



PLANNING COMMISSION

November 2, 2020

SAN MARCOS
DISCOVER LIFE'S POSSIBILITIES

CLIMATE ACTION PLAN (CAP) BASICS

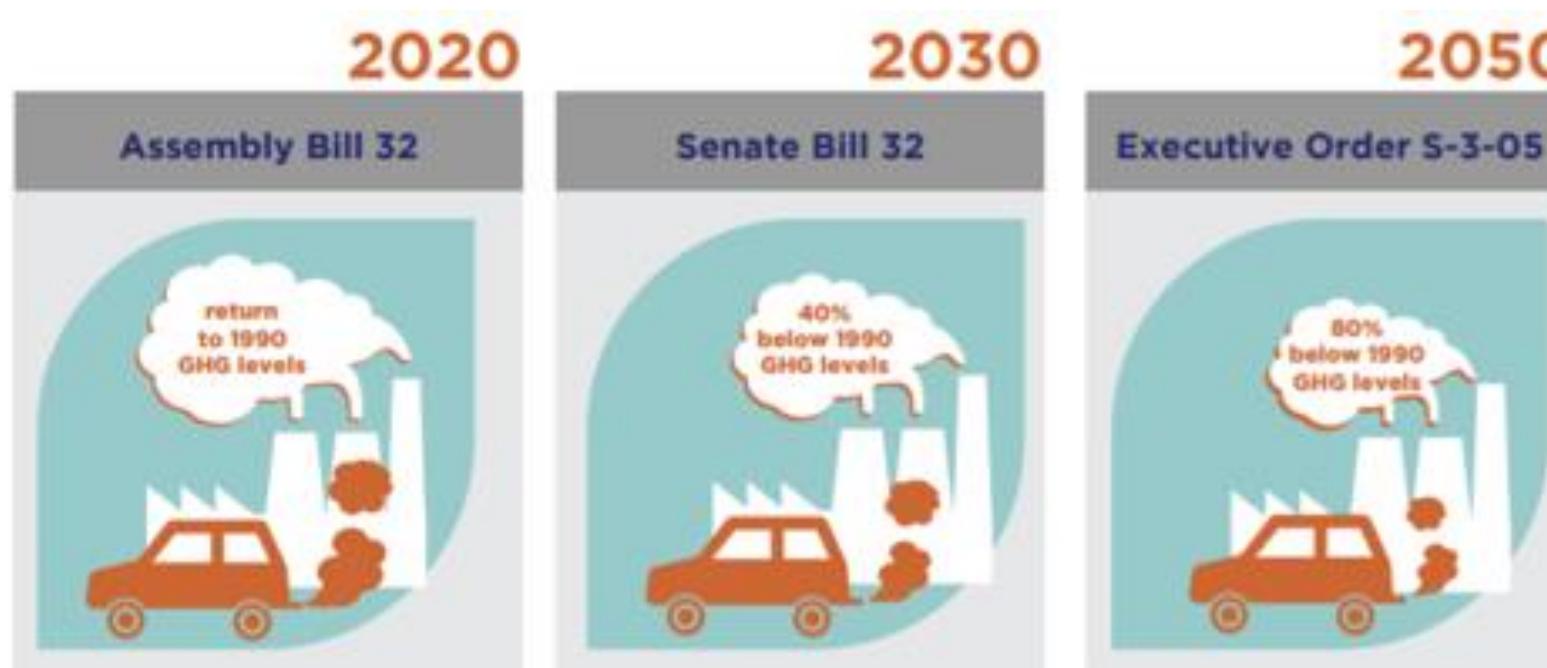
A Climate Action Plan is a comprehensive roadmap that addresses how a city will work to reduce greenhouse gas emissions (GHG).

This includes:

- Modeling current and future citywide GHG emissions and projections
 - Setting future reduction targets consistent with State requirements
 - Identifying the “emissions gap” that must be met by City actions
- Outlining actions the City will take to reduce GHG emissions
 - Developing strategies to achieve new targets
 - Establishing implementation and monitoring procedures

