

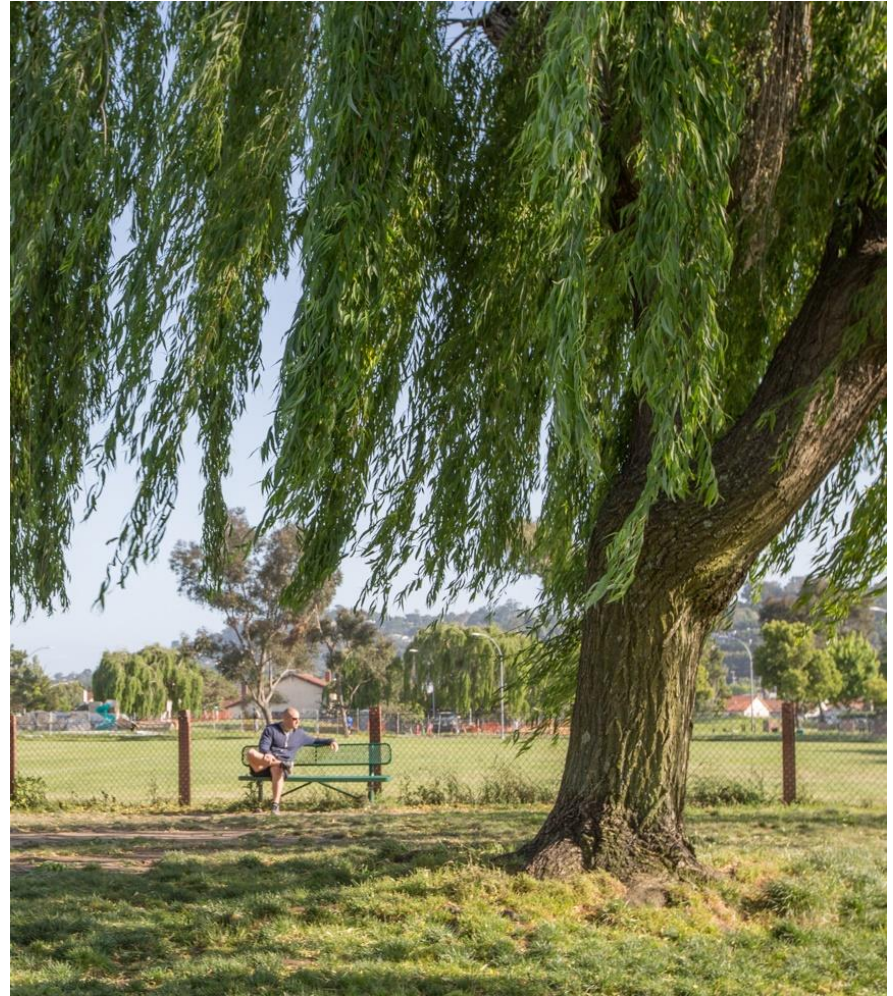
Climate Action Plan Update

San Mateo City Council
Study Session
January 6, 2020



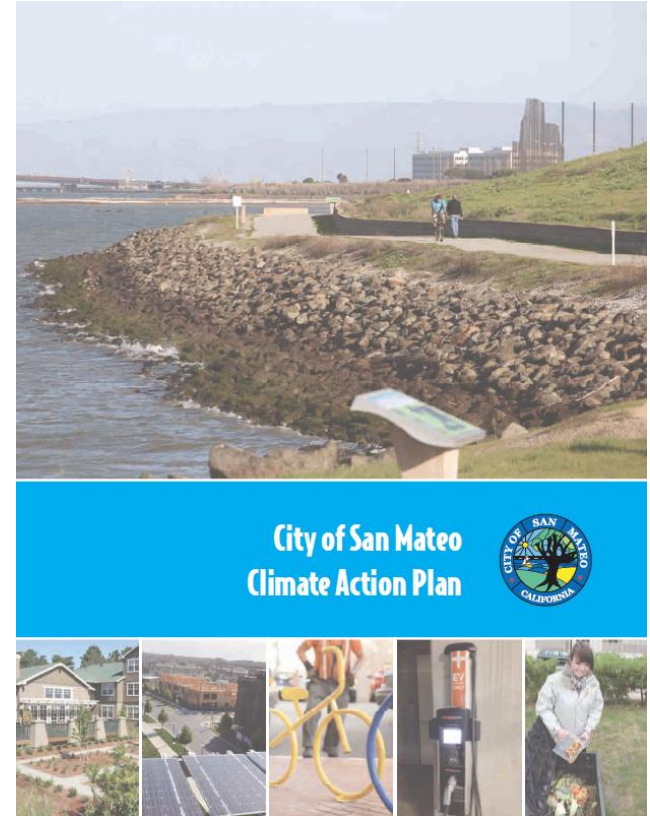
Meeting Objectives

- » Review Draft 2020 CAP.
- » Discuss next steps.



