



California's Strategy to Reduce Short-Lived Climate Pollutants

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www.arb.ca.gov/cc/cc.htm

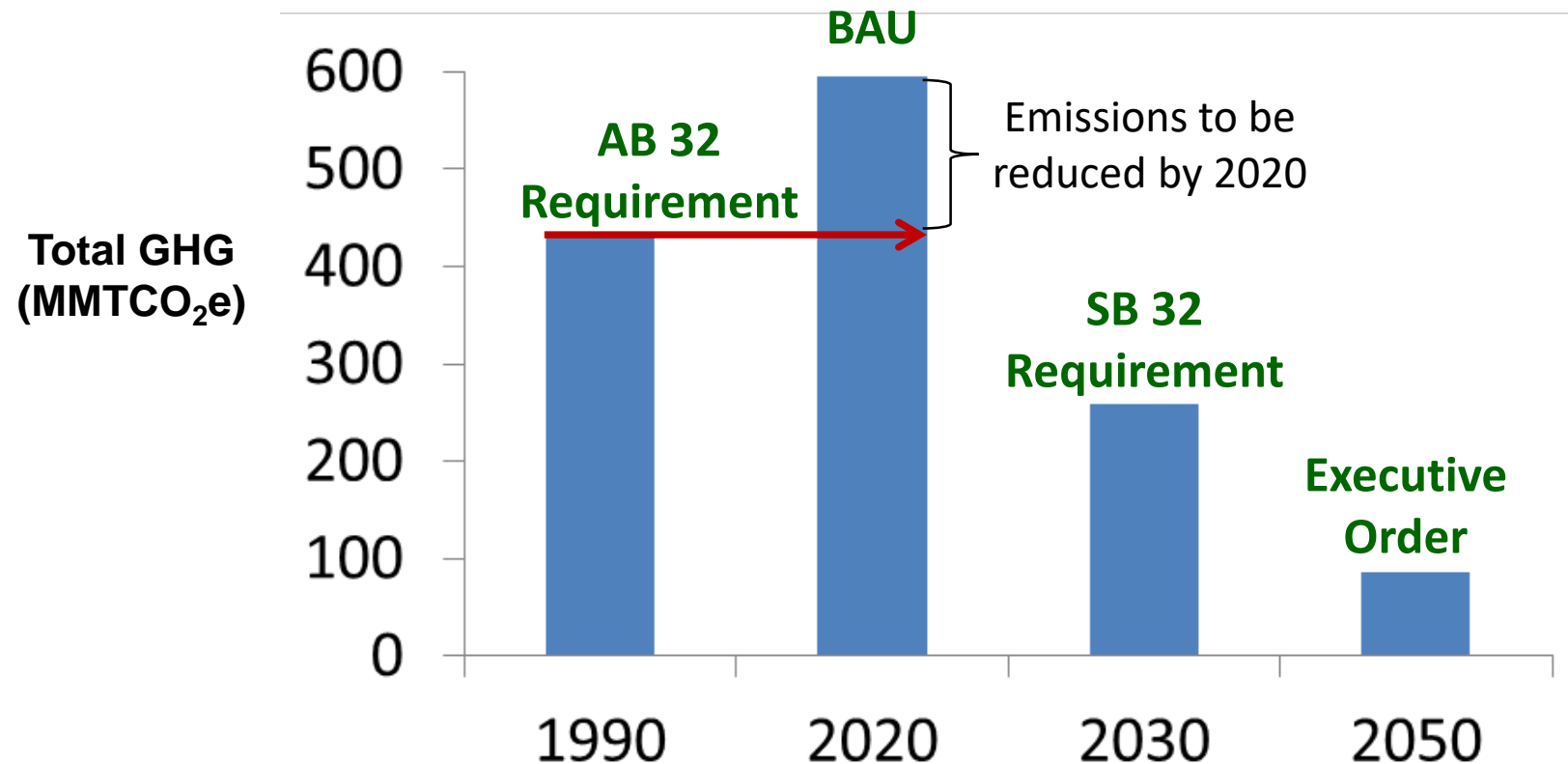


Outline

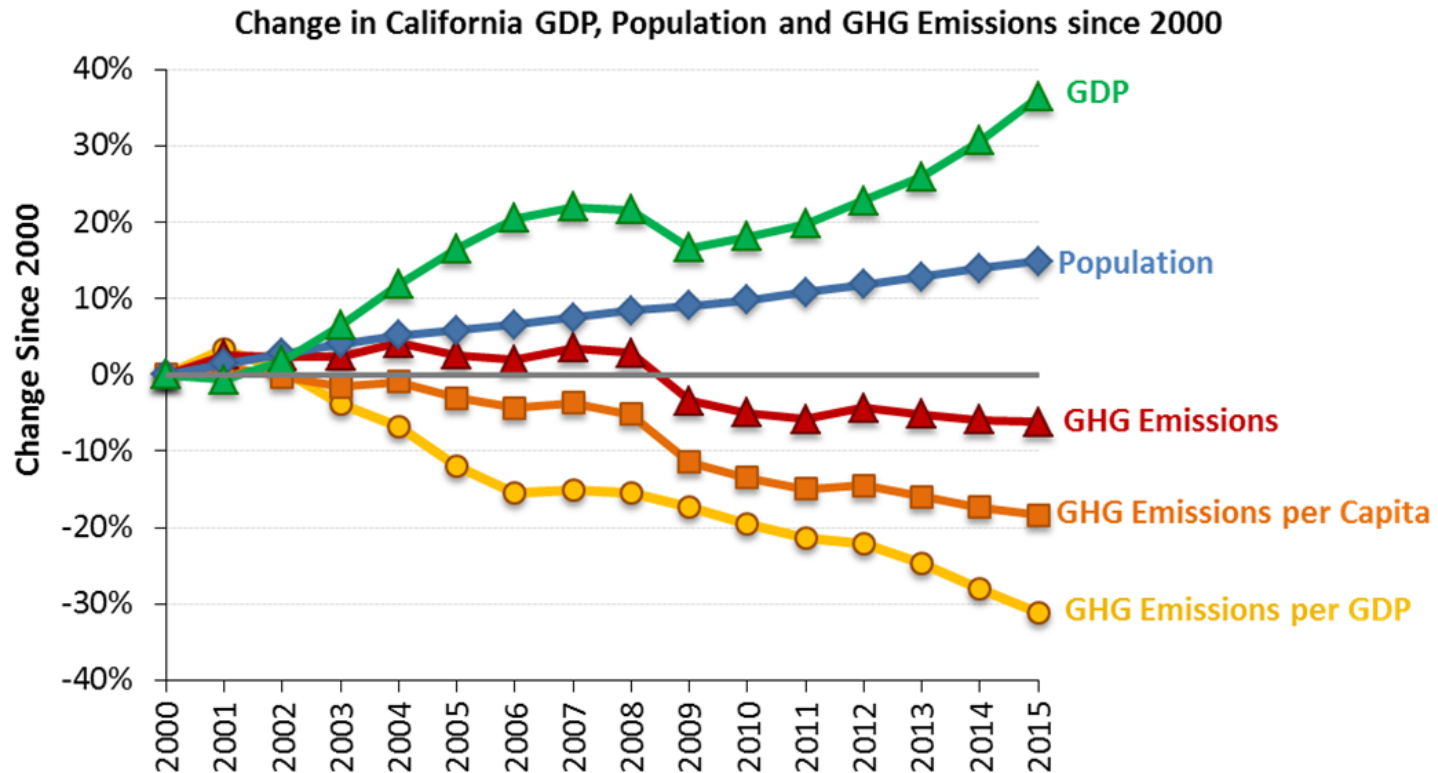
- California GHG Reduction Targets
- Importance of SNAP Prohibitions
- CARB's SNAP Regulation



