

Rethinking Methane to Meet Our Long-Term Climate Goals

Turning a Cost into Benefit

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June 9, 2015

History of Progress on Air and Energy

1965: First California mobile source emissions standards established

1970: Federal Clean Air Act expanded:
California is allowed to enforce more stringent standards

1975: The California Energy Commission established by
the Warren-Alquist Act (AB 1575, Warren)

2002: California Clean Cars Law (AB 1493, **Pavley**)—sets standards
for climate pollution for cars and light-duty trucks

2005: Cleaner Loading Order (SB 1037, Kehoe)—rewards utilities for a
cleaner more efficient system and penalizing waste.

2006: California's Global Warming Solutions Act
(AB 32, Núñez-**Pavley**) establishes 2020 climate target
Greenhouse Gas Emissions Performance Standard Act
(SB 1368, Perata) phases out coal from the state's energy portfolio.

2009-11: Federal government adopts national fuel economy standards
based on California Clean Cars Law (54.5 mpg by 2025)

**WHAT'S NEXT???? There may be a place in the clean fuels portfolio for
renewable natural gas.**

California's Legacy of Leadership

- AB 32 (2006), GHG reductions of **1990 levels by 2020**
- Multi-sector approach:
 - ✓ Vehicles
 - ✓ Fuels
 - ✓ Renewable energy
 - ✓ Cap and Trade
 - ✓ Appliances
 - ✓ Buildings



**Setting a long term emissions target
created a market for investment and innovation**

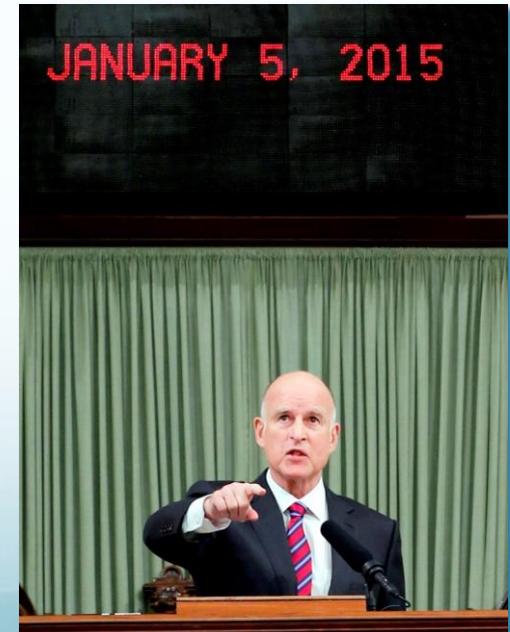
Our Next Chapter of Leadership

Governor Brown & Legislature Pursue 2030/2050 Climate Goal



- January State of the State outlines **50/50/50** goal
- April Exec. Order B-30-15 establishes GHG target of **40% below 1990 levels by 2030**

- SB 32 amended on Senate Floor to incorporate 2030 target (passed with 24-15 vote)
- SB 350 would establish complementary policies (**50% renewable power; 50% cut in petroleum; Doubling energy savings in existing buildings**)



Historically: Methane Has Been a Problem



- Methane is **84 times more potent** than CO₂ in the short term.
- Environmental Defense Fund teamed up about 100 universities, research institutions and companies to map methane leaks.
- **SB 605** (Lara-Pavley, 2014) seeks to address Short Lived Climate Pollutants (SLCPs):
 - Oil and gas wells
 - Pipeline system
 - Agriculture
- ARB in the process of developing an inventory and strategy on SLCPs

Looking to the future: (Bio)Methane as a Solution

- **Leaks and fugitive emissions** from the pipeline system must be addressed.
- We must pursue this resource to meet our long term power and fuels goals:
 - Using excess renewables to produce biomethane to store in the pipeline can help solve our “duck curve.”
 - Biomethane helps diversify our fuel supply, cleans up our air quality and cuts climate pollution from our fuels.
- Need to incentivize low carbon fuel infrastructure and production:
 - Renewable natural gas standard (e.g. **SB 687** (Allen))
 - Incentives for biomethane production to supplement the LCFS and RPS (e.g. **SB 706** (Pavley)), or some other strategy.
- Biogas and RNG have **much smaller carbon footprints** than natural gas.

