



City Council AGENDA REPORT

DATE: 08/10/2021

AGENDA OF: 08/24/2021

DEPARTMENT: City Manager

SUBJECT: City of Santa Cruz Climate Action Plan 2020 Close Out Report (CM)

RECOMMENDATION: Motion to accept the Climate Action Plan 2020 close out report on the City's performance in implementing the Climate Action Plan adopted in 2012.

BACKGROUND: California considers greenhouse gas (GHG) emissions and the impacts of climate change to be a serious threat to the public health, environment, economic well-being, and natural resources of the state, and has taken an aggressive stance to mitigate the impact on climate change at the state-level through the adoption of legislation and policies. Many cities have developed local climate action plans and aligned goals to correspond with state emissions reduction goals. The two major state GHG-related goals are established by Assembly Bill (AB) 32 and Senate Bill (SB) 32. AB 32 required state agencies to reduce state GHG emissions to 1990 levels by 2020 whereas SB 32 requires a 40 percent reduction below 1990 levels by 2030. The goals set by AB 32 were achieved by the state in 2016¹ and many jurisdictions are completing GHG inventories to quantify progress toward their own 2020 goals as well as develop targets to align with the requirements of SB 32. A long-term goal of carbon neutrality by 2045 for the state was established, but not codified, through Executive Order (EO) B-55-18. While it is not required for jurisdictions to meet this target, many are establishing or exceeding this goal to show alignment with the aggressive decarbonization goals of the state.

The 2020 Climate Action Plan adopted by the City in 2012 identified targets to reduce community-wide greenhouse gas emissions 30% by 2020 and 80% by 2050, compared to 1990 levels. These targets are tracked using GHG inventories, which are reviewed herein. Overall community and municipal GHG emissions have declined steadily since 2005, and the City achieved its 2020 target between 2015 and 2019. During the Climate Action Plan 2030 development process, Resilient Together, the City and community will determine the most equitable pathway to carbon neutrality and will set a target year and goal that meets or exceeds the targets set out by AB 32 and SB 32 as well as EO B-55-18. The update will also fulfill the

¹ California Air Resources Board. California Greenhouse Gas Emissions Inventory. Accessed at: <https://ww3.arb.ca.gov/cc/inventory/inventory.htm>. Accessed on: July 2019

requirements of the California Environmental Quality Act (CEQA) Guidelines § 15183.5(b).

As the City of Santa Cruz closes its 2012 -2020 Climate Action Plan and develops its 2022-2030 Climate Action Plan, this report provides:

- An overview and consistency review of the City’s community and municipal GHG inventories
- The City’s 2020 progress on and status of milestones, indicators, and actions
- Details on the City’s Carbon Fund investments and other major climate initiatives and reporting insights

DISCUSSION: Estimating GHG emissions enables local governments to establish an emissions baseline, track emissions trends, identify the greatest sources of GHG emissions within their jurisdictions, and set targets for future reductions. Emissions contained within this memorandum include activities under the jurisdictional control or significant influence of the City of Santa Cruz, as recommended by the Association of Environmental Professionals (AEP) in preparing Community Protocol and CEQA-compliant inventories². The municipal operations inventory is a subset of the community-wide inventory, meaning the municipal emissions are included within the community-wide inventory.

Community GHG Inventories

Rincon Consultants, Inc. (Rincon) reviewed the City of Santa Cruz’s existing community inventories as part of the Climate and Energy Action Plan 2030 development process to assess and verify the consistent application of appropriate methodologies defined by the by the Local Governments for Sustainability USA (ICLEI) U.S. Community Protocol as well as the correct emissions factors and inclusion of all appropriate emission sources.³ This included a review of the activity data used and emissions calculated in the 2005, 2010, 2015, 2018 and 2019 Community Wide Greenhouse Gas (GHG) Emissions Inventories and 2005, 2010, and 2015 Municipal GHG Emissions Inventories. The City’s community inventories follow the ICLEI U.S. Community Protocol The Community Protocol requires a minimum set of five Basic Emissions Generating Activities that must be included in all Protocol-compliant GHG inventory reports:

1. Use of Electricity by the Community
2. Use of Fuel in Residential and Commercial Stationary Combustion Equipment
3. On-Road Passenger and Freight Motor Vehicle Travel
4. Use of Energy in Potable Water and Wastewater Treatment and Distribution
5. Generation of Solid Waste by the Community

The City’s community inventories include all required sectors listed above. The community inventories are divided into seven sectors, or sources of emissions: residential energy,

² Association of Environmental Professionals. 2013. The California Supplement to the United States Community-Wide Greenhouse Gas (GHG) Protocol.

³ Local Governments for Sustainability (ICLEI). 2019. U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions. Available: <<https://icleiusa.org/us-community-protocol/>>. Accessed May 20, 2021.

commercial energy, industrial energy, transportation and mobile sources, solid waste, and water and wastewater. Each of the seven sectors is further categorized into sub-sectors to provide a more detailed understanding of emissions sources in the City of Santa Cruz. As depicted in Figure 1, transportation accounts for the largest share of community emissions for each inventory year, followed by residential and commercial energy. Figure 2 details sub-sector emissions for each of the community inventory years.

Figure 1 City of Santa Cruz Community GHG Emissions by Sector (2005-2019)

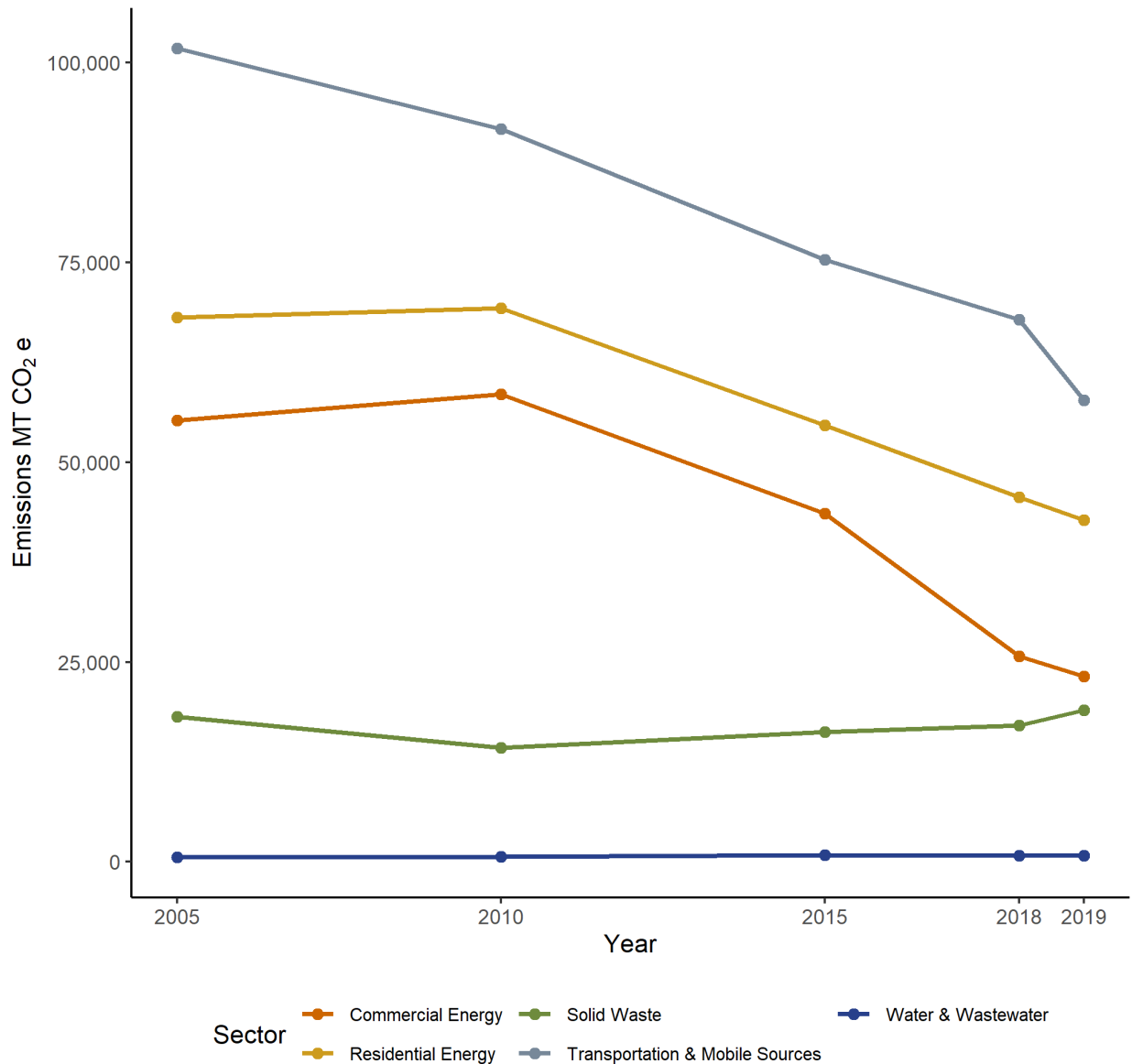


Figure 2 depicts the energy sectors (commercial and residential) separated into electricity and natural gas emissions sources. Commercial and residential natural gas emissions remain relatively constant from 2005 to 2019, as expected.

Figure 2 City of Santa Cruz Community GHG Emissions by Sub-sector (2005-2019)