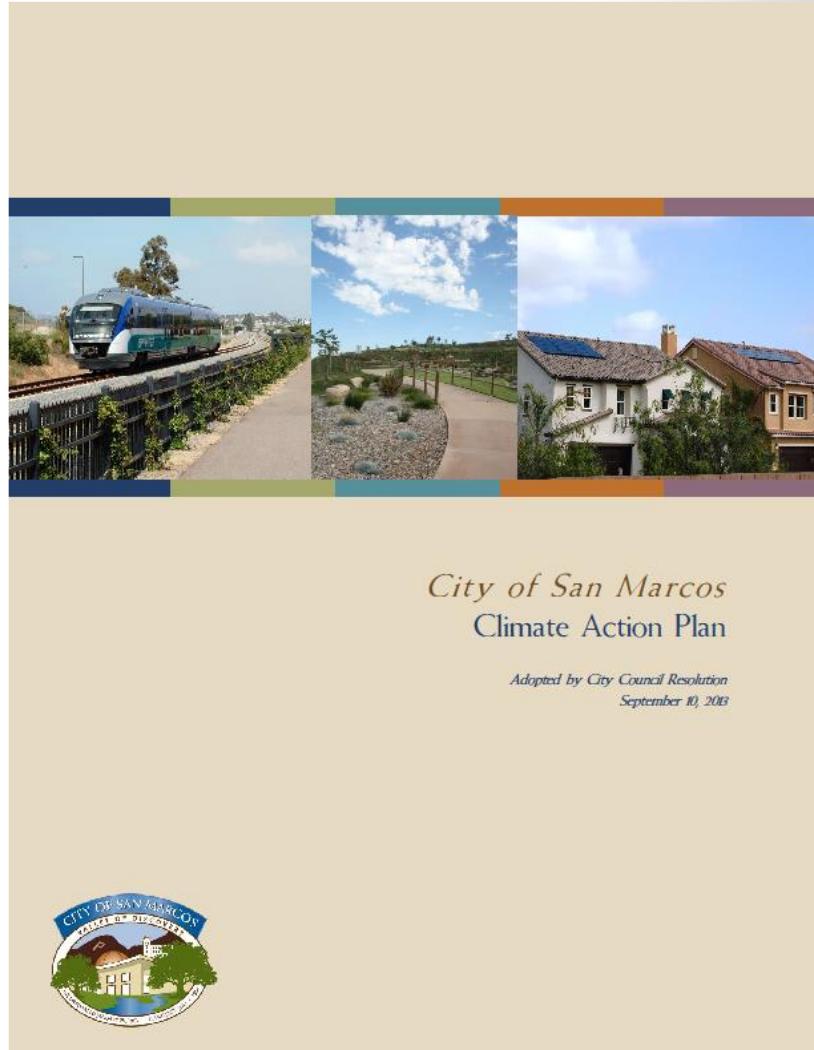
CLIMATE RELATED STATE REGULATIONS

Senate Bill 32 established new targets for the year 2030. San Marcos must update its CAP to align with these new, stricter GHG reduction targets.



