

Petaluma

Commitments to meeting
community greenhouse
gas reduction goals.



5.4 Petaluma

This section presents the community greenhouse gas (GHG) emissions profile specific to Petaluma and the measures that the City of Petaluma will implement, with the support of the RCPA and other regional entities, as part of the regional approach to reducing GHG emissions.

5.4.1 Community Summary

Petaluma serves as the southern gateway to Sonoma County, located 3 miles north of the Marin County-Sonoma County border and less than 20 miles south of Santa Rosa. Petaluma is known for its thriving historic downtown district, rich agricultural heritage, and as a growing hub for food and beverage processing, information communications technology, green services and construction, diversified manufacturing, consumer products, health & wellness, tourism, and recreation. Home to a diverse range of housing types, award-winning schools, and over 40 annual events and festivals, Petaluma is a family-oriented community with a strong sense of place with easy access to wine country, the coast, and San Francisco.

Demographics

Petaluma spans 14.5 square miles and had a population of 57,941 as of the 2010 census. In 2020 the population of Petaluma is expected to be 61,122, an increase of 5% over 2010. Employment in the area is expected to increase by 13%. Petaluma’s demographic composition in 2010 was 81% White, 1% African American, 0.6% Native American, 5% Asian, 0.2% Pacific Islander, 9% from other races, and 4% from two or more races. Persons of Hispanic or Latino origin were 22%.

As shown in Table 5.4-1, the City is expected to experience steady growth in population, housing, and jobs in the future.

Table 5.4-1. Petaluma Socioeconomic Data

	Actual			Projected		
	1990	2010	2015	2020	2040	2050
Population	43,184	57,941	59,440	61,122	68,542	71,980
Housing	16,062	22,198	22,862	23,508	26,362	27,670
Employment	26,145	31,537	33,644	35,738	38,488	39,897

Socioeconomic data were derived from the SCTA travel demand model and incorporate input from the City based on its internal planning forecasts.

According to the 2010 Census data, Petaluma housing is majority owner-occupied with 65% of all housing units owned and 35% rented.

Energy and Water Use

Compared to households in the county as a whole, Petaluma households use less electricity and water but more natural gas. They also use less electricity, natural gas, and water than households statewide.

Table 5.4-2. Petaluma, County, and State 2010 Average Energy and Water Use (per household, per year)

	Petaluma	County	State
Electricity (kWh)	6,000	7,042	9,320
Natural Gas (Therms)	493	413	512
Water Use (Gallons)	73,268	75,810	107,869

Sources:

City Data: provided by PG&E (energy) and by the City of Petaluma Urban Water Management Plan.

County Data: provided by PG&E (energy) and the cities or their Urban Water Management Plans (water).

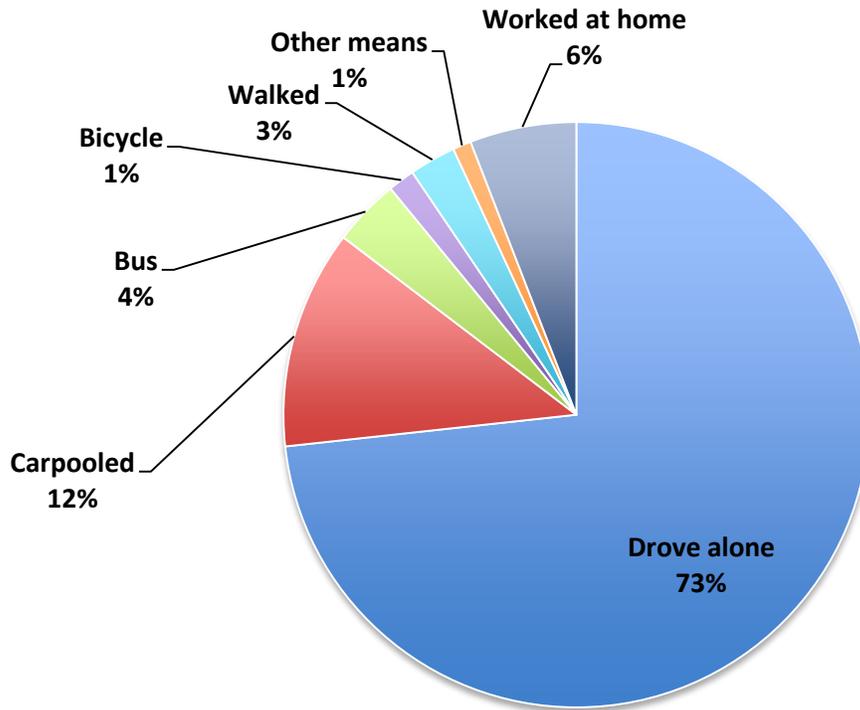
State Data: U.S. Energy Information Administration 2009, U.S. Geological Survey 2014, California Department of Finance 2015.