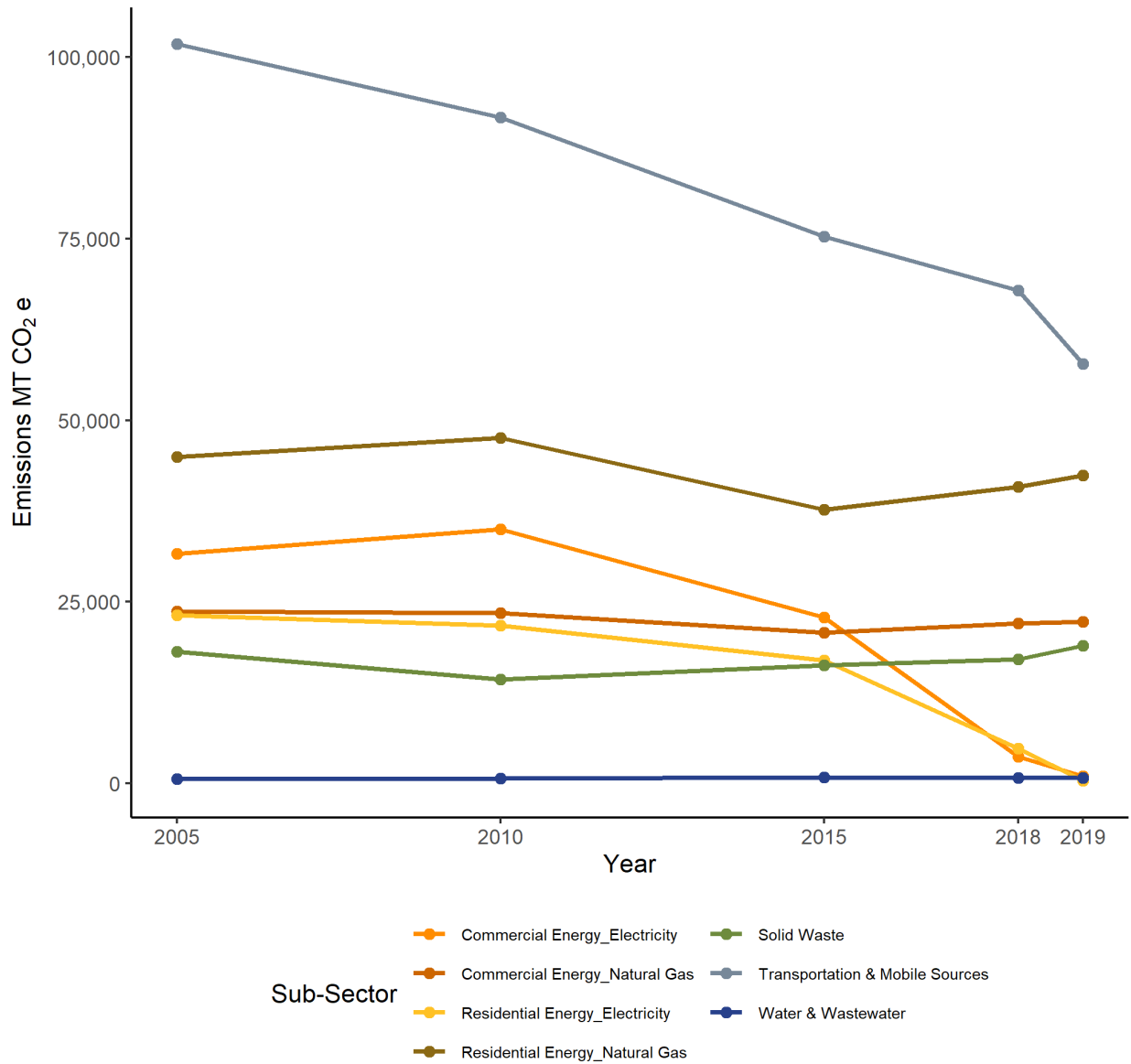
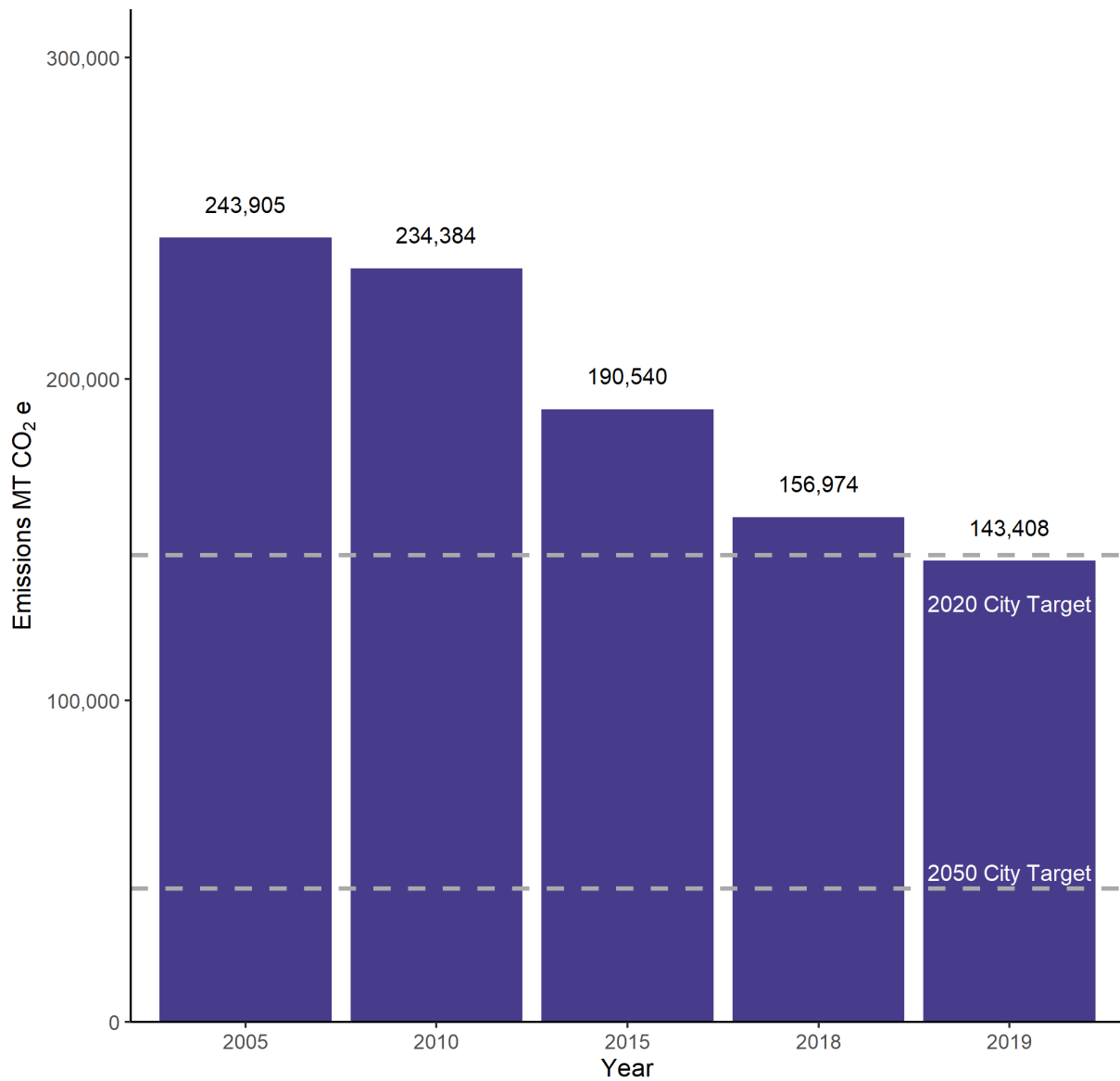


Figure 3 depicts the City’s updated community emissions for all inventory years. Based on the City’s updated community GHG inventories, total community emissions have decreased over time. The City’s emissions dropped approximately 4% from 2005 to 2010, 19% from 2010 to 2015, 18% from 2015 to 2018, and 9% from 2018 to 2019.

Figure 3 City of Santa Cruz Total Community GHG Emissions by Year (2005-2019)



Municipal GHG Inventories

Rincon reviewed the City of Santa Cruz’s existing municipal inventories as part of the Climate and Energy Action Plan 2030 development process to assess and verify the consistent application of appropriate methodologies defined by the Local Governments for Sustainability USA (ICLEI) U.S. Local Government Operations Protocol as well as the correct emissions factors and inclusion of all appropriate emission sources. The Municipal GHG inventories follow the ICLEI Local Government Operations Protocol which categorizes direct and indirect emissions into scopes as follows:

- Scope 1: All direct GHG emissions (with the exception of direct carbon dioxide emissions from biogenic sources)
- Scope 2: Indirect GHG emissions associated with the consumption of purchased or

acquired electricity, steam, heating, or cooling

- Scope 3: All other indirect emissions not covered in Scope 2, such as emissions resulting from the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity (e.g., employee commuting and business travel), outsourced activities, waste disposal, etc.

The Local Government Operations Protocol requires that, at minimum, Scope 1 and Scope 2 emissions be quantified. Quantification of Scope 3 emissions is optional. The City’s municipal inventories quantify both Scope 1 and 2 emissions. The City of Santa Cruz has completed three municipal inventories: 2005, 2010, and 2015. All of the City’s municipal inventories include emissions from buildings and facilities and streetlights and traffic signals. Table 1 provides the recommended updates to the municipal inventories and describes if and how each was addressed.

Table 1 Municipal Inventory Updates

Sector	Recommendation	Updates/Notes
Buildings and Facilities	Confirm and update the activity data for 2005 Inventory Record: “Fire-Natural Gas” from MMBtu to therms.	Rincon updated the ClearPath record for “Fire-Natural Gas” from MMBtu to therms. The cloned inventory with updated record is labeled 2005 Santa Cruz LGOP GHG Inventory – REV 2021.
Vehicle Fleet and Transit Fleet	Consider back casting emissions to 2005 for a more consistent inventory.	Back-casting was deemed unnecessary for this analysis. Instead, Vehicle Fleet and Transit Fleet are removed from this analysis for all years and inventories updated.
Water and Wastewater	Coordinate with the Water Department and other relevant City Departments, to determine what changed between 2005 and 2010 to cause a large decrease in emissions.	For the purposes of this report, no updates were made to the Water and Wastewater sector as it represents minor emissions contributions. City will investigate the large decrease in emissions.

As depicted in Figure 4, water and wastewater treatment accounts for the largest share of municipal emissions for each inventory year, followed by buildings and facilities. Each sector shows a decrease in emissions over time. Figure 5 details sub-sector emissions for each of the municipal inventory years.

Figure 4 City of Santa Cruz Municipal GHG Emissions by Sector (2005-2015)

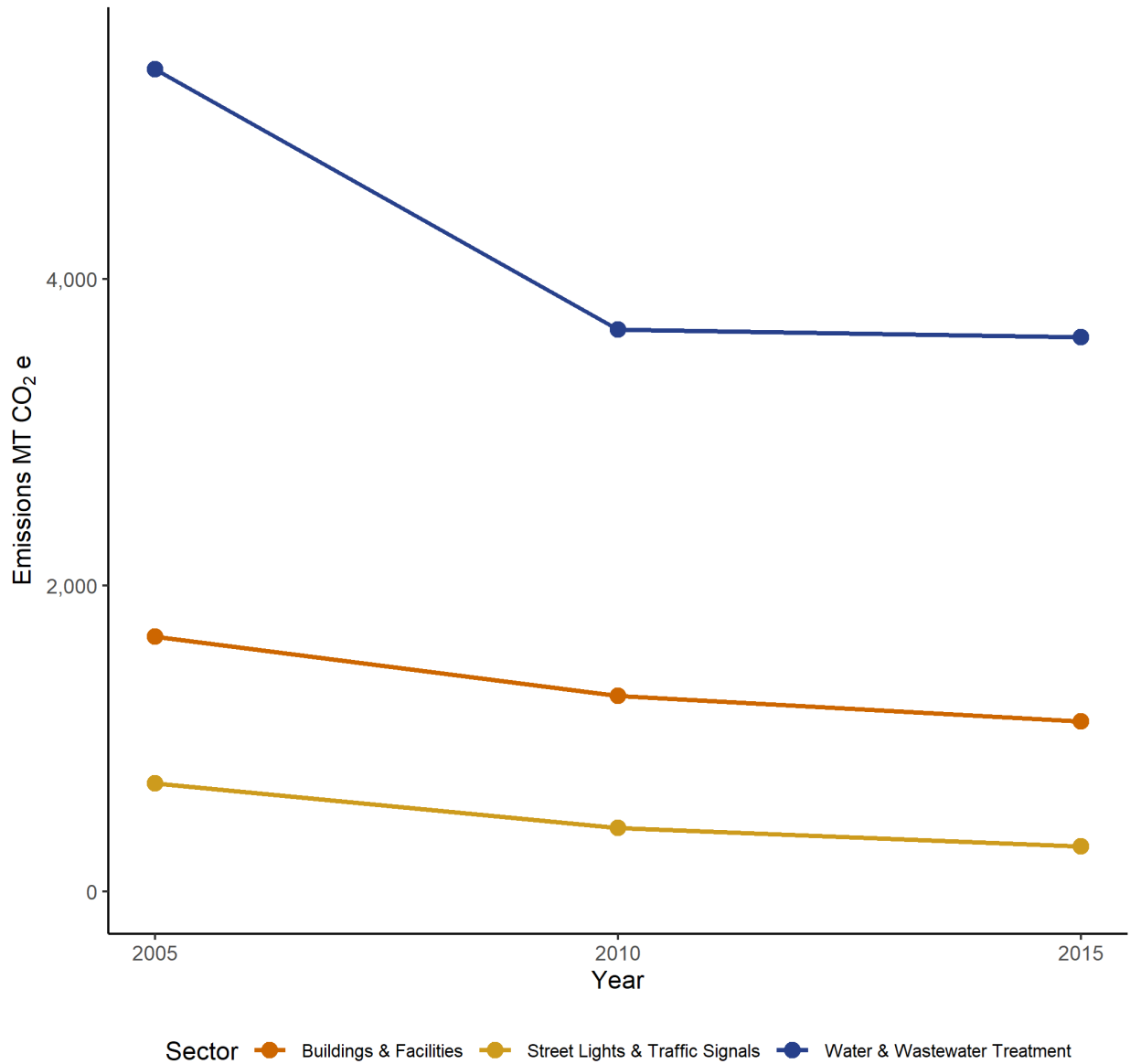


Figure 5 depicts the energy-related sectors (buildings & facilities and water & wastewater treatment) separated into electricity and natural gas emissions sources. Water and wastewater treatment natural gas emissions decreased from 2005 to 2010 and increased from 2010 to 2015, while water and wastewater treatment electricity emissions increased from 2005 to 2010 and decreased from 2010 to 2015. This City is investigating the cause of these changes.

