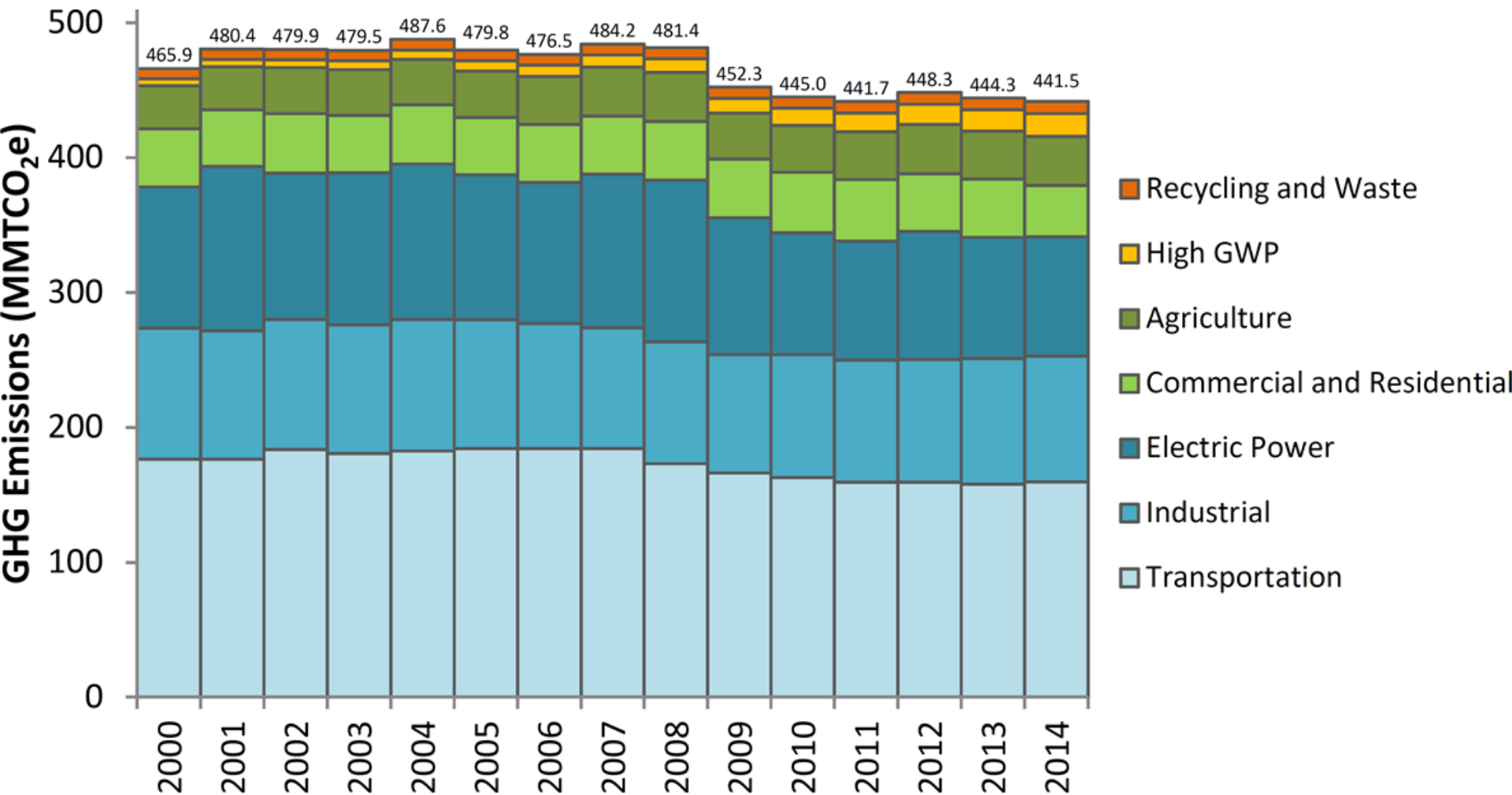


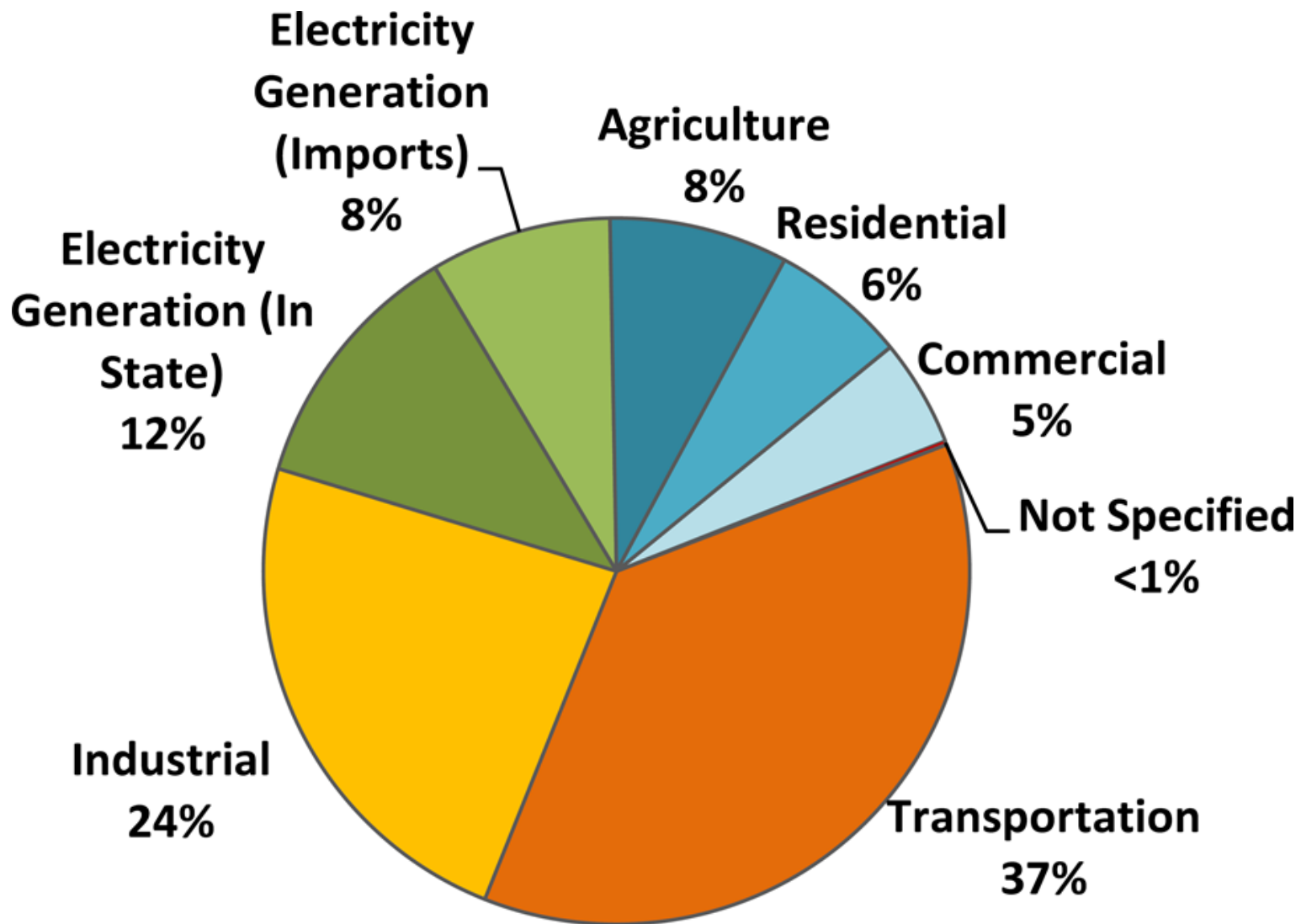


Evaluation of GHG Emissions Trading in North America

*Ashley Conrad-Saydah
Deputy Secretary for Climate Policy
California Environmental Protection Agency
October 19, 2016*