kWh = kilowatt hours

Transportation Commute Modes

In the inventory year 2010, most Petaluma residents (73%) drove alone to work. The average work trip for a resident of Petaluma is 29.3 minutes, higher than the county average of 25.3 minutes (U.S. Census Bureau 2014).

Figure 5.4-1. Modes to Work in Petaluma in 2010



Source: U.S. Census Bureau 2014: American Community Survey 2006–2010

5.4.2 Petaluma’s Existing Actions to Reduce GHG Emissions

Petaluma has already taken a number of steps to reduce energy use, promote renewable energy use, and other actions that have already been helping to reduce GHG emissions. The City has adopted the following programs, ordinances, and General Plan policies that help to reduce GHG emissions and will support the implementation of the formal GHG reduction measures in this CAP.

- Building Energy
 - Residential Retrofits: Energy Upgrade California in Sonoma County – Whole House Upgrade Program.
 - Residential Appliance Upgrades: Programs through PG&E and other agencies.
 - Solar Installations at Residences: Energy Upgrade California in Sonoma County – Whole House Upgrade Program.
 - Solar Action Alliance/Solar Sonoma County program.
 - Community Choice Aggregation – General Plan Policy: Chapter 4 – Policy 4-P-28. Prepare a feasibility report for the City of Petaluma forming a Community Choice Aggregation as a way of supplying renewable energy to the community. (Petaluma joined SCP in 2014).
 - Solar Subsidy – General Plan Policy: Chapter 4 – Policy 4-P-32. Investigate the feasibility of developing a City sponsored program to subsidize or assist homeowners in purchasing

solar water heating or passive solar systems, or other forms of renewable energy, through low-interest loans or property tax assessments. (Petaluma participates in the Sonoma County Energy Independence Program and Property Assessed Clean Energy [PACE] Financing Marketplace).

- Green Building Guidelines – General Plan Policy: Chapter 2 – Policy 2-P-118B. Prepare and adopt green street standards, and incorporate these practices in design of City streets.
- Green Building Guidelines – General Plan Policy: Chapter 2 – Policy 2-P-118C. Prepare a salvage ordinance that requires an inventory of usable materials prior to demolition.
- Incorporation – General Plan Policy: Chapter 2 – Policy 2-P-119. Incorporate green building principles and practices into the planning, design, construction, management, renovation, operations, and demolition of all facilities that are constructed, owned, managed or financed by the City.
- Evaluation and Implementation – General Plan Policy: Chapter 2 – Policy 2-P-121. Evaluate the success of the voluntary green program and develop and implement a mandatory program for new residential, commercial and municipal development and remodels.
- CALGreen Building Standards Code: Municipal Code Chapter 17.04.010 – Part 11. CALGreen Tier 1 adopted as mandatory for residential and non-residential buildings.
- Energy Standards – General Plan Policy: Chapter 4 – Policy 4-P-18. Develop and adopt local energy standards that would result in less energy consumption than standards set by the California Energy Commission’s (CEC) Title 24 or updates thereto.
- Land Use and Transportation
 - Bicycle and Pedestrian Master Plan adopted May 2008.
 - Multiple Modes – General plan Policy: Chapter 5 – Policy 5-P-1. Develop an interconnected mobility system that allows travel on multiple routes by multiple modes.
 - Increased Transit Service – General Plan Policy: Chapter 5 – Policy 5-G-42. Expand the bus transit system so that it is convenient and provides frequent, regular service along major City corridors serving education, shopping, and employment destinations, and SMART park-and-ride lots.
 - Subsidized Fares – General Plan Policy: Chapter 5 – Policy 5-P-44. Maintain a transit system of nominal cost, or no cost, to riders.
 - Support Transit Oriented Development – General Plan Policy: Chapter 5 – Policy 5-P-43. Support efforts for transit oriented development around the Petaluma Depot and along the Washington Street, Petaluma Boulevard, McDowell Boulevard, Lakeville Street, and other transit corridors. (Petaluma SMART Rail Station Areas: TOD Master Plan adopted June 2013)

