Appendix A- Ukiah Climate Action Plan Draft Greenhouse Gas (GHG) Emissions Reduction Measures

1 Overview of Measures and Actions

Greenhouse Gas (GHG) Reduction Measures identify specific goals designed to mitigate GHG emissions from each community sector, with a goal to reduce community-wide GHG emissions from 132,323 MT CO2e to 96,544 MT CO2e by 2030 and reach carbon neutrality by 2045.[1] 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 necessary programs and policies that would accomplish a measure's 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. Additional measures developed for the Climate Action Plan (CAP) include municipal-specific measures (are a part of each sector).
3. **Actions:** Actions identify the programs and policies, that will be implemented within the region. Each measure contains a suite of actions, which together have been designed to accomplish the measure goal and metrics.

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 effect, indirect GHG reduction benefit, or potential for double-counting– they will not be quantified and do not contribute directly to the expected GHG reduction target and consistency with the State goals. For example, municipal-specific measures are not quantified, as they represent a subset of

[1] Achieving the stated 2030 emissions reduction target will require the City to reduce emissions by 27% within 5 years. The 96,544 MT CO2e GHG inventory target was determined based on the State target to reduce emissions by 40% below 1990 levels by 2030. Ukiah's 1990 GHG inventory was estimated to be 160,907 MT CO2e, with 96,544 MT CO2e being reflective of a 40% emissions reduction compared to 1990.

communitywide emissions for each sector and as such could be characterized as double-counting. Despite not being quantified, supportive measures/actions are nevertheless critical to the overall success of the CAP and provide support so that the quantitative measures and actions will be successfully implemented.

For the purposes of this stage of CAP development, the following list of measures and actions also includes an order-of-magnitude identification regarding GHG reductions compared to the State 2030 target. Specifically, this categorizes a measure's anticipated GHG reduction effect as high, moderate, or low in relation to its contribution to reducing Ukiah's total forecasted community-wide GHG emissions by 2030, offering a clearer understanding of the potential implications while avoiding analysis challenges such as double-counting. The scale of GHG reduction impact is defined as:

- Low 0% – 1% GHG reduction by 2030
- Moderate 1% – 5% GHG reduction by 2030
- High > 5% GHG reduction by 2030

Additionally, the measures and actions list outline the anticipated implementation schedule for each measure, establishing a timeline to work toward achieving 2030 GHG reduction goals and making substantial progress to the 2045 goals. Implementation is defined in terms of phases, with Phase 1 occurring in the short-term over the next two years (2025-2026). Phase 2 would include implementation of mid-term actions that should begin no later than 2027, while Phase 3 would include implementation of longer-term measures that should begin no later than 2028, that are anticipated to occur after feasibility studies are complete and initial measures are implemented. Additionally, actions that will be ongoing, such as an education program, will have a start date and indicate that the action is ongoing. Where applicable, it is also indicated whether a measure aligns with or supports other goals or initiatives in Ukiah, as outlined in the following:

- City of Ukiah's 2040 General Plan (2040 GP)
- City Council Strategic Plan (CCSP)

The list of measures and actions also identifies the anticipated order-of-magnitude cost of each measure, also using a high, moderate, and low category identification. Where applicable, the cost categories indicate whether the cost would be incurred by the City and/or the community. The definition and examples of the different cost categories are defined in Table 1 below.

Table 1 Cost Categories

Cost Category	City	Community
No-Cost	Goals associated with operational changes that do not include new upfront costs or result in zero lifecycle costs. ▪ Continuing existing programs	Goals associated with changes that do not include new upfront costs or result in zero lifecycle costs. ▪ Switching transportation modes from single occupancy vehicles to active transportation.
Low-Cost	Goals associated with low upfront costs and will only require staff time to implement, such as: ▪ Developing partnerships ▪ 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

Cost Category	City	Community
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 from utilities or city taxes ▪ 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 purchases prior to existing vehicle replacement ▪ Single-family residential household retrofits/upgrades

The cost and GHG reduction potentials associated with each measure have not been quantified and are intended to be considered broad estimates based on experience quantifying cost and GHG reduction associated with GHG reduction measures. Actual measures quantification will be completed at a later date after a complete set of measures has been approved by the City.

