

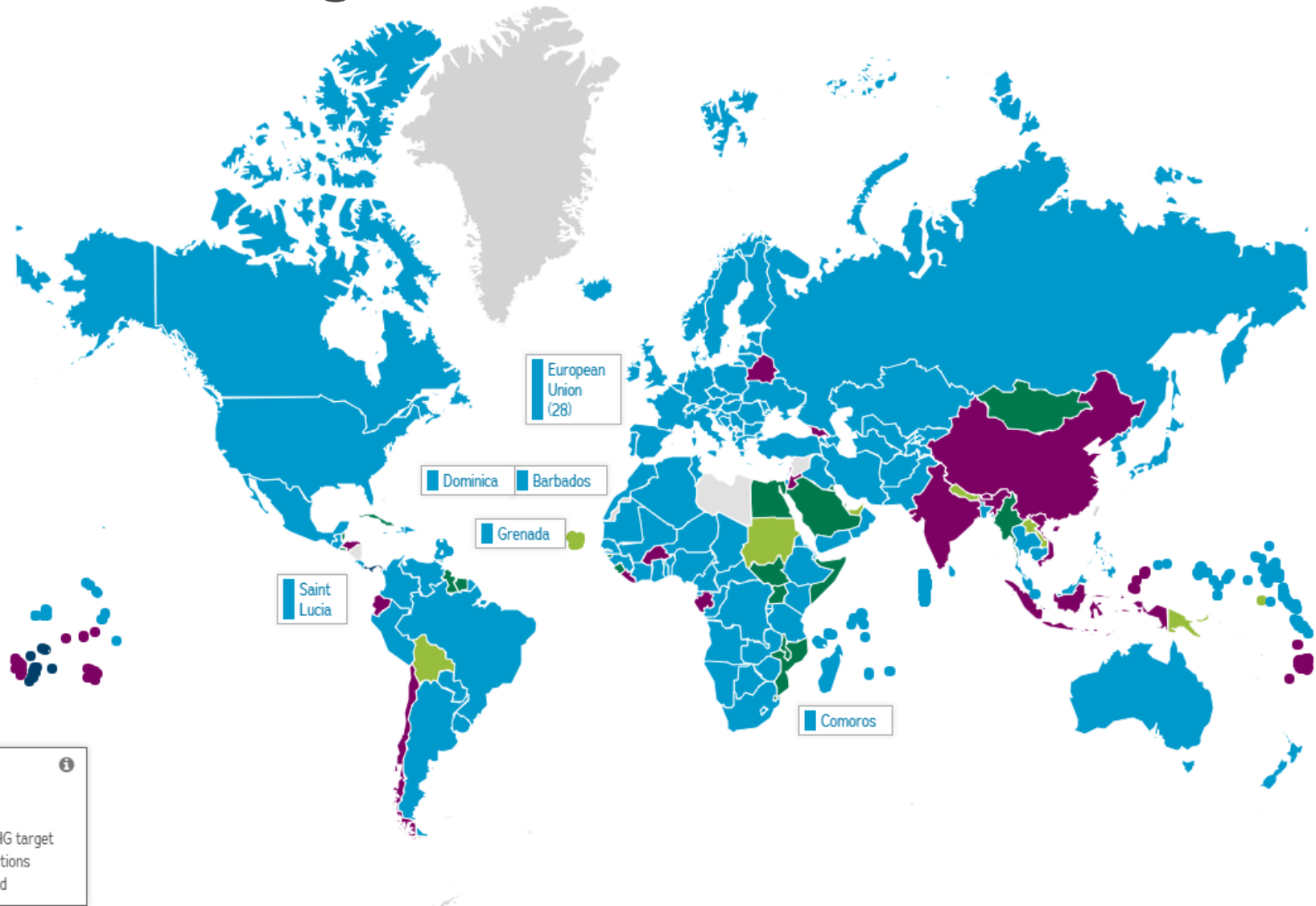
SUSTAINABILITY OVERVIEW

Jennifer Venema

Sustainability Manager, Department of Public Works
City of Sacramento

May 7, 2018

The Paris Agreement

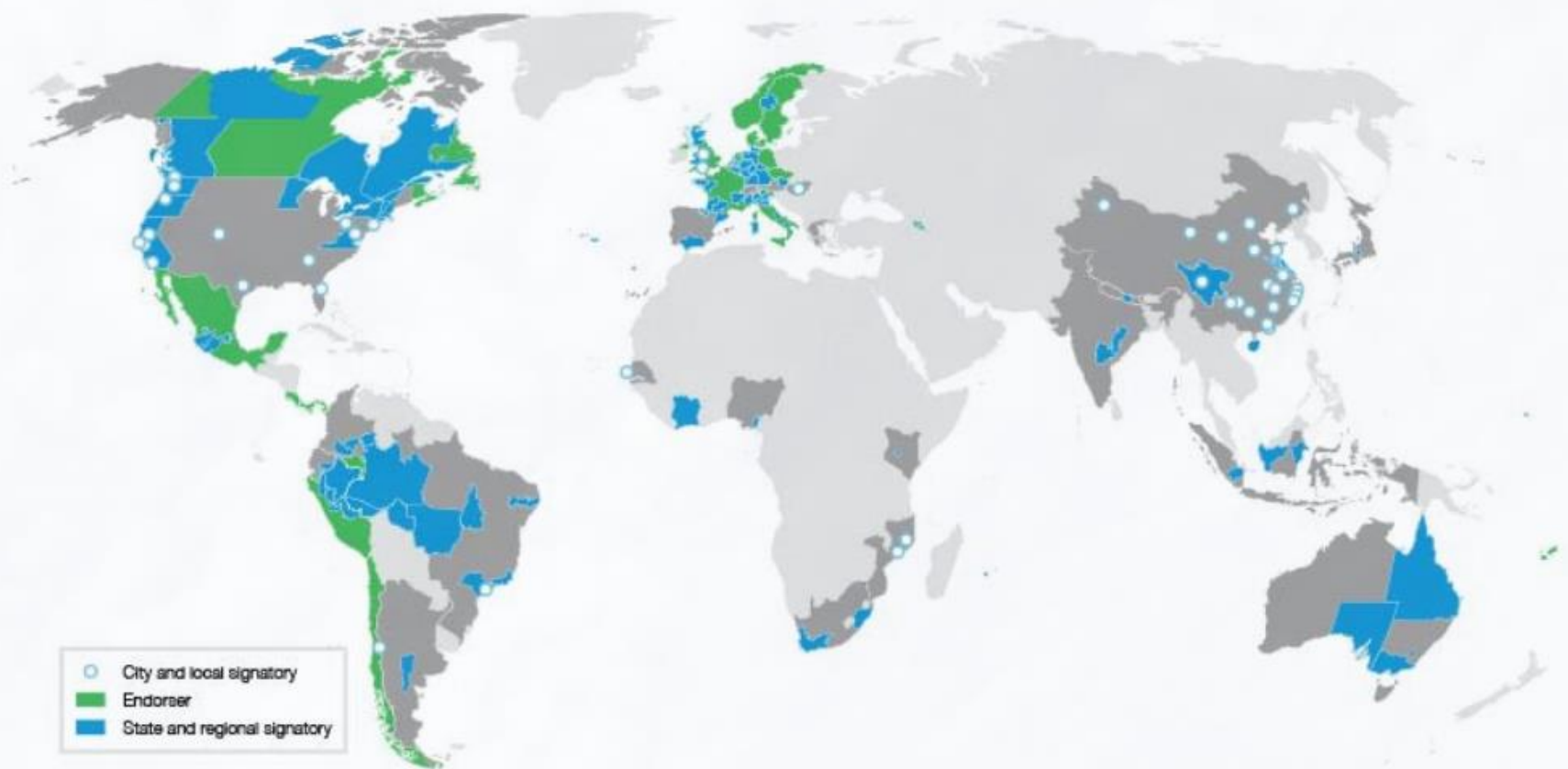


Timeline

1992	UN Conference on Environment and Development - Rio Declaration
1997	Kyoto Protocol adopted
2005	Kyoto Protocol entered “into force” US Conference of Mayors Climate Protection Agreement
2006	California’s Global Warming Solutions Act (AB 32) adopted
2015	Under2 MOU Subnational Climate Agreement COP 21 - Paris Agreement adopted
2016	Paris Agreement ratified and “entered into force” SB 32: Expansion of AB 32



