



CLIMATE ACTION PLANS IN PRACTICE:

San Leandro & Ontario Case Studies

TODAY'S SPEAKERS



FRAN ROBUSTELLI
City Manager
City of San Leandro



TITO HAES
PW Executive Director
City of Ontario



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Regional Manager
Climatec

TODAY'S AGENDA

1. Climate Action Plan Background & Purpose
2. City of Ontario CAP Summary
3. City of San Leandro CAP Summary
4. Q&A

CLIMATE ACTION PLANS: THE WHAT & WHY

What

- A Strategic plan to reduce emissions
- Actionable, measurable goals that foster sustainable communities
- Goals & targets for reaching carbon neutrality and resiliency
- Transparent channel to communicate outcomes to local community

Why

- Mitigate impact of climate change
- Contribute to safer, healthier, & more equitable communities
- Support economic development
- Streamline environmental review of GHG emissions
- Satisfy CEQA requirement for general plan updates

CAP BACKGROUND

California cities adopt Climate Action Plans (CAP) to help meet the State's long-term GHG reduction targets.

**EXECUTIVE ORDER
& AB32**

**EXECUTIVE
ORDER**

**CLIMATE
CHANGE
SCOPING
PLAN**

SB 375

**CALIFORNIA
CAP & TRADE
PROGRAM**





COMMUNITY CAP SUMMARY

Adopted 2014;
Updated 2022

Purpose:
Design a feasible
strategy to reduce
GHG emissions per
State mandates

GHG
Baseline & Goal

2008 Baseline:
2.5 million MTCO₂e



2050 Goal:
391,800 MTCO₂e

GHG
Reduction Progress

Ontario is exceeding
reduction target with
33% decrease in
GHG emissions
relative to 2008 levels

GHG INVENTORIES | BASELINE & FORECAST

Absolut Emissions Target

Per Capita Emissions Target

Target

MTCO₂e

MTCO₂e

2008 Baseline

2,503,816

8.25 MTCO₂e per person
(service population)

2030 Target

1,175,390

6.0 MTCO₂e per person
(service population)

2050 Target

391,800

2.0 MTCO₂e per person
(service population)

CHALLENGES

Aging Municipal
Infrastructure

Limited
Funding & Staff

Community
Pressure

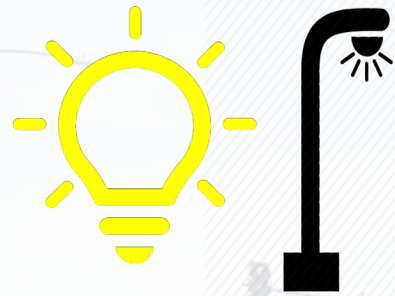
MUNICIPAL CAP (MCAP) INITIATIVE



Smart City Technology

Reduction Strategy 11

- Wireless Mesh Network
- Street light monitoring & dimming control



LED Street & Building Lighting

Reduction Strategy 11

- ~45,000 interior/
exterior building &
streetlights modernized



Heating & Cooling Systems

Reduction Strategy 7

- Modernized over 100
HVAC units citywide

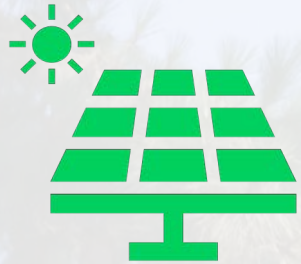


Building Automation Systems (BAS)

Reduction Strategy 7

- City-wide BAS HVAC
upgrades

MUNICIPAL CAP (MCAP) INITIATIVE



Renewable Energy (Solar PV)

Reduction Strategy 3

- 1.8MW solar array at Convention Center & Police



Battery Energy Storage

Reduction Strategy 3

- Stores solar production for future use



Electric Vehicle Charging

Reduction Strategy 12

- 4 EV charging stations



Community Outreach

Reduction Strategy 26

- Sustainability website
- Press releases

SUSTAINABILITY MEASURES IMPLEMENTED



MUNICIPAL CAP (MCAP) INITIATIVE

COMPREHENSIVE SUSTAINABILITY PROGRAM FINANCIALS

- Program Investment: \$31M
- Lifecycle Savings: \$75M | 260,704,125 kWh
- Lifecycle GHG reduction: 69,840 MTCO₂e
- Funding Sources:
 - Utility Incentives
 - Self Generation Incentive Program (SGIP)
 - CEC ECAA 1% Funding
 - Private Sector Funding

