Draft Greenhouse Gas (GHG) Emissions Reduction Measures and Supporting Actions for the City of Healdsburg Climate Mobilization Strategy

1 Overview of Measures and Actions

Greenhouse Gas (GHG) Reduction Measures identify specific goals (i.e., Healdsburg activity data targets by 2030) to address amounts of GHG emissions from each sector. A single measure generally addresses a subsector or represents an incremental step towards reducing GHG emissions in an overall sector. For example, three measures may be established under transportation to address active transportation, shared transportation, and single passenger vehicles. **GHG Reduction Actions** identify the supportive programs, policies, financial pathways, and other commitments that will accomplish a measure goal. Measures and actions are organized according to the following hierarchy:

1. **Sectors:** Sectors define the GHG emissions category in which the GHG reductions will take place and include Building Energy, Transportation, Solid Waste, Water and Wastewater, and Carbon Sequestration.
2. **Measures:** Measures are developed under each sector pursuant to the GHG Inventory and Forecast and in line with the Community Protocol and the California Air Resources Board (CARB) 2022 Climate Change Scoping Plan:
   - Building Energy
   - Transportation
   - Solid Waste, Water, and Wastewater
   - Carbon Sequestration

   Additional measures developed for the City of Healdsburg Climate Mobilization Strategy (CMS) not quantified in emissions reductions include:
   - Municipal Measures (are a part of each sector) [1]
   - Administrative and Funding
3. **Actions:** Actions identify the programs, policies, funding pathways, and other specific commitments that the City of Healdsburg will implement. Each measure contains a suite of actions, which together have been designed to accomplish the measure goal and metrics.

[1] Municipal measures are the City's demonstration of climate action leadership. They contribute only minorly to community-level GHG emissions reductions and are a subset of the community GHG emissions. For this reason, the GHG emissions reductions expected from municipal measures are considered supportive and will not be quantified as part of the CMS.

Measures and actions can be either quantitative or supportive, defined as follows:

- **Quantitative:** Quantitative measures and actions result in quantifiable GHG emissions reductions when implemented. GHG emissions reductions from these measures and actions are supported by case studies, scientific articles, calculations, or other third-party substantial evidence.
- **Supportive:** Supportive measures and actions may also be quantifiable and have substantial evidence to support their overall contribution to GHG reduction. However, due to one of several factors – including a low GHG reduction benefit, indirect GHG reduction benefit, or potential for double-counting– they have not been quantified and do not contribute directly to the expected GHG reduction target and consistency with the state goals. Despite not being quantified, supportive measures/actions are nevertheless critical to the overall success of the CMS and provide support so that the quantitative measures and actions will be successfully implemented.

2 Key Strategy Attributes

In general, measures are designed to encompass six key attributes that are essential to effective climate policy implementation. Together, these specific key attributes have been identified to be specific community impact areas that together will activate or guide the buildout of actions for each measure. In general, the actions under a single measure should collectively address all the key pillars. The suggested key attributes are:

- **Structural Change:** Establishing a program/policy/ordinance that will allow the City to reach the target that we have within a measure (e.g., ordinance or code)
- **Education**: To support a structural action we want to get community buy in and promote the existence of the program and educate stakeholders (e.g., educational events or materials)
- **Equity**: Actions that engage and consider vulnerable communities (low-income families, fixed-income seniors, agricultural workers, etc.) that may experience secondary impacts or not benefit directly from what the measure's objective is (e.g., actions that ensure the overall community benefit)
- **Feasibility Studies**: Used to understand more about the details/obstacles/feasibility or implementation of a program (e.g., analysis necessary to identify the best path or the feasibility of implementing a specific measure)
- **Funding**: The financial backing to get a program going – a dive into grant funding or financing opportunities (e.g., grants or rebates that help pay for the implementation of a measure, funding to adequately staff the program)
- **Partnerships:** Looking at outside non-profits or agencies that can help with implementation of a measure's actions (e.g., community organizations that are best positioned to move a measure forward consistently or sustainably)

3 Cost of Implementation

Determining cost for measures is a complex process that involves an evaluation of capital cost, marginal cost, cost of inaction, change in cost overtime, and return on investment. Variability in implementation costs depends on the Goals identified, their level of specificity, and the accompanying funding and financing strategies. Costs may vary from capital-intensive investments, like the installation of bike infrastructure to encourage alternative means of transportation, to less capital-intensive but more staff-intensive investments, like conducting outreach and education campaigns to increase organic waste diversion. These costs have been broken down into three categories presented in Table 1. A qualitative cost range for each draft measure are provided in Table 2. ***A more in-depth cost analysis for up to 15 actions is underway***.

Table 1 Cost Categories

Cost Category	City	Community
Low-Cost	Goals associated with low upfront costs and will only require staff time to implement, such as: ▪ Policy Updates ▪ Community Outreach	Goals associated with low upfront costs compared to existing alternatives, such as: ▪ Additional energy bill costs for renewable energy compared to fossil fuel-based energy
Moderate-Cost	Goals associated with moderate upfront costs to the City and require moderate capital costs or consultant time along with staff time, such as: ▪ Feasibility Studies ▪ Incentive and Compliance Programs ▪ Pilot Projects	Goals associated with moderate upfront costs that are not comparable to existing costs nor are offset over lifetime, such as: ▪ New fees ▪ Upfront costs partially offset by rebate opportunities
High-Cost	Goals associated with high upfront costs and require substantial investments into infrastructure and technology system upgrades, such as: ▪ Bike Lanes ▪ Energy Storage Systems ▪ EV Charging Networks	Goals associated with high upfront costs that are not comparable to existing cost nor are offset over lifetime, such as: ▪ New electric vehicle purchase prior to existing vehicle replacement

4 Measures and Actions

Measures presented in Table 2 were developed based on best practices to achieve GHG emission reductions from the 2018 levels used to develop Healdsburg's GHG forecast. Specific goals for GHG reduction were set based on community, City staff, City Council, and stakeholder input. Recently the Balancing Act survey was developed to evaluate specific GHG reduction strategies and the degree of emphasis the community would like to prioritize specific strategies in the CMS. Table 2 presents information including the ranking of community-wide measure within an individual sector based on the results of the Balancing Act, an estimation of GHG emission reductions achievable, and notes on additional context and justification for how the measure was prioritized and why it is included in this list.

Tables 3 to 6 provide the actions that accompany each individual measure. Analytics of the Balancing Act survey along with feedback received from the community through other outreach activities and events and feedback received from City staff regarding feasibility and priorities during Departmental interviews were used to draft the actions presented in Tables 3 through 6. Note that measures that were not included in the Balancing Act survey for community prioritization, are municipal measures, or are supportive measures do not include a ranking in this draft measures list.