SECRETARIAT THE °CLIMATE GROUP



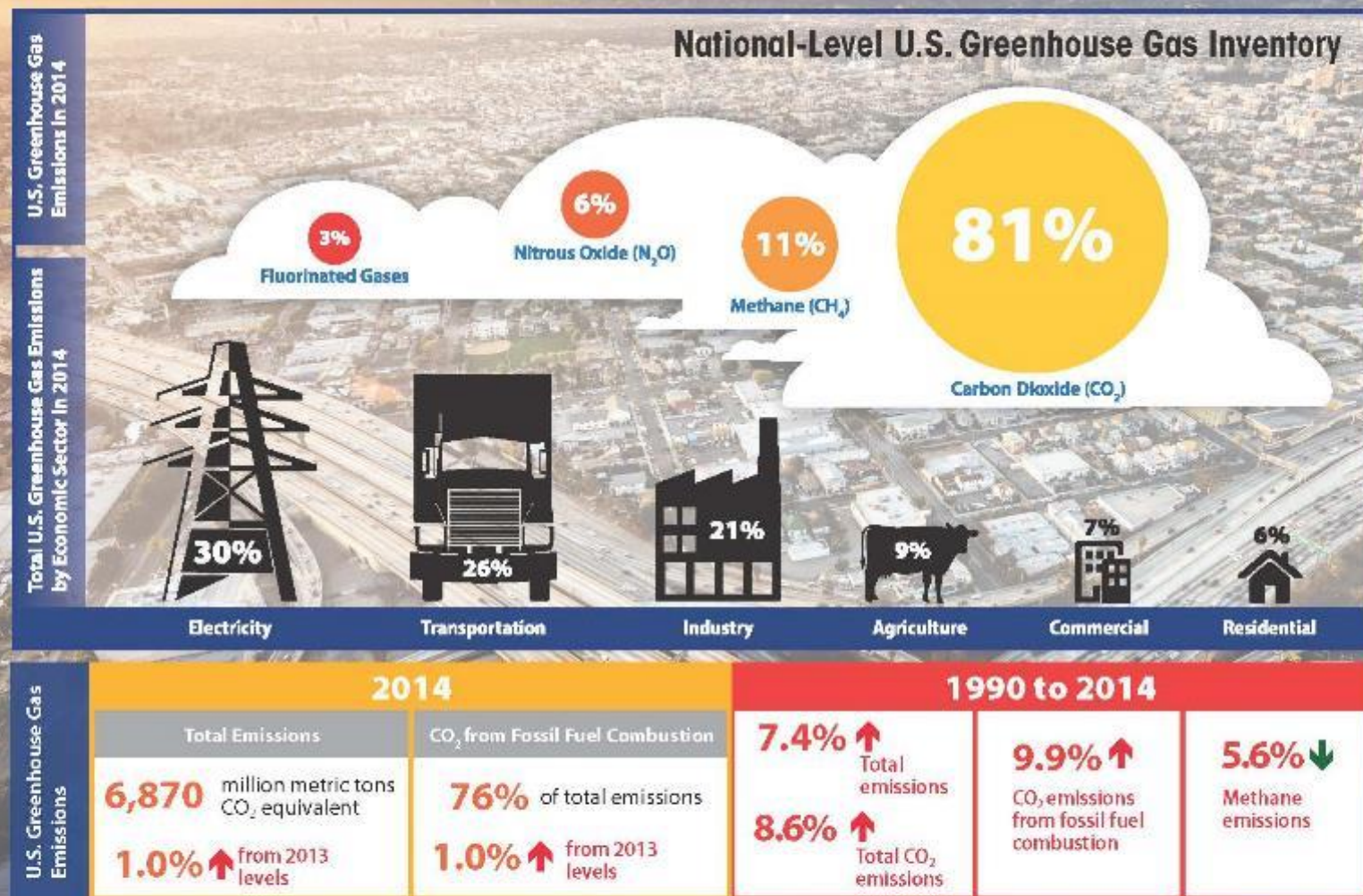
UNDER2 SIGNATORIES AND ENDORSERS

#Under2Coalition

Under2MOU.org

Fast Facts

1990-2014



To learn more about the inventory, scan the QR code to the left, visit www.epa.gov/climatechange/emissions/usinventoryreport.html, or explore the data at www.epa.gov/climatechange/ghgemissions/inventoryexplorer.



April 2016
EPA 430-F-16-002

Gov. Brown signs sweeping legislation to combat climate change



Gov. Jerry Brown signs legislation to advance California's nation-leading efforts to address climate change. See Brown's full speech [here](#).

By **Chris Megerian and Liam Dillon**

SEPTEMBER 8, 2016, 3:55 PM

California will become a petri dish for international efforts to slow global warming under legislation signed by Gov. Jerry Brown on Thursday, forcing one

<http://www.latimes.com/politics/la-pol-ca-jerry-brown-signs-climate-laws-20160908-snap-story.html>



ADVERTISEMENT

In Case You Missed



Trump wins stunning upset will 'no longer' less than the

12:30 AM

California's GHG Emissions

Figure 1. California Total and Per Capita GHG Emissions

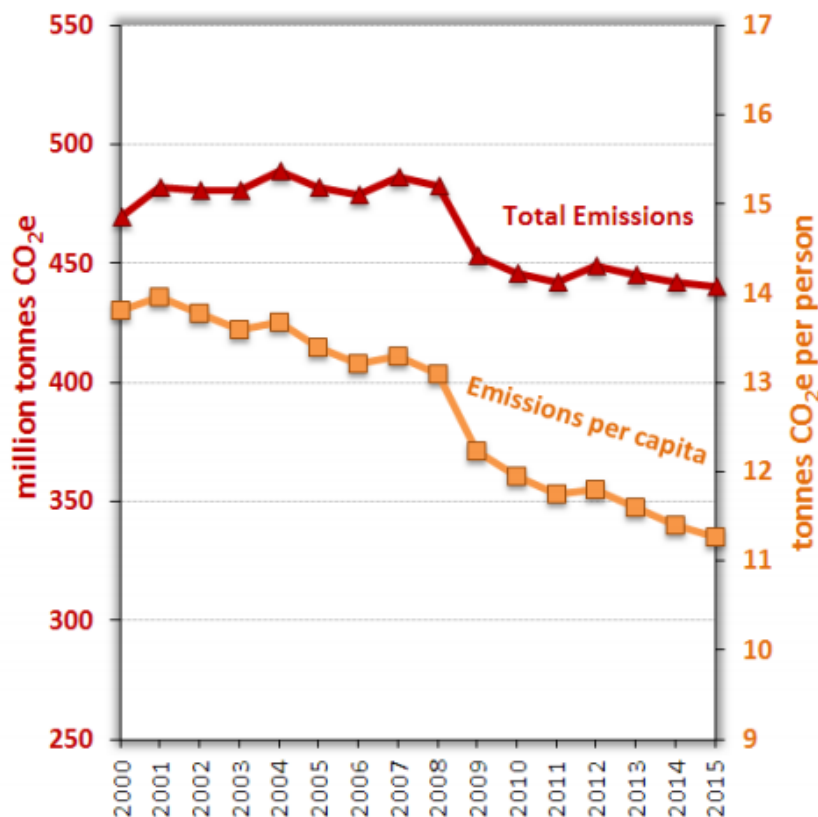
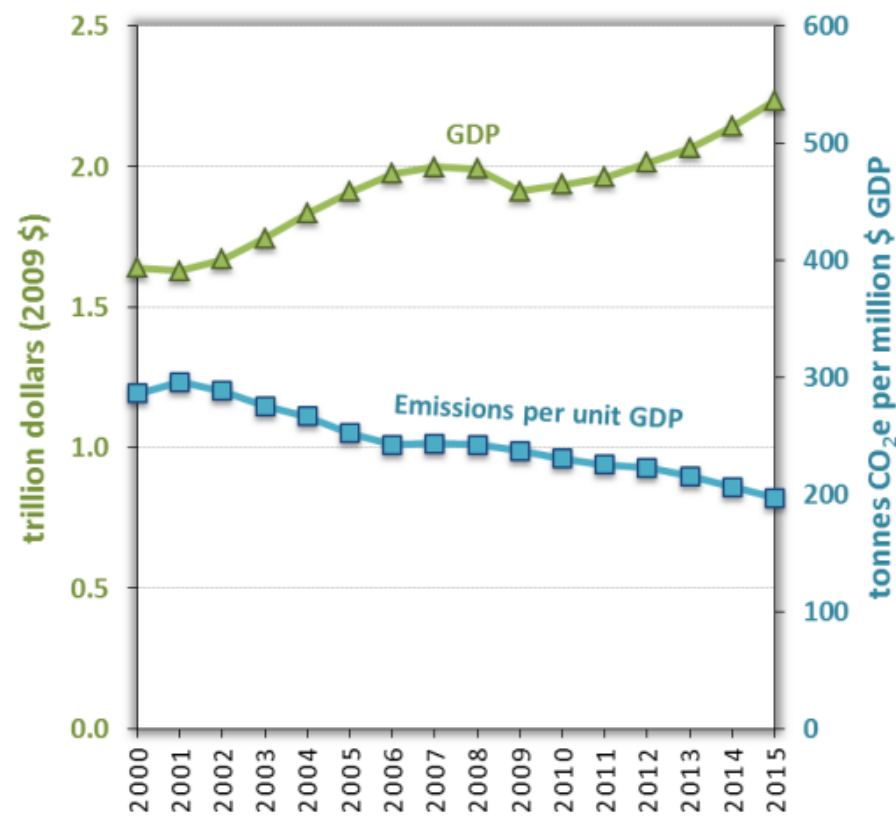