2 Measures and Actions

Ukiah, located in Mendocino County, California, is known for its blend of urban and rural characteristics and serves as a commercial hub for the surrounding rural area. According to Ukiah's 2022 Community GHG Inventory, transportation is the primary source of GHG emissions, accounting for 50 percent. Combined with building electricity (23 percent) and natural gas (21 percent) emissions, the building energy sector constitutes 44 percent. Transportation emissions equate to 50 percent. Thus, the building energy and transportation sectors together constitute 94 percent of Ukiah's total GHG emissions. Therefore, while effort should be applied across all community GHG emissions sources, addressing emissions in these sectors is crucial for achieving substantial reductions in Ukiah's overall GHG emissions.

2040 General Plan	Adopt a Municipal Climate Action Plan (CAP). The City shall adopt a municipal Climate Action Plan to achieve carbon neutrality for all municipal operations and meet State and City GHG emission reduction goals.

California has a statutory goal of reducing anthropogenic emissions by at least 85% below 1990 levels and achieving carbon neutrality by 2045. A communitywide greenhouse gas inventory was produced in 2023 by Rincon Consultants Inc., in advance of the development of this Climate Action Plan. Since Ukiah does not possess accurate greenhouse gas emission data for 1990, future performance will be measured against the newly established 2023 baseline. The City will develop a Climate Action Progress Report in 2030 and will produce a CAP update once it is identified that progress to achieve GHG reductions targets is no longer tracking with the CAP target trajectory.[2]

Ukiah faces unique challenges in reducing GHG emissions, including limited staff and funding resources, as well as land constraints for new project developments such as utility-scale solar installations or centralized local waste management infrastructure. Additionally, as a regional hub, Ukiah's rural surroundings complicate mitigating transportation emissions from trips that cross the City's boundaries such as public transportation and infrastructure improvements. Furthermore, the dispersed nature of the Ukiah Valley's residential development, as well as its disconnected rural nodes, such as Calpella and Talmage further increase reliance on personal vehicles.

Despite these challenges, Ukiah also has significant opportunities to enhance its sustainability efforts. Ukiah's proximity to the Mendocino National Forest, planned annexation of the western hills and other undeveloped natural lands, and surrounding agricultural industry offers an intriguing opportunity for regional carbon sequestration initiatives. Ukiah also has municipal ownership over the community's electric utility that in turn offers greater control over regional energy resilience and renewable energy procurement. The forthcoming Ukiah Climate Action Plan will underscore the importance of partnerships to leverage these opportunities and effectively address emissions across the transportation, energy distribution, water and wastewater, and waste management sectors. Measures were developed based on community input and best practices to achieve GHG emission

[2] In 2030, the City will produce a Climate Action Progress Report which will highlight progress while assessing existing gaps. The report will also make recommendations for future updates to the Climate Action Plan. The City will develop an updated Climate Action Plan as soon as significant gaps in progress emerge, and no later than 2035.

reductions. Specific goals for GHG reduction were set based on City staff input, as well as targets set by local initiatives. Tables 1 to 5 provide the actions that accompany each individual measure.

Table 2 GHG Emissions Reduction Measures and Actions by Sector

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
Building Energy					
Measure BE-1	**Procure 77% of electricity from renewable and zero-carbon sources by 2030 and 100% renewable and carbon-free no later than 2045**		**2040 GP HO-1b** **2040 GP AI-15** **CCSP AI-14** **CCSP AI-30**	**High**	**High (City)** **Moderate (Com)**
Action	Evaluate options for utility-scale battery storage to accommodate future renewable electricity supply to build energy resilience.	Phase 1			
Action	Work to increase local renewable energy supply by pursuing funding opportunities to incentivize community adoption of renewable energy solutions such as residential solar, wind, and battery storage. Prioritize subsidies for disadvantaged and low-income households and small businesses. Target underutilized urban spaces, such as parking lots and rooftops, as an opportunity to develop the city's solar canopy.	Phase 1-ongoing			
Action	Develop a long-range community-wide electric energy and demand forecast to: 1. Estimate future usage and peak demands due to adoption rates of building and transportation electrification and grid capacity, as well as future annexation and economic development plans. 2. Formalize a pathway (resource-plan) to meet the City's energy needs and list of potential renewable resources through 2030 and 2045. Long-range planning of generation resources should take into consideration opportunities to implement carbon sequestration and utilization opportunities in alignment with State and City goals. 3. Develop a decarbonization priority list and implementation schedule for all municipal buildings.	Phase 2			

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
	4. Pending results of the forecast, the City shall develop and implement renewable energy procurement schedule for 2030 and 2045 and will track progress towards goals.				

