

2019 Municipal Greenhouse Gas Inventory

Petaluma Climate Action and Adaptation Plan

November 2021

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Municipal Greenhouse Gas Emissions Inventory

Petaluma's Climate Emergency Framework articulates a vision to make Petaluma a leader in climate mitigation and sequestration to ensure a stable climate for current and future generations. The City endeavors to reach carbon neutrality no later than 2030. These commitments demonstrate local, regional, and national leadership to creating innovative and strategic pathways to carbon neutrality, a resilient community, and a just transition.

Emissions inventories help government leaders understand the sources and magnitude of greenhouse gas (GHG) emissions that are generated from various activities associated with City operations. Emissions accounting standards and protocols are used to compile, synthesize, analyze, and report emissions data at the City operations scale.

This Municipal Greenhouse Gas Inventory provides a summary of emissions produced by City of Petaluma operations in 2019. As the first municipal GHG inventory conducted for the City operations, this document provides a baseline of emissions that the City can use to track progress towards its climate commitments. The preparation of this inventory also helped identify where the City can improve its data collection to more accurately estimate municipal GHG emissions in the future.

The 2019 inventory primarily follows the Local Government Operations Protocol (LGOP) developed by the California Air Resources Board, California Climate Action Registry, ICLEI, and the Climate Registry. Calendar year 2019 was chosen as it was the most recent calendar year with complete data available.

Key Findings

- **Total estimated greenhouse gas emissions from City operations were 3,653 MTCO₂e in 2019.**
- **Fleet vehicles were the City's largest source of emissions.** Greenhouse gas emissions from fleet vehicles were the largest sector, accounting for 31% of the emissions from City operations in 2019.
- **Employee travel was the City's second largest source of emissions.** Employee travel accounted for 27% of the emissions from City operations in 2019.
- **Electricity emissions from Buildings and Facilities, Streetlights and Traffic Signals, and Airport Facilities are zero because the City's provider is Sonoma Clean Power EverGreen.**
- **Improving City data collection procedures will result in more accurate inventorying of greenhouse gas emissions in the future.** The City should establish new data tracking protocols to more accurately inventory emissions from fleet vehicles, solid waste, water, and wastewater sectors, as well as fugitive emissions.

Sources of Municipal GHG Emissions

This municipal inventory uses the ICLEI Local Government Operations Protocol (LGOP) to estimate the emissions produced by operations the City owns or controls. Using the City's operational control boundaries for the inventory represents the emission sources for which Petaluma has direct control over. This means that Petaluma can exert influence over operations to achieve further reductions in emissions. Emissions sources includes direct emissions from the combustion of fuels and indirect emissions from the purchase of electricity as described in Table 1. Table 1 also lists sources of emissions for which data is currently unavailable.

Table 1: Sources of Emissions

Sector	Description	Inclusion in Inventory
Buildings and Other Facilities	City buildings and facilities use electricity and natural gas.	Included
Streetlights and Traffic Signals	The City maintains over 5,100 streetlights, each using electricity.	Included
Wastewater Facilities	The City owns and operates the Ellis Creek Water Recycling Facility.	Included
Airport Facilities	The City owns and operates the Petaluma Municipal Airport.	Included
Vehicle Fleet	Petaluma owns vehicles for water maintenance, firefighting, and other services.	Included
Transit Fleet	The City operates Petaluma Transit.	Included
Employee Travel	The City had 319 employees in 2019, and this accounts for emissions from the fuel employees consumed travelling to and from work.	Included
Water Delivery Facilities	City facilities use potable water which is conveyed using electricity.	Not included. Water use data not available
Solid Waste	The City does not have its own landfill, but City facilities and operations generate waste that is hauled by Recology.	Not included. Solid waste generation data not available
Other Process and Fugitive Emissions	Fugitive emissions are generated from the use of refrigerants in building HVAC equipment and refrigeration in the fleet air conditioning.	Not included. Refrigerant data not available
Port Facilities	No sources	Not included
Power Generation Facilities	No sources	Not included

2019 Emissions Inventory Results

Summary

The City emitted an estimated 3,685 MTCO_{2e} from its operations in 2019, representing less than 1% of communitywide emissions.¹ These emissions were produced by buildings and facilities, employee commute, fleet vehicles, transit fleet vehicles, and wastewater sectors. This inventory also includes the streetlights / traffic signals and airport facilities, but those sectors did not have any recorded emissions. These facilities and infrastructure use carbon-free electricity and did not report any natural gas consumption.

