State of Climate Action Planning 2019

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September 26, 2019

EPIC
ENERGY POLICY INITIATIVES CENTER
UNIVERSITY OF SAN DIEGO SCHOOL OF LAW

California Climate and Energy Policy Context

California Health and Safety Code s. 38505

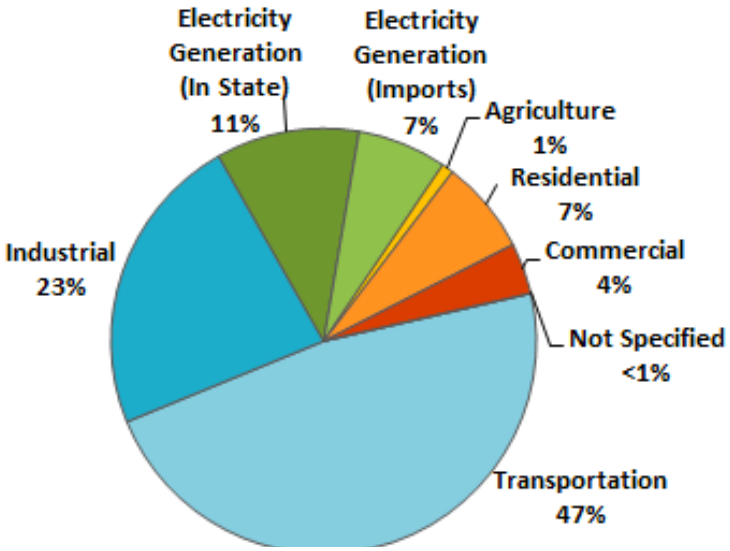
California Air Resources Board must regulate seven greenhouse gases:

Carbon dioxide ($CO_{2)}$
Methane (CH_4)
Nitrous oxide (N_2O)

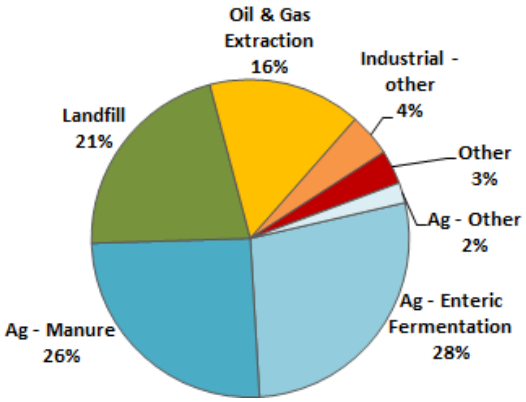
Sulfur hexafluoride (SF_6)
Hydrofluorocarbons (HFCs)
Perfluorocarbons (PFCs)
Nitrogen trifluoride (NF_3)

High Global Warming Potential Gases – HGWP

California Emissions by Greenhouse Gas 2017

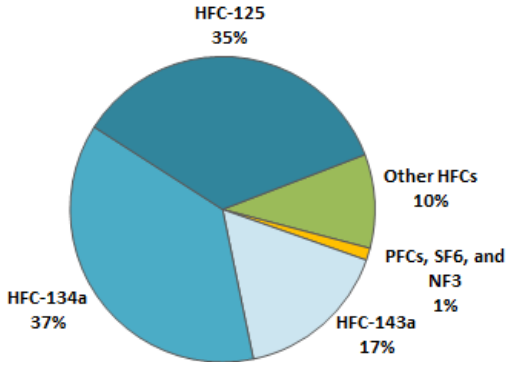


Carbon Dioxide: 351 MMT CO2e

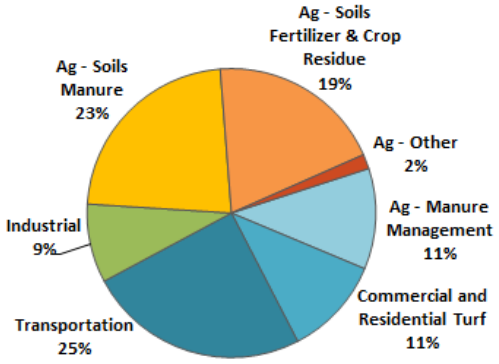


Methane: 40 MMT CO2e

Human-made – used in manufacturing, electric industry – replaced ozone-depleting chemicals



