to target years, the Town can then understand what percentage of the Town's future emissions reductions will be achieved by legislative actions and what percentage will need to be reduced through the CAP Element goals and policies to meet the Town's GHG reduction targets.

CAP Reduction Targets

The Town has established the goal of reducing community-wide emissions to 80 percent below baseline emissions (2008) by 2040 as well as engaging in a transparent and robust community engagement process to help achieve the goals. Additionally, as discussed above, SB 32 requires the statewide emissions level to be reduced to 40 percent below 1990 levels by 2030.

To assess the level of reductions needed to achieve the Town's 2030 and 2040 goals, data regarding the Town's GHG emissions levels for the years 2008 and 1990 are needed. Community-wide inventory data is available for the year 2008, as discussed above. Because the necessary data are not available to estimate the Town's 1990 emission levels, proportional targets for the CAP were developed that express the level of GHG emissions reductions that would be needed locally between 2008 and future target years to demonstrate consistency with statewide targets and goals.

Additionally, to determine the equivalent reduction target at the local level for the State's 2030 target, CARB's 2017 Scoping Plan recommends that local governments evaluate and adopt robust and quantitative locally appropriate goals that align with the statewide per capita targets and the State's sustainable development objectives to develop plans to achieve local goals (CARB 2017). The 2017 Scoping Plan clarifies that an evidence-based local per capita goal, or some other metric that the local jurisdiction deems appropriate (e.g., mass emission, per service population), may be used (CARB 2017).

With CARB's recommendations in mind, the Town's 2030 reduction target was derived using a mass emissions approach and local data from the Town's 2008 baseline inventory. Equivalent targets were calculated relative to the California Greenhouse Gas 2000-2018 Emissions Trends and Indicators Report (CARB 2020). Specifically, the State's 2008 GHG emissions inventory was compared to the State's 2030 target mass emissions targets relative to its 1990 inventory, from which specific percent reductions relative to 2008 were developed.

When developing the CAP's GHG reduction targets, the analysis includes adjustments to the State's 2018 GHG emissions inventory and statewide targets to exclude GHG emissions sectors that are being regulated at the State-level or sectors not located in the town and; therefore, local jurisdictions are not responsible for helping to reduce emissions from these sectors to reach the statewide targets. Specifically, this analysis excludes emissions from the Cap-and-Trade program and emissions from the Agricultural sector accounted for in the statewide inventory. As a result of these adjustments and consistent with the State's targets relative to 2008 levels, the CAP's targets are expressed according to the percentage reductions in GHG emissions relative to the Town's 2008 community-wide GHG emissions levels. The following adjusted reduction targets should be achieved in the Town to achieve GHG emissions reductions in alignment with State targets and goals as well as the Town's emissions reduction target adopted in Resolution 2017-58:

Reduce emissions 40 percent below 1990 levels by 2030 and

80 percent below 2008 levels by 2040.

As shown in Table 1 below and Figure 4, the Town's 2030 goal to reduce emissions to 40 percent below 2008 levels is equivalent to 140,900 $MTCO_2e$ per year and is based on the adjusted State reduction target established as SB 32. The Town's 2040 goal, established in Town Resolution 2017-58, to reduce emissions to 80 percent below 2008 levels is equivalent to 46,875 $MTCO_2e$ per year. As discussed above, through Executive Order S-3-05, the State has set a target to achieve carbon neutrality by 2045. While this Executive Order is not binding for local jurisdiction, the target can establish a more long-term goal for emission reductions for the Town. Table 1 also includes the total annual reductions that would be needed by 2045 and 2050 to meet the State's carbon neutrality target.

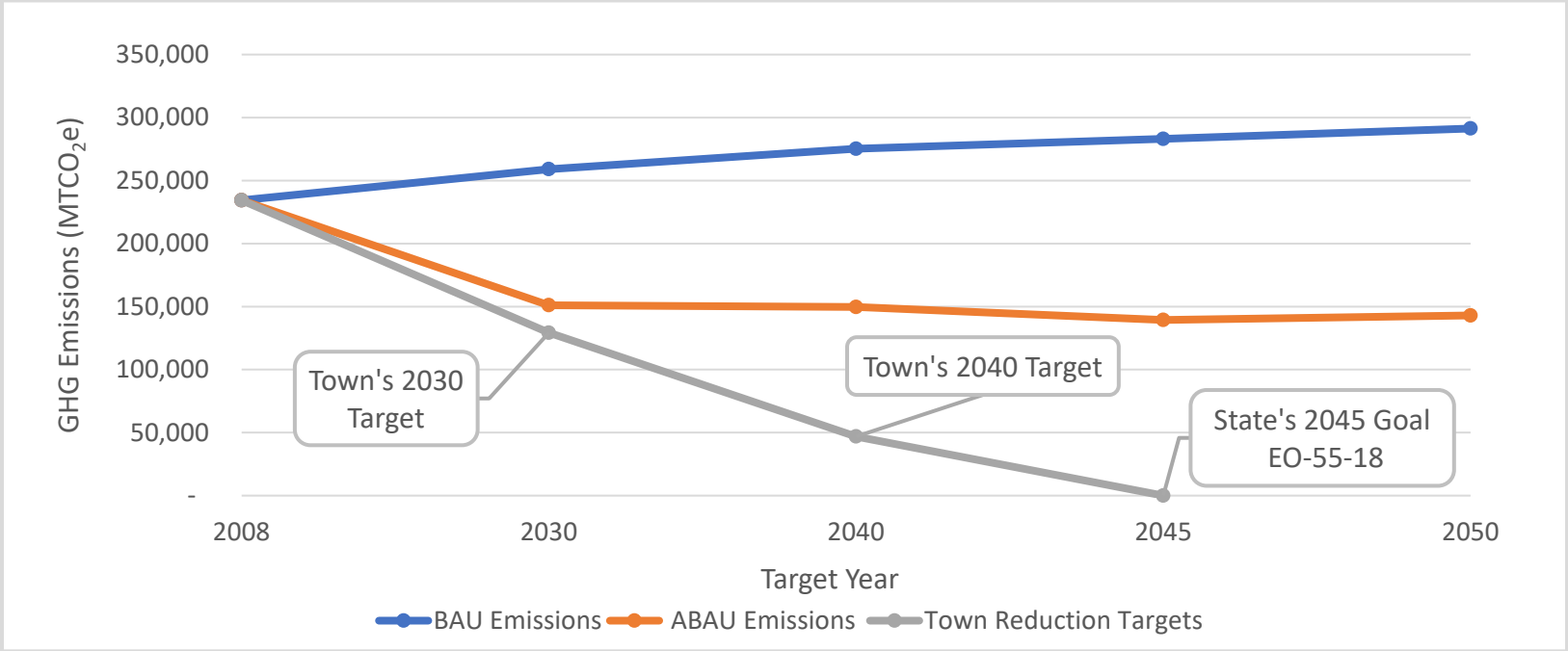

Figure 4: Forecast of Community-Wide Emissions and Town Targets

CAP Metric	Target Year						
	2008 (Baseline)	2016	2020	2030	2040	2045	2050
BAU Forecast ($MTCO_2e$)	230,349	228,334	240,075	259,033	275,250	283,079	291,297
ABAU Forecast ($MTCO_2e$)	230,349	153,438	141,195	151,106	149,695	139,379	142,958
ABAU Forecast - percent change from 2008 baseline	NA	-33%	-39%	-34%	-35%	-39%	-38%
Town GHG reduction targets compared to 2008 baseline	NA	0%	0%	-40%	-80%	-100%	-100%
Town annual emissions targets ($MTCO_2e$)	230,349	NA	NA	127,032	46,070	-	-
Reductions needed from CAP strategies to achieve targets ($MTCO_2e$)	NA	NA		21,853	102,820	139,379	142,958
Total GHG Reductions from CAP Element (MTCO2e)				38,884	68,384	67,176	73,702
Percentage of gap achieved through CAP Element				178%	67%	48%	52%

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; NA = not applicable. Source: Data provided by Ascent Environmental in 2020

Table 1 - Truckee CAP Emissions Forecast and GHG Reduction Targets

CAP Element Goals, Policies, and Actions

The following section includes the CAP Element goals, policies, and actions that have been developed to reduce the Town's GHG emissions, consistent with the State emissions reduction targets and Town's goals. As shown in Table 2 and Figure 5, the Town would need to reduce annual emissions by 21,853 $MTCO_2e$ by 2030 to achieve the 2030 emissions target of 127,032 $MTCO_2e$ per year. The combined CAP Element goals, if fully implemented, would reduce emissions by 38,884 $MTCO_2e$ allowing the Town to achieve and exceed the 2030 target. By 2040, the Town would need to reduce emissions by 102,820 $MTCO_2e$ to achieve the 2040 emissions target of 46,070 $MTCO_2e$ per year. However, the CAP Element goals would only achieve approximately 67 percent of the reductions needed by 2040. The CAP Element aligns with the State in proposing measures to meet the 2030 target and achieve significant progress towards achieving the Town's 2040 targets. To the extent climate change science, policy, technology, and other factors continue to advance, the Town will be able to apply new reductions toward reducing emissions on a trajectory consistent with the 2040 target and the State's 2045 carbon neutrality goal in future CAP updates.

Each CAP Element goal includes a corresponding set of policies and actions to help achieve the larger goal, providing details on how the Town and Truckee community can achieve meaningful and effective reductions from each of the town's four main activity sectors. While the goals, policies, and actions provide a framework for reducing emission in line with Town and State's emission reduction targets, it is important to recognize that effective implementation and consistent monitoring of GHG reduction progress will be needed to achieve the Town's targets.

The CAP Element includes 11 goals in total with the first 9 goals focused on reducing GHG emissions from three major activity sectors that generate GHG emissions: Building Energy, Transportation and Land Use, Solid Waste.

Provided below is a brief description of how the suite of CAP Element goals for each activity sector help to reduce GHG emissions associated with existing activities as well as future development in the town. The discussion of goals associated with each activity sector also includes a table with the anticipated GHG reduction potential for each goal for target years.