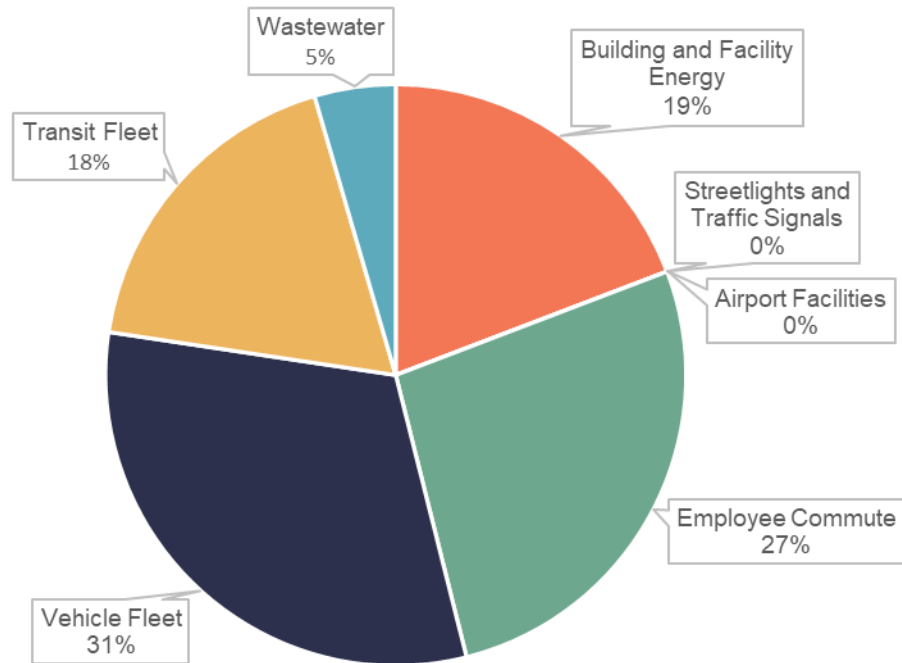
Of the sectors inventoried, the vehicle fleet comprised the largest portion (31%) of the total municipal operations emissions in 2019. Employee travel was the second largest source, accounting for 27% of emissions.

Table 2: Emissions by Sector

Sector	Emissions (MTCO _{2e})	Percent of Total
Buildings and Facilities	701	19%
Streetlights and Traffic Signals	0	0%
Airport Facilities	0	0%
Employee Travel	982	27%
Vehicle Fleet	1,143	31%
Transit Fleet	662	18%
Wastewater	165	5%
Total	3,683	100%
<i>Sources: City of Petaluma, 2021; Raimi + Associates, 2021.</i>		

¹ The Petaluma Community GHG Inventory estimated 2018 emissions.

Figure 1: 2019 Emissions by Sector



2019 Emissions Inventory by Sector

Buildings and Facilities

The buildings and facilities sector accounts for the emissions from energy consumption. Total 2019 emissions from buildings and facilities were estimated at 701 MTCO_{2e}, or 19% of the City's operations emissions in 2019. Since Petaluma purchases carbon-free electricity from Sonoma Clean Power, all emissions are from the use of natural gas. Table 3 shows the total annual buildings and facilities sector emissions broken down by subsector.