Figure 5 City of Santa Cruz Municipal GHG Emissions by Sub-sector (2005-2015)

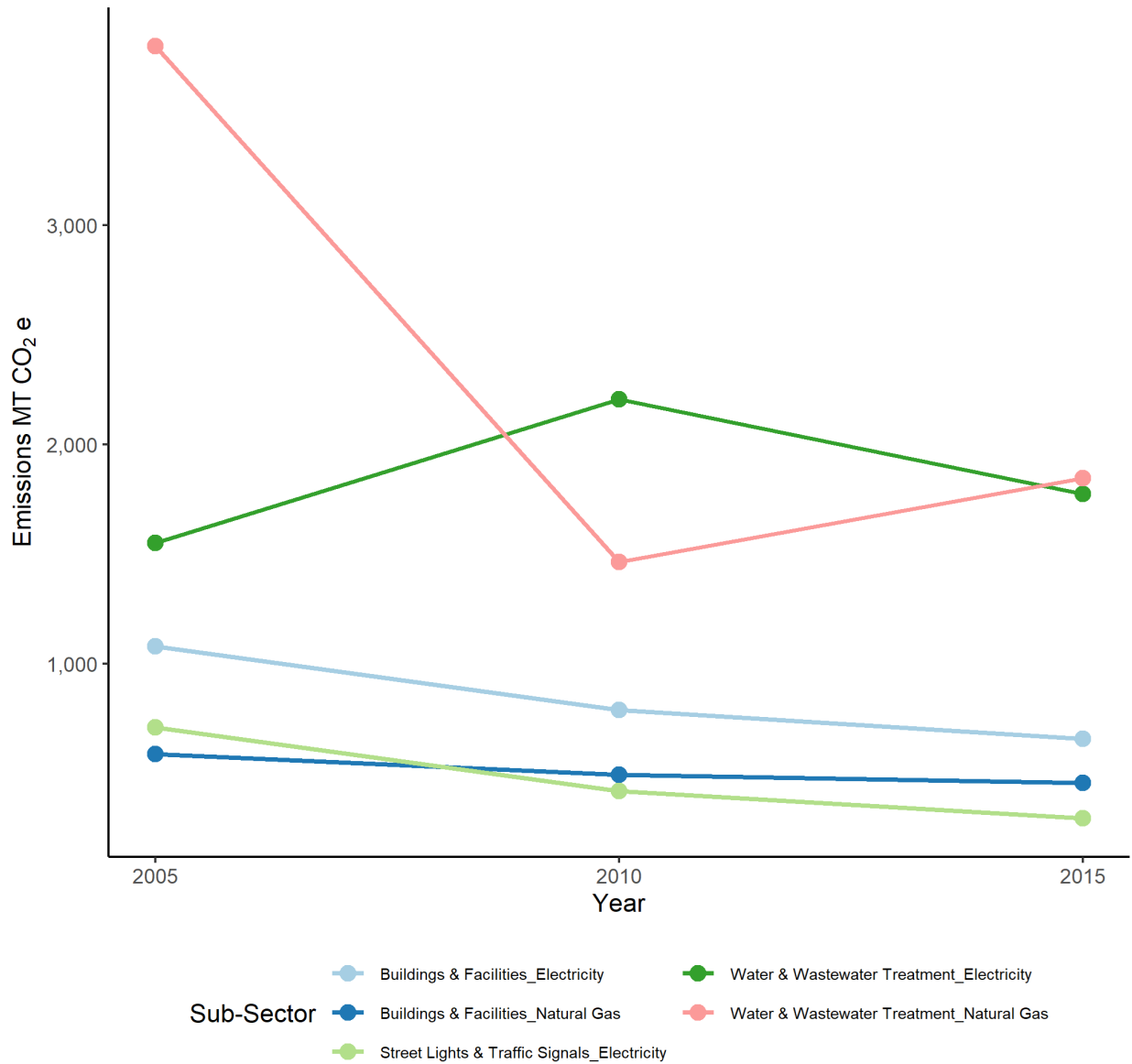
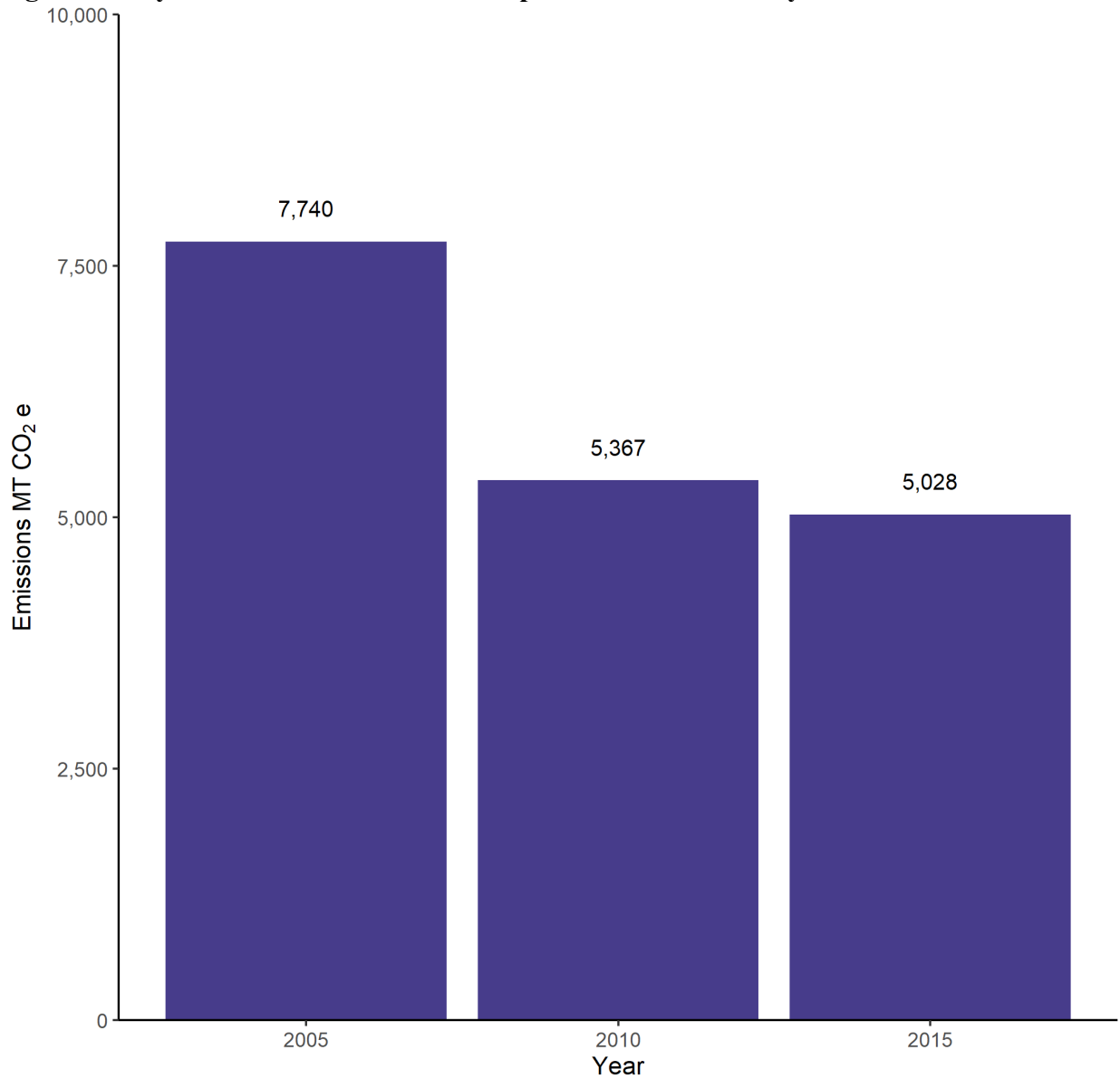


Figure 6 depicts municipal emissions excluding vehicle and transit fleet emissions to ensure consistent comparison of data cross years. The data show a 35% decrease in municipal emissions from 2005 to 2015.

Figure 6 City of Santa Cruz Total Municipal GHG Emissions by Year



Summary of GHG Inventories

The updated inventories are appropriate for the sectors evaluated. Rincon, the Climate Action Plan 2030 technical consultant, found that the emissions were appropriately calculated using the principles and methods outlined in the Community Protocol and Local Government Operations Protocol. Updates to be considered in the next Climate Action Plan update include:

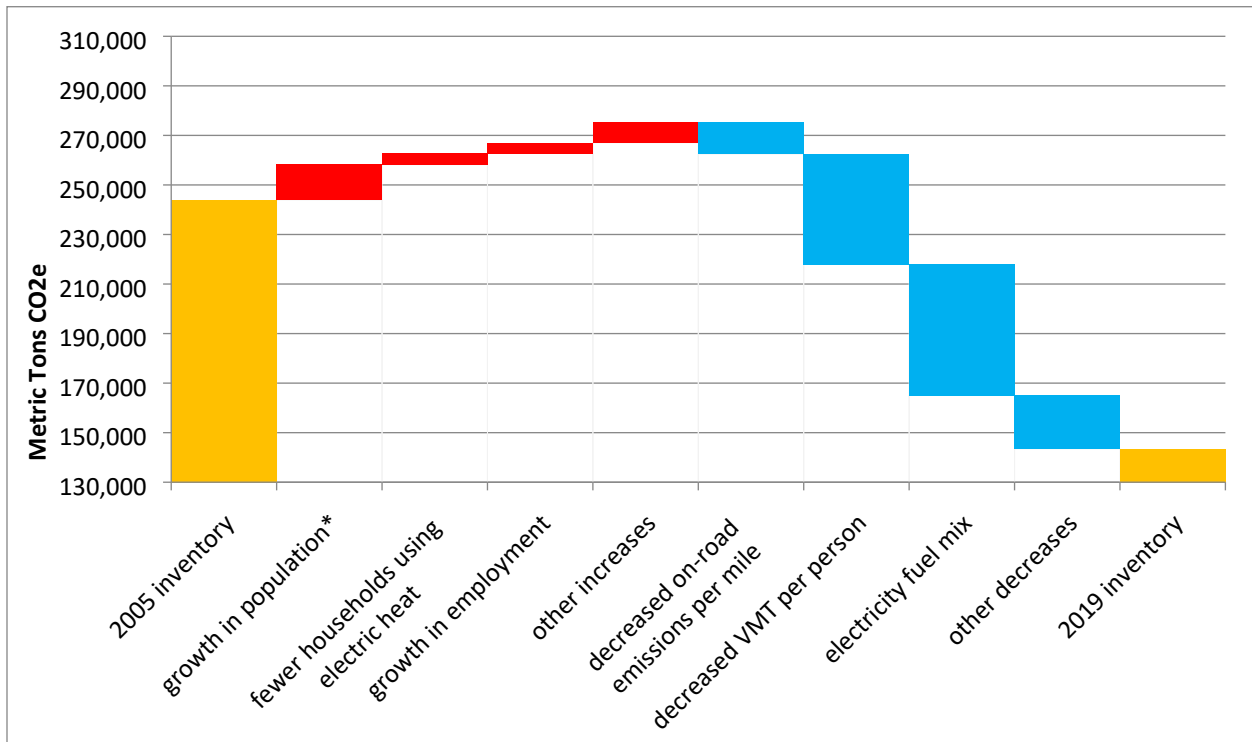
- Change VMT methodology from accounting for internal trips only to origin destination accounting and advocate for investment in modifications to regional transportation modeling by AMBAG
- Include employee commuting and vehicle/transit fleet in future municipal inventories
- Investigate and document the cause of the large decrease in municipal water and wastewater

emissions between 2005 and 2010 (a minor contributor to overall municipal GHG emissions)

Emissions Contribution Analysis

A Contribution Analysis of the 2005 and 2019 community GHG inventories was performed by ICLEI in July 2021, completed as part of the City’s membership. A contribution analysis explores drivers of emissions trends, quantifying impacts of a select set of inventories, assuming no changes to operational or organizational boundaries, in order to better explain what caused observed changes in emissions between inventory years. Under this methodology, for Santa Cruz, a cleaner electricity fuel mix and decreasing vehicle miles traveled (VMT) were the largest contributors to overall community emissions decreasing between 2005 and 2019. The community was able to meet its 2020 GHG reduction target despite increasing population and employment growth, the two largest contributors to emissions output, in the same period.

Figure 7. Quick summary: Three largest increases/decreases in community GHG emissions



Progress on Milestone Indicators + Actions

The City’s 2012 Climate Action Plan set out 12 milestones measured by 13 indicators, each with targets to achieve by 2020 from a baseline year of 2008. Data were not available for all years for all indicators, and, in some cases, data sources changed between years. Moreover, due the lag in or unavailability of 2020 data for some indicators as well as the fact that 2020 represents an anomaly year in terms of emission output, 2019 data were utilized in most cases (and as noted). The City did not track progress on sub-milestones contained in the Plan. Below is a summary of the level of achievement for each milestone and major efforts or conditions that likely

contributed toward or impeded progress.

The Climate Action Plan also contains an Appendix of Actions, which includes 256 actions to be completed by 2020 to help achieve each milestone. As of April 2021, out of the 256 actions, 103 actions have been completed and 84 are either ongoing or in progress. Attachment 1 provides a tabular 2021 status summary of each action.

Milestone 1 - Reduce Energy Use in Municipal Buildings by 40% by 2020.

Indicator 1.1 - Municipal energy use in buildings and facilities only - includes buildings, facilities (including wastewater but not water transport or streetlights).

2020 Target – 46,532 MMBtu of Energy Use

2020 Value - 49,406 MMBtu of Energy Use

Progress toward Target– Reduced energy use in municipal buildings by 36.3% between 2008 to 2020 (91% achievement of target) but saw an increase of 6.5% between 2008 and 2019. 2019 was a more typical year for energy use than 2020 due to the covid-19 pandemic, however. Major efforts contributing to progress include the hire of an energy coordinator, several rounds of no to low cost state funding to implement major energy efficiency projects at City facilities, and bringing online methane cogeneration to electricity at the Wastewater Treatment Facility and approximately 1.6 MW of solar PV at municipal facilities.