Why Update the CAP?

- » 2015 CAP has been successfully implemented.
 - Reduces emissions to meet 2020 target.
- » State targets changed since 2015.
 - Must update CAP strategies to meet 2030 and 2050 targets.
- » Opportunity to build on City's CAP implementation successes and integrate with General Plan update.

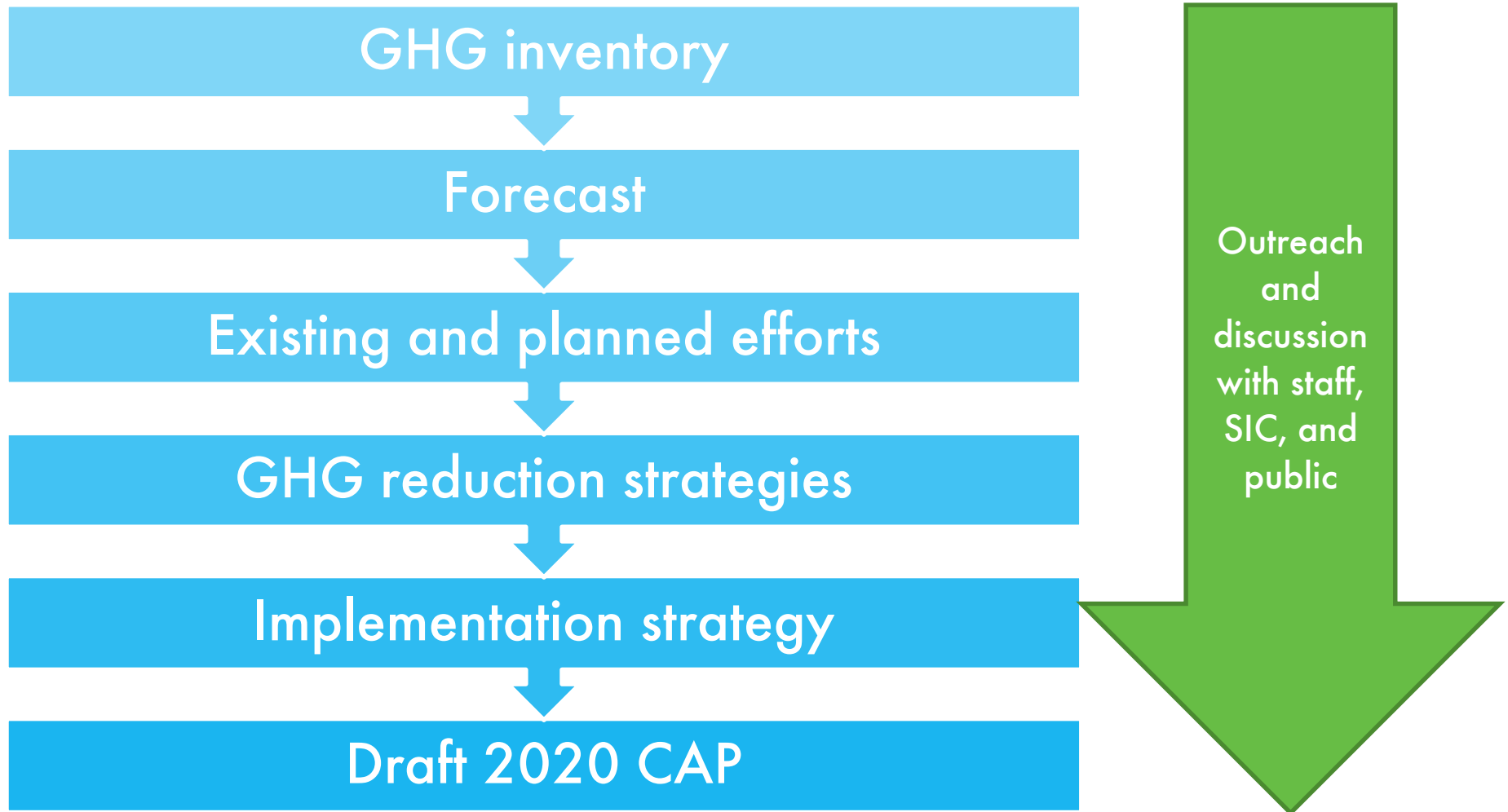


2020 CAP Update Background

- » City issued RFP in August 2018.
- » Selected team led by PlaceWorks with DNV GL.
 - PlaceWorks is General Plan update consultant.
 - DNV GL is consultant to RICAPS.
- » CAP preparation process began in October 2018.