Table 3: Buildings and Facilities Energy Emissions by Sector

Sector	Electricity Consumption (in kWh)	Natural Gas Consumption (in Therms)	Emissions Factor	Emissions (MTCO _{2e})
Electricity	12,970,814	N/A	0	0
Natural Gas	N/A	132,182	0.005307026	701
Total	12,970,814	132,182	N/A	701

Note: Electricity consumed by airport facilities and streetlights and signals are reported as their own sectors.
Sources: Sonoma Clean Power, 2019; Pacific Gas & Electric, 2019

Electricity

Municipal electricity consumption data was obtained from Sonoma Clean Power (SCP) in the form of total kilowatt hours (kWh) consumed by service account in 2019. The City's electricity is provided by SCP's 100% renewably sourced EverGreen program, is assumed to be carbon free.² Therefore, the emissions of the nearly 13 million kWh of electricity used by City operations in 2019 zero out. Table 4 indicates emissions by subsector, which are estimates based on the City's customer service classifications.

Table 4: Building and Facility Electricity Consumption by Subsector

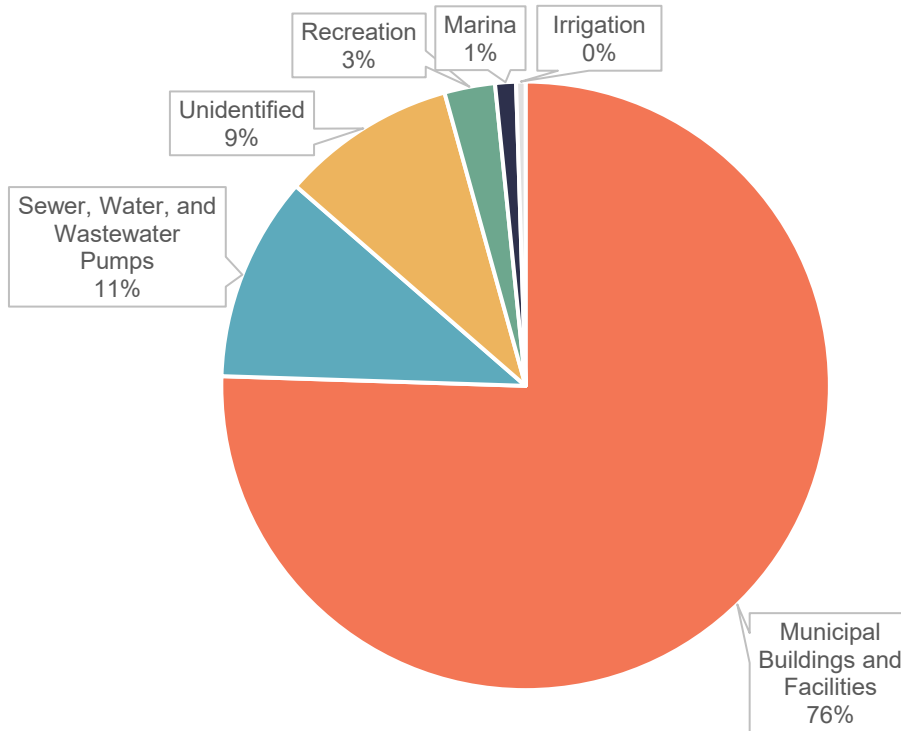
Subsector	Emissions (MTCO _{2e})	Percent of Total
Municipal Buildings and Facilities	9,793,947	76%
Sewer, Water, and Wastewater Pumps	1,411,894	11%
Other Electrical Service*	1,207,887	9%
Parks	348,530	3%
Marina	143,544	1%
Irrigation	65,013	1%
Total	12,970,814	100%

*Other Electrical Service entries have address data but do not have a facility type associated.
Sources: Sonoma Clean Power, 2019; City of Petaluma, 2021

² The emissions factor associated with SCP EverGreen is 0.00000045 MTCO_{2e}/kWh. Since it is from 100% renewable sources and carbon free, it is modeled as zero emission.

When broken down by facility type, Municipal Buildings and Facilities account for over two thirds of consumption (see Figure 2). These include specific buildings and facilities, including the Ellis Creek Water Recycling Facility, City Hall, the Police Station, and the Fleet Yard (see Table 5 for more details). The other sectors were small in comparison. Sewer, water, and wastewater pumps and other electrical services accounted for 11% and 9% of the consumption, respectively.