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
Measure BE-2	**Decarbonize 15% of existing buildings by 2030 and 100% by 2045**		**2040 GP HO-1d 2040 GP HO-1e CCSP AI-1 CCSP AI-10**	**High**	**Moderate (Com)**
Action	Adopt a zero NOx threshold by 2026 to require replacement of water heaters and HVAC appliances in residential and commercial buildings upon burnout.	Phase 1			
Action	Incentivize energy and water efficiency measures to improve building performance and reduce utility costs. Reduce energy use in residential and commercial buildings by promoting and incentivizing energy efficient solutions including heat pumps (air-source and geothermal), "cool" building strategies, trees, green roofs, and other nature-based solutions.	Phase 1			
Action	Outline and prioritize a pathway to carbon-free emergency and back-up power across the City's critical asset portfolio with an emphasis on developing community-scale microgrids and/or clean energy districts.	Phase 2			
Action	Expand the local building decarbonization workforce, with targeted supports designed for disadvantaged workers.	Phase 3			
Action	Eliminate fossil fuel use in buildings by 2045 by tailoring electrification solutions to different building ownership, systems, and use types. Work with PG&E to develop a strategy for the equitable decommissioning of the City's natural gas system by 2045. Incentivize electrification across all building types.	Phase 3			
Measure BE-3	**Decarbonize 95% of new building construction by 2026**		**2040 GP HO-1d 2040 GP HO-1e CCSP AI-1 CCSP AI-10**	**Moderate**	**Low (Com)**
Action	Adopt a single margin hourly source energy threshold (EDR1) performance standard for new construction by 2026.	Phase 1			
Action	Incorporate additional climate resilient design requirements as part of any future updates to the City's building code or zoning code.	Phase 1			

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
Action	Continue to remove procedural barriers and establish a more streamlined permitting process for all new construction by 2027.	Phase 2			
Measure BE-4	**Decarbonize 50% of municipal buildings by 2030 and 100% by 2045**		**2040 GP AG-M CCSP AI-12 CCSP AI-13**	**Low[2]**	**Moderate (City)**
Action	Adopt policy that requires the City to decarbonize 50% of municipal buildings and facilities by 2030 and 100% by 2045 while prioritizing critical and public access facilities.	Phase 1			
Action	Pursue grant funding and rebates to electrify municipal buildings.	Phase 1			
Transportation					
Measure T-1	**Increase the total mode share of active transportation to 15% by 2030, and 30% by 2045**		**2040 GP LU-A 2040 GP ED-5 2040 GP MO-C CCSP AI-5 CCSP AI-34 CCSP AI-37**	**Low**	**High (City)**
Action	Update the Ukiah Bicycle and Pedestrian Master Plan (2015) to reflect current conditions and projects[3] to outline where new lanes are needed to construct a comprehensive, connected network of safe and accessible (low-stress) bikeways and walkways, on- and off-street, and within and across neighborhoods. Develop and pilot a program that provides communitywide access to bicycles.	Phase 1			
Action	Establish affordable public transportation options for low-income residents while prioritizing bicycles and other micro-mobility options. Re-explore and expand available rebates with a focus on supporting low-income families and qualified residents.	Phase 1			

[3] Projects include the Urban Core Rehabilitation Project (UCRT), construction of Phases 1-3 of the GRT-Ukiah, as well as well as the Downtown Streetscape (Phases 1 & 2).

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
Action	Develop a priority list of active transportation projects for MCOG's 2023/2024 Regional Transportation Plan and proposed update to the Ukiah Bicycle and Pedestrian Master Plan. Prioritized projects should be selected on level of impact, expansion of inter-jurisdictional connectivity, and access considerations for historically disadvantaged communities. Identify and pursue available resources in order to implement the top 5 priority projects by 2028.	Phase 1-ongoing			
Action	Further develop safe bike lane transportation corridors by 2027 to be implemented with State and federal funding through available grant programs.	Phase 2-ongoing			
Measure T-2	**Increase total public transportation mode share to 5% by 2030, and 20% by 2045**		**2040 GP MO-F 2040 GP MO-J CCSP AI-36 CCSP AI-38**	**Low**	**High (City)**
Action	Collaborate with Mendocino Council of Governments and Mendocino Transit Authority (MTA) to implement a transportation system plan to shift travel behavior away from single-occupancy vehicles and encourage use of public and multi-modal transportation options. The plan may include the following considerations: 1. Increasing MTA ridership through improved routes and modifying schedules to increase efficiency and align with rider needs. 2. Prioritizing transportation access and improvements in low-income areas, active aging neighborhoods, schools, infill development areas, and at major destinations. 3. Identification of design improvements of seating and shading at bus stops and along active transportation routes. 4. Increasing micro-transit access to improved public transit network facilities to promote last-mile commute access to alternative transportation methods. 5. Developing a local electric trolley or bus system that operates year-round.	Phase 1			