Table 2 City of Healdsburg CMS GHG Emissions Reduction Measures List

Measure #	Community Rank by Sector	2030 GHG Emission Reduction (MT CO_2e)	Relative Cost	Measure	Context/Justification
Building Energy (4,750 MT CO2e)					
BE-1	1	2,170	Moderate cost to City and Utility to obtain additional carbon-free or renewable electricity from existing contracts. Moderate community investment associated with rate increases.	Procure 85% of electricity from renewable and zero-carbon sources by 2030 and 100% renewable and carbon-free no later than 2045.	Procuring as much renewable and carbon-free electricity as feasible has been indicated as # 1 priority for the community through surveys and workshops. Achieving this measure will increase the GHG reductions from other electrification measures related to building and transportation. This aligns with resolution 99-2018 specifying a target of 200 lb/MW, and places a date on the target already adopted by Council.
BE-2	3	930	Moderate cost to City to update ordinance and enforce in building permitting process. Low community investment for meeting ordinance requirements. Construction cost savings expected related to avoided gas infrastructure.	Continue to adopt an Electrification Reach Code for all new residential and commercial buildings with each triannual code cycle, if not included within state building codes. Update building electrification ordinance to eliminate natural gas consumption in new construction for the 2025 California Building Standards Code and moving forward.	Of the measure options related to the electrification of new construction, electrification of new construction by 100% was ranked the highest in the Balancing Act. This measure is a low lift financially for the City and community as it requires expansion of an existing ordinance and would build off of increasing the renewable sources for the electricity grid mix. Council adopted the current Electrification Reach Code in 2022, to be implemented and enforced beginning in 2023. For the expected residential development during the 3-year code cycle 2023-2025, the Reach Code is estimated to reduce 159 MT CO2e annually. If the current

Measure #	Community Rank by Sector	2030 GHG Emission Reduction (MT CO_2e)	Relative Cost	Measure	Context/Justification
					exemptions remain in future Reach Codes, the estimated 2030 GHG emission reduction would be 830 MT CO_2e, compared to the 930 expected without exemptions.
BE-3	2	950	Moderate cost to City associated with offering rebates/incentives Moderate community investment for equipment upgrades and retrofitting of buildings on a voluntary basis	Decarbonize residential building stock by 10% by 2030.	Based on community feedback via surveys and workshops, the community most identified the greatest comfort with electrification of 25% of existing building stock. However, many community members are concerned with the elimination of natural gas completely as it is viewed as a necessary power source in the case of emergencies and power outages. To decarbonize a City it will be essential to decarbonize the building stock completely. At this time, the measure focuses on achieving a percentage of decarbonization by 2030.
BE-4	2	700		Decarbonize non-residential building stock by 10% by 2030.	
BE-5	Not ranked	Supportive (Municipal Measure)	Moderate to high cost to City depending on availability of equipment and structural needs for retrofits	Lead by example and decarbonize 50% of municipal buildings and facilities by 2030.	Demonstrates municipality's dedication to leading by example and decarbonizing City operations.
Transportation (18,850 MT CO2e)					
T-1	2	350	High cost to City for infrastructure improvements and expansions Moderate community investment for local taxes that go towards infrastructure	Implement programs that increase access to safe active transportation, such as walking and biking, that achieve 15% of active transportation mode share by 2030.	The community indicated high interest in improved infrastructure for walking and biking. Additionally, tourism in the community also uses the active transportation infrastructure. An increase to 15% mode shift to walking and biking is at the higher end of what studies have been shown is achievable and is supported by community interest. (Current mode share is 2% biking and 4% walking.)

Measure #	Community Rank by Sector	2030 GHG Emission Reduction (MT CO_2e)	Relative Cost	Measure	Context/Justification
T-2	3	2,000	Moderate cost to City to conduct a feasibility analysis and offer incentives to the community Low community investment as City would help off-set voluntary use of transit with incentives	Implement programs for public transportation that achieve 10% of public transit mode share by 2030.	The community indicated that even with improved public transit, there is not an interest in increasing public transit use significantly. Infrastructure for public transit is expensive, therefore, without the interest of the community to switch to an increased usage of the system the cost for substantial increases in public transit infrastructure is not justified. The measure focuses on achieving a 10% mode shift to public transit (from the current 1%).
T-2A Structural	Not Ranked	Supportive	Moderate cost to City to conduct feasibility study and developing/maintaining a micromobility program Moderate community investment for local taxes or user fees that go towards program maintenance	Explore the development of a micro-mobility and/or car-share program to support mode shift from single occupancy fossil fuel vehicles to Zero Emission Vehicles.	Based on community feedback during surveys and workshops, the development of a micro-mobility program to incentivize mode shift to less GHG intensive modes of transportation is highly desirable. This measure involves evaluating different micro-mobility opportunities, such as carshare programs or door-to-door shuttle services, and then determining if and how the micro mobility program would be implemented.
T-3	Not ranked	Supportive	Moderate cost to City to conduct feasibility studies, devote resources to developing and enforcing new policies Low to moderate community investment for paid parking	Develop programs and policies to discourage driving single passenger vehicles and to support the bicycle/pedestrian and public transit mode share goals of Measures TR-1 and TR-2.	This measure is included to further incentivize mode shift to less GHG intensive modes of transportation. This includes actions such as establishing parking fees to influence behavior and provide funding support for mode shift.
T-4	1	14,500	High cost to City to expand EV infrastructure in City	Increase passenger zero-emission vehicle use and adoption to 50% by 2030.	The community indicated this as a high priority for the City (1st for transportation measures), however the prioritization of this

Measure #	Community Rank by Sector	2030 GHG Emission Reduction (MT CO_2e)	Relative Cost	Measure	Context/Justification
T-5	2	2,000	Moderate community investment for EV charging stations in compliance with EV reach code and business fleet conversion (note that some fleets are already required to begin electrifying their fleet per the Advanced Clean Fleets regulation)	Increase commercial zero-emission vehicle use and adoption to 40% by 2030.	measure differed amongst English speaking and Spanish speaking residents, with Spanish speakers prioritizing this effort lower. A majority of the community's GHG emissions are from the transportation sector, so electrifying the vehicles would significantly reduce GHG emissions.
T-6	Not ranked	Supportive (Municipal Measure)	Moderate cost to City to replace fleet vehicles and purchase ZEVs in accordance with Advanced Clean Fleet Rule. High cost if exceeding the goals of the Rule.	Lead by example and electrify or otherwise decarbonize the municipal fleet in compliance with the state's Advanced Clean Fleet Rule.	Demonstrates municipalities dedication to leading by example and decarbonizing City operations
Solid Waste, Water, and Wastewater (7,780 MT CO2e)					
W-1	2	50	Moderate cost to City for additional incentives and resources to install water conservation devices. Low community investment to voluntarily engage in water conservation efforts.	Reduce per capita potable water consumption by 25% by 2030.	The community is concerned with drought and water resources and motivated to conserve water. Additionally, the City has indicated that in past years the community has reduced water consumption by 50% in drought years and is currently implementing a recycled water pipeline that is expected to reduce potable water use by 10%. Therefore, a reduction to 25% compared to 2018 consumption has already been achieved and now just needs to be maintained.
SW-1	1	7,730	Moderate to high cost to City for resources to develop and enforce compliance with State compost requirements Low to moderate community investment due to paying penalties for non-compliance (low or no cost	Achieve Zero Waste by 2030 through 90% diversion of solid waste from the landfill.	The community is very interested in continuing to reduce waste sent to the landfill. Additionally, community members have done well at separating organic waste with the City's assistance and providing of free compost and organic waste containers. This measure has strong community support, low cost to the City and community in alignment