CAP Update Process



2020 CAP Updates

- » Climate change science
- » GHG inventory and forecast
- » Reduction targets
- » Existing and planned activities
- » GHG reduction measures
- » Work program
- » CAP Consistency Checklist



Public Engagement

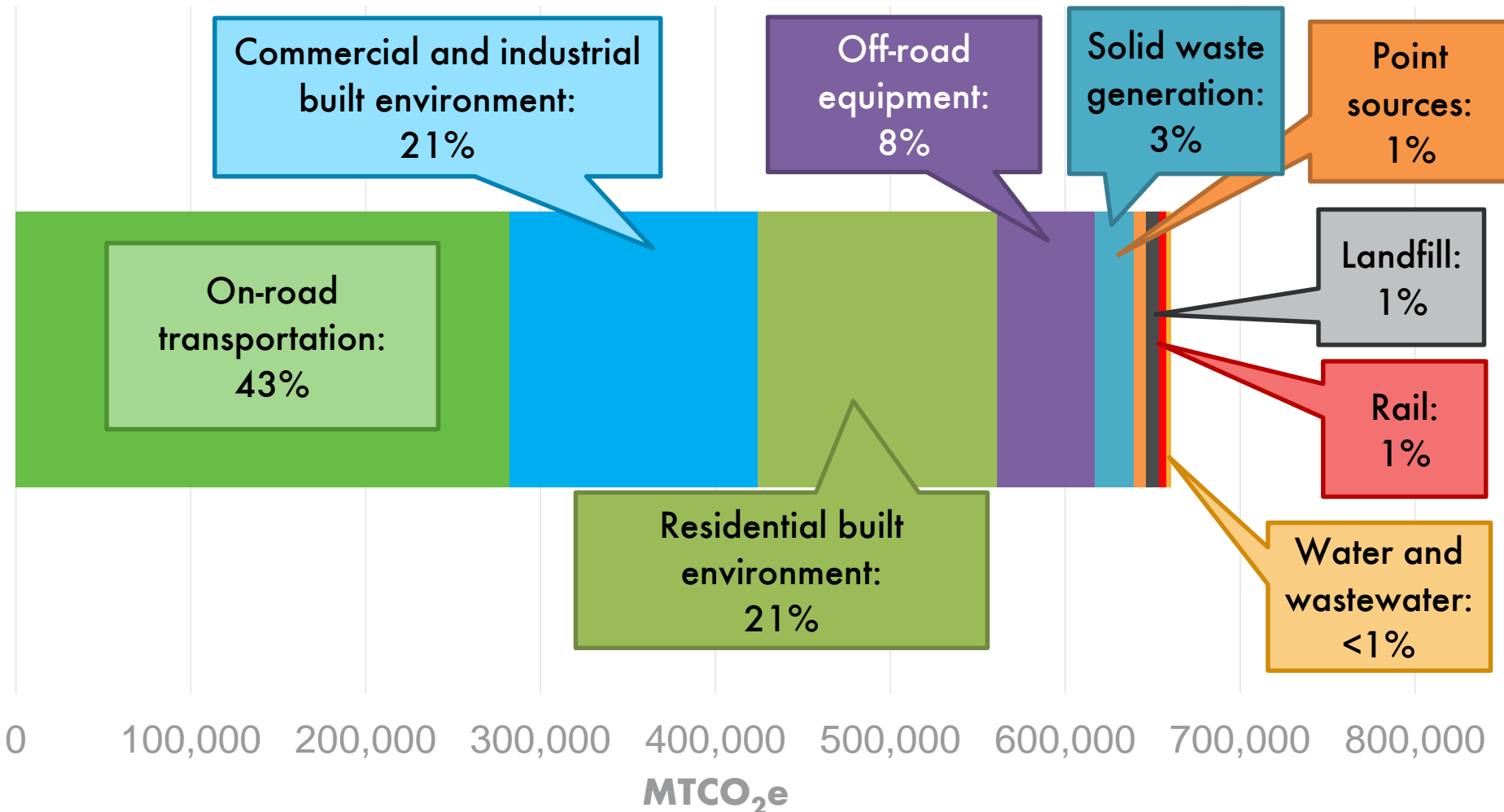
- » Sustainability and Infrastructure Commission
 - Five meetings
- » June 6 community workshop
 - Approximately 50 attendees
- » City staff
- » All feedback incorporated into 2020 CAP content.



