

DOCKETED

Docket Number:	15-RETI-02
Project Title:	Renewable Energy Transmission Initiative 2.0
TN #:	210091
Document Title:	California Climate Strategy (CARB) for RETI 2.0 Plenary Meeting on Jan 29, 2016
Description:	California Climate Strategy
Filer:	clare Laufenberg
Organization:	Air Resources Board
Submitter Role:	Public Agency
Submission Date:	1/29/2016 3:46:27 PM
Docketed Date:	1/29/2016



California Climate Strategy

*Air Resources Board
January 29, 2016*



CALIFORNIA CLIMATE STRATEGY

An Integrated Plan for Addressing Climate Change



VISION

**Reducing Greenhouse Gas Emissions
to 40% Below 1990 Levels by 2030**

GOALS

**50%
reduction
in petroleum
use in vehicles**



**50%
renewable
electricity**



**Double energy
efficiency savings
at existing buildings**



**Carbon
sequestration
in the land base**



**Reduce
short-lived
climate pollutants**

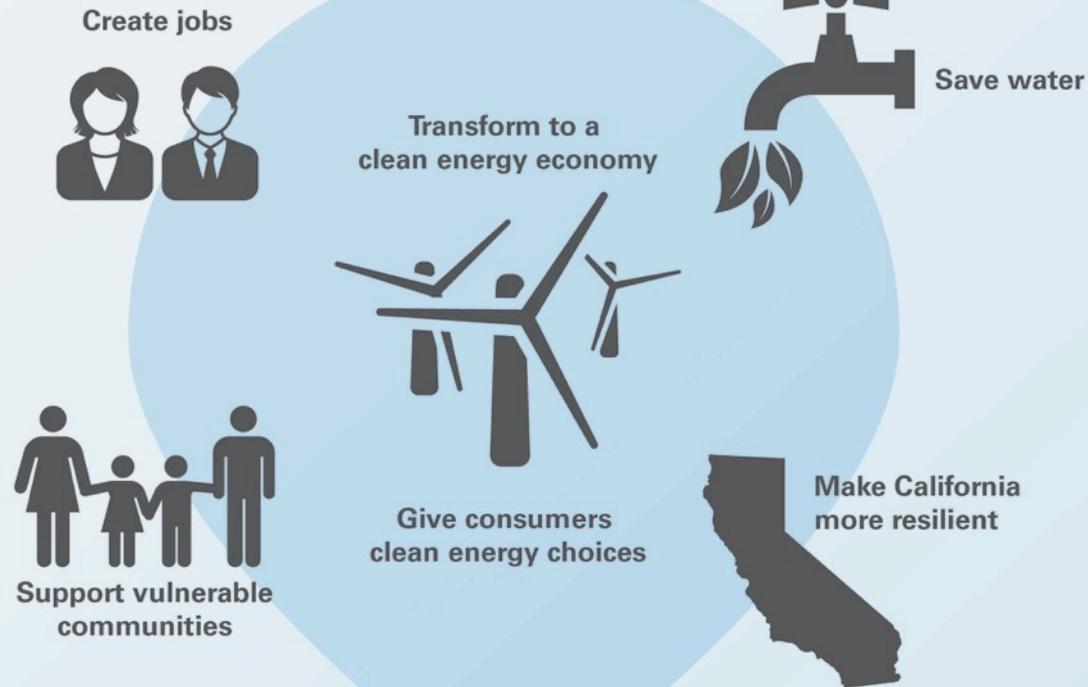


**Safeguard
California**



CALIFORNIA CLIMATE STRATEGY

PRINCIPLES



CALIFORNIA CLIMATE STRATEGY

IMPLEMENTATION

SCOPING PLAN

Climate Action Plans

SLCP Plan

Forest Carbon Plan

Cap and Trade Regulation

2040 CA Transportation Plan

Other plans/regulations for renewables, efficiency, transportation, fuels

LEGISLATION

AB758 Energy Efficiency Plan

GGRF Investment Plan

Healthy Soils Action Plan

BUILDING BLOCKS

Partnerships



Research



Incentives



Grants



Voluntary Action



Regulations



Local Action



International Climate Agreements



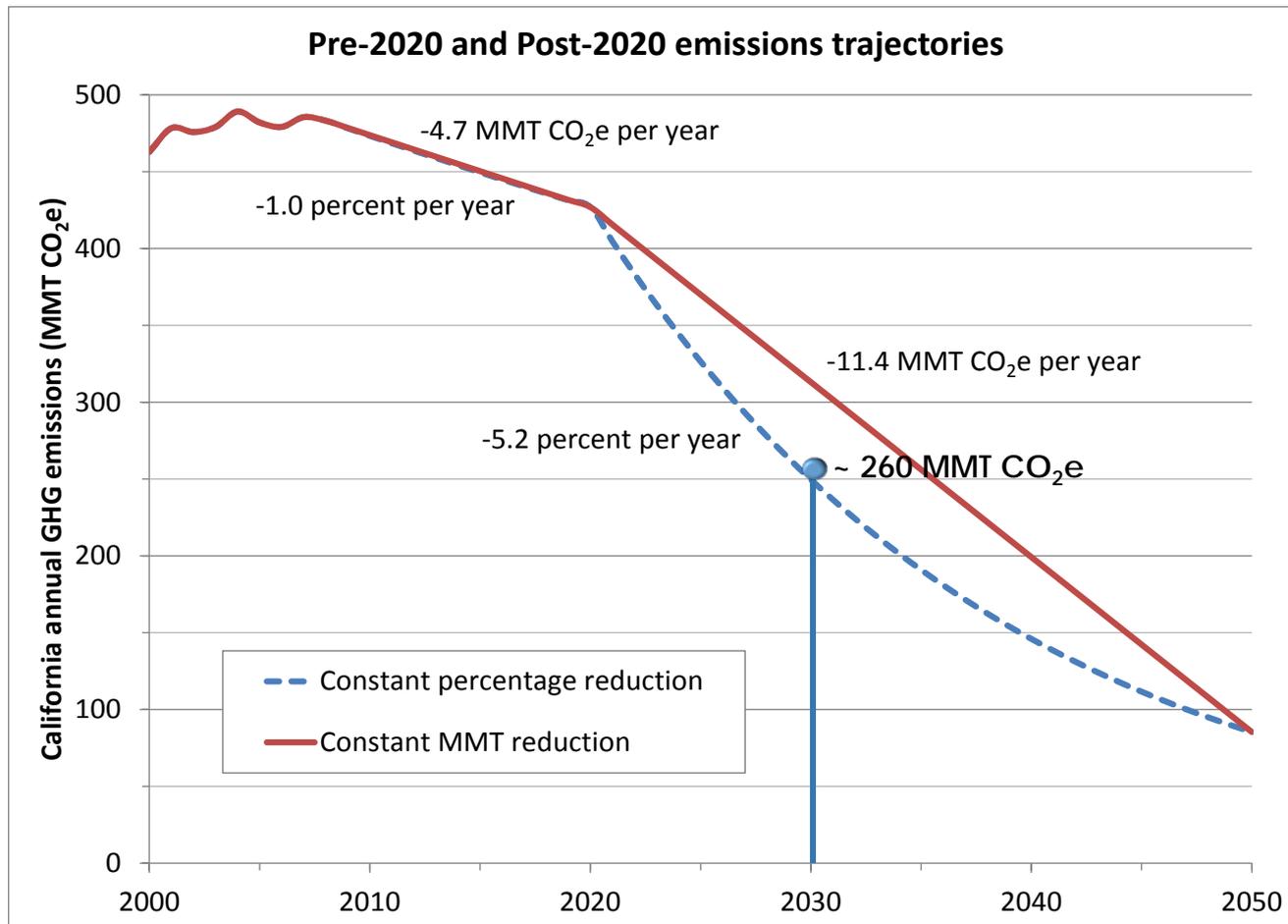
2030 Target Scoping Plan Overview

CALIFORNIA AIR RESOURCES BOARD

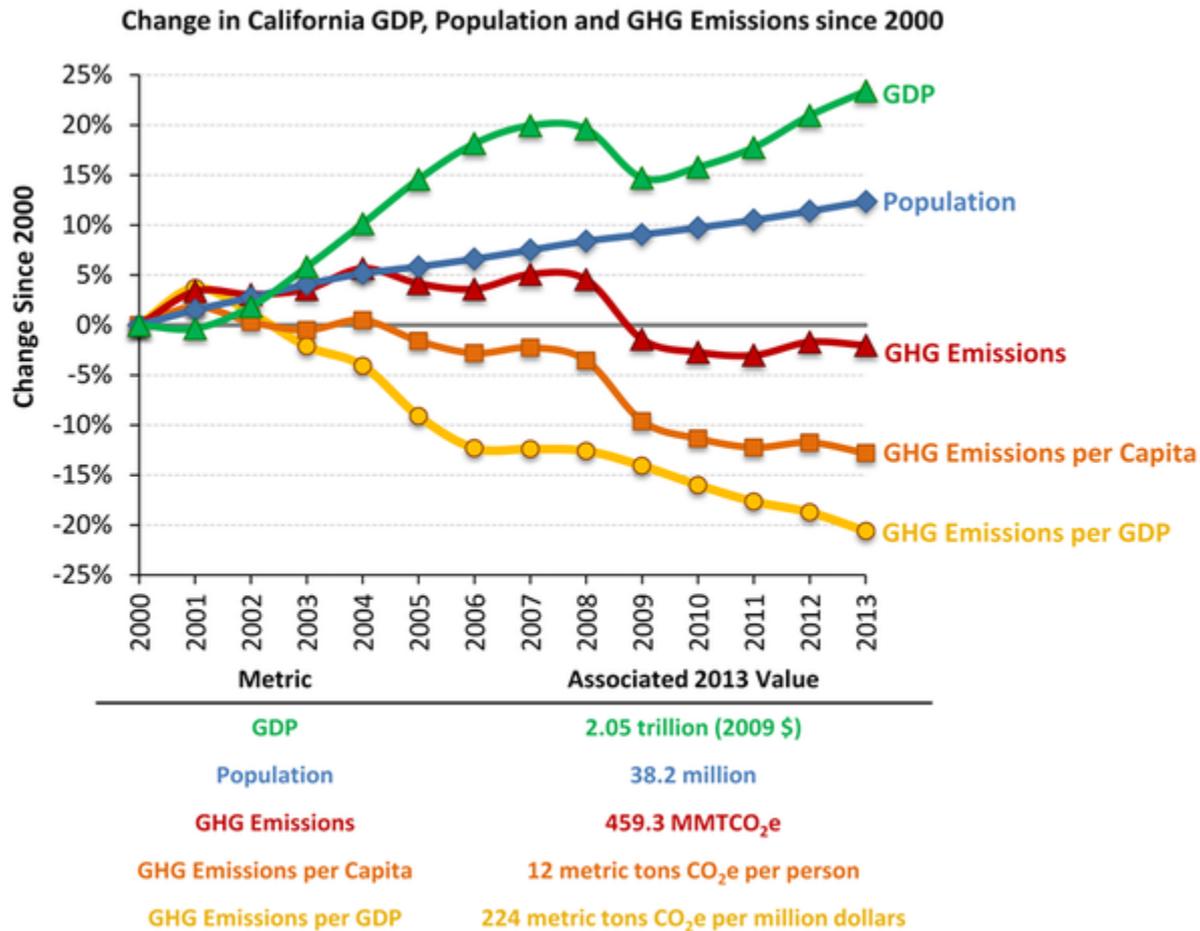
AB 32 Objectives

- ▣ Develop a balanced approach to address climate change
- ▣ Improve air quality and public health
- ▣ Provide a consistent policy approach to drive investment in clean technology
- ▣ Provide a model for future national and international climate change efforts
- ▣ Achieve 1990 emissions by 2020; maintain and continue reductions past 2020 to achieve 2030 and 2050 goals
- ▣ Coordinate efforts across government agencies

Path to 2050 Greenhouse Gas Target



Decoupling GDP & GHGs



Guiding Principles

- Reduce Greenhouse Gas Emissions to 40% Below 1990 Levels by 2030 (Executive Order B-30-15)
- Create jobs and support a robust workforce
- Save water
- Support Disadvantaged Communities
- Make California more resilient
- Transform to a clean energy economy
- Give consumers clean energy choices

