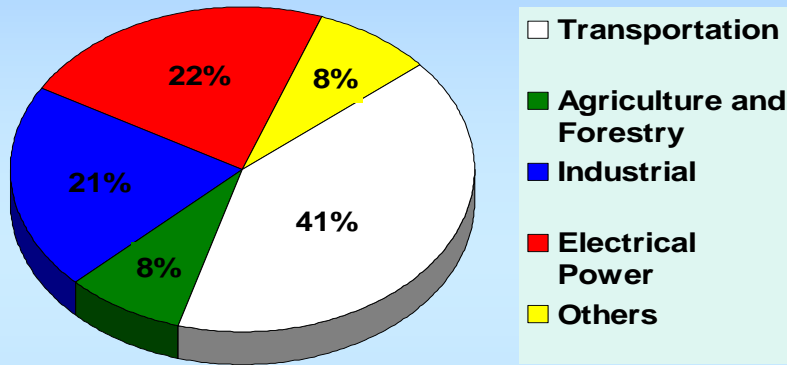


Overview of State Requirements and Emerging Links to Legal and Market Issues

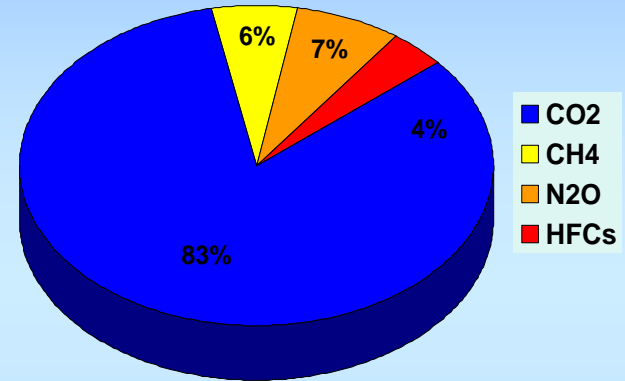
Jon F. Elliott, JD
Touchstone Environmental, Inc.

California Greenhouse Gas Emissions

GHG EMISSION SOURCES
[MMT CO₂ eq]



GHG EMISSIONS BY TYPE



CEC, "Inventory of California Greenhouse Gas Emissions and Sinks: 1990-2004" (2006), www.climatechange.ca.gov/policies/greenhouse_gas_inventory/index.html



CO₂, N₂O



CO₂, CH₄, N₂O



CO₂



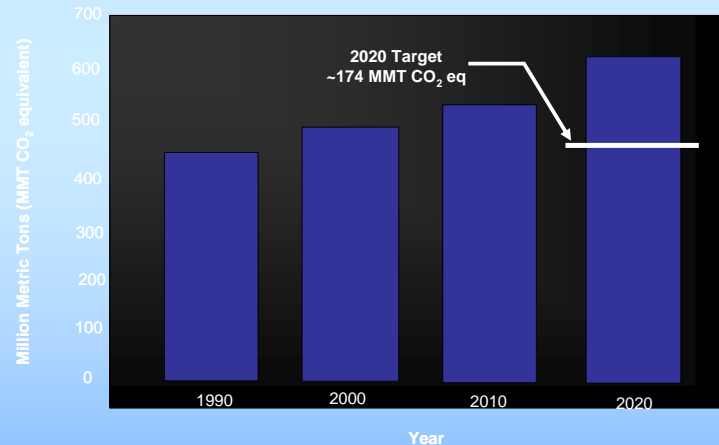
CO₂



HFCs

AB 32 (Nuñez)--California Global Warming Solutions Act of 2006

- Directs Air Resources Board (ARB) to reduce statewide GHG emission to 1990 levels by 2020 (approx. 20% below 2006)



- Compare Kyoto Target: 5 - 7% below 1990 by 2012

AB 32 Provisions

- **Discrete early action measures**
 - Issue list by 6/30/07, adopt regulations as soon as possible (all by 1/1/10)
 - Begin implementation before 2012
 - Proposed list (4/07) includes:
 - Low carbon fuel standard
 - Reduce HFC-134a emissions from auto AC
 - Guidance to business, local governments
 - Actions by other agencies (landfills; transport)

AB 32 Provisions

- **ARB Regulations:**
 - Adopt by 1/1/08; enforceable by 1/1/12
 - Emissions limits
 - statewide (i.e., reach 1990 levels by 2020)
 - by source categories and sources – biggest are Transportation (41%); Electric Power (20.6%); Refineries (6.4%); Ag & Ag Soil Management (6.2%); Landfills (1.9%); Cement (1.7%)
 - Emissions monitoring and annual reporting

