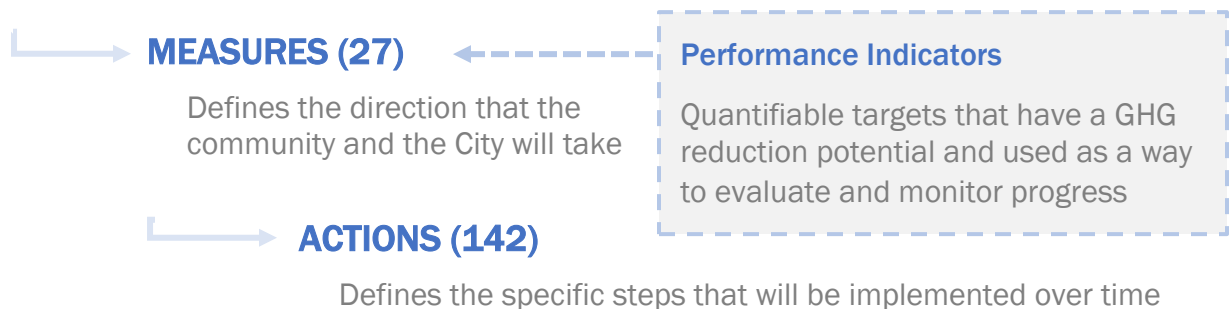


## Near Term Implementation Actions

The Pasadena Climate Action Plan (CAP) is a long-term plan and strategic framework for measuring, planning, and reducing the City’s share of GHG emissions. The CAP identifies five principal strategies to achieve the City’s GHG reduction goals for the years 2020 and 2035: (1) Sustainable Mobility and Land Use, (2) Energy Efficiency and Conservation, (3) Water Conservation, (4) Waste Reduction, and (5) Urban Greening. Each strategy includes a series of measures that define the direction the community and the City will take in order to accomplish statewide targets and local reduction goals. The CAP contains 27 measures that are either regulatory, incentive-based, or voluntary. Particular measures support the overall strategy and are qualitative in nature. Other measures include quantifiable targets that can yield approximate GHG reductions. These performance indicators also serve to evaluate the performance of the CAP measure and monitor its success. Each measure consists of a set of implementation actions intended to define the specific steps that both the City and the community will implement over time. The CAP contains 142 implementation actions that include a combination of ordinances, policies, programs, and incentives, as well as outreach and educational activities.

### STRATEGIES (5)

Five principle strategies to achieve City’s GHG reduction goals



This document provides the status of each CAP implementation action identified as a priority in the near term. Each implementation action is assigned one of the following categories to indicate the level of progress:

- **Tier I:** Action is ongoing or will begin within one year
- **Tier II:** Action will begin within two to five years or revisited
- **Tier III:** Action requires additional funding and/or resources
- **Complete:** Action has been completed
- **Pending:** Awaiting comments

The Departments responsible for implementation assigns the above categories based on the Department’s work program and priorities. Of the 88 near term implementation actions, five are completed, 73 are ongoing, six will begin within two to five years, four will require additional resources, and one is pending. Notes are included for implementation actions categorized as Tier II or Tier III.

**STRATEGY**



Sustainable Mobility and Land Use

**MEASURE**

T-1: Walking and Bicycling

**ACTION**

T-1.1: Continue to expand the City’s bicycle and pedestrian network

	Department	Status	Notes
A. Bicycle Transportation Action Plan	DOT	1	
B. Track Progress	DOT	1	
C. Pedestrian Plan	DOT	1	
D. Bike Share Program	DOT	2	The City is still evaluating alternatives used by other municipalities employing vendors from the private sector.
E. Network Improvement and Expansion	DOT	1	
F. Bike Friendly Development	DOT	1	
G. End-of-Trip Facilities	DOT	1	

Performance Indicators	2019 Progress
<b>2020</b> <ul style="list-style-type: none"> <li>Install 3 miles of bicycle lanes</li> <li>Acquire 400 bicycle share bicycles</li> <li>install 1 bike share station/mi<sup>2</sup></li> </ul>	<b>Undetermined</b> <ul style="list-style-type: none"> <li>0 miles of bicycle lanes</li> <li>0 bicycle share bicycles</li> <li>0 bike share stations</li> </ul>

