

# Congressional Development on Climate Change Overview

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# Outline



- Recent Congressional Activity
  - Waxman-Markey
  - Kerry-Boxer
- Review of climate change policy elements
  - Cap and Trade
  - Offsets
- EPA's economic analysis of the legislation
- EPA's Mandatory GHG Reporting Rule

# Recent Congressional Activity



- House passed American Clean Energy and Security Act of 2009 – June 26, 2009
- Draft Senate climate bill—Kerry-Boxer Clean Energy Jobs & American Power Act—Passed EPW Committee November 4, 2009
- Current legislative framework focuses on cap and trade, but also other policy tools, like:
  - Energy efficiency
  - Renewable Energy

# Quick Cap and Trade Review



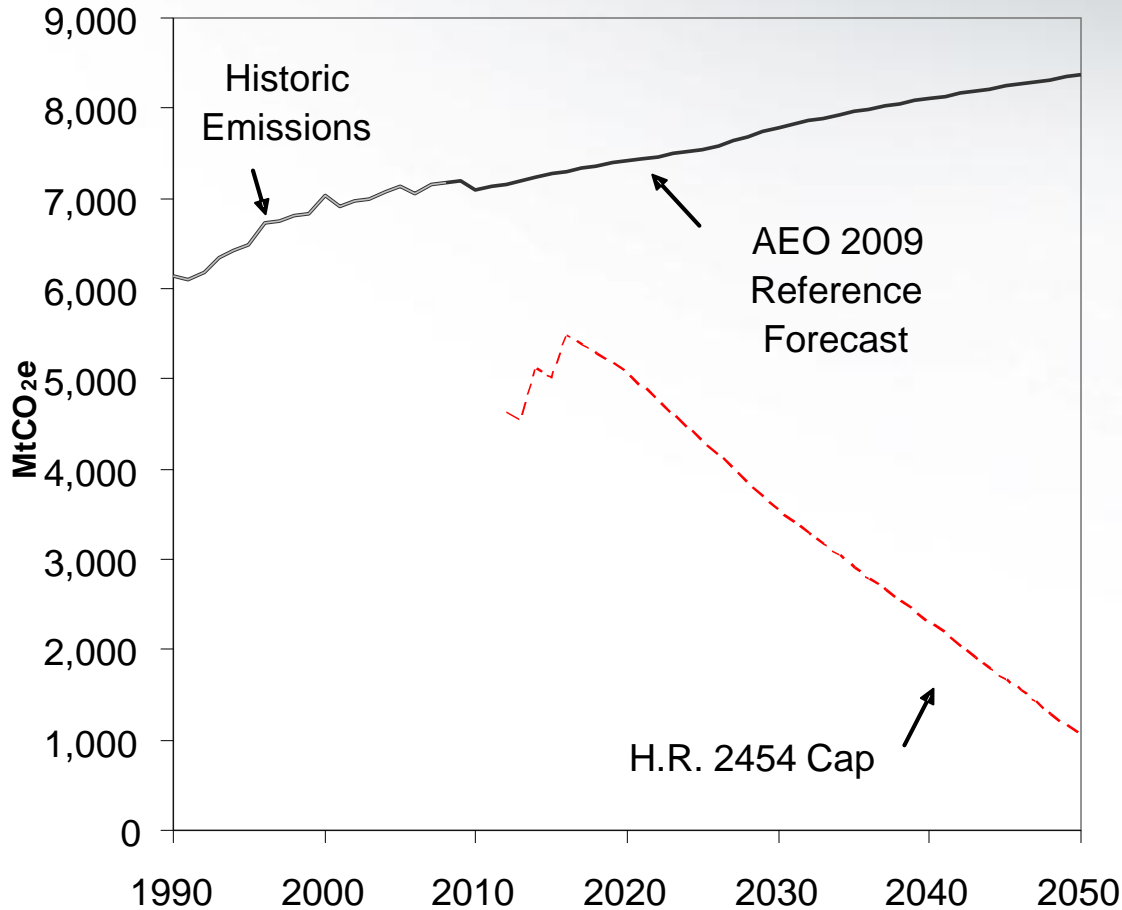
- A cap-and-trade program sets a mandatory cap, or maximum limit, on the aggregate emissions of all affected sources to achieve broad, regional reductions
- The government distributes emission allowances—either freely (allocation) or by sale (auction)—that total no more than the cap
- Allowances may be traded (purchased and sold) creating a market for allowances and establishing a price. This creates an incentive to reduce emissions
- Control requirements are not specified under a cap-and-trade program, but each affected source must surrender allowances for compliance equal to its actual emissions
- The cap ensures achievement of the emission reduction goal while also providing flexibility to sources and predictability for the allowance trading market

# Waxman-Markey



- June 2009: House passed the American Clean Energy and Security Act of 2009 (H.R. 2454)
- 5 distinct titles:
  - Titles I and II: clean energy and energy efficiency. Renewable electricity standard, energy efficiency programs and standards for buildings, lighting, appliances.
  - Title III: cap and trade program for GHG emissions.
  - Title IV: addresses competitiveness issues and the transition to a clean energy economy.
  - Title V: agriculture and forestry related offsets program.