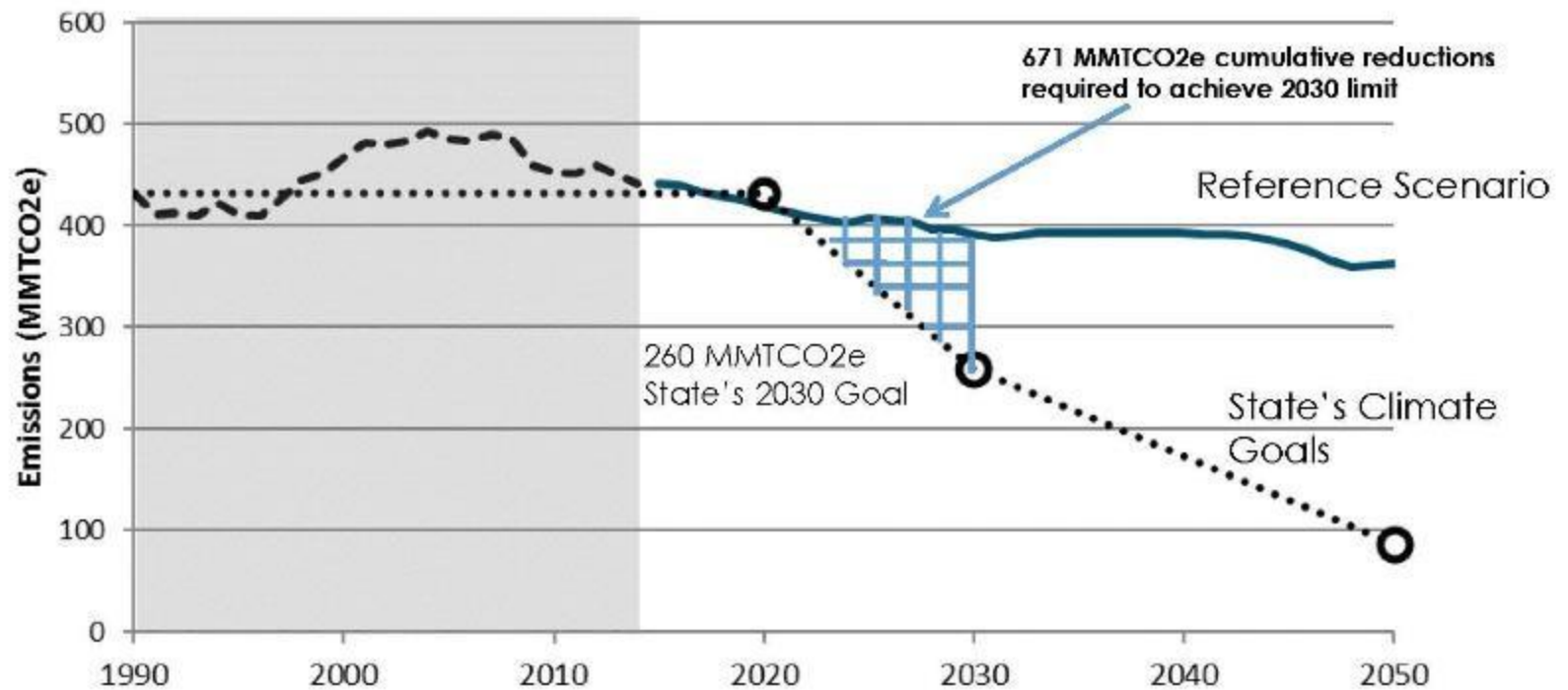
Figure 2. Carbon Intensity of California's Economy



California Air Resources Board (ARB) 2017 Edition California GHG Emission Inventory:

https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2015/ghg_inventory_trends_00-15.pdf

Updated Reference Scenario



From the ARB Scoping Plan Update meeting, 11/07/16

<https://www.arb.ca.gov/cc/scopingplan/meetings/110716/scopingplanpresentation.pdf>

Sacramento



Local Policy Context

The City is committed to improving health and sustainability of the community through improved regional air quality and reduced GHG emissions that contribute to climate change
General Plan Environmental Resources Goal 6.1

GHG reduction targets of

15% below 2005 community-wide levels by 2020

22% below 2005 municipal levels by 2020

Climate Action Plans (CAPs)

MARCH 2009

2030 General Plan policies

FEB. 2010 (UPDATED JUNE 2016)