Achieving the 2030 Target

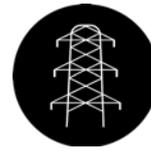
- Continuation of programs established to reach the 2020 GHG emissions reduction target
 - Cap-and-Trade Program
 - Low Carbon Fuel Standard
 - Renewable Portfolio Standard
 - Advanced Clean Cars Program
 - ZEV Program
 - Sustainable Freight Strategy
 - Short-Lived Climate Pollutant Strategy
 - SB 375 Sustainable Communities Strategy

Measure Development Plan

- ▣ Governor's Office pillars framework
 - ▣ Reduce petroleum use
 - ▣ Increase renewable electricity
 - ▣ Increase building energy efficiency
 - ▣ Reduce short-lived climate pollutants
 - ▣ Ensure natural/working lands are carbon sink
- ▣ Sector oriented measures
- ▣ Maximize GHG reductions across all areas
 - ▣ Realize co-benefits at large industrial sources
- ▣ Multi-agency collaborative process
- ▣ Stakeholder input

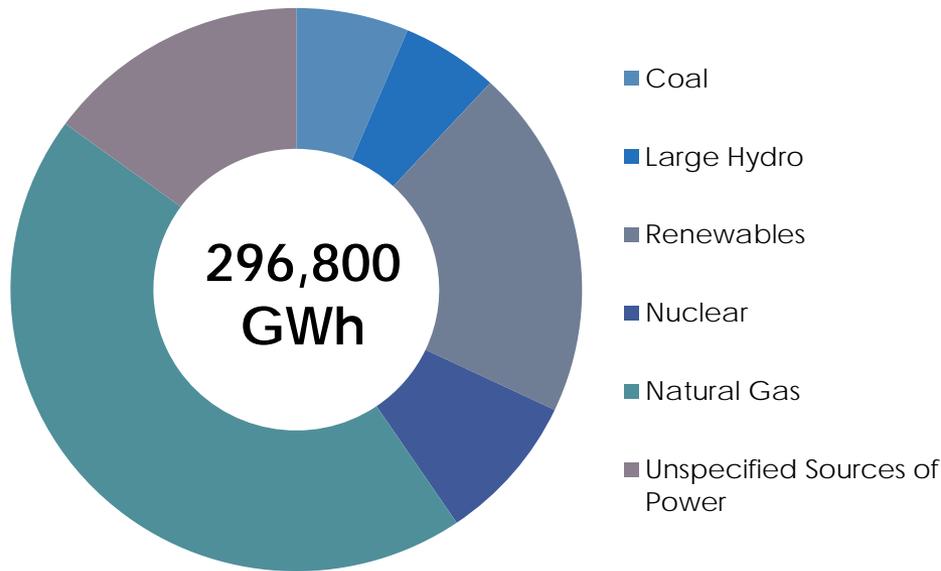
Elements of 2030 Strategy

- Focus areas within pillars framework
 - Energy
 - Green buildings
 - Transportation
 - Water
 - Natural and working lands
 - Agriculture
 - Waste management
 - Short-lived climate pollutants
- Maximize synergies among sectors



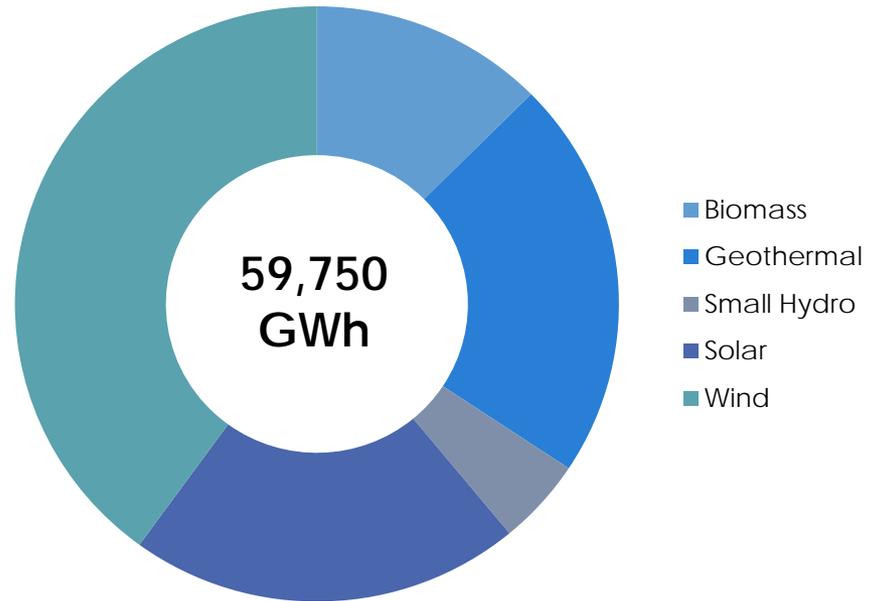
Electricity Sector in California

Total California Generation (GWh)