# Waxman-Markey: Targets and Timetables



- Cap for GHG emissions from covered sectors is set at
  - 3% below 2005 level in 2012
  - 17% below 2005 level in 2020
  - 42% below 2005 level in 2030
  - 83% below 2005 level in 2050
- 85% of US economy's GHG emissions are covered. Coverage is phased in between 2012 and 2016 by sector
  - Covers ~7,400 facilities
- There is a separate cap for HFCs
- Uncapped sectors also contribute reductions
  - Regulations required for some uncapped sectors to extend bill coverage to 95% of US industrial sector emissions
  - Other sectors can provide offsets that would reduce costs of compliance with cap

# Waxman-Markey: Coverage, Point of Regulation and Reporting



## Covered under the cap:

### **Upstream:**

- Petroleum (Refineries and Importers)
- Natural Gas (LDCs over 25,000 mtCO<sub>2</sub>e) for deliveries for residential and commercial use
- Industrial Gas Producers and Importers

### **Downstream:**

- Industrial facilities with large combustion and process emissions (25,000 mtCO<sub>2</sub>e threshold for some)
- Electricity sector
- Geologic Sequestration Sites

## Additional facilities covered under the W-M reporting provision:

- Facilities > 10,000 mtCO<sub>2</sub>e/year
- Other sectors at the discretion of EPA

# Waxman-Markey: Some Key Provisions



- Allocations and auctions: Initially, 85% of allowances allocated and 15% of allowances auctioned. 70% auctioned by 2050.
- Cost containment:
  - Unlimited allowance banking, borrowing with certain restrictions
  - Strategic reserve of allowances available to covered sources through auctions
  - Up to 2 billion MMT CO<sub>2</sub>e international and domestic offsets can be used for compliance each year
- Preventing emissions leakage:
  - Allowance rebates to heavy and energy intensive industry
  - International reserve allowance program (“border tax”)
- Interaction with state and regional climate programs:
  - States cannot administer other GHG cap and trade programs from 2012-2017
  - Emission allowances issued before 2011 by California or by RGGI or WCI states can be exchanged for allowances issued by EPA
- Interaction with federal regulatory authority:
  - Limits EPA’s ability to regulate GHGs under CAA authority

# Quick Offsets Review



- Emission reductions occurring at sources that are not capped (e.g., a landfill).
- With GHGs, emission reductions have the same effect regardless of where they take place.
- Advantages of offsets:
  - Provide incentives for reductions in sectors that are not amenable to trading.
  - Potential cost-savings for capped facilities.
- Challenges
  - Assessing “additionality” of reductions.

## Offset Project Type Examples

- **Methane capture**
  - Landfill, manure, coal mines
- **Forestry**
  - Afforestation, forest management, Increasing Agriculture Soil C
- **Other**
  - Industrial and commercial boiler upgrades, bus fleet upgrades