Milestone 2 - Expand energy efficiency programs to 30% of homes and businesses by 2020.

Indicator 2.1 – Number of household and business buildings participating in the Green Building Program and received service from Central Coast Energy Services, an energy efficiency provider to low income households.

2020 Target – 8,912 Households and Business Buildings

2020 Value – 2,234 Households and Business Buildings

Progress toward Target - Expanded energy efficiency programs to 7.5% of homes and businesses between 2008 and 2020 (25% achievement of target). Major efforts contributing to progress include implementation and revision of requirements of the Green Building program and the growth of Central Coast Energy Services and the funding it manages to provide weatherization services to households in Santa Cruz. While data are unavailable for this indicator metric, it is widely acknowledged that roll out of the State Energy Upgrade California program targeted to residential households did not meet expectations and had very little uptake in Santa Cruz due primarily to program design. There are likely other energy efficiency programs that were implemented during the CAP 2020 performance period but were not tracked (e.g., Green Business Program upgrades, Ecology Action’s former Right Lights program).

Milestone 3 – Increase solar to 5,000 residents, 500 businesses and supply municipal buildings with 33% solar energy by 2020.

Indicator 3.1 – Number of household solar photovoltaics

2020 Target – 5,000 household solar photovoltaics

2020 Value – 3,567 household solar photovoltaics

Progress toward Target– Increased solar to 3,567 residents (71% achievement of target). Drivers of progress included state of California rebates, advantageous utility rates, and the federal Investment Tax Credit available throughout the majority of the CAP 2020 performance period. The City provided streamlined solar PV permitting. In 2019, the state required PV on all new homes. Progress may have been impeded by pricing and availability of PV components in recent years as well as anticipated changes to advantageous utility rates for solar PV.

Indicator 3.2 – Number of commercial business solar photovoltaics

2020 Target – 500 commercial business solar photovoltaics

2020 Value – 116 commercial solar photovoltaics

Progress toward Target– Increased solar to 116 commercial businesses (23% achievement of target). Drivers of progress included state of California rebates, advantageous utility rates, and the federal Investment Tax Credit available throughout the majority of the CAP 2020 performance period. The City provided streamlined solar PV permitting and a one-time technical assistance project for 3 commercial property owners. Progress may have been impeded by commercial property owners' lack of expertise and capacity to evaluate solar PV, pricing and availability of PV components in recent years as well as anticipated changes to advantageous utility rates for solar PV.

Indicator 3.3 – Renewable energy generation compared with overall electricity consumption by municipal buildings

2020 Target – 33% renewable energy generation

2020 Value – 37% renewable energy generation

Progress toward Target– Increased renewable energy generation by 37% (112% achievement of target). Drivers of progress included funding Power Purchase Agreements and ownership models to install 1.6 MW of solar PV at City facilities and optimizing use of cogeneration at the Wastewater Treatment Facility. Hire of an energy coordinator and, more recently, the services of an Energy Services Company, enabled rapid evaluation and packaging of many systems installed.

Milestone 4 - Partner with UCSC on 25 sustainability and alternative energy research projects by 2020.

Indicator 4.1 – Number of projects and completed

2020 Target – 25 projects

2020 Value – 32 projects

Progress toward Target – Partnered with UCSC on 25 sustainability and alternative energy research projects between 2011 and 2020, by conservative estimate (120% achievement of target). Many of these projects are ongoing or multiple year initiatives. The Climate Action Program likely tracks only a portion of UCSC X City sustainability collaborations. However, strong ties on climate and climate related topics exist that enabled achievement of this target. Some projects implemented during the CAP 2020 performance period include:

• GreenWharf renewable energy testbed
• Bike route quality index
• Kudela Lab LED monitor display at Wharf HQ
• Kudela Lab SCOOP research
• GreenWharf EV charging station
• GreenWharf EcoTour - self guided app/ docent guided
• GreenWharf Green Business Challenge
• Residential solar workshop for students and employees
• IDEASS Bike counter technology study
• IDEASS Bike commute workshops for businesses (including City)
• IDEASS parking space availability survey along Rail Trail
• GreenWharf renewable energy testbed wildlifestudy
• GreenWharf lighting retrofit
• GreenWharf Sanctuary Celebration Event
• Commercial solar PV technical assistance
• GreenWharf solar streetlamp pilot
• UCSC Stakeholder meetings for Wharf Master Plan
• Kudela Lab/Exploratorium Water Quality Exhibit at GreenWharf
• IDEASS/City grant and design of stormwater infrastructure improvements at Bayview School
• GreenWharf renewable energy testbed dashboard
• CISR/City tree canopy study
• UC Natural Reserves Tree Planting
• ENVIS interns / Doris Duke Conservation Scholar Interns
• Climate Action Task Force participation
• Grid Alternatives Low Income Solar PV
• Volkswagen EV investment coordination
• UC Natural Reserves Tree Planting
• Climate Adaptation Coastal Science and Policy annual collaborations
• Panelist at UC Climate Conference
• Co-instructor of UCSC Staff Sustainability Certificate Courses
• Move out waste reduction program
• On campus resource recovery education

Milestone 5 - Ensure the rail corridor supports bike and pedestrian use by 2020 and support establishment of future rail service.

Indicator 5.1 – Percentage of bike path constructed and/or being funded for construction in City limits

2020 Target – 100% of bike path constructed and/or funded for construction

2020 Value – 35% of bike path completed and 89% of remaining bike path funded

Progress toward Target – Completed 35% of the City’s bike path and secured funding for 89% of bike path. Substantial progress with this milestone is attributable to regional alignment and coordination on this initiative, hiring a transportation planner and aggressive pursuit of funding opportunities by the Transportation Division of the Public Works Department.

Milestone 6 - Maximize water conservation efforts to achieve the goals recommended by the Water Supply Advisory Committee and accepted by the Council and to meet state mandates.

Progress toward Target– Reduced residential per capita water use by 22% between 2013 and 2020. The City’s Water Conservation Master Plan adopted in January 2017 describes the historical water conservation programs contributing to progress on this milestone. The Urban Water Management Plan update will be complete by end of year that will summarize water conservation activities since 2017. *There is no target related to this indicator.*

Milestone 7 - Achieve 75% total waste diversion and maximize organic waste diversion by 2020.

Indicator 7.1 – Total waste diversion rate

2020 Target – 75% waste diversion rate

2020 Value – 63% waste diversion rate

Progress toward Target – Increased to 63% total waste diversion (83.4% of target) between 2008 and 2020 (with a high of approximately 69.9% in 2013). Progress on this milestone was driven by state mandates, local policy, and increased outreach and education. Progress was impeded by the China National Sword policy, the limitations in expanding infrastructure and conducting sufficient outreach, and increased waste generation from illegal encampments and online ordering. Major projects include the installation of food waste processing systems at the landfill, launch of residential and commercial food scrap collection pilots, and expanded education such as the launch of a “What Goes Where App.”

Milestone 8 - Increase bike ridership to 12% of local commutes by 2020 (stretch goal after initial achievement of original goal of 10%).

Indicator 8.1 – Bike mode split

2020 Target – 12% bike mode split

2020 Value– 7.6% bike mode split (high of 10.2% in 2018)

Progress toward Target – Decreased bike ridership by 1.7%. Staff noted that there are questions about the validity of the 2019 data and the City should revisit this value when the 2020 data become available. Progress on this milestone included hiring a transportation planner, aggressive pursuit of funding, integrated design of bike lanes and other bike friendly infrastructure, launch of a bike share, construction of several segments of the Rail Trail, Street Smarts - a successful bilingual multi-media outreach campaign - along with other education and encouragement activities, and the GO Santa Cruz transportation initiative to promote transit, active transportation and carpooling. Departure of the bike share during the covid-19 pandemic and the challenge of improving bike infrastructure within the right of way made progress challenging.

Milestone 9 - Switch 20% of cars to low-carbon fuels by 2020.

Indicator 9.1 –DMV registered low-carbon fuel cars

2020 Target – 12,675 low carbon cars

2020 Value – 6,826 low carbon cars

Progress toward Target – Switched 11% of cars to low-carbon fuels between 2013 and 2020 (achievement of 54% of target). While progress may appear low in this milestone, Santa Cruz is second only to San Jose in the number of new vehicle purchases that are electric. Federal, state and local incentives (Monterey Bay Air Resources District, CAL VIP, and Central Coast Community Energy) were leveraged to both procure electric vehicles (EVs), upgrade electrical infrastructure, and install EV chargers in fleet and public spaces. Other drivers of progress includes the strong environmental ethic and relative affluence of Santa Cruz residents and growth of EV charging as a private business model. Higher costs and range anxiety continue to be impediments to accelerated adoption.

Milestone 10 - Retain 200 certified Santa Cruz Green Businesses within the City through 2020.

Indicator 10.1 – Number of certified green businesses

2020 Target – 200 certified green businesses

2020 Value – 197 certified green businesses

Progress toward Target – Retained 197 certified green businesses between 2012 and 2020 (achievement of 99% of target). Accelerators of progress included strong environmental ethic of businesses, relationship building and partnership with Ecology Action, business recognition by City Council and mayor, targeted business district campaigns, green business transition grants provided by City's carbon fund, technical support and the coordination provided by the California Green Business Network on initiatives like the Shop Green App and the Green Business Database. Progress was impeded by the covid-19 pandemic, employee turnover, strengthened measure requirements and insufficient technical assistance for businesses.

Milestone 11 - Maintain and increase the City's urban tree canopy by 10%.

Indicator 11.1 – Acreage of the urban tree canopy

2020 Target – 10% increase in urban tree canopy (from 38.2% tree canopy to 42%)

2020 Achieved – 2% increase in urban tree canopy

Progress toward Target – Increased tree canopy by 2% between 2009 and 2016 (50% achievement of target), the only year data are available. Several efforts were identified as drivers of progress on this milestone including close collaboration between departments, community groups and utilities to craft policy, secure grants and identify volunteer resources. Progress on this milestone was impeded by limited available space and conditions in urban paved areas for trees and capacity. Major projects contributing to progress include recent CalFIRE grant funded planting of 500 trees, adoption of a Street Trees Plan, ongoing annual planting of about 200 trees including many with community groups and one typically tied into Arbor Day. The Urban Forester continues to provide education and outreach through tree walking tours and other community events.

Milestone 12 - Reduce single occupancy vehicle commutes 10% by 2020.

Indicator 12.1 – Drive alone mode split

2020 Target – 55.6% drive alone mode split

2020 Value – 58.7% drive alone mode split (low of 56.5% in 2016)

Progress toward Target– Reduced single occupancy vehicle commutes by 5% between 2009 and 2020 (50% achievement of the target). Progress on this milestone was driven by an approach of “meeting people where they are with many options,” launching the Rail Trail segments, Go Santa Cruz and My511 commute platform. Changes in remote and flexible work policy due to covid-19 pandemic also played a major role in progress.

Carbon Fund Project Implementation

In 2016 the City established through Administrative Procedural Order a Carbon Fund to provide funding for implementing carbon reducing projects. The fund's revenue originally included energy rebate check deposits and more recently a city-imposed internal fleet fossil fuel surcharge of 5% that is allocated to the fund annually, with any end year balance set to roll over year to year. Annually, the City Sustainability Team solicits project funding requests for projects from employees that implement the Climate Action Plan and prioritizes recommendations for each year's allocation to the City Manager. The City Manager typically approves the recommendations and the Climate Action Manager works with departments and Finance Department to fund the projects. The Carbon Fund has awarded nearly \$240,000 to 24 projects in various City departments. Projects funded range in value from \$1,000 to \$27,000 with an average award of \$10,000 per project. These projects span various sectors and topical areas including open spaces and nature, energy, infrastructure, transportation, and municipal operations. See Table 5 for a full list of projects funded and implemented. Together, the projects awarded by the Carbon Fund have supported the implementation of Milestones 1, 6, 7, 8, 10, 11, and 12 of the 2020 CAP. The Carbon Fund did not award funds in 2020 during the pandemic.

Table 2. Carbon Fund awards FY17 – FY20.