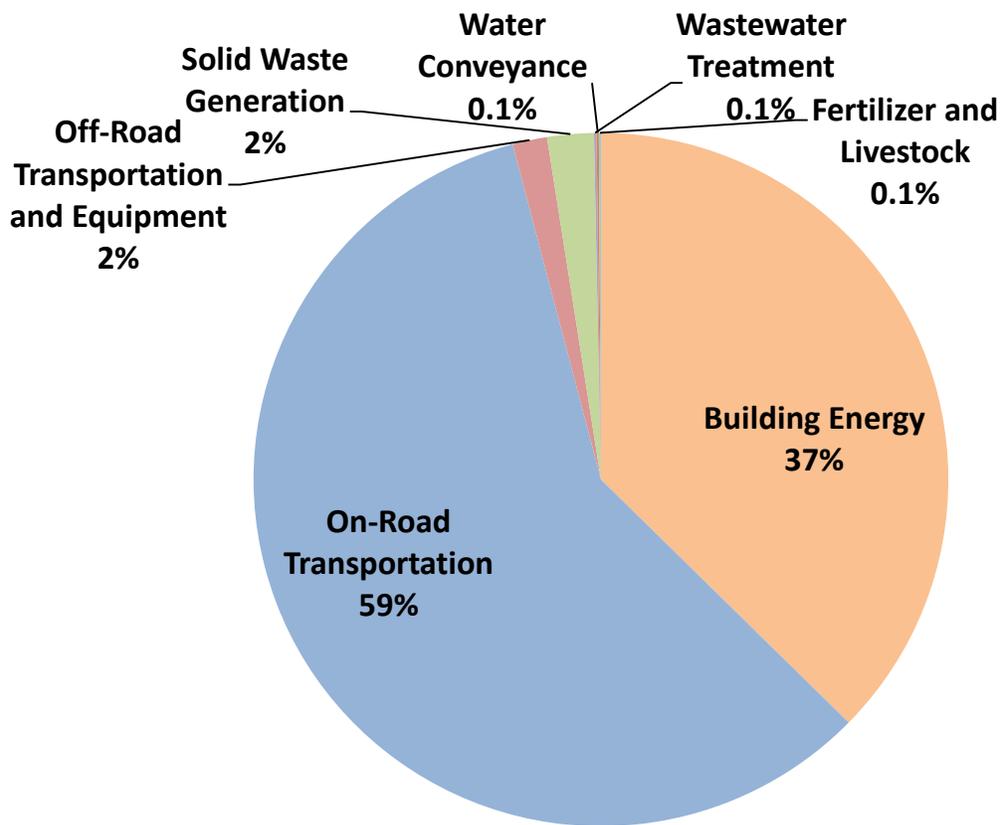
- Transportation Demand Management – General Plan Policy: Chapter 5 – Policy 5-P-13. Encourage existing major employers to develop and implement Transportation Demand Management programs to reduce peak period trip generation.
- Alternative Fuel Stations – General Plan Policy: Chapter 4 – Policy 4-P-9. Require a percentage of parking spaces in large parking lots or garages to provide electrical vehicle charging facilities.
- Charging Stations – General Plan Policy: Chapter 4 – Policy 4-P-10. Require electric vehicle charging and alternative fuel facilities at all new and remodeled gas stations.
- Ride Sharing – General Plan Policy: Chapter 4 -Policy 4-P-11. Promote ride-sharing and car-sharing programs.
- Drive-Through Prohibition – General Plan Policy: Chapter 4 – Policy 4-P-12. Prohibit new drive-thru food and service facilities with the exception of vehicle serving businesses, such as car wash and oil/lube, and limit expansion of the drive-thru components of existing facilities which increase idling vehicles.
- Traffic Calming – General Plan Policy: Chapter 4 – Policy 4-P-13. Require development of traffic roundabouts, where feasible, as an alternative to a traffic signal, to reduce idling vehicles.
- Transportation Tech – General Plan Policy: Chapter 4 – Policy 4-P-14. Develop and integrate Intelligent Transportation Technologies, as applicable, into Petaluma’s transportation system.
- Trip Reduction Ordinance: Municipal Code Chapter 11.90. Requirements for employers with 100+ employees at a given work site to distribute information on the benefits of alternative transportation, designate a transportation coordinator, and perform annual surveys and reports on employee transportation use.
- Waste Minimization and Recycling
 - Construction Phase Recycling Plan – General Plan Policy: Chapter 2 – Policy 2-P-121. Require development projects to prepare a Construction Phase Recycling Plan that would address the reuse and recycling of major waste materials (soil, vegetation, concrete, lumber, metal scraps, cardboard packaging, etc.) generated by any demolition activities and construction of the project.
 - Plastic Bottles – General Plan Policy: Chapter 4 – Policy 4-P-21G. Investigate and replace bottled water in City offices with alternate source of drinking water.
 - Compost – General Plan Policy: Chapter 4 – Policy 4-P-21D. Develop a residential and commercial food waste composting program.
 - Environmental Purchasing – General Plan Policy: Chapter 4 – Policy 4-P-32. Develop and implement a municipal Environmentally Preferable Purchasing Program.