**STRATEGY**



Sustainable Mobility  
and Land Use

**MEASURE**

T-2: Public Transit

**ACTION**

T-2: Continue to enhance safe, reliable, and seamless transit services

	Department	Status	Notes
A. Seamless Transit	DOT	<b>1</b>	
B. Short-Range Transit Plan	DOT	<b>1</b>	
C. Update Plan	DOT	<b>Complete</b>	The Short Range Transit Plan was finalized in Spring 2019.
D. Outreach Activities	DOT	<b>1</b>	
E. Transportation Surveys	DOT	<b>1</b>	
F. Transit Subsidies	DOT	<b>1</b>	
G. Transit Safety	DOT	<b>1</b>	

Performance Indicators		2019 Progress	
2020	Achieve 10% transit mode share	Likely	5% transit mode share. (Decrease of 2018's transit mode share of 4%)

**STRATEGY**



Sustainable Mobility and Land Use

**MEASURE**

T-3: Transportation Demand Management

**ACTION**

T-3.1: Decrease annual commuter miles travelled by single occupancy vehicles

	Department	Status	Notes
A. Trip Reduction Ordinance	DOT	<b>1</b>	DOT is currently working on updating the TRO which will result in new TDM policies. (Upgrade from Tier II to I)
B. Trip Reduction Toolkit	DOT	<b>Complete</b>	Project ended in February 2018.
C. Car Sharing	DOT	<b>1</b>	
D. Incentivize Carpooling	DOT	<b>1</b>	

Performance Indicators		2019 Progress	
<b>2020</b>	Achieve 10% carpooling mode share	<b>Likely</b>	8.3% carpooling mode share. (Increase from 2018's carpooling mode share of 7%)

**STRATEGY**



Sustainable Mobility  
and Land Use

**MEASURE**

T-4: Alternative Fuel Vehicles

**ACTION**

T-4.1: Expand the availability and use of alternative fuel vehicles and fueling infrastructure

	Department	Status	Notes
A. Charging Station Inventory	PWP	<b>1</b>	PWP secured a \$210,000 incentive grant from the Southern California Incentive Program (SCIP) for the Marengo Charging Plaza.
B. Electric Vehicle Chargers	PWP	<b>1</b>	During CY2019, PWP received \$1,578,568 in revenues from the sale of LCFS credits to be used for EV related infrastructure and related programs/incentives.
C. Alternative Vehicle Fueling Wiring	PWP	<b>1</b>	
D. Update Zoning Code	Planning	<b>1</b>	
E. Advertise Stations	PWP	<b>1</b>	
F. EV Incentives	PWP	<b>1</b>	
G. EV and Transit Fleet	DOT, PW	<b>1</b>	
H. Hydrogen Fueling Stations	PW	<b>3</b>	City's current priorities are on electric charging stations.

Performance Indicators		2019 Progress	
2020	Achieve 5% EV mode share	Likely	Information not available at this time.

**STRATEGY**



Energy Efficiency and Conservation

**MEASURE**

E-2: Energy Retrofits of Existing Building

**ACTION**

E-2.1: Facilitate energy efficient upgrades in existing homes and businesses

	Department	Tier	Notes
A. Energy Campaigns	PWP	1	
B. Smart Appliances	PWP	1	
C. Incentive Programs	PWP	1	
D. Provide Resources	PWP	1	
E. Benchmark Use	PWP	1	
F. Promote Audits	PWP	1	
G. Efficiency Financing	PWP	3	Changed from Tier II to Tier III pending further evaluation of risks and benefits. Numerous drawbacks have been identified with energy efficiency financing, in particular PACE financing.
H. New Customer Audits	PWP	2	New residential customers receive the Welcome Guide where there is information about efficiency audits- UnderOneRoof and Home Improvement Program.
I. Energy Efficient Giveaways	PWP	1	
J. Highlight Success Stories	PWP	1	

Performance Indicators		2019 Progress	
2020	Decrease energy use in existing buildings by 16% below 2013 levels	Likely	A GHG inventory is needed to determine data on energy use in existing building.

## STRATEGY



Energy Efficiency  
and Conservation

## MEASURE

E-3: Municipal Operations

### ACTION

#### E-3.1: Increase municipal energy conservation efforts

	Department	Status	Notes
A. City Energy Audits	PW	<b>2</b>	PW is seeking to develop an RFP to conduct an official audit of energy efficiencies within our facilities to determine tiers of importance and a cost analysis per tier. <i>(Changed priority from Tier III to II)</i>
B. Municipal Upgrades	PW	<b>1</b>	
C. Energy Saving Software	PW	<b>1</b>	
D. Plug-Load Management	PW	<b>1</b>	
E. City Renewable Power	PWP	<b>1</b>	As part of the FY21 Operating Budget process staff has estimated the costs of shifting all City accounts to the Renewable Power rate would be from \$900,000 to \$1,260,000 per year.