Internal Operations CAP

FEB. 2012

Community-wide CAP

MARCH 2015

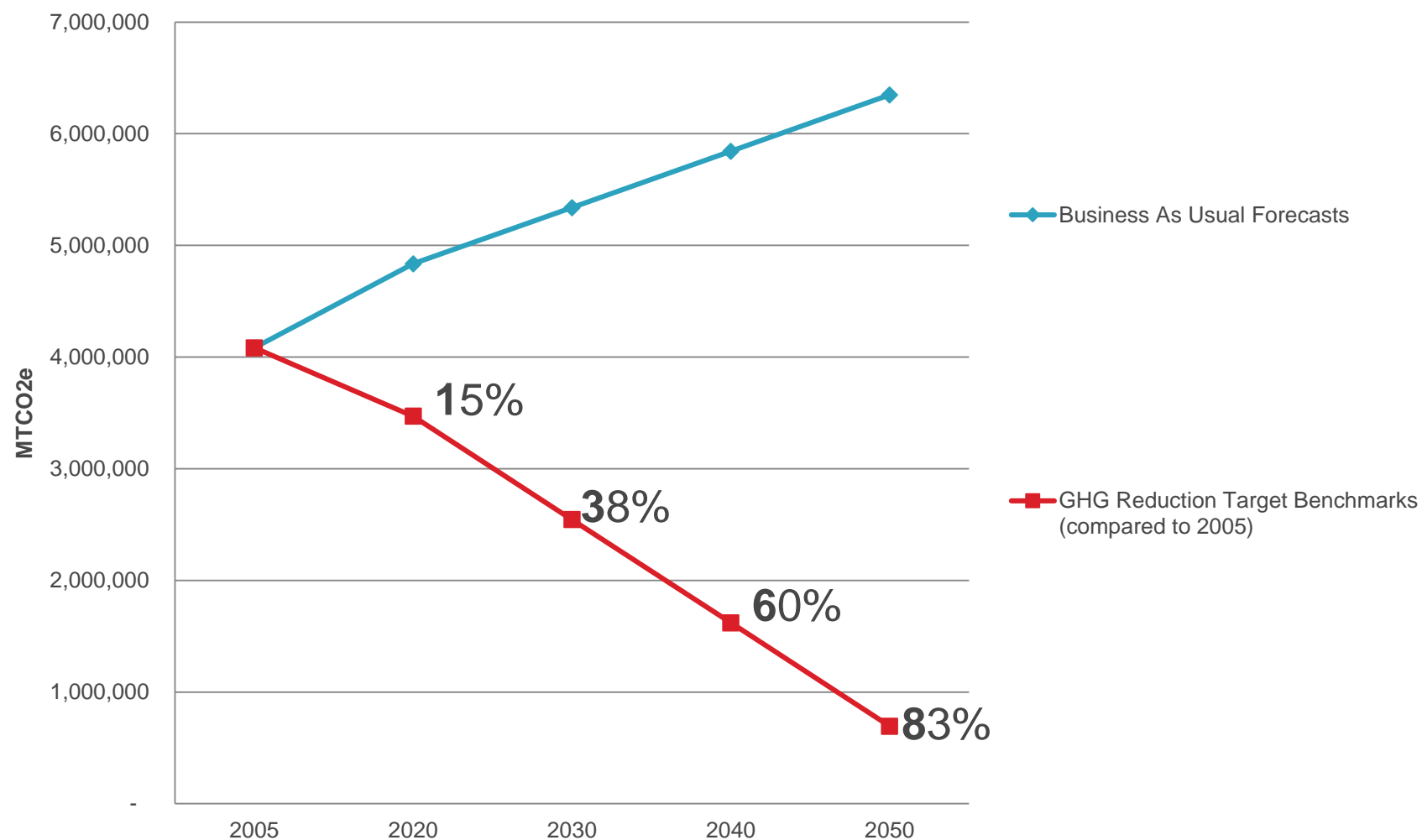
2035 General Plan
integration

SUMMER 2018

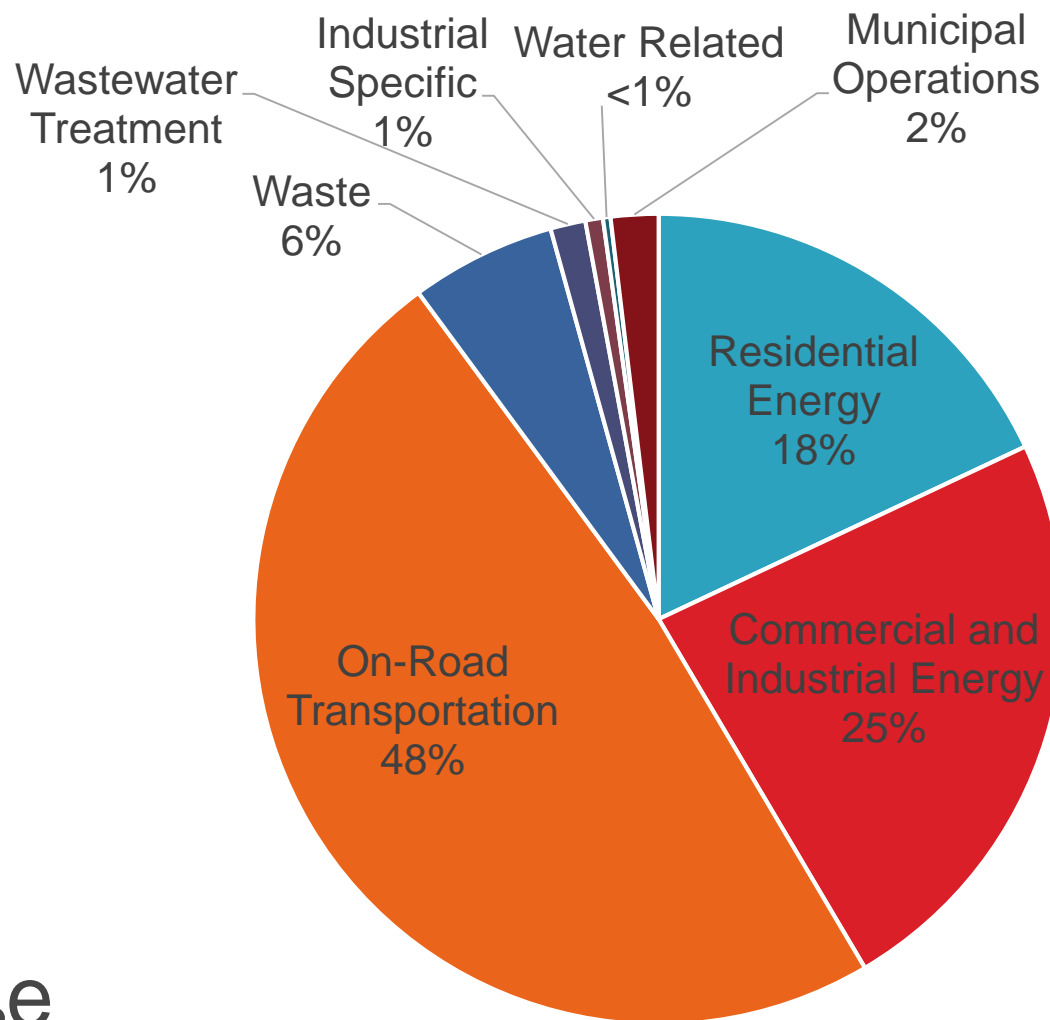
GP/CAP update to initiate



GHG Forecast and Reduction Targets



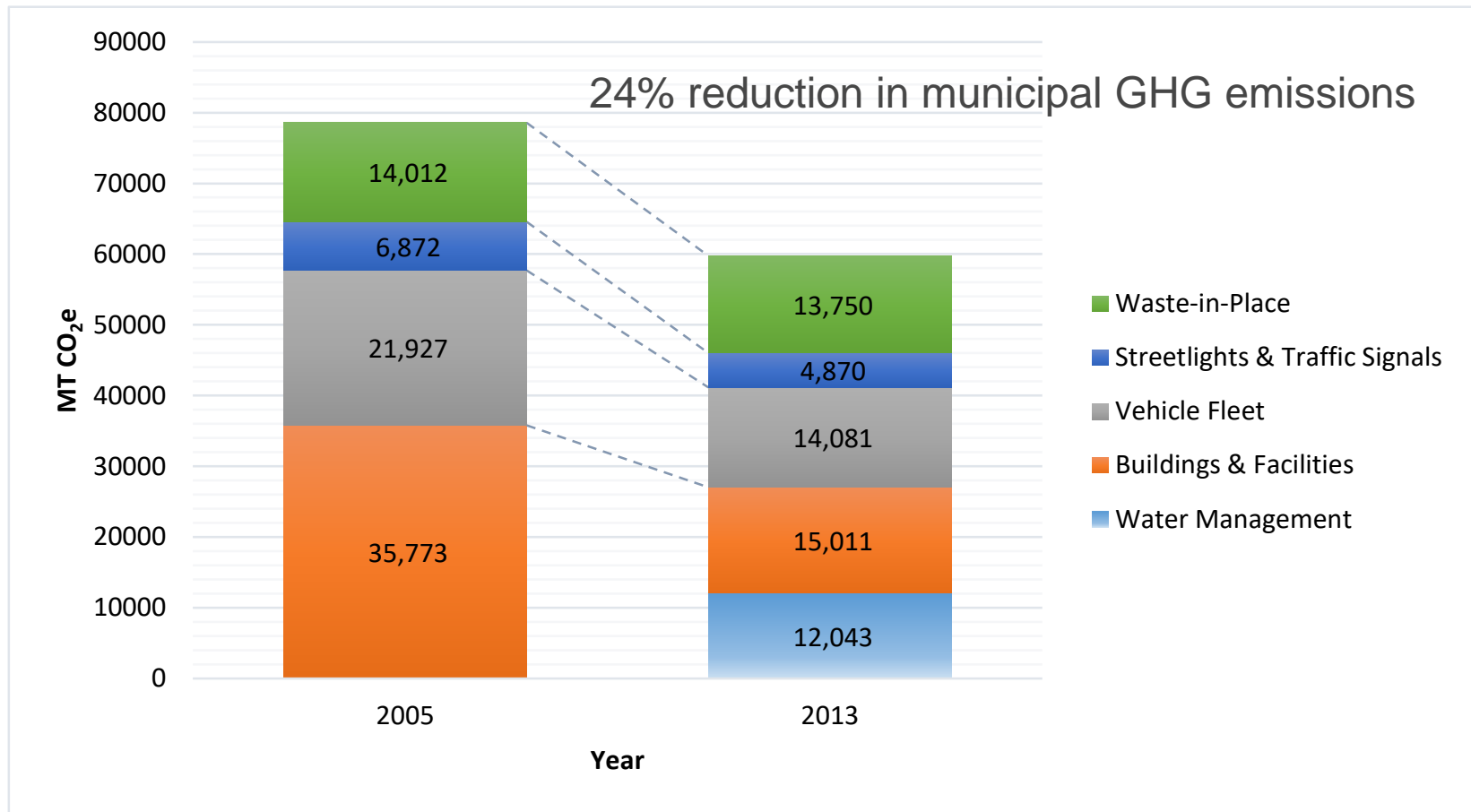
2005 Community-Wide GHG Inventory



4.2 MMTCO₂e

Internal Operations CAP

GHG EMISSIONS FROM MUNICIPAL OPERATIONS, 2005-2013



Citywide

5th most polluted city by ozone in the US

Top 20% for exposure to diesel particulate matter

Sacramento Promise Zone: approx. 127K residents and 35% unemployment

Sacramento Promise Zone Second Round



Lead Organization:
Sacramento Housing and
Redevelopment Agency

Population:
127, 893

Poverty Rate:
34.39%

Unemployment Rate:
18.14%

Key Partners:
City of Sacramento,
County of Sacramento,
Sacramento Employment
and Training Agency,
Sierra Health
Foundation, University of
California-Davis, United
Way CA Capital Region,
Sacramento ACT, Twin
Rivers Unified School
District, California Capital
Financial Development
Corporation

Contact:
Tyrone Roderick Williams
twilliams@shra.org

The Sacramento Promise Zone encompasses some of the economically hardest-hit neighborhoods in the city – from Del Paso Heights in the North Area to The Avenues in the South County. More than 30% of residents in the Promise Zone have yet to achieve a High School diploma or GED. Nearly a quarter of the residents are foreign born with limited English proficiency. The Promise Zone has alarmingly high unemployment and mortality rates.

