



**Climate Change Update:
Approaches to Greenhouse Gas
Cap-and-Trade Programs**

**Ann M. Seha
Dorsey & Whitney LLP**

April 23, 2009

Overview

- **International Negotiations**
- **Design issues for Cap-and-Trade Programs**
- **Congressional Update: Waxman-Markey Discussion Draft**

International Treaties and Negotiations

- **1992 United Nations Convention Framework on Climate Change: ratified by United States**
- **Annual Conferences of the Parties (COP)**
- **Most notable is COP 3, which negotiated the Kyoto Protocol in 1997, which set reduction targets for developed countries for 2008-2012: not ratified by United States**
- **COP 15 set for Copenhagen in December 2009**
- **UNCFCC parties intend to negotiate reduction scheme for post 2012 period**

Cap-and-Trade: Scope

- **Scope of program includes:**
 - **Set of GHG covered**
 - **Sectors of economy capped**
 - **Regulated entities covered**
- **Broad program can reduce compliance costs and leakage (transfer of GHG emissions to unregulated sources)**
- **Measurement crucial to integrity of the cap and thus the success of the program**

Cap-and-Trade: Point of Regulation

- **“Upstream” refers to place GHG first enter the economy:**
 - **Mine or well**
 - **Port of Entry**
 - **Point of manufacture or refining a fuel**
- **“Downstream” refers to place GHG emitted to the atmosphere:**
 - **Power plant**
 - **Industrial facility**
 - **Tailpipe**
- **“Hybrid” program combines upstream and downstream concepts**
- **Early programs have focused on large downstream emitters**

Cap-and-Trade: Emission Reduction Timetables

- **Affects overall cost of program by establishing scarcity of the commodity (the allowance to emit one ton of GHG)**
- **Must consider:**
 - **How quickly cap-and-trade program can be put into place**
 - **Lead time that is realistic for technology development**
- **European Union and United States differ substantially on stringency of 2020 reduction goal**

Cap-and-Trade: Cost Containment Mechanisms

- **Banking:** allowing flexibility to use allowances in years other than their vintage year
- **Safety valve:** some relief from program requirements if market price of allowances exceeds a price ceiling
- **Linkage:** assuring enough consistency between cap-and-trade programs to allow larger trading zone

Cap-and-Trade: Offset Credits

- **Offsets allow reductions outside of cap-and-trade system to be credited against the cap**
- **Standard requirements:**
 - **Reduce GHG emissions**
 - **Verifiable**
 - **Additional**
 - **Permanent**
- **Can be important in reducing cost of cap-and-trade**
- **Some estimates suggest that without offsets, the cost of a cap-and-trade program could nearly double**

Cap-and-Trade: Allocation

- **Allocation based on baseline emissions of covered sources:**
 - Used in CAA emission trading programs for criteria pollutants
 - Represents a reduction from baseline emissions, thus imposing substantial compliance cost
- **Auction of allowances:**
 - Generates revenue that can be used for clean energy programs or to minimize consumer cost impacts
 - Avoids potential market distortion or windfall profits
- **Combination of free allocation and auction can be used**
- **Relative portion of allowances freely allocated and auctioned can vary over time as program matures**

Waxman-Markey Discussion Draft

- **American Clean Energy and Security Act**
- **Four titles in 648 pages**
- **Hearings started yesterday**
- **Proposed approach on every significant aspect of climate change policy**

Waxman-Markey Discussion Draft: Title I, Clean Energy

- **Renewable energy generation requirement that would reach 25% in 2025**
- **Aggressive program to develop carbon capture and sequestration technology to control emissions from coal-fired power plants**
- **Low carbon fuel standard to reduce greenhouse gases from transportation activities**
- **Achievement of goals furthered by deployment of a “smart” electric transmission grid to get renewable energy to load centers and facilitate other technologies to increase energy efficiency**

Waxman-Markey Discussion Draft: Title II, Energy Efficiency

- **Programs and requirements for improving efficiency of new and existing buildings, appliances and manufactured homes**
- **Authorization for federal agencies to enter into long-term contracts to purchase renewable energy**
- **Require EPA to adopt greenhouse gas emission standards for mobile sources under the existing CAA**

Waxman-Markey Discussion Draft: Title IV, Economic Transition

- **Programs designed to keep U.S. manufacturers from suffering competitive disadvantage due to the cost of additional emission controls, including possible imposition of a “border adjustment” program to account for the carbon content of imported products**
- **Programs to promote training for “green jobs”**
- **Consumer assistance program**
- **Program to encourage deployment of clean technologies to developing countries.**

Waxman-Markey Discussion Draft: Title III, GHG Regulation

- Greenhouse gas cap and trade program with reductions from 2005 levels as follows:
 - 3% by 2012,
 - 20% by 2020, and
 - 83% by 2050
- Emission allowances also include offset credits which could be used to offset emissions at a ratio of 5 offset credits to 4 emission credits, limited to 2 billion tons per year.

Waxman-Markey Discussion Draft: Title III, GHG Regulation

- **Covered entities would include:**
 - **Electricity sources that emit 25,000 tons CO₂e**
 - **Chemical, petrochemical and other industrial sources that emit 25,000 tons CO₂e**
 - **Fuel producers: 25,000 ton CO₂e emissions measurement is based on what would be emitted from combustion of fuels produced.**
 - **Natural gas local distribution companies that deliver over 460 million cubic feet of gas to non-covered customers.**

Waxman-Markey Discussion Draft: Title III, GHG Regulation

- **Bill is silent, pending committee markup, on two of the most central issues in the upcoming debate:**
 - **The portion of emissions allowances to be allocated and/or auctioned**
 - **The use of the proceeds from an auction.**
- **This aspect of cap and trade legislation determines the timing and level of costs that will be imposed on covered entities**
- **The final result will likely reflect complicated compromises set forth in detailed allowance allocation language (similar to the final legislation on the allowance allocations in the CAA Title IV Acid Deposition Program)**



Contact Information

Ann M. Seha
Dorsey & Whitney LLP
seha.ann@dorsey.com
612.492.6883