- Green Purchasing – General Plan Policy: Chapter 4 – Policy 4-p-21D. Purchase goods containing recycled materials for City use.
- Urban Forestry and Natural Areas
 - Required Tree Planting – General Plan Policy: Chapter 4 – Policy 4-P-6A. Require planting of trees for every significant tree removed at a project site. Replacement planting may occur on the project site or on a publicly owned area, with long-term maintenance assured. Encourage the use of trees which provide biogenic benefits to air quality and are suitable to the local environment.
- Water and Wastewater Efficiency
 - Sewer Lateral Replacement Grant Program: provides financial assistance to property owners for the replacement of their private sewer lateral, which is often a source of infiltration and inflow to the sewer collection system.
 - High Efficiency Toilet Rebate: Up to \$150 rebate for each high-efficiency toilet installed.
 - High Efficiency Clothes Washer Rebate: Up to \$125.00 rebates for high efficiency clothes washing machines.
 - Mulch Madness: Offers free mulch, compost, cardboard, an irrigation conversion kit and free native plants from a local native plant nursery to those customers who wish to sheet mulch their existing turf. Free volunteer labor for those that are unable to install measures themselves.
 - Smart Yard: improves landscape water use efficiency by assessing and installing water-use efficiency irrigation and landscape systems. The cost of the systems and labor is added to a monthly water bill. The charges are added to the water bill for 5 years, after which the customer officially owns the system.
- Multi-sector
 - The City of Petaluma’s Biomass-to-Biofuel Project would leverage highly optimized anaerobic digestion technology and state-of-the-art biogas scrubbing technology to produce more than 150,000 gallons gas equivalent of compressed natural gas (CNG) annually. The biogas would be produced primarily from high strength waste, food waste and fats, oils and grease, and wastewater solids. This renewable fuel would replace high carbon intensity fuels with CNG that has a net negative carbon intensity for Petaluma’s transit fleet and its waste hauler’s collection fleet. This project could serve as a model for a local renewable fuel program. The project combines several features for reducing carbon emissions:
 - Efficiently producing and utilizing a very low carbon intensity, renewable vehicle fuel as a replacement for high carbon intensity fuels, like diesel.
 - Substantially reducing truck traffic and fuel consumption by keeping and treating commercial food waste, FOG and food processing waste within the community

- Discontinuing the disposal of readily biodegradable waste in situations and landfills where aggressive greenhouse gases are produced and difficult to contain.
- Greenhouse Gas Emissions
 - General Plan Policy: Chapter 4 – Policy 4-P-15. Improve air quality by reducing emissions from stationary point sources of air pollution (e.g., equipment at commercial and industrial facilities) and stationary area sources (e.g., wood-burning fireplaces & gas powered lawn mowers) which cumulatively emit large quantities of emissions.
 - Climate Action Plan – General Plan Policy: Chapter 4 – Policy 4-P-27. The City shall prepare a Community Climate Action Plan to identify and prioritize programs, projects, and procedural policies that will help the City achieve the community greenhouse gas emission goals of Resolution 2005-118 (25% below 1990 levels by 2015).

