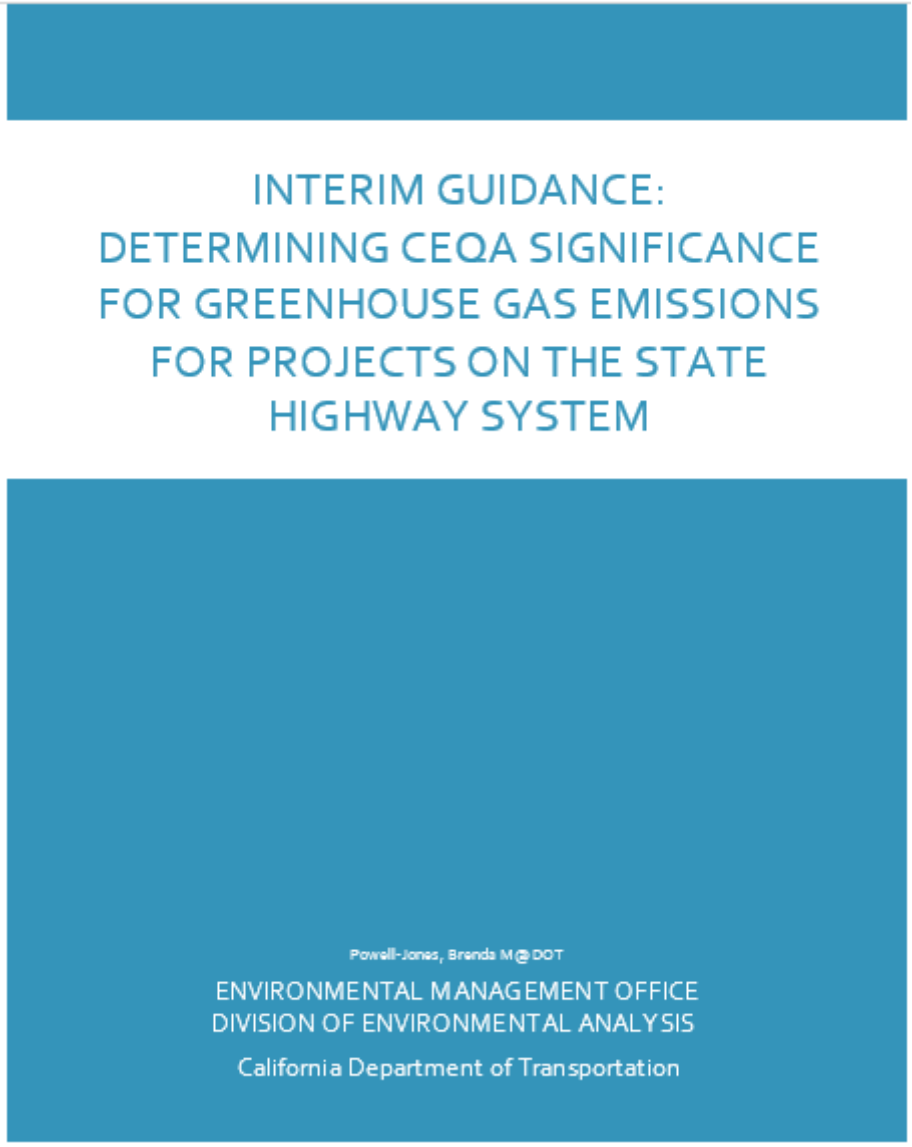
Interim Guidance: Determining CEQA significance for GHG Emissions

May 31, 2018 Transportation Co-op Meeting

Background

Why We are Briefing You:



- **Interim guidance will apply to all projects for which Caltrans is CEQA lead**
  - **Includes Caltrans and locally-sponsored projects on SHS**

Our Current Practice for CEQA: GHG Analysis

We <u>have</u> been analyzing GHG emissions at the project level for over 10 years, including

- Doing qualitative/quantitative emission modeling
  - Emphasis on comparative differences between the alternatives

We <u>have</u> been disclosing measures and efforts by Caltrans to reduce GHG

We <u>have not</u> been making a CEQA significance determination for GHG

Key Current Mandate


Office of Governor
Edmund G. Brown Jr.