Table 2 – CAP Goals and Policies - GHG Reduction Summary

CAP Goal or Policy	$MTCO_2e$ Reductions by Target Year			
	2030	2040	2045	2050
ABAU forecast ($MTCO_2e$)	151,106	149,695	139,379	142,958
Town annual emissions targets ($MTCO_2e$)	127,032	46,070	-	-
Reductions needed from CAP Element to achieve targets ($MTCO_2e$)	21,853	102,820	139,379	142,958
Total GHG Reductions from CAP Element (MTCO2e)	38,884	668,384	667,176	773,702
Percentage of gap achieved through CAP Element	178%	67%	48%	52%

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent.

Source: Data provided by Ascent Environmental in 2020

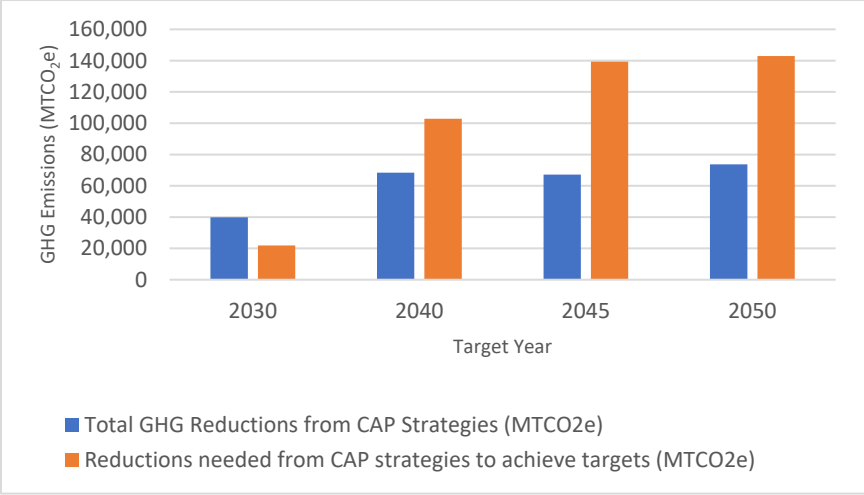

Figure 5 – CAP Goals - GHG Reduction and Target Achievement

Transportation and Land Use Goals

Goals CAP-1 through CAP-5 focus on reducing emissions from transportation-related activity for existing residents and businesses as well as vehicle trips from future population and economic growth in the community. These goals focus on reducing the over reliance on personal vehicles as the primary mode of transportation in the town while supporting programs and physical improvements in the town that support more sustainable transportation options including transit, bicycles, walking, and opportunities to avoid vehicle trips all together. Additional programs and strategies should be focused on increasing vehicle occupancy thereby increasing roadway capacity without physical improvement. These CAP Element goals align closely with other goals included in the General Plan that focus on creating more sustainable land use patterns (i.e., Land Use Element) and promoting and accommodating more sustainable modes of transportation and reducing personal vehicle use (i.e., Mobility Element). The category also includes opportunities to promote carbon sequestration through open space conservation and prioritizing infill development for new growth. Table 3 includes the anticipated GHG reduction potential for transportation and land use related CAP goals for each target year.

Table 3 – Transportation and Land Use related CAP Goals

CAP Goal or Policy	$MTCO_2e$ Reductions by Target Year			
	2030	2040	2045	2050
GOAL CAP-1 Transportation innovation and Transportation Demand Management (TDM) programs	1,107	1,366	1,649	2,002
GOAL CAP-2 Increase Community Bicycle and Pedestrian Trips	1,073	558	428	594
GOAL CAP-3 Safe and efficient local and regional transit system	398	1,175	1,123	1,134
GOAL CAP-4 Increase low and zero emissions public and private vehicle options	317	668	1,018	1,325
GOAL CAP-5 Affordable and walkable neighborhoods that serve the daily needs of its residents and visitors.	TBD	TBD	TBD	TBD
GOAL CAP-6 Conserve open space and improve land carbon sequestration	2,775	5,550	8,325	11,100

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent.

Source: Data provided by Ascent Environmental in 2020

Building Energy Goals

Goals CAP-7 and CAP-8 focus on reducing GHG emissions associated with energy use in existing buildings and new development in the town. Since existing buildings are where most emissions are generated currently, there is a strong emphasis on increasing energy efficiency in existing buildings, building electrification, and use of renewable natural gas in existing development. However, Goal CAP-8 ensures new development in the town reduces energy use and GHG emissions wherever possible. Table 4 includes the anticipated GHG reduction potential for building energy use related CAP goals for each target year.

Table 4 – Building Energy related CAP Goals

CAP Goal or Policy	$MTCO_2e$ Reductions by Target Year			
	2030	2040	2045	2050
GOAL CAP-7a Energy efficiency in existing developments (CAP Policy 7.1 Renewable natural gas)	11,517	4,903	6,946	6,802
GOAL CAP-7b Energy efficiency in existing development (CAP Policy 7.5 Energy Efficiency Program)	19,758	47,725	42,550	45,513
GOAL CAP-7c Energy efficiency in existing development (CAP Policy 7.6 Water Conservation)	7	7	7	7
GOAL CAP-8 Promote and incentivize building electrification and energy efficiency in new development	NA	3,030	1,264	1,289

Source: Data provided by Ascent Environmental in 2020

Solid Waste Goal

Goal CAP-9 focuses on reducing GHG emissions associated with organic waste through diversion of organic waste from landfills towards more productive uses as well as reducing food waste and food recovery efforts. Table 4 includes the anticipated GHG reduction potential for Goal CAP-9 goals for each target year.

Table 4 – Building Energy related CAP Goals

CAP Goal or Policy	$MTCO_2e$ Reductions by Target Year			
	2030	2040	2045	2050
GOAL CAP-9 Reduce organic waste generated in Truckee	1,932	3,403	3,866	3,936

Source: Data provided by Ascent Environmental in 2020

Additional CAP Element Goals

Goal CAP-10 focuses on reducing GHG emissions through strategies to reduce overall consumption of resources in the town and promote more sustainable consumption patterns including reuse and recycling as well as promoting the "sharing" economy. Because Goal CAP-10 would reduce emissions from sources outside the town limits and are not included in the scope of the Town's emissions inventory, the emissions reductions from Goal CAP-10 counted towards the Town's GHG reduction goals.

Goal CAP-11 focuses on preliminary steps to be taken to begin implementing that CAP with more detail on implementation provided in the CAP Implementation Guide (Appendix X).

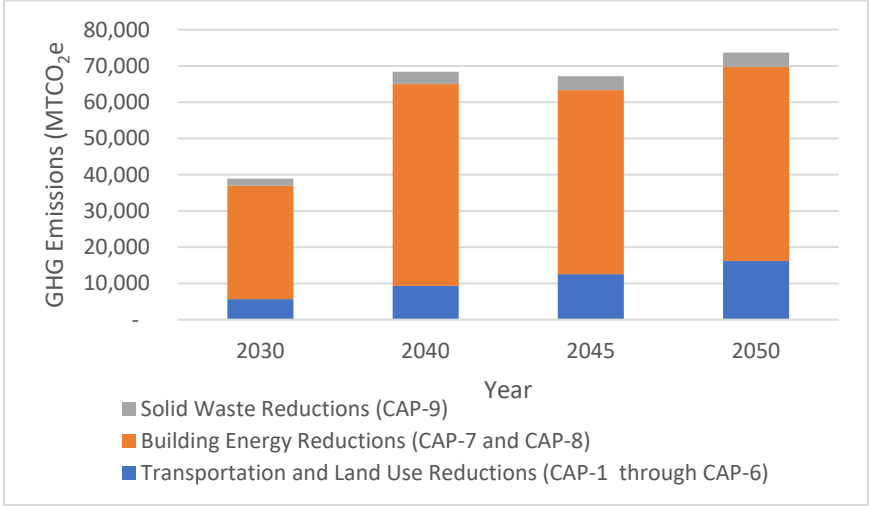

Figure 6 - GHG Reductions by Emissions Sector and Target Year

Goal CAP-1 Reduce Vehicle Miles Traveled

Promote transportation innovation and transportation demand management programs to reduce vehicles miles traveled.

Policies

CAP-1.1

Transportation Demand Reduction Measures (M-1.1)

Support community partners, including existing and future businesses and public and non-profit employers, to expand the use of transportation demand reduction measures including discounts, rewards, and parking cash out programs that divert automobile commute trips to transit, walking, bicycling, or digital/remote working.

CAP-1.2

VMT Standards

Implement the adopted VMT standards and thresholds and evaluate new development projects using the adopted VMT analysis methodologies, thresholds of significance, and mitigation strategies.

CAP-1.3

Transportation Innovation

Promote transportation innovation and encourage transportation network companies to reduce GHGs through improved technology and micromobility alternatives.

Actions

CAP-1.A

Transportation Demand Management Program

Develop an employee threshold (e.g., more than 50 employees) above which TDM measures would be required for new nonresidential development projects and develop a menu of TDM measures to be used as project requirements for such projects. Conduct preliminary outreach with large employers to identify the most appropriate and effective TDM measures for Truckee businesses and their employees. TDM measures could include, but are not limited to:

- parking discounts, rewards, and cash-out programs;
- unbundled parking strategies;
- long-term bicycle parking, on-site lockers, and showers;
- flexible work schedules and telework programs;
- subsidized transit passes, a vanpool program, or
- ridesharing/ride-matching services;

Work with existing and future businesses, and major public and non-profit employers (e.g., local agencies) to expand the use of transportation demand reduction measures that divert automobile commute trips to transit, walking, bicycling, or digital/remote working and incentivize carpool and multi-passenger trips for regional commutes.

> **Responsibility:** Engineering and Public Works Department and Community Development Department

> **Time Frame:** 2025

CAP-1.B

VMT Mitigation

Establish appropriate mitigation measures for projects that cannot adequately reduce VMTs to acceptable standards. VMT mitigation measures might include, but are not limited to:

- Changing land uses to increase internalization of trips and to shorten trip lengths of trips generated by other nearby land uses;
- Improving bicycle and pedestrian network connections;
- Contributions to regional transit enhancements, particularly ongoing operations funding;
- Participation in parking pricing program;
- Reduction in parking supply rates, or unbundling parking spaces from residential units;
- Provision of employee shuttle or ridesharing service;
- Implementing a car-sharing program; and
- Providing funding towards VMT-reducing land uses.