<i>FY</i>	<i>Description</i>	<i>Amount</i>
2017	Fully fund GIS data pre-processing of City tree canopy aerials (for the purpose of setting a baseline and ongoing method to determine canopy cover in order to track milestone 11).	\$10,000
2017	Contribute to boiler replacement at Louden Nelson with energy efficient units (total cost at about \$81k / \$10k-\$15k from fund).	\$15,000
2017	Harvey West pool pump controls	\$10,000
2017	Micro grants to fund energy efficiency (not in CEC loan) and water conservation for green business certification of City offices with potential pilots at Finance and Water Departments and Harvey West and Louden Nelson. City Hall would be high profile.	\$5,000
2017	Micro grants to fund energy efficiency and water conservation for green business certification of businesses.	\$5,000
2017	City employee alternative commute/carpooling incentive program (prizes) to replace Ridespring.	\$1,200
2018	Electrification of Bike share stations.	\$15,000
2018	Submetering of City Hall Annex and Police Department for CEC Grant.	\$15,000
2018	Urban Tree Inventory Grant Match.	\$10,000
2018	Stipend for Green Business Intern.	\$1,000
2018	Expansion of the Planning Department's Blue Beam Plan Review System.	\$20,000
2018	Fleet ebike (For Corp Yard).	\$5,000
2018	Street Light Assessment.	\$12,000
2019	Climate & Energy Action Plan 2030.	\$27,000
2019	Civic Auditorium Boiler.	\$10,000
2019	WWTF Entry Gate Long Range Reader.	\$4,000
2019	Rideshare Incentives.	\$12,000
2019	Sub Meters for River St Garage, Corp Yd, HW Pool.	\$12,000
2020	Climate & Energy Action Plan 2030	\$13,000
2020	Organic Waste Digester Pilot Program	\$10,000
2020	LED Upgrade to Teen Center Lighting	\$6,000
2020	Loch Lomond Hydration Station & Reusable Bottles	\$4,000
2020	Deli Concession Case Replacement at Civic	\$10,000
2020	Electric Conversion of Gas Landscaping Equipment	\$7,000
	Awarded Total	\$239,200

Equity Considerations

A first generation climate plan, the City's Climate Action Plan 2020 lacked explicit consideration of environmental justice and equity. It did, however, acknowledge the need to prioritize investments to ensure long term sustainability while integrating ecological, economic and social improvements (i.e., the "triple bottom line"). During implementation of the adopted Climate Action Plan 2020, city staff began integrating equity considerations more fully into climate adaptation work and participating in training to iterate and improve upon each phase of that work. Climate Action Plan 2020 actions implemented aimed at lifting up historically under resourced groups included the low income household Grid Alternatives solar PV pilot program resulting in the award of 6 solar PV systems to low income homeowners.

In the Climate Action Plan 2030 development process, Resilient Together, the City is holistically integrating community and equity advisory group feedback with technical, engagement, and equity consultants expertise to ensure that equity is both procedural in the planning process and distributive in the Plan itself. Procedural equity works to weave equity throughout the creation of the plan, ensuring that the input of marginalized stakeholders and communities is central to the plan's formation. Distributive equity focuses on the outcomes that the plan will have, to better conditions for marginalized communities in the City of Santa Cruz. The City is using the Greenlining Institute's Making Equity Real Framework as the overarching framework for integrating equity in the planning process. Additional resources, such as the Urban Sustainability Directors Network (USDN) Equity Foundations Training, free resources from the Government Alliance on Race and Equity (GARE) and numerous others particularly tied to the City's Health in All Policies initiative also inform this work.

Other Major Efforts Completed or Underway

Central Coast Community Energy

Central Coast Community Energy (3CE, previously Monterey Bay Community Power) was launched in 2018 as a community choice aggregator (CCA), one of 21 CCAs currently serving more than 10 million customers across California. 3CE was formed as a Joint Power Authority to gain more control of electricity needs and provide economic and GHG reduction benefits to our community. The City has one City Council representative on the Policy Board and one City executive representative on the Operations Board, both of whom govern the JPA. 3CE now procures electricity for 33 communities on the Central Coast. Delivered through PG&E transmission infrastructure, all residential and commercial electricity accounts were transitioned over to 3CE in 2018 and have enjoyed a discount on PG&E rates. By supporting electricity sourced from clean and renewable sources, 3CE's procurement of city consumed electricity accelerated progress toward the City GHG reduction goal (achieved in 2019) and state goals.

The closeout year for the Climate Action Plan and its GHG emission tracking is 2019. In 2020 3CE shifted its procurement strategy away from paper environmental attributes that made the electricity procured be considered carbon free to a new strategy of actual renewable energy supply. 3CE targets meeting 60% of electricity supply from new clean and renewable sources by 2025 and 100% by 2030. The City's GHG inventories between 2020 and 2030 will reflect this new procurement strategy in how electricity emissions are accounted for. It is important to note that 100% renewable energy is not the same as carbon neutral.

3CE also provides financial resources, technical support and education as the region transitions from fossil fuels to clean energy. 3CE energy programs recommended for funding in FY 22 include many aligned with the City's current climate action workplan and future implementation actions including incentives for EVs; energy education, Workforce Development and grant program, residential and commercial building electrification; public and private EV charging stations; demand response program; uninterruptible power supplies and battery storage systems.

Building Electrification

The State of California has set ambitious renewable energy targets for new construction -- it aims to achieve zero-net-energy (ZNE) for all new residential buildings by 2020 and for all nonresidential buildings (including >3 stories residential) by 2030. One of the State's policy mechanisms is to include energy efficiency and renewable energy requirements in the energy code, which is part of the State building code and must be adopted and enforced by local agencies. While the requirements of the 2019 version of the code (effective on January 1, 2020) move in the direction of ZNE performance, opportunities exist to achieve greater energy savings and accelerate decarbonization such as building electrification

The term "Building Electrification" refers to the construction of new buildings or retrofit of existing buildings to utilize electric powered building systems and/or appliances and transition away from the use of natural gas powered building systems and/or appliances. The City's current Climate Action Plan 2020 did not specifically call out building electrification as a strategy (the Plan predates the building electrification concept and trend), it did recognize that the launch of a community choice energy program, i.e., 3CE, would result in significant GHG emissions reduction related to electricity consumption. In its recent Electrification Strategic Plan, 3CE indicates that considering all vehicle and built environment emissions, 18% of those emissions are a result of residential and commercial space conditioning, water heating and food preparation. In 2020, the City adopted a prohibition of new natural gas connections in new building construction with limited exceptions. It is the emissions related to a building's systems that require natural gas combustion as well as leakage occurring during natural gas procurement, transportation, storage, and distribution that this ordinance addresses.

Based on estimates from the Planning and Community Development Department, approximately 600 dwelling units could be built between 2020 and 2024. With the adoption of the proposed ordinance prohibiting natural gas in new construction, GHG emissions related to energy consumption in these new buildings will be zero, with an annual reduction of over 300 metric tons of carbon dioxide equivalent (MT CO₂e). With annual turnover of building stock at about 1%, the emissions avoided will compound annually over time. With the natural gas in new construction prohibition ordinance in its implementation phase for one year, the rate of dwelling unit permits doubles what was projected for the time period, increasing GHG emissions avoided from what was projected.

Other co-benefits include potential developer and building occupant cost savings, improvement of indoor air quality due to elimination of chemicals produced through indoor fuel combustion, and a decrease in public safety risks associated with leaking legacy natural gas infrastructure between the point of extraction and entry to homes that has been the source of catastrophic explosions throughout California and the US. The City received a \$15,000 rebate check for adoption of the ordinance, which was deposited into the City's internal Carbon Fund. The City is

actively evaluating opportunities for existing building electrification.

Climate suit⁴

In late 2017, the City of Santa Cruz filed a lawsuit seeking to hold fossil fuel defendants accountable for their decades of deception about climate change and the resulting damages associated with sea level rise, more frequent and intense wildfires, more destructive storms, and other consequences of climate change knowingly caused by the defendants' products. The City's goal is to ensure that the costs of measures needed to protect Santa Cruz from those consequences are borne by the fossil fuel defendants who caused it – and not by the City's taxpayers.

While the lawsuit was initially filed in a California state court, the defendants removed the case to federal court, arguing that federal law controls the lawsuit.

There have been several procedural rulings related to whether the case should be tried in state or federal court. In 2018, U.S. District Court Judge Vincent Chhabria rejected all of defendants' arguments that federal law controls the case, and sent it back to state court. The defendants appealed that decision to the Ninth Circuit Court of Appeals, which, in 2020, affirmed that the lawsuit must be heard in state court. However, pursuant to Ninth Circuit precedent, the court only reviewed defendants' assertion of "federal officer" status as the basis for federal jurisdiction, not the additional bases on which defendants removed the case to federal court.

In early 2021, the U.S. Supreme Court ruled, in the City of Baltimore's similar lawsuit, that U.S. Courts of Appeals must review all of defendants' arguments for federal jurisdiction, not just the "federal officer" basis. As a result, the Ninth Circuit is now reviewing the defendants' other federal jurisdiction claims that were rejected by Judge Chhabria, and a ruling is expected sometime this year.

Commitments and Reporting

The City has reaffirmed its commitment to accelerated and equitable climate action through the adoption of the following resolutions and plans:

- The City's Resolution in Support of Paris Climate Agreement (2017)
- The City's Climate Emergency Resolution (2018)
- The City's Health in All Policies ordinance and city council policy (2019)
- The City's Green New Deal Resolution (2019)
- The City's Interim Recovery Plan (2020)

The City has made several commitments and reports to entities to ensure transparency and accountability in climate action.

⁴ Source: City Attorney's Summary of Ongoing Litigation (August, 2021)

The Global Covenant of Mayors and Carbon Disclosure Project

Adopted by resolution in 2016, the City is one of over 10,000 cities across the globe committed to the Global Covenant of Mayors for Climate and Energy, an international coalition of cities and local governments with a shared long-term vision of promoting and supporting voluntary action to combat climate change. Through a common reporting platform (reporting to the Carbon Disclosure Project [CDP] annually), cities comply with the covenant by earning up to 9 badges across emission mitigation, climate adaptation and access to energy. The City has earned 6 of 9 badges all for emission mitigation and climate adaptation requirements and has recently reported for 2020 anticipating award of the newly added remaining badges related to access to energy.

CDP also issues grades to cities based on their performance. Since beginning reporting to CDP, the City has earned a “D+” grade in 2018 (due primarily to lack of data to report), an “A” in 2019, and “A-“ in 2020. The small downgrade in 2020 was attributable to the latest reported greenhouse gas inventory becoming too dated for compliance. The City expects to regain an “A” grade as the inventory requirement is now in compliance with 2021 reporting of the most recent inventories presented earlier in this report. In addition to the Global Covenant of Mayors reporting and the CDP grade, reporting with CDP gains the City insight into its own and peers climate action goals and performance through the CDP data analytics platform. City Council often inquires how the City performs with respect to peer agencies and the CDP annual summary report provides some insight into other climate progressive North American cities who report (i.e., those who care about climate enough to report).

In North America, of cities that reported to CDP:

- 82% reported a community-wide emissions inventory,
- 73% reported a community-wide emissions reduction target,
- 69% reported adopting a climate action plan and 63% reporting adoption of a climate adaptation plan.

The City has completed each of these actions. Furthermore, the top emissions mitigation actions reported by cities includes energy efficiency/retrofit measures, building codes and standards, on site renewable energy generation, low or zero carbon energy supply generation and improvement of fuel economy / reduction of emissions from motorized vehicles, all part of the 2020 Climate Action Plan.

Of the US cities reporting, 8% had set a greenhouse gas emissions target for year 2020 with comparable baseline and target introduction years. The 2020 emissions targets of reporting cities ranged from a 10% to 36% reduction between the baseline year and 2020. The City’s target was a 30% reduction from at 1990 baseline year (achieved in 2019 as reported earlier). 19% of US cities reporting have adopted a 2030 emissions reduction target, ranging from a 10 to 100% reduction; 11% of cities report a 100% emissions reduction target ranging between target years of 2030 to 2060. The City’s adopted future target is an 80% emissions reduction by 2050 from a 1990 baseline.

Furthermore, 40% of cities reporting have adopted a 100% renewable energy goal with target years that range between 2024 and 2050. Of the cities reporting a 100% renewable energy target, 45% of renewable energy targets reported were for municipal / local government operations and

55% were citywide. The City's current climate action plan 2030 project will re-evaluate the State of California aligned emission target in year 2050 and consider potential new targets for science-based renewable energy and carbon neutrality targets.

Beacon Program

The Institute for Local Government's Beacon Program provides a growing number of local governments throughout California with a comprehensive framework and ongoing support to implement effective climate action, energy efficiency and sustainability practices. The Beacon Program encourages, supports and recognizes voluntary action by local governments throughout California to address climate change, promote energy innovation and create more sustainable communities. Each year, dozens of local agencies are honored with Beacon awards. The City of Santa Cruz was selected as one of the Institute for Local Government's 2019 Beacon Award Winners. The City received a Silver Level Beacon Award for the following achievements completed over the past decade (2009-2019):

- Platinum Level Award for 23% Community Greenhouse Gas Reductions
- Gold Level Award for 15% Agency Greenhouse Gas Reductions
- Gold level Award for 18% Agency Energy Savings
- Silver Level Award for 7% Agency Natural Gas Savings
- Platinum Level Award in Sustainability Best Practices

The City did not report to Beacon in 2020 due to covid related capacity constraints and no new changes in agency emissions reduction information available.