Performance Indicators		2019 Progress	
2020	Decrease municipal energy use by 10% below 2013 levels and/or 10% of municipal energy use be from renewable sources	Likely	9% decrease in municipal energy use since FY2014. No data available for FY2013.





## STRATEGY



Energy Efficiency and Conservation

## MEASURE

E-4: Residential and Commercial Carbon-neutral Energy

### ACTION

E-4.1: Increase City-wide use of carbon-neutral energy by encouraging and/or supporting carbon-neutral technologies

	Department	Status	Notes
A. Promote Solar	PWP	1	
B. Solar-ready Buildings	Planning	1	
C. On-site Carbon-neutral Requirement	Planning	2	The energy commission has postponed the zero-net energy requirements to determine a cost-effective strategy that is valuable to the grid and environment that also ensures that rooftop solar generation does not substantially exceed the home's electricity use.
D. 100% Renewable Retail Rate Option	PWP	1	
E. Solar-power Shade Structures	Planning	1	Specific Plan Update process propose regulations that include shade structures in targeted areas
F. Rooftop Solar Study	Planning	3	Requires resources such as staffing and time to identify buildings and follow up with building owners.
G. Promote Solar Installation	Planning, PWP	1	
H. Solar Powered EV Charging	DOT, PWP	3	Determined action is not cost effective at this time

I. Prohibit Non-renewable  
Customer Generation

PWP

Complete

Approved by City Council on April 30, 2018 to require that new and modified customer-owned self-generation units utilize only renewable fuel sources.

Performance Indicators		2019 Progress	
2020	Replace 950,000 kWh of electricity use with carbon-free energy	Achieved	65,505,454 kWh reduction in fossil-fueled energy supply.

**STRATEGY**



Water Conservation

**MEASURE**

WC-1: Potable Water

**ACTION**

WC-1.1: Reduce potable water use throughout Pasadena

	Department	Status	Notes
A. Urban Water Management Plan	PWP	<b>1</b>	
B. Retrofits and Rainwater Harvesting	PWP	<b>1</b>	
C. Drought-Tolerant Landscaping	Planning	<b>Complete</b>	Council adopted amendments to the City's Landscape Ordinance on 4-23-2018.
D. Landscape Ordinance	Planning	<b>Complete</b>	Council adopted amendments to the City's Landscape Ordinance on 4-23-2018 to adopt the State's Model Water Efficient Landscape Ordinance.
E. School Conservation	PUSD	<i>Pending</i>	
F. Water Efficiency Planning and Outreach	PWP	<b>1</b>	
G. Water Efficiency Study	PWP	<b>1</b>	PWP has retrofitted various City Facility landscapes to drought tolerant plants with drip irrigation, including all Pasadena Fire Stations (with existing turf) and for a City parcel at Washington and Marengo. <i>(Changed priority from Tier II to Tier I)</i>
H. Water Efficient Landscape	PWP	<b>1</b>	
I. Water Quality Information	PWP	<b>1</b>	

<b>Performance Indicators</b>	<b>2019 Progress</b>
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<b>2020</b>	0% reduction in water consumption per capita (Comply with SB X7-7 target of 20% below SB X7-7 baseline by 2020)	<b>Achieved</b>	33% below SB X7-7 baseline.
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**STRATEGY**



Water Conservation

**MEASURE**

WC-2: Non-Potable Water

**ACTION**

WC-2.1: Increase access to and use of non-potable water

	Department	Status	Notes
A. Non-potable Water Project (NPWP)	PWP	<b>1</b>	
B. NPWP Outreach	PWP	<b>1</b>	
C. Community Greywater Assistance	PWP	<b>1</b>	
D. Greywater Permit Streamlining	PWP, Planning	<b>1</b>	
E. Dual Plumbing Requirements	PWP	<b>2</b>	Dual plumbing provisions have been adopted in the Uniform Plumbing Code and regulations are adopted by the State, local provisions are pending the development of the NPWP.

Performance Indicators		2019 Progress	
2020	Continue to evaluate the City's NPWP	<b>Achieved</b>	THE NPWP is being redefined for less energy intensive water sources to be developed as first priority.