COMMUNITY ENGAGEMENT

- Sustainability Website: SmartOntarioCA.com
- News & Press Releases
- 'Smart Ontario Goes Green' celebration



GHG INVENTORIES | BASELINE & FORECAST

Sector	2008	2016	2019	Percentage Change, 2008–2019
Transportation	3.51	3.00	3.04	-13%
Nonresidential energy	2.77	1.80	1.29	-54%
Residential energy	0.72	0.55	0.50	-30%
Solid waste	0.28	0.22	0.27	-4%
Off-road equipment	0.17	0.08	0.21	23%
Agriculture	0.63	0.21	0.16	-75%
Water and wastewater	0.15	0.08	0.06	-56%
Land use and sequestration	0.01	0.00	0.00	-77%
Total annual per capita MTCO_{2e}	8.25	5.95	5.54	-33%

City of **San**
Leandro



CAP SUMMARY

Adopted 2009; Updated 2021

Purpose: Design a feasible strategy to reduce community GHG emissions and adapt to changing climate

GHG Baseline & Goal

2008 Baseline:
720,990 MTCO₂e



2050 Goal:
214,170 MTCO₂e
(70% reduction)

Guiding Principles

- Resiliency
- Sustainability
- Equity
- Community Engagement

CHALLENGES

Limited
Funding &
Staff

Community
Equity &
Resilience

Aging
Infrastructure

Wide-
Impacting
Hazards
(Health, wildfire,
day-to-day costs)

COMMUNITY CAP ENGAGEMENT



Building trust, relationships, community ownership, and collaboration with community partners



COMMUNITY CAP INITIATIVES

EQUITY

- Wechat channel for 500 Chinese residents to receive updates
- Establish resilience hub in each council district to guide project development
- Climate action plan festival in 2022



RESILIENCE

- \$1.49M grant for tree planting (target = 5,000 trees)
- Tree master plan
- Key infrastructure power back-up

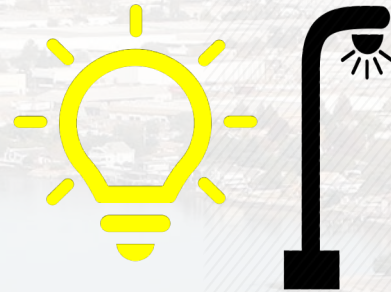
MUNICIPAL CAP (MCAP) SUMMARY



Smart City Technology

Adaptation Strategy 4

- Wireless Mesh Network
- Street light monitoring & dimming control



LED Street & Building Lighting

Reduction Strategy ME-1

- Modernized all streetlights & interior/exterior building lights
- Streetlights controlled remotely



Heating & Cooling Systems & Indoor Air Quality

Reduction Strategy ME-1

- Modernized all HVAC citywide
- MERV-17 air filtration

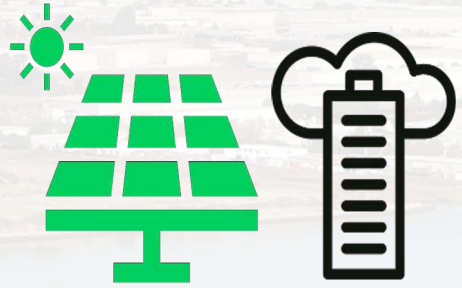


Building Automation Systems (BAS)

Reduction Strategy ME-1

- City-wide BAS HVAC upgrades

MUNICIPAL CAP (MCAP) SUMMARY



**Renewable Energy
Battery Storage &
Microgrid**

**Reduction Strategies
ME-2 & ME-3
Adaptation Strategy 5**

- 1.1 MW Solar array at WPCP
- Stores energy for continuity of critical services



**Water and
Wastewater
Improvements**

Adaptation Strategy 5

- New process equipment
- Digester mixing improvements
- Reduce equipment maintenance



**Water
Conservation and
Park Irrigation**

Adaptation Strategy 5

- Network controls
- Operational efficiency



**Renewable
Natural Gas**

Reduction Strategy 1

- Convert/clean methane to become RNG
- Additional City revenue
- High strength waste receiving from local industry