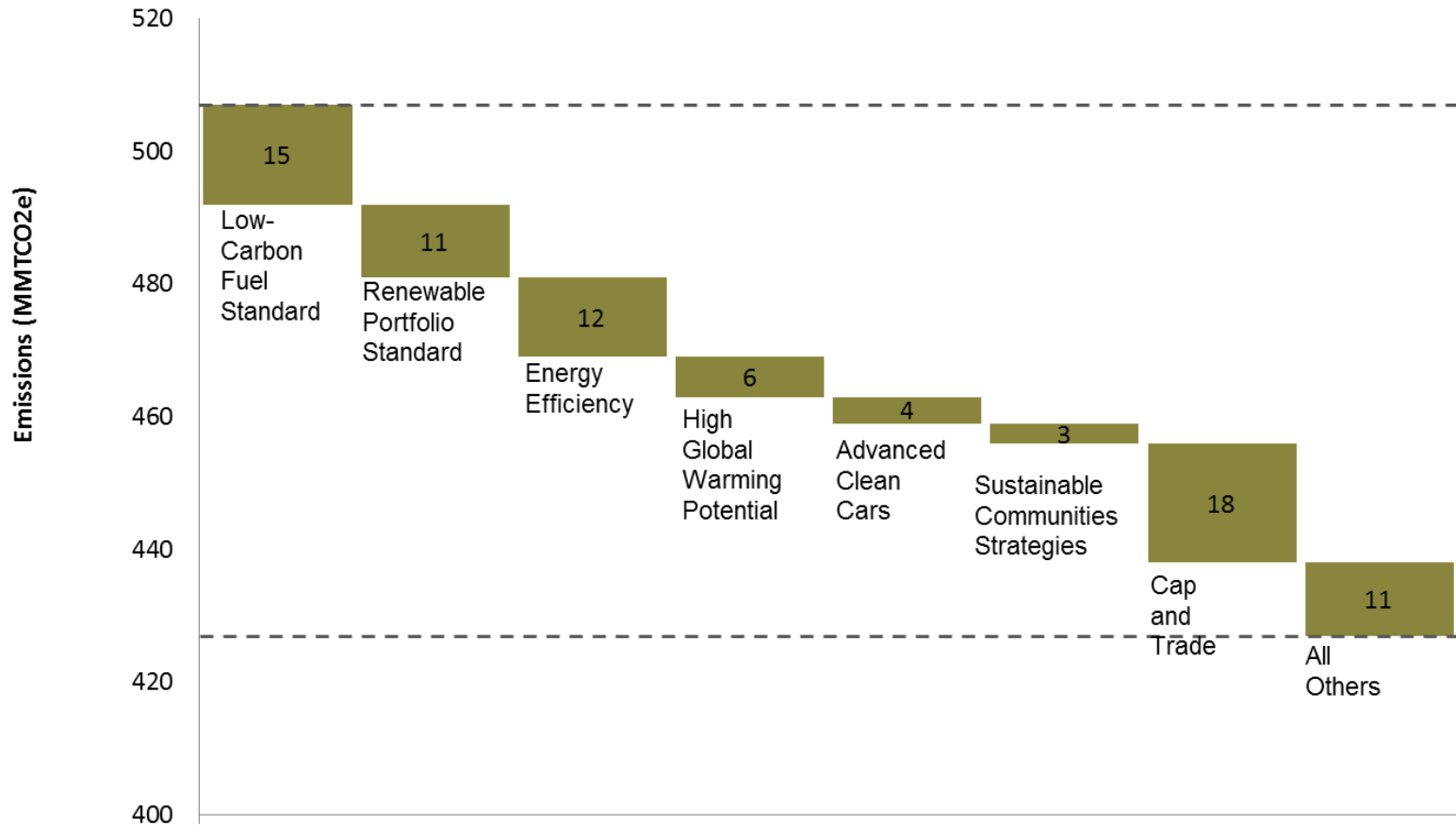
Emissions Change Over Time





2014 Total CA Emissions: 441.5 MMTCO₂e

Emissions Reductions from Complementary Programs

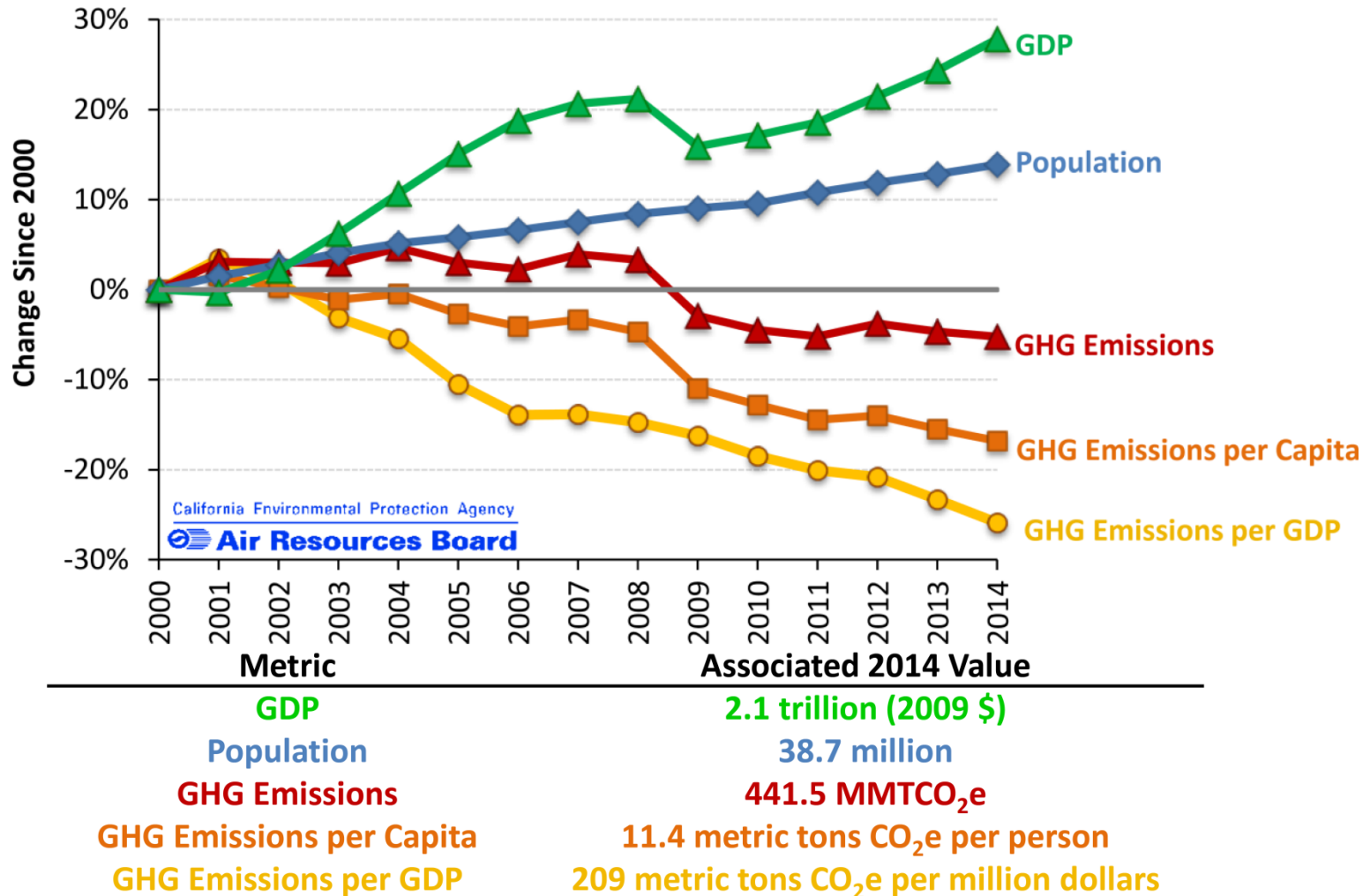


AB 32 Objectives

- ❑ Global Warming Solutions Act of 2006
 - ❑ 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
 - ❑ Maintain or improvement California's economic standing

Emissions and the Economy

Change in California GDP, Population and GHG Emissions since 2000



Sub-national relationships

- ❑ Quebec

- ❑ Differences in language, politics, currency, market size, emissions profile
 - ❑ Successful link