Figure 2: Buildings and Facilities Energy Use by Subsector



The buildings and facilities that used the most electricity are listed in Table 5. Even though the use of SCP EverGreen meant this electricity did not produce any GHG emissions, these high-using facilities are an opportunity to reduce electricity consumption and energy costs. Ellis Creek Water Recycling Facility accounts for 68% of the electricity consumed by all City buildings and facilities.

Table 5: Top 5 Consumers of Electricity in Buildings and Facilities Sector

Facility	Electricity Consumption (kWh)
Ellis Creek Water Recycling Facility	8,853,620
Sewer Pump Station – 950 Hopper St	787,237
City Hall	297,590
Police Station	236,748
Browns Ln End Electrical Service	208,602
<i>Sources: Sonoma Clean Power, 2019.</i>	

Natural Gas

The City's total natural gas emissions from municipal operations were 701 MTCO_{2e} in 2019, approximately 19% of total municipal emissions. The top consumer of natural gas in City operations was the Swim Center, which accounted for over half of the City's natural gas usage. Other top consumers of natural gas are listed in Table 6.

Table 6: Top 5 Consumers of Natural Gas in Buildings and Facilities Sector

Facility	Natural Gas Consumption (kWh)	Emissions (MTCO _{2e})
Swim Center	74,467	395
Ellis Creek Water Recycling Facility	19,567	104
City Hall	12,759	68
Community Center	4,851	26
Corporation Yard	4,540	24
<i>Sources: PG&E, 2019</i>		

Natural gas data was obtained from Pacific Gas & Electric (PG&E) in the form of therms consumed by street address annually. The City identified the natural gas usage of municipal facilities by matching up the facility name and its address. Natural gas emissions are calculated by applying an emissions factor to the therms of natural gas used.

Streetlights and Traffic Signals

Streetlights and traffic signals consumed 1,122,596 kWh of electricity in 2019. However, they did not produce any GHG emissions because the City's electricity is supplied by SCP EverGreen. There was no natural gas usage reported for the sector. Table 7 shows energy consumption by subsector.

Table 7: Streetlight and Traffic Signal Energy Consumption

Subsector	Electricity Consumption (kWh)
Streetlights	951,358
Traffic Control and Signals	161,238
Total	1,112,596
<i>Sources: Sonoma Clean Power, 2019.</i>	

Airport Facilities

Though the City used 195,484 kWh of electricity at airport facilities in 2019, they did not produce any GHG emissions because the City's electricity is supplied by SCP EverGreen. Vehicles that operate at the airport are counted in the Fleet Vehicle sector. There was no natural gas usage reported for airport facilities. Table 8 shows the electricity consumption by facility.

Table 8: Airport Facilities Electricity Consumption

Facility	Electricity Consumption (kWh)
Airport – 2200 E Wash	76,638
Hangar #2 Airport	36,185
Airport – 2200 E Wash	23,758
Pilot Building/HQ – 2210 E Washington	17,673
Hangars 9-12	19,108
Hangar 18A	11,845
Hangar 18B	4,130
Hangar B	4,120
Hangar 18C	846
Total	195,484
<i>Sources: Sonoma Clean Power, 2019; City of Petaluma, 2021.</i>	

Employee Travel

Employee travel accounts for emissions from the fuel City employees consumed travelling to and from work. The amount of annual vehicle miles traveled (VMT) for all employees was extrapolated from responses to the 2019 Petaluma Employee Commute Survey, which was conducted August 2021.

Table 9 below shows the proportion of 2019 employee commute VMT by fuel type. A vast majority of employee VMT is from gasoline-powered vehicles, and a small number of employees reported using electric or hybrid vehicles. Even fewer reported using transit, walking, and/or biking. No employees reported commuting in vehicles that use biodiesel, compressed natural gas, or hydrogen fuel cell.

