Assembly Bill (AB) 32 and Sulfur Hexafluoride (SF₆)

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California Air Resources Board



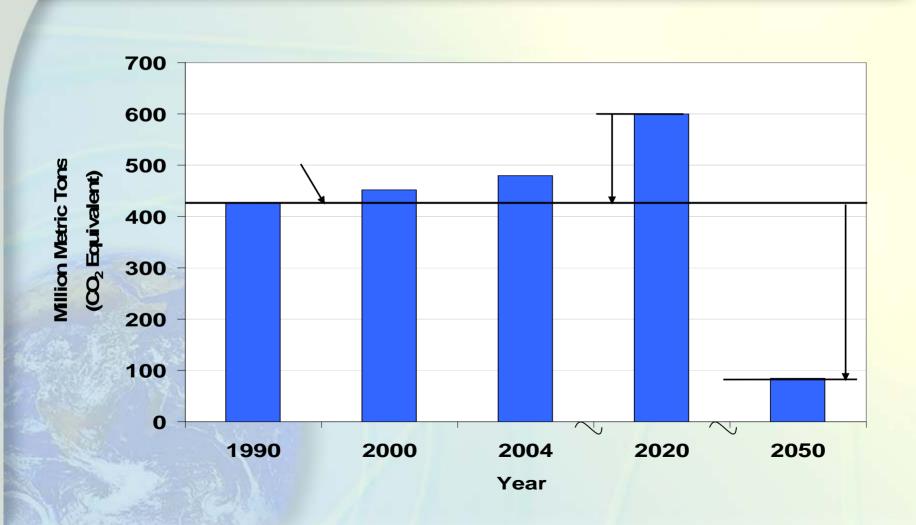
What Is AB 32?

- "Global Warming Solutions Act of 2006": State law outlining the main plan to reduce GHGs in CA
- Requires a return to 1990 GHG levels by 2020
 - Acknowledges that 2020 is not the endpoint
- Tasks ARB with monitoring/regulating GHG sources
- ARB is the lead agency, but extensive collaboration with state, local agencies, industry, environmental, NGO's, and the general public
- Required a Scoping Plan be adopted by 1/1/09

Ultimate GHG Goals of AB 32

- Generate Co-benefits additional reductions in criteria pollutants, toxic emissions, smog, threats to public health
- Ensure activities do not interfere with ambient air quality standards or toxic air contaminant emissions
- Generate economic benefits improved efficiency, reduce and diversify energy/fuel use, green technology, and business development
- Provide a vision for a low carbon future 2050

Magnitude of the Challenge



Scoping Plan

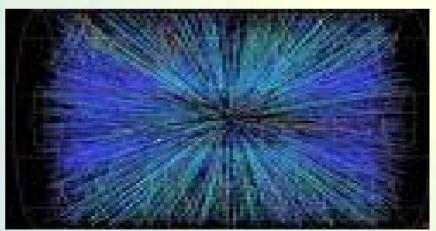
- Describes how California will reduce GHG emission levels to 1990 levels by 2020
- Identifies measures to achieve GHG reductions
- Defines roles of individual sectors, State government and local government
- Balances Early Actions, CAT efforts, voluntary reductions, regulations, market role
- Evaluates economic and public health impacts

Sulfur Hexafluoride (SF₆) Emission Reduction Measure





Photo credit: Callifornia Energy Commission



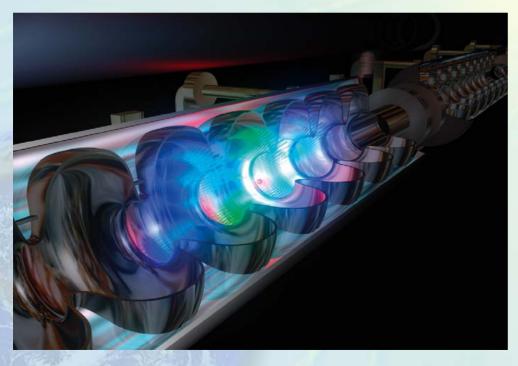


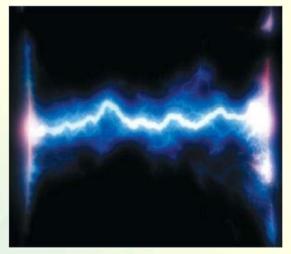
BACKGROUND/SCOPE

- SF6 has the highest global warming potential of all of the greenhouse gases
- •The measure will reduce SF₆ emissions from
 - The Electricity Sector
 - **❖Particle Accelerators**

SECTOR USES

 The electricity sector uses SF₆ as an insulator and arc quencher

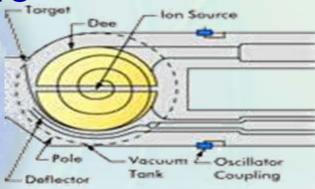




Particle accelerator uses are similar

APPLICATION

- Affected Entities
 - Investor and publically owned utilities
 - Merchant electricity generators
 - DG and CHP Operators
 - Community choice aggregators
 - California's particle accelerator operators





SF6 TIMELINE

Evaluate Survey Responses March **Draft Regulatory Concepts April Hold Second Workgroup** May Meeting **Draft Regulatory Language** July **Hold Public Workshop** September **Present Proposed Regulation** December to the Board

Related Links

- ARB Climate Change Web Site (All things climate change) http://www.arb.ca.gov/cc/cc.htm
- ARB Energy Related Programs-SF₆ (SF₆ for the electricity sector/particle accelerators)
 http://www.arb.ca.gov/energy/sf6elec/sf6elec.htm
- High Global Warming Potential Sector (SF₆ reductions for the non-electricity sector)
 http://www.arb.ca.gov/cc/sf6nonelec/sf6nonelec.htm
- Fluorinated Compounds and Semiconductors (Stationary Equipment Refrigerant Management Program http://www.arb.ca.gov/cc/reftrack/reftrack.htm

Thank You and Contact Information

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