Measure #	Community Rank by Sector	2030 GHG Emission Reduction (MT CO_2e)	Relative Cost	Measure	Context/Justification
			to community members if compliant)		with SB 1383. Additionally, this measure supports the Resolution 52-2019, adopted by City Council to achieve zero waste by 2030. (Currently the City has a 53% landfill diversion rate.)
Carbon Sequestration (275 MT CO2e)					
CS-1	2	25	Moderate cost to City for increase tree planting and conducting feasibility study for compost application. Low community investment for voluntary engagement	Increase carbon sequestration by preserving existing mature trees and planting 500 new trees and high emissions reduction potential land cover types throughout the community by 2030.	Community is highly interested in carbon sequestration. However, the technology to sequester large amounts of CO_2 requires additional research and technology advancements. Therefore, several measures are included to increase carbon sequestration through greening of the City, and maintaining existing carbon stock. The City may choose to investigate the opportunities for additional carbon sequestration as technology improves.
CS-2	Not Ranked	Supportive	Low to moderate cost to City for increasing restoration projects with partnerships.	Maintain and expand existing restoration projects to sequester carbon in restored lands.	
CS-3	Not Ranked	250	Moderate cost to City in identifying locations for compost application.	Align with SB 1383 and procure products of organic diversion at a rate of 0.08 tons of organic waste per resident per year with a focus on increasing compost application within City limits to increase carbon sequestration.	Part of SB 1383 requires jurisdiction procurement of SB 1383 compliant product (e.g., compost, RNG, etc.). Application of compost would satisfy SB 1383 and increase carbon sequestration.
Administration and Funding					
F-1	Not Ranked	Supportive	Moderate to high cost to City for developing a position for a Climate Program Manager.	Designate a Climate Program Manager by 2025	Establishing a position dedicated to implementing the CMS and planned projects can improve the implementation success and success in identifying grants and establishing programs.
Total Reductions (31,655 MT CO2e)					

Table 3 City of Healdsburg Building Energy CMS GHG Emissions Reduction Measures and Actions List

Building Energy		
Measure/Action Number	**Pillar**	**Action**
Measure BE-1	**Procure 85% of electricity from renewable and zero-carbon sources by 2030 and 100% renewable and carbon-free no later than 2045.**	
BE-1.1	Feasibility Study	Conduct an electrification infrastructure and capacity feasibility study, or studies. This may include outcomes such as: • Identify expected increases in electric utility demand due to building and vehicle electrification • Ensure adequate utility capacity to meet that demand • Identify any utility infrastructure improvements and their costs • Analyze resource adequacy • Evaluate different technologies for energy storage and energy reliability (e.g., batteries, fuel cell) • Identify locations or complexes (i.e., City facilities, parking lots, critical facilities) in the City for installation of local renewable energy generation, energy storage projects, and/or ideal locations for development of a utility scale micro-grids to improve system reliability. • Prioritize and schedule projects for implementation. The study/studies should include an identification of barriers and needs for implementation of the prioritized projects as well as identify funding sources, impacts on rates, and partnerships needed for successful implementation.
BE-1.2	Structural	Develop a resolution that Healdsburg Electric will exceed the requirements of SB 100 and SB 1020 by 2030 where 85% of the electricity mix is sourced from eligible renewable sources and/or carbon-free sources. As part of this resolution include actions of: 1. Establish grid resiliency goals in the City, such as reliability index targets and/or qualitative targets 2. Establish MW capacity goal for battery storage and/or demand response by 2030 3. Continue to offer 100% renewable Green Rate 4. Indicate that geothermal and other low-carbon eligible renewables will continue to make up approximately 30% of the overall electricity mix. 5. Work with City Council to determine the acceptable and available products that may be used to reach this goal.
BE-1.3	Partnership/ Funding	Work with other stakeholders of the Lodi Energy Center (LEC) to identify ways to support as well as streamline the Department of Energy grant application to fund the LEC hydrogen-electrolyzer project. This will reduce emissions of Healdsburg Electric electricity and increase reliability of the electricity source.
BE-1.4	Partnership/ Education	Work with community groups, local organizations, and NCPA to: • Engage with community to advertise/highlight the adoption of the resolution establishing the goal of achieving 85% renewable and/or carbon-free electricity by 2030 and 100% renewable and/or carbon-free no later than 2045. Provide information on the process for providing reliable electricity 24/7 year around and the importance of power sources to ensure the reliability of the electricity provided. • Provide information to the community on the importance of achieving this goal and how to meet this goal through city and community actions and involvement. This may include information on the benefits of local generation of renewable energy versus purchasing of Renewable Energy Certificates (RECs) to promote community installation and

Building Energy		
Measure/Action Number	**Pillar**	**Action**
		use of on-site solar and battery storage as a means to limit reliance on the utility and to better achieve local carbon-free electricity community wide. • Include information on time of energy use as it factors into carbon intensity and how community members can capitalize on using electricity when it has the lowest carbon intensity (e.g., when to charge electric vehicles and when to run space heating and cooling). Work with industry experts to help with demand response planning, developing strategies to increase flexibility of the grid, and for informing consumers of carbon intensity of the electricity they are using to promote behavior change.
BE-1.5	Partnership/ Equity	Partner with community organizations to ensure low/moderate income households are aware of the CARE and State's HEAP program to receive decreased electricity rates and provide technical assistance.
Measure BE-2	**Continue to adopt an Electrification Reach Code for all new residential and commercial buildings with each triannual code cycle. Update electrification ordinance to eliminate natural gas consumption in new construction for the 2025 California Building Standards Code and moving forward.**	
BE-2.1	Structural	Continue to enforce the Electrification Reach Code for the 2022 California Building Standards Code requiring electric space and water heating in new construction.
BE-2.2	Structural	In 2025 and every 3-years thereafter if not included within State building codes, revisit the building electrification ordinance to update the scope and reduce exemptions to align with industry technology advancements. As part of ordinance update, include the following scope changes: 1. Minimize the exemptions associated with the ordinance and continue to require the submittal of an infeasibility waiver to review specific end uses where electrification is technologically infeasible. 2. Require that any end-use deemed infeasible for electrification exceed existing Title 24 energy efficiency standards and be electric ready for future electrification. 3. Establish a zero NOx threshold. 4. To limit stranded assets, discontinue approval of permits for new natural gas lines for new construction unless an infeasibility waiver has been approved. 5. Streamline permitting for battery storage for resiliency in the event of power outage. 6. Specify that affordable housing developments will be all-electric to ensure no stranded assets. 7. Revisit substantial remodel and improvement definitions to be included in the ordinance.
BE-2.3	Education	Engage with the community, key stakeholders, and local-based community organization representing vulnerable communities to raise awareness about building electrification before revising the electrification ordinance. Emphasize the economic and environmental advantages of electrification and address concerns related to emergency response to minimize exceptions. Publicize the cost savings, environmental benefits, and flexibility of electrification through the City website and permit counters, targeting builders, property owners, and contractors.
BE-2.4	Partnerships/ Equity	Engage with interested parties, both internal interested parties, such as City staff and officials, and external interested parties, such as local developers and community groups regarding the purpose and impact of the Healdsburg Electrification Reach Code and to identify and address equity concerns in policy implementation.

