

Climate Legislation & Regulation

CIBO Environmental & Energy
Committee Meeting

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Climate Presentation Overview

- Waxman-Markey HR 2454, The American Clean Energy & Security Act
- Senate action on legislation
- EPA GHG Reporting rule status
- Status of other EPA rules regulating GHGs



Title I, Clean Energy

- Renewable Electricity & Efficiency Standards
 - 6% RES by 2012, moving to 20% RES by 2020
 - Utilities can meet these requirements by purchasing “renewable” electricity from industrials
 - Up to 25% of obligation can come from efficiency improvements; states may petition to make this 40%
 - No RES credit for nuclear, CCS, non-incremental hydropower, non-renewable biomass



Title I, Clean Energy

- Other features:
 - Clean transportation (incl electric vehicles)
 - State development funds to manage federal funding for clean energy & efficiency programs (from allowance auction proceeds)
 - Smart Grid & transmission planning
 - Regional energy innovation hubs/research centers
 - Loan guarantee & clean energy investment funds for nuclear and advanced technologies



Title II, Energy Efficiency

- Major programs:
 - Building efficiency standards (updated national building codes every 3 years)
 - Retrofit program for residential/non-residential structures
 - Lighting & appliance standards
 - EPA WaterSense program
 - Transportation (vehicle standards, state emission reduction goals, enhanced SmartWay program)



Title II, Energy Efficiency

- Industrial energy efficiency program:
 - Run by DOE
 - Electric & thermal waste energy recovery reward program
 - Motor efficiency rebate program
 - Clean energy manufacturing revolving loan fund
 - Clean energy & efficiency manufacturing partnerships



Title III & IV, Reducing Global Warming Pollution & Transitioning to a Clean Energy Economy

- Reduction targets & timetables
 - 2012: 3% below 2005 levels
 - 2020: 17% below 2005 levels
 - 2030: 42% below 2005 levels
 - 2050: 83% below 2005 levels
 - Amendments to Title VI of CAA to impose declining consumption cap on HFC emissions
 - Mandatory NAS review



Title III & IV, Reducing Global Warming Pollution & Transitioning to a Clean Energy Economy

- Covered gases: 5 Kyoto gases plus nitrogen trifluoride; EPA can add others
- Mandatory GHG reporting:
 - Applies to covered entities & others
 - Applicability threshold down to 10,000 tons CO₂e, 25,000 tons for vehicle fleets
 - Regulations due 6 months after passage (expectation that current EPA reporting rule becomes a registry rule?)



Title III & IV, Reducing Global Warming Pollution & Transitioning to a Clean Energy Economy

- Point of regulation/covered sources:
 - 2012: EGUs (downstream); natural gas/petroleum/coal liquids that when combusted emit at least 25K tons of CO₂e (upstream)
 - 2014: industrial sources emitting at least 25K tons, excluding petroleum and renewable biomass combustion (downstream), plus all size industrial sources in trade/energy intensive industries
 - 2016: natural gas Local Distribution Companies



Title III & IV, Reducing Global Warming Pollution & Transitioning to a Clean Energy Economy

- Free allowances/auction revenues available for many sectors & other groups (% from total allowance pool):
 - Electricity consumers through LDCs: 37.5% in 2012
 - Merchant coal generators: 6.3% in 2012
 - Natural gas consumers: 9% in 2016
 - Home heating oil/propane consumers: 1.9% in 2012
 - Low-income consumers: 15% through 2050 (auction revenues)
 - Energy efficiency/renewable energy: 9.5% grant to states in 2012
 - Refiners: 2.3% in 2014
 - Deficit reduction: 10.5% in 2012, declining until 2030, then 17% in 2030 (auction revenues)



Title III & IV, Reducing Global Warming Pollution & Transitioning to a Clean Energy Economy