Table 9: 2019 Annual Employee Commute VMT by Fuel Type

Fuel Type	Annual VMT	% VMT by Fuel Type	Average Fuel Efficiency (mpg)	Emissions (MTCO _{2e})
Diesel Light Duty Truck	63,247	2.8%	16.2	40
Electric	65,515	2.9%	N/A	0
Gasoline Passenger Vehicle	997,090	44.6%	22.5	391
Gasoline Light Duty Truck	910,559	40.7%	16.2	496
Hybrid (gasoline/electric)	54,680	2.4%	31.2	15
Hybrid Electric (plug-in)	141,110	6.31%	31.2	40
Transit + Bike/Walk	2,772	0.1%	N/A	
Total	2,234,973	100%		982
<i>Sources: Raimi + Associates, 2021; Greenhouse Gas Protocol and World Resources Institute, n.d.</i>				

The estimated total emissions from the commutes of the City's 319 employees were estimated at 982 MTCO_{2e}, or 27% of the City's operations emissions in 2019. This analysis estimated the gallons of fuel used by each vehicle type and multiplied that by the emissions factors supplied by the 2018 EPA "Emissions Factors for Greenhouse Gas Inventories"³ and converted by the GHG Protocol Corporate Standards.⁴ This analysis assumed 219.2 commute days annually, which is an estimate that removes weekends, holidays, vacation days and other factors from the total year.

³ US EPA. "Emission Factors for Greenhouse Gas Inventories." 9 March 2018.

https://www.epa.gov/sites/default/files/2018-03/documents/emission-factors_mar_2018_0.pdf

⁴ Greenhouse Gas Protocol & World Resources Institute. "GHG Emissions Calculation Tool." Table S1 – Mobile Combustion. March 2021. <https://ghgprotocol.org/calculation-tools>

Fleet Vehicles

The City's fleet vehicles account for 1,143 MTCO_{2e}, or 31% of the City's operations emissions in 2019. As a full-service city, Petaluma owns a wide variety of vehicle types used for street maintenance, fire protection, and other functions. Vehicles that are part of the City's transit agency are accounted for in the next section. Table 10 indicates the emissions from the subsectors of fuel and vehicle types. The fleet contains four electric passenger vehicles; however, they do not consume fuel so their emissions are zero in this sector.⁵

Table 10: Fleet Emissions by Subsector

Fuel and Vehicle Type	Fuel Consumption (gal)	Emissions Factor (MTCO _{2e} /gal)	Emissions (MTCO _{2e})
Electric Vehicle*	NA	NA	NA
Motor Gasoline - Gasoline Passenger Cars	12,052	0.008812	106
Motor Gasoline - Gasoline Light-duty Trucks (Vans, Pickup Trucks, SUVs)	64,702	0.008816	570
Motor Gasoline - Gasoline Heavy-duty Vehicles	6,343	0.008819	56
Motor Gasoline - Hybrid (Gasoline) Passenger Cars	5,709	0.008825	50
Motor Gasoline - Gasoline Motorcycles	7,612	0.00897	68
Diesel Fuel - Diesel Light-duty Trucks	6,343	0.01022	65
Diesel Fuel - Diesel Medium- and Heavy-duty Vehicles	22,202	0.01022	227
Total	124,964	N/A	1,143

*Electricity usage for electric vehicles is included in the building and facilities sector.

Note: Fuel consumption (gal) for each fuel type was estimated by multiplying the percentage that fuel type comprises in the fleet by the total fleet fuel use.

Note: Petaluma Transit vehicles (buses and pool vehicles) were not included in this analysis

Sources: City of Petaluma, 2021; EPA, 2018; Greenhouse Gas Protocol and World Resources Institute, n.d.

⁵ Per the LGOP, emissions from the electricity used to charge fleet EVs should be reported in the Vehicle Fleet sector. However, due to lack of data, the energy is aggregated with Building and Facility energy use.