Building Energy		
Measure/Action Number	**Pillar**	**Action**
BE-2.5	Funding/Equity	Engage with affordable housing developers to leverage incentives for new all-electric and efficient low-income residential buildings through the California Energy Commission Building Initiative for Low-Emissions Development (BUILD) Program and the Affordable Housing and Sustainable Communities (AHSC) Program. Regularly investigate and leverage other incentive programs available for electrification of new buildings.
Measure BE-3	**Decarbonize residential building stock by 10% by 2030.**	
BE-3.1	Feasibility Study	Develop a residential building decarbonization plan that assesses the feasibility and cost for electrification retrofitting as well as identifies potential equity concerns/impacts. The plan should identify strategies and/or specific projects to electrify 10% of existing residential buildings by 2030 and identify the increased electricity capacity needs for this electrification goal. It would also establish the funding and financing requirements necessary to support the community in this transition. This may include identification of funding needs to develop and enforce a permitting compliance program.
BE-3.2	Structural	Continue to monitor the 9th circuit court of appeals of the CRA vs City of Berkeley ruling. Once electrification costs and funding/financing options are identified, develop an-electric-preferred reach code for existing residential buildings by 2025 to be implemented through the building code for projects that are valued at $250,000 or greater. Include the following aspects in the code development: 1. Develop the reach code such that it satisfies the federal Energy Policy and Conservation Act's (EPCA) seven criteria for an exemption from preemption. 2. Establish a zero-NOx standards for replacement appliances. 3. Establish a time of renovation energy efficiency performance requirement and electrification requirement that includes a checklist of cost-effective efficiency and electrification options for renovations to be completed based on scale of project.
BE-3.3	Structural	Develop a comprehensive permitting compliance program that includes routine training of City staff, dedicating City staff time to building inspections, charging fees for noncompliance, providing easy-to-understand compliance checklists online and with permit applications, and facilitating permitting online. As part of this permitting program, align with SB 379 to implement an online, automated permitting platform that verifies code compliance and issues permits in real time or allows the City to issue permits in real time for a residential solar energy system (<38.4 kilowatts AC) and a residential energy storage system paired with a solar energy system.
BE-3.4	Partnership	Explore opportunities with PG&E as they arise for natural gas infrastructure pruning within the City to reduce the chance of stranded assets, provide potential funding, and establish an efficient transition to carbon neutral buildings.
BE-3.5	Funding/Equity	Continue to provide incentives available for community members installing solar and battery storage to their homes such as a Net Metering Program with high-compensation NEM rates, and continue to provide incentives for energy efficiency and efficient electrification upgrades. Consider a Disadvantaged Communities-single-family Solar Homes program. Provide resource information to the community through websites, workshops, and partnerships. Include outreach to newly sold homes, when homeowners are more likely to make upgrades.

Building Energy		
Measure/Action Number	**Pillar**	**Action**
BE-3.6	Equity	Review incentives, rebates, and financing options for procedural equity and ensure that existing and updated incentive programs are being equitably distributed to the community. Develop a suite of Equity Guardrails with input from the community to ensure existing building electrification improves equity in the community.
BE-3.7	Structural	Implement a Neighborhood Retrofit Program to improve resiliency in residential buildings (i.e., on-site power generation and storage, weatherization, cooling, etc.), with an emphasis on connecting incentives and resources with rental property owners and low-income residents. Partner with community organizations to utilize existing resources. Develop an appliance direct install program for Multi-Family income-restricted properties.
BE-3.8	Funding	Once feasibility studies and cost analysis are completed, dedicate staff time or funding of consultants to pursue funds through CARB, the Investment Reduction Act, and the Infrastructure Investment and Jobs Act including, but not limited to: 1. DOE block grants 2. Green bonds 3. Grant Anticipation Notes or Short-Term Loans 4. Tax exempt lease purchases 5. Energy as a service 6. Energy Performance Contracting from Energy Service Companies (ESCOs)
BE-3.9	Partnership	Continue to conduct periodic energy efficiency rebates reviews. Promote existing available rebates and incentives for energy efficiency and electrification from Healdsburg Electric, the State, and the Federal government through partnership with Climate Action Healdsburg to educate the community on ways to finance electrification.
Measure BE-4	**Decarbonize non-residential building stock by 10% by 2030.**	
BE-4.1	Feasibility Studies	Conduct a feasibility strategy to identify non-residential building electrification barriers and develop a non-residential building electrification strategy with analysis supporting future adoption of a non-residential building electric-preferred reach code. Feasibility analysis should aim to identify areas of existing utility capacity and customer panel capacity to identify the potential to transition 10% of natural gas usage to electric usage based on average natural gas end-uses in the community and average energy efficiency of standard appliances converted from natural gas to electric. As part of study identify staff resources needs to monitor and enforce a building emission limit standard.
BE-4.2	Structural Change	Continue to monitor the 9th circuit court of appeals of the CRA vs City of Berkeley ruling. As part of the next building code cycle, develop an electric-preferred reach code for existing non-residential buildings to be adopted by 2026 to be implemented through the building code for projects that are valued at $500,000 or greater. As part of this reach code include the following steps: 1. Develop the reach code such that it satisfies the federal EPCA's seven criteria for an exemption from preemption. 2. Encourage commercial buildings to comply with the Commercial Energy Performance Assessment and Disclosure Program (AB 1103). 3. Establish a zero-NOx standards for replacement appliances. 4. Enforce the permitting of replacement appliances through the same permitting compliance program as for residential building electric-preferred reach code.

Building Energy		
Measure/Action Number	**Pillar**	**Action**
BE-4.3	Education	Develop an education campaign to promote electrification and include items in the program such as: 1. Conduct engagement efforts for the commercial sector to identify ways the City can support commercial energy storage installations and neighborhood scale microgrid opportunities. 2. Facilitate funding opportunities for commercial business electrification by identifying and supporting grant opportunities available to the community, prioritizing small and community owned. 3. Implement feedback provided during the community outreach process for small businesses and community-owned businesses to address potential equity impacts of the building performance program. 4. Utility bill inserts to advertise the incentive programs or grants available and the cost benefits of electric appliances 5. Targeted outreach to builders, developers, local contractors, and property managers with an informational brochure describing the financial benefits of replacing natural gas appliances with all electric appliance when they apply for permits 6. Provide informational webinars and an updated website to advertise and promote All-Electric Building Initiative rebates and incentives 7. Promote the use of the Energy Star Portfolio Manager program and benchmarking training programs for nonresidential building owners.
BE-4.4	Education/ Partnership	Continue to partner with electrification/efficiency experts to provide guidance to commercial buildings covered by the new code(s) and/or ordinance(s).
BE-4.5	Education/ Partnership	Partner with the Healdsburg businesses and the Chamber of Commerce to inform and facilitate electrification for commercial business owners.
Measure BE-5	**Decarbonize 50% municipal buildings and facilities by 2030**	
BE-5.1	Structural	Continue to retrofit with LED lighting and replace failing equipment with efficient electric alternatives, such as the all-electric and efficiency upgrades made to City Hall in 2018. Develop a resolution to decarbonize 50% of municipal buildings and facilities by 2030 and 100% by 2045, by retrofitting natural gas appliances with electric alternatives. Include in the resolution an 'electric first' purchasing policy for any equipment or appliances in need of replacement.
BE-5.2	Feasibility Studies/ Funding	Conduct a feasibility study to understand current decarbonization and barriers to installing additional distributed energy resources such as solar and battery storage, or other renewable energy generation infrastructure, at municipal facilities. Plan for directing resources through the city for funding, energy storage, and distributed energy resources. Direct municipal efforts to sourcing space for energy storage projects, microgrid implementation, and future electrification.
BE-5.3	Structural	Gain funding for and complete a Wastewater treatment plant energy efficiency study and implement the highest impact recommendations.