Source: SANDAG 2018

UPDATING THE 2013 CLIMATE ACTION PLAN

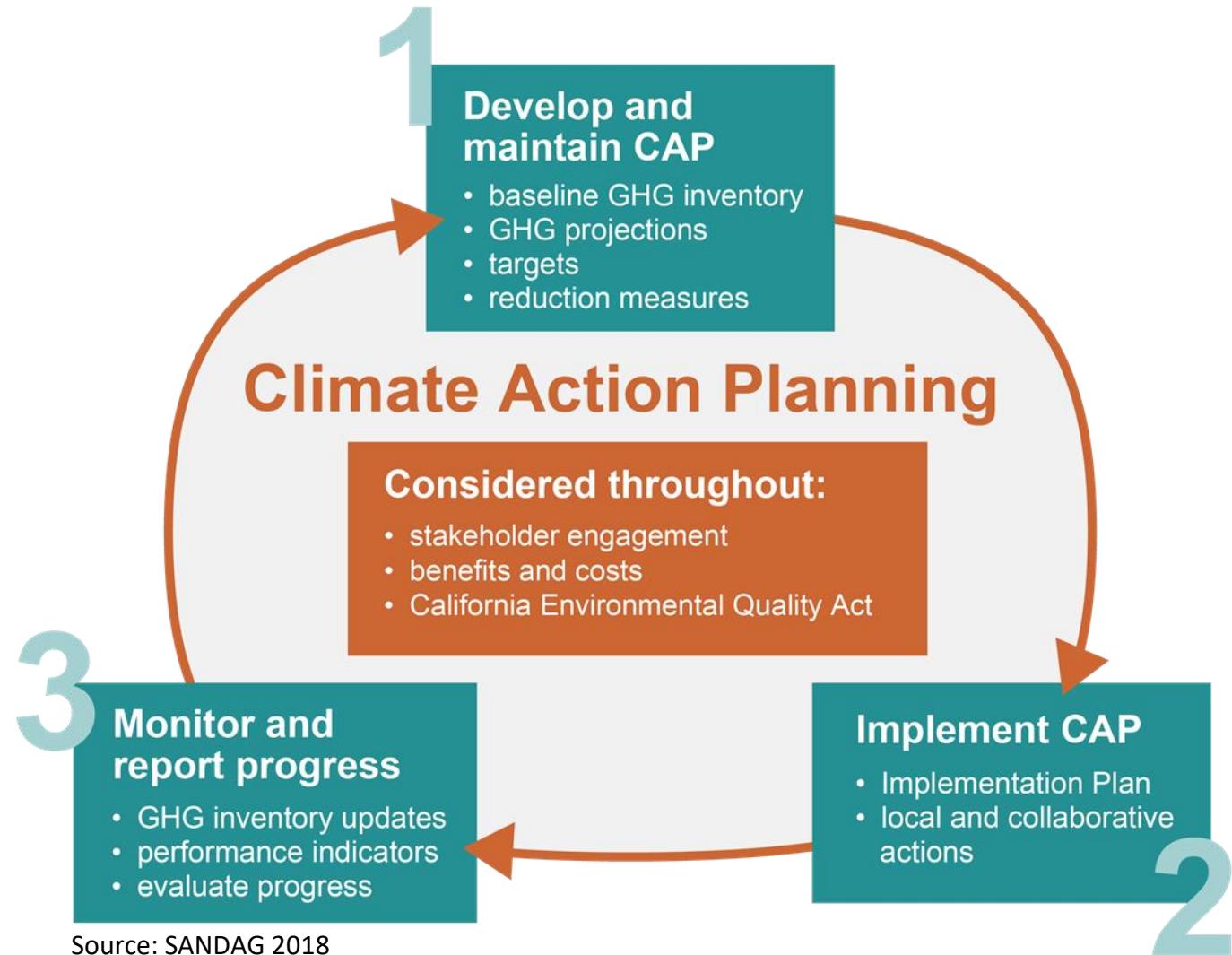


Source: City of San Marcos 2013

- San Marcos' current CAP was adopted in 2013, prior to the passage of Senate Bill 32
- SB32 requires that greenhouse gas emissions meet new, more stringent, reduction targets of 40% below the 1990 levels

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THE CLIMATE ACTION PLANNING PROCESS





DEVELOP AND MAINTAIN CAP

- Updated greenhouse gas emissions inventory, projections and targets
- Greenhouse gas reduction strategies and measures
- Implementation and monitoring of new measures