Develop a process to monitor effectiveness of VMT mitigation measures in projects in which they are required and adjust mitigation if needed.

> **Responsibility:** Engineering and Public Works Department

> **Time Frame:** Establish mitigation measures by 2022 and review every five years.

CAP-1.C

Reduce Parking Requirements

Review and amend the Development Code, as necessary, to reduce parking requirements for commercial, mixed-use, and mid-to-high density residential development where it can be demonstrated that alternative modes of transportation are being provided, or where other mechanisms (e.g., unbundled parking, car shares, transit passes) or quantifiable TDM programs would be supported and implemented by the developer.

> **Responsibility:** Community Development Department

> **Time Frame:** Fall 2024

CAP-1.D

Ride-Share Programs

Work with Tahoe Regional Planning Agency (TRPA) to explore a ride-matching/ride-sharing program as part of the TRPA Linking Tahoe website. The program should be focused on reducing commute-related VMT by increasing carpooling for residents with similar commute behavior and destinations.

> **Responsibility:** Engineering and Public Works Department

> **Time Frame:** 2027

CAP-1.E

Mobile Ride-Share Applications

Research ride-sharing/ride-matching mobile applications (e.g., Waze Carpool, Scoop) and websites (e.g., Agile Mile, Comovee, RideAmigos, RideShark, Luum, TripShot) that could be used by or promoted to residents and businesses in Truckee to reduce traffic congestion, commute-related VMT, and single-occupancy vehicle trips. Identify the most appropriate mobile apps to promote and integrate these resources into the Town's other TDM initiatives.

> **Responsibility:** Engineering and Public Works Department

> **Time Frame:** 2027

CAP-1.F

Transportation Network Company GHG Reductions

Develop a strategy to work with Transportation Network Companies (TNCs) (e.g., Uber, Lyft), car-sharing services, and other transportation service companies to reduce greenhouse gas emissions by providing electric vehicle (EV) charging stations at strategic locations and reduce deadhead VMT, which is VMT associated with TNC drivers searching for new passengers.

> **Responsibility:** Engineering and Public Works Department

> **Time Frame:** 2027

Goal CAP-2 Bicycle and Pedestrian Trips

Increase bicycle and pedestrian trips to reduce dependence on vehicles and promote community health.

Policies

CAP-2.1

Truckee Trails and Bikeways Master Plan (M-2.1)

Maintain, implement, and update the Truckee Trails and Bikeways Master Plan to continue to expand the Town's inter-connected system of bikeways, trails, and sidewalks throughout the community that is accessible to all users, including children, persons with disabilities, and seniors.

CAP-2.2

Bike Parking Requirements for New Development

Require new and intensifying existing non-residential and multi-family residential projects to have adequate bike parking and storage.

CAP-2.3

Adequate Bike Parking at Major Facilities

Provide adequate bike parking at all Town facilities and encourage similar parking at other agencies and major existing employers.

CAP-2.4

Bicycle and Pedestrian Roadway Improvements

Use roadway, roundabout, and intersection improvements as an opportunity to improve bicycle and pedestrian facilities and connections, where feasible.

CAP-2.5

Bicycle and Pedestrian Education.

The Town shall continue to provide programs that educate the community about bicycle and pedestrian safety as well as the availability of facilities for and benefits of walking and biking.

Actions

CAP-2.A

New Pedestrian and Bicycle Facilities (M-2.5)

Identify and implement new pedestrian and bicycle facilities beyond those identified in the Trails and Bikeways Master Plan and Downtown Specific Plan. These facilities may include, but not be limited to, pedestrian and bicycle facilities along Donner Pass Road in the Gateway Area and between Cold Stream Road and South Shore Drive, along Highway 89 South, and along West River Street.

- **Responsibility:** Engineering and Public Works Department
- **Time Frame:** Identification by 2025; implementation as part of the budget process

CAP-2.B

Downtown Bicycle and Pedestrian Connections (M-2.4)

Implement the downtown streetscapes as part of the Downtown Specific Plan to complete sidewalks and pedestrian and bicycle connections on Jibboom, Bridge, Church, West River, and other downtown streets resulting in a "Complete Street" cross section accommodating all modes and users.

- **Responsibility:** Engineering and Public Works Department
- **Time Frame:** Ongoing, as part of the annual budget process.

CAP-2.C

Bicycle and Pedestrian Roadway Improvements

Improve bicycle and pedestrian facilities and connections as part of Capital Improvement Projects for roadway, roundabout, and intersection improvements, where feasible.

- **Responsibility:** Engineering and Public Works Department
- **Time Frame:** Ongoing

CAP-2.D

Assessment District Financing

Consider broadening the use of assessment district financing to enable the Town to generate sidewalk and pedestrian area maintenance fees to improve pedestrian access and circulation in commercial and mixed-use areas in Gateway, Downtown, and as part of large private development projects such as the Railyard or Coldstream.

- **Responsibility:** Engineering and Public Works Department
- **Time Frame:** Ongoing, as part of streetscape projects.

CAP-2.E

Bicycle Parking (M-2.15)

Work with Truckee business owners to increase short-term and long-term bicycle parking at strategic locations that support multimodal trips. Ensure that bicycle parking locations are closer and more convenient than vehicle parking options.

- **Responsibility:** Climate Action Team
- **Time Frame:** 2030

CAP-2.F

Bicycle Parking Capital Improvement Project

Create and implement a comprehensive bicycle parking Capital Improvement Project to close gaps in the Town's overall bike network.

- **Responsibility:** Engineering and Public Works Department
- **Time Frame:** Creation by 2027; implementation as part of the annual budget process.

CAP-2.G

Shower and Locker Room Incentives

Create incentives for employers to incorporate shower facilities and locker rooms into new and existing development.

- **Responsibility:** Assistant to the Town Manager's Department and Community Development Department
- **Time Frame:** 2030

CAP-2.H

Bicycle and Trail Promotion

Continue to work with partner organizations like the Truckee Trails Foundation, Truckee Donner Land Trust or Truckee Donner Recreation and Park District to promote development of appropriate bicycle and trail facilities and signage and to develop a comprehensive outreach strategy to increase the percentage of local trips made by biking and walking.

- **Responsibility:** Climate Action Team
- **Time Frame:** Ongoing

Goal CAP-3 Transit System

Promote a safe, accessible, equitable, and efficient local and integrated regional transit system, including bus, van, shuttles, and rail to encourage broad support and use of public transit and reduce dependence on single-occupancy vehicles.

Policies

CAP-3.1
Transit Access
Require new development to incorporate features that accommodate and maximize transit access and use, including shelters, safe routes to transit stops, and ADA improvements, and ensure that right-of-way for future transit access is reserved in plans for new growth areas.

CAP-3.2
First-Last Mile Solutions
Prioritize capital improvements that include first-last mile solutions that connect passengers between modes including rail, intercity bus service, biking, and walking.

CAP-3.3
Transit Use and Transfers
Work to increase ridership, reduce headways, and expand route connections, including transfers between different modes of transport such as Reno/Tahoe International Airport, Truckee Airport, bicycle, rail, and inter-regional bus service.

CAP-3.4
Transit for Special Needs Groups
Incorporate the transit needs of children, seniors, disabled, low-income, disadvantaged, and transit-dependent persons in making decisions regarding transit services and compliance with the Americans with Disabilities Act and Title VI of the Civil Rights Act.

CAP-3.5
Inter-Regional Transit Services
Collaborate with regional partners to expand the provision of inter-regional transit services to and from the Lake Tahoe Basin, ski areas, summer recreation destinations, and public lands, as funding permits.

CAP-3.6
Bus Shelters
Encourage that new bus and van/shuttle shelters include accessible bicycle racks, bicycle maintenance stations, and lighting, and are ADA accessible.

Actions

CAP-3.A

Long Range Transit Plan

Maintain, implement, and update Truckee's Long Range Transit Plan that anticipates a series of improvements and expansion plans and capital facilities, including:

- Increased headways on all transit routes;
- Expanded dial-a-ride programs for on-call and emergency rides; and
- New neighborhood connection routes in critical places such as Tahoe Donner and Glenshire, including bus shelters and service expansion.

Responsibility: Engineering and Public Works Department

Time Frame: Ongoing

CAP-3.B

Funding for Transit Services

Pursue all available sources of funding for capital and operating costs of transit services, including consideration of funding through major developers such as the assessment districts formed for the Coldstream Specific Plan, Joerger Ranch Specific Plan, and the Railyard Master Plan.

Responsibility: Engineering and Public Works Department

Time Frame: Ongoing

CAP-3.C

TART and TTUSD Partnership

Partner with TART and TTUSD to provide extensive outreach and education to local schools and explore opportunities to coordinate ride sharing and "bell times" with the regional network, support free student fares, connect to afterschool activities, and provide bike storage elements to increase ridership and eliminate barriers to "last mile" travel.

Responsibility: Engineering and Public Works Department

Time Frame: 2024

CAP-3.D

Community Outreach and Marketing Campaign

Work with Keep Truckee Green, local community organizations, the TART, and other partners to develop a community-led marketing campaign focused on increasing transit ridership and promoting the community benefits and equity considerations inherent in transit planning. Conduct community outreach to identify the largest barriers to increasing transit ridership and develop a strategy to remove these barriers.

Responsibility: Climate Action Team

Time Frame: 2025

CAP-3.E

First-Last Mile Gap Analysis

Work with active transportation organizations and other stakeholders to conduct a first-last mile gap analysis for the Town's transit system and identify key strategies to remove first-last mile issues for transit riders. Strategies could include increasing bike parking at transit stations; increasing vehicle parking at transit stops; increasing signage and wayfinding; and increasing infrastructure for walking, rolling, and biking (e.g., bike lanes, bike parking, sidewalks, and crosswalks).

Responsibility: Engineering and Public Works Department

Time Frame: 2028

CAP-3.F

Regional Traffic Generators

Encourage major regional traffic generators and employers with more than 50 full-time equivalent employees to develop and implement trip reduction measures and increased use of transit (both public and private) through provision of additional transit routes, connections, and increased service frequency.