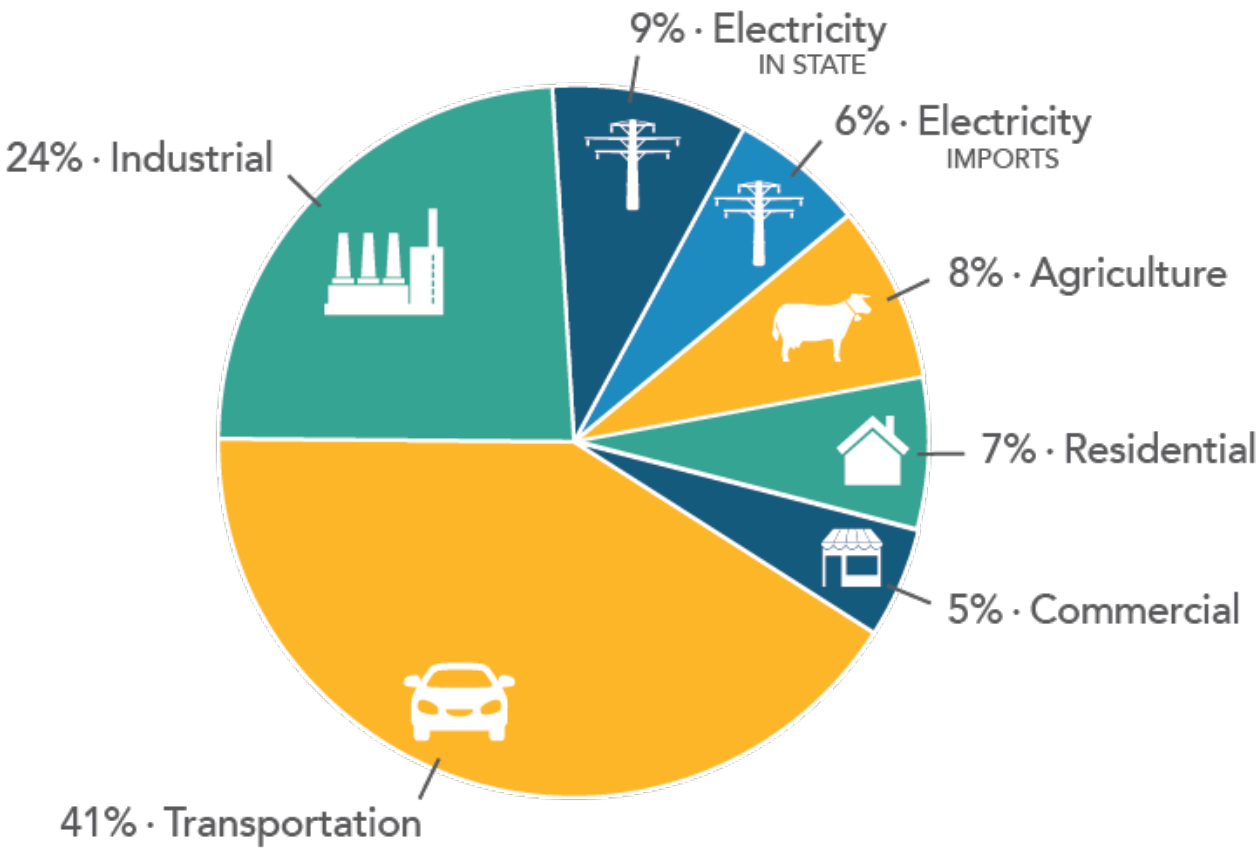
HGWP: 20 MMT CO2e



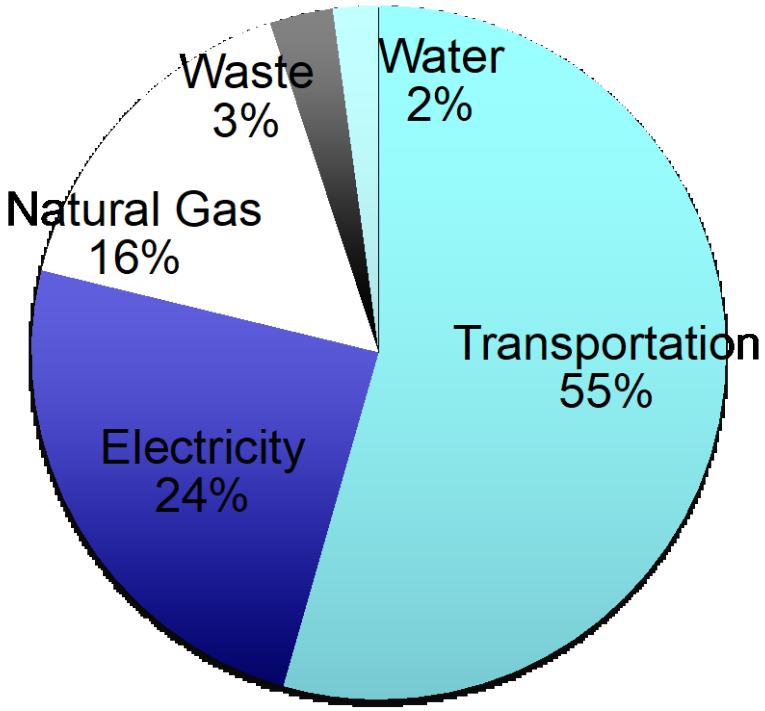
N_2O: 13 MMT CO2e

Total CO2e (2017): 424 MMT CO2e

California Emissions by Category 2017

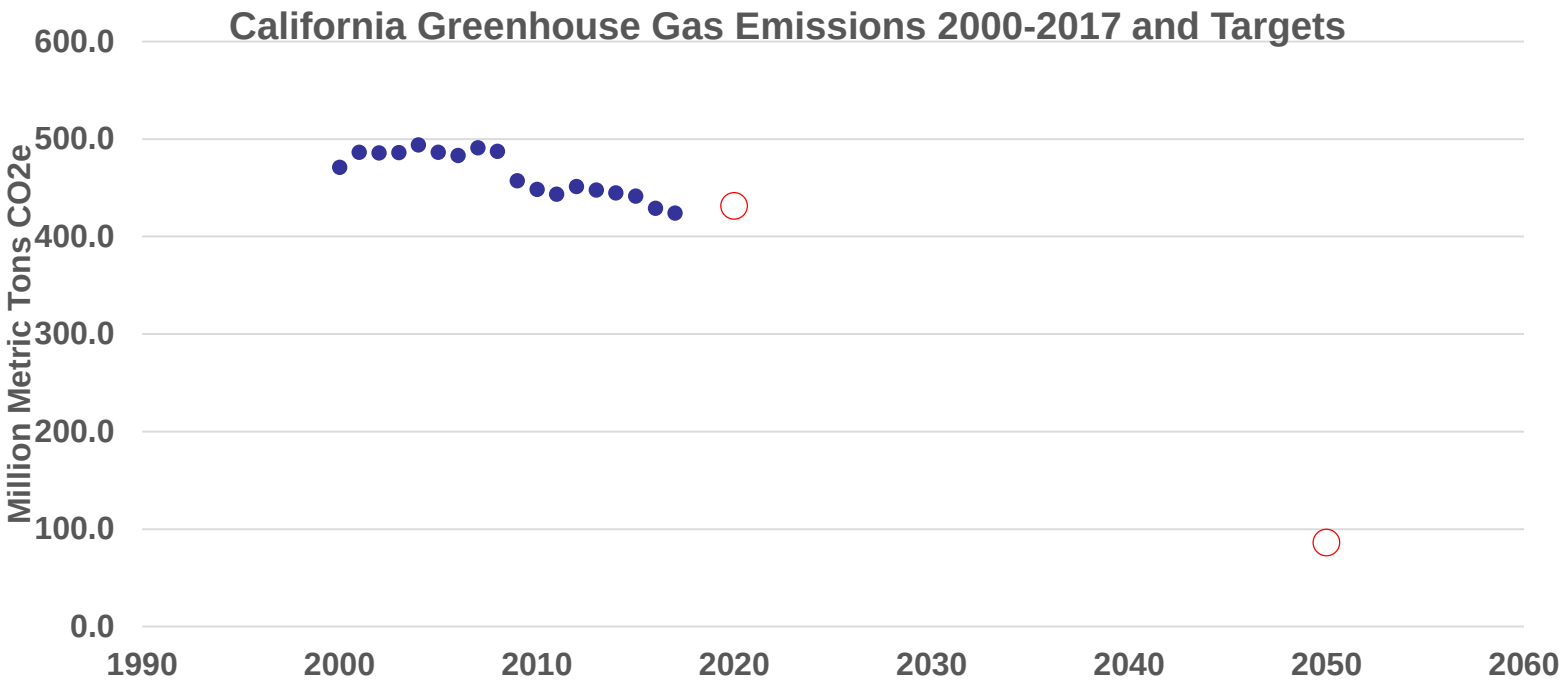


Typical City Emissions by Category



California Greenhouse Gas Reduction Policies

EO S-03-05 (2005)	By 2020, reduce GHG emissions to 1990 levels
	By 2050, reduce GHG emissions to 80% below 1990 levels



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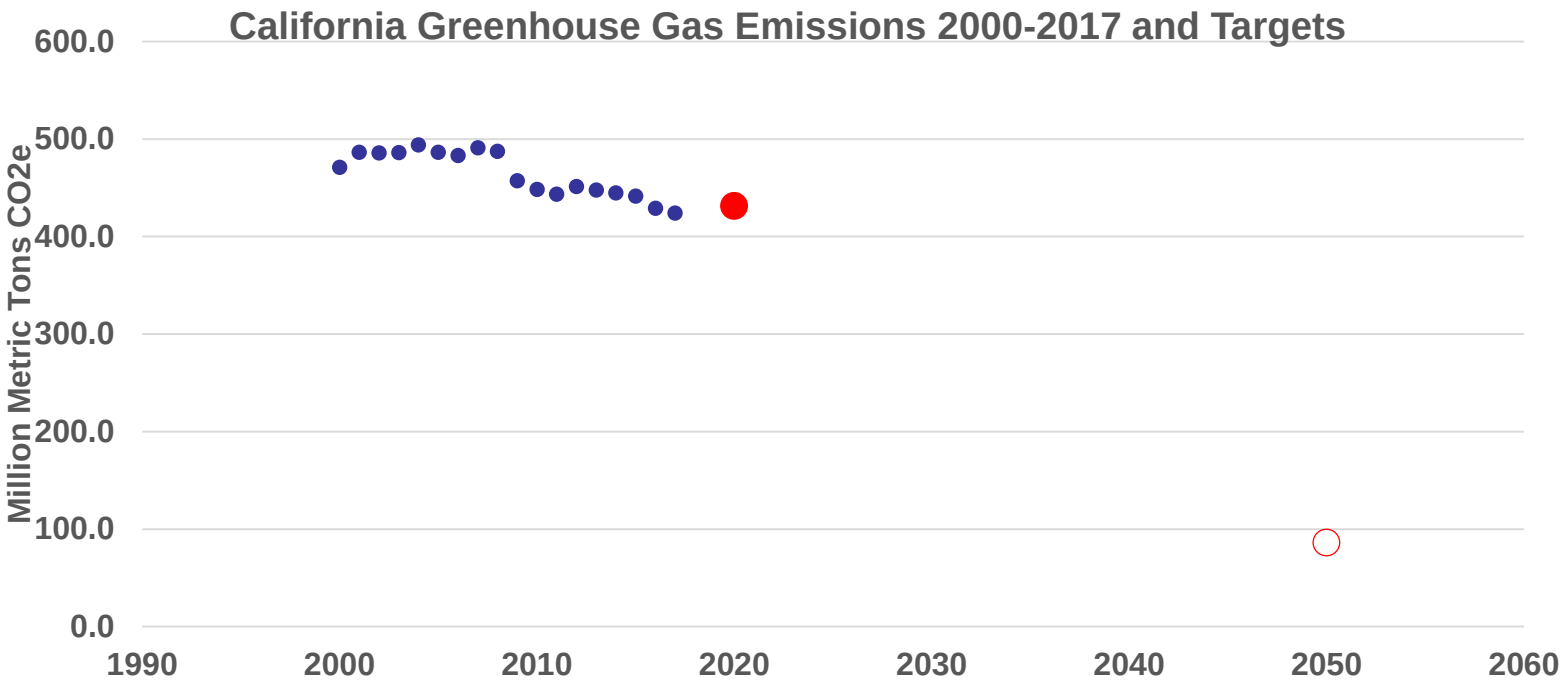

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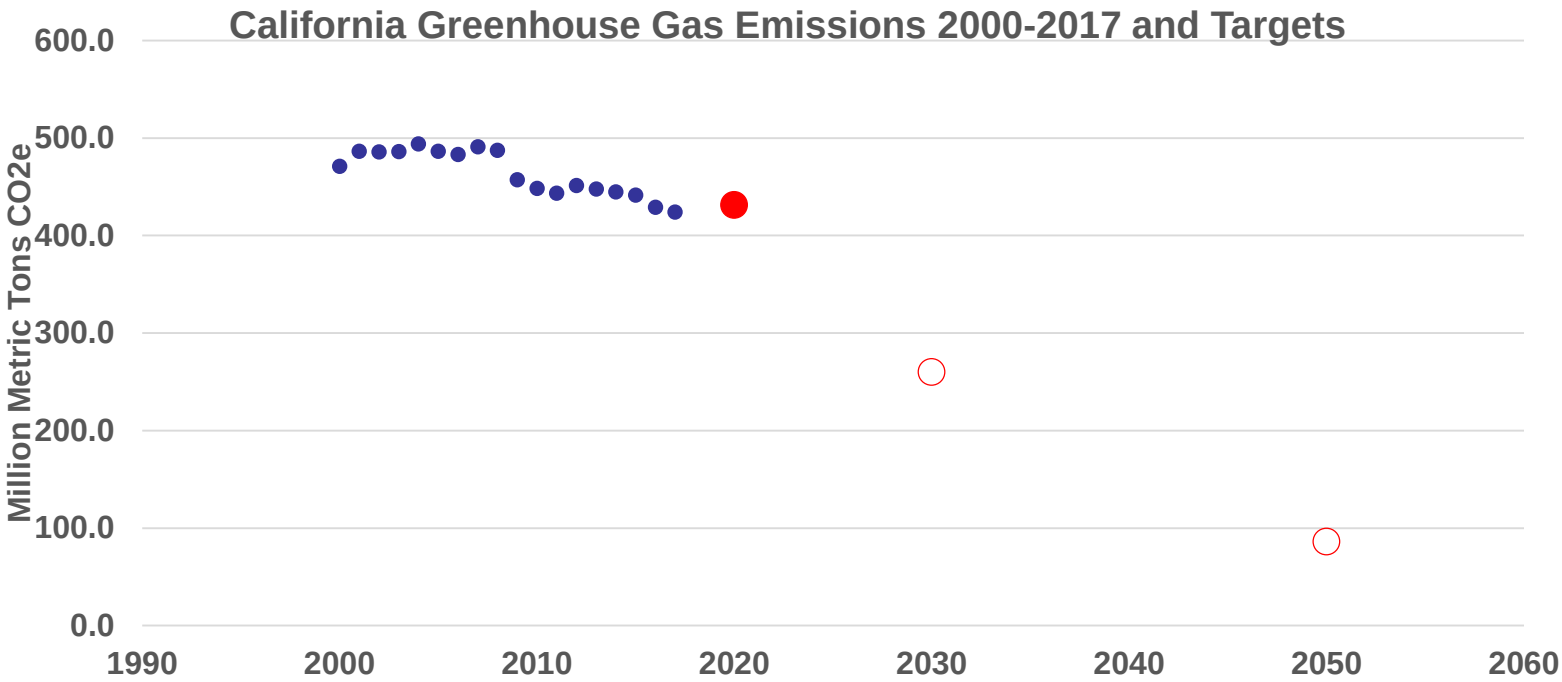

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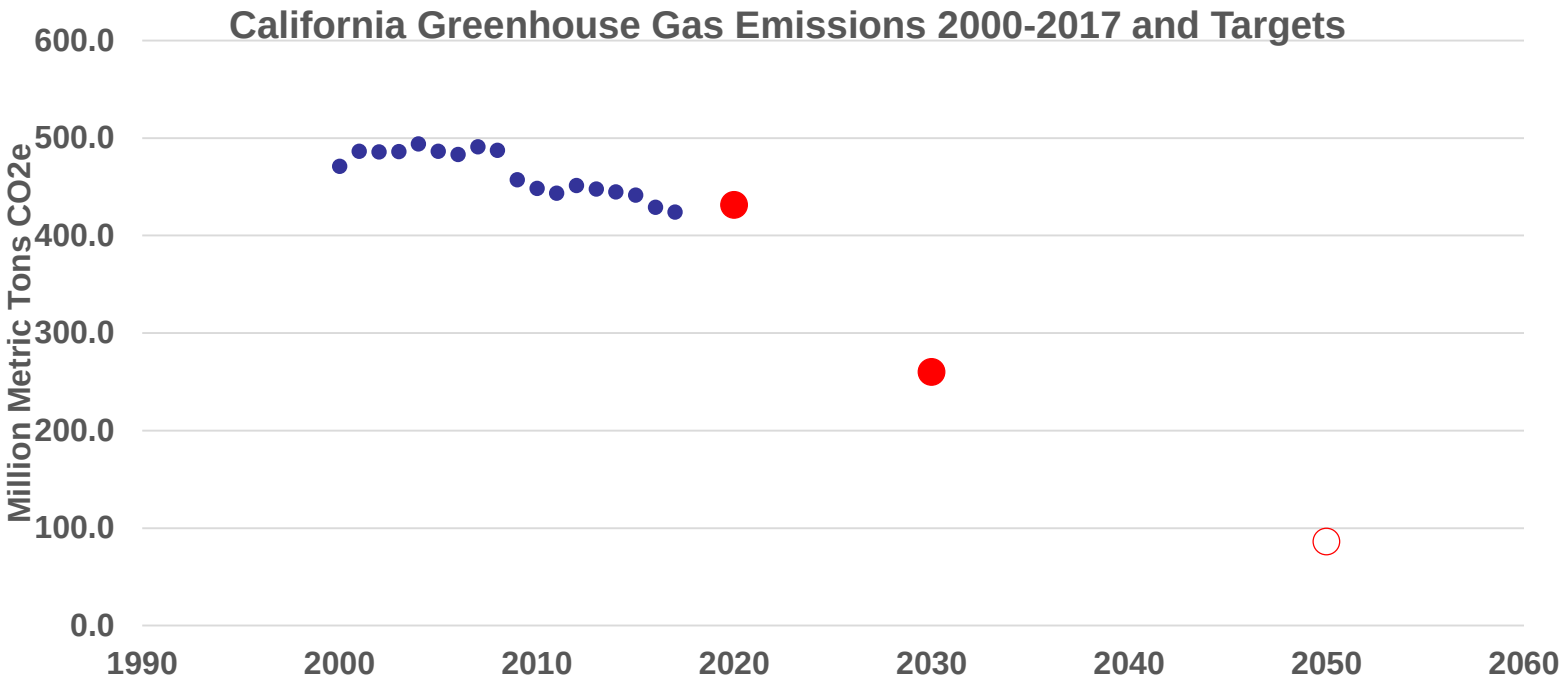