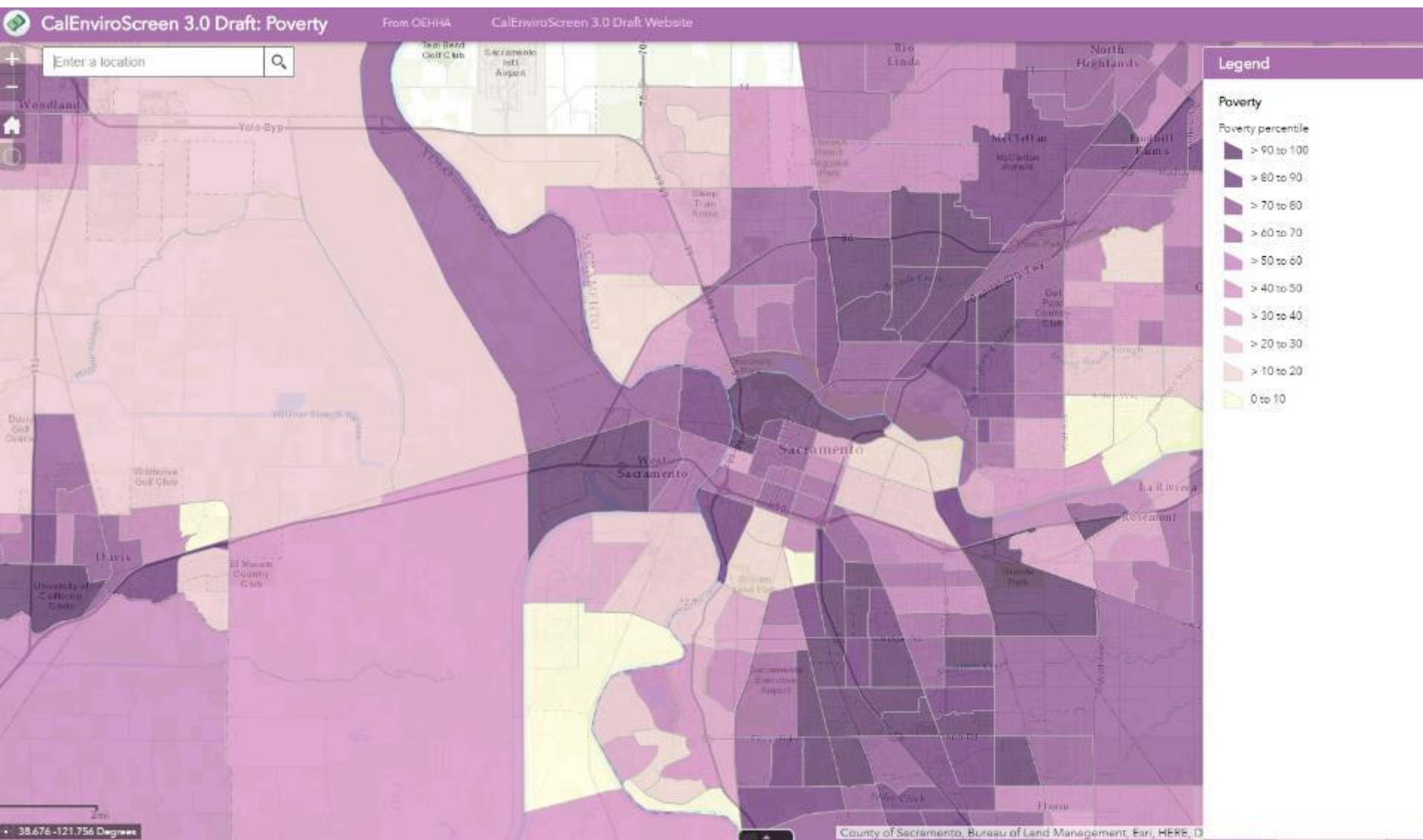


As the lead applicant, the Sacramento Housing and Redevelopment Agency, in partnership with key partners, will work to coordinate resources, build capacity and create public-private partnerships to drive area revitalization. The partners have adopted the following five goals to improve the quality of life and accelerate revitalization.

- Create Jobs
- Increase Economic Activity
- Improve Educational Opportunities
- Improve Health and Wellness
- Facilitate Neighborhood Revitalization

"The City of Sacramento and our partners are committed to pursuing opportunities that will support the goals of the Promise Zone. As the Capitol City of California, our goal is to be a model city for the region and state. The designation presents an extraordinary opportunity for the Promise Zone neighborhoods and the region."