Responsibility: Engineering and Public Works Department

Time Frame: Ongoing

CAP-3.G

Transportation Working Group

Work with TART and the Truckee-North Tahoe Transportation Management Association and relevant community organizations to convene a working group similar to a Social Service Transportation Advisory Council. This group would be comprised of representatives knowledgeable about the needs, including unmet transit needs, of senior, disabled, low-income, and transit-dependent persons. Integrate feedback and suggestions from the working group into future updates to the transit system as well as future updates to Truckee's Long Range Transit Plan.

- **Responsibility:** Engineering and Public Works Department
- **Time Frame:** 2023

Goal CAP-4 Low and Zero Emission Vehicles

Increase low and zero emissions vehicle options to work towards a carbon neutral transportation system.

Policies

CAP-4.1
Low Emissions Vehicles to Complement Fixed Route Transit
Expand the van, shuttle, on-demand ride, trip consolidation software, ride sharing and other technologies emphasizing no or low emissions vehicles such as electric to augment or complement fixed route transit.

CAP-4.2
Charging Station System
Enhance the EV charging station network throughout town for both public and private fleets.

CAP-4.3
EV-Ready Installation Infrastructure
Require new residential and nonresidential developments to have EV–ready installation infrastructure and/or installed EV charging stations.

CAP-4.4
Electric-Assist Bikes
Ensure adequate infrastructure for electric-assist bikes such as charging stations in new and redeveloped commercial and multi-family residential projects and Town facilities and a regional bike share program. Encourage other agencies and major employers to install e-bike charging stations. Consider the appropriateness of e-bikes on major multi-use bikeways and trails.

Actions

CAP-4.A
Incentives for Zero Emission Vehicles
Explore incentive programs to convert existing van, shuttle, taxi, ride share, and call-up ride services to zero emission vehicles, and encourage businesses and other agencies to provide EV charging stations.

- **Responsibility:** Climate Action Team
- **Time Frame:** 2026

CAP-4.B
EV and Bike Charging Stations
Provide EV and bike charging stations at Town facilities and throughout town with free charging and/or free parking. Work with partner agencies and private businesses to expand the charging station network.

- **Responsibility:** Engineering and Public Works Department
- **Time Frame:** Ongoing

CAP-4.C
Electric Vehicle Charging Ordinance
Adopt an ordinance establishing minimum requirements for either prewiring or installing electric vehicle supply equipment, as defined by

Article 625 of the California Electrical Code, in all new residential and nonresidential development in Truckee.

> **Responsibility:** Community Development Department

> **Time Frame:** 2027

CAP-4.D

EV Charging Station Guidelines and Permitting Procedures

Develop guidelines for the design and construction of EV charging stations for incorporation into the Town's Development Code as part of the EV charging station ordinance process. Use the Governor's Office of Planning and Research's Zero-Emission Vehicles in California: Community Readiness Guidebook (OPR 2015) to help guide development of the EV charging station guidelines. Develop a process to streamline and expedite permitting for EV chargers in single-family residences.

> **Responsibility:** Community Development Department

> **Time Frame:** 2027

CAP-4.E

Incentives and Rebates for Electric Vehicles

Provide incentives and rebates for homeowners to install home charging stations and purchase EVs. Develop an outreach strategy to promote existing rebates and incentives for EVs and EV charging stations provided by the Truckee-Donner Public Utilities District (TDPUD).

> **Responsibility:** Climate Action Team

> **Time Frame:** 2027

CAP-4.F

Charging Station Standards for Commercial and Multi-family Development

Update the Development Code to require EV and electric bicycle charging stations in new commercial and multi-family development.

> **Responsibility:** Community Development Department

> **Time Frame:** 2024

CAP-4.G

Green Business Certification Program

Advocate for integration of EV and electric bike parking and charging into the Sierra Business Council's Green Business Certification program.

> **Responsibility:** Assistant to the Town Manager's Department

> **Time Frame:** 2022

CAP-4.H

Pilot E-Bike Infrastructure Standards

Conduct research on similar jurisdictions taking initiatives on E-Bike infrastructure and consult with E-bike companies to develop pilot Development Code standards for E-Bike infrastructure. Identify key new development projects in the Town that may be willing to incorporate the pilot E-Bike infrastructure standards into the project design. Work with local community organizations to conduct surveys targeting Town residents and businesses regarding electric bike (E-Bike) ownership and E-Bike infrastructure.

> **Responsibility:** Community Development Department

> **Time Frame:** 2024

CAP-4.I

Electric Bike Trail Use

Consider the appropriateness of electric bikes on major multi-use bikeways and trails and amend the Trails and Bikeways Master Plan and Municipal Code, as necessary. Where feasible, redesign existing trails to accommodate emerging technologies to reduce conflicts and provide for a wide-variety of users.

> **Responsibility:** Engineering and Public Works Department

> **Time Frame:** 2023

Goal CAP-5 Land Use Patterns

Reduce reliance on vehicles by encouraging higher density housing in close proximity to businesses and amenities (e.g., trails, community gathering spaces) that serve the daily needs of residents.

Policies

CAP-5.1
Proximity to Services and Transportation Centers
Promote strategies that will reduce automobile trips including clustering services and housing near transportation centers and routes to reduce vehicle miles travelled.

CAP-5.2
Appropriately Locate Affordable Housing Development
Use regulatory and voluntary tools to focus affordable housing development along existing and planned transit routes and near services and jobs.

CAP-5.3
Healthy Jobs-Housing Balance
Incorporate information from the North Tahoe Regional Workforce Housing Needs Assessment and future housing needs studies into the Town's housing strategy to maintain a healthy jobs-housing balance in the Town.

Actions

CAP-5.A
Transfer of Development Rights Program
Explore the feasibility of developing a transfer of development rights program to conserve land on the town's perimeter and encourage growth in the town's urban core.

- **Responsibility:** Community Development Department
- **Time Frame:** 2027

CAP-5.B
Incentives for ADUs
Create a new housing program that incentivizes the construction of ADUs within one mile of Downtown and the Gateway area.

- **Responsibility:** Community Development Department
- **Time Frame:** 2025

CAP-5.C
Hospital Campus Master Plan
Work with the Tahoe Forest Hospital to develop a comprehensive hospital campus master plan that maximizes opportunities for denser development, employee housing on campus, trip reduction, trip sharing, covered parking, consolidation of jobs, and provision of "on campus" services to reduce employee trips.

- **Responsibility:** Community Development Department
- **Time Frame:** 2023

CAP-5.D

Workforce Housing Strategy

Work with existing large employers to develop a strategy to increase workforce housing in Truckee for employees and their families. The strategy should emphasize co-benefits for both employers (e.g., potential new revenue, employee reliability) and employees (e.g., decreased commute lengths, cost savings, quality of life).

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** Ongoing

Goal CAP-6 Open Space and Carbon Sequestration

Conserve open space and improve land carbon sequestration potential to enhance the resilience of natural spaces.

Policies

CAP-6.1
Land Conservation
Identify new opportunities for conservation and wildfire risk reduction in and surrounding the town.

CAP-6.2
Open Space Restoration
Protect, increase, and restore open space while working to expand the carbon sequestration potential of land.

Actions

CAP-6.A
Carbon Sequestration
Quantify existing carbon sequestration values and work with land conservation organizations (e.g., Truckee Donner Land Trust) and coordinate with local, regional, and State agencies to identify opportunities to preserve open space areas, plant additional tree corridors, restore degraded meadows, and manage vegetation to increase the sequestration of carbon.

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** 2030

CAP-6.B
Truckee Forest Management Plan
In partnership with other agencies (e.g., Department of Fish and Wildlife, CAL FIRE, Truckee Fire Protection District), develop the Truckee Forest Management Plan by 2025 with the goals of increasing the carbon sequestration potential of Truckee's forests and natural lands while reducing wildfire risk. Consider fuel management strategies, such as using wood chipping rather than burn piles, using cleared fuels for lumber or wood products, and using biomass as a fuel source.

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** 2025

CAP-6.C
Tree Preservation Ordinance
Review the Development Code for opportunities to strengthen the tree preservation ordinance to protect mature, significant trees where possible in the project development process, while ensuring that regulations are not in direct conflict with wildfire management goals.

- **Responsibility:** Community Development Department
- **Time Frame:** 2023

Goal CAP-7 Energy Efficiency in Existing Development

Increase energy efficiency in existing developments to reduce energy use in the built environment.

Policies

CAP-7.1
Renewable Energy Sources
Support utility providers in achieving 100 percent renewable energy by increasing renewable energy sources including renewable natural gas. Support regional efforts to develop renewable energy sources and supportive funding opportunities.

CAP-7.2
Resource Conservation Outreach Programs
Continue to work with local utility providers to develop outreach programs and materials to educate and influence resource conservation behavior of residents, businesses, and visitors.

CAP-7.3
Energy Efficiency Upgrades at Town Facilities
Continue to employ energy efficiency upgrades as part of regular municipal maintenance operations and incorporate renewable energy options where feasible.

CAP-7.4
Decarbonization
Work toward decarbonization of existing buildings by 2030 while supplementing cost and burdens for vulnerable populations.

CAP-7.5
Building Energy Retrofit Program
Develop and implement a comprehensive building energy retrofit program.

CAP-7.6
Water Conservation
Promote indoor and outdoor water conservation to reduce water and water-related energy use.

Actions

CAP-7.A
Building Retrofit Program
Work with energy providers, including TDPUD and Liberty Utilities, to develop a comprehensive building electrification and energy efficiency retrofit program that incentivizes and provides financing mechanisms for complete building retrofits for residential and business customers, including an initial audit, efficient appliance incentives, water-use reduction, and upgrades to building envelopes, heating sources, and lighting. Collaborate with local property assessed clean energy providers to help finance larger retrofit projects. Identify funding options and subsidies for low-income households to ensure equitable participation in the program. Identify opportunities to pilot projects with participating residents and businesses to provide an example of potential savings that can be achieved through the program. Incorporate subsidies for low-income households. The program should include the goal of reducing natural gas use in existing residential land uses by 20 percent and nonresidential land uses by 15 percent by 2030.