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
Action	Identify high-trafficked areas of the City to: eliminate parking minimums, develop parking maximums, and require parking management and transportation demand management plans based on available transportation options, travel patterns, and land use.	Phase 1			
Action	Collaborate with Mendocino Council of Governments and Mendocino Transit Authority (MTA), Mendocino College, and other key institutional partners to establish free or subsidized local public transit programs that service local residential and commercial areas.	Phase 2			
Measure T-3	**Reduce local VMT from single passenger vehicles**		**2040 GP LU-A 2040 GP MO-D 2040 GP MO-E CCSP AI-30**	**Low[2]**	**Low (City)**
Action	Require developers to meet Reach Code requirements to include EV charging infrastructure and local active and public transit facilities in new multi-family construction. Promote development that increases walkability and is bikeable in neighborhoods.	Phase 1-ongoing			
Action	Reduce VMT by promoting and prioritizing infill development and/or increased density of residential development in the downtown core, along transit corridors, and within future planned development areas that is compact, mixed use, pedestrian friendly, and transit-oriented where applicable. Continue to evaluate surplus or annexed land potential opportunities to promote infill development and sustainable growth management.	Phase 1-ongoing			
Action	Pursue and implement policies by 2027 that support accessible, walkable neighborhoods and connected bike networks as part of infill development projects. Infrastructure requirements may include: 1. Interconnected bike lanes and sidewalks connecting to City's trail network. 2. Bike locks/stations or other micro-mobility hubs outside of mixed use or commercial development. 3. Increase public bike parking capacity outside of public and commercial development.	Phase 2			

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
	4. Establish parking policies that encourage the use of public transit and active transportation.				
Measure T-4	**Achieve zero-emission vehicle (ZEV) adoption rates of 30% for passenger vehicles and 25% for commercial vehicles by 2030 and 100% for all vehicles by 2045**		**CCSP AI-30**	**High**	**Moderate (City)**
	Complete an inventory of existing public EV infrastructure and locations. Additionally, identify key locations to add new public EV chargers (Level 2+) to facilitate the transition to EVs. The analysis shall include the following: **Passenger Fleets** 1. Survey existing publicly accessible electric vehicle chargers and locations and identify a prioritized list of new electric vehicle charging stations or lots for increased chargers. 2. Identify and quantify opportunities to increase public access to curbside charging, with guidance for appropriate types and charging scenarios. 3. Identify funding opportunities for the installation of public EV chargers and residential home EV charging systems by 2030. **Commercial Vehicles subject to Advanced Clean Fleet requirements** 1. Identifies opportunities for accelerated fleet ZEV adoption and establish a strategy to promote ZEV/EV adoption within business fleets, with consideration for vehicle exceptions. 2. For high priority fleets, conduct an utility grid planning analysis to identify necessary infrastructure upgrades to support a fully built-out fleet. 3. Identifies the responsible party to submit construction permits early and submit utility interconnection applications early.	Phase 1			

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
Action	By 2026, develop a reach code requiring electric vehicle capable charging spaces to promote EV chargers in new development and existing parking spaces, to require: 1. Single Family – CalGreen Tier 2 provisions 2. Multifamily – CalGreen Tier 2 provisions 3. Non-residential – CalGreen Tier 2 provisions 4. Expand the designation of EV charging parking spaces to 30% of parking spaces within multi-family residential buildings by 2030 5. Require larger residential rental building owners (more than 20 tenants) to install working electric vehicle chargers in 30% of parking spaces for new and existing buildings at time of renovation if projects are valued at $250,000 or greater 6. Expediate EV charger permits 7. Additionally, continue to install and provide EV charger access at City-owned facilities	Phase 1			
Measure T-5	**By 2030, electrify or otherwise decarbonize 12% of applicable SORE off-road equipment and replace 35% of fossil diesel consumption with renewable diesel in alignment with EO N-79-20**		**CCSP AI-30** **CCSP AI-10**	**Low**	**Low (City)**
Action	Identify potential users of fossil fuel-based equipment and target education and incentives for replacement with SORE zero emissions alternatives.	Phase 1			
Action	Implement and promote CARB's Small-Off Road Engines (SORE) regulations, requiring most newly manufactured small off-road engines (e.g., leaf blowers, lawn mowers) to be zero emission starting in Model Year 2024, with Phase 2 targeting zero emissions for generators and large pressure washers by Model Year 2028.	Phase 1-ongoing			
Action	Coordinate with regulatory agencies to notify affected fleets and establish a compliance tracking system, and partner with regional fuel suppliers to support and promote the increased procurement of renewable diesel. Identify pathways to ensure community compliance with the requirement for diesel vehicles over 25 horsepower to use R99 or R100 renewable diesel.	Phase 1-2			