5.4.3 Greenhouse Gas Inventory and Forecast

Figure 5.4-2. Petaluma 2010 Community GHG Inventory by Sector



Petaluma’s inventory is similar to other cities in the county and state. The majority of the GHG emissions are from the transportation sector due to fossil fuel combustion in personal and light-duty vehicles. The next largest sector is building energy, which includes emissions related to energy used to heat the homes and businesses in Petaluma. Residential uses account for most

(54%) of the building energy emissions in Petaluma. Commercial uses account for 46% of building energy emissions. The other categories of emissions are much smaller in comparison to building energy and on-road transportation.

In Petaluma, total GHG emissions generated by community activities in 2010 were 441,880 MTCO₂e, which is approximately 17% of countywide GHG emissions in the same year. This is a 14% increase from estimated 1990 emissions, which were 387,020 MTCO₂e. Table 5.4-3 shows the 1990 backcast, the 2010 inventory and business-as-usual (BAU) forecasts for 2015, 2020, 2040 and 2050 for the City of Petaluma.

Table 5.4-3. Petaluma Community GHG Backcast, Inventory, and Forecasts

Sector	1990 Backcast		2010 Inventory		2015 Forecast		2020 Forecast		2040 Forecast		2050 Forecast	
Building Energy	134,720	35%	165,260	37%	182,020	36%	190,180	35%	209,020	36%	218,060	37%
On-Road Transportation	228,530	59%	258,940	59%	303,090	60%	330,670	61%	339,440	58%	336,690	57%
Off-Road Transportation and Equipment	5,980	2%	7,110	2%	8,550	2%	10,290	2%	19,370	3%	20,210	3%
Solid Waste Generation	11,960	3%	9,580	2%	10,050	2%	10,530	2%	11,530	2%	12,020	2%
Wastewater Treatment	390	0%	520	0.1%	540	0%	550	0%	620	0%	650	0%
Water Conveyance	5,440	1%	470	0.1%	720	0%	750	0%	880	0%	930	0%
Total	387,020	100%	441,880	100%	504,970	100%	542,970	100%	580,870	100%	588,560	100%
Per-Capita Emissions	9.0		7.6		8.5		8.9		8.5		8.2	

5.4.4 Greenhouse Gas Reduction Goal and Measures

The City of Petaluma joins the other Sonoma County communities to support the regional GHG emissions reduction target of 25% below 1990 countywide emissions by 2020 through adoption of 27 local GHG reduction measures. The City’s GHG emissions under 2020 BAU conditions (in absence of state, regional, and local measures) would be approximately 542,970 MTCO₂e. The City’s local GHG reduction measures, in combination with state and regional measures, would reduce the City’s GHG emissions in 2020 to 375,260 MTCO₂e, which would be a reduction of approximately 31% compared to 2020 BAU conditions. The City will achieve these reductions through reduction measures that are technologically feasible and cost-effective per AB 32 through a combination of state (71%), regional (17%), and local (12%) efforts. With the reduction measures in CA2020, per-capita emissions in Petaluma will be 6.1 MTCO₂e per person, a 32% reduction in per capita emissions compared to 1990.