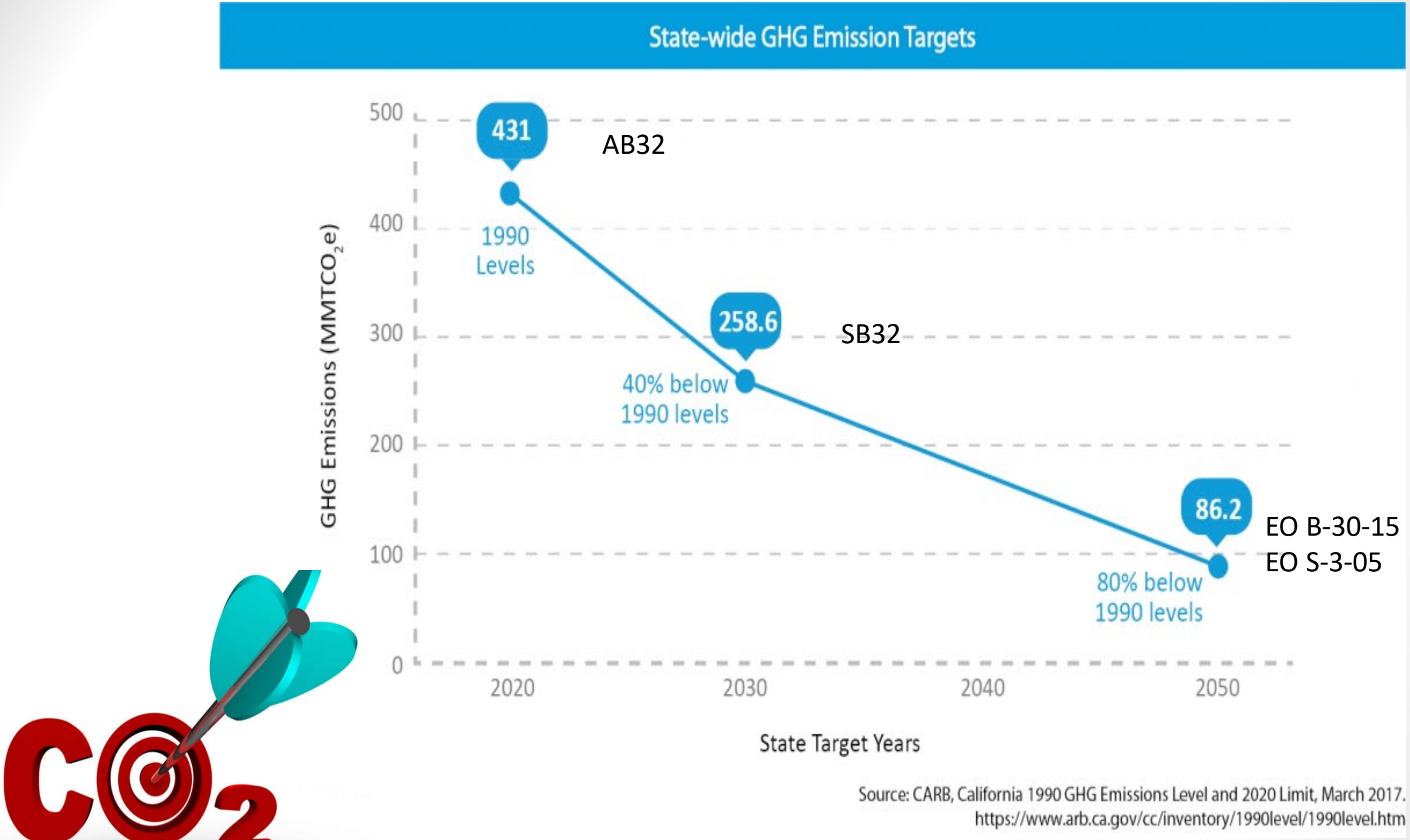
Home About Newsro

Governor Brown Establishes Most Ambitious Greenhouse Gas Reduction Target in North America