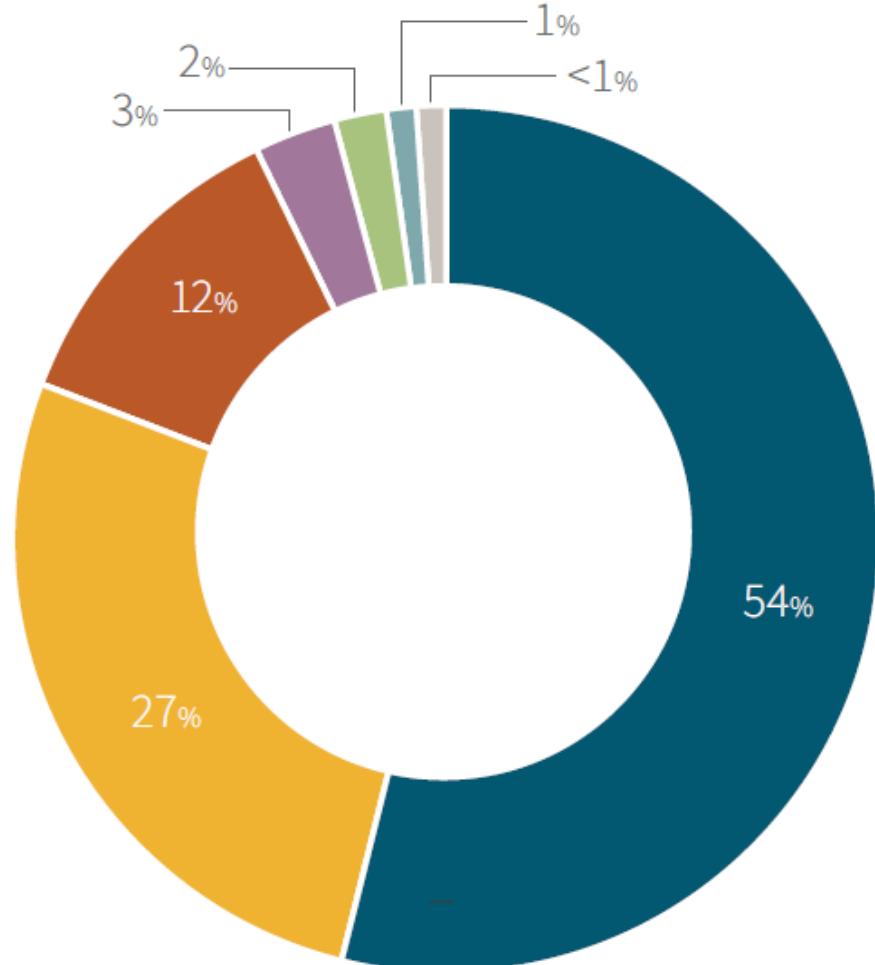
BASELINE GHG EMISSIONS INVENTORY - 2012

Total emissions in 2012:

600,000 MT CO₂e/yr

(metric tons of carbon dioxide equivalent per year)

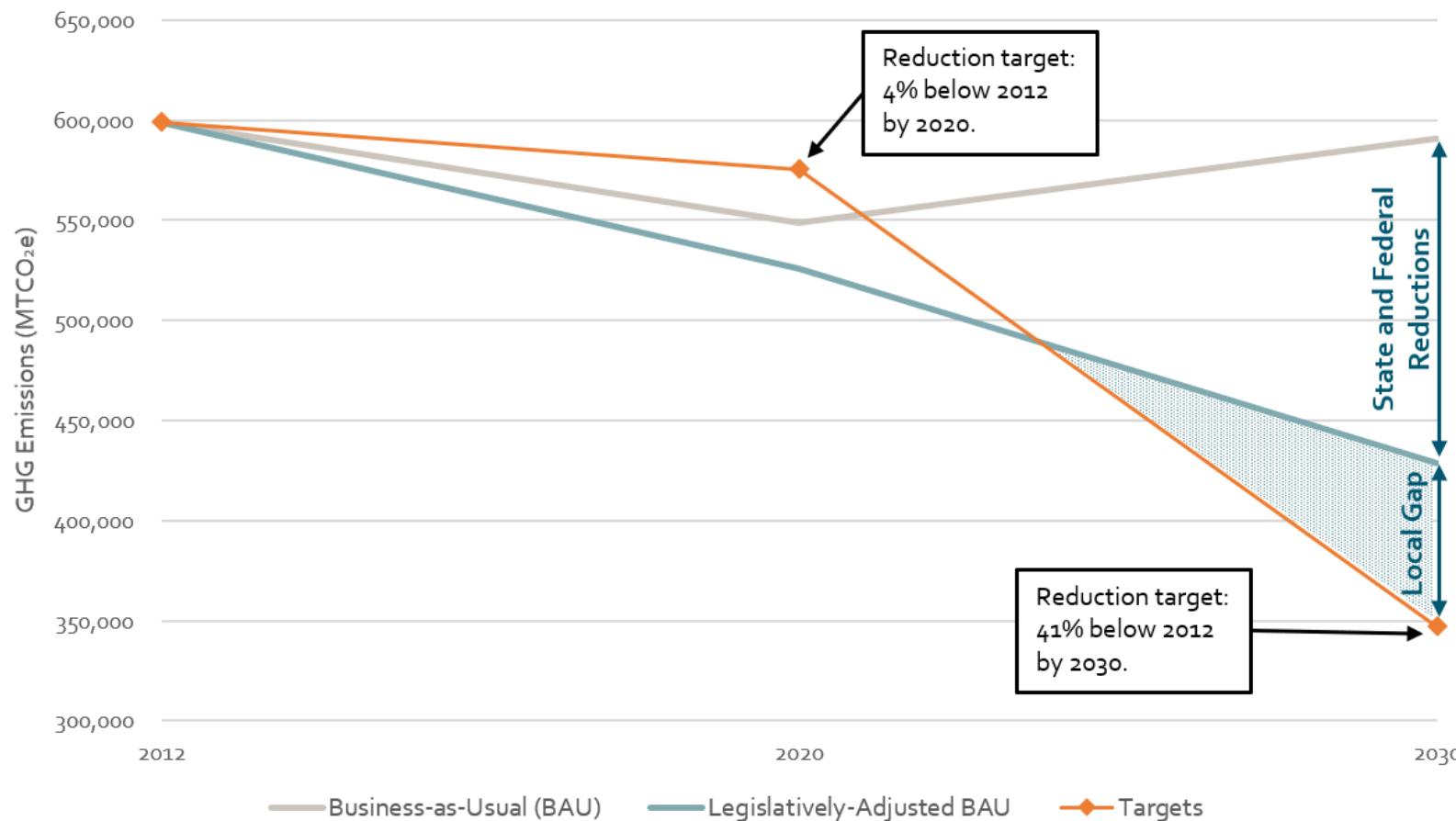
- TRANSPORT
 - On-road Transportation
 - Off-road Transportation
- ENERGY
 - Electricity
 - Natural Gas
- SOLID WASTE
 - Solid Waste
- WATER
 - Water
 - Wastewater