- **Responsibility:** Community Development Department and Assistant to the Town Manager's Department
- **Time Frame:** 2024

CAP-7.B

Decarbonization of Local Gas Supply

Work with Southwest Gas and other relevant stakeholders to develop a goal and timeline to achieve decarbonization of local gas supply. Explore the costs and benefits of various pathways to providing renewable natural gas to Truckee residents and pursue the most cost-effective path that still achieves GHG reductions.

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** Begin 2022, ongoing

CAP-7.C

Utility Rates

Work with local utilities to adopt utility rates that incentivize and balance energy efficiency, renewable energy, and other future clean energy efforts that may impact demand with consideration to customer needs.

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** Begin 2024, ongoing

CAP-7.D

Clean Energy Coalition

Support a coalition of local agencies, large consumers, utilities, and non-profit organizations to drive a regional transition to clean energy, including innovative alternative fuels such as community solar, wind, biofuels and/or biomass, and others.

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** Begin 2024, ongoing

CAP-7.E

Rural Regional Energy Network

Explore possibilities for joining or helping to develop a Rural Regional Energy Network to implement policies CAP-7.1 and CAP-7.5 to decarbonize existing buildings by 2030.

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** 2023

CAP-7.F

Town Facility Retrofits

Retrofit existing Town facilities and encourage other local agencies to pursue upgrades of existing facilities as part of future Capital Improvement Projects, considering use of all-electric energy, efficient natural gas units, and renewable generation.

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** 2030

CAP-7.G

Water Conservation Education

Provide educational material for residents and businesses on water conservation tips and the TDPUD's existing water saving programs (e.g., water-efficient toilet upgrades and rebates for water leak repairs) on the Town's website and at the Town planning counter, including information from local landscape professionals on appropriate native and drought-tolerant landscape design solutions for existing and new development.

- **Responsibility:** Community Development Department
- **Time Frame:** 2022

CAP-7.H

Roadmap to Decarbonization

By 2030, develop a policy roadmap to decarbonize existing while supplementing cost and burdens for vulnerable populations.

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** 2025

CAP-7.I

Retrofit Incentive Promotion

Promote electric appliance, HVAC system, and other retrofit incentives on the Town website as well as at the Town planning and permitting counters.

Responsibility: Community Development Department

Time Frame: 2025

Goal CAP-8 Energy Efficiency in New Development

Promote and incentivize building electrification and energy efficiency in new development.

Policies

CAP-8.1
Fossil Fuel Reduction

Discourage use of fossil fuels in new building and incentivize electrification to reduce the use of fossil fuels.

CAP-8.2
Zero Net Energy Standard

Develop a Zero Net Energy (ZNE) Standard to minimize energy use in new residential and non-residential development.

CAP-8.3
Alternative Building Materials

Support the use of innovative and alternative building materials and designs to improve energy efficiency, and encourage voluntary actions, such as compliance with the Leadership in Energy and Environmental Design standard or Build it Green point system.

Actions

CAP-8.A
Reach Code

Explore development of a reach code to be adopted by 2025 that requires new development projects above a certain threshold (e.g., square footage) to comply with California Green Building Standards Code Tier 1 standards, including a target of reducing energy use by 20 percent over minimum Title 24 Part 6 Building Energy Efficiency Standards for residential land uses and 15 percent for nonresidential land uses. Incorporate flexibility and exemptions into the green building ordinance to ensure that affordable housing projects and low-income residents are not disproportionately affected by the ordinance. Require exemptions to the solar mandate to replace lost energy generation with equal energy savings by other measures.

- **Responsibility:** Community Development Department
- **Time Frame:** 2025

CAP-8.B
All-Electric Development Incentives

Conduct a comprehensive review of the Town's permit fee structure and development review process and identify key areas that can be updated to defer planning, permitting, and inspection fees and streamline the development review process for applicants who commit to developing all-electric residential and nonresidential development projects.

- **Responsibility:** Community Development Department
- **Time Frame:** 2025

CAP-8.C
Zero Net Energy Standard

Adopt a ZNE standard by 2030 with the goal of a zero-net increase in new residential energy use and a 75 percent reduction in new nonresidential energy use (compared to business as usual). Identify and incorporate exemptions for energy intensive nonresidential land uses that may not be able to achieve the ZNE standard. Update the Town

website to provide information on the ordinance, and proactively work with applicants to make compliance with the ordinance as effective and efficient as possible.

> **Responsibility:** Community Development Department
>
> **Time Frame:** 2030

CAP-8.D

Energy Efficiency Upgrade Trainings

Collaborate with the Northern California Chapter of the U.S. Green Building Council, TDPUD, Liberty Utilities, Southwest Gas, and community organizations to provide local training and workshops for energy efficiency upgrades and green building design. Focus outreach for training on historically underserved communities, low-income residents, and unemployed or underemployed residents to ensure equitable access to training and job opportunities.

> **Responsibility:** Community Development Department
>
> **Time Frame:** Ongoing

CAP-8.E

Outdoor Water Use Reductions

Review and update the Division 5.3 "Water Efficiency and Conservation" of the Town of Truckee California Green Building Code Requirements for non-residential development projects to ensure project designs include a 20 percent reduction in outdoor water use compared to the Town's WS-1R Worksheet (baseline water use) for new development projects.

> **Responsibility:** Community Development Department
>
> **Time Frame:** 2025

Goal CAP-9 Organic Waste

Reduce organic waste generated in Truckee.

Policies

CAP-9.1
Organic Waste Diversion
Increase organic waste diversion rates for businesses, residents, and public agencies while supporting local renewable natural gas production, as appropriate.

CAP-9.2
Alternative Fuel Sources
Consider alternative fuel sources, including local anaerobic digestion, biofuel, biodiesel, methane capture from wastewater processing, and forest biomass as potential energy sources.

Actions

CAP-9.A
Recycling and Composting Ordinance
Conduct research and develop an implementation strategy, including timeline, outreach strategy, and monitoring program, for a mandatory organics recycling ordinance by 2022, pursuant to SB 1383, and eliminate disposal of compostable organic materials to landfills. Create an engagement strategy to educate the community on zero waste programs, including reducing food waste, composting, and the impacts of waste stream contamination. Provide incentives, financial support, and partnerships to support robust engagement.

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** 2022

CAP-9.B
Edible Food Recovery
Engage with stakeholders (e.g., Nevada and Placer County, religious institutions, and local food donation, recovery, and collection organizations) to build robust collection and food storage capacity, and reliable and equitable distribution systems to achieve the food recovery goal established in SB 1383 of increasing edible food recovery by 20 percent above 2014 levels by 2025. Link to large food waste generators such as supermarkets, wholesale distributors, and large hotels, and create a platform to connect donators and receivers.

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** 2024

CAP-9.C
Development Standards for Organic Waste Collection
Update the Town's development standards to ensure that the design of new commercial developments is adequate for organic waste collection.

- **Responsibility:** Assistant to the Town Manager's Department and Community Development Department
- **Time Frame:** 2022

CAP-9.D
Sustainability and Climate Change Education
Through Keep Truckee Green and local partners, implement educational programming for students on how to take environmental action, and increase sustainability and climate change education in public school curriculum.

- **Responsibility:** Assistant to the Town Manager's Department

Time Frame: 2022

Goal CAP-10 Minimize Overall Consumption

Minimize embedded carbon emissions and reduce overall consumption.

Policies

CAP-10.1
Single-Use Items
Increase recycling and reuse and reduce the use of single-use items throughout the community.

CAP-10.2
Packaging, Production, Goods Transportation Waste
Encourage all organizations, particularly large waste-generating organizations, to reduce waste in packaging, production, and transporting of goods to Truckee.

CAP-10.3
Refurbishment, Repair, and Reuse
Support development programs that teach refurbishment, repair, and reuse, while increasing education and awareness campaigns that focus on reuse and repair as a first priority. Work with community partners to adopt waste reduction pledges and create marketing campaigns to brand a "cool" culture of sustainability.

Actions

CAP-10.A
Reduce Single-Use Items
Work with residents and businesses, specifically restaurants, to reduce and eliminate single-use items and adopt guidelines encouraging reusable foodware in-house and at events.

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** 2022

CAP-10.B
Reuse Facility and Repair Hubs
Work with partners to investigate feasibility of a reuse facility or specified location at the Eastern Regional Landfill that makes building materials available to customers and acts as an outlet for reusable items otherwise destined for landfill. Create hubs for businesses and residents to learn skills in repair and reuse, and support creation of a civic-public partnership that connects residents to sharable goods and services.

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** 2026

CAP-10.C
Ordinance to Discourage Single-Use Items
Consider implementing an ordinance that makes use of charges, incentives, and requirements to encourage behavioral change on use of disposable foodware and other single-use items, with focus on equitable application.

- **Responsibility:** Assistant to the Town Manager's Department
- **Time Frame:** 2022

CAP-10.D
Consumption-Based Emissions Study
Conduct a consumption-based emissions study for the Town by 2030 to identify life-cycle emissions costs of the products residents and visitors purchase at the store and online. Research and identify appropriate

standard for conducting the Town consumption-based emissions study. Examples and resources include:

- Urban Sustainability Director's Network Consumption Based Emissions Inventory (CBEI)
- C-40 Consumption-Based GHG Emissions Report
- Production, Consumption and Lifecycle Greenhouse Gas Inventories: Implications for CEQA and Climate Action Plans – AEP White Paper
- Life Cycle Database as part of the Greenhouse Gas Protocol

Responsibility: Assistant to the Town Manager's Department

Time Frame: 2030

Goal CAP-11 CAP Implementation, Monitoring, and Reporting

Implement CAP goals, policies, and actions through a comprehensive implementation, monitoring, and reporting program

Policies

CAP-11.1

Interjurisdictional and Interagency Collaboration

Promote regional interjurisdictional and interagency collaboration on all relevant climate action measures.

CAP-11.2

CAP Implementation Progress Updates

Ensure elected officials and the public are regularly updated on CAP implementation and progress achieved towards the Town's GHG reduction targets.