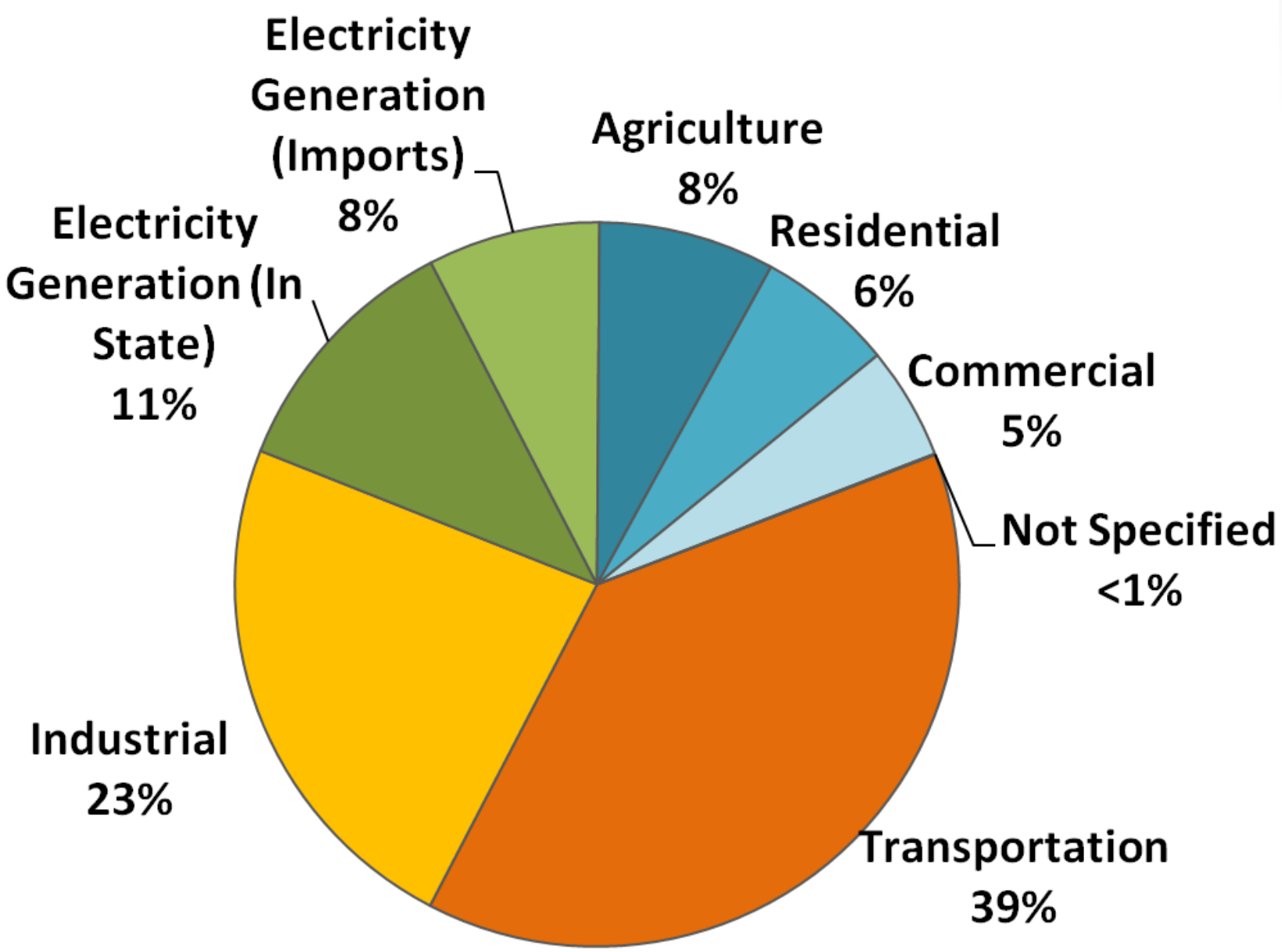
Published: Apr 29, 2015

New California Goal Aims to Reduce Emissions 40 Percent Below 1990 Levels by 2030

- **EO B-30-15**
  - GHG emissions target **40% below 1990** level by 2030
  - State Agencies **shall take** climate change into account in their planning and investment decisions


State-wide GHG Emission Targets
GHG Emissions (MMTCO2e)
500
400
300
200
100
0
431
1990 Levels
AB32
258.6
40% below 1990 levels
SB32
86.2
80% below 1990 levels
EO B-30-15
EO S-3-05
2020
2030
2040
2050
State Target Years
Source: CARB, California 1990 GHG Emissions Level and 2020 Limit, March 2017.
https://www.arb.ca.gov/cc/inventory/1990level/1990level.htm

CO2



2015 Total CA Emissions: 440.4 MMTCO2e

ARB 2017 GHG Inventory: https://www.arb.ca.gov/cc/inventory/data/data.htm

Draft Interim Guidance

Key points

CEQA Checklist GHG Questions

VII. GREENHOUSE GAS EMISSIONS. Would the project:

Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.