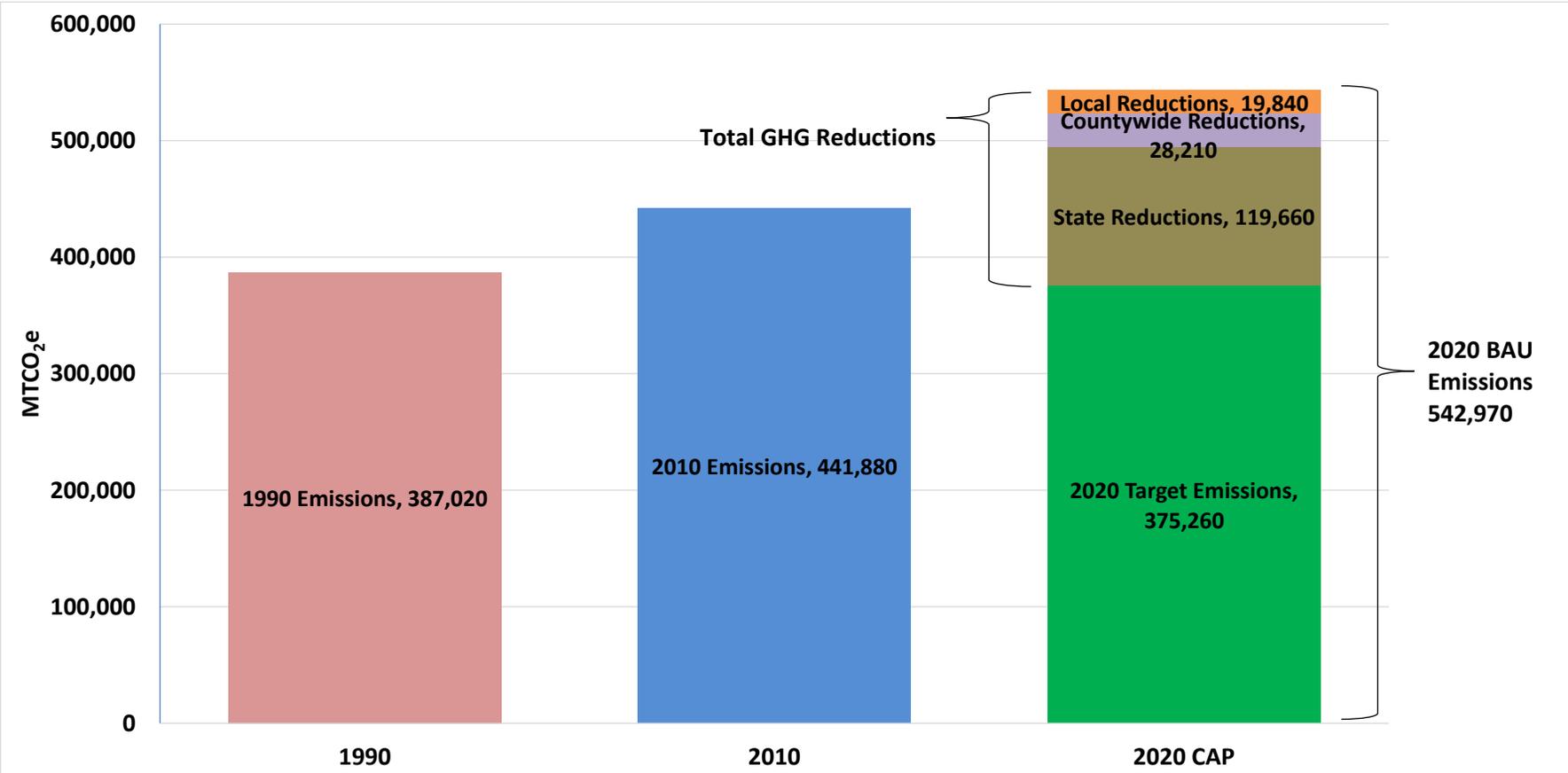
Table 5.4-4. Petaluma 2020 GHG BAU Emissions, Reductions, and CAP Emissions

Sector	2020 BAU Forecast	Reductions				2020 CAP Emissions	% Reduction from BAU
		State	County-wide	Local	Total		
Building Energy	190,180	43,440	12,030	14,910	70,380	119,800	37%
On-Road Transportation	330,670	75,300	8,540	4,480	88,320	242,350	27%
Off-Road Transportation and Equipment	10,290	910	-	310	1,220	9,070	12%
Solid Waste Generation	10,530	-	6,940	-	6,940	3,590	66%
Water Conveyance	750	-	700	10	710	40	95%
Wastewater Treatment	550	-	-	140	140	410	25%
Total Emissions	542,970	119,660	28,210	19,840	167,710	375,260	31%
		71%	17%	12%			

Values may not sum due to rounding.

Figure 5.4-3 shows Petaluma’s 1990 and 2010 GHG emissions total, 2020 BAU emissions forecast total, and the total emissions remaining after implementation of the City’s reduction measures. The contribution of state, regional, and local reductions are overlaid on the 2020 BAU emissions forecast total, representing the total emissions reductions achieved in 2020. Like the other communities, Petaluma benefits greatly from the work the state and other regional entities are committed to implementing on climate action. See Chapter 4 for more information on state and regional actions.

Figure 5.4-3. Petaluma 1990, 2010, and 2020 GHG Emissions; 2020 State and Local Reductions



Greenhouse Gas Reduction Measures by Sector

As shown in Table 5.4-5, the City of Petaluma will achieve its reduction goal through a combination of state, regional, and local measures. State reduction measures are implemented through state law, including some that require action by the City to comply with state mandates (e.g., Title 24 energy efficiency measures). State measure reductions total 119,660 MTCO₂e, including the Pavley vehicle fuel efficiency standards, Title 24 building standards, the state's low carbon fuel standard, and the RPS.