Kevin Johnson, Sacramento Mayor



CAP Strategies

Sustainable land use

Mobility and connectivity

Energy efficiency and renewable energy

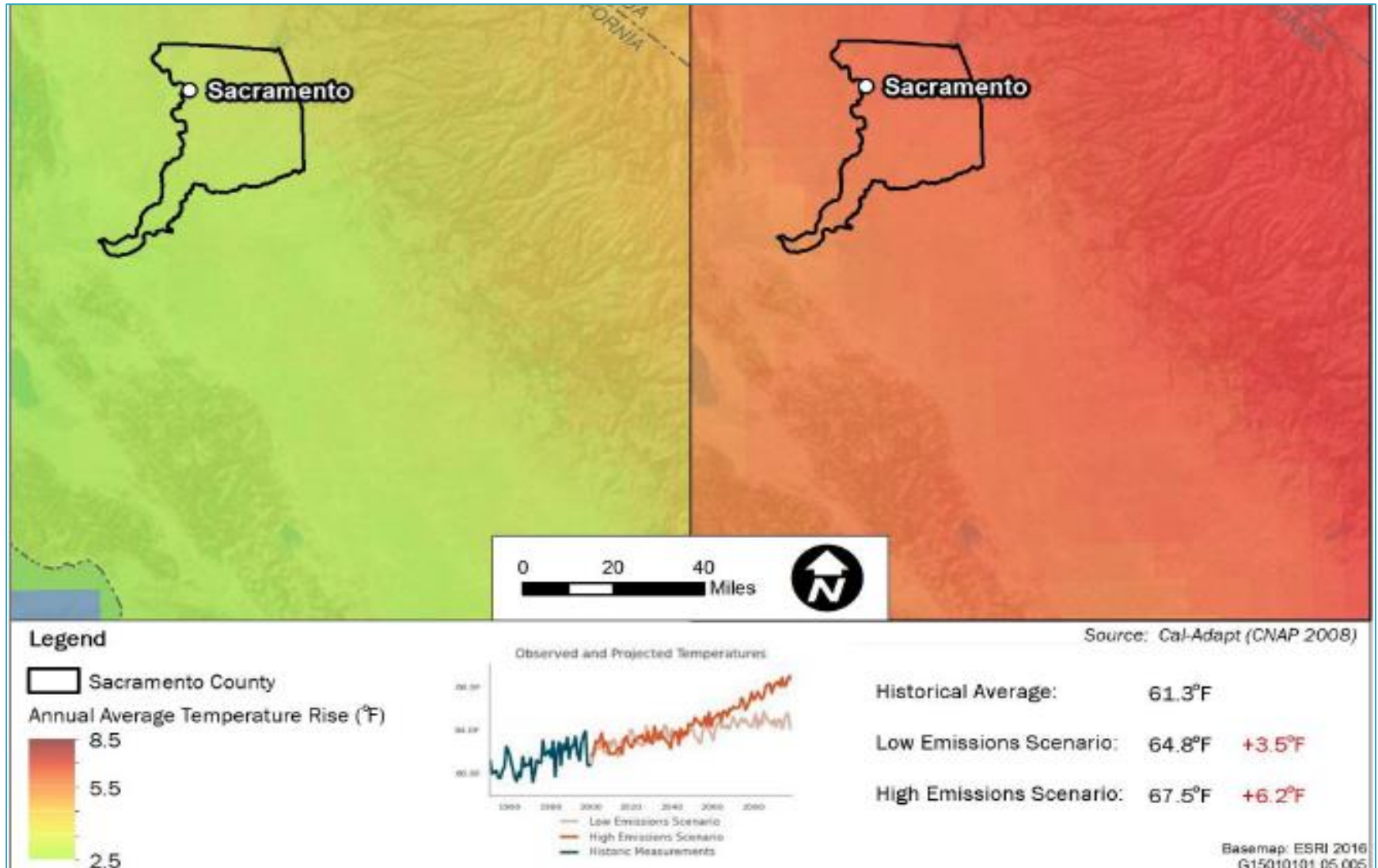
Waste reduction and recycling

Water conservation and renewable energy

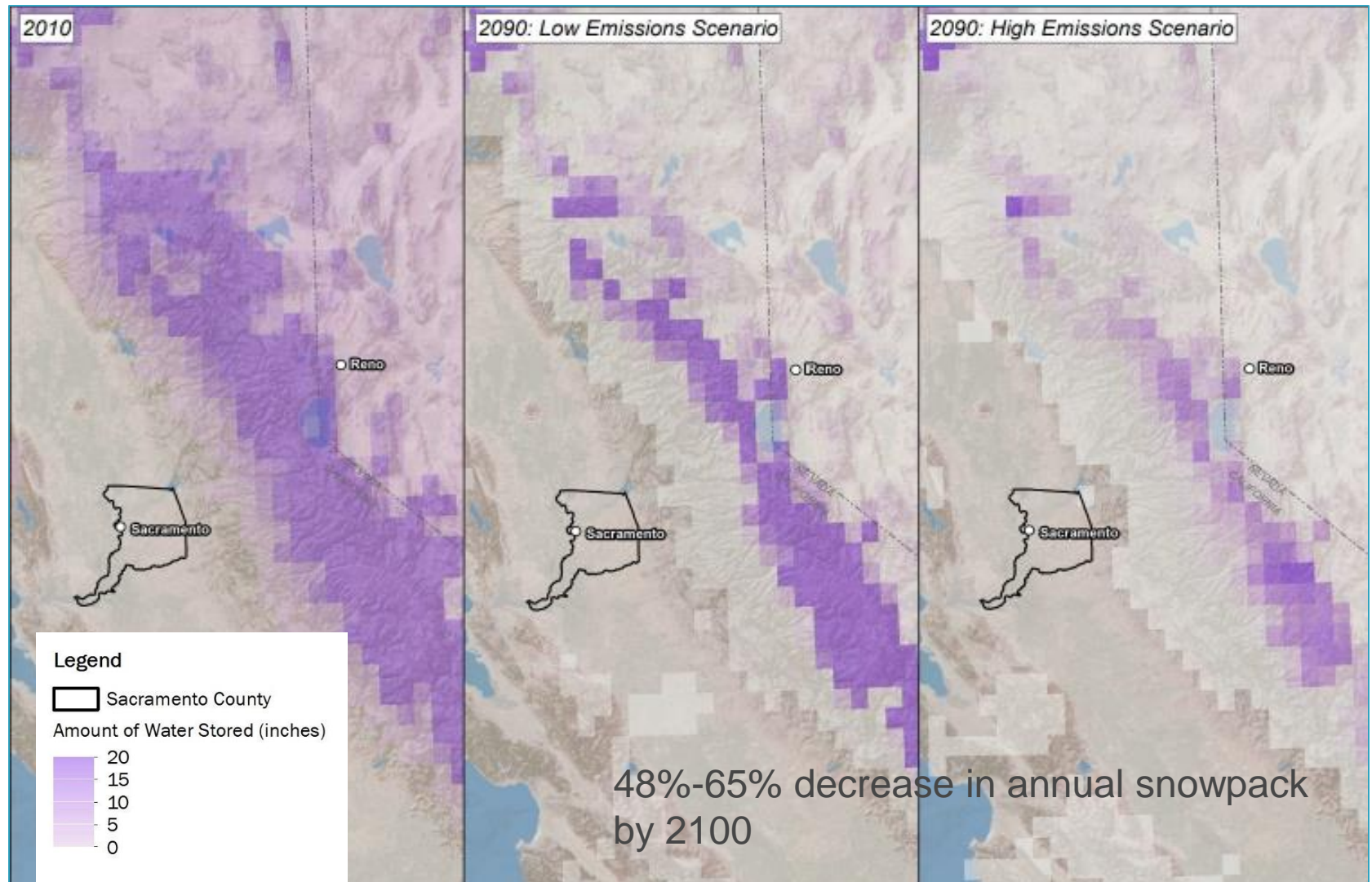
Climate change adaptation

Community involvement and empowerment

Annual Average Temperature

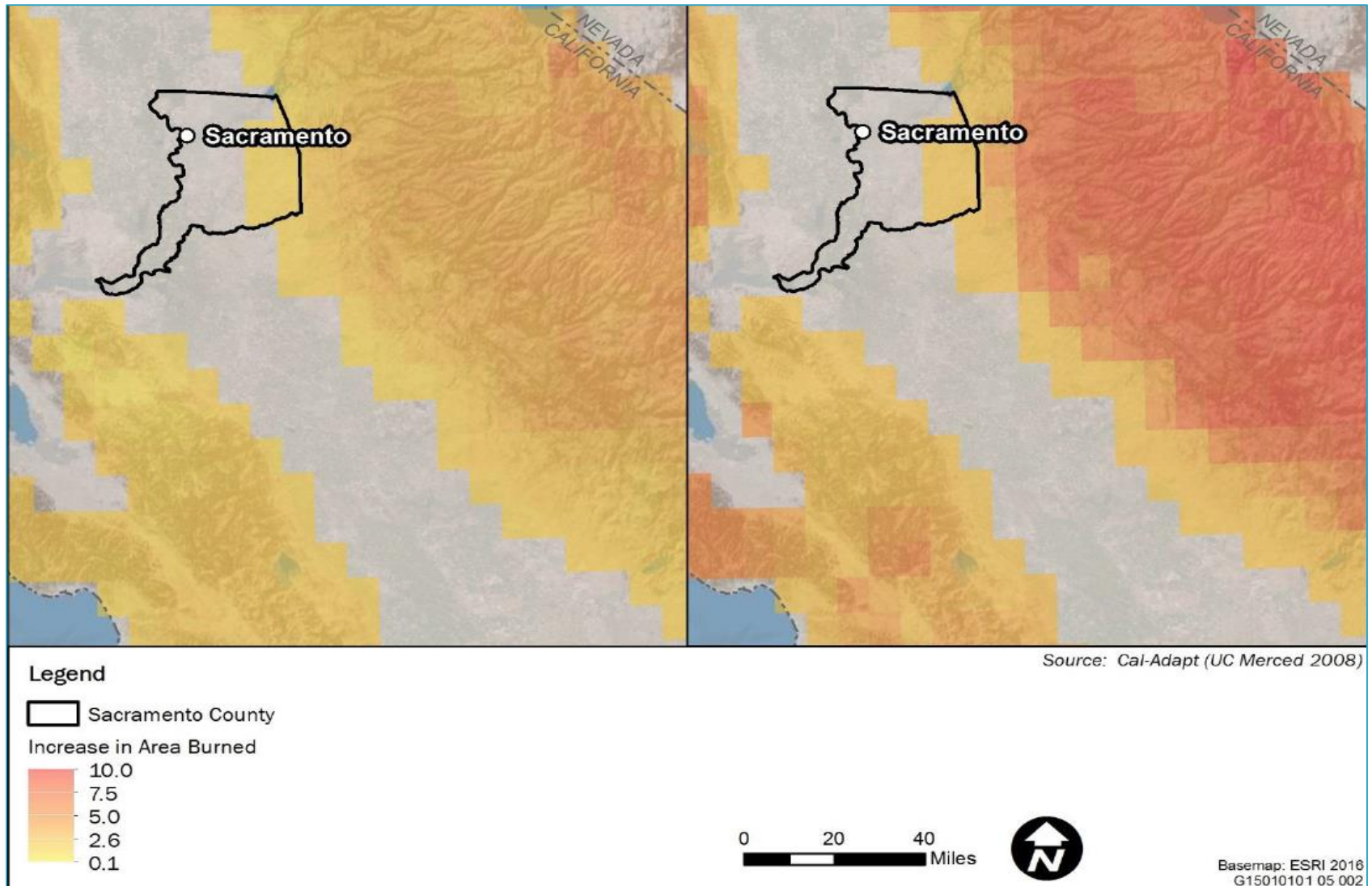


Change in Sierra Snowpack by 2090



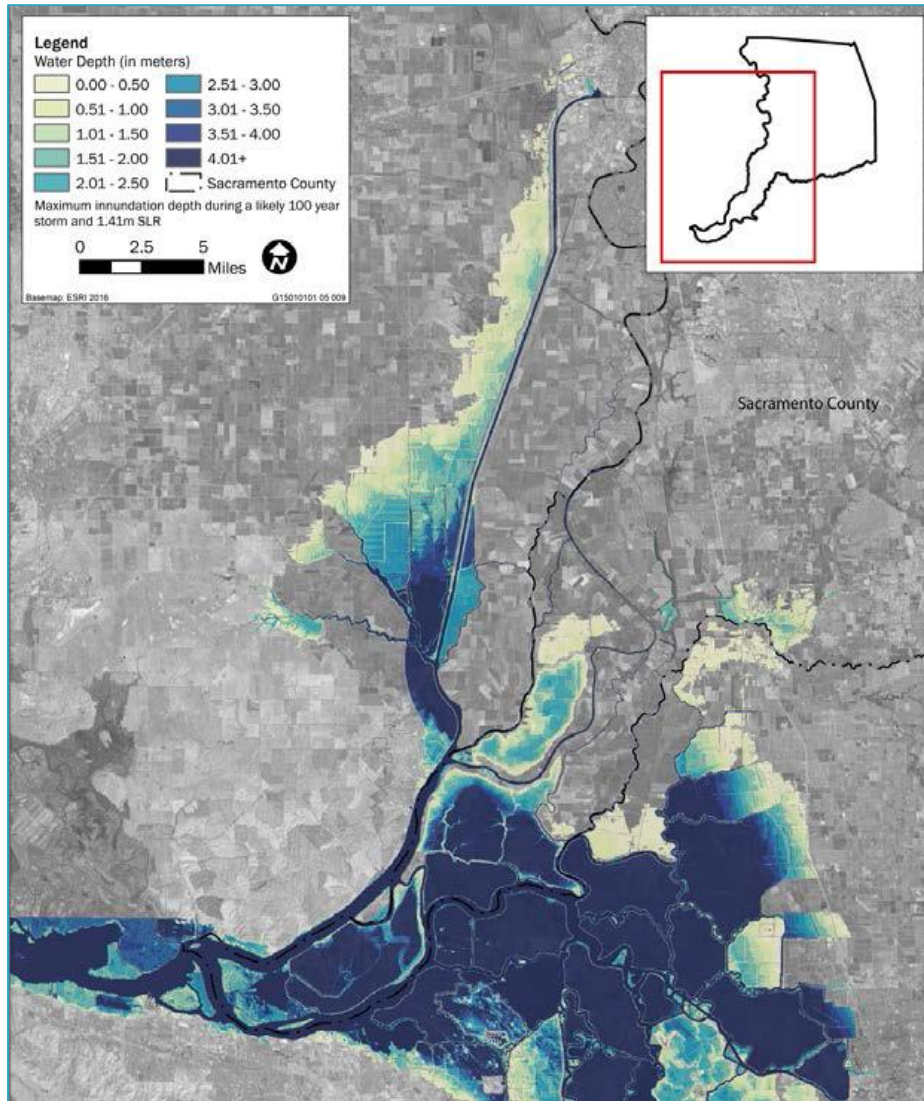
Source: Sacramento County Vulnerability Assessment

Increased Frequency of Wildfire



Source: Sacramento County Vulnerability Assessment

Flooding & Sea Level Rise



“While it is uncertain precisely how and to what extent climate change will affect flooding events in Sacramento County, it is reasonable to expect that an increase in flooding could have serious ramifications, because the area is already considerably vulnerable. “

Sacramento



Example municipal retrofits

HVAC replacements

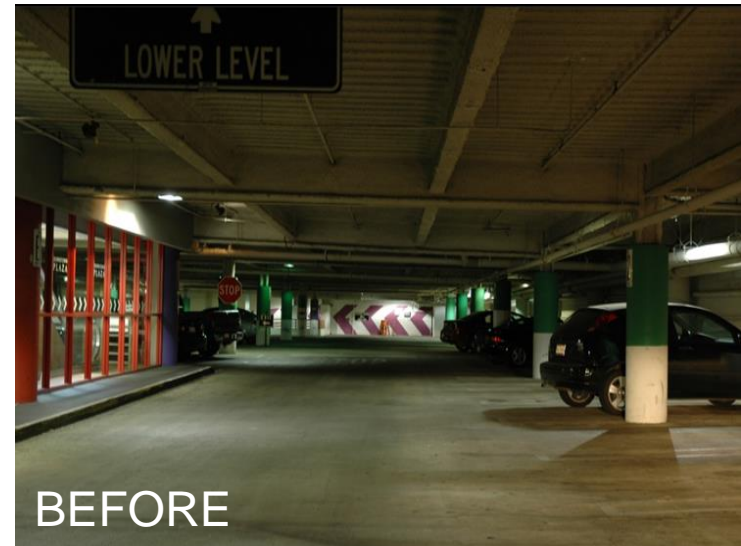