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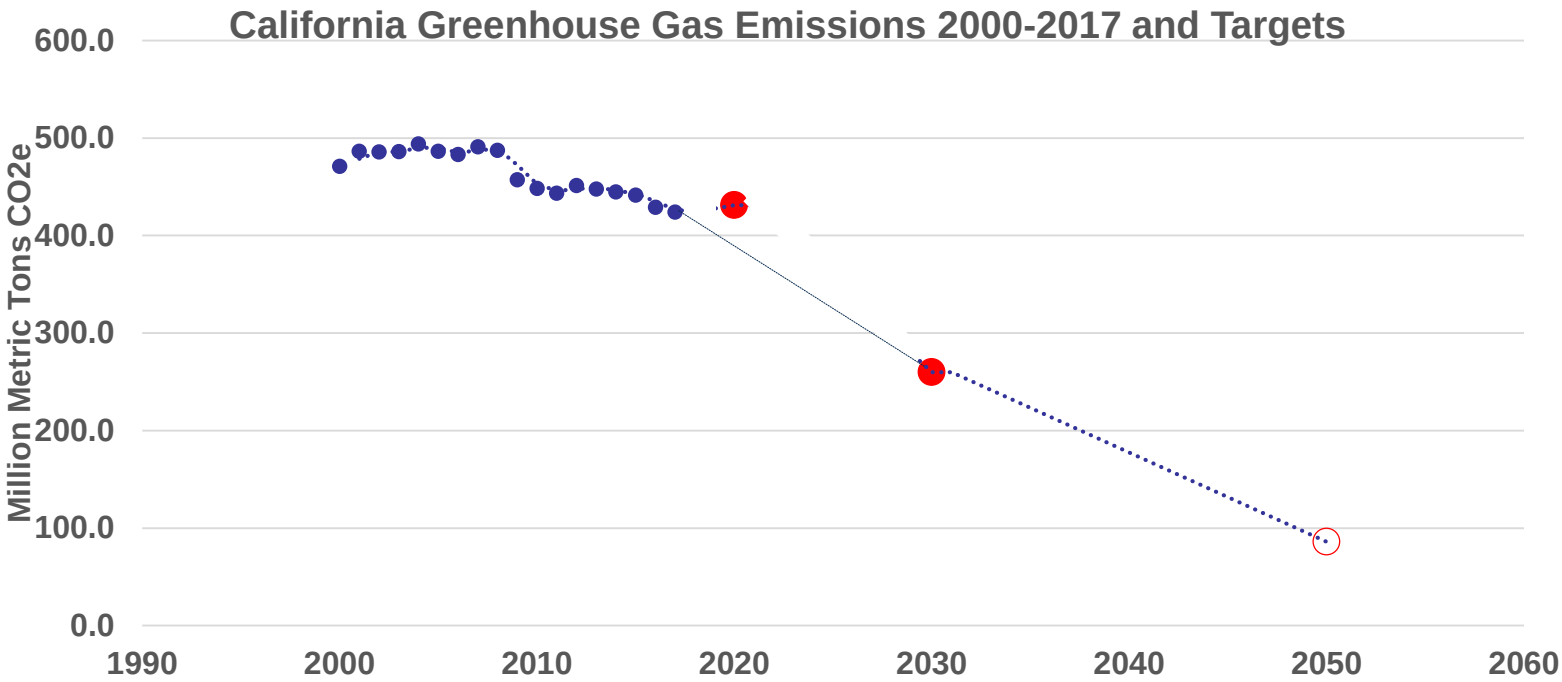

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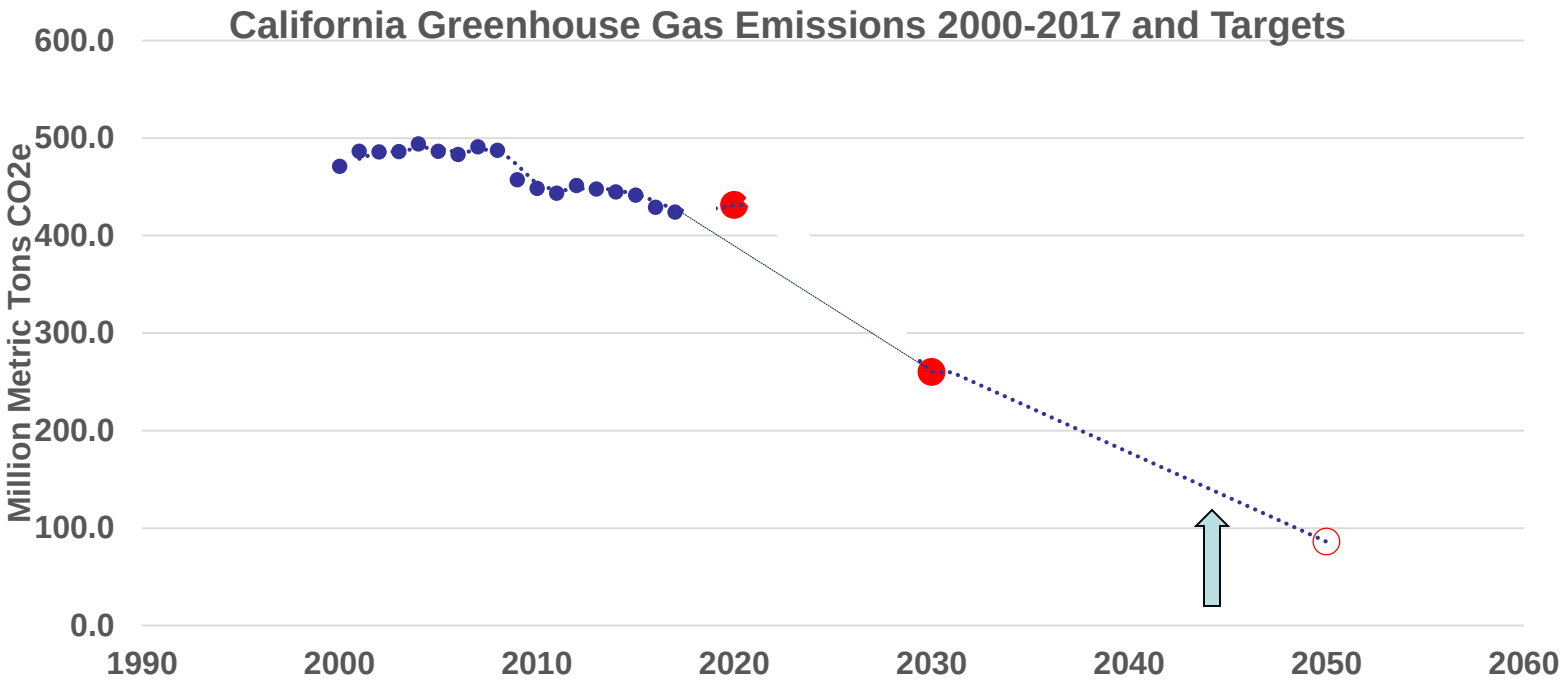