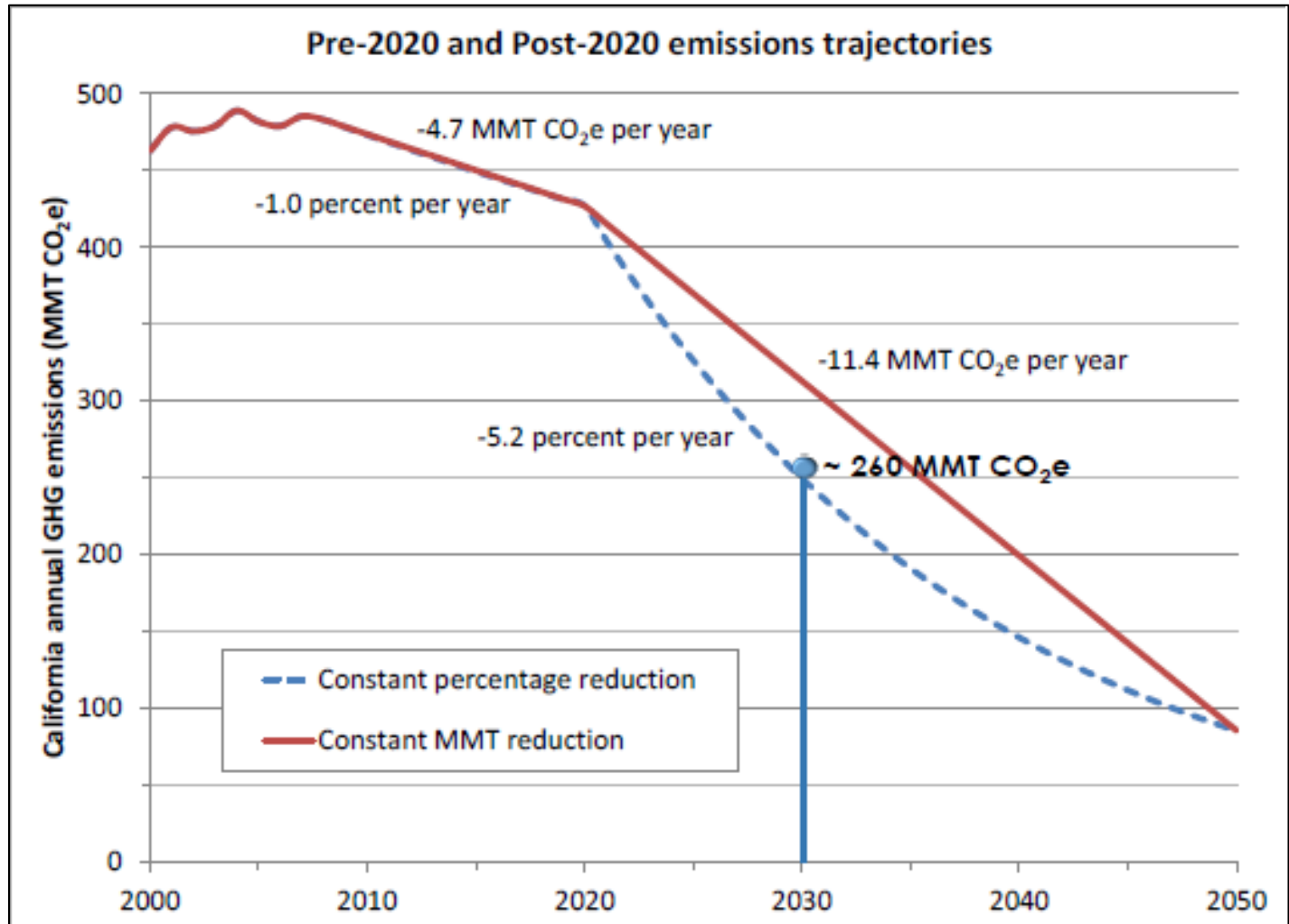
- ❑ Ontario

- ❑ More similar market size and emissions profile, difference in currency
 - ❑ Link in progress

- ❑ [Under2MOU](#)

- ❑ 136 jurisdictions representing 32 countries signed
 - ❑ Commitment to 80-95% GHG emission reductions below 1990 levels by 2050 or 2 tons/capita by 2050

Path to 2050 Greenhouse Gas Target



CALIFORNIA CLIMATE STRATEGY

An Integrated Plan for Addressing Climate Change

VISION

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

GOALS



**50%
renewable
electricity**

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



**Double energy
efficiency savings
at existing buildings**

**Carbon
sequestration
in the land base**



**Reduce
short-lived
climate pollutants**

**Safeguard
California**



CALIFORNIA CLIMATE STRATEGY

IMPLEMENTATION

SCOPING PLAN

Climate
Action Plans

SLCP Plan

Forest
Carbon Plan

Cap and Trade
Regulation

2040 CA
Transportation Plan

LEGISLATION

AB758 Energy
Efficiency Plan

GGRF
Investment Plan

Healthy Soils
Action Plan

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

BUILDING BLOCKS

Partnerships



Incentives



Voluntary Action



Local Action



Research



Grants



Regulations



Achieving the 2030 Target:

Scoping Plan

- ❑ Continuation of programs established to reach the 2020 GHG emission reduction target
 - ❑ [Cap-and-Trade Program](#)
 - ❑ [Low Carbon Fuel Standard](#)
 - ❑ Renewable Portfolio Standard: [SB 350 target of 50%](#)
 - ❑ [Advanced Clean Cars Program](#)
 - ❑ [Zero-Emission Vehicles Action Plan](#)
 - ❑ [Incentive programs and investments of GGRF](#)
- ❑ Innovation and newer programs underway
 - ❑ [Sustainable Freight Action Plan](#)
 - ❑ [Vibrant Communities Strategy](#)

Additional Innovation for 2030 targets

- ❑ [SB 32](#): 40 percent emissions reductions below 1990 levels by 2030
 - ❑ “The State Air Resources Board shall achieve the state’s more stringent greenhouse gas emission reductions in a manner that benefits the state’s most disadvantaged communities and is transparent and accountable to the public and the Legislature.”
- ❑ [AB 197](#): GHG regulation
 - ❑ The ARB shall consider the social costs of regulation and “prioritize...”
 - ❑ (a) Emission reduction rules and regulations that result in direct emission reductions at large stationary sources of greenhouse gas emissions and direct emission reductions from mobile sources.
 - ❑ (b) Emission reduction rules and regulations that result in direct emission reductions from sources other than those specified in (a).”
- ❑ [SB 1383](#): short-lived climate pollutant reduction
 - ❑ “Reduction in the statewide emissions of methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030.”

Cap and Trade Auction Proceeds: Totals

Total California Auction Proceeds To Date

The total amount of auction proceeds to date that have been deposited into the California Greenhouse Gas Reduction Fund (GGRF) pursuant to California Government Code section 16428.8 are shown in the table below. Proceeds are shown by quarter for the most recent auction, and by fiscal year for previous fiscal years.³

<u>Auction Quarter or Fiscal Year</u>	<u>Total Proceeds for Current and Advance Auctions in GGRF (USD)</u>
Q3 2016 (August)	\$8,387,909.54
FY 2015-2016	\$1,829,134,502.71
FY 2014-2015	\$1,490,776,416.79
FY 2013-2014	\$477,140,441.20
FY 2012-2013	\$257,264,031.64
TOTAL	\$4,062,703,301.88

Greenhouse Gas Reduction Fund Appropriations (\$M)	13-14	14-15	15-16	16-17
HSRA - High Speed Rail	\$ 0	\$ 250	\$ 457	-
Caltrans - Low Carbon Transit Operations	\$ 0	\$ 25	\$ 182	-
CalSTA - Transit and Intercity Rail Capital	\$ 0	\$ 25	\$ 91	\$135+
SGC – Afford. Housing Sustainable Comm.s, Sust. Ag. Land Conservation	\$ 0	\$ 130	\$ 366	-
ARB - Low Carbon Transportation	\$ 30	\$ 200	\$ 95	\$363
CSD – Residential Weatherization	\$ 0	\$ 75	\$ 79	\$20
CEC - Energy Efficiency for Public Buildings	\$ 0	\$ 20	\$ 0	\$0
DWR – Water Energy Efficiency	\$ 30	\$ 20	\$ 20	\$0
CDFA – Climate Smart Agriculture	\$ 10	\$ 25	\$ 40	\$65
CDFW - Wetlands and Watershed Restoration	\$ 0	\$ 25	\$ 2	\$0
CALFIRE - Fire Prevention/Urban Forestry	\$ 0	\$ 42	\$ 0	\$40
Cal Recycle - Waste Diversion	\$ 0	\$ 25	\$ 6	\$40
Total	\$ 70	\$ 862	\$ 1,338	\$663 (cont.)

New programs 2016-17

GGRF Appropriations (\$M)	16-17
SGC - Transformative Climate Communities	\$140
ARB – Black Carbon Woodsmoke	\$5
Caltrans – Active Transportation Program	\$10
CNRA - Urban Greening	\$80
Total (new)	\$235
Grand Total 2016-17	\$898

Remaining Issues

- ☐ Political motivation
- ☐ Educational outreach
- ☐ Investment impact
- ☐ Community support

Questions? Thank you!
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