Actions

CAP-11.A

Sierra Regional Climate Action Planning Program

Work with other jurisdictions and agencies (e.g., Nevada County, Placer County, TRPA) to form a regional climate action collaborative and establish the Sierra Regional Climate Action Planning Program to support regional and local GHG reduction strategies. Include representatives from relevant non-profit organizations, business associations, community organizations, and educational institutions to ensure strong community support and representation in the collaborative leadership. Potential implementation actions to support the regional program include:

- Identify common GHG reduction strategies between jurisdictions and develop an information sharing and mutual aid system to support the successful implementation of these strategies at the local level.
- Ensure adequate funding, resources, and expertise are provided to the collaborative to ensure a long-term and sustainable model for strategy implementation.
- As part of the collaborative, establish working groups focused on major emissions sectors (e.g., building energy use, transportation, solid waste) to support the implementation of sector-specific strategies.
- Establish a permanent funding source for the collaborative to ensure GHG reduction strategies can be fully implemented. Use funding to implement GHG reductions strategies while ensuring businesses, low-income households, and disadvantaged communities are not unduly burdened by the costs and impacts of strategy implementation.

> **Responsibility:** Assistant to the Town Manager's Department

> **Time Frame:** Ongoing

CAP-11.B

Sustainability Coordinator

Hire or appoint a Sustainability Coordinator to lead implementation and monitoring of the CAP as well as collaborate with internal staff and regional partners on climate action.

> **Responsibility:** Assistant to the Town Manager's Department and Community Development Department

> **Time Frame:** 2021-2022

CAP-11.C

Climate Action Team

Establish a Climate Action Team composed of key staff from Town departments, community organizations, and other stakeholders who will be involved in CAP implementation and monitoring.

> **Responsibility:** Sustainability Coordinator

> **Time Frame:** 2021-2022

CAP-11.D

CAP Development Review Checklist

Develop a CAP Development Review Checklist, within 6 months of adoption of the General Plan Update, to assist in the California Environmental Quality Act (CEQA) streamlining process in reference to CEQA Section 15183.5, and include all necessary CAP strategies for new development projects to achieve CAP GHG reduction targets.

> **Responsibility:** Community Development Department

> **Time Frame:** Complete by Spring 2023

CAP-11.E

CAP Implementation and Progress Reports

Monitor CAP implementation on a quarterly basis, and report progress toward achieving the CAP's GHG reduction targets to Town Council on an annual basis. Create a CAP monitoring and reporting tool to assist with annual reports that include an implementation matrix for consolidated tracking and reporting on strategy-by-strategy progress.

> **Responsibility:** Climate Action Team

> **Time Frame:** Quarterly monitoring and annual reporting

CAP-11.F

Greenhouse Gas Emissions Inventory

Update the Town's GHG emissions inventory every four years and update the CAP at a minimum of every six years to incorporate new technologies for GHG reductions, new state programs and legislation that affect GHG emissions, and new or updated local measures to reduce GHG emissions. If the annual reporting and monitoring actions (CAP-11.E) indicate that the strategies included in CAP are not collectively achieving appropriate progress toward the GHG reduction targets, Town staff shall prepare and present to the Town Council recommended revisions to the CAP that would modify or replace measures to the extent necessary to achieve the GHG reduction targets.

> **Responsibility:** Climate Action Team

> **Time Frame:** Update emissions inventory in 2026 and every four years thereafter. Update CAP in 2028 and at least every six years thereafter

Abbreviations

AB	Assembly Bill
ABAU	legislative-adjusted business-as-usual
BAU	business-as-usual
CAL FIRE	California Department of Forestry and Fire Protection
CAP	Climate Action Plan
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
EV	electric vehicle
GHG	greenhouse gas
MPO	Metropolitan Planning Organization
$MTCO_2e$	metric tons of carbon dioxide equivalent
NA	not applicable
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
SB	Senate Bill
SCS	Sustainable Communities Strategy
TART	Tahoe Truckee Area Regional Transit
TDM	transportation demand management
TDPUD	Truckee-Donner Public Utilities District
TNC	Transportation Network Companies
Town	Town of Truckee
town	Town of Truckee (geographic area)
TRPA	Tahoe Regional Transportation Authority
VMT	vehicle miles traveled

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general plan + downtown specific plan

DRAFT Climate Action Plan Appendix

Town of Truckee | 2040 General Plan Update

Climate Action Plan Appendix

The Truckee Climate Action Plan (CAP) Appendix serves as a supplement to Chapter 9 Climate Action Plan Element of the *Truckee 2040 General Plan* and is intended to help with implementation of the greenhouse gas (GHG) emissions reductions achieved through the goals, policies, and actions identified in Chapter 9. The appendix identifies specific metrics and GHG reduction targets associated with each CAP Element Goal and some specific policies to be achieved by milestone years. The appendix also includes a list of funding strategies available to help implement the CAP goals, policies, and actions.

Town of Truckee Renewable Energy and Greenhouse Gas Reduction Goals

In 2017, the Town passed Resolution 2017-58, which established the goals of reducing communitywide emissions to 80 percent below baseline emissions (2008) by 2040, achieving 100 percent renewable electricity in municipal operations by 2030, achieving 100 percent renewable energy town-wide by 2050, achieving 100 percent renewable electricity in municipal facilities by 2020, and engaging in a transparent and robust community engagement process to help achieve the goals outlined in the resolution.

To understand what annual GHG emissions will look like in the future, the Town has modeled two emissions growth scenarios—a business-as-usual (BAU) scenario and a legislative-adjusted BAU (ABAU) scenario. These scenarios are based on projected trends in energy use, driving behavior, job growth, and population growth for the target years 2030, 2040, 2045, and 2050, and are based on the state's established GHG reduction goals as shown in Table 1. These trends are also informed by the policies included in the *Truckee 2040 General Plan* that will affect annual GHG emissions. The emissions forecasts allow the Town to assess the effectiveness of various GHG reduction strategies over time while also providing a snapshot of how annual emissions levels will likely change under the two scenarios.

By modeling BAU and ABAU emissions out to target years, the Town can then understand what percentage of the Town's future emissions reductions will be achieved by legislative actions and what percentage will need to be achieved through the CAP strategies to achieve the Town's GHG reduction targets. The tables provided for the strategies that could be quantified provide an annual GHG reduction potential for the strategy if it were fully implemented.

Table 1 - Truckee CAP Emissions Forecast and GHG Reduction Targets

CAP Metric	Target Year						
	2008 (Baseline)	2016	2020	2030	2040	2045	2050
BAU forecast ($MTCO_2e$)	230,349	228,334	240,075	259,033	275,250	283,079	291,297
ABAU forecast ($MTCO_2e$)	230,349	153,438	141,195	151,106	149,695	139,379	142,958
ABAU Forecast - percent change from 2008 baseline	NA	-33%	-39%	-34%	-35%	-39%	-38%
Town GHG reduction targets compared to 2008 baseline	NA	0%	0%	-40%	-80%	-100%	-100%
Town annual emissions targets ($MTCO_2e$)	230,349	NA	NA	127,032	46,070	0	0
Reductions needed from CAP strategies to achieve targets (annual $MTCO_2e$)	NA	NA		21,853	102,820	139,379	142,958

Notes: ABAU = legislative-adjusted business-as-usual; BAU = business-as-usual; $MTCO_2e$ = metric tons of carbon dioxide equivalent; NA = not applicable.
Source: Data provided by Ascent Environmental in 2021

Table 2 provides a summary of the GHG reduction potential for each CAP strategy as well as the progress towards the Town's long-term GHG reduction targets. If fully implemented, the CAP strategies will result in an annual emission reduction of approximately 38,884 metric tons of carbon dioxide equivalent ($MTCO_2e$), exceeding the Town's GHG reduction goal of 21,853 $MTCO_2e$ by 2030 and the state reduction target set forth by Senate Bill (SB) 32. By 2040, the CAP strategies will achieve an annual reduction of 68,384 $MTCO_2e$, or 67 percent of the reductions needed to achieve the Town's target for 2040 of reducing emissions to 80 percent below 2008 levels. Similarly, the CAP achieves a 48 percent reduction towards the 2045 target and a 52 percent reduction towards the 2050 target. Due to the longer period for the 2040, 2045, and 2050 targets, it is assumed that as the CAP is implemented and updated periodically new strategies, technologies and programs will help achieve the remaining reductions needed for 2040, 2045, and 2050. The remainder of this document provides details on each of the GHG reduction strategies and actions that will need to be taken to successfully implement each of the strategies.

Table 2 – CAP Goals and Policies - GHG Reduction Summary

CAP Goal or Policy		$MTCO_2e$ Reductions by Target Year			
		2030	2040	2045	2050
GOAL CAP-1	Transportation innovation and transportation management programs	1,107	1,366	1,649	2,002
GOAL CAP-2	Increase Community Bicycle and Pedestrian Trips	1,073	558	428	594
GOAL CAP-3	Safe and efficient local and regional transit system	398	1,175	1,123	1,134
GOAL CAP-4	Increase low and zero emissions vehicle options	317	668	1,018	1,325
GOAL CAP-5	Affordable and walkable neighborhoods that serve the daily needs of its residents	TBD	TBD	TBD	TBD
GOAL CAP-6	Conserve open space and improve land carbon sequestration	2,775	5,550	8,325	11,100
GOAL CAP-7a	Energy efficiency in existing developments (CAP Policy 7.1 Renewable Natural Gas)	11,517	4,903	6,946	6,802
GOAL CAP-7b	Energy efficiency in existing development (CAP Policy 7.5 Energy Efficiency Program)	19,758	47,725	42,550	45,513
GOAL CAP-7c	Energy efficiency in existing development (CAP Policy 7.6 Water Conservation)	7	7	7	7
GOAL CAP-8	Promote and incentivize building electrification and energy efficiency in new development	1,002	3,030	1,264	1,289
GOAL CAP-9	Reduce organic waste generated in Truckee	1,932	3,403	3,866	3,936
GOAL CAP-10	Minimize embedded carbon emissions and reduce overall consumption	NA	NA	NA	NA
GOAL CAP-11	Implement CAP goals, policies, and actions	NA	NA	NA	NA
Total GHG Reductions from CAP Strategies ($MTCO_2e$)		**38,884**	**68,384**	**67,176**	**73,702**
Reductions needed from CAP strategies to achieve targets ($MTCO_2e$)		**21,853**	**102,820**	**139,379**	**142,958**
Percentage of gap achieved through initial measures		**178%**	**67%**	**48%**	**52%**
Remaining GHG Reduction Gap ($MTCO_2e$)		**NA**	**34,145**	**71,927**	**68,950**

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; NA = not applicable.
Source: Data provided by Ascent Environmental in 2021

CAP Element Goals and Policies – GHG Reduction Quantification Metrics

This section provides the CAP Element Goals and an associated "CAP Metric" to identify how the GHG reductions for the various goals and policies are being quantified and provide the Town with a mechanism to track implementation progress for specific goals, policies, and actions.