Table 4 City of Healdsburg Transportation CMS GHG Emissions Reduction Measures and Actions List

Transportation		
Measure/Action Number	**Pillar**	**Action**
Measure T-1	**Implement programs that increase access to safe active transportation, such as walking and biking, that achieve 15% of active transportation mode share by 2030.**	
T-1.1	Structural	Work with Sonoma County Transportation Authority (SCTA) to update the 2013 Existing and Planned Bicycle and Pedestrian Facilities for City of Healdsburg with new planned and completed projects by 2025. As part of the update consider including: 1. Identified projects from the 2013 plan not yet implemented and include a progress update and/or reasons that identified projects were determined infeasible in updated Master Plan 2. Safe Routes to School plan 3. Increased biking infrastructure off the main street to enhance connectivity throughout the City and/or in communities where there is currently no or limited infrastructure 4. In partnership with surrounding communities, identify opportunities for infrastructure improvements or expansions to enhance cross-community active transportation 5. Explore streets for permanent through traffic closures to promote walking, biking, and other forms of active transportation with a focus on closing off downtown 6. Explore areas of the City to remove parking and/or additional traffic lanes to prioritize outdoor seating and dining 7. Determine equity barriers to safe bike and pedestrian infrastructure.
T-1.2	Structural	Continue to utilize discretionary funds to implement the bicycle and pedestrian infrastructure improvements and updates such as the protected bike lanes along Healdsburg Avenue and reduction of through lanes on Healdsburg Avenue (e.g., Healdsburg Avenue Improvement Project). Select consultant to finalize designs for Healdsburg Avenue Improvement Project by end of 2023 to aim for project completion end of 2028. Improvement projects underway include: 1. Healdsburg Avenue Complete Streets improvements 2. Grove Street improves including ADA compliance 3. Foss Creek & Front Street connections
T-1.3	Education/ Partnership	Work with the Sonoma County Bicycle Coalition and local community groups to facilitate community outreach and education on transportation alternatives and promote infrastructure improvements and expansion, such as Foss Creek Trail. Continually improve methods for engaging the community, gathering input, and utilizing it to prioritize projects from the Bicycle and Pedestrian Master Plan. Promote and distribute regionally available tools, such as bike maps, bus routes and schedules, etc. to the community and to hotels and tourism centers to increase visitor use of active transportation.
T-1.4	Structural	Develop the Pilot Bike Share Program into a permanent and dependable bike share network that provides access to key destinations throughout the City, and work with regional partners including SMART and others, to assess potential for a regional bike share system. Include educational outreach and campaigns promoting use of the re-inspired program.
T-1.5	Education/ Partnerships	Coordinate regionally through Sonoma County leveraging the regional active transportation plan to facilitate cross-community active transportation improvements. As part of this action include community outreach and education on active transportation improvements to affected areas as well as the community through Public Works and create a continuous feedback loop of public commentary to ensure efficacy and broad awareness of transportation options.

Transportation		
Measure/Action Number	**Pillar**	**Action**
T-1.6	Feasibility Studies	Evaluate existing bike parking facilities and evaluate what improvements can be made to increase supply, reduce theft, and increase rider attraction. This would include surveying existing bike parking facilities throughout the city and developing policies to increase and/or improve these facilities with preference given to improving bike parking facilities near public transit stops and expand access to safe transit (i.e., first and last-mile access). Include analysis of last mile limitations and hurdles. Explore ways to require safe, secure bike parking and/or bike lockers as part of large commercial and multi-family projects.
T-1.7	Partnerships	Partner with the tourism and business sectors of the greater Healdsburg County region to identify pathways to increase active transportation from tourists and employees.
T-1.8	Funding/Equity	Partner with local bike shops to provide subsidies to low-income residents for bicycles, helmets, pumps, and other bicycle equipment. Continue to offer e-bike rebates with increased rebate opportunities for low-income customers. Implement an income-qualified coupon for the e-bike share program, in addition to the available 50% discounted e-bike share rate.
Measure T-2	**Implement programs for public transportation that achieve 10% of public transit mode share by 2030.**	
T-2.1	Feasibility Study / Partnership	Partner with SCT to conduct a feasibility study to inform the development of a tourism-based mobility plan aimed at decreasing tourism-based single passenger vehicle use. In this study: 1. Identify community boundary locations for tourism designated parking and optimal route connectivity. 2. Identify opportunities for town shuttle services and park-and-ride locations for residents and tourists. 3. Pilot study on private funded transportation to wineries. 4. Gauge potential of private partnerships with big tourism destinations such as wineries and local businesses to implement direct public transit routes between park and ride and the relevant tourist destinations.
T-2.2	Study/ Partnership	Partner with regional organizations to conduct local transportation surveys to better understand the community's needs and motivation for traveling by car versus other alternatives such as the bus. Use survey results to inform policy development and education/outreach campaigns that are transit focused.
T-2.3	Equity/ Partnership	In the identification of access improvements to transportation include design improvements of seating and shading at bus stops and along active transportation routes. Partner with SCT to incorporate design changes throughout infrastructure modifications.
T-2.4	Equity/ Studies	Work with SCT to ensure public transportation access and improvements are prioritized in low-income areas, active aging neighborhoods, schools and at major destinations. This could include surveying existing transportation services, routes, schedules, and facilities throughout the city and developing a plan to improve these for implementation with preference given to improving public transportation facilities and expand access to transit (i.e., first and last-mile access).
T-2.5	Studies	Work with local community groups and grant agencies focused on equity projects to conduct a free or subsidized regional public transit pilot program for frontline communities in Healdsburg that makes it free or discounted for participants to travel regionally via SCT.
T-2.6	Partnership	Collaborate and engage with SCT to understand how they are addressing the Innovative Clean Transit Rule and their plan to electrify their bus fleet.