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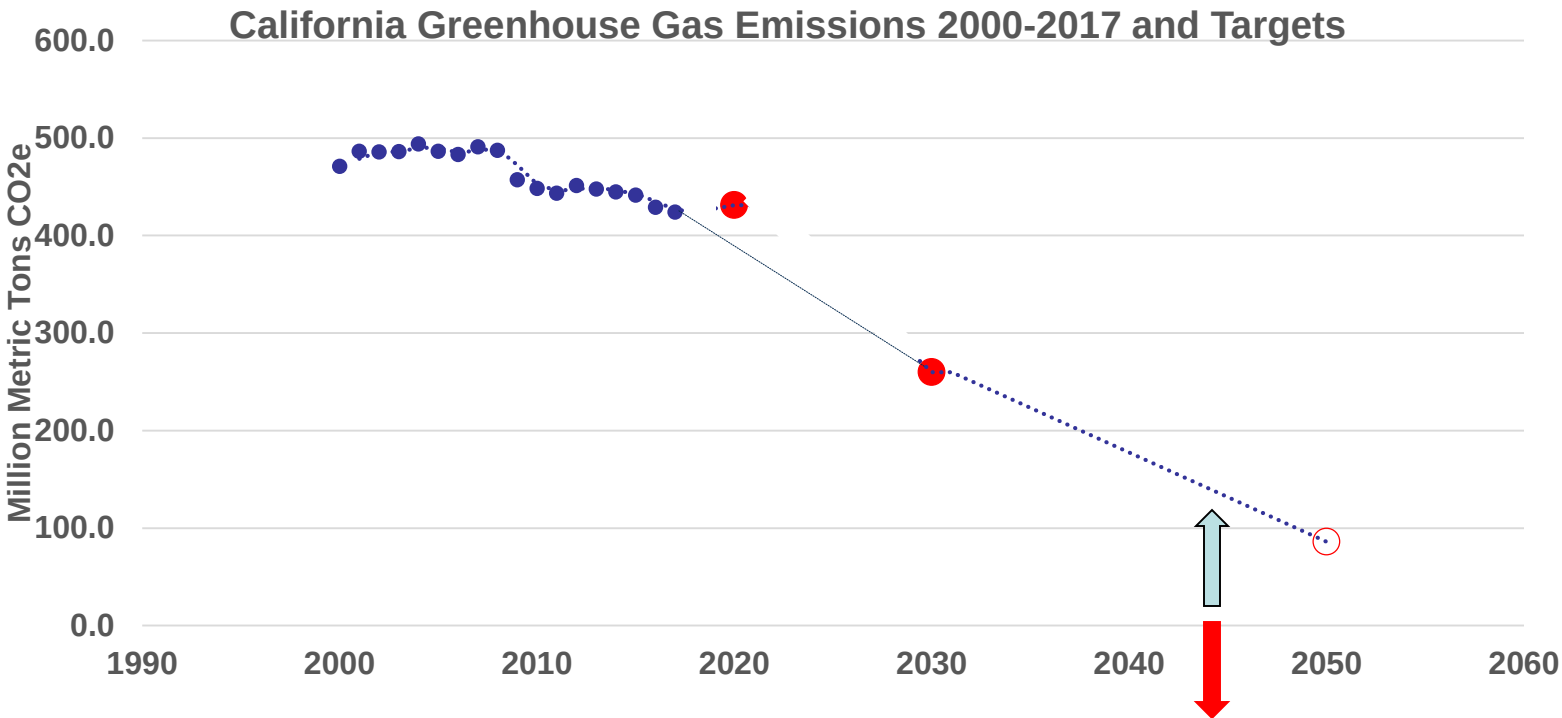
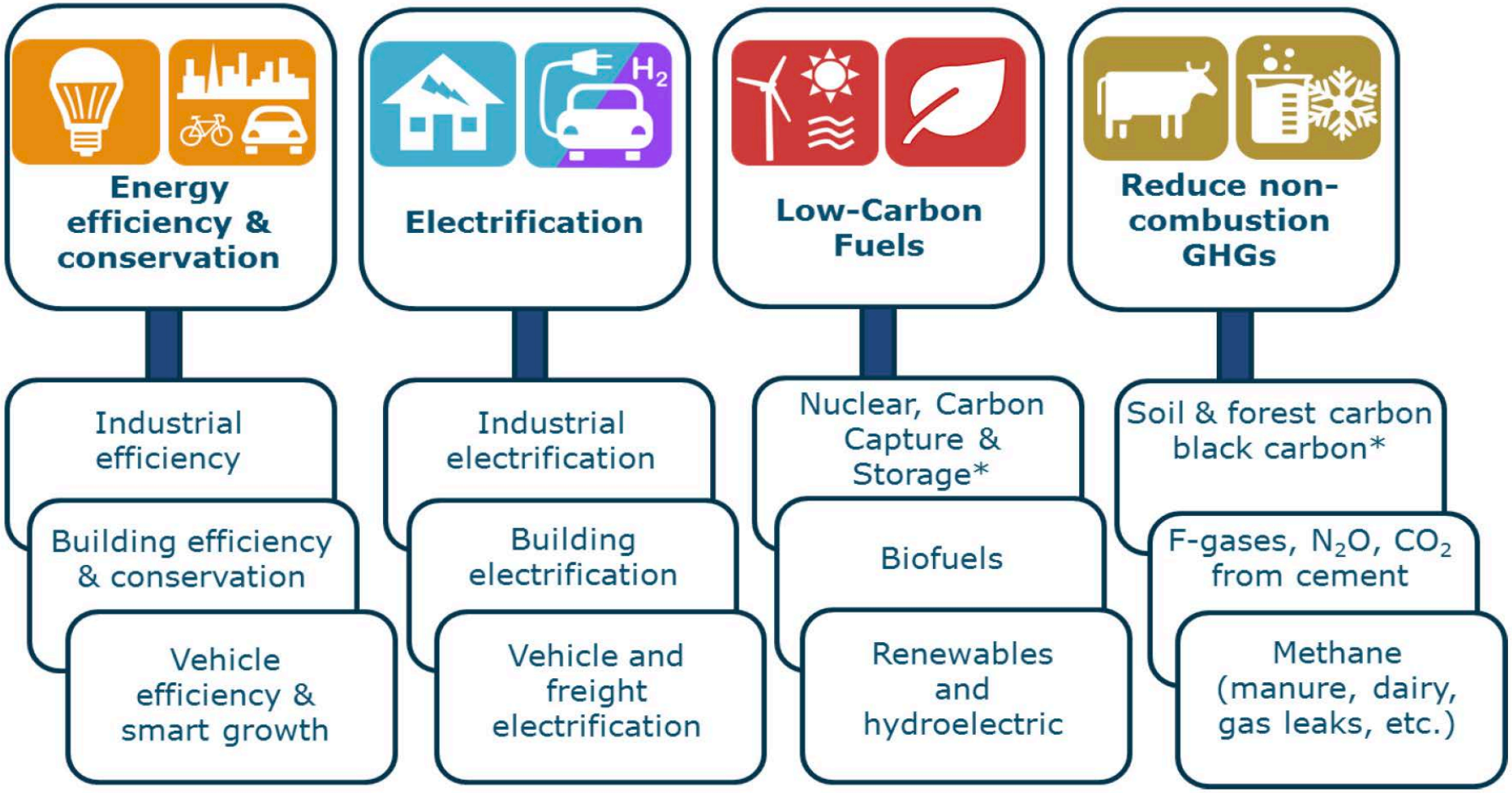


Energy Policy is driven by Climate Policy



Source: California Energy Commission, Deep Decarbonization in a High Renewables Future: Updated Results from the California PATHWAYS Model, June 2018.

California Energy and Climate Change Regulations

1. Electricity Sector: Renewable Portfolio Standard (**RPS**); Direct Access/Choice; PV goals

2. Vehicle efficiency standards and Electric Vehicle Goals

3. Efficiency regulations: building standards, appliance standards

5. SB 375: **land use and transportation** GHG targets

6. Cap and trade

7. City **climate action plans** with targets, connection with California Environmental Quality Act (**CEQA – citizen enforcement)**

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7. City **climate action plans,** targets, connection with California Environmental Quality Act (CEQA)

Electricity Sector – more renewables

Required renewables on the grid (RPS)

- Applies to all electricity service providers (DA, CCAs, public utilities and IOUs)

    - 33% RPS-eligibles by 2020
    - 60% RPS-eligibles by 2030 (SB100)
    - 100% zero-carbon electricity by 2045 (SB100)

Local CAPs renewables goals > state standards

    - City of San Diego CAP 2015: 100% renewable electricity by 2035
    - Solana Beach (2017), Del Mar (2016) – 100% by 2035
    - Chula Vista (2017) by 2035 – 100% by 2035

Electricity Sector – more choice?

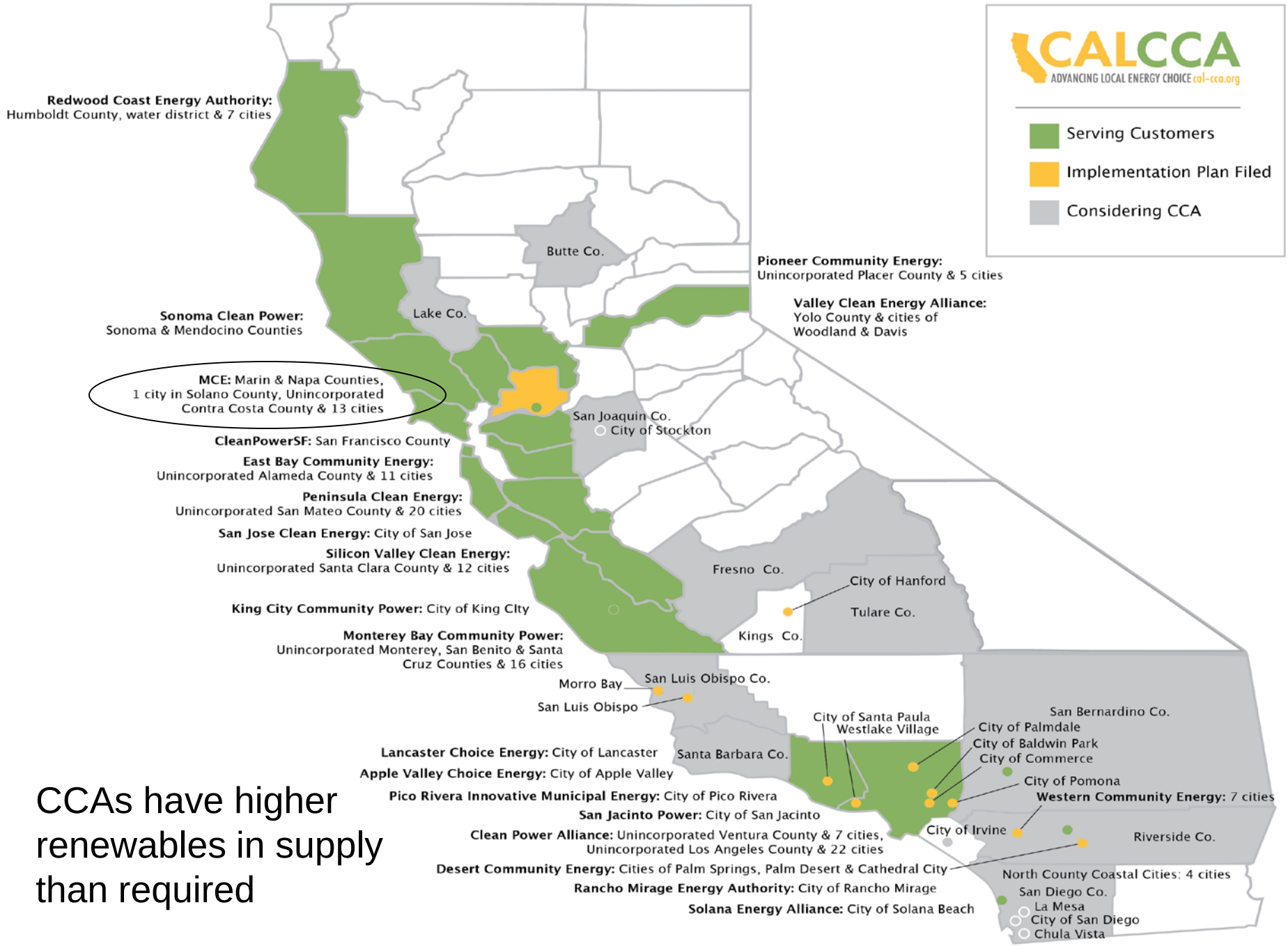
Direct Access

- Commercial and industrial customers can buy from other ESPs
- AB 1890 (1998) ~13% of IOU load, capped, suspended 2001
- SB 237 (2019): Expanded Direct Access
  - Increased statewide cap by 4,000 GWHs for non-residential customers
  - CPUC will be addressing expansion of DA
    - Rulemaking proceeding to consider re-opening DA for all, in 2020

Electricity Sector – more choice?