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
Measure T-6	**Decarbonize the municipal fleet in compliance with the California Advanced Clean Fleet Rule and EO N-79-20 off-road requirements**		**2040 GP AG-M 2040 GP ES-M CCSP AI-10**	**Low[2]**	**Moderate (City)**
Action	Align the City's Sustainable Purchasing Policy by 2025 to require all new and replacement municipal fleet vehicle purchases to be EVs or ZEVs, where commercially viable. Implement a schedule to comply with the California Advanced Clean Fleet rule, mandating that 50% of medium and heavy-duty vehicle purchases be zero-emission beginning in 2024, and 100% by 2027, where commercially viable.	Phase 1			
Action	Evaluate opportunities for procuring renewable diesel for all applicable jurisdiction-owned equipment while replacing end-of-life off-road equipment with zero-emission alternatives, where feasible.	Phase 1			
Action	Obtain the necessary resources to install additional ZEV chargers and renewable fueling stations in municipal parking lots for use by the fleet, employees, and the public.	Phase 1-ongoing			
Water Resources					
Measure WR-1	**Continue to implement wastewater recycling and water conservation projects and reduce per capita potable water consumption**		**2040 GP PI-A 2040 GP SF-W 2040 GP ES-J 2040 GP ES-B 2040 GP ES-K 2040 GP ES-L CCSP AI-23 CCSP AI-15**	**Low[2]**	**Low/Moderate (City)**
Action	The City of Ukiah's water utility department will update the Ukiah 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	Phase 1			

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
	Way of Life regulations. Include new actions in the UWMPs as needed to achieve State regulations, which may include: 1. Develop or amend Water Shortage Contingency Plans in the region to develop water waste restrictions for households, businesses, industries, and public infrastructure. 2. Work with large water users, and other interested parties to develop an On-Site Water Reuse Plan to maximize utilization of local water supplies. 3. In conjunction with the Community Development Department, revisit and update the Model Water Efficient Landscape Ordinance (MWELO), 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. 6. Revise water and wastewater rates as necessary to ensure the cost of service is covered.				
Action	Continue to require the use of low-impact-development (LID)[4] strategies as specified by the Ukiah LID Technical Manual for new construction and development.	Ongoing			
Solid Waste					
Measure SW-1	**Achieve and maintain SB 1383 requirements to reduce organic waste sent to landfills by 75% by 2030**		**2040 GP HO-1e** **2040 GP PI-E** **CCSP AI-2** **CCSP AI-21**	**Moderate**	**Moderate (City)** **Low (Com)**
Action	Meet the requirements of SB 1383 to reduce organics in the waste stream by 75% below 2014 levels by 2030 and achieve through activities such as:	Phase 3			

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
	1. Implement enforcement and fee for incorrectly sorted materials with sensitivity to shared collection. Utilize funding to implement programs and efforts to increase communitywide organic waste diversion. 2. Assure adequate bin signage across commercial and residential areas of acceptable landfill, recyclable, and compostable materials. 3. Identify public areas for adding organics collection and recycling bins where needed. 4. Work with C&S Waste Solutions[5] and Mendocino Solid Waste Management Authority (MSWMA) to conduct free food scrap collection pail giveaways and promote curbside organics collection service offered in applicable communities. 5. Evaluate opportunities to have community compost hubs that are easily accessible for community members. Partner with regional community gardens to increase community wide access to local compost bins. 6. Identify long-term and alternate solutions for the community's wastewater bio-solids and develop local, beneficial reuse. Facilitate meeting SB 1383 requirements by identifying and obtaining the resources necessary for implementation of solid waste diversion projects by 2027, such as increased funding and/or MSWMA staffing and capacity.				
Measure SW-2	**Achieve SB 1383 procurement requirements (0.08 tons recovered organic waste per person) by 2030**		**2040 GP AG-M** **2040 GP AG-I**	**Low**	**Moderate (City)** **Low (Com)**
Action	Establish and execute an implementation plan for meeting procurement requirements. This may include: 1. Enforcing compliance with SB 1383, aiming to exceed baseline requirements by establishing a minimum annual level of compost or mulch application on appropriate land throughout the region. 2. Maintaining procurement policies to purchase recovered organic waste products in accordance with SB 1383 requirements.	Phase 3			