Regional measures will reduce emissions by 28,210 MTCO₂e and will be implemented by regional entities, including the Regional Climate Protection Authority (RCPA), Sonoma County Water Agency (SCWA), County of Sonoma Energy Independence Office (ESD), Sonoma County Transportation Authority (SCTA), and Sonoma Clean Power (SCP).

An additional reduction of 19,840 MTCO₂e will be achieved primarily through locally adopted measures relevant to the City of Petaluma. The locally adopted measures, although not as high-achieving of GHG reductions as the state and regional measures, are important because they represent the actions that local communities can take directly. The communities have local control over their infrastructure and policies and have selected the local measures that best suit the needs of their community.

The three measures that will have the greatest impact in Petaluma are, in order of importance, Measure 2-L4 (Solar in Existing Non-Residential Buildings), Measure 11-L1 (Senate Bill SB X7-7 - Water Conservation Act of 2009), and Measure 8-L1 (Idling Ordinance). These three measures, in addition to reducing GHG emissions, will save energy, improve air quality and public health in the region, and conserve water and other natural resources. As the county and state continue to experience a historic drought, water conservation will remain an especially important co-benefit.

On the state level, the RPS and the Pavley measures have the greatest potential to reduce emissions in the City. Of the regional measures, the measures with the greatest impact include the CCA measure, the waste-to-energy measure, and the waste diversion measure.

Table 5.4-5 presents the individual GHG reduction measures that Petaluma has selected for the CAP. For more information on the specifics of the measures, see Appendix C.

City of Petaluma Biomass to Biofuel Project

The City of Petaluma is seeking to partner with the California Energy Commission in a pilot project to capture the gas released naturally by food waste generated in the City and reuse it for fuel for the City's municipal vehicle fleet. The Biomass to Biofuel project would use state of the art technology to capture the gas from food waste and wastewater solids. The gas would then be used for the City's transit fleet and the waste collection vehicle fleet. The project would be an excellent example of how wastewater utilities and the food processing industry can reduce the carbon intensity of transportation.

Table 5.4-5. Petaluma 2020 GHG Emissions Reductions by Measure

✓ = Local Measure (otherwise State or Regional)	2020 GHG Reductions
Goal 1: Increase Building Energy Efficiency	9,650
Measure 1-S1: Title 24 Standards for Commercial and Residential Buildings	2,686
Measure 1-S2: Lighting Efficiency and Toxics Reduction Act (AB 1109)	4,135
Measure 1-S3: Industrial Boiler Efficiency	NA
Measure 1-R1: Community Energy Efficiency Retrofits for Existing Buildings	155
Measure 1-R2: Expand the Community Energy Efficiency Retrofits Program	2,259
Measure 1-L2: Outdoor Lighting ✓	403
Measure 1-L3: Shade Tree Planting ✓	11
Measure 1-L4: Co-Generation Facilities ✓	1
Goal 2: Increase Renewable Energy Use	54,509
Measure 2-S1: Renewables Portfolio Standard	36,470
Measure 2-S2: Solar Water Heaters	153
Measure 2-R1: Community Choice Aggregation	9,479
Measure 2-L1: Solar in New Residential Development ✓	106
Measure 2-L2: Solar in Existing Residential Building ✓	1,889
Measure 2-L3: Solar in New Non-Residential Developments ✓	97
Measure 2-L4: Solar in Existing Non-Residential Buildings ✓	6,315
Goal 3: Switch Equipment from Fossil Fuel to Electricity	1,226
Measure 3-L1: Convert to Electric Water Heating ✓	1,226
Goal 4: Reduce Travel Demand Through Focused Growth	1,401
Measure 4-L1: Mixed-Use Development in City Centers and Along Transit Corridors ✓	1,201
Measure 4-L2: Increase Transit Accessibility ✓	130
Measure 4-L3: Supporting Land Use Measures ✓	NQ
Measure 4-L4: Affordable Housing Linked to Transit ✓	71
Goal 5: Encourage a Shift Toward Low-Carbon Transportation Options	6,416
Measure 5-R1: Improve and Increase Transit Service	49
Measure 5-R2: Supporting Transit Measures	NQ
Measure 5-R3: Sonoma-Marín Area Rail Transit	NQ
Measure 5-R4: Trip Reduction Ordinance	1,294
Measure 5-R5: Supporting Measures for the Transportation Demand Management Program	NQ