Water Bonds

Water Revenue Bonds reporting is also included in the Climate Action Plan annual report summarizing how revenues were expended on green projects. In 2019 there were \$26 million in net proceeds used to fund the following new capital improvement projects: (1) improvements to the Graham Hill WTP including a tube settler replacement and flocculator rehabilitation and replacement, University Tank No. 5 replacement, water main pipe replacements, and replacement of the Coast Pump Station discharge pipeline project. These projects are deemed "green" because they help the Water department address climate change and create resilient infrastructure.

Other Commitments and Reporting

Health in All Policies (HiAP) community well-being outcomes indicator development was specified in the HiAP year 1 implementation workplan adopted in January 2021. Draft HiAP indicators include those related to sustainability, in addition to the other pillars of equity and public health. Community well-being outcomes metrics are to be reported every 2 years and a draft set will be brought to City Council for consideration in September 2021. The City's Interim Recovery Plan (IRP), adopted in October, 2020, includes sustainability and the green economy as priority values of the IRP. The IRP includes quarterly indicator metrics to assess the impact of various activities on recovery and includes those related to green economy and equitable outcomes. The last IRP quarterly report was made on August 9, 2021.

FISCAL IMPACT: None.

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ATTACHMENTS:

1. CLIMATE ACTION PLAN 2020 – CLIMATE ACTION MEASURES PROGRESS.PDF

ATTACHMENT 1 – CLIMATE ACTION PLAN 2020 ACTION STATUS

Goal	Measures	Actions	Status as of 7/1/2021	Status Notes
Chapter 4. Energy Use in the Built Environment				
Municipal Sector				
Goal: Significantly reduce energy use in municipal, residential and commercial buildings.	1. Formalize a Santa Cruz Municipal Energy Management Office to coordinate energy use practices, efficiency upgrades, and future investments in renewable energy among departments and services.	a. Hire and support a staff person to evaluate additional energy saving opportunities in City buildings. Provide training in energy efficiency and green building methods.	Done	
		b. Seek funding to continue Energy Office staffing.	Done	
		c. Establish individual building and facility goals for energy use reductions with incentives for meeting those goals. Report back to departments periodically on goal attainment.	Done	Implementation strategies in place that include energy management.
		d. Designate an Energy Management Office liaison for each City functional use.		
		e. Evaluate opportunities to leverage municipal energy cost savings towards additional investments in energy system upgrades.	Done	Carbon fund for fleet fuel surcharge and rebates established; savings not captured but with new energy dashboard (2020), may be possible. Evaluate in CAP
		f. Continue to improve energy use tracking and reporting procedures.	Done	New energy dashboard launched in 2020.
		g. Optimize municipal energy use and address deferred maintenance.	Done	On Bill Financing (2 rounds), CEC 1% loan and CEC grant.
	2. Implement the Energy Efficiency Conservation Strategy (EECS) to reduce energy use in municipal buildings by an additional 40% by 2020.	a. Complete EECS to guide future energy efficiency and management strategies.	In Progress	Rincon look at EECS and goals/progress and as groundwork for muni side energy analysis/recommendations
		b. Meet annually with City departments to create the next year's EECS implementation priorities.		
		c. Coordinate EECS activities among departments to identify funding mechanisms and to research and identify new energy efficiency opportunities, products, and technologies for municipal infrastructure and City services.	Done	Energy coordinator coordinates activities collaboratively. Done but really never done.
		d. Design and implement energy load management and demand response systems for City departments and report annually on EECS results.		
		e. Meet most recent energy efficiency requirements when remodeling or building new municipal buildings.	Done	
		f. Establish a minimum level of energy efficiency required for new and extensively remodeled municipal buildings.	Ongoing	
	3. Integrate new energy efficient equipment and reduction measures into the EECS for the wastewater treatment and collection system to reduce energy use 10% below 2005 values.	a. Complete a Wastewater Treatment Facility audit and energy efficiency plan to reduce energy use and emissions.	In Progress	
		b. Evaluate options for the most cost effective and efficient use of methane generated at the facility (e.g. high efficiency co-generation and fuel cell technology).	Ongoing	
		c. Evaluate cost effective options to convert City services to low carbon alternatives.	Ongoing	
	4. Integrate new energy efficient equipment and reduction measures into the EECS for the Water Department to reduce energy use 10% below 2005 values.	a. Identify and implement additional energy efficiency upgrades for pumps, equipment, and other measures.	In Progress	
5. Integrate new energy efficient equipment and reduction measures into the EECS for the Information Technology Division to reduce energy use 10% below 2005 values.	a. Install computer server virtualization technology and desktop virtualization.	Done		
Residential Sector				
	1. Increase market penetration of the Green Building Program to 10% of residential buildings by 2020.	a. Provide support and incentives to increase the percentage of Green Building award winners to 20% of GBP applicants.	Done	
		b. Establish a Green Building Award option for residents who participate in programs such as AMBAG Energy Watch and Home Energy Rating System audits that achieve a 30% reduction in energy and/or water use within their current residences.		
		c. Integrate solar finance district development and implementation with Green Building Program.		

Goal	Measures	Actions	Status as of 7/1/2021	Status Notes
		d. Compile guidance materials regarding new building techniques and materials that enhance conservation, high efficiency and zero waste.		
		e. Develop an information packet on the value of energy efficiency upgrades to homes and apartments at time of sale or lease. Provide information packet to local realtors.	In Progress	
		f. Support development and distribution of an energy use report card for homes.		
		g. Continue to revise Green Building Program to incorporate new technologies and best management practices.	Done	
		h. Develop energy usage reporting methods and tools for renters and home owners.	Ongoing	
		i. Integrate City Tree Programs with Green Building Program to include guidance on tree species that enhance climate-responsive performance of buildings.	Done	completed tree inventory in GIS and street trees plan
		j. Work with Ecology Action to add information to the existing Green Building kiosks on the value of Home Performance .		
	2. Partner with others to create tools and incentives for landlords to invest in home weatherizing and energy efficiency upgrades for off campus student housing to obtain 50% penetration of the 52% of UC Santa Cruz students who live off campus by 2020.	a. Create or expand current programs that provide energy efficiency audits and retrofits for off campus student and other rental housing. (AMBAG, Central Coast Energy Services, Ecology Action, UCSC Student Services)	Ongoing	
		b. Investigate grant and other funding to provide energy retrofit incentives to student off campus housing.		
		c. Integrate the Climate Action Teams Program with current Education for Sustainable Living; providing tools and opportunities for students to create their own climate action plans while in school and going forward.	Complete	also sustainability staff certificate program
		d. Support UC Student Services efforts to create a “green” off campus rating system.		green leases in 2018?
		e. Work with UC Sustainability office to create programs to invest in solar electric and hot water systems for rental properties.		Explored,
	3. Expand participation in energy efficiency upgrade programs to 25% of all homes within the City by 2020.	a. Partner with Energy Upgrade California to increase participation by City residents.	Done	
		b. Increase penetration of energy efficiency retrofit programs (Central Coast Energy Services) for low income housing within the City to 75% by 2020.	Ongoing	needs to be verified
		c. Provide access to and knowledge of tools to improve energy efficiency of residential buildings through education, media, neighborhood outreach, web portals, and special events.	Ongoing	
		d. Support programs and subsidies for residential home energy retrofits through the Green Building Program.	Ongoing	3CE incentives, etc.
		e. Create or expand energy efficiency programs to reach income brackets of the residential community not already served.	Done	Grid Alternatives in 2018? 3CE EV income based rebates
Commercial Sector				
	1. Increase participation in the Monterey Bay Area Green Business Certification Program by 250 additional businesses within the City by 2020.	a. Provide ongoing support for the implementation of the climate change mitigation section in the program.	Ongoing	
		b. Incorporate the Green Business Program into a green downtown campaign (i.e. Green Wave) to encourage participation of businesses and property owners in efficiency programs.	Done	
		c. Work with key members of the Hotel and Property Management commercial sectors to investigate other innovative programs.		Evaluated bike share. NOAA working on a Blue Green hotel certification
	2. Increase market penetration of the Green Building and LEED Programs to 10% of the commercial and industrial space by 2020.	a. Increase Green Building award winners to 20% of commercial program applicants.	Unknown	
		b. Initiate commercial interiors and tenant improvement into Green Building Program.	In Progress	
		c. Compile and make available technical guidance and building design tools for energy efficient retail/workspace.		
		d. Continue to provide forums for local professionals in green building and retrofit programs.	Ongoing	
		e. Integrate Solar Finance District development and implementation with Green Building Program.		Duplicate action

Goal	Measures	Actions	Status as of 7/1/2021	Status Notes
		f. Continue to revise Green Building Program to incorporate new technologies and best management practices.	Ongoing	Mark Ellis to lead evaluation of program revamp in early 2017
	3. Increase the amount of energy efficient commercial space within the City to 30% by 2020.	a. Increase awareness and coordinate use of incentives for commercial landlords to invest in energy efficiency upgrades.	g	
		b. Coordinate communication and quantification among existing audit/retrofit programs to move toward a turn-key energy efficiency service including technical assistance and incentives.	Ongoing	Completed commercial solar technical assistance project in 2015.
		c. Establish a green downtown campaign (i.e. Green Wave) to encourage wide scale participation of businesses and property owners in efficiency programs.	Done	
		d. Establish an Energy Award for businesses that voluntarily reduce energy use (i.e. RightLights and Green Business Programs) by 30%.	Done	keep it cool
		e. Establish specific guidance for comprehensive energy audits and upgrades for commercial buildings.		
		f. Explore specific funding mechanisms to support commercial building energy retrofit programs.	Done	microgrants to green biz; 3CE incentives
		g. Investigate feasibility of establishing central cogeneration facilities in high density commercial and industrial areas.	Ongoing	microgrid study completed
Chapter 5. Sustainable Transportation and Land Use Planning				
Municipal Sector				
<p>Goal A: Reduce GHG emissions by reducing vehicle miles traveled, decreasing single occupancy vehicle travel, and increasing the use of alternative fuels and transportation options.</p> <p>Goal B: Promote land use strategies that encourage density development along transit corridors and activity centers to support efficient, accessible, and sustainable transportation options.</p> <p>Goal C: Implement the City's General Plan including programs related to alternative transportation.</p>	1. Reduce City fleet vehicle emissions by 20% by 2020.	a. Calculate GHG emissions from fleet and set reduction goals for each City department or functional use. Quantify past program success where possible.	Ongoing	
		b. Designate fleet management liaisons within departments that make functional sense.		
		c. Upgrade to more efficient pool vehicles. Implement programs to promote pool vehicle use.	Done	
		d. Implement energy efficient vehicle purchasing policy.	Done	
		e. Implement fleet fuel efficiency monitoring program to routinely monitor vehicle performance.	In Progress	
		f. Increase the % of biodiesel in fuel as equipment and state law permits.	Ongoing	
		g. Prioritize the use of locally-sourced biodiesel when available and cost effective.		
		h. Institute a "smart driving/fuel conservation" education program for municipal employees.		
		i. Support alternatives to staff trips by auto for work-related meetings and events.	Done	ebikes procured and EV drive event for employees in 2018
		j. Evaluate more efficient transportation options for parking enforcement staff.	Done	
		k. Investigate partnership with Zipcar-like programs to support cost effective way to increase the availability of energy efficient or electric vehicles for City fleet.	In Progress	
		l. Increase use of bicycles and electric bikes for municipal operations.	Done	Promotion of pool bikes and expansion beyond City Hall expected in 2017.
		m. Evaluate how electric vehicles could become a useful component of the City fleet.	Done	fleet electrification study completed summer 2020
	2. Establish a Sustainable Transportation and Land Use Team among the Public Works, Planning, and Economic Development and Redevelopment Departments.	a. Develop annual Team objectives and actions for Commission and City Council as defined in approved plans and report on past year's results.		CAP annual workplan presented to City Council
	b. Report recommendations of the Sustainable Transportation and Land Use Team to the TPWC and Planning Commission for review, based on commission bylaws, prior to presentation to Council.	Done		
c. Update Transportation Impact Fee project plan to include implementation of alternative transportation infrastructure projects that support infill projects outlined in the 2030 General Plan.	In Progress			
d. Investigate additional opportunities for the Redevelopment Agency to participate in the implementation of the Climate Action Plan.	In Progress	RDA defunct; green economy/business resiliency and ultra efficient development coordination		
e. Establish a standard review process to evaluate how City Capital Improvement Projects affect the implementation of the CAP.	Done			