**STRATEGY**



Waste Reduction

**MEASURE**

WR-1: Solid Waste

**ACTION**

WR-1.1: Continue to reduce solid waste and landfill GHG emissions

	Department	Status	Notes
A. Zero Waste Strategic Plan	PW	<b>1</b>	
B. Annual Zero Waste Progress	PW	<b>1</b>	Staff committed to providing an update/assessment every three years to City Council committees and commissions. The next update will be presented to Council in 2020.
C. Multi-use Food Containers	PW	<b>1</b>	Staff will develop an educational outreach campaign to encourage residents to bring their own reusable container for leftover dine in food that would normally be doggy bagged
D. Zero Waste Outreach	PW	<b>1</b>	
E. Waste Diversion	PW	<b>1</b>	
F. Source Separated Recycling	PW	<b>1</b>	

Performance Indicators		2019 Progress	
2020	Achieve 75% diversion rate	Undetermined*	Indicators for measuring performance changed to a per capita disposal rate. The State's requirement is a 50% diversion rate which corresponds to 10.9 lbs/person/day. In 2019, the City's per capita disposal rate was 9.2 lbs/person/day.

## STRATEGY



Waste  
Reduction

## MEASURE

WR-3: Composting and Food Recycling

### ACTION

WR-3.1: Implement a city-wide composting program to limit the amount of organic material entering landfills

	Department	Status	Notes
A. Food Waste Recycling	PW	<b>1</b>	
B. Community Outreach	PW	<b>1</b>	
C. Backyard Compost	PW	<b>1</b>	
D. Compost Education	PW	<b>1</b>	Beginning Fall 2020 Public Works will host quarterly backyard composting workshops and provide participants (Pasadena residents) with a free composter. Limit one per household. <i>(Changed priority from Tier II to Tier I)</i>
E. Composting Facilities	PW	<b>1</b>	On January 1, 2020 the City began shipping yard waste to Agromin Composting facility. <i>(Changed priority from Tier II to Tier I)</i>
F. Compost Resources	PW	<b>1</b>	Expand City's website with resources related to various levels of composting, including images or infographics of exemplary kitchen pails, backyard bins, completed compost, and thriving gardens. <i>(Changed priority from Tier II to Tier I)</i>
G. Redistribute Mulch/ Compost	PW	<b>1</b>	

H. Compost/ Mulch Program

PW

1

Beginning Fall 2020 Public Works will host quarterly backyard composting workshops and provide participants (Pasadena residents) with a free composter. Limit one per household. *(Changed priority from Tier II to Tier I)*

Performance Indicators		2019 Progress	
2020	Reduce organic waste by 50% below 2014 levels	Undetermined*	Data unavailable. Per SB 1383, the State will provide guidance for determining this percentage. In 2019, the City diverted a total of 13,974 tons of organic waste.



**STRATEGY**



Urban Greening

**MEASURE**

UG-1: Greenspace\*

**ACTION**

UG-1.1: Continue to preserve, enhance, acquire additional green space throughout Pasadena to improve carbon sequestration, reduce the urban heat-island effect, and increase opportunities for active recreation

	Department	Status	Notes
A. Accessible Open Space	PW, Planning	<b>1</b>	
B. Additional Greenspace	PW, Planning	<b>1</b>	
C. Convert to Greenspace	PW, Planning	<b>1</b>	
D. Green Space Policies	Planning	<b>1</b>	
E. Native Greenspace	Planning	<b>1</b>	

Performance Indicators		2019 Progress	
2020	Acquire 5 new acres of green space	Likely	15.5 acres of greenspace has been restored.  Hahamongna Watershed Park was completed and restored 15.5 acres of habitat.

\* The Green Space and Open Space Element of the General Plan identifies green space as a combination of two types of open space- natural and developed.

**STRATEGY**



Urban Greening

**MEASURE**

UG-2: Urban Forest

**ACTION**

UG-2.1: Continue to protect existing trees and plant new ones to improve and ensure viability of Pasadena’s urban forest

	Department	Status	Notes
A. Sidewalk Trees	PW	<b>1</b>	
B. Tree Health Assessment Program	PW	<b>1</b>	
C. Encourage Private Tree Planting	Planning	<b>1</b>	The Specific Plan Update Process propose regulations that require landscaping, including trees recommended in the MSTP.
D. Tree List	PW	<b>1</b>	Public Works published a GIS-based version of the City's Master Street Tree Plan (MSTP) in 2019 allowing staff to better coordinate tree planting efforts.

Performance Indicators		2019 Progress	
2020	Plant 500 new trees	Likely	493 new public trees were planted.*

\* The Pasadena CAP does not distinguish between public or private trees. The City may have already met the 2020 target but based on the City’s available data, the Report only accounts for public trees.