Community Choice Aggregation (AB117)

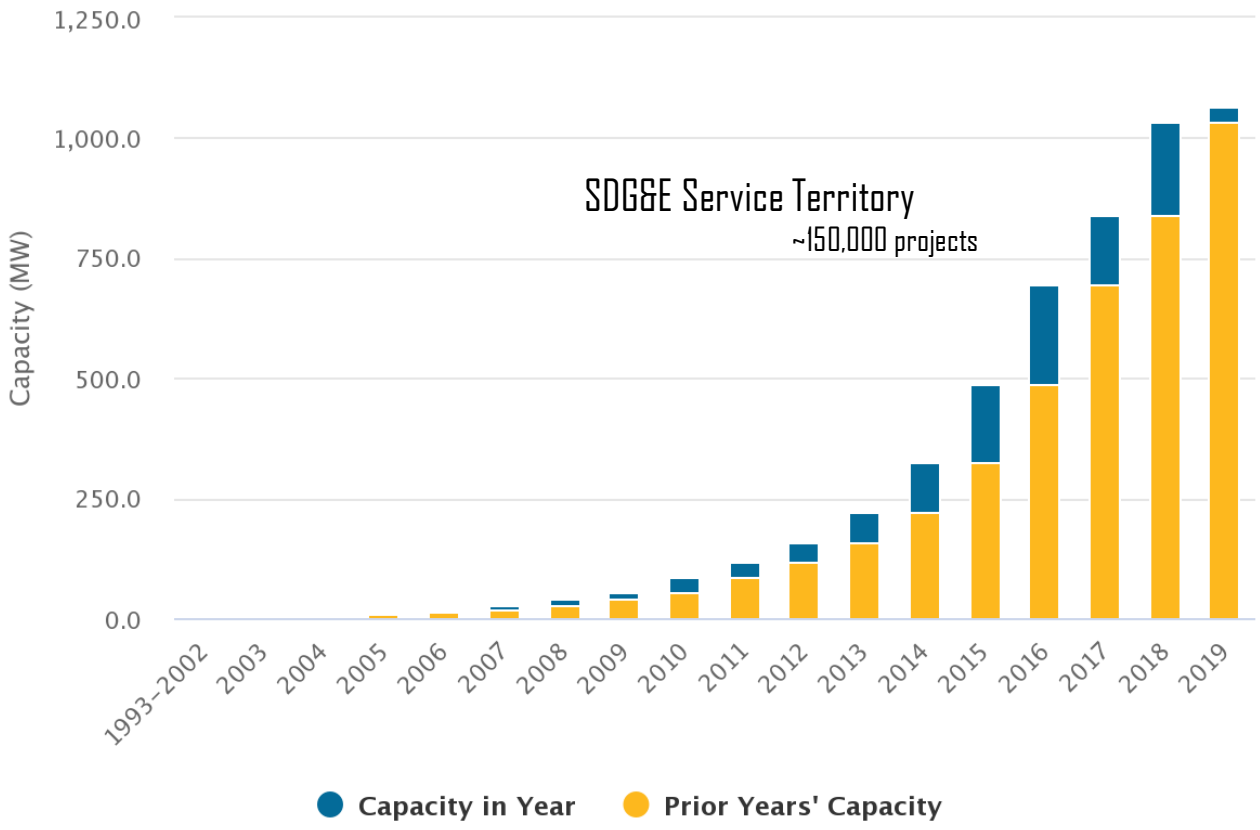
- Communities (cities, counties) may procure energy on behalf of citizens
- Local governments can become electricity providers (direct or contracted)
- “Choice” is about choice in electricity generation mix
- Automatic opt-in
- Local control over rates, governance
- IOU retains control and responsibility over transmission and distribution



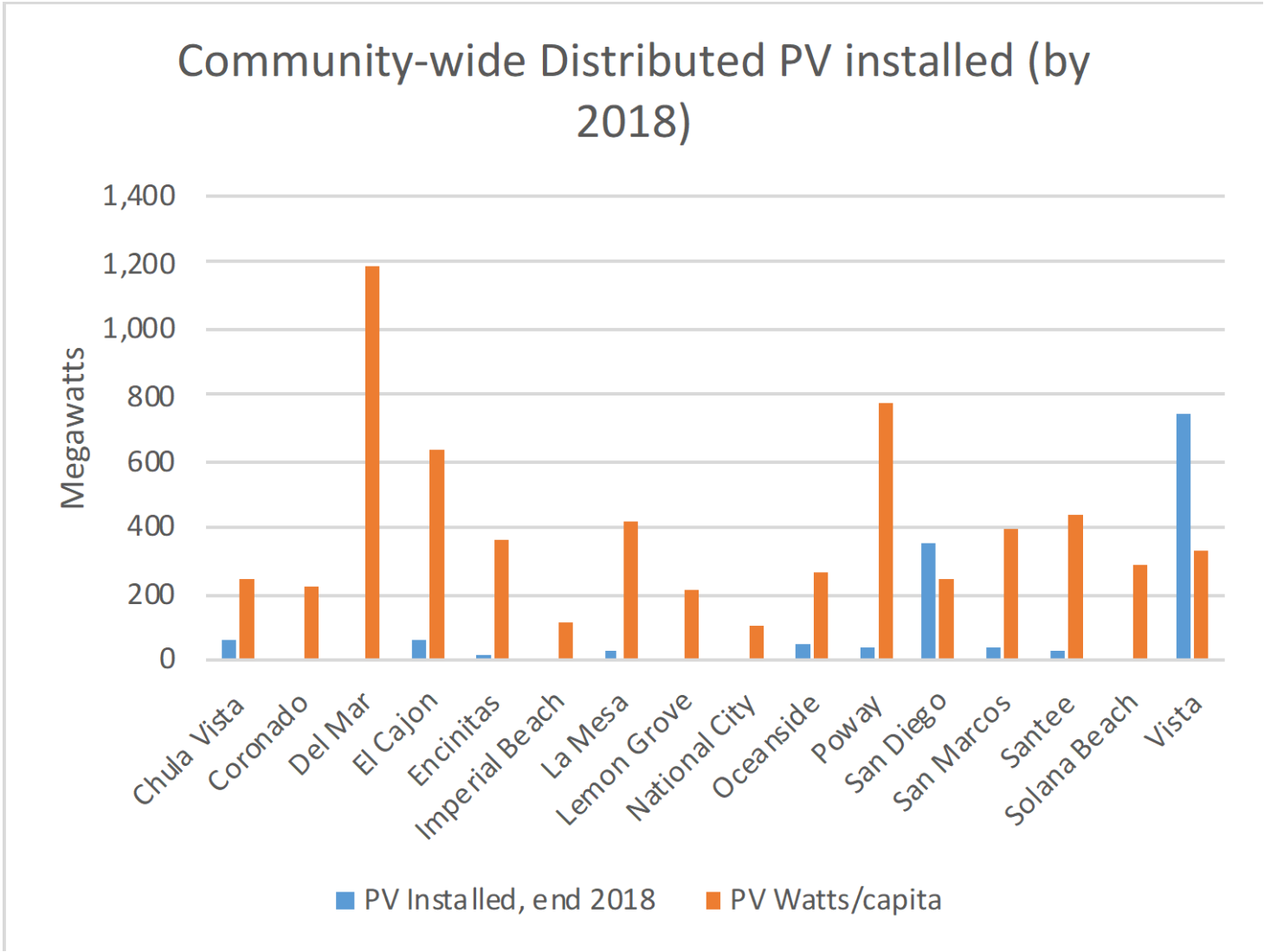
CCAs have higher renewables in supply than required

Electricity Sector – more distributed solar….

Distributed Generation



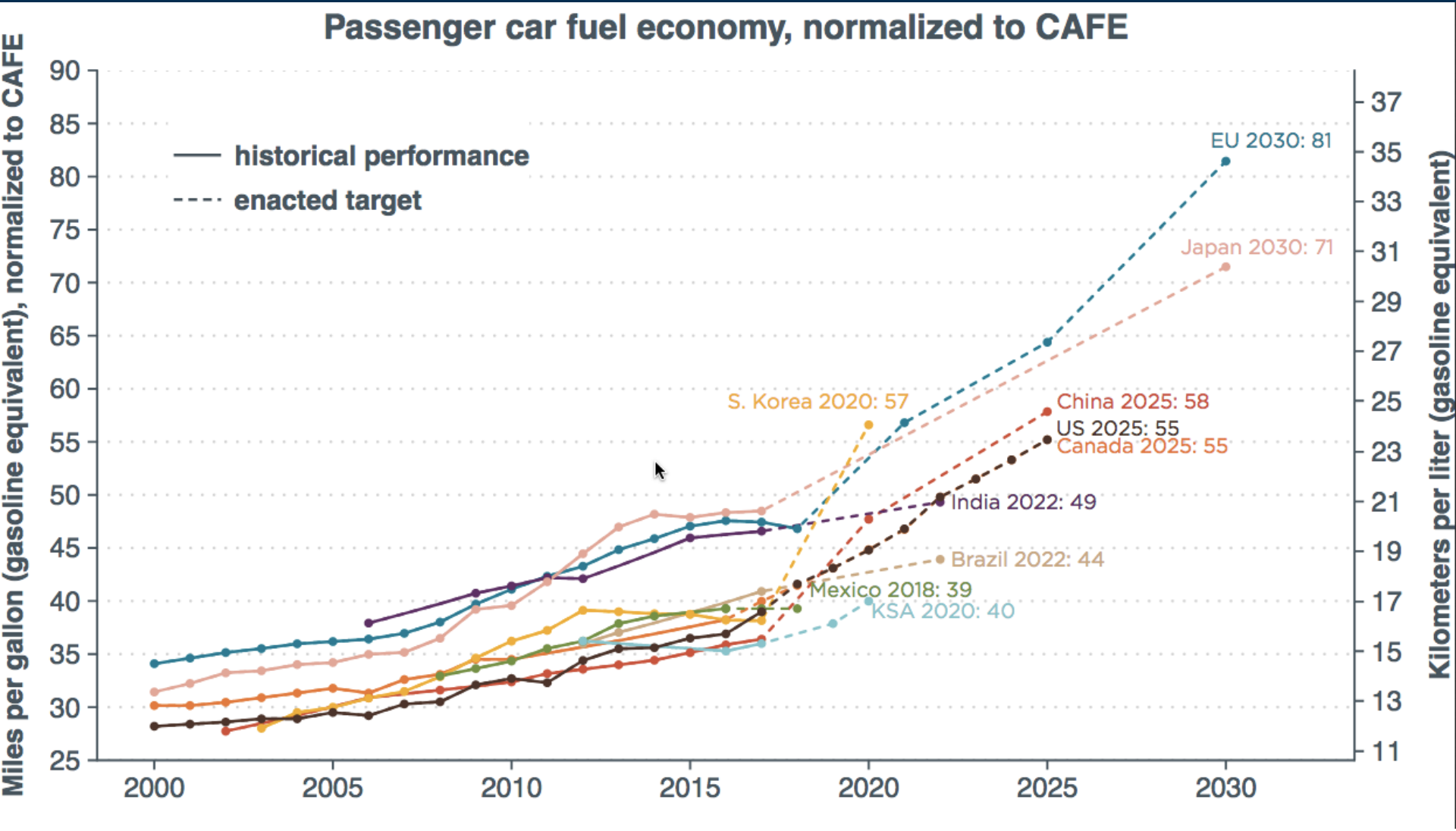
Distributed Solar by City, San Diego County, 2018



Transportation – vehicle fuel efficiency standards…..