Source: Energy Policy Initiatives Center 2019

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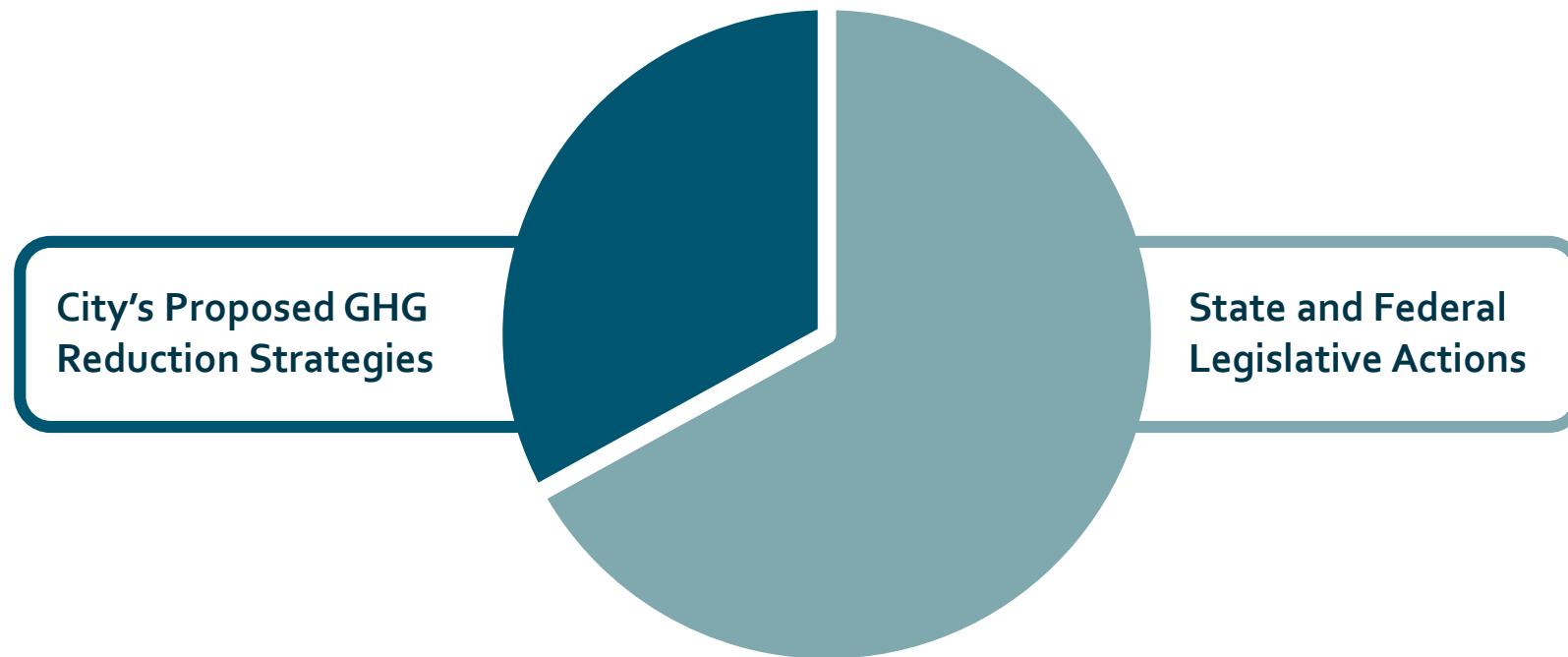
GHG BASELINE, PROJECTIONS AND TARGETS