SIC meetings

January 9	<ul style="list-style-type: none">• CAP update overview• Inventory results
March 13	<ul style="list-style-type: none">• Forecast results• Existing and planned efforts to reduce emissions• Updates to reduction measures
May 8	<ul style="list-style-type: none">• New and revised GHG reduction measure language
September 11	<ul style="list-style-type: none">• Identification of GHG reduction potential from measures.• Underlying assumptions and methods
December 11	<ul style="list-style-type: none">• Updated CAP document

2005 GHG Inventory



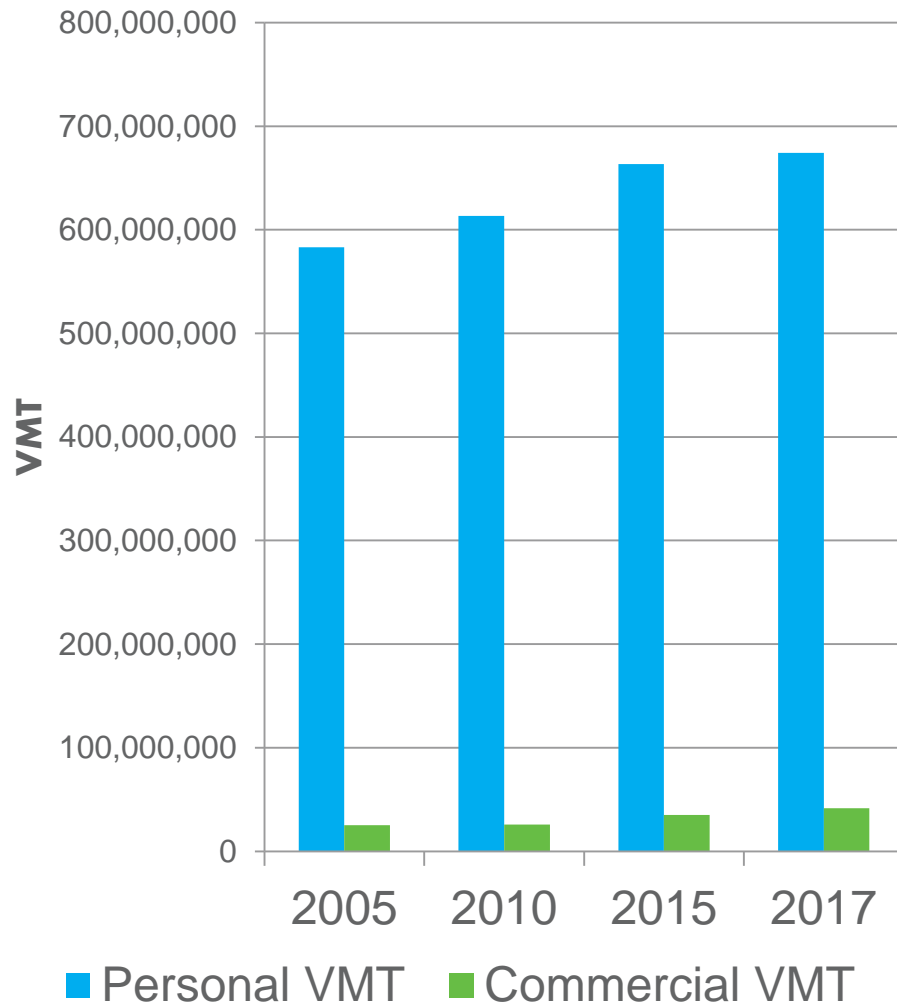
GHG Inventory Comparison

Sector	2005 MTCO ₂ e	2017 MTCO ₂ e
On-road transportation	282,370	269,110
Commercial/industrial built environment	141,960	85,840
Residential built environment	136,690	97,730
Solid waste generation	29,550	23,680
Off-road equipment	55,780	45,030
Point sources	7,390	14,230
Rail	4,350	4,520
Water and wastewater	2,520	1,810
Total	660,600	541,960

