Climate Change

Legislative, Regulatory, and Economic Forces at Work

Emerging Issues: Climate Change Legislation
AHC Group Corporate Affiliates Workshop January 28th
Phoenix, AZ

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Shumaker, Loop & Kendrick, LLP
Climate Change Action

- U.S. Supreme Court (endangerment finding)
- Senate and House Bills
- Copenhagen
- Public Opinion
- Science (closed?)
- Science (re-opening?)
- Public Opinion (changing?)
- Economic and Physical Impacts
- New Political Balance
The Climate Change Debate

- Whether or not climate change due to anthropogenic activity is a reality or is a debate for the scientific community.

- In contrast, climate change legislation and policy is a reality that industry will need to address in the upcoming decades.
Overview – Competing Legal Drivers

- Massachusetts v. EPA
- U.S. EPA “endangerment finding”
- Congressional legislation
  - Waxman-Markey GHG bill
  - Kerry-Boxer GHG bill
- International GHG accords
- Cost factors
Massachusetts v. EPA (U.S. 2007)

- Holding (5-4 decision): GHG could be regulated under CAA 202(a)(1)
  - “any air pollution agent or combination of such agents, including any physical, chemical ... substance or matter which is emitted into or otherwise enters the ambient air”

- Implications – Expand Clean Air Act Title V and NSR Programs
EPA Endangerment Finding

- Final rule: December 15, 2009
  - Six GHG are air pollutants
    - Carbon dioxide  Hydrofluorocarbons
    - Methane  Perfluorocarbons
    - Nitrous oxide  Sulfur hexafluoride
  - Allows EPA to set emission standards for GHG for new motor vehicles
EPA Endangerment Finding

The next step to stationary sources?
- CAA 108(a)(1): “[T]he Administrator shall ... revise ... air pollutant – ... emissions of which ... [result] from mobile or stationary sources ...”

EPA could avoid a CAA 108 determination for GHG if Congress adopts comprehensive climate change laws (the pressure on legislative action)
GHG Legislation

  - First comprehensive legislation enacted to limit the growth of GHG
- Kerry-Boxer Bill (S.1733): Reported by committee on Nov. 5, 2009

*More comprehensive than Kerry-Boxer Bill
GHG Legislation

- **Renewable energy standard***
  - Large utilities must derive a percentage of electricity from renewable energy
    - 2012: 6%
    - 2025: 25%
  - Renewable: Wind, biomass, solar, geothermal, hydropower, landfill gas
  - Facilities will receive one energy credit for each megawatt of renewable energy

- Develop a strategy and regulations for the sequestration of CO₂

*Waxman-Markey Bill Only*
GHG Legislation

- Regulations to *reduce* emissions of covered sources to
  - 97% of 2005 levels by 2012
  - 80% of 2005 levels by 2020
  - 58% of 2005 levels by 2030
  - 17% of 2005 levels by 2050
Net Emission Reductions Under Congress Cap-and-Trade Proposals

World Resources Institute.
GHG Legislation

- Allows allowance trading (no restrictions, foreign allowances)
- Unlimited banking of allowances
- May borrow a percentage of future allowances
- Strategic reserve allows government to withhold of allowances and auction them off quarterly
- No state action; no regulation under Title V, NSR
Aim of legislation is to reduce average 5.5 tons of carbon per person to 0.63 tons per person.
What Would It Take to Achieve these Reductions by 2050?

To achieve these reductions, the U.S. would have to:

- Add 30,000 megawatts of new wind turbines every year
- Add 35,000 megawatts of solar photovoltaic capacity every year
- Multiply the nuclear reactor fleet by fivefold
- Retrofit all existing coal-fired power plants with carbon capture and storage technology
- Build twice as many new plants with carbon capture and storage technology
- Substitute natural gas for coal
- Require 2/3 of cars and trucks to be electricity powered and 1/3 run on advanced biofuels

The Copenhagen Accord - Toothful or Toothless?

- Developed countries agree to provide quantified emission targets for 2020 by January 31, 2010
- Developing countries agree to provide voluntary mitigation actions by January 31, 2010 – No cap
- Developed countries agree to create a fund of 100 billion dollars a year by 2020 to address needs of developing countries
China – Reduce Rate of Growth of Emissions

China’s approach:
- Economy-wide energy efficiency targets that mandate a reduction in energy intensity
- Renewable energy law mandates 16% of energy from wind, biomass, solar, and hydro-power energy by 2020
- Promotes nuclear power
- Improve power sector energy efficiency
- National building codes
- Appliance efficiency standards
- Fuel economy standards and motor vehicle taxes
- Close inefficient industrial facilities
Top Ten CO2 Emitting States

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Million Metric Tons CO₂
GHG Legislation Impact on the U.S. GDP

Conclusions

- Massachusetts v. EPA opened the door to regulating GHG emissions under the Clean Air Act
- The current Administration and Congress are moving forward through various rulemakings and legislation to regulate GHG emissions
- These regulations and laws will have an economic impact on the U.S. and will be more detrimental in states that heavily rely on coal-fired power plants for electricity
- Stay tuned after Massachusetts election!