- Baseline inventory from citywide emissions in 2012
- San Marcos CAP targets:
 - 4 percent below 2012 levels by 2020
 - 41 percent below 2012 levels by 2030 – 82,000 MTCO₂

Source: Energy Policy Initiatives Center 2019

REDUCTIONS ACHIEVED FROM STATE & FEDERAL ACTIONS



- State and Federal programs to reduce emissions
 - Renewable Portfolio Standard
 - California Solar Policies and Programs
 - California Energy Efficiency Programs
 - Federal and State Vehicle Standards



RECOMMENDED GHG REDUCTION STRATEGIES AND MEASURES

- Transportation
- Energy
- Waste and Water
- Carbon Sequestration

TRANSPORTATION

- Emissions generated from:

- Vehicle travel on City roads



- Reductions achieved by:

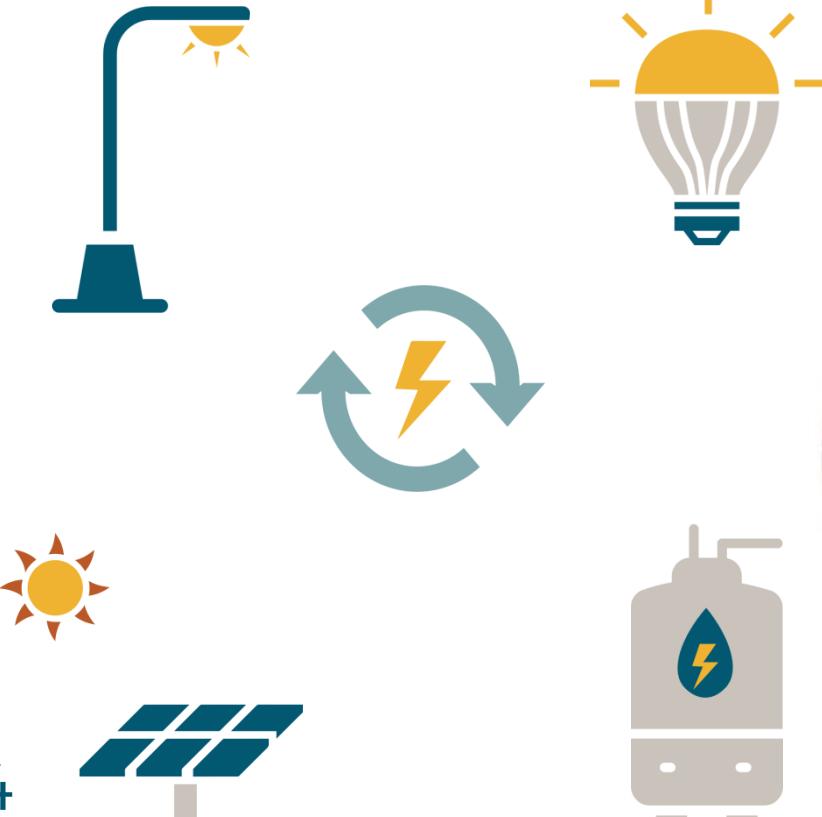
- Transition to fuel-efficient municipal fleet
 - Increase EV chargers in the City
 - Synchronize traffic signals and install roundabouts
 - Increased bicycle and pedestrian travel
 - Adopt TDM Ordinance
 - Increased use of public transit



- Total Reductions from Transportation : 33,782

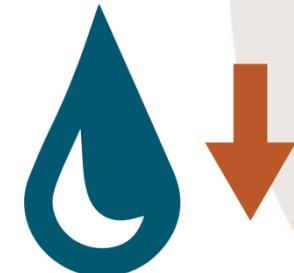
ENERGY

- Emissions generated from:
 - Fuel used to generate electricity
 - Building lighting
 - Space and water heating
- Reductions achieved by:
 - Increasing building efficiency
 - Increasing supply of renewable energy
- Total Reductions from Energy: 36,384