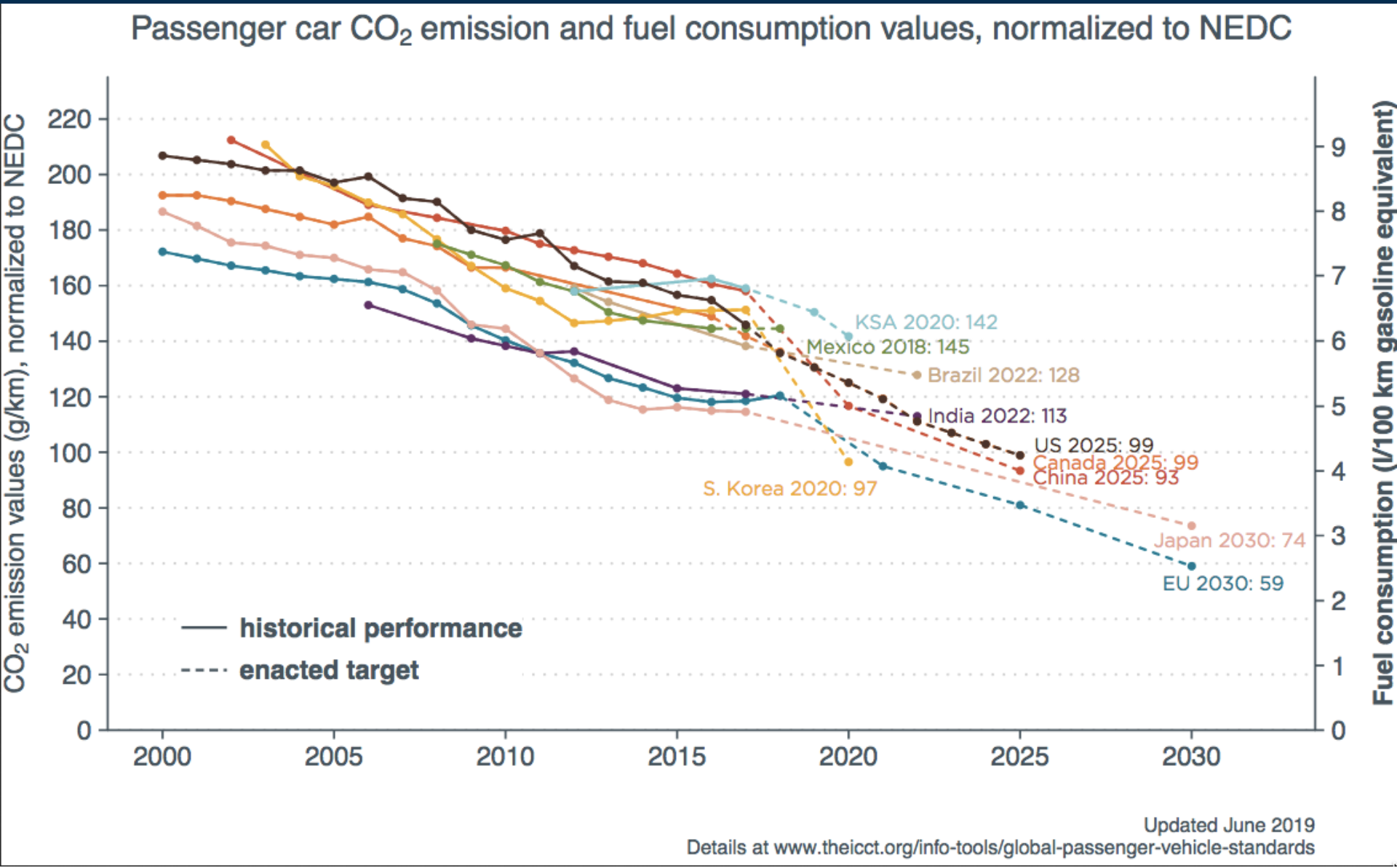
- 2012-2016 model years
  - Average 35.5 mpg in 2016. 251 grams CO2/mile.
- Standards set through MY 2021.
- Proposed 2017-2025.
  - Achieve average 54.5 mpg by 2025. 166 grams CO2/mile.
  - Criteria pollutant benefits: PM2.5 <11%, NOx 36%, ROG < 21% compared with 2016
- EPA 2019 revised determination for 2022-2025 standards
  - Preferred option: freeze at MY 2020 standards through 2026

Transportation – vehicle fuel efficiency standards…..



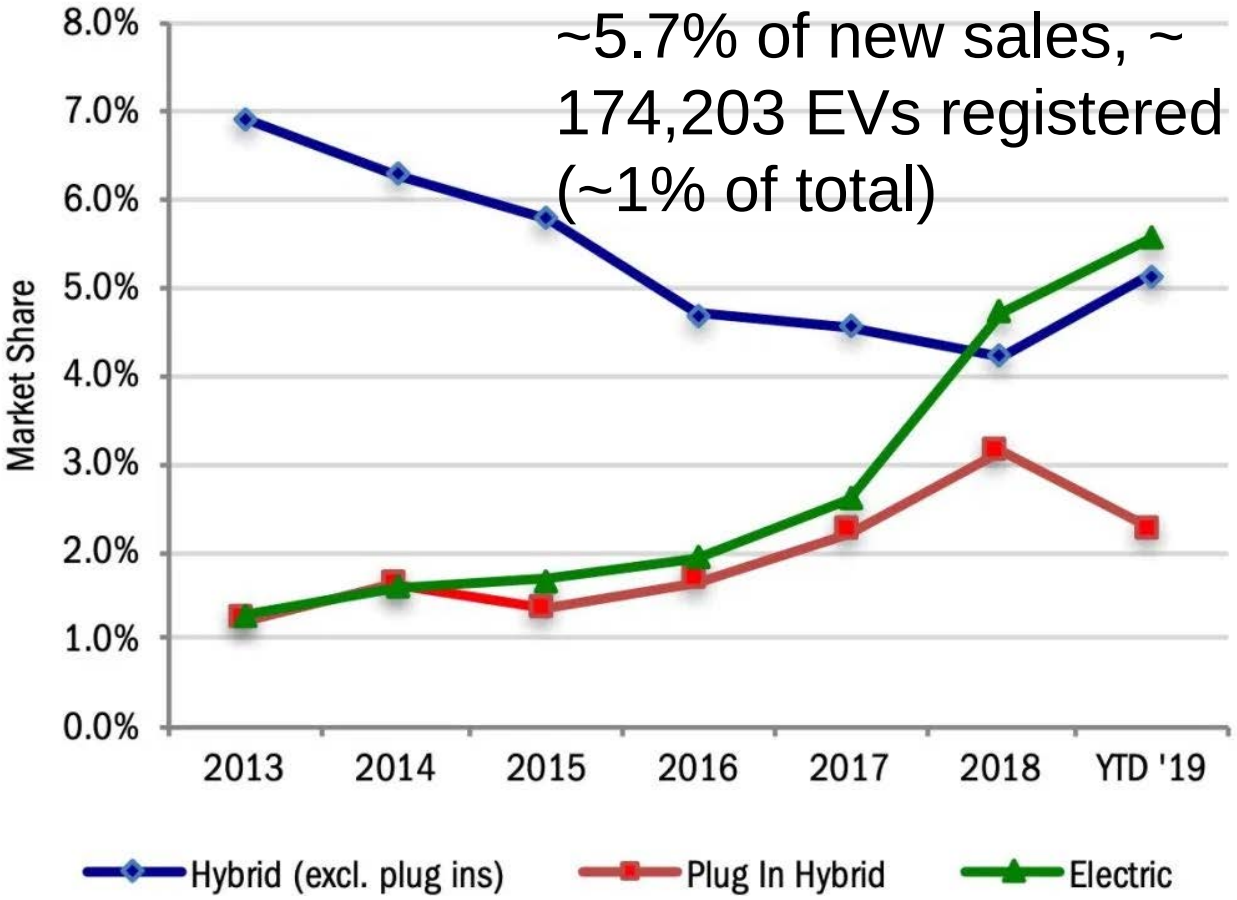
Source:https://theicct.org/sites/default/files/CAFE_mpg_cars_Jun2019.pdf

Transportation – vehicle CO2 emission standards…..