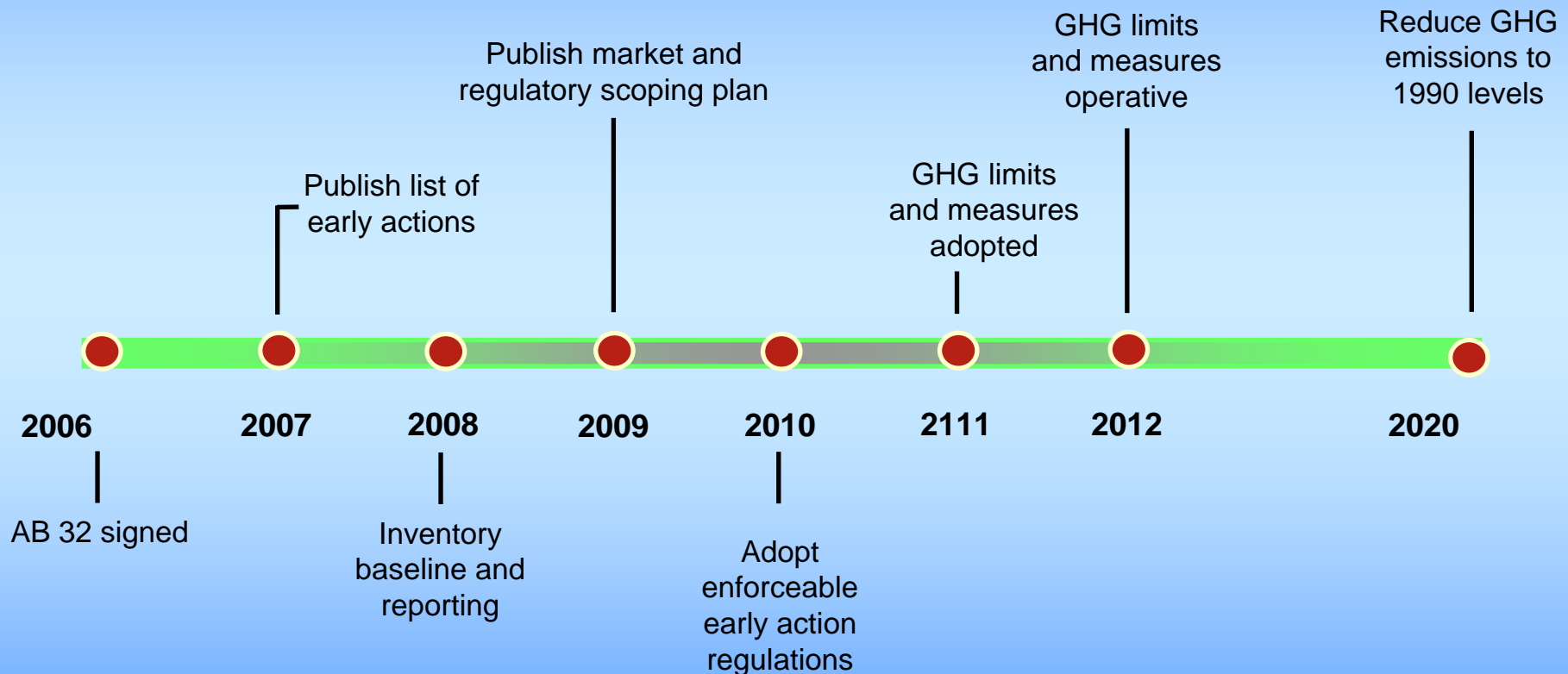
AB 32 Provisions

- **“Rigorous and consistent accounting”**
 - Incorporate protocols developed by the Cal. Climate Action Registry, where appropriate
- **Market-based compliance mechanisms**
 - AB 32 authorizes ARB to adopt; subsequent Executive Order requires
 - Cap-and-trade seems most likely

AB 32 Provisions

- **Scoping plan** (adopt by 1/1/09)
 - to achieve “maximum technologically feasible and cost-effective” GHG reductions address source categories (at least electricity generation, petroleum refining, fuels)
 - consider GHG reduction measures in other jurisdictions (e.g., Europe, NE states (RGGI))
 - Identify opportunities for voluntary reductions

California Global Warming Solutions Act of 2006 (AB 32)



GHG Executive Order (S-17-06)

- Create market-based program, if possible
- Cal/EPA Secretary convenes a “Market Advisory Committee”
- Collaborate with Climate Action Team

GHG Executive Order (S-03-05)

- Pre-dates AB 32
- Establishes goals for statewide emissions:
 - 2000 GHG levels by 2010
 - 1990 GHG levels by 2020 (AB 32 adopts)
 - 80% below 1990 GHG levels by 2050
- Created California Climate Action Team
 - CalEPA chairs, other agencies as members (B&T, DFA, Resources, ARB, CPUC, CEC)

Other GHG Efforts

- **AB 1493 (Pavley, 2002)**
 - Reducing Auto GHGs -- ARB regulations requiring design changes to automobiles and light-duty trucks, beginning in model year 2009
 - ARB regulations (2004) adopt declining fleet average GHG emission standards (estimate 22% reduction in 2012, 30% in 2016)
 - Court challenge by automakers and Central Valley auto dealers (affected by U.S. Supreme Court *Massachusetts v. EPA* decision)
 - EPA must rule on California's request for waiver of national CAA requirements (i.e., stricter standards)

Other GHG Efforts

California Climate Action Registry (2001)

- Establishes protocols for facility and entity GHG emissions inventories
- Participants (voluntary) use protocols to measure annual GHG emissions (baseline and later years)
- May 2007: joins with 30 other states, 2 Canadian provinces and 1 Indian tribe to found The Climate Registry, intended to provide North American standards (begin 1/1/08)

Other GHG Efforts

GHG Exchanges and Offsets

- Purpose: create marketplaces where GHG emissions can be bought and sold
 - Chicago Climate Exchange, European Trading Scheme
 - Brokers and offset schemes for purchases
 - Climate Trust (Oregon) – to implement state requirements for power plants; individuals may also participate
 - Other offset providers (PG&E, etc.)

Other GHG Efforts

Low Carbon Fuel Standard (LCFS)

- January 2007 - Governor Executive Order S-01-07 establishing LCFS for fuel sold in California
- Reduce carbon intensity of passenger vehicle fuels at least 10% by 2020
- Use market-based mechanisms
- Supports AB 32 – recommended as an early action item

Other GHG Efforts

Western Regional Climate Action Initiative (2/07)

- Pursuing joint strategy for GHG reductions, including market-based system (adopt by 8/08)
 - Arizona, California, New Mexico, Oregon. Washington (2/07)
 - plus British Columbia (4/07)
 - plus Utah (5/07)

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