WASTE AND WATER

- Emissions generated from:
 - Solid waste disposal at landfills
 - Fuel used to extract, treat, convey, and distribute water
- Reductions achieved by:
 - Reducing outdoor water use
 - Increasing solid waste diversion from landfills (e.g., recycling or composting)
- Total Reductions from Waste and Water: 11,743



CARBON SEQUESTRATION

- Offset greenhouse gas emissions generated by other sources
- Reductions achieved by:
 - Planting new trees
- Total Reductions from Carbon Sequestration: 245





IMPLEMENT AND MONITOR CAP

- Identified strategies, measures and specific actions based on:
 - Action type
 - Responsible City department
 - Timeframe to implement
 - Staffing
 - Cost to implement the measure

PUBLIC WORKSHOPS



Save the Dates
CLIMATE ACTION PLAN WORKSHOPS

THURSDAY, MAY 9TH
AT 6:00 PM
San Marcos Senior Center

MONDAY, MAY 13TH
AT 6:00 PM
San Marcos Community Center, Main Hall

MONDAY, MAY 20TH
AT 6:30 PM
Planning Commission Workshop:
San Marcos Civic Center,
Valley of Discovery Room

www.san-marcos.net/departments/development-services/planning/climate-action-plan

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- Hosted three workshops – May, 2019
- Surveys at the workshop and online
- Comments helps in development of CAP measures

ENVIRONMENTAL REVIEW

- An environmental review document for the City's updated Climate Action Plan is required by CEQA
- City prepared the Initial Study/Negative Declaration (IS/ND)
- Draft of CAP and IS/ND released for public comment
- Comment period from August 7, 2020 to September 7, 2020
- Comments received and responses included in the Report.

RECOMMENDATION

Recommend to the City Council approval and adoption of the Initial Study/Negative Declaration and update of the Climate Action Plan

Resolution Number: PC 20-4894

QUESTIONS ?

Technical Consultants

- Ascent Environmental Inc.
- Energy Policy Initiative Center (EPIC)



TRANSPORTATION

Strategies and Measures	GHG Reduction Potential in 2030 (MTCO ₂ e)
Transportation	
Strategy 1: Increase Use of Zero-Emission/Alternative Fuel Vehicles	
T-1: Transition to a More Fuel-Efficient Municipal Fleet	32
T-2: Require Electric Vehicle Charging Stations in New Development	2,493
T-3: Install Electric Vehicle Charging Stations at Public Facilities	759
T-4: Provide Grants for Residents and Businesses to Install Electric Vehicle Charging Stations	8,282
Strategy 2: Reduce Fossil Fuel Use	
T-5: Synchronize Traffic Signals	263
T-6: Install Roundabouts	687
Strategy 3: Reduce Vehicle Miles Traveled	
T-7: Participate in the San Diego Association of Government's iCommute Vanpool Program	149
T-8: Develop Bicycle Infrastructure Identified in the City's General Plan Mobility Element	692
T-9: Adopt Citywide Transportation Demand Management Ordinance	262
T-10: Implement the Intra-City Shuttle System	4,932
T-11: Increase Transit Ridership	4,415
T-12: Reduce Parking Requirements for New Residential Developments Near Transit	2,017
T-13: Implement Transportation Demand Management Plans at Existing Employers	8,786
T-14: Transition to an Online Building and Engineering Permit Submittal System	13
Total Reduction from Transportation Measures	33,782

ENERGY, WATER, SOLID WASTE, SEQUESTRATION

Energy	
Strategy 4: Increase Building Energy Efficiency	
E-1: Require New Residential Developments to Install Alternatively-Fueled Water Heaters	1,275
Strategy 5: Increase Renewable and Zero Carbon Energy	
E-2: Require Installation of PV systems at New Non-Residential Developments	773
E-3: Increase Grid-Supply Renewable and Zero-Carbon Electricity	34,336
Water	
Strategy 6: Reduce Water Use	
W-1: Reduce Outdoor Water Use for Landscaping	91
W-2: Reduce Water Use in City Managed Landscape Areas	67
Solid Waste	
Strategy 7: Reduce and Recycle Solid Waste	
S-1: Increase Citywide Waste Diversion	11,585
Carbon Sequestration	
Strategy 8: Increase Urban Tree Cover	
C-1: Increase Tree Planting at City Parks and Public Rights-of-Way	148
C-2: Increase Tree Planting in New Developments	97
Total Reduction from all Measures	82,153