# Offsets in Waxman-Markey

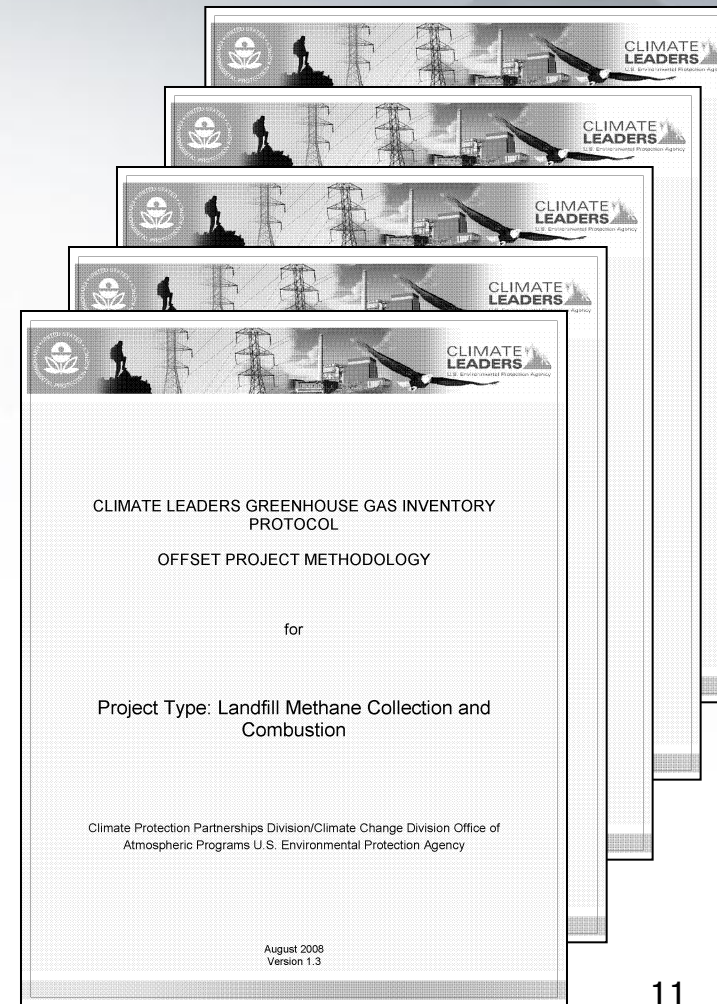


- EPA establishes program for non-agriculture/forestry domestic offsets and for international offsets
- USDA establishes program for domestic agricultural and forestry offsets
- EPA and USDA develop lists of eligible project types
  - For each project type, EPA/USDA develops methods, including conservative activity baselines, crediting period, provisions for reversals and leakage
- Third party verification is required
  - EPA can accept ANSI or develop its own accreditation program
  - USDA is not given authority to accept ANSI
- EPA determines eligible early offsets programs/project types
  - Program must have started prior to January 2009
  - Includes CCAR, RGGI, and others as determined by EPA
  - Projects initiated after January 1, 2001 are eligible

# Offsets Methodologies



- Accounting methodologies:
  - Commercial boiler
  - Industrial boiler
  - Landfill Methane
  - Anaerobic digesters
  - Transportation – Bus fleet
  - Afforestation/Reforestation
  - End-use of methane
  - Forest management (in development)
  - Coal-mine methane (in development)



# Congressional Developments: Kerry-Boxer



- November 5, 2009: Senate Environment and Public Works Committee passed the Clean Energy Jobs and American Power Act (S. 1733).
- Key differences from House bill:
  - Slightly more ambitious 2020 target (20% below 2005 levels)
  - Allowance price “collar”: \$28 allowance price triggers auction of reserve allowances
  - Fewer international offsets allowed
  - Delays preemption of state and regional programs if federal program is “substantially delayed”
  - EPA retains much CAA authority, but bill would delay until 2020 any EPA standards on sources that are outside the cap but that could supply domestic offsets (e.g., landfill and coal mine methane)

# EPA's Economic Analysis of Legislation



- The cap and trade policy of Waxman-Markey has a relatively modest impact on US consumers
  - Average annual household consumption is estimated to decline by \$80-111 per year relative to the no policy case. (0.1-0.2% of household consumption)\*
- The impacts of Kerry-Boxer would be similar to those estimated for Waxman-Markey\*\*

\*EPA Analysis of the American Clean Energy and Security Act of 2009 H.R. 2454 in the 111<sup>th</sup> Congress 6/23/09

\*\*Economic Impacts of S.1733: The Clean Energy Jobs and American Power Act of 2009 October 23, 2009

# Mandatory GHG Reporting Rule



- Required by the FY 2008 Consolidated Appropriations Act, promulgated under CAA authority
- Intended to collect accurate and timely emissions data to inform future policy decisions
- Final rule signed September 22, 2009

# Rule Summary



- Threshold: 25,000 metric tons of GHG emissions per year
- Reporting: facility-based, direct to EPA
- Methodology: direct measurement from power plants, facility-specific calculation methods for other source categories
- Frequency: annual
  - Data collection begins Jan. 1 2010; first report due March 31, 2011
- Verification: EPA verifies reports

# What this means for Water Utilities



- POTWs not covered in the rule EXCEPT
  - When stationary combustion at the facility exceeds the 25,000 ton CO<sub>2</sub>e/year.
  - Look at Subpart C – Stationary Combustion
- For more information on Mandatory GHG Reporting Rule
  - Preamble and regulatory text, information sheets, training schedule:  
[www.epa.gov/climatechange/emissions/ghgrulemaking.html](http://www.epa.gov/climatechange/emissions/ghgrulemaking.html)
  - Hotline:
    - Telephone: 1-877-GHG-1188
    - Email: [GHGMRR@epa.gov](mailto:GHGMRR@epa.gov)

# Contacts and Resources



*Thank you!*

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