MCAP SUSTAINABILITY MEASURES IMPLEMENTED



MUNICIPAL CAP (MCAP) INITIATIVE

INVESTMENT & FUNDING PLAN (3 PHASES)

- Program Investment
 - \$23.1M
- Lifecycle Savings
 - \$37.3M | 93,446,430 kWh
- Lifecycle GHG reduction
 - 25,033 MTCO₂e
- Funding Sources:
 - Utility Incentives
 - \$2M CEC Grant
 - Federal Renewable Fuel Standard Program
 - Sale of Renewable Natural Gas (RNG)
 - American Rescue Plan Act (ARPA)
 - CEC 1% Loan
 - City Capital



MCAP – COMMUNITY AWARENESS

SUSTAINABILITY WEBSITE

▪ SmartCitySL.org

Projects

The Future

News

[Home](#) > [Government](#) > [Departments](#) > [Public Works](#) > Smart City San Leandro

Smart City San Leandro

The future of cities is happening in San Leandro. In the midst of the SF Bay Area, this city of 90,000 is implementing technologies and infrastructure to create a brighter future for residents and businesses. From a municipal fiber network to meshed street lights, while many talk about creating smart cities, San Leandro is actually implementing.



San Leandro Receives Smart 50 Award

February 2nd, 2018



San Leandro Receives Climate Protection Award for Solar Power Resiliency Program

February 2nd, 2021

EBCE CAP COLLABORATION



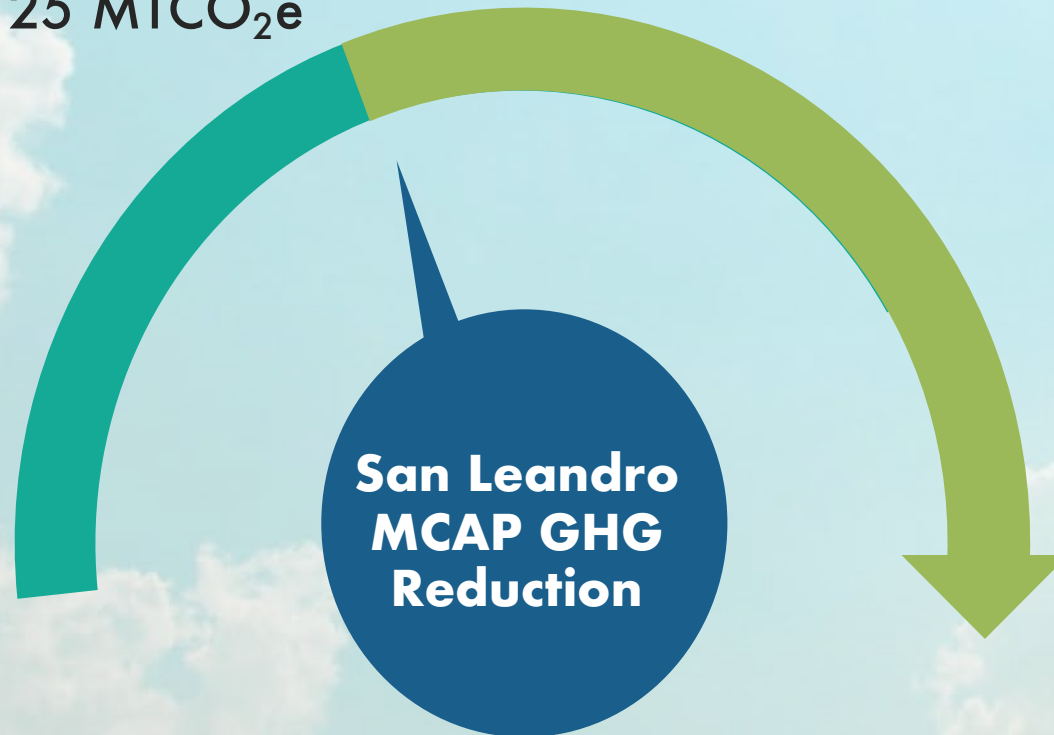
**EAST BAY
COMMUNITY
ENERGY**

- Partnership with EBCE for
- EV Charging infrastructure
 - Fleet electrification
 - Additional Solar PV