Goal	Measures	Actions	Status as of 7/1/2021	Status Notes
		f. Provide leadership in the planning and implementation of the County rail corridor through the RTC.	Done and ongoing	
		g. Quantify results of alternative transportation projects (trip reduction and mode split) when possible and use these data in vehicle trip projections to support planning and the implementation of infrastructure projects.	Ongoing	
		h. Evaluate local sales leakage and work with Redevelopment Agency to provide necessary services within county to reduce "over the hill" shopping.	Done and ongoing	Shop Local campaign
		i. Evaluate per capita GHG emissions rather than project-scale GHG emissions to ensure compliance with General Plan and Climate Action Plan objectives.	In progress	Rincon to Address in CAP 2030
		j. Encourage development of affordable housing, retail services, and employment in areas of Santa Cruz best served by current or expanded alternative transportation options.	Done and ongoing	
		k. Continue to develop alternative transportation options to encourage a "Park Once" campaign.	In Progress	
		l. Continue to work with county and regional transportation leaders to explore options for additional funding sources on regional level to support multi-modal transportation infrastructure.	Done and ongoing	
		m. Continue to implement intelligent transportation systems, roundabouts, signal timing/synchronization, intersection widening and other efficiency methods that decrease idling time and congestion.	Done and ongoing	
	3. Support implementation of the General Plan infill policies.	a. Require new development along commercial corridors to be at least two stories in height.	Done	
		b. Encourage zoning that would allow for the development of housing above single-story commercial buildings along corridors.	Done	
		c. Investigate modifying parking control strategies beyond what's allowed in current parking ordinance for residential housing, businesses and major destination centers. Review parking fee structure for downtown and throughout the City.	Done	Get an update from ED on the parking study in Q4 2016
		d. Investigate an "in-lieu-fee" option for meeting some parking requirements to support infill and alternative parking options.	Done	
		e. Re-evaluate current accessory dwelling unit (ADU) standards to encourage additional ADU development.	Done	
	4. Actively participate in the county and regional transportation planning working groups.	a. Advocate that METRO consider new cross-town public transit routes as defined in the MTS.	Ongoing	
		b. Support sustainable transportation options within City-defined higher density development areas and employment centers.	Done	bike share
		c. Advocate for transit that supports sustainable growth within the County.	Ongoing	
		d. Work with AMBAG to create a Sustainable Community Strategy that supports the 2030 General Plan goals and policies.	Done	
	Community (programs, services, opportunities)			
	1. Reduce within-town car trips by 10% by 2020.	a. Work with regional agencies to establish baseline values for vehicle trip makeup (origin/destination) for residents, businesses, municipalities and create baseline transportation numbers for in-town trips.	Done	In town trips quantified; AMBAG model does not provide origin / destination VMT
		b. Continue to investigate and modify parking requirements and parking fees for new developments.	Done and Ongoing	
		c. Encourage use of ridesharing and car sharing as an alternative to single occupancy driving through business and commuter incentives and parking disincentives.	Done and ongoing	
		d. Support sustainable transportation education programs.	Done	Street Smarts
		e. Provide incentives and infrastructure that support alternatives to single occupancy vehicles.	In Progress	My Commute 511
		f. Make Santa Cruz a Scooter friendly community.		
		g. Work with community groups to encourage pedestrian and bike events.	Done and ongoing	Open streets, bike to work, etc.

Goal	Measures	Actions	Status as of 7/1/2021	Status Notes
		h. Allow for events to receive permits to close off sections of Pacific if it reduces SOV driving and is financially sustainable.	Done	Open streets, bike to work, Covid etc.
		i. Investigate partnership with Zipcar-like programs to support use of energy efficient or electric vehicles for City residents.	Done	
		j. Work with business and government partners to establish a "Car-Free by the Sea" ecotourism campaign.		
		k. Allow car-free weekends or special events within the community (West Cliff, East Cliff, Pacific Ave.) if it reduces SOV driving and is financially sustainable.	Done	
		l. Continue to create more spaces for bikes and pedestrians on West Cliff Drive when feasible.	Done	West Cliff Drive Plan
	2. Double bike ridership through the continued implementation of long term actions identified within the Bike Plan that complete a safe network of bike corridors by 2020.	a. Continue to provide periodic status reports on Bike Plan implementation to the TPWC and City Council.	Done	Active Transportation Plan adopted Q1 2017
		b. Complete a Quality Index assessment for Bicycle routes throughout the City and set targets to upgrade sections of key corridors to meet "Reasonable" or "Ideal" condition levels by 2020.	Done	
		c. Continue to implement "Very High" and "High" priority projects defined in the Bike Plan to close gaps in the bicycle networks and connect major destinations and activity centers by 2020.	Done	
		d. Work with County to design safe bike infrastructure across jurisdictional boundaries.	Done	
		e. Work with the RTC signage project to install bike route signs including directions and mileage indicators to common destinations.		
	3. Reduce trips by car to and from elementary and secondary schools by 30% by 2020.	a. Work with school districts to quantify vehicle trip makeup.		
		b. Continue to work with school districts and solicit input from elementary, middle and high school parents to identify opportunities to decrease emissions from school commutes.	Ongoing	Green Schools Committee, AMBAG prop 39 funds, possible Q2 2017 Green Schools Certification Challenge; anti idling campaign in 2018
		c. Support school busing, carpooling, biking and walking options as alternatives to individual parent pick-up and drop-off.	Done and ongoing	Safe routes to School
		d. Support development of more "safe routes to school" for students to walk and ride to school and home.	Done and ongoing	Safe routes to School
		e. Support ridesharing programs for schools .		
		f. Continue to explore additional funding for projects that enhance bike and walk to school opportunities.	Done and ongoing	
	4. Reduce regional workforce single occupancy vehicle commutes 10% by 2020.	a. Work with the local partners and regional transportation planning groups to support the use of the rail corridor as a supplemental regional commute option.	Done and ongoing	
		b. Support local and regional ride sharing programs.	In Progress	
		c. Support the Economic Development and Redevelopment Agency programs to retain and create jobs within SC to reduce number of trips "over the hill" commute by 10%.	In Progress	
		d. Encourage employers to develop tools and methods to decrease emissions from work commutes, including work at home, ride-sharing, vanpools and improving transit service to local businesses.	In Progress	
		e. Encourage businesses to provide bikes, electric bikes, electric vehicles, and scooters to employees for lunch time and work time errands.	Ongoing	Fleet e-bike and bikes available
	5. Work with the METRO Transit District and others to increase local public transit ridership for multiple sectors of the community by more than 5% by 2020.	a. Recommend cost-effective first steps for immediate action for increased ridership.		
		b. Advocate for federal, state and local funding to maintain public transit and provide new service on the rail corridor.	Ongoing	
		c. Encourage METRO to identify specific actions that would encourage new riders to use the bus/trolley system.	Ongoing	
		d. Encourage METRO to define high frequency bus routes that may be funded, created, expanded or modified to enable new sectors of the community to use the transit system.		
e. Link community districts and redevelopment areas with high frequency transit services.				

Goal	Measures	Actions	Status as of 7/1/2021	Status Notes
		f. Seek funding for a weekend bus/trolley pilot program as defined and prioritized in the scoping process.	Done	trolley - electric
		g. Participate in RTC processes to develop a rail corridor that provides an economically viable trail and rail service by 2020.	In Progress	Measure D, if passed on 11/8/2016, will enable a feasibility study to assess the viability of rail service.
		h. Coordinate the rail corridor future use options with high density and/or employment centered development as outlined in the 2030 General Plan.		
		i. Work with local and regional transportation partners to develop, fund and implement transit options to create a convenient, integrated and accessible transit system for within town, cross county and Monterey Bay Area commutes.	In Progress	
		j. Identify and implement transit options that link the region with the proposed CalTrain Station in Pajaro.	In Progress	
		k. Continue to work with the University on long range transportation planning as outlined in the settlement agreement.	Done	
		l. Continue to monitor ongoing development of Personal Rapid Transit.	Ongoing	
	6. Provide incentives for the switch of 20% vehicles to low-carbon/high-efficiency alternatives by 2020.	a. Continue to work with the Monterey Bay Electrical Vehicle Alliance and others to assess needs and develop future municipal and private charging infrastructure.	Done	EV Needs and Use study to be completed in Dec. 2016
		b. Evaluate preferential or size appropriate parking for electric vehicles, ultra mini cars, and scooters.		
		c. Encourage education on the use of low-carbon vehicles and fuels.	Ongoing	Erdie event
		d. Promote the City's package of incentives for those who own and use low-carbon/high-efficiency fuel vehicles.	Ongoing	
Chapter 6. Water Conservation and Solid Waste Management				
Municipal Sector				
Goal A: Continue to reduce per capita and total water use within the Santa Cruz service area. Goal B: Reduce GHG emissions through improved waste handling and increased recycling, composting, reuse and waste reduction.	1. Implement an updated City Water Conservation Plan to maximize water use efficiency.	a. Continue to implement Best Management Practices as outlined in the MOU with the California Urban Water Conservation Council.	Ongoing	
		b. Comply with new State laws which mandates new water conservation measures.	Done	
		c. Establish an ultra-low water use policy for City buildings and operations and provide mechanisms to achieve policy goals by 2020.	Unknown	check with water
		d. Partner with Central Coast Energy Services to integrate City low-flow toilet and showerhead replacement services into their low-income housing energy efficiency audit and retrofit services.		
		e. Report to Council annually on the water system energy use from standard and renewable sources, energy associated with desalination, and estimated GHG emissions.	Done	
		f. Maintain a rate schedule that is based on cost of service and designed to provide an economic incentive for conservation.	Done	
	2. Increase or establish use of rainwater catchment and reclaimed/grey water, where appropriate.	a. Investigate emerging technologies that reuse water within residential and commercial buildings and make that information available to the public.	Done	PW brochure on grey water systems
		b. Integrate new California grey water building/plumbing codes into Green Building Program.	Done	PW brochure on grey water systems
		c. Encourage grey water use and rainwater catchment systems where their use could accomplish water conservation objectives.	Done	PW brochure on grey water systems
		d. Consider landscape and park uses for future reclaimed water projects, where such use is appropriate.	In Progress	
		e. Work with City Parks and Recreation and Water Departments on pilot composting toilet program for remote service areas.		
		f. Continue to investigate reclaimed water opportunities.	In Progress	
		a. Implement actions to achieve 75% waste diversion by 2020.	Ongoing	

Goal	Measures	Actions	Status as of 7/1/2021	Status Notes	
	3. Continue to implement programs to become a zero waste City by 2030.	b. Expand construction and demolition waste reduction programs in partnership with the Green Building program.	Done	Established donation to UCSC Carbon Fund as an alternative to Noncompliance with diversion requirements (it is not an option but rather a last resort alternative should the requirements not be met).	
		c. Investigate options for processing food waste to generate renewable energy and/or useful products.	In Progress	TW to meet with Mary Simmons and Bob Nelson to understand the City's efforts toward meeting upcoming organics diversion state policy.	
		d. Expand City policies to eliminate waste at its source.	In Progress		
		e. Continue to review and revise City solid waste programs to maintain incentives, outreach programs and other activities designed to increase waste diversion.	Done and in progress	48	
	4. Establish programs and services to support resource conservation and waste reduction as a daily action for all City staff.	a. Establish a Zero Waste Plan for City buildings and operations.			
		b. Conduct Green Business waste audits of municipal buildings.	In Progress		
		c. Implement practices to reduce paper use in City operations.	Done	TW to revisit the purchasing and operations policy regarding this. See intern report on topical policies, APOs, ordinances, etc.	
		d. Provide user-friendly composting options in all kitchen areas.		TW to report to Sustainability Team on organic waste pick up service (\$5/bucket/week and \$2.50 for each additional bucket at the same location). 3000 per year.	
		e. Establish City policies to reduce consumption. i.e., repairing equipment, digital distribution of documents.	Done	surplus share/did you knows/procurement policy	
		f. Implement digital permitting and plan check procedures.	Done		
	5. Reduce emissions from waste collection and fugitive sources by 10% by 2020.	a. Continue to meet and exceed State surface emission requirements at the landfill.	Done		
		b. Improve collection vehicle fuel efficiency and reduce trip VMT where possible. Purchase alternative fuel collection and sweeper vehicles as technology develops and regulations permit.	Done	first e refuse truck	
c. Increase % of biofuel in diesel as equipment and regulations permit. Use locally-generated alternative fuels when available at a reasonable price.					
Residential Sector					
	1. Support implementation of Water Conservation Plan to maximize water use efficiency.	a. Continue to implement residential Best Management Practices as outlined in the MOU with the California Urban Water Conservation Council.	Unknown		
		b. Investigate and incentivize appropriate approaches to rainwater capture and grey water reuse.	Done		
		c. Pursue funding sources to provide rebates and reduce permit fees for cisterns.			
		d. Support water efficient landscaping programs, classes and businesses.	Done		
		e. Promote Central Coast Energy Services programs which includes the City's low-flow toilet and showerhead replacement services.		Not part of current CCES services	
		f. Expand support of permaculture and climate-appropriate plant programs and classes that help residents reduce water use.			
	2. Reduce the amount of recyclable and compostable materials in the residential waste stream.	a. Define and implement programs that divert an additional 50% (below 2010 levels) of methane producing materials from landfill.	In Progress		
		b. Expand or develop programs and services that directly address results of the 2010 Waste Characterization Study to move towards zero waste goal.	In Progress		
Commercial Sector					
	1. Support implementation of Water Conservation Plan to maximize water use efficiency.	a. Continue to implement commercial Best Management Practices as outlined in the MOU with the California Urban Water Conservation Council.	n		
		b. Continue to emphasize water conservation as part of the Monterey Bay Area Green Business Program.	Ongoing		
		c. Per California Assembly Bill 1881, update the landscape water conservation ordinance for new developments and remodels.			