California GHG Emission Reduction Goals



Progress Toward 2020 Target



Metric	Associated 2015 Value
GDP	2.2 trillion (2009 \$)
Population	39.1 million
GHG Emissions	440.36 MMTCO₂e
GHG Emissions per Capita	11.3 metric tons CO₂e per person
GHG Emissions per GDP	197 metric tons CO₂e per million dollars

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**



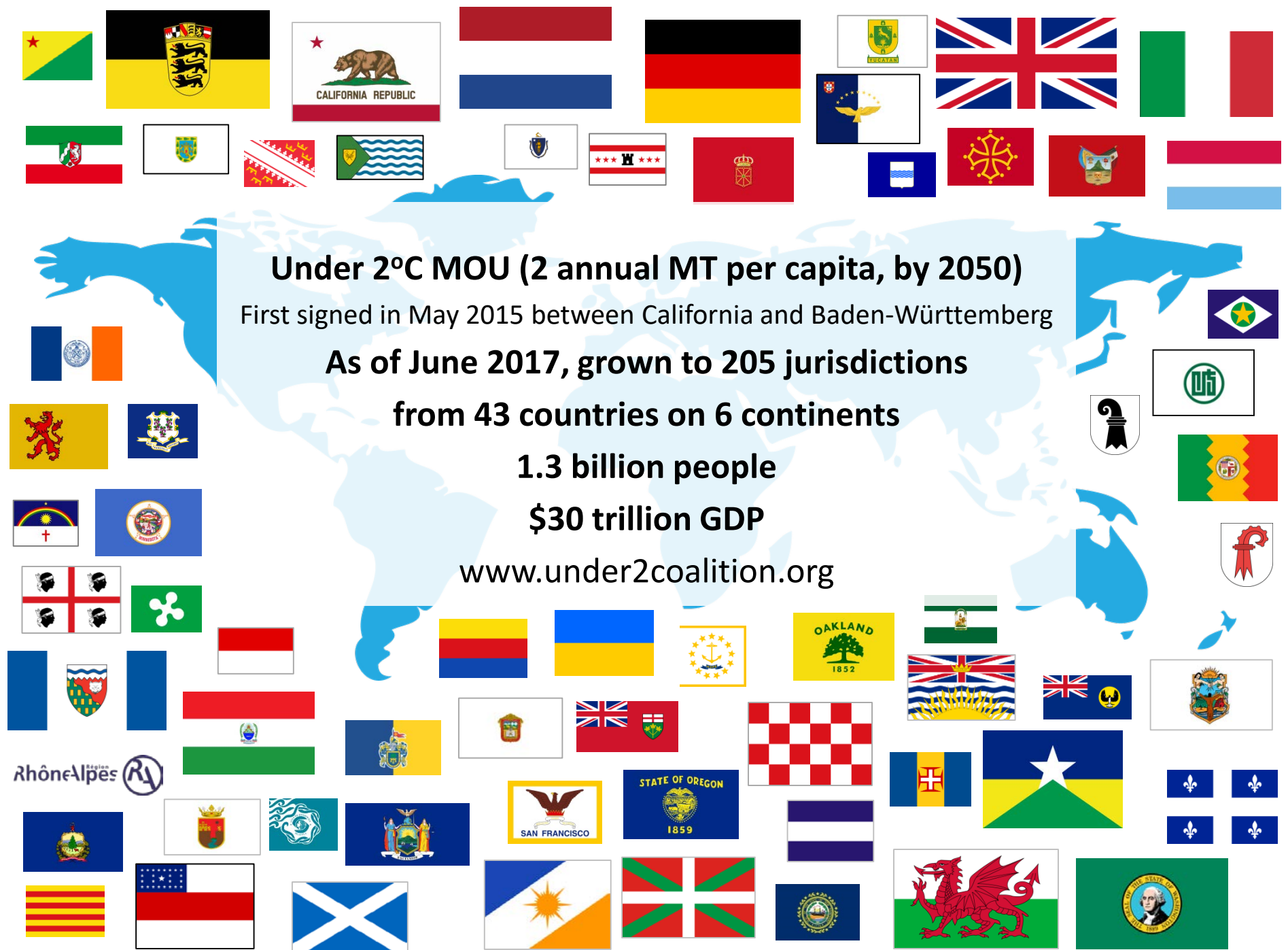
**Carbon
sequestration
in the land base**