This analysis estimated the gallons of fuel used by each vehicle type and multiplied that by the emissions factors supplied by the 2018 EPA “Emissions Factors for Greenhouse Gas Inventories”⁶ and converted by the GHG Protocol Corporate Standards.⁷ This estimate indicates that Gasoline Light-Duty Trucks are the largest source of emissions in the fleet, followed by Diesel Medium- and Heavy-Duty Vehicles and Gasoline Passenger Cars.

Transit Vehicles

Petaluma Transit emitted an estimated 662 MTCO_{2e}, or 18% of the City’s operations emissions. Petaluma Transit runs six fixed bus routes in addition to providing paratransit service and pool vehicles. The fleet consists of eleven diesel buses, three diesel-electric hybrid buses, eleven gasoline cutaway buses, and three gasoline vehicles.⁸ Emissions from transit vehicles were calculated following the LGOP protocol in which the known fuel use is multiplied by the emissions factor of the respective fuel type. Table 11 shows the Petaluma Transit fleet emissions by fuel type.

Table 11: Transit Fleet Emissions by Fuel Type

Fuel Type	Fuel Consumption (gal)	Emissions Factor (MTCO _{2e} /gal)	Emissions (MTCO _{2e})
Gasoline	12,414	0.0089	110
Diesel	54,315	0.0102	551
Total	66,729	N/A	662
<i>Sources: Federal Transit Administration, 2019; US Energy Information Administration, n.d.; Greenhouse Gas Protocol and World Resources Institute, n.d.</i>			

Wastewater

The City owns and operates the Ellis Creek Water Recycling Facility (ECWRF) that collects, treats, and then re-uses both the waste and the water that goes into the city sewer. Total estimated emissions⁹ from wastewater treatment were 165 MTCO_{2e}, or 5% of the City’s operations emissions.

Wastewater treatment processes create fugitive GHGs, mainly methane (CH₄) and nitrous oxide (N₂O). Though 90% of ECWRF’s operations serve Petaluma and 10% serves Unincorporated Sonoma County, all of the emissions from the plant are counted as part of the City’s emissions because it is under its

⁶ US EPA. “Emission Factors for Greenhouse Gas Inventories.” 9 March 2018.

https://www.epa.gov/sites/default/files/2018-03/documents/emission-factors_mar_2018_0.pdf

⁷ Greenhouse Gas Protocol & World Resources Institute. “GHG Emissions Calculation Tool.” Table S1 – Mobile Combustion. March 2021. <https://ghgprotocol.org/calculation-tools>

⁸ Hall, Jared. Personal communication. 21 September 2021.

⁹ 2018 data was used to approximate ECWRF’s 2019 emissions.

operational control. Table 12 indicates the emissions produced by various processes associated with wastewater recycling.

Table 12: Ellis Creek Water Recycling Facility Emissions by Type

Emission Type	Emissions (MTCO_{2e})
Stationary Emissions from Combustion of Digester Gas	2.3
Process Methane Emissions from Wastewater Treatment Lagoons	4.7
Process Nitrous Oxide Emissions from Wastewater Treatment Plants with Nitrification or Denitrification	112.5
Fugitive Nitrous Oxide Emissions from Effluent Discharge	45.6
Total	165
Note: This analysis uses 2018 data due to unavailability of 2019 data. The facility's emissions should be relatively consistent from one year to the next. <i>Sources: City of Petaluma, 2021</i>	

Data Collection Recommendations

This municipal inventory is an important first step for the City to understand where its emissions come from and track the effectiveness of reduction measures in the future. The City collects and maintains many of the necessary data sources to calculate greenhouse gas emissions from municipal operations, Incomplete or lack of data for several sectors, however, means that the City does not have a complete picture of municipal emissions in 2019. Table 13 shows additional data sets and departmental responsibilities organized by sector.