	2020 GHG Reductions
Measure 5-R6: Reduced Transit Passes	1,198
Measure 5-R7: Alternative Travel Marketing & Optimize Online Service	959
Measure 5-R8: Safe Routes to School	2,662
Measure 5-R9: Car-sharing Program	NQ
Measure 5-R10: Bike Sharing Program	NQ
Measure 5-L3: Guaranteed Ride Home ✓	NQ
Measure 5-L4: Supporting Bicycle/Pedestrian Measures ✓	NQ
Measure 5-L5: Traffic Calming ✓	255
Measure 5-L7: Supporting Parking Policy Measures ✓	NQ
Goal 6: Increase Vehicle and Equipment Fuel Efficiency	75,303
Measure 6-S1: Pavley Emissions Standards for Passenger Vehicles and the Low Carbon Fuel Standard	70,043
Measure 6-S2: Advanced Clean Cars	2,140
Measure 6-S3: Assembly Bill 32 Vehicle Efficiency Measures	3,119
Goal 7: Encourage a Shift Toward Low-Carbon Fuels in Vehicles and Equipment	3,513
Measure 7-S1: Low Carbon Fuel Standard: Off-Road	911
Measure 7-R1: Shift Sonoma County (Electric Vehicles)	2,338
Measure 7-R2: Alternative Fuel for Transit Vehicles	38
Measure 7-L1: Electric Vehicle Charging Station Program ✓	3
Measure 7-L2: Electrify Construction Equipment ✓	224
Measure 7-L3: Reduce Fossil Fuel Use in Equipment through Efficiency or Fuel Switching ✓	NQ
Goal 8: Reduce Idling	2,901
Measure 8-L1: Idling Ordinance ✓	2,818
Measure 8-L2: Idling Ordinance for Construction Equipment ✓	83
Goal 9: Increase Solid Waste Diversion	3,106
Measure 9-R1: Waste Diversion Goal	3,106
Measure 9-L1: Create Construction and Demolition Reuse and Recycling Ordinance ✓	<1
Goal 10: Increase Capture and Use of Methane from Landfills	3,841
Measure 10-R1: Increase Landfill Methane Capture and Use for Energy	3,841
Goal 11: Reduce Water Consumption	5,007
Measure 11-R1: Countywide Water Conservation Support and Incentives	NQ

✓ = Local Measure (otherwise State or Regional)	2020 GHG Reductions
Measure 11-L1: Senate Bill SB X7-7 - Water Conservation Act of 2009* ✓	3,761
Measure 11-L2: Water Conservation for New Construction* ✓	86
Measure 11-L3: Water Conservation for Existing Buildings* ✓	1,159
Goal 12: Increase Recycled Water and Greywater Use	13
Measure 12-R1: Recycled Water*	13
Measure 12-L1: Greywater Use* ✓	0.2
Goal 13: Increase Water and Wastewater Infrastructure Efficiency	142
Measure 13-R1: Infrastructure and Water Supply Improvement	7
Measure 13-R2: Wastewater Treatment Equipment Efficiency*	136
Goal 14: Increase Use of Renewable Energy in Water and Wastewater Systems	678
Measure 14-R1: Sonoma County Water Agency Carbon Free Water by 2015	678
Total State Measures	119,660
Total County Measures	28,210
Total Local Measures	19,840
Grand Total Emissions	167,710

*Measures reduce emissions in multiple sectors (i.e. water and energy)

NQ = not quantified

5.4.5 Municipal Greenhouse Gas Reduction Measures

Like the other cities and the county, Petaluma has recognized the need to reduce GHG emissions from municipal operations. Petaluma completed the “City of Petaluma Greenhouse Gas Emissions Reduction Action Plan Analysis” in October 2009. This municipal climate action plan outlines GHG reduction initiatives that the City can pursue for its facilities. The analysis and resulting GHG emissions reductions include opportunities for improved municipal building efficiency, fleet composition, street light retrofits, water/wastewater system improvements, and PV system installations.

Although municipal GHG reduction measures are not part of this countywide plan, the efforts of local communities are important and will continue in the future. Descriptions of potential municipal GHG reduction measures are provided in Appendix E as an informational resource.