**Reduce
short-lived
climate pollutants**



**Safeguard
California**



Under 2°C MOU (2 annual MT per capita, by 2050)

First signed in May 2015 between California and Baden-Württemberg

As of June 2017, grown to 205 jurisdictions

from 43 countries on 6 continents

1.3 billion people

\$30 trillion GDP

www.under2coalition.org

Rhône-Alpes 

 SAN FRANCISCO

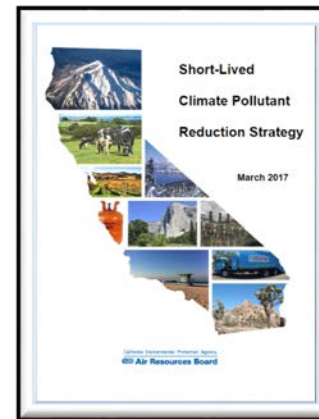
STATE OF OREGON
1859

OAKLAND
1852

Short-lived Climate Pollutant Targets (Senate Bill 1383, Lara)

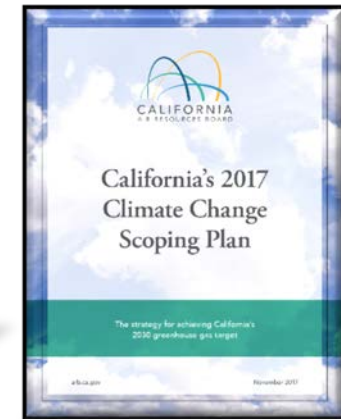
- HFCs and Methane
 - 40% below 2013 levels by 2030
- Black Carbon (Non-forest)
 - 50% below 2013 levels by 2030