Table 13: Future Data Collection Recommendations

Sector	Description	Department
Wastewater Facilities	Renewable natural gas from the anaerobic digestion system	Environmental Services Division
Vehicle Fleet	Fuel consumption by type, including: <ul style="list-style-type: none"> • Direct measurements of fuel use from vehicle fuel gauges or storage tanks • Fuel receipts • Purchase records for bulk storage fuel purchases • kWh or electricity used to charge electric vehicles Keep non-transit and transit fleet data separate	Finance or Public Works and Utilities

Reimbursed Employee Miles	Vehicle miles traveled and/or total of annual reimbursements	Finance
Water Delivery Facilities	Water use	Parks and Facilities Maintenance Division or the Finance Department
Solid Waste	Tons of waste produced by City operations	Public Works and Utilities
Other Process and Fugitive Emissions	To accurately track emissions from refrigerants: <ul style="list-style-type: none"> • The difference in quantity of the HFC in storage at the beginning of the year versus the end of the year at each City facility • The purchases and sales/disbursements of HFCs during the year • Type of HFC or refrigerant blend • Net increase in full charge/nameplate capacity 	Parks and Facilities Maintenance Division or the Finance Department

Appendix A: City Sustainability Plans, Policies, and Programs

This appendix reviews the City of Petaluma's existing sustainability-related plans, policies, and programs as compared to sustainability best practices. This list contains plans, policies, and programs that not only address sources of greenhouse gas (GHG) emissions, but quality of life and equity issues as well. It summarizes documents provided in the initial data transfer and identified in a review of the City's website. The best practices list was developed by reviewing the requirements of sustainability rating systems, such as STAR Communities and LEED for Cities, current trends in municipal sustainability, and the strategies of leading-edge cities.

Petaluma has already developed many of the key planning documents; however, some gaps do exist in the implementation of those programs as shown below. Based on this initial review, Petaluma could focus on enhancing sustainability in the Transportation sector, which can achieve GHG emission reductions especially given the City's participation in Sonoma Clean Power. There is also the opportunity for the City to implement more actions related to municipal operations. These strategies will be explored in the General Plan and associated climate action and adaptation plan, including the quantification of different GHG reduction measures.

Equity and Social Justice

Plan/Policy/Program Best Practices	Petaluma Policy Status
Equity and Social Justice	
Environmental Justice or Social Equity Plan	Climate Emergency Framework (2021)
Aging in Place Plan	No existing plan – Age Friendly Petaluma Initiative; Senior Advisory Committee
Community Study/Needs Assessment	No existing plan
School District wellness policy	Petaluma City Schools Wellness Policy (2006)

Mitigation and Sequestration

Plan/Policy/Program Best Practices	Petaluma Policy Status
Long-Range Planning Documents	
General Plan Circulation Element – promotes compact, mixed-use development Land Use Element – Identifies areas for mixed-use development, density, TOD, infill	General Plan Update (in process)
Sustainability Plan	Sustainability Action Plan (2015)

Climate Action Plan (CAP)	Sonoma County Regional Climate Action Plan (2016)
Greenhouse Gas (GHG) Inventory	City data included in Sonoma County GHG Inventory (2018) with baseline year 2010
Local Hazard Mitigation Plan or Resilience Plan	Local Hazard Mitigation Plan (2020)
Buildings + Energy	
Key Plan: Energy Action Plan (EAP) or CAP	Climate Emergency Framework (2021), Sustainability Plan (2015)
Key Implementation Measure: Community Choice Aggregation (CCA)	Sonoma Clean Power (SCP), EverGreen 100% renewable. CleanStart 50% renewable (93% carbon free)
Solar PV streamlined permitting	Streamlining for roof-mount solar PV ≤10kW (2020)
EV readiness policy and streamlined permitting	CALGreen Tier 1 (Single/2 Family DU - EV ready circuit; New multifamily - 15% EV charging spaces; New hotel/motel – EV charging spaces varies; New nonresidential – EV charging spaces varies) ¹⁰
Green building requirements (beyond CALGreen)	CALGreen Tier 1 required
Energy Efficiency or electrification reach code	All-Electric Construction in Newly Constructed Buildings (Municipal Code Chapter 17.09) and local amendments to CA Building Standards Code (2021)
Energy efficiency retrofit programs	Available through SCP, PG&E
PACE or other financing mechanisms	Available through SCP, Sonoma County Energy Independence Program, and BayRen
Benchmarking ordinance	No existing ordinance – AB 802 compliant
Public benefit agreements that include sustainability measures	No existing policy
Water	
Key Plan: Water conservation ordinance	Water Shortage Contingency Plan
Model Water Efficient Landscape Ordinance (MWELO)	2016
Supply alternative sources of water (i.e. recycled)	Recycled: Ellis Creek Water Recycling Facility (non-potable): 1,756 AF (2020) for on-site uses and irrigation of city parks and agricultural land