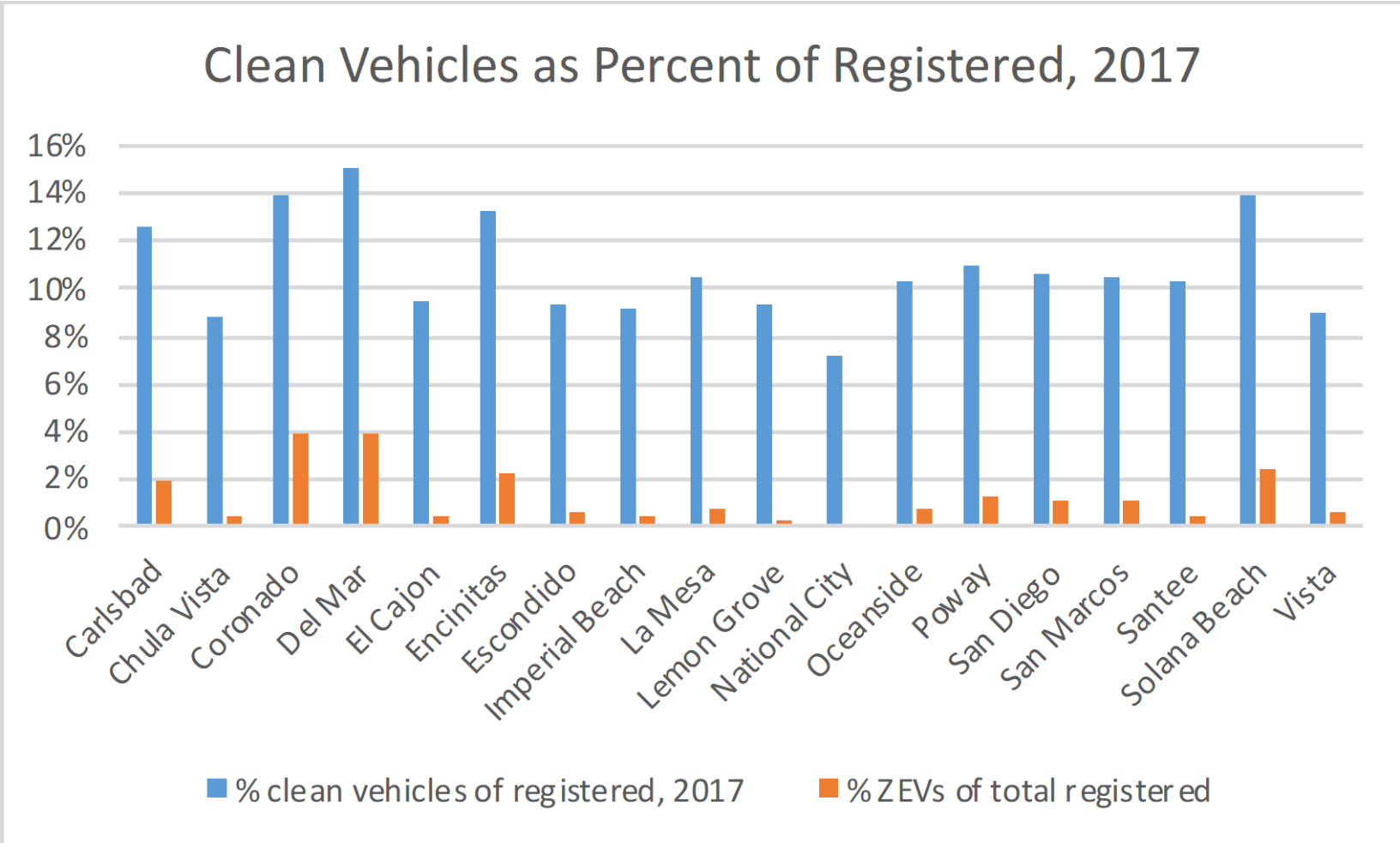
Transportation Fuels – more electric

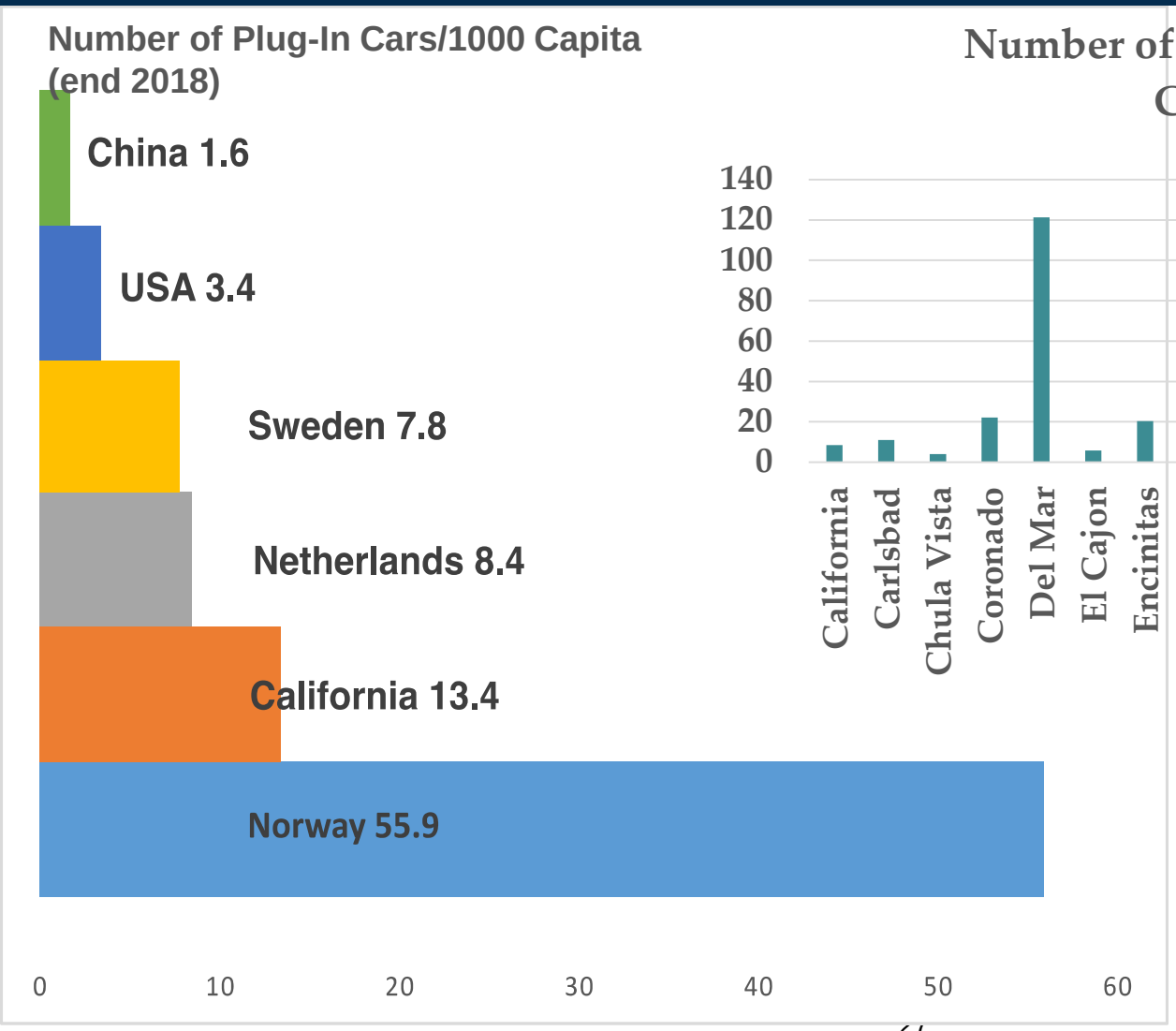
California New Sales

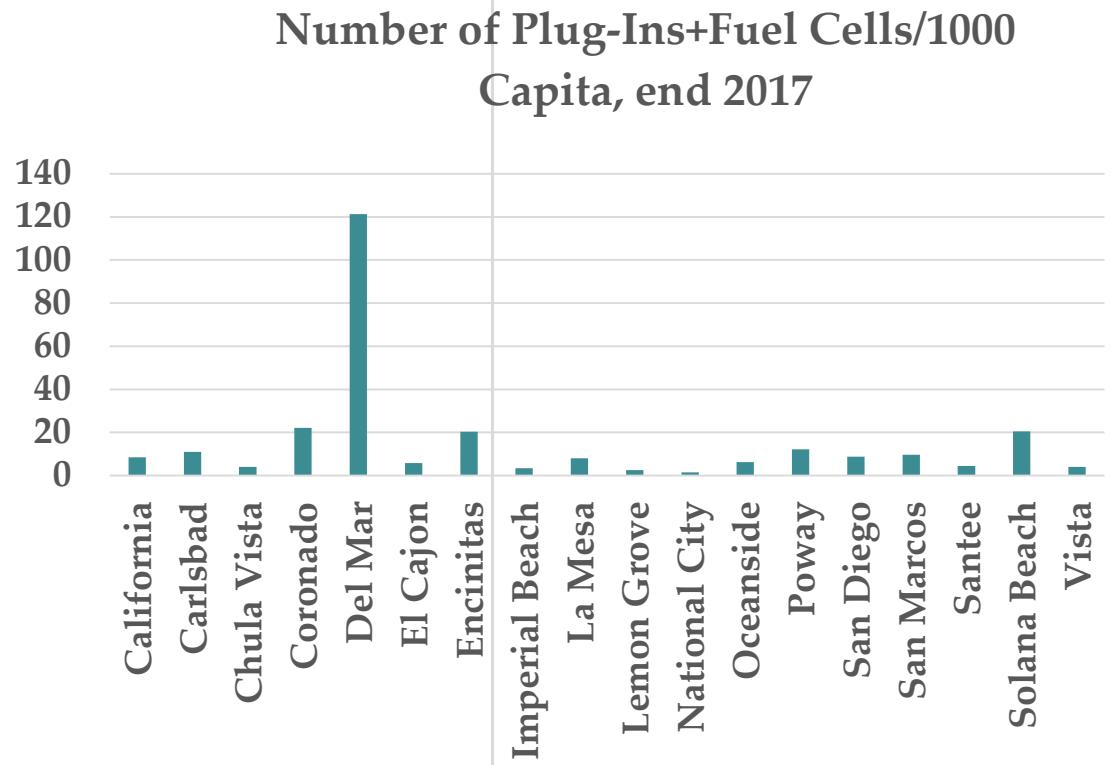


CA Goals:
5 million EVs (2030)
250,000 EVCS
200 H stations

Transportation – clean vehicles – San Diego county cities…..







Source: EPIC 2019 based on data from DMV

Connection Climate Policies and Environmental Quality

California Environmental Quality Act (changes in 2010)

- Projects (including plans) must conduct not only environmental analysis but also GHG analysis, and mitigate

"Environmental impact report is the heart of CEQA":

"...purpose it is to alert the public and its responsible officials to env changes before they have reached the point of no return..... to demonstrate ...that the (..*lead.. permitting*) agency has, in fact, analyzed and considered the ecological implications of its action"

"…information, participation, mitigation, accountability.."

" The EIR process protects not only the environment but also informed self government"

Power of CEQA

- If public agencies do not follow CEQA requirements before project approval, any interested person can
  - Contact the agency and make discrepancies known (must)
  - Complain to Attorney General
  - Initiate private litigation

- Court may overturn an EIR if there is "prejudicial abuse of discretion"
  - Not proceeding in a manner required by law
  - Approval of EIR by agency not supported by substantial evidence

Litigation

Sierra Club v County of San Diego (2014, 2018)

Cleveland National Forest Foundation et al v San Diego Association of Governments (2014, 2018)

Newhall Ranch Case, 2012, appeal 2016

Sierra Club v County of San Diego (2014)

- County updated General Plan + EIR 2011
  - Committed to a CAP as an implementation strategy
  - CAP was adopted by council
- Sierra Club challenged GP and CAP EIR as insufficient
  - CAP did not show how measures would achieve targets by 2020
  - Emissions increased after 2020, in violation of state policy
  - Measures were “recommended,” not enforceable
  - Measures were not funded
- Courts (trial + appellate) agreed with Sierra Club

Cleveland National Forest Foundation et al v. SANDAG (2014)

SANDAG adopted a Regional Transportation Plan to 2050 and EIR with GHG reductions shown only till 2020, thereafter GHGs increased.

Question**:** Must the plan show reduction beyond 2020?

SANDAG: Consistency needed only till 2020 (AB32), not with Exec Order

Trial Court, CA Court of Appeal:

- EIR failed as an informational document
- Failed consistency with state climate policy, must show consistency beyond 2020

Newhall Ranch case (Los Angeles) 2012, CA Supreme Court 2015
CENTER FOR BIOLOGICAL DIVERSITY et al., Plaintiffs and Respondents, v. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, Defendant and Appellant;

(1) Does the environmental impact report validly determine the development would not significantly impact the environment by its discharge of greenhouse gases?