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
	3. Expansion/creation of community composting programs paired with community gardens.				

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
Carbon Sequestration					
Measure CS-1	**Preserve existing trees and plant at least 200 new trees per year or an equivalent amount of high-emissions reduction potential land cover throughout the community, beginning in 2025 and through 2045**		**2040 GP ES-B** **2040 GP ES-A** **2040 GP ES-E** **2040 GP ES-C** **2040 GP ES-F** **2040 GP SF-U** **CCSP AI-4**	**Low**	**Low (City)** **Low (Com)**
Action	Prepare an Urban Forest Master Plan, update the Tree Management Guidelines and create a Tree Protection Plan to promote public tree health, enhancing resiliency, and increasing the environmental benefits and co-benefits of street trees and shading. The City will continue to conduct an urban tree canopy study every 5-8 years to track progress and identify new priority areas.	Phase 1			
Action	Optimize natural carbon sequestration through regenerative land and water management. Advance nature-based climate solutions that sequester carbon, restore ecosystems, and conserve biodiversity. Enhance ongoing conservation and wildfire prevention efforts in the western hills and in forested areas within the City's Area of Interest (AoI).	Phase 1-ongoing			
Action	Conduct carbon sequestration farming pilot projects within the community and across the City's area of interest (AoI).	Phase 3			
Measure CS-2	**Pursue opportunities to support the City's sustainable economic development goals with an emphasis on circularity and creating green jobs within the region**		**2040 GP AI-13** **CCSP AI-11** **CCSP AI-17** **CCSP AI-30**	**Low**	**Low (City)**
Action	Integrate climate action strategies into the City's long-term economic development goals to grow a more local, resilient, self-sufficient, and circular economy.	Phase 1-ongoing			
Action	Conduct a feasibility study to identify the potential of converting organic materials such as food and yard waste, woody biomass, and	Phase 1-ongoing			

Measure/Action Number	Goal/Measure	Implementation Timeframe	City Plan Alignment	Magnitude of GHG Reduction Potential[1]	Magnitude of Cost
	wastewater sludge to energy. In addition to identifying technology opportunities, the feasibility study will include research on regional land-use management opportunities and potential financing pathways.				
Action	Develop and adopt a sustainable purchasing policy for municipal operations that emphasize localism. Work with businesses, community organizations, and surrounding jurisdictions to implement reuse, refill, and repair programs to repurpose materials and capture value before disposal.	Phase 2			

Note: MT CO_2e = metric tons of carbon dioxide equivalents; CCSP = City Council Strategic Plan; GP = General Plan; MCOG= Mendocino Council of Governments; MSWMA = Mendocino Solid Waste Management Authority

1. GHG reduction potential will be quantified upon finalization of measures and actions list.
2. The measure is considered supportive such that associated GHG reductions are encompassed in other measures within the sector and thereby does not result in additional GHG reductions. To avoid double counting, GHG reductions associated with the measure will not be quantified in the CAP.
3. The City generates sufficient geothermal and hydroelectric power to meet 80% of the community's current electricity needs; however, at times, the City sells Renewable Energy Credits (RECs) (the environmental attribute associated with this energy) to other entities through the City's membership in Northern California Power Agency (NCPA). Though this creates a more renewable regional grid mix and helps keep local utility costs low, sale of the RECs by the City results in a higher GHG emissions grid profile for Ukiah. (https://www.ncpa.com/about/ncpa-members/city-of-ukiah/)
4. Low Impact Development (LID) refers to systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality and associated aquatic habitat (https://www.epa.gov/nps/nonpoint-source-urban-areas).
5. C&S Solutions operates as Ukiah's curbside garbage, recycling, and organics collection service provider.