Transportation		
Measure/Action Number	**Pillar**	**Action**
Measure T-2A Structural	**Explore the development of a micro-mobility and/or car-share program to support mode shift from single occupancy fossil fuel vehicles to Zero Emission Vehicles.**	
T-2A.1	Feasibility Study	Conduct a feasibility and cost analysis for purchasing, operating, and maintaining an on-demand door-to-door e-shuttle. This may include the development of a new on-demand e-shuttle, the expansion of DASH for all residents of Healdsburg, or the development of a program to subsidize the cost for electric car-share programs such as Uber or Lyft. The analysis should include identification of potential funding sources (e.g., grants, local taxes, discretionary funds, etc.) and identification of barriers and opportunities for how such a micro-mobility program may enhance active transportation or public transit use. Present the findings to City Council and the public to determine next steps.
T-2A.2	Structural	Based on the findings of the feasibility study and the response from City Council and the public, develop and implement a micro-mobility policy that establishes a deployment protocol and permitting process, identifies any restrictions for use for safety reasons, and promotes equitable access through requirements for consistent placement of micro-mobility devices (e-scooters, e-bikes, etc.) in underserved areas or reductions in usage fees for lower-income users.
T-2A.3	Equity	Facilitate transportation equity through multilingual programs that identify local equity issues and seek to remove barriers for vulnerable communities to use carshare or micro-mobility options.
T-2A.4	Education/ Partnership	Leverage community groups and local organizations to develop outreach and education materials advertising micro-mobility options and the benefits of use for traveling locally and increasing connectivity of public transit. Provide information on available funding opportunities or subsidies offered for low-income residents.
Measure T-3	**Develop programs and policies to discourage driving single passenger vehicles and to support the bicycle/pedestrian and public transit mode share goals of Measures T-1 and T-2.**	
T-3.1	Structural	Reduce future VMT of new development through infrastructure requirements modifying the General Plan and/or specific plans (e.g., Central Healdsburg Avenue Plan) such that the plans for different City areas include policies that support the development of a connected pedestrian and cyclist network. Infrastructure requirements may include: 1. Small scale version of park and ride for residents and tourists. 2. Interconnected bike lanes and sidewalks throughout the City. 3. Electric Bike stations or other micro-mobility hubs outside of major residences and shop destinations
T-3.2	Structural/ Funding	Investigate parking policies to disincentivize single passenger vehicles while enabling alternative options for communities meeting defined equity metrics. Based on City Council and public feedback, implement parking policies to disincentivize single passenger vehicles. This ***may*** include options such as, but not limited to: 1. Eliminate or severely limit parking options for single-passenger vehicles in downtown and other commercial areas of the city using best available information on implementation. a. Implement a parking permit system to reserve available parking for employees of businesses downtown or in commercial areas. 2. Utilize a static or dynamic parking pricing for all downtown parking locations and use revenue to fund active transportation and public transportation projects. 3. Price all public parking spaces for all areas of the city with fees directed towards active transportation

Transportation		
Measure/Action Number	**Pillar**	**Action**
T-3.3	Feasibility Study	Conduct an analysis of the potential community impacts and benefits of charging for parking in downtown. Analysis should include evaluation of different parking fee structures as well as ensure that potential equity concerns are identified.
T-3.4	Structural	City lead by example by encouraging and providing incentives for active transportation and public transit use, such as free access to the e-bike share program, public transit passes, telework options, or other incentives.
Measure T-4	**Increase passenger zero-emission vehicle use and adoption to 50% by 2030.**	
T-4.1	Structural	Develop a reach code requiring electric vehicle capable charging spaces. By 2024, amend the Healdsburg Development and Municipal Code to promote EV chargers in new development and existing parking spaces, to require at minimum: • Single Family – CalGreen Tier 2 provisions • Multifamily – CalGreen Tier 2 provisions • Non-Residential – CalGreen Tier 2 provisions • Expand the designation of EV charging parking spaces to 15% of existing parking spaces within the City by 2030. • Require larger residential rental building owners (more than 20 tenants) and large commercial building owners (more than 10,000 square feet) to install working electric vehicle chargers in 20% of parking spaces for new and existing buildings. • Expediate EV charger permits
T-4.2	Structural	Develop an ordinance requiring Healdsburg vehicles to participate in the States Biennial smog check program and contribute towards clean energy standards. Work with the Northern Sonoma County Air Pollution Control District to require biennial smog checks.
T-4.3	Education	Develop outreach and education materials and distribute to local businesses and organizations on the financial, environmental, and health and safety benefits of ZEVs. Provide information on available funding opportunities.
T-4.4	Equity/Partnerships	Identify private sector partnerships and develop affordable, zero-emission vehicle car share programs to serve affordable housing and/or multifamily developments with a priority to target vulnerable communities.
T-4.5	Equity/Funding	Continue to promote the EV Monthly Bill Discount Program with increased discount opportunities for low-income customers, and develop an updated or replacement program following program sunset in 2025. Continue to promote affordable EV charging rates at city-owned EV charging stations.
T-4.6	Funding	Utilize the CALeVIP rebate to install new electric vehicle chargers at the Senior Center and downtown Maher lot. Applied for Federal Charing and Fueling Infrastructure (CFI) grant to install electric vehicle chargers at the Community Center, Giorgi Park, High School, and West Plaza.
T-4.7	Feasibility Study	In addition to the 6 City-owned lots already identified, conduct a survey of existing publicly accessible electric vehicle chargers and their locations and identify a prioritized list of additional locations for new electric vehicle charging stations with consideration for equitable distribution of chargers to vulnerable communities. Study should include an evaluation of capacity needs associated with the installation of new EV chargers and identification of the businesses or stakeholders that own the property to coordinate with for installation of chargers.