Goal	Measures	Actions	Status as of 7/1/2021	Status Notes
		d. Investigate and incentivize appropriate approaches to rainwater capture and grey water reuse.		
		e. Develop strategies to further reduce water use on large commercial landscapes such as assigning water budgets and/or creating new fee structure.	Done and in progress	
	2. Reduce the amount of recyclable and compostable materials in the commercial waste stream.	a. Implement construction and demolition waste reduction programs in partnership with the Green Building program to comply with 50% reduction mandate of Cal Green State building code.	Done	
		b. Require new and remodeled developments to design appropriate and convenient inside and outside service areas that encourage recycling.		
		c. Continue to emphasize waste reduction as part of the Monterey Bay Area Green Business Program.	Done	
		d. Continue to support recycling and compost efforts at City schools and UCSC.	Ongoing	
		e. Continue to offer staff assistance in identifying waste reduction options for businesses and industry within the City limits.	Ongoing	
		f. Evaluate options and select method to achieve 50% commercial organic waste diversion by 2030.	In Progress	
		g. Implement State regulations mandating recycling at multi-family apartments and commercial buildings.	Done	
		h. Encourage the use of local recycled and reused materials in partnership with local businesses.		
Chapter 7. Solar Santa Cruz				
Municipal Sector				
Goal: Ensure a sustainable transition toward locally generated renewable energy through programs, policies and investments.	1. Develop a Renewable Energy Plan as part of the Energy Efficiency Conservation Strategy to coordinate departmental investment in renewable energy to reach a 33% locally-generated renewable energy portfolio by 2020.	a. Complete a phase II solar feasibility study of City buildings and facilities that will include both solar photovoltaic and solar thermal options.	Done	Done in Dec. 2016
		b. Create a solar expansion plan for the municipality.	Done	Done in Dec. 2016
		c. Participate in cooperative purchasing programs and public/private partnerships for energy efficiency and renewable energy services and infrastructure.	Ongoing	Pilot planned for Q3 and Q4 2014
		d. Investigate feasibility of forming/joining a Community Choice Aggregation that allows all businesses and residents (including renters) to use and support local investments in renewable energy.	Done	
		e. Equip electric car and bike charging stations with solar and other renewable energy generation.	In Progress	Grant funded mobile solar/battery r EV and power tool charger in 2020
	2. Partner with UCSC and other stakeholders to implement pilot projects that support development of emerging alternative energy technologies.	a. Find funding to support the development of the Coastal Energy Research Facility at the Municipal wharf and other locations.	Done	
		b. Work with the City Economic Development and Redevelopment Agency to support investment in new energy technology businesses.	In Progress	green economy jobs and workforce development

Goal	Measures	Actions	Status as of 7/1/2021	Status Notes
Community Sector				
	1. Implement the Solar Santa Cruz Program to increase the number of residential solar systems to 1000 by 2012 and 5000 by 2020. (Approximately 500 at present.)	a. Create a Solar Finance District for City residents.		
		b. Identify and establish incentives to support the switch to renewable energy.		
		c. Work with Climate Action Compact partners to create a local offset fund to support renewable energy/sustainable planning projects within the community.	Done	MBRCAC and internal carbon fund.
		d. Establish new planning, development and building policies to support appropriate use of emerging wind, solar, biomass and micro hydro technologies.		
		e. Establish a Solar Hot Water campaign and financing mechanism to increase the number of solar hot water systems to 2000 in the City.		
	2. Work with the Green Building Program to install renewable energy on 60% of new buildings and remodels by 2020.	a. Provide mechanisms (solar financing district, revolving funds, partnering with local banks) for new buildings to include solar as an integral part of the project.	Ongoing	PACE enabled
	3. Implement the Solar Santa Cruz Program to increase the number of solar systems installed on businesses to 100 by 2012 and 500 by 2020.	a. Support future Solar Financing programs and incentives adoption by the business community.		
		b. Encourage all new commercial and industrial development to include on-site renewable energy generation.	Done	thru bldg. electrification ordinance and CA Energy Code
		c. Establish new planning, development and building policies to support appropriate use of emerging wind, solar, biomass and micro hydro technologies on large business properties.		
		d. Establish a Solar Hot Water campaign and financing mechanism to increase the number of solar hot water systems in the City.		
		e. Partner with Chamber of Commerce and other business associations to create incentives for landlords to invest in renewable energy generation on commercial properties. (30% penetration)		
Chapter 8. Public Partnerships, Education & Outreach				
Municipal Sector				
Goal A: Identify and allocate funding and other resources for the implementation of the Climate Action Plan. Goal B: Support community implementation of the Climate Action Plan through public education, outreach, and programs.	1. Establish a City Sustainability Team to coordinate ongoing implementation of the Climate Action Plan and ensure integration of actions with all City departments.	a. Identify ongoing funding to support program coordinator.	Done	
		b. Coordinate implementation and completion of the Climate Action Plan by 2020.	Done	
		c. Conduct GHG Emissions Inventories at least every five years.	Done	
		d. Conduct periodic review and revision of the Climate Action Plan.	Done	Milestones revised in 2016. CAP 2.0 planned for 2019/2020
		e. Review Climate Adaptation Plan annually. Implement proposed actions as funding becomes available.	Done and ongoing	
		f. Work with the County and regional leaders to initiate an Energy Descent Plan for the Monterey Bay area.	In Progress	
		g. Provide advocacy for effective State and Federal policies and lead by example through reporting of local reduction success.	In Progress	Mayor's compact, Beacon, etc.
		h. Establish a process for reporting a "GHG Emissions" section within appropriate Council reports to evaluate and analyze how actions support or are consistent with the City's GHG reduction goals.	Done	Now have HiAP section that includes calling out how item is consistent with or impelements CAP/CAPU
		i. Enhance City policies that support continued investment in low carbon and sustainable products and services.	Done	EP3 adopted in 2019
		j. Integrate City departments' operational implementation of the Climate Action Plan through coordination with staff of all relevant City programs and by establishing a Climate Action liaison in each department.	Ongoing	
	2. Develop an outreach campaign to highlight City's sustainability efforts to date and engage various constituencies in achieving our environmental goals.	a. Quantify and report on the effectiveness of the implementation of the Climate Action Plan and make the information available to City Council, all City departments, partners, and the public.	Done and ongoing	
		b. Develop and implement fundraising strategy.	In progress	Via CAP 2030
		c. Create effective marketing materials to keep the public up to date on CAP implementation status and new opportunities to participate.	Done and ongoing	

Goal	Measures	Actions	Status as of 7/1/2021	Status Notes
		d. Establish, maintain and promote an interactive web portal dedicated to the Climate Action Program.	Done and ongoing	
	3. Incorporate energy efficiency and resource conservation as daily actions for all City staff.	a. Obtain Green Business Certification for City operations and facilities.	In Progress	
		b. Work with City staff to create department level GHG reduction plans and put mechanisms in place to report on the status of implementation.	Ongoing	
		c. Expand the Climate Action Teams Program for participation by City staff, Commissioners, and City Council members.		
		d. Periodically report on City-wide GHG reduction goals attainment to City department staff.	Done	
		e. Create suggestion e-box for staff energy efficiency and resource conservation ideas.	Done	See intranet
	4. Support the establishment of sustainable purchasing procedures.	a. Create a policy to guide the City in making sustainable purchasing decisions.	Done	
		b. Use City purchasing policies to advocate for reduced product packaging and lower embodied carbon content.	Done	
		c. Develop a process to prioritize the purchase of Energy Star rated appliances and computer equipment for all City operations.	Done	
		d. Advocate for additional legislation to mandate extended producer responsibility. Continue to implement current Extended Producer Responsibility policies.	In Progress	
	5. Continue leadership in the Climate Action Compact.	a. Partner with regional municipalities to conduct GHG emissions inventories.	Done by AMBAG	
		b. Partner with regional municipalities to develop and implement local Climate Action Plans.	In Progress	
		c. Partner with regional municipalities to establish funding to support GHG reduction efforts.	In Progress	3CE
Community Sector				
	1. Provide support for 20% of City residents to pledge and take action to reduce their emissions 30% by 2020.	a. Expand the Climate Action Teams Program (CATP) to reach 10% of City residents (approximately 1200 families) and 50 businesses through partnerships with community groups, business districts, faith-based organizations, and schools.		
		b. Establish sustainable funding for the CATP.	In Progress	
		c. Increase web capacity for data collection and analysis, participant follow up, and online participant interaction that supports and builds a sense of community.	In Progress	
		d. Explore opportunities for linking CATP with other local programs such as the Monterey Bay Area Green Business Program, AMBAG Home Energy Watch Program and RightLights Program.		
		e. Investigate feasibility of linking CATP with subsidized home energy audit and retrofit program.		
		f. Expand and adapt CATP to specific sectors of the community through targeted promotional efforts, events, pilot programs, etc.	Ongoing	
		g. Work with regional municipal partners to find funding to initiate and implement CATP throughout the Monterey Bay Area.	In Progress	
	2. Support continued investment in City greenspace, parks and other fun things!	a. Support community tree plantings, open space enhancement, and gardens.	Done	CalFire project w/500 trees
		b. Increase the number of community gardens.		
		c. Increase and enhance urban forests.	In Progress	
		d. Evaluate potential for a residential excess harvest program that could integrate with food assistance programs and farmers markets, modeled after the Portland Fruit Tree Project.	In Progress	See Mike Fox park community orchard.
		e. Continue to support local farmers' markets and work to provide sufficient locations and increased infrastructure.	In Progress	
		f. Incentivize water-efficient greenscape and reduced use of asphalt in new development.	In Progress	
		g. Complete Arana Gulch multi-use trail and habitat restoration project.	Done.	
		a. Support ongoing public efforts to increase climate change awareness, action, and advocacy.	Done	

Goal	Measures	Actions	Status as of 7/1/2021	Status Notes
	3. Support and expand programs to enhance sustainable options for those living and working in, as well as visiting, Santa Cruz.	b. Support coordination and promotion of films, events, speakers, and forums related to climate change.	Done	
		c. Work with local nonprofit organizations to enhance the reach of their sustainability programs.	Ongoing	
		d. Promote product repair and reuse businesses.	In Progress	Master Composters
		e. Support the Buy Local campaign as a GHG reduction tool.	Ongoing	
	4. Continue to coordinate and promote sustainable choices within the business community.	a. Increase the number of certified Monterey Bay Area Green Businesses.	Done and ongoing	
		b. Conduct pilot programs such as Green Wave Campaign to contribute to a local green economy.	Done.	
		c. Establish an online Climate Action Program web portal and social media network to enhance collaboration and resource sharing amongst businesses and residents.	Done	CAP social media combined with general City in 2020
		d. Create awareness of Green Business/commercial sustainability efforts through signs in businesses and in business districts.	Done.	
		e. Expand City and partner programs which enhance education to all owners, employees, and customers of businesses within the City regarding energy efficiency, resource conservation, and climate change programs and policies.	Ongoing	
		f. Work with the business community to find ways to incorporate the Climate Action Teams Program into company environmental programs as well as explore potential funding mechanisms.		
	5. Partner with schools and higher education institutions to promote sustainable choices and policies.	a. Continue to work with the Santa Cruz City Schools District as they complete their GHG Emissions Inventory and develop their Climate Action Plan.	In Progress	
		b. Use experience gained from pilot program with Gateway School to support and inform elementary, middle and high school GHG reduction and climate change education.		
		c. Promote Green Business certification of Santa Cruz City Schools.	In Progress	
		d. Explore opportunities to engage high school students in reducing their personal GHG emissions as well as becoming leaders in community-wide GHG reductions.	Done and ongoing	See Sister Cities collab and youth advisors to CAP
		e. Continue to collaborate with UCSC to support implementation of their Climate Action Plan and develop avenues through which staff and students are empowered to reduce their GHG emissions as well as campus-wide emissions.	Done and ongoing	Green Wharf
		f. Work with schools to develop opportunities for creating additional community gardens on their campuses.		
		g. Explore the idea of planting trees on school campuses through the City Tree Program.	In Progress	