- **Special allocation to energy/trade intensive industries: 15% in 2014; must meet either of eligibility criteria below**
 - **(1) Combination of Trade, Energy, GHG intensity**
 - **Trade Intensity Metric**
 - $(\text{value of imports} + \text{exports}) / (\text{value of shipments} + \text{imports}) > 15\%$
 - **and Energy Intensity Metric**
 - $\text{energy cost} / \text{value of shipments} > 5\%$
 - **or GHG Intensity Metric**
 - $(\text{direct} + \text{indirect CO}_2\text{e per ton}) * \$20 / \text{value of shipments} > 5\%$
 - **(2) Very Energy or GHG intense**
 - **Energy Intensity Metric**
 - $\text{energy cost} / \text{value of shipments} > 20\%$
 - **or GHG Intensity Metric**
 - $(\text{direct} + \text{indirect CO}_2\text{e per ton}) * \$20 / \text{value of shipments} > 20\%$



Title III & IV, Reducing Global Warming Pollution & Transitioning to a Clean Energy Economy

- Variety of cost containment measures:
 - Allowance trading (no restrictions)
 - Banking (not limited)
 - Borrowing (with & without interest)
 - Strategic reserve (only available to covered entities, lots of restrictions; \$28 minimum price)
 - International allowances (program must be at least as stringent as US)



Title III & IV, Reducing Global Warming Pollution & Transitioning to a Clean Energy Economy

- **Waxman-Markey bill allows capped sources to use up to 2 billion offsets of allowances annually (split between domestic and international offsets)**
 - An offset is a reduction in GHG emissions related to a project or activity that occurs outside of the covered entities
 - Gives EPA and USDA broad authority for developing offset program rules
 - Allows exchange for early action offset credits from certain state and voluntary programs
- **Title V of the Waxman-Markey bill (Representative Peterson Amendments) establishes key principles for agricultural and forestry offsets**
 - Agricultural, grassland, and rangeland sequestration and management practices
 - Manure management and disposal



Title III & IV, Reducing Global Warming Pollution & Transitioning to a Clean Energy Economy

- Interaction with EPA Clean Air Act authority:
 - Prohibits EPA regulation of GHGs as criteria pollutants (no NAAQS)
 - Prohibits EPA regulation of GHGs as HAPs (no MACT)
 - Prohibits EPA using NSR/PSD for GHGs
 - Requires EPA to set NSPS for uncapped stationary sources
 - Requires EPA to regulate certain mobile sources
 - Requires EPA to regulate new coal-fired utilities & CCS storage sites



Expected 2009 Senate Action on Climate

- Schedule
 - 9/28 release of Boxer bill (?) (could be Title by Title)
 - EPW discussion/mark-up expected, but floor vote increasingly unlikely; health care & financial reform higher priorities
 - Separate energy legislation still possible, but could be delayed until Spring 2010
- Key issues
 - Stringency of cap; cost containment; offsets; free allowances vs. auctioned; EPA authority; state preemption



EPA Regulatory Activity

- GHG Reporting Rule
- Endangerment Finding
- Mobile source GHG rules
- GHG PSD rule
- NSPS for utilities and others
- All signs point towards concerted EPA push—is this a game of chicken with Congress, a Copenhagen play, a power grab, or all of the above?



EPA GHG Reporting Rule

- At OMB; release next month (?), 60-day Congressional review
- Lots of meetings with OMB & EPA over last few weeks
- Key issues:
 - Delayed implementation or use of best available data
 - 3rd party certification vs. self certification; certification requirements
 - Unit vs. facility-level reporting
 - Boiler protocols



EPA Endangerment Finding

- Final finding 1st step towards GHGs as regulated pollutants
- US Chamber challenge
- Litigation a virtual certainty
- Key issue: welfare vs. human health finding



EPA PSD/Title V Rule for GHGs

- At OMB
- Key issues:
 - Major source threshold for PSD & Title V
 - Significance threshold for GHGs
 - Do other parts of PSD/NSR reform rule remain in place? (demand growth exclusion, capable of accommodating exclusion, actual to future actual calculations, etc)
 - What is BACT?



NSPS for GHGs

- Boiler NSPS under EPA voluntary remand
- EPA interested in integrating NSPS & CAMR replacement
- Will GHG standards be rolled in?
- Next categories: cement, refineries, chemicals?
- EPA able/likely to roll these out slowly (?)