Does the project have impacts that are individually limited, but cumulatively considerable?

Emission Sources

Construction

Operational

Project Type

Non-Capacity Increasing/ Congestion Relief

- Rehabilitation
- Maintenance
- Replacement
- Repair projects designed to improve the conditions of existing transportation assets (e.g., highways, roadways, bridges, culverts, transit systems, and assets that serve bicycle and pedestrian facilities) and
- **Do not increase the number of motor vehicle lanes or result in a change in speed or volume**

Capacity-Increasing/ Congestion Relief

- Addition of through lanes
  - General purpose/mixed flow lanes, high occupancy vehicle (HOV) lanes, new managed/express/toll lanes
- New interchange or interchange reconfiguration
- Auxiliary lanes over 1 mile

EXAMPLES OF CONGESTION RELIEF AND CAPACITY-INCREASING PROJECTS

New Roadway/Facility	Additional Lanes	Interchange Reconfiguration	Other
Bypass	HOV lane	Ramp widening	Auxiliary lanes more than 1 mile long
New or extended highway	New general purpose or mixed-flow lanes		
New interchange	Managed, express, or toll lanes		

EXAMPLE LIST OF NON-CAPACITY INCREASING PROJECTS

Safety	Maintenance	Operational Improvements	Other
Install Rumble Strips	Pavement Rehab	Construct turn pockets	Change Superelevation
Curve Correction	Slope Stabilization	Install vehicle classification System	Excess Land Disposal
Install Guardrail	Replace Bridge Counterweights	Install loop detectors	Construct noise wall
Install median barrier	Replace Bridge Joint Seals	Install ramp meters	Air space lease
Widen shoulders	Bridge overlay	Install signals	Storm-water improvements and installations
Install lighting	Storm damage repair	Install receiver and signals for FasTrak	Approve research grants
Install sidewalk	Restore planting and upgrade irrigation	Modify intersection	Relinquishment
Install signs	Replace culvert	On-ramp/off-ramp improvements	Upgrade park and ride
Replace bridge rails	Tie-back slope/soil nails	Install traffic operation system	Upgrade highway rest areas
Install highway planting	Replace bridge in-kind	Install closed circuit television cameras	Install wireless cell towers
Bridge Retrofit	Repair sidewalk	Realignments that don't add capacity	Upgrade facilities for ADA compliance
Addition of an auxiliary lane of less than one mile in length	Repair signs/lighting	Grade separations	Construct mitigation site/environmental stewardship projects
	Install retaining wall	Install Roundabout	Test drilling and soil sampling
	Maintenance station improvements	Reduction in number of through lanes	Installation, repair or maintenance of Traffic Management System elements, or traffic control devices
	Pavement grinding	Installation or reconfiguration of traffic calming measures	Highway shoulder enhancements for safety or bike /pedestrian access
	Culvert clean-out	Addition of traffic wayfinding signage	
	Maintain storm-water		

Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

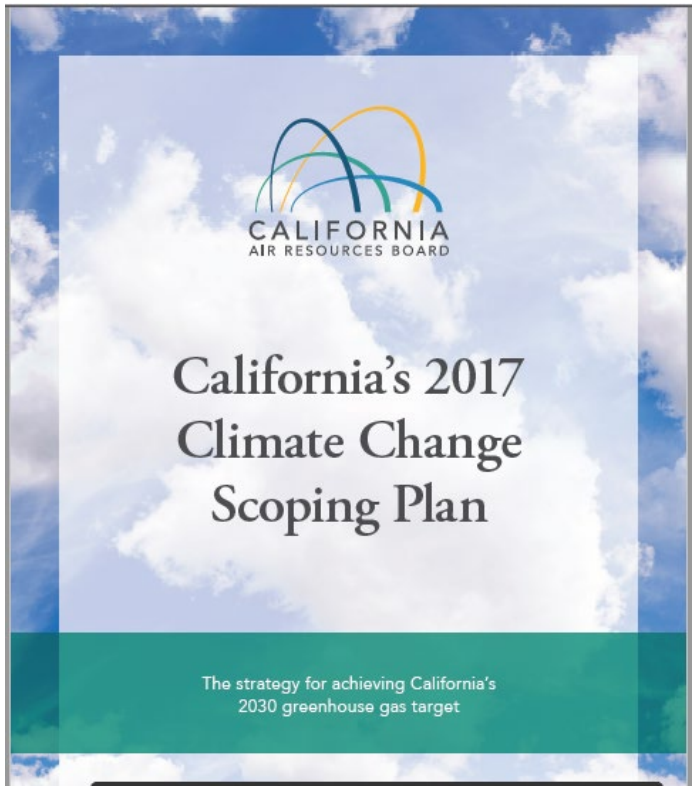
Non-Capacity Increasing Projects

- **Construction Emissions**
  - Include good faith estimate
  - Addressed by through the inclusion of standard measures designed to reduce or eliminate those emissions
- **Operational Emissions (Qualitative)**
  - Assume no substantive changes in operational emissions
- **Significance**
  - Generally considered to be less than significant w/supporting information

Capacity Increasing Projects

- **Construction Emissions**
  - Include good faith estimate
  - Addressed through the inclusion of standard measures designed to reduce or eliminate those emissions
- **Operational Emissions (Quantitative)**
  - Analyze changes in emissions among alternatives: existing, future build, and future no-build
- **Significance**
  - Generally considered significant if future build emissions are greater than existing

Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?



- **GHG emissions reductions targets**
  - Set forth in executive orders, addressed in ARB Scoping Plan for meeting emissions reduction targets
- **SB 375**
  - Consistency with applicable Sustainable Community Strategies from MTP or RTP
- **Climate action plans and general plans as applicable**

Does the project have impacts that are individually limited, but cumulatively considerable?

- **If the proposed project is expected to result in an increase of operational emissions when compared to existing conditions, then it may be considered a cumulatively considerable contribution to global climate change**
  - unless substantial evidence is presented that the project will implement or fund its fair share of the mitigation for the GHG cumulative impact

Mitigate for GHG /Defined by CEQA

*Consistent with section **15126.4(a)**, lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring and reporting, of mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effect of greenhouse gas emissions may include, among others;*

- ***Measures in an existing plan** or mitigation program for the reduction of emissions that are required as part of the lead agency's decision*
- *Reduction in emissions resulting from a project through implementation of project features, project design, or other measures, such as those described in **Appendix F***
- ***Off-site measures** , including offsets that are not otherwise required, to mitigate a projects emissions*
- *Measures that **sequester greenhouse gases***
- *In the case of the adoption of a plan, such as a general plan, long range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific measures that may be implemented on a project-by-project basis. Mitigation may also include the incorporation of specific measures or policies found in an adopted ordinance or regulation that reduces the cumulative effect of emissions*

Mitigate: Construction Impacts

Measures that consider incorporation of Best Available Control Technology (BACT) during design, construction and operation of projects to minimize GHG emissions, including but not limited to:

- Use energy and fuel efficient vehicles and equipment. Project proponents are encouraged to meet and exceed all EPA/NHTSA/CARB standards relating to fuel efficiency and emission reduction;
- Use alternative (non-petroleum based) fuels;
- Deployment of zero- and/or near zero emission technologies as defined by CARB;
- Use lighting systems that are energy efficient, such as LED technology;
- Use the minimum feasible amount of GHG-emitting construction materials that is feasible;
- Use cement blended with the maximum feasible amount of fly ash or other materials that reduce GHG emissions from cement production;

Mitigate: Construction Impacts (cont.)

- Incorporate design measures to reduce GHG emissions from solid waste management through encouraging solid waste reduction, recycling and reuse;
- Incorporate passive solar and other design measures to reduce energy consumption and increase production and use of renewable energy;
- Incorporate design measures like Water Sense fixtures and water capture to reduce water consumption;
- Use lighter-colored pavement where feasible;
- Recycle construction debris to maximum extent feasible;
- Protect and plant shade trees in or near construction projects where feasible; and
- Solicit bids that include concepts listed above.

Mitigate: Operational Impacts

- Measures listed in the applicable RTP/SCS EIR
- Measures to improve energy efficiency
- Measures to improve water efficiency
- Incorporation of Complete Streets components
- Installation of solar
- Installation of Zero Emission Vehicle (Zev) infrastructure (i.e. electric vehicle charging stations)
- Planting/vegetation
- Measures to reduce or support reduction of **VMT**

Point of Contact

Brenda Powell-Jones, Sr. Environmental Planner

Climate Change Policy Advisor

Division of Environmental Analysis, Office of Environmental Management

(916) 653-0255

Bpowellj@dot.ca.gov