NOTE TO REVIEWERS: GHG reductions identified in this section may be revised as the General Plan elements are developed.

GOAL CAP 1: Reduce Vehicle Miles Traveled

Promote transportation innovation and transportation demand management programs to reduce vehicles miles traveled.

Table 3 – GHG Reduction Summary for Goal CAP-1

$MTCO_2e$ Reduction and CAP Metric	Target Year			
	2030	2040	2045	2050
$MTCO_2e$ reduction	1,107	1,366	1,649	2,002
Percent reduction in commute-related VMT reduction programs	15%	20%	25%	30%
Annual VMT reduction	3,717,879	5,038,857	6,445,210	7,942,588

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; VMT = vehicle miles traveled.
Source: Data provided by Ascent Environmental in 2021

Emission Reduction Summary

The emissions reduced through Goal CAP-1 would be achieved by implementing the policies and supporting actions under Goal 1, which focus on reducing commute-related single occupancy vehicle trips and vehicle miles traveled (VMT) from new and existing development in the Town. This reduction will come from a transition to more sustainable commute behavior (e.g., transit, carpooling, biking walking, and telecommuting) for Town residents and those who work in Town but live elsewhere. The emissions reductions and associated reduction in VMT for Goal 1 are calculated based on a percentage reduction in projected town wide VMT for the target years of 2030, 2040, 2045, and 2050.

GOAL CAP-2: Bicycle and Pedestrian Trips

Increase community bicycle and pedestrian trips to reduce dependence on vehicles and promote community health.

Table 4 – GHG Reduction Summary for Goal CAP-2

$MTCO_2e$ Reduction and CAP Metric	Target Year			
	2030	2040	2045	2050
$MTCO_2e$ reduction	1,073	558	428	594
New Class I and II bike lanes (miles)	24	20	20	5
Percent increase of town-wide street length with Class I and II bike lanes	43%	25%	20%	25%
Percent of Town wide street length with Class I and II bike lanes	52%	65%	78%	82%

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; VMT = vehicle miles traveled.
Source: Data provided by Ascent Environmental in 2021

Emissions Reduction Summary

The emissions reductions from Goal CAP-2 would be achieved through improving biking and pedestrian facilities throughout the Town, helping to shift transportation behavior and increase trips within the Town made by biking or by walking. Research has demonstrated that a 1 percent increase of street length with bike lanes will result in a 0.35 percent increase in trips made by bicycle (Marshall and Garrick 2010). The emissions reduction calculations for this goal are based on the percent increase of town-wide streets with Class I and II bike lanes and assumes that these new bicycle tripes would replace trips otherwise made by single occupancy vehicles.

GOAL CAP-3: Transit System

Promote a safe, accessible, equitable, and efficient local and integrated regional transit system, including bus, van, shuttles, and rail to encourage broad support and use of public transit and reduce dependence on single-occupancy vehicles.

Table 5 – GHG Reduction Summary for Goal CAP-3

$MTCO_2e$ Reduction and CAP Metric	Target Year			
	2030	2040	2045	2050
$MTCO_2e$ reduction	398	1,175	1,123	1,134
VMT reduction	1,339,271	4,488,696	4,608,927	4,740,352

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; VMT = vehicle miles traveled.
Source: Data provided by Ascent Environmental in 2021

Emissions Reduction Summary

The emissions reductions from Goal CAP-3 would be achieved through improvements to the Town's transit system, helping to change transportation behavior and replace vehicle trips with local and regional trips made using the transit system. This would result in an overall reduction in town wide VMT and associated GHG emissions. Research has demonstrated that comprehensive expansions to transit networks can result in between 0.1 percent and 10 percent reduction in a community's total annual VMT (Hany et al. 2013). The calculations for this goal conservatively assume a 3 percent decrease in VMT by 2030 and 6 percent increase in town wide VMT by 2040, 2045, and 2050.

GOAL CAP 4: Low and Zero Emission Vehicles

Increase low and zero emissions vehicle options to work towards a carbon neutral transportation system.

Table 6 – GHG Reduction Summary for Goal CAP-4

$MTCO_2e$ Reduction and CAP Metric	Target Year			
	2030	2040	2045	2050
$MTCO_2e$ reduction	317	668	1,018	1,325
Cumulative nonresidential EV charging stations installed	50	100	150	200

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; EV = electric vehicle.

Source: Data provided by Ascent Environmental in 2021

Emissions Reduction Summary

The emissions reductions from Goal 4 would be achieved through the increased adoption and use electric vehicles. By increasing the prevalence of public EV charging stations in Truckee, the Town can encourage the purchase and use of EV's by residents and visitors. The calculations for this goal assume there will be 50 new EV charging stations (2 charging plugs per station) by 2030 at Town facilities and non-residential land uses by 2030, 100 new charging stations by 2040, 150 new changing stations by 2045, and 200 new charging stations by 2050. The calculations assume an average of 3 hours of charging a days per charging plug beginning in 2030.

GOAL CAP-5: Land Use Patterns

Encourage higher density housing in close proximity to business and amenities (e.g., trails and community gathering places) that serve the daily needs of its residents and to reduce reliance on vehicles.

Table 7 – GHG Reduction Summary for Goal CAP-5

$MTCO_2e$ Reduction and CAP Metric	Target Year			
	2030	2040	2045	2050
$MTCO_2e$ reduction	TBD	TBD	TBD	TBD
New affordable housing units	TBD	TBD	TBD	TBD

Note: $MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: Data provided by Ascent Environmental in 2021

Emissions Reduction Summary

The emissions reductions from Goal CAP-5 would be achieved through an increase in the number of affordable housing units developed in the Town by target years. Research has indicated that, on average, residents of affordable housing units use transit more and have lower rates of vehicle ownership, leading to overall reductions in VMT from new residential development compared to market rate housing (CAPCOA Measure 2010, LUT-6). (Note: The number of affordable housing units to be developed will be determined by the land use alternatives process and therefore has not been calculated yet.)

GOAL CAP-6: Open Space and Carbon Sequestration

Conserve open space and improve land carbon sequestration potential to enhance the resilience of natural spaces.

Table 8 – GHG Reduction Summary for Goal CAP-6

$MTCO_2e$ Reduction and CAP Metric	Target Year			
	2030	2040	2045	2050
$MTCO_2e$ reduction	2,775	5,550	8,325	11,100
New acres in preservation	25	50	75	100

Note: $MTCO_2e$ = metric tons of carbon dioxide equivalent.

Source: Data provided by Ascent Environmental in 2021

Emissions Reduction Summary

The emissions reductions from Goal CAP-6 would be achieved through new acres open space being placed into permanent conservation easements or other conservation mechanism, permanently preserving the carbon sequestration potential of the land. The calculations for this goal assume that the acres of open space preserved would otherwise, without the actions taken by the Town, be developed for other uses and the carbon sequestration potential would be lost. The calculations for this measure assume a carbon sequestration potential of 111 $MTCO_2e$ per acre for forestland (South Coast Air Quality Management District 2021).

GOAL CAP-7: Energy Efficiency in Existing Development

Increase energy efficiency in existing developments to reduce energy use in the built environment.

The GHG reductions and CAP Metrics for GOAL CAP-7 are associated with three individual policies (i.e., Policy 7.1, Policy 7.5, and Policy 7.6) included under the larger goal.

CAP Policy 7.1: Renewable Energy Sources

Support utility providers in achieving 100 percent renewable energy by increasing renewable energy sources including renewable natural gas. Support regional efforts to develop renewable energy sources and supportive funding opportunities.

Table 9 – GHG Reduction Summary for CAP Policy 7.1

$MTCO_2e$ Reduction and CAP Metric	Target Year			
	2030	2040	2045	2050
$MTCO_2e$ reduction	11,517	4,903	6,946	6,802
Percent renewable natural gas provided to Truckee Residents	25%	50%	100%	100%

Note: MTCO2e = metric tons of carbon dioxide equivalent.

Source: Data provided by Ascent Environmental in 2021

Emissions Reduction Summary

The emissions reductions from CAP Policy 7.1 under Goal CAP-7 would be achieved by steadily increasing the percentage of renewable natural gas that is provided to Town resident's and businesses. This increase in the use of renewable natural gas will reduce the overall GHG intensity of natural gas used in Town until, by 2045, all natural gas consumption will be sourced from renewable resources.

CAP Policy 7.5: Building Energy Retrofit Program

Develop and implement a comprehensive building energy retrofit program.

Table 10 – GHG Reduction Summary for CAP Policy 7.5

$MTCO_2e$ Reduction and CAP Metric	Target Year			
	2030	2040	2045	2050
Reductions from residential retrofit projects ($MTCO_2e$)	14,085	33,361	28,861	29,804
Reductions from nonresidential retrofit projects ($MTCO_2e$)	5,673	14,365	13,689	15,710
Total $MTCO_2e$ reduction	19,758	47,725	42,550	45,513

Note: $MTCO_2e$ = metric tons of carbon dioxide equivalent.

Source: Data provided by Ascent Environmental in 2021

Emissions Reduction Summary

The emissions reductions from CAP Policy 7.5 under Goal CAP-7 would be achieved through a comprehensive building electrification and energy efficiency retrofit program. The calculation for this policy assumes that, as the retrofitting and electrification of buildings in the Town occurs, there would large reductions in the use of natural gas and subsequent reduction in associated GHG emissions.

CAP Policy 7.6: Water Conservation

Promote indoor and outdoor water conservation to reduce water and energy use.

Table 11 – GHG Reduction Summary for CAP Policy 7.6

$MTCO_2e$ Reduction and CAP Metric	Target Year			
	2030	2040	2045	2050
$MTCO_2e$ reduction	7	7	6	6
Percent reduction in outdoor water use achieved by policy	20%	20%	20%	20%

Note: MTCO2e = metric tons of carbon dioxide equivalent.