- Saving over \$34K and 43% energy annually from 2 recent HVAC replacements

LED lighting retrofits in 8 City-owned parking garages

- \$462K in annual savings, \$3.3 million in total savings anticipated over life of the project

Future retrofits

- Lighting retrofits at more than 40 City-owned libraries, community centers, and pools



Example renewable energy efforts

4.9 MW of solar PV on City facilities

- >7 million kWh generated annually, offsetting electricity of approx. 900 homes

13 MW of off-site solar with SMUD's SolarShares Program

- Anticipated 20-year savings of approximately \$8 million
- Offsets 37% of municipal energy use



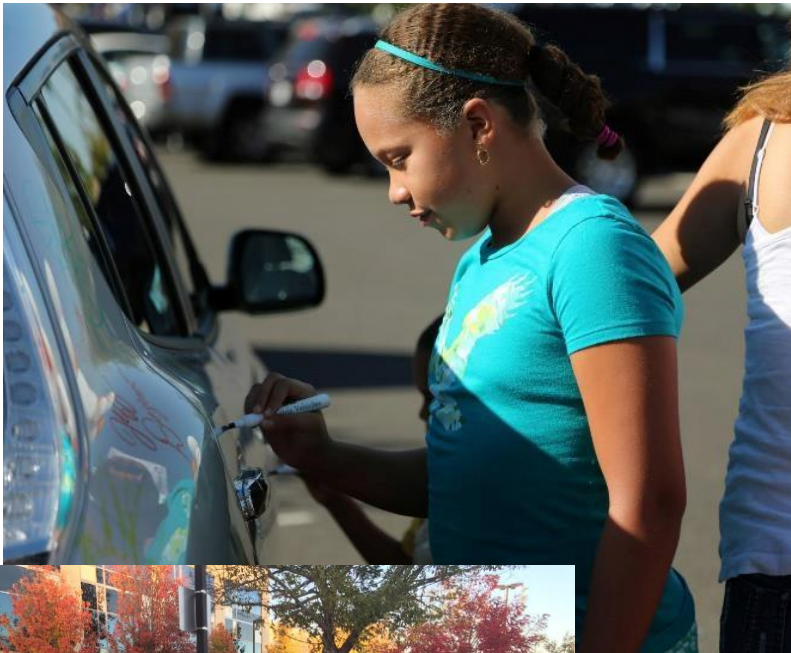
Fairbairn Water Treatment Plant

Sacramento Valley Station



EV Strategy

Adopted 12/12/18

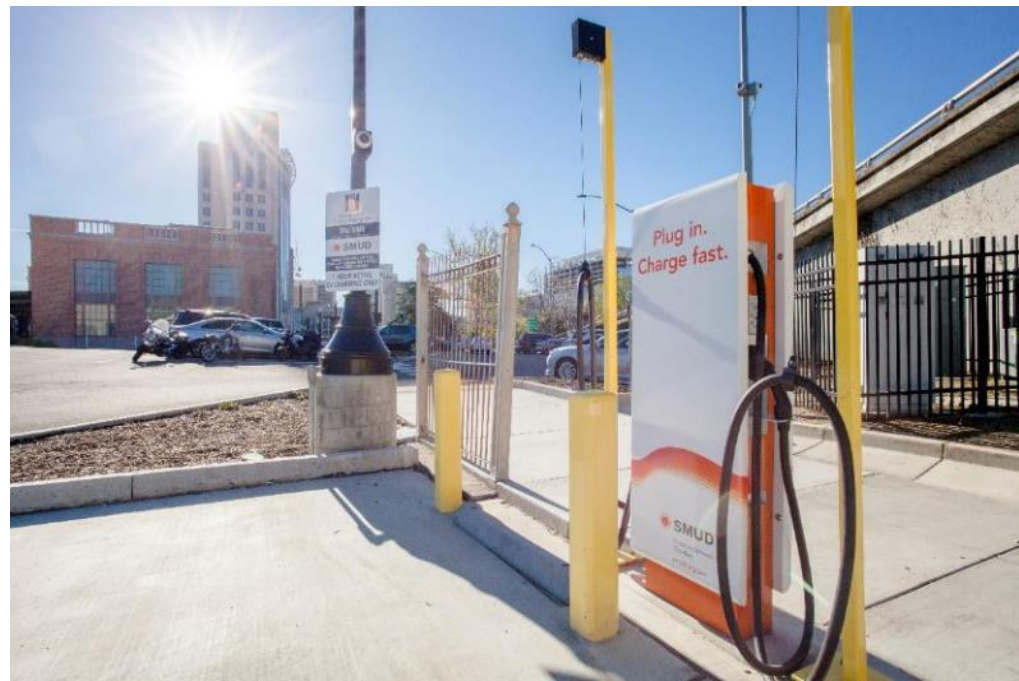


EVGo station for electric vehicles outside a Cracker Barrel in Arlington, Texas on Tuesday, June 5, 2012. (Star-Telegram/Khampha Bouaphanh) **Khampha Bouaphanh** - Khampha Bouaphanh