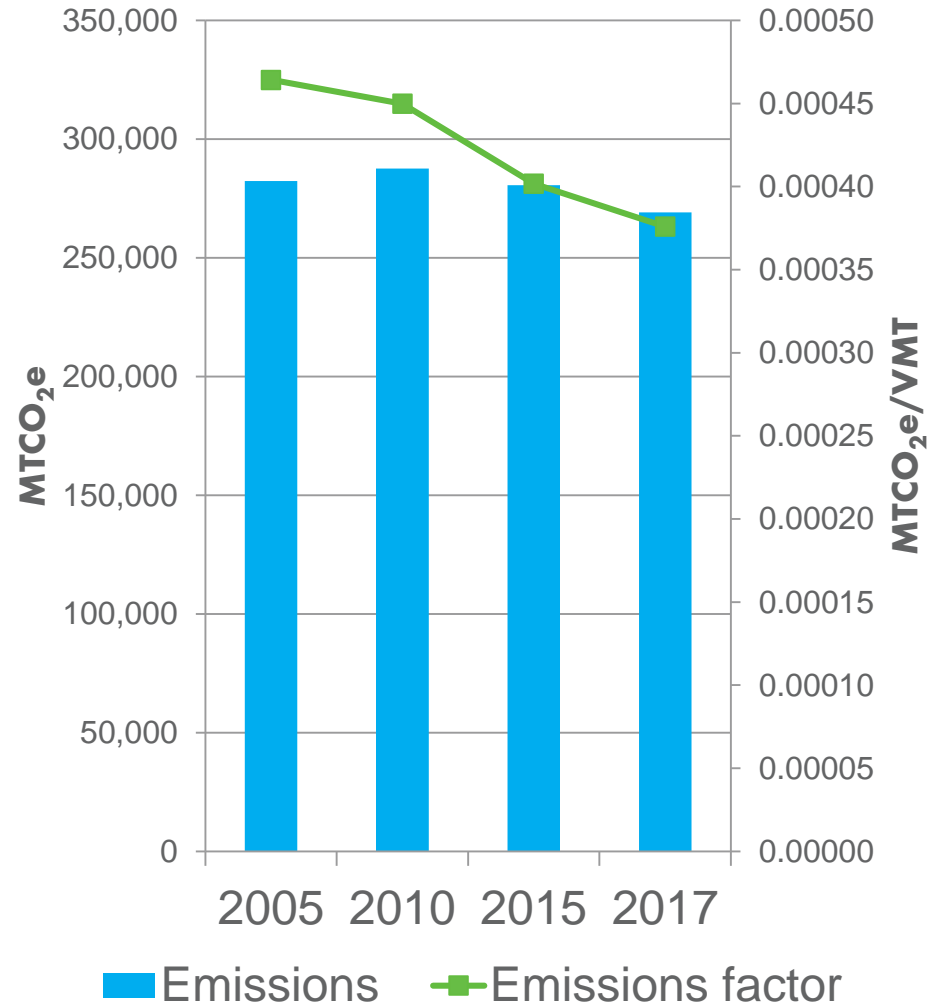
2017: 18%
below
2005 levels

Transportation Emissions Example

Vehicle miles traveled



Vehicle Emissions



Future GHG Emissions

Forecast

- Projects emissions if no action is taken to achieve reductions.
- **23% increase** from 2017 levels by 2050.

Existing and Planned Actions

- Projects emissions with benefit of ongoing and planned local, regional, and state programs.
- Shows expected continued decrease in emissions.
- **14% decrease** from 2017 levels by 2050.

GHG Reduction Targets

- » Updated to follow State recommendations in SB 32 Scoping Plan and guidance.
- » Appropriate for plan-level and project-level efforts.
- » Ensure CAP is consistent with CEQA Guidelines and continues as Qualified GHG Reduction Strategy.
 - Requires EIR addendum.