Source: Data provided by Ascent Environmental in 2021

Emissions Reduction Summary

The emissions reductions from CAP Policy 7.6 under Goal CAP-7 would be achieved through reductions in outdoor water use and, subsequently, a reduction in electricity use associated with the conveyance and treatment of potable drinking water used. The calculations for this policy assume a 20 percent reduction outdoor water use through the use of water efficient irrigation systems and drought tolerant landscaping.

GOAL CAP-8: Energy Efficiency in New Development

Promote and incentivize building electrification and energy efficiency in new development.

Table 12 – GHG Reduction Summary for Goal CAP 8

$MTCO_2e$ Reduction and CAP Metric	Target Year		
	2040	2045	2050
$MTCO_2e$ reduction	3,030	1,264	1,289
Residential energy use reduction above Title 24 Part 6 Building Energy Efficiency Standards	100%	100%	100%
Nonresidential energy use reduction above Title 24 Part 6 Building Energy Efficiency Standards	75%	100%	100%

Emissions Reduction Summary

The emissions reductions from Goal CAP-8 would be achieved through the development and adoption of a zero net energy standard that would go into effect no later than 2030. The zero net energy standard would require all new residential development after 2030 to produce net zero emissions associated with building energy use and all new nonresidential development to achieve a 75 percent reduction in energy use and associated emissions compared to the Title 24 Part 6 Building Energy Efficiency Standards for nonresidential development in place in 2030.

GOAL CAP-9: Organic Waste

Reduce organic waste generated in Truckee.

Table 13 – GHG Reduction Summary for Goal CAP 9

$MTCO_2e$ Reduction and CAP Metric	Target Year			
	2030	2040	2045	2050
$MTCO_2e$ reduction	1,932	3,403	3,866	3,936
Organic waste diversion increase from 2014 levels (%)	50%	75%	90%	90%

Note: $MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: Data provided by Ascent Environmental in 2021

Emissions Reduction Summary

The emissions reductions from Goal CAP-9 would be achieved through a reduction in organic waste sent to landfills and, therefore, a reduction in methane emissions generated from that organic waste. The calculations for this goal assume a 50 percent reduction in organic waste diverted from landfills by 2030 compared to 2014 levels, a 75 percent diversion by 2040, and a 90 percent reduction by 2045.

GOAL CAP-10: Minimize Overall Consumption

Minimize embedded carbon emissions and reduce overall consumption

Emissions Reduction Summary

While Goal CAP-10 would achieve emissions reductions, these reductions would be achieved from emissions generated from manufacturing, sources which are outside the jurisdiction of the Town. Therefore, these emissions reductions are not calculated or accounted for in the CAP

GOAL CAP-11: CAP Implementation, Monitoring, and Reporting

Implement CAP goals, policies, and actions through a comprehensive implementation, monitoring, and reporting program

Emissions Reduction Summary

Goal CAP-11 is focused on implementation of the previous ten goals in the CAP and, therefore, there are no direct emissions associated with this goal.

CAP Goals and Policies Monitoring Table

The following is a summary of all the CAP Metrics that have been identified for the various goals and policies. The table summarizes all the CAP Metrics in one location and will help the Town monitor progress towards achieving each of the CAP Metric targets for the target years of 2030, 2040, 2045, 2050.

CAP Goals and Policies	CAP Metric	Metric Target by Future Target Years			
		2030	2040	2045	2050
GOAL CAP-1 Transportation innovation and transportation management programs	Percent reduction from commute-related VMT reduction programs	15%	20%	25%	30%
GOAL CAP-2 Increase Community Bicycle and Pedestrian Trips	New Class 2 and 3 bike lanes (miles)	24	20	20	5
	Percent increase of town-wide street length with bike lanes	43%	25%	20%	25%
GOAL CAP-3 Safe and efficient local and regional transit system	VMT reduction from transit trips replacing vehicle trips	1,339,271	4,488,696	4,608,927	4,740,352
GOAL CAP-4 Increase low and zero emissions vehicle options	Cumulative nonresidential EV charging stations installed	50	100	150	200
GOAL CAP-5 Affordable and walkable neighborhoods that serve the daily needs of its residents	TBD	TBD	TBD	TBD	TBD
GOAL CAP-6 Conserve open space and improve land carbon sequestration	New acres of (Forestland – Scrub or similar) in preservation	25	50	75	100
GOAL CAP-7 Part A Energy efficiency in existing developments (CAP Policy 7.1 Renewable natural gas)	Percent renewable natural gas provided to Truckee Residents	25%	50%	100%	100%
GOAL CAP-7 Part B Energy efficiency in existing development (CAP Policy 7.5 Energy Efficiency Program)	Reductions from residential retrofit projects (MTCO2e)	14,085	33,361	28,861	29,804
	Reductions from nonresidential retrofit projects (MTCO2e)	5,673	14,365	13,689	15,710
GOAL CAP-7 Part C Energy efficiency in existing development (CAP Policy 7.6 Water Conservation)	Percent reduction in outdoor water use achieved by policy	20%	20%	20%	20%
GOAL CAP-8 Promote and incentivize building electrification and energy efficiency in new development	kWhs reduced from existing energy use	NA	45,196,467	60,605,473	69,549,732
	Therms reduced from existing energy use	NA	1,819,465	2,439,782	2,799,850
	Gallons of propane reduced from existing energy use	NA	91,332	122,470	140,544
GOAL CAP-9 Reduce organic waste generated in Truckee	Organic waste diversion (reduction) increases from 2014 levels	50%	75%	90%	90%

Source: Data provided by Ascent Environmental in 2021

CAP Implementation Funding Sources

Implementation of the CAP strategies will require both funding from external sources, such as grants and private-public partnerships, and the allocation of Town resources to achieve comprehensive implementation of the CAP and achieve long-term GHG reductions. Provided below is a sample list of current funding sources and programs that could help support the implementation of the CAP strategies. Funding sources are constantly changing; thus, the Town will need to evaluate individual funding needs and potential funding sources for each strategy on a case-by-case basis. The Town may also need to take future actions to pursue competitive funding opportunities, such as grants, or develop new partnerships or agreements with other agencies that already provide funding through existing programs.

Residential and Commercial Energy

- **California Energy Commission 1 Percent Interest Rate Loans:** The California Energy Commission offers 1 percent loans for local jurisdictions to conduct projects with proven energy savings at municipal facilities.
- **California Lending for Energy and Environmental Needs Center**: This funding source, a program of the California Infrastructure and Economic Development Bank, provides direct public financing to municipalities, universities, schools, and hospitals to help meet the state's goals for GHG reductions, water conservation, and environmental preservation.
- **GRID Alternatives:** GRID Alternatives is a nonprofit organization that provides no-cost solar installations to low-income residents and provides assistance for communities in developing multifamily and community-scale solar installations. The organization also provides hands-on job training for volunteers interested in employment in the solar industry.

Transportation and Land Use

- **Active Transportation Planning Program:** This California Department of Transportation (Caltrans) program provides competitive planning grants for jurisdictions working on planning projects to increase the proportion of trips accomplished by biking and walking and reduce communitywide VMT.
- **Transportation Planning Grant Program:** Caltrans's Transportation Planning Grant Program provides competitive planning grants to help local jurisdictions in a variety of transportation planning efforts, including development and implementation of regional transportation plans; address multimodal transportation deficiencies with a focus on transit, and support planning actions that advance climate adaptation efforts for local transportation systems.
- **California Clean Vehicle Rebate Project:** This CARB program provides rebates of up to $7,000 for the purchase or lease of a new, eligible zero-emission or plug-in hybrid light-duty vehicle.
- **Affordable Housing and Sustainable Communities Program:** This program, administered by the California Department of Housing and Community Development, funds land use, housing, transportation, and land preservation projects that support infill and compact development and reduce GHG emissions. Funds are available in the form of loans and/or grants in two kinds of project areas: transit-oriented development project areas and integrated connectivity project areas.

- **SB 2 Planning Grant Program:** This planning grant program provides financial and technical assistance to local governments to update planning documents and zoning ordinances, including general plans, community plans, and specific plans, in order to streamline housing production; implement sustainable community strategies; and implement local coastal programs. The program does not use a competitive process to award funds. All localities that meet the eligibility requirements outlined in the grant application will be funded.
- **Strategic Growth Council Affordable Housing and Sustainable Communities Program:** This program makes it easier for Californians to drive less by making sure housing, jobs, and key destinations are accessible by walking, biking, and transit. Program funding can be used for affordable housing development, sustainable transportation infrastructure and related amenities that reduce VMT, and programs to encourage increases in active transportation modes.

Solid Waste

- **CalRecycle Food Waste Prevention and Rescue Grant Program:** The purpose of this competitive grant program is to reduce overall GHG emissions by establishing new or expanding existing food waste prevention projects (source reduction or food rescue for people) in California to reduce the amount of food being disposed of in landfills.
- **CalRecycle Local Enforcement Agency Grant Program:** CalRecycle administers a noncompetitive grant program to assist local enforcement agencies with their solid waste facilities permit and inspection program.

General Funding and Staff Capacity

- **CivicSpark Program:** The CivicSpark Program supports sustainability-focused research, planning, and implementation projects throughout California by providing public agencies and other organizations with high-quality capacity building support and community engagement through volunteer engagement via highly motivated emerging sustainability AmeriCorps Fellows for 11 months.
- **California Climate Investments:** California Climate Investments is a statewide initiative that provides funds from the state's Cap-and-Trade Program for projects and programs that work to reduce GHGs in the state. Funds from California Climate Investments can be used to support a variety of projects, including affordable housing, renewable energy, public transportation, zero-emission vehicles, environmental restoration, more sustainable agriculture, and recycling. Numerous state programs identified above are funded by California Climate Investments; however, the program continues to evolve and is updated by the state periodically to include new or modified programs.

The funding sources and programs listed above are subject to change. In addition to seeking support from the above-listed funding sources, the Town should continue to search for new funding sources through the state's Climate Change Funding Wizard website, which provides the most up-to-date information on funding opportunities for projects for climate change mitigation and adaptation.

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