MCAP - GHG EMISSION PROGRESS

MPAC Progress

25 MTCO₂e



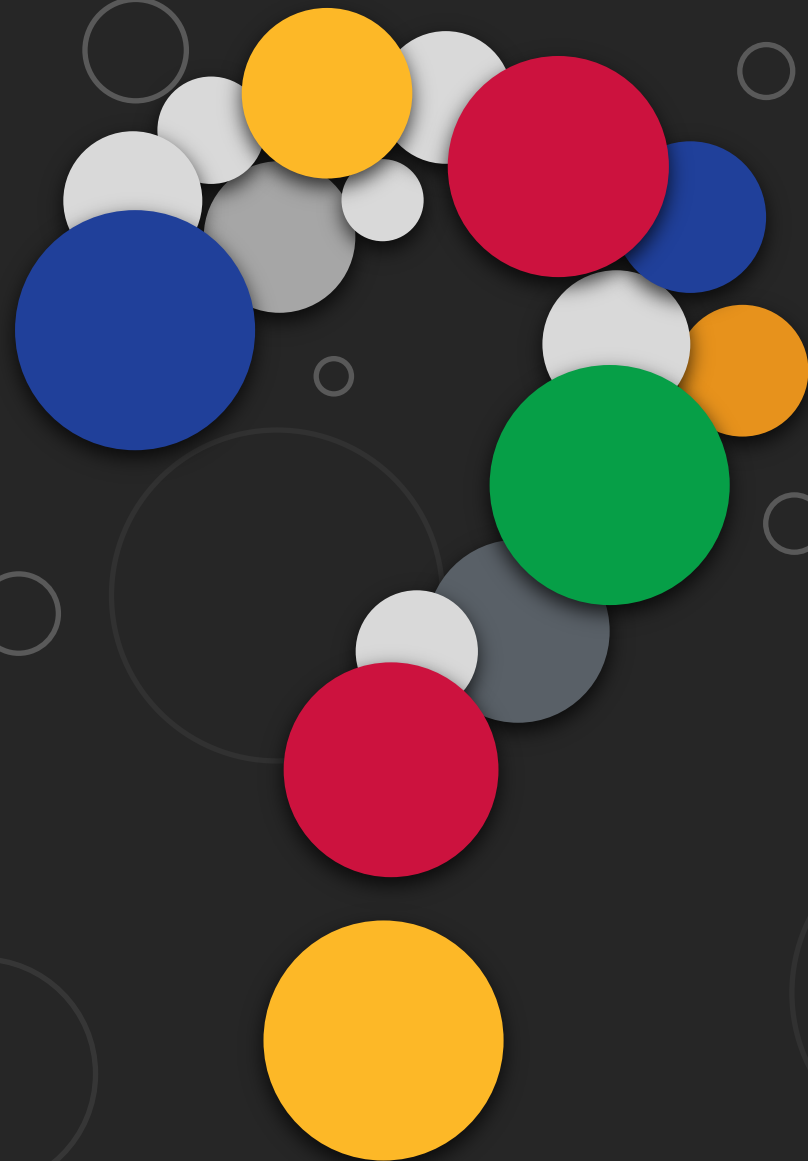
MCAP GHG Goal

70 MTCO₂e

GHG EMISSION REDUCTION PROGRESS

Sector	2005 MTCO ₂ e	2010 MTCO ₂ e	2015 MTCO ₂ e	2017 MTCO ₂ e	Change in Emissions, 2005–2017
Transportation	363,550	372,220	353,130	344,290	-5%
Nonresidential energy	182,950	146,600	96,490	88,620	-52%
Residential energy	101,760	100,650	83,830	73,320	-28%
Waste	46,910	40,080	38,880	34,860	-26%
Off-road	23,190	22,860	30,940	26,970	16%
BART	2,920	3,030	3,720	3,710	27%
Water and wastewater	-	2,410	2,470	1,820	-25%*
Total	720,990	687,860	609,460	573,580	100%
Biomass sequestration †	-530	-530	-530	-530	0%

Overall reduction
percentage of
20+%



QUESTIONS?

For more information & resources, contact:
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