What we learn from court interpretation of climate policies

- *validly (ie substantial evidence) determine that..a.. development would not significantly impact the environment by its discharge of greenhouse gases*

- *adopt (..GHG reduction plan) by a specific date, commit to enforceable measures… monitor and report*

- *Show consistency with state climate policy*

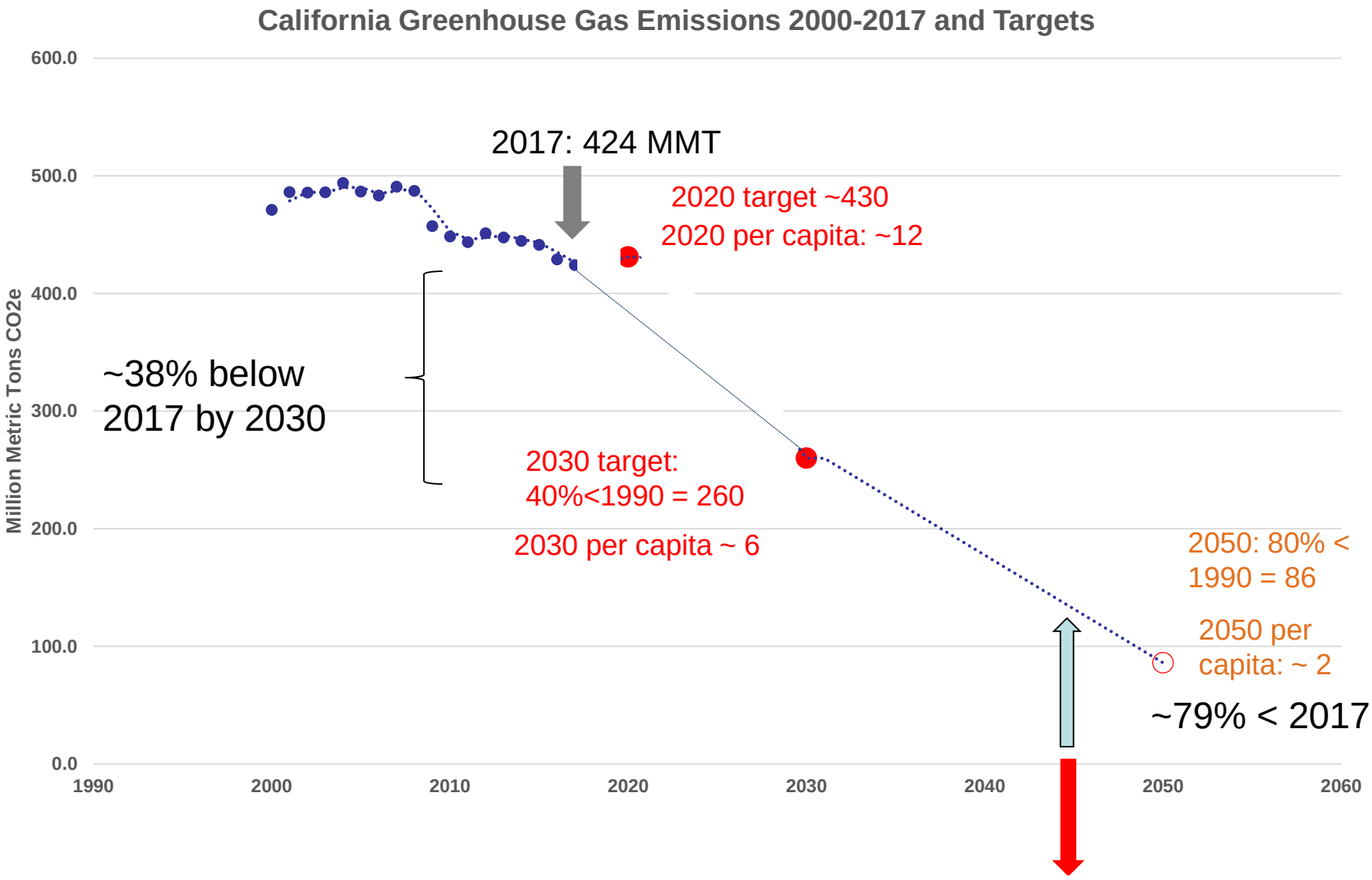
What Does the State Expect from Local Governments?

2008 Scoping Plan: recommended ~ 15% reduction from 2005-2012 base year

2017 Scoping Plan: recommends (+ Appendix B Local Actions examples)

- Adopt robust, quantitative, locally-appropriate goals
- Express in mass, per capita and service population emissions
- Use population projections consistent with that used for state
- Show downward trend

What Does the State Expect from Local Governments?



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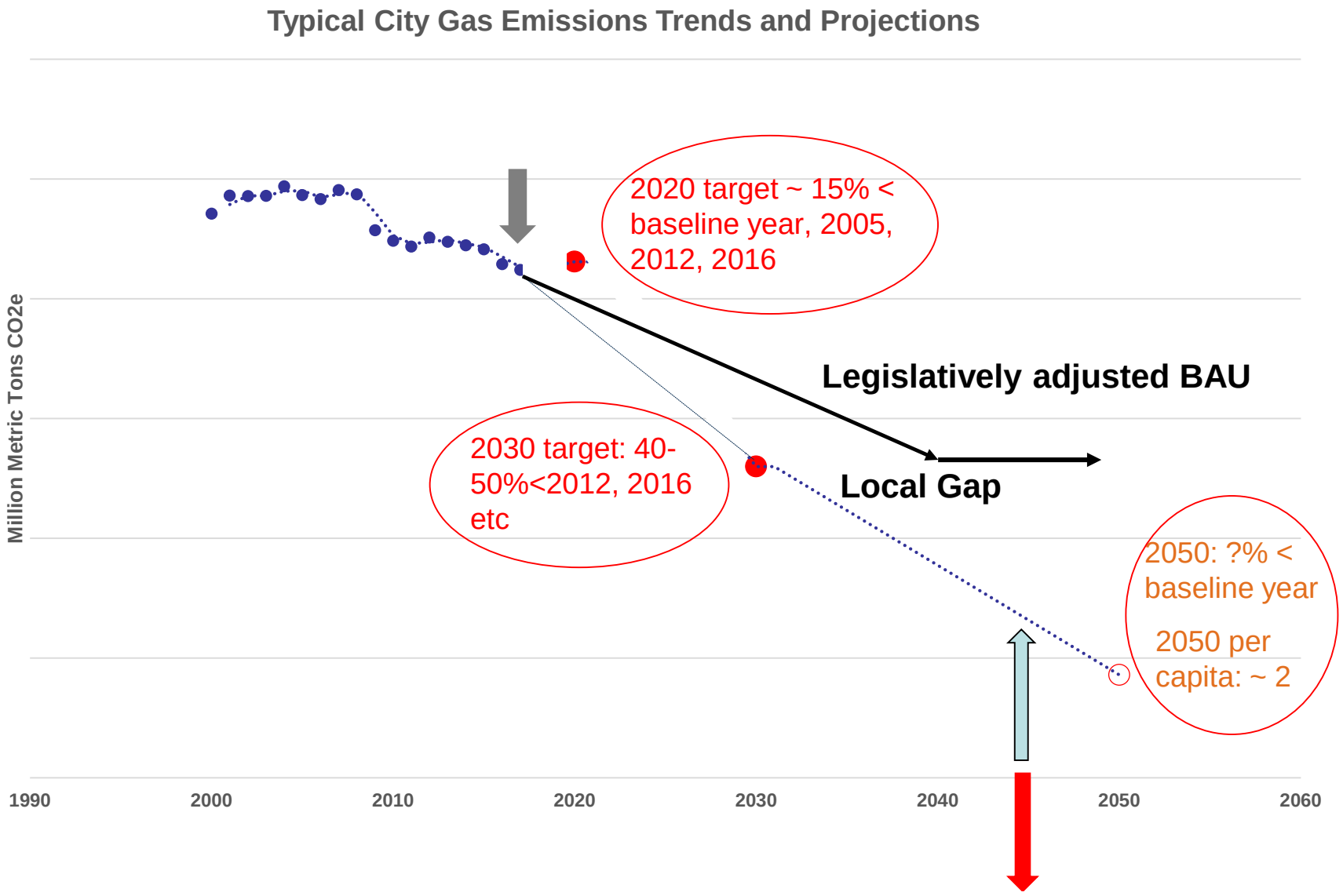


CAPs Adopted Since 2015 in the San Diego Region

Jurisdiction	Year Adopted	Type
City of San Diego	2015, update 2021?	CEQA Qualified
Chula Vista	2017	Guidance
Del Mar	2016	Guidance
El Cajon	July 2019	CEQA Qualified
Encinitas	2018	CEQA Qualified
Imperial Beach	July 2019	
La Mesa	2018	CEQA Qualified
Lemon Grove	2019	CEQA Qualified
Oceanside	2019	CEQA Qualified
San Diego (County)	2018	In litigation
San Marcos	2019?	CEQA Qualified
Solana Beach	2017	Guidance
Vista	2019?	CEQA Qualified

Mitigation Measure Trends (CAPs Since 2015, San Diego Region)

- High renewable electricity supply, more PV
- Require energy audits for residential, non-res
- Reach codes
- Increase electric vehicle charging stations
- Increase solid waste diversion
- Increase alternative modes, density (in transit areas), mixed use
- Urban forestry/tree planting
- Minor measures (parking changes, permitting via internet, school bus conversions, construction equipment alternative fuel, etc.)

2017 Scoping Plan suggests also:

- Disclose all emissions, focus on sectors of jurisdictional control
  - Include trips outside boundary
  - Include carbon sequestration from natural and working lands
- Consider policies to reduce VMT by an average of 1.5 miles/person/day from 2030 projections
  - Land use and community design to reduce VMT
  - Transit oriented development
  - Street design to prioritize transit, biking, and walking
  - Increase low carbon mobility choices
  - Improved access to public transportation and active transportation
- "Production-based" inventories and emissions reduction appropriate
- Show consumption-based emissions as background, disclosure, outreach
- Cumulative vs target year reductions?

KEY ISSUES

- Equity
  - L.A.’s Green New Deal - Sustainable City pLAn 2019
  - Equity in mitigation and adaptation

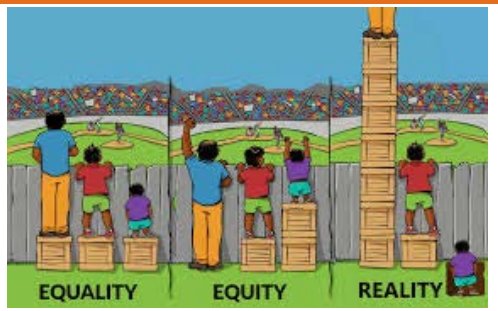
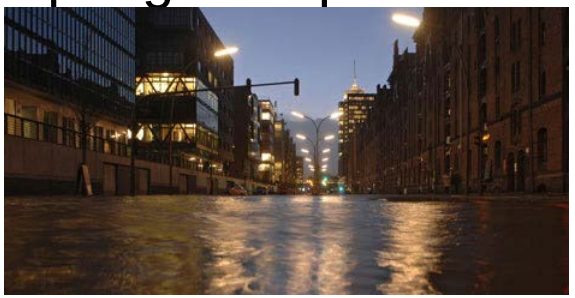


Illustration by Angus Maguire for the Interaction Institute for Social Change (2016)

- Carbon Neutrality
  - Carbon Sequestration
  - Need to consider working and natural lands
  - Carbon Offsets
    - Local versus anywhere

- Shift from reducing emissions to reacting and adapting to impacts
  - Sea level rise
  - Wildfire
  - Heat waves



- System vulnerabilities and resilience to impacts

Thank you!

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