2020: 15%
below
2005 levels

2030: 4.3
MTCO₂e
per capita

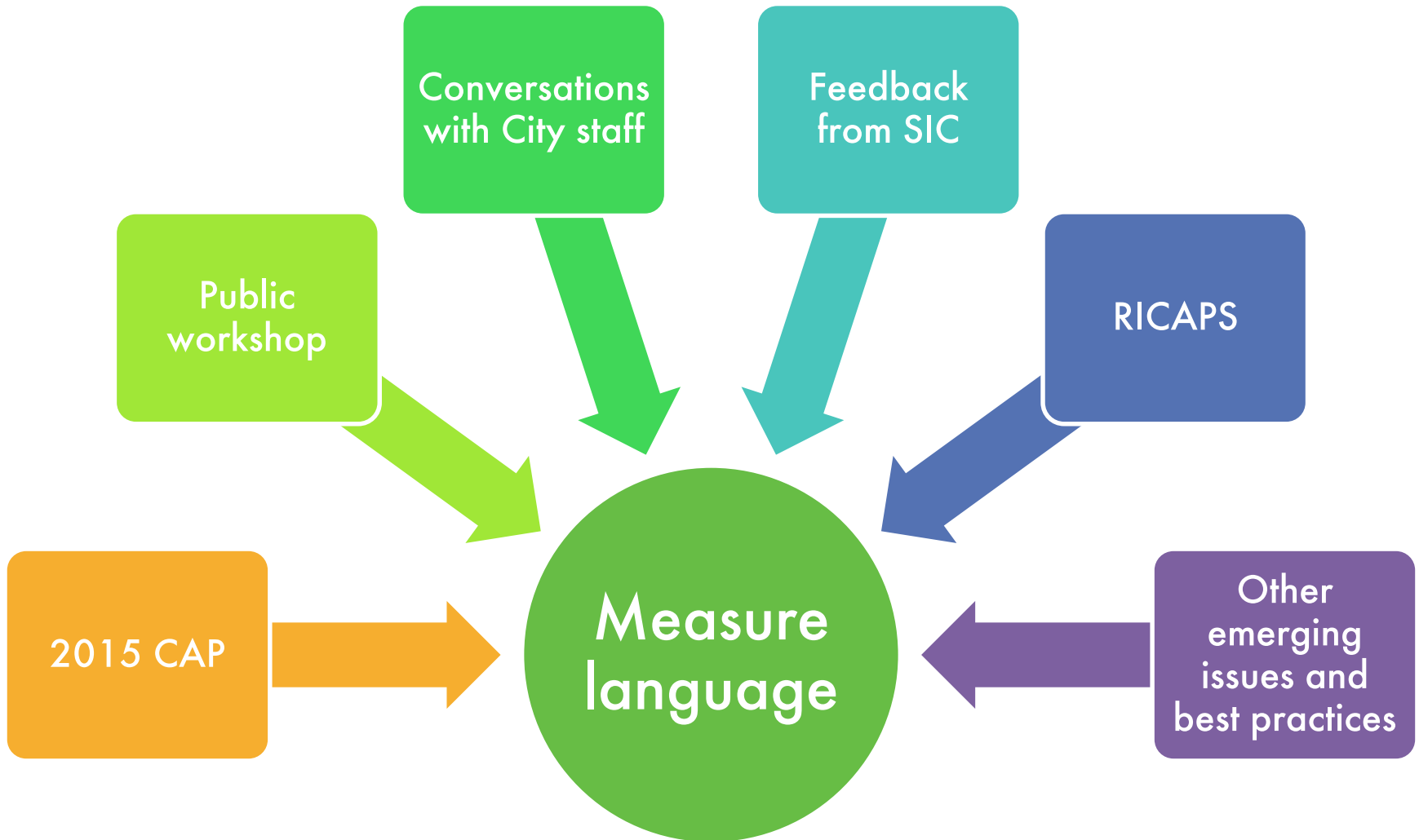
2050: 1.2
MTCO₂e
per capita

GHG Reduction Measure Development

- » Started with measures in 2015 CAP.
 - Revised existing measures as needed.
 - Deleted measures that are completed or no longer relevant.
- » Drafted new measures to fill in gaps.
 - Addressed changes in technology, best practices, and other factors.