March 2017



**Short-Lived
Climate Pollutant
Reduction
Strategy**

December 2017

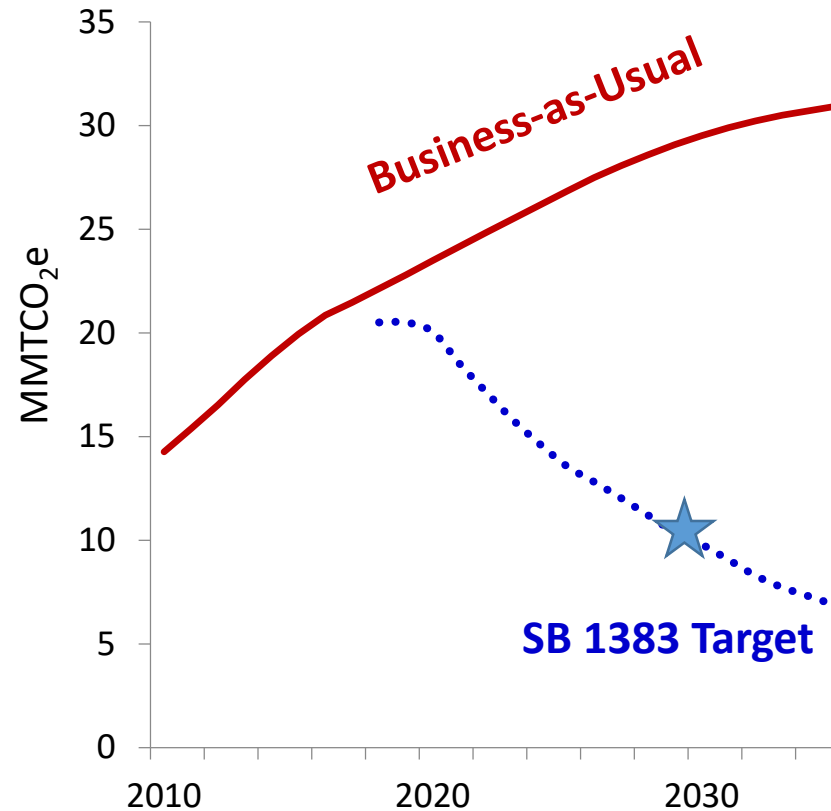


**2017 Climate
Change
Scoping Plan**

Fastest Growing Source of Greenhouse Gases

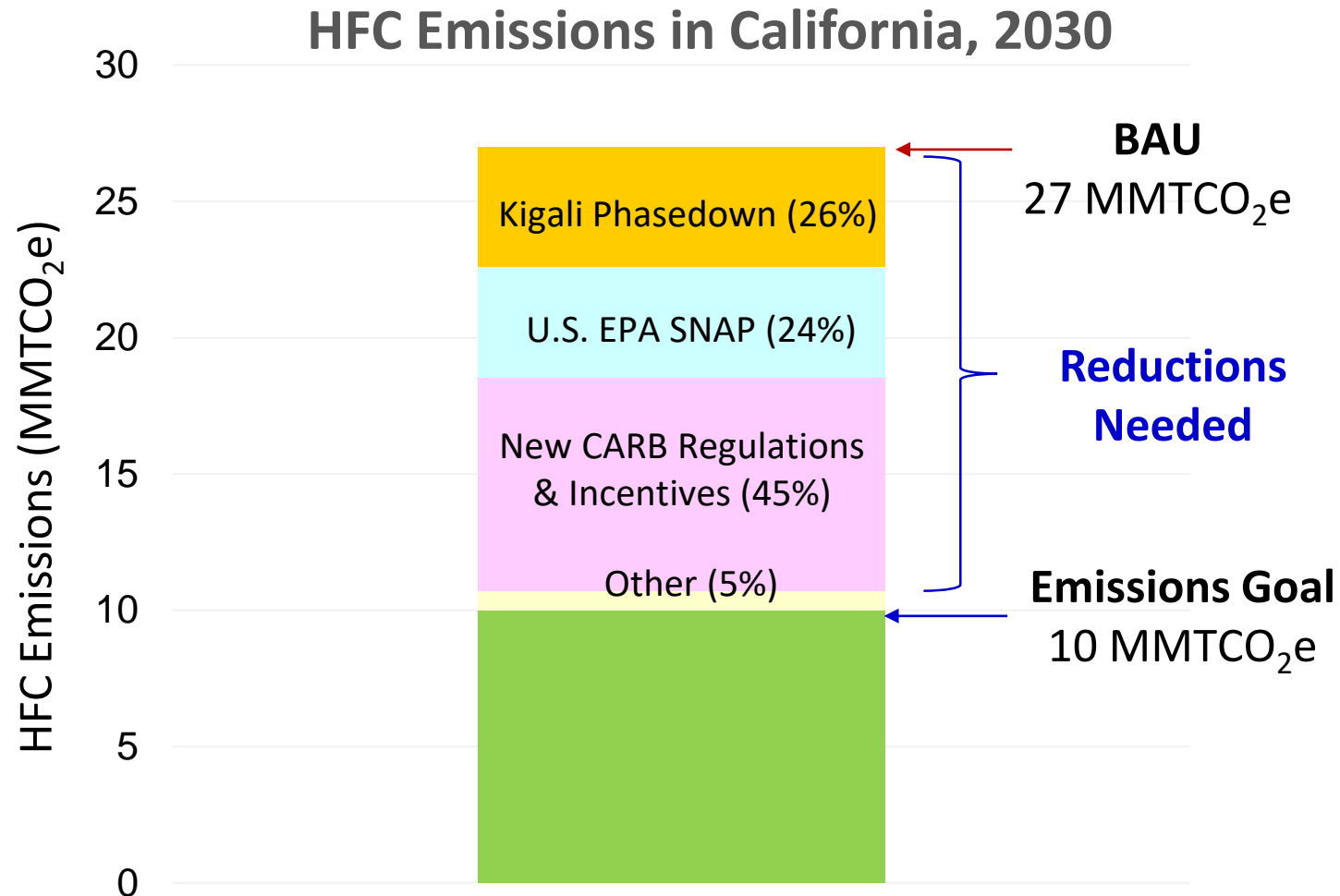
- Currently 4% of California GHG emissions
- Emissions projected to double over 20 years