TRANSPORTATION

JULY 04, 2017 3:30

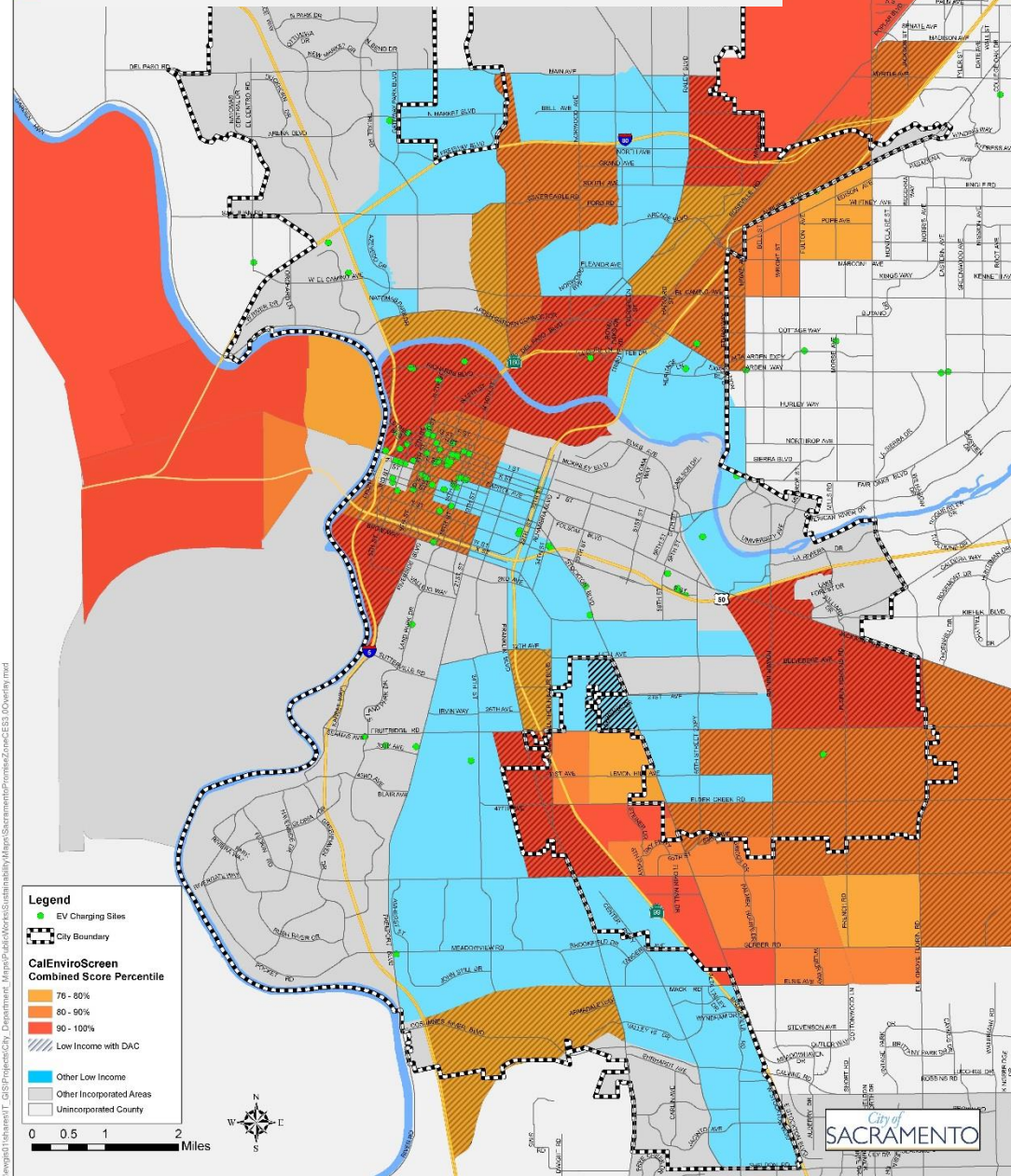
Why Sacramento leaders believe curbside vehicle chargers will be a game-changer



Key EV issues

1. Charging in new construction
2. Publicly-available infrastructure
3. Education and awareness

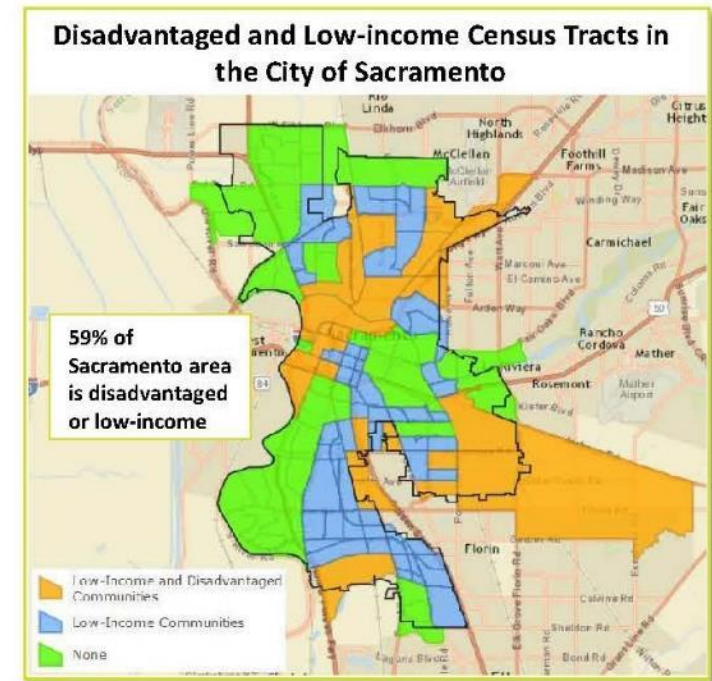
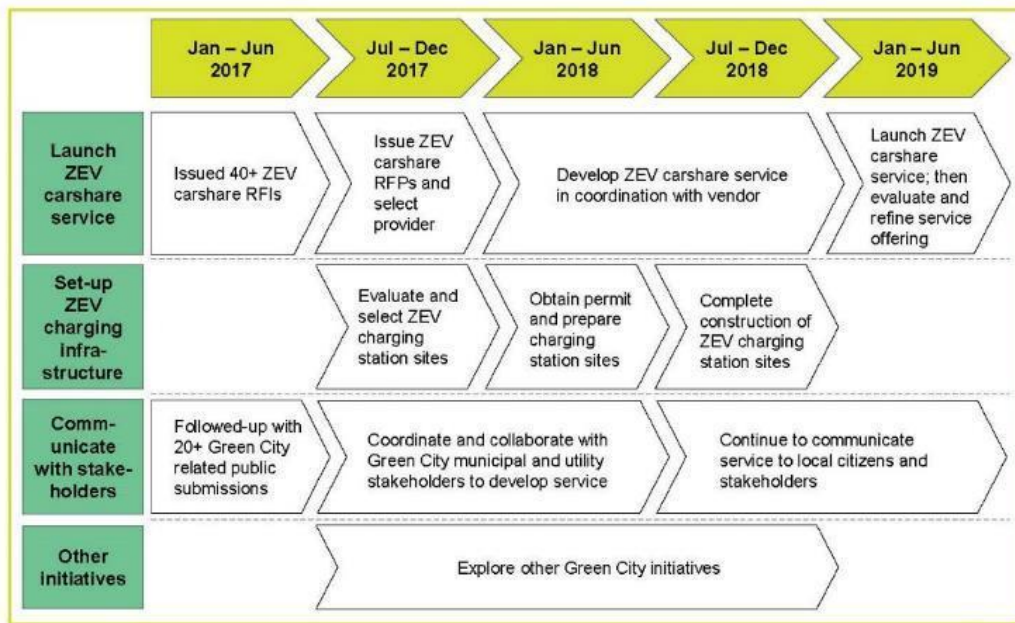
EV Chargers in Disadvantaged and Low-Income Communities



VW ZEV Investment

\$44 million Green City initiative in Sacramento

Figure 8: Green City Initiative 6-month Milestones



Source: Electrify America (06/29/2017).
Supplement to the California ZEV Investment Plan, Cycle 1.

https://www.arb.ca.gov/msprog/vw_info/vsi/vw-zevinvest/documents/california_zev_investme nt_plan_supplement_062917.pdf

Moving forward

- New development versus existing activities
- Cost/benefit conundrums
- Upfront costs with limited budget & staff
- Regulations and red tape
- Time