GHG Reduction Measure Development



Reduction Measure Categories

Building
electrification

Renewable
energy

Energy efficiency

Municipal energy
efficiency and
electrification

Clean
transportation
fuels

Sustainable
transportation

Solid waste

Water and
wastewater

Off-road
equipment

Measure Reduction Potential

	2020 MTCO ₂ e	2030 MTCO ₂ e	2050 MTCO ₂ e
Building electrification	-1,500	-18,590	-94,380
Renewable electricity	-450	-1,300	0
Energy efficiency	-1,250	-15,960	-34,900
Municipal energy efficiency and electrification	0	-130	-280
Clean transportation fuels	-3,680	-49,980	-95,690
Sustainable transportation	-1,480	-13,580	-41,140
Solid waste	-2,180	-19,920	-28,890
Water and wastewater	-20	-100	-240
Off-road equipment	0	-200	-1,140
Total reductions	-10,560	-119,760	-295,660

Example Strategies

BE 2: All-electric existing buildings.

- » Encourage residents and businesses to purchase electric appliances and devices.
- » Encourage upgrades to electric panels in existing buildings.
- » Support training and outreach to residents, businesses, contractors, vendors, and installers.

SW 3: Waste awareness and source reduction.

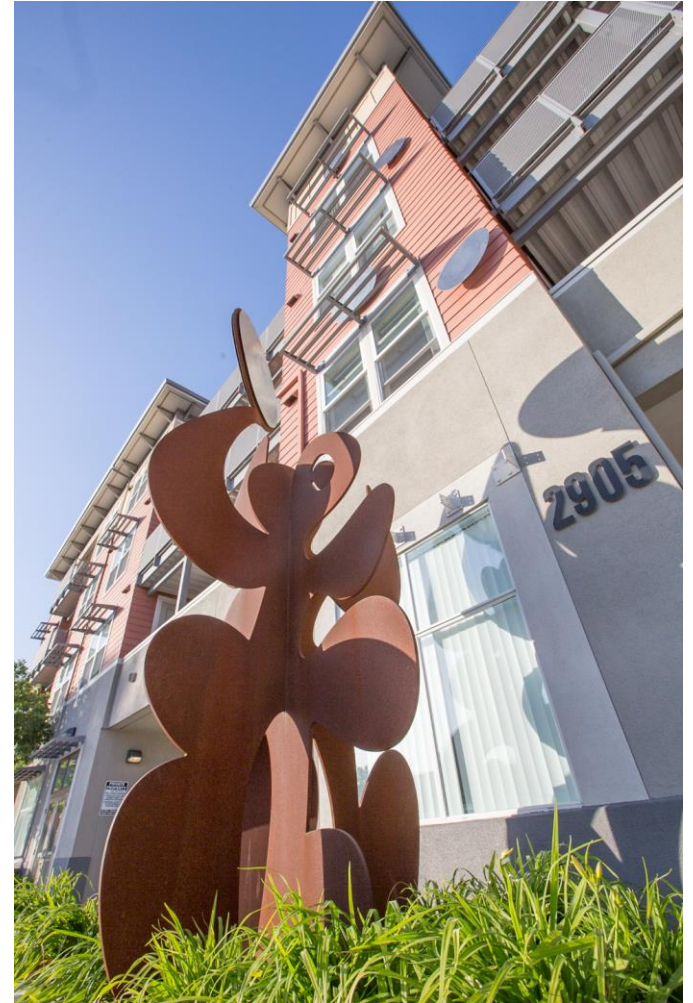
- » Work with partners to establish source reduction and materials reuse programs, and to minimize recycling contamination.
- » Explore bans on some types of single-use or disposable plastics.
- » Continue Team Up to Clean Up program.
- » Encourage restaurants to divert or donate food.

Progress to Goals

	2020	2030	2050
Emissions target	561,510 MTCO ₂ e	4.3 MTCO ₂ e per-capita	1.2 MTCO ₂ e per-capita
Emissions with 2020 CAP	501,110 MTCO ₂ e	2.9 MTCO ₂ e per-capita	1.2 MTCO ₂ e per-capita
Target achieved?	Yes	Yes	Yes

Implementation

- » Dedicated section of 2020 CAP.
- » Implementation measures to help ensure CAP is put into practice.
- » Work plan.
 - Estimated staff time.
 - Time frame.
 - Lead department(s).
- » Annual monitoring and reporting to continue.
- » Future CAP updates every 5 to 10 years.



Next Steps

- » Review and discuss draft 2020 CAP.
- » Provide direction to staff.



Tentative Meetings and Dates

Date	Topics
February	Planning Commission public hearing and review of General Plan Amendment and General Plan EIR Addendum.
To be scheduled	City Council public hearing to review 2020 CAP, General Plan Amendment, and General Plan EIR Addendum.

Questions?