Estimated Emissions in California



Importance of SNAP Prohibitions

California Strategy to Reduce HFCs 40% from 2013 Levels



International & National Efforts



- International Phasedown– Kigali Amendment
 - Amends the Montreal Protocol
 - Signed by over 200 countries, broad industry support
 - Begins January 1, 2019
 - ***Not ratified by the United States***



- U.S. EPA – Significant New Alternatives Policy (SNAP)
 - Regulates ODS and their substitutes
 - Prohibited high-GWP HFCs as alternatives became available
 - ***Vacated by Federal Court***

Preserving SNAP Benefits

- SB 1013, Lara – Backstop all SNAP HFC prohibitions into State law
- CARB's Regulation – Preserves emission reductions from sectors with past or shortly upcoming effective dates
- CARB's Future Rulemaking – Will cover additional measures identified in the SB 1383 SLCP Strategy approved by Board last year

Global Transition is Underway

- European Union implementing more ambitious HFC measures than SNAP
- Canada recently adopted HFC measures similar to SNAP
- U.S Climate Alliance issued challenge to jurisdictions, businesses, and other actors to bring SLCP commitments to Global Climate Action Summit in San Francisco on September 12-14
- Australia and Japan also have HFC reduction programs
- Affected industries serve global market and are preparing for one solution
- Many manufacturers/users in U.S. have already adopted lower GWP technologies

CARB's SNAP Regulation

Purpose of Proposed Regulation: Backstop Partially Vacated SNAP Rules

- Focus on “end-uses” with past and shortly upcoming compliance dates (an end-use is a specific type of equipment or material)
- Prevent backsliding—most of these end-uses have already transitioned to low-GWP
- Make SNAP prohibitions enforceable in California
- 3.4 MMTCO₂E reduction annually by 2030

Applies Mainly to Equipment Manufacturers



Supermarket Refrigeration & Remote Condensing Units



Refrigerated Food Processing & Dispensing Equipment



Stand-alone Refrigeration Units



Refrigerated Vending Machines



Foams

First Prohibitions Start January 1, 2019

End-Use (Equipment or Material)	Prohibition Date for New Equipment and Retrofits	Current Industry Status
Supermarket Refrigeration & Remote Condensing Units	January 1, 2019 (Federal prohibition date was January 1, 2016 - 2018)	Industry has already transitioned
Stand-Alone Refrigeration Units	January 1, 2019 - 2020	Approved alternatives are currently in use in some applications
Refrigerated Vending Machines	January 1, 2019	Approved alternatives available now; preferred alternative not currently allowed in some locations
Refrigerated Food Processing & Dispensing Equipment	January 1, 2021	Approved alternatives are available now
Foams (certain uses)	January 1, 2019 (Federal prohibition date was January 1, 2017)	Industry has already transitioned

Rule Requirements

- Listed HFCs are prohibited in new and retrofit equipment and materials
- Manufacturer recordkeeping
- Disclosure statement certifying that the product uses only compliant substances

Next Steps

- Finalize regulation with 15-day changes
- Implement/enforce regulation January 1, 2019
- Partner with other States
- Continue rulemakings to meet SB 1383 40% reduction target for 2030