¹⁰ Percentages reflect CALGreen 2019. EV charging spaces refers to spaces that are capable of supporting future EVSE

	Groundwater: <5%, for supplemental or emergency purposes only
Water Quality Reporting	Yes – City of Petaluma Public Works & Utilities
Watershed management plan	2015
Stormwater management plan - NPDES	2003
Urban Water Management Plan	2020
Low Impact Development (LID) standards	No existing policy
Green Infrastructure Plan	No existing plan
Transportation	
Key Plan: Active Transportation Plan	Bicycle and Pedestrian Plan Update (in progress)
Complete streets policy	No existing policy
Transportation Demand Management	No existing policy
SB 743 implementation	VMT Guidelines (2021)
Establish/support bike share program	BikeLink at Petaluma Downtown SMART Station
Public EV chargers	One at City Hall, one at SMART Station, and a dozen scattered at commercial and hotel locations.
Senior mobility services/ free shuttle	No existing policy
Transportation Agency	Yes - Petaluma Transit
ZEV Bus Policy	No existing policy
Waste	
Key Plan: Zero Waste Plan	No existing plan but has a zero-waste goal
C&D waste diversion requirements	Yes – 65% for new buildings, 50% for all other projects must be diverted
Mandatory recycling	Yes – Commercial, MFR, residential
Mandatory composting – including food scraps	No existing policy – AB 1826 compliant
Mandatory school recycling and composting	No existing policy
Plastic bag ban	SB 207 compliant
Polystyrene ban	Disposable Food Service Ware and Polystyrene Foam Product Waste Reduction Ordinance
Plastic straw ban	No existing policy
Open Space	
Key Plan: Urban Forestry Management Plan	No existing plan
Key Plan: Open Space or Parks Management Plan	No existing plans
Park fees (Quimby Act and AB 1600)	Park Land Acquisition Fee (2008)
Tree preservation ordinance	Zoning Code Ch. 17: Tree Preservation Mun. Code Ch. 8.28: Heritage and Landmark Trees (1991)
Privately Owned Public Open Space program	No existing program

Municipal Strategies	
Key Plan: Sustainability Program Manager	No existing position
Facilities Improvement Plan – energy efficiency, decarbonization, LEED, resiliency etc.	No existing policy – goal in 2015 Sustainability Plan
Environmentally preferable purchasing (EPP)	No existing policy
Fleet alternative fuel policy	No existing policy
Healthy food vending policy	No existing policy

Community Engagement

Plan/Policy/Program Best Practices	Petaluma Policy Status
Education + Outreach	
Green business certification program	Sonoma County Green Business Program
Utility energy and water efficiency program outreach	Yes – water savings rebates and programs
Farmers’ Market & Market Match program	Yes – East Side Farmers’ Market, Walnut Park Farmers’ Market, and Evening Market
Local government volunteer program	No

Adaptation and Social Resilience

Plan/Policy/Program Best Practices	Petaluma Policy Status
Adaptation and Social Resilience	
Resilience or Climate Adaptation Plans	Climate Emergency Framework (2021)
CERT Program	No existing program
Resiliency Hub Policy	No existing policy
Cooling Centers Policy	No existing policy – one center in partnership with New Life Church

Other

Plan/Policy/Program Best Practices	Petaluma Policy Status
Other	
Arts strategic plan	Public Art Master Plan (2013)
Historic Preservation Plan/Ordinance	Ch. 15 Zoning Code