Transportation		
Measure/Action Number	**Pillar**	**Action**
T-4.8	Funding	Promote incentives and financing options for residential electric vehicle charger installations. Develop programs and policies to add 500 new publicly accessible and private workplace Level 2 and 3 electric vehicle charging stations to the City by 2030 through grants such as the California Energy Commission's Clean Transportation Program. Develop programs that incentivize residents and businesses to charge during times of abundant solar resources and avoid charging during peak hours and grid emergencies
T-4.9	Partnership / Equity	Collaborate with neighboring jurisdictions and the Sonoma County Transportation Authority to develop a connected network on ZEV car share. Prioritize car share to serve affordable housing and/or multifamily developments.
T-4.10	Funding/Partnership/Equity	Partner with the local air district and RCPA to communicate State requirements for off road equipment and identify funding opportunities to support low-income residents to replace gas-powered landscaping equipment and off-road engines with zero emission equipment, such as through rebates or buyback programs.
Measure T-5	**Increase commercial zero-emission vehicle use and adoption to 40% by 2030.**	
T-5.1	Feasibility Studies	Inventory commercial vehicle fleets in Healdsburg and identify employers to target for accelerating zero emission vehicle adoption. Develop a plan for City-supported accelerated fleet electrification.
T-5.2	Structural	Adopt a ZEV plan for commercial vehicles in line with state targets and in line with the findings of the accompanying feasibility study. Work with stakeholders to develop and implement the plan for City-supported accelerated fleet electrification. As part of the plan, identify opportunities for accelerated fleet electrification and promote zero-emission vehicle (ZEV) adoption within business and municipal fleets.
T-5.3	Education/ Partnerships	Provide information to businesses on state and federal programs to help fund conversion of commercial fleets to zero emissions vehicles.
T-5.4	Equity/ Funding	Identify, implement, and connect vehicle fleet owners, particularly those serving vulnerable communities to incentivize vehicle electrification. This could include local tax breaks.
T-5.5	Funding	Secure funding from state programs (such as the California Air Resources Board's Clean Vehicle Rebate Project and the Truck and Bus Voucher Incentive Program) and federal sources to increase procurement of EV or ZEV cars, trucks, and other vehicles and installation of EV/ZEV charging/fueling infrastructure at municipal facilities.
Measure T-6	**Lead by example and electrify or otherwise decarbonize the municipal fleet in compliance with the state's Advanced Clean Fleet Rule.**	
T-6.1	Structural	Continue to implement the Zero-emission vehicle first purchasing policy for all light-duty municipal vehicles, and update policy to reflect State requirement.
T-6.2	Study	Complete an inventory of all municipal off-road equipment and fleet vehicles and determine which are possible to decarbonize based on existing technologies. Complete a cost analysis for decarbonizing. Continue to purchase electric lawn equipment to replace gas powered lawn equipment. Continue to purchase hybrid medium duty bucket trucks for electrical utility work to utilize electric batteries for bucket operation, and track purchases to ensure compliance with State purchasing requirements.
T-6.3	Structural	Develop and implement a City Zero-Emission Vehicle Transition Plan to convert fossil fuel municipal fleet vehicles to electric or otherwise decarbonize the fleet in alignment with the Advanced Clean Fleet Rule, including a short and long-term schedule for completion as well as potential for regional bulk procurement. Plan will be in alignment with the Advanced Clean Fleets Rule,

Transportation		
Measure/Action Number	**Pillar**	**Action**
		requiring 50% of medium- and heavy-duty vehicle purchases be zero-emissions beginning in 2024 and 100% beginning in 2027. Also include that by 2035 100% of light-duty fleet vehicle are zero-emissions. Consider aligning the Plan with ACF's ZEV Milestones Option to establish appropriate goals of obtaining medium and heavy-duty ZEVs to replace existing medium and heavy-duty fleet vehicles. Maintain exemptions needed to ensure public safety and delivery of critical services.
T-6.4	Structural	Install additional ZEV chargers in municipal parking lots for fleet, employees, and public use, pilot curbside to meet projected demand.
T-6.5	Structural	Implement a plan to replace all City owned end-of-life off-road equipment with electric equipment or equipment fueled by alternative fuel. Plan should include evaluation of current City-owned equipment, alternative low or zero-emission options, prioritize equipment to replace first (e.g. largest GHG emission reduction potential), and a timeline for replacements that align with goals and feasibility of replacement.

Table 5 City of Healdsburg Solid Waste, Water, and Wastewater CMS GHG Emissions Reduction Measures and Actions List

Solid Waste, Water, and Wastewater		
Measure Action Number	**Pillar**	**Measure/Action**
Measure W-1	**Reduce per capita potable water consumption by 25% by 2030.**	
W-1.1	Structural	Update the Urban Water Management Plan every 5 years, as required by the State, and implement the identified demand reduction actions to ensure compliance with the State's Making Water Conservation a Way of Life regulations. Include new actions in the UWMP as needed to achieve State regulations, which may include: 1. Amend the City's Water Shortage Contingency Plan to restrict any water waste at any time for households, businesses, industries, and public infrastructure. 2. Work with Community Development, large water users, and other stakeholders to develop an On-Site Water Reuse Plan to maximize utilization of local water supplies decreasing energy intensity of distribution. 3. Revisit and update the Water Efficient Landscape Ordinance as needed. Engage, through regional partnerships, with builders and developers to provide information on the requirements for development projects. 4. Develop an ordinance for installation of dual-plumbing water systems that utilize greywater or recycled water for irrigation at new residential and commercial construction. 5. Increase engagement with the community, specifically low-to-moderate income residents, to understand available incentives or rebates, options, and programs to reduce per capita water use. Leverage regional programs and resources available through membership in the Sonoma-Marin Saving Water Partnership, and leverage partnerships with local organizations to expand water conservation outreach. 6. Expand the Municipal Recycled Water Pipeline project, as funding is available. Identify additional locations available for recycled water use and establish a schedule for potable water replacement with recycled water in appropriate applications residentially, commercially, and municipally, and determine recycled water user fees. 7. Revise water and wastewater rates as necessary to ensure cost of service is covered.
Measure SW-1	**Achieve Zero Waste by 2030 through 90% diversion of solid waste from the landfill.**	
SW-1.1	Structural	Meet the requirements of SB 1383 to reduce organics in the waste stream by 75% below 2014 levels by 2025 and achieve Zero Waste through 90% solid waste diversion by 2030. Include activities such as: 1. Reduce the total pounds per person per day landfilled by at least 10% annually. 2. Pilot and evaluate emerging technologies like at source organic waste digestion to reduce organic waste by restaurants and other major food waste producers. 3. Implement enforcement and fee for incorrectly sorted materials with sensitivity to shared collection. 4. Increase bin signage across commercial and residential areas of acceptable landfill, recyclable, and compostable materials.

Solid Waste, Water, and Wastewater		
Measure Action Number	**Pillar**	**Measure/Action**
		5. Conduct additional free compost bin giveaways and promote the free curbside organics collection service by Recology 6. Expand existing ban on polystyrene products containing PFAS to include additional items without means of recycling or recycling markets, such as produce bags, plastic packaging, straws, plastics #4-7, and mixed materials. 7. Implement pilot project for reusables for restaurant to-go containers. 8. Identify long-term and alternate solutions for the community's wastewater bio-solids to avoid long hauling distances and develop local, beneficial reuse. 9. Partner with Recology and Zero Waste Sonoma as applicable for the actions listed above.
SW-1.2	Structural	Develop City resolution that incorporates increased lid-flipping into the franchise agreement with Recology and enforces organic diversion requirements via penalty fees issued by the City for non-compliance by 2025.
SW-1.3	Structural	Explore local opportunities to facilitate the siting and permitting of processing and end market infrastructure that will be needed to manage the volume of material from higher levels of diversion or participate in regional projects if developed.
SW-1.4	Education / Partnership	Partner with Zero Waste Sonoma to conduct a Bring your own (BYO) education and outreach training for residents and businesses on reusables and implementing more sustainable packaging into daily use. Also educate the community on food scraps. Provide resources of education and technical assistance on city website. Partner with libraries and other existing facilities to market campaigns about waste reductions, reuse and repair.
SW-1.5	Equity/ Partnership	Establish relationships with multi-family property owners/managers to develop signage for their properties. Partner with community groups and organizations to go door-to-door at each multi-family unit yearly to provide supplies and education for proper sorting.
SW-1.6	Feasibility Studies/Partnership	Leverage Zero Waste Sonoma 2022 Waste Characterization study and visual characterization conducted at the Healdsburg transfer station to understand the waste stream and create a plan to increase diversion and reduce contamination. Continue to work with Zero Waste Sonoma to conduct a waste characterization study every 5 years that includes Healdsburg to inform programs and policies.
SW-1.7	Funding/ Partnership	Partner with Recology and/or Zero Waste Sonoma to pursue funding, such as from CalRecycle, to outfit multi-family homes with zero waste infrastructure and expand waste diversions programs within the City.
SW-1.8	Partnerships	Partner with city community gardens and/or the UC Cooperative Extension Master Gardner program to increase community wide access to local compost bins.