Instate: 198,900 GWh Imports: 97,900 GWh

Total Renewable Generation (GWh)

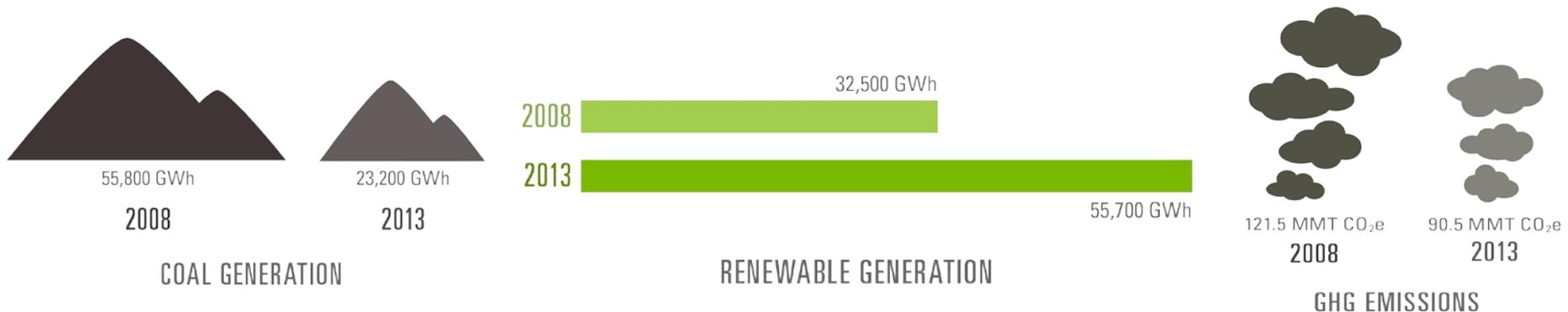


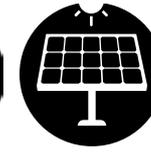
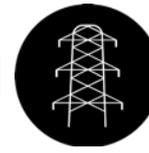
Instate 44,850 GWh Imports: 14,900 GWh



Vision to 2020

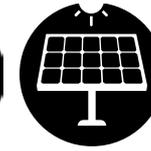
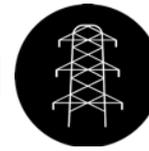
- Electricity sector is about 20% below 1990 GHG emission levels
- From 2008 to 2013:
 - Renewable generation almost doubled
 - Coal generation reduced by more than half
 - GHG emissions reduced by a quarter





Achieving 2020 Goals

- ▣ Electricity sector is about 20% below 1990 GHG emission levels
- ▣ Energy/Water Nexus
- ▣ GHG reduction/climate programs
 - ▣ Renewables Portfolio Standard
 - ▣ Customer-side distributed generation programs
 - ▣ Cap-and-Trade
 - ▣ Combined Heat and Power Programs
 - ▣ Energy Efficiency
 - ▣ Electric Vehicle Programs
 - ▣ Integrating variable resources



SB 350, De León

- Increases the 33% RPS to 50% RPS
- Paves the way for transformation of the California ISO into a regional organization
- Requires integrated resource plans
- Requires studies on low-income customers' access and barriers to clean technologies
- Ensure low-income residents benefit from clean energy policies

2030 Target Scoping Plan

CALIFORNIA AIR RESOURCES BOARD

Tentative Scoping Plan Schedule

- ▣ Draft 2030 Target Scoping Plan – Spring 2016
- ▣ Regional workshops – 2016
 - ▣ Bay Area, Los Angeles, Central Valley
- ▣ Advisory group meetings – 2016
 - ▣ Environmental Justice Advisory Committee
 - ▣ Economic Reviewers
- ▣ Technical Workshops –2016
 - ▣ Economic/environmental analyses
- ▣ Final 2030 Target Scoping Plan presented to Board – Fall 2016