Table 6 City of Healdsburg Carbon Sequestration CMS GHG Emissions Reduction Measures and Actions List

Carbon Sequestration		
Measure/Action Number High)	**Pillar**	**Measure/Action**
Measure CS-1	**Increase carbon sequestration by preserving existing mature trees and planting 500 new trees and high emissions reduction potential land cover types throughout the community by 2030**	
CS-1.1	Structural/ Partnerships/ Equity	Develop a Street Tree Master Plan to include goals for promoting street tree health, enhancing resiliency, increasing the environmental benefits and co-benefits resulting from street trees and shading, community engagement around the urban forest. Include activity to promote street tree health and maintaining existing trees through partnerships with the community and local organizations, including organizations with connections to vulnerable communities to assist in the implementation of the Street Tree Master Plan to ensure equity is prioritized as part of the plan.
CS-1.2	Structural	Develop a new Tree Protection Ordinance to include protection for native and heritage trees. The ordinance should regulate the removal of not just heritage trees, but native trees that increase the City's carbon stock and carbon sequestration. Ordinance may include: 1) Development requirements to protect or replace one-for-one existing trees and greenspace. 2) Implementation of a tree removal in-lieu fee that provides funding for the City to plant a new tree equivalent to every tree removed from private property. 3) Identification of native tree species and heritage trees to be protected. 4) Shade tree requirements for new development 5) Parking lot landscaping requirements 6) Increased permeable surfaces and green spaces in new development 7) Vegetative barrier requirements between busy roadways and developments to reduce exposure to air pollutants from traffic 8) Best practices to protect existing carbon stocks against wildfire risk
CS-1.3	Education	Establish an adopt-a-tree or adopt-a-street program that enables individuals, businesses, and community organizations to plant and care for trees in selected communities. Program should provide formalized information on appropriate trees eligible for planting in Healdsburg (i.e., native, drought tolerant, locations, fire resistant) and their maintenance. Leverage existing plant lists developed by nearby and partner organizations.
CS-1.4	Equity	Prioritize low-income areas of the city with less existing tree canopy for tree plantings. Increase shading in gathering spaces.
CS-1.5	Feasibility Studies	Identify current baseline urban forest coverage within the city to measure increased coverage as it relates to sequestration as part of the next Street Tree Master Plan update.
CS-1.6	Funding	Explore urban and community forestry grant programs (e.g., CAL FIRE) and other sources of state, federal, and philanthropic funding to fund urban forestry programs. As part of this effort, establish a goal to apply for at least one grant every three years.
Measure CS-2	**Maintain and expand existing restoration projects to sequester carbon in restored lands.**	
CS-2.1	Structural	Develop and adopt urban park guidelines that: 1. Provide flexible solutions for developing urban parks in infill areas where traditional neighborhood and community parks are not feasible;

Carbon Sequestration		
Measure/Action Number High)	**Pillar**	**Measure/Action**
		2. Establishes guidelines for achieving the greatest carbon sequestration potential of parks via design; and 3. Are equitable in ensuring such urban parks are accessible for lower-income residents while avoiding displacement. 4. Establishes a plan for long term maintenance to restoration projects.
CS-2.2	Structural	Continue maintenance and expansion of Healdsburg Ridge Open Space Preserve (150 acres), and the Fitch Mountain Park and Open Space Preserve (170 acres).
CS-2.3	Education and Engagement	Develop a community-based volunteer program supporting restoration project activity to create a maintained restoration process.
CS-2.4	Feasibility Studies	Facilitate annual reporting as part of the restoration plan mapping the existing restoration projects and open space lands to gauge progress in restoration activities overtime as well as identify any gaps in maintenance activities related to ongoing projects. Incorporate GHG reduction calculations into this monitoring plan.
CS-2.5	Funding	Apply for at least one grant every three years for obtaining grant funding for restoration and preservation activities with a focus on projects that have been unable to be fully completed due to funding constraints.
CS-2.6	Partnerships	Partner with local community organizations to communicate sequestration opportunities and facilitate volunteer maintenance projects.
Measure CS-3	**Align with SB 1383 and procure products of organic diversion at a rate of 0.08 tons of organic waste per capita per year with a focus on increasing compost application within City limits to increase carbon sequestration.**	
CS-3.1	Structural Change	Enforce compliance with SB 1383 and aim to meet the baseline requirement by establishing an average minimum level of compost application per year on applicable/appropriate land throughout the City including City-owned land, depending on the feasibly study and based on an assessment of land needs. Additionally, evaluate opportunities to procure other applicable products, such as SB 1383 RNG, to meet the procurement requirements. Maintain procurement policies to comply with SB 1383 requirements for jurisdictions to purchase recovered organic waste products.
CS-3.2	Feasibility Studies	Identify additional locations within the City to apply compost to help meet the procurement requirements of SB 1383 and provide household incentives for small-scale implementation.
CS-3.3	Education	Work with Recology and ZWS to provide residents, businesses, and developers with educational material on where compost can be taken and how it can be used (i.e., landscaping), as well as how compost promotes carbon sequestration.
CS-3.4	Equity	Prioritize providing free compost procurement services, increased outreach, and translated materials to low-income households, small businesses, and other vulnerable communities.
CS-3.5	Funding	Apply for at least one grant every three years for obtaining grant funding for SB 1383 compliance.
CS-3.6	Partnerships	Collaborate with local schools, Public Works, Community Services, Ag+Open Space, and the Resource Conservation Districts to identify opportunities to apply compost to landscaping potentially in addition to open space land conservation efforts.
CS-3.7	Partnerships	Work with Sonoma County and RCPA to identify opportunities for a regional compost procurement program to help meet the organics procurement provisions of SB 1383 as well as streamline hauler routes through regional collaboration.

Table 7 City of Healdsburg Administration and Funding CMS Measures and Actions List

Administration and Funding		
Measure/Action Number High)	**Pillar**	**Measure/Action**
Measure F-1	**Designate a Climate Program Manager by 2025**	
F-1.2	Structural	Create a Climate Program Manager new position who is responsible for implementing CMS measures and actions by drafting ordinances, managing technical studies, leading outreach efforts, updating online information, managing the webpages and Facebook posts to promote climate programs, networking with partners and stakeholders, and pursuing grant opportunities.
F-1.2	Structural	Report progress on CMS implementation annually to the City Council to measure progress and ensure accountability in achieving CMS emissions reduction goals.
F-1.3	Partnership/ Education	Partner with RCPA and other jurisdictions to ensure transparency in GHG emission reporting and make GHG emission data and inputs publicly available.