Climate Change Update

CIBO Environment Committee Meeting December 10, 2008

President-Elect Obama's Views on Climate Issues

- Views climate change as high priority for his Administration
- Believes US should be a leader in taking action
- Supports comprehensive cap & trade program
 - ~ `80% reduction in GHGs by 2050
 - 100% auctions from the start
- Would tie cap & trade to \$150 billion "green jobs" stimulus program
- Believes CO2 is a "dangerous pollutant" that should be regulated under the Clean Air Act
- Supports related energy initiatives
 - 25% national RPS by 2025
 - Increased RFS mandate to 60 billion gallons by 2030

- Industry comments: most totally opposed to regulation of GHGs under CAA; a few attempt to at least engage
 - AFPA in latter category:
 - Interconnection of CAA would prevent targeted action thru single program
 - CAA designed for local/regional pollutants
 - CAA programs highly inefficient/inflexible means for regulating GHGs
 - CAA stationary source programs will not effectively address climate change compared to comprehensive legislation
 - <u>But</u>, if EPA moves forward, some provisions more flexible than others

- NACAA:
 - Supports use of CAA, particularly NSPS, mobile source provisions, limited NSR & Title V
 - Don't preempt state activities to reduce GHGs
 - NSPS for power plants, forest products, cement, iron & steel, refineries [industrial boilers covered under these categories?]
 - BACT for "large sources" of GHGs

- NRDC, Sierra Club, et al
 - Integrate mobile source standards with LCFS
 - "legal duty" to set NSPS for new & existing sources
 - Existing source NSPS standards should =new
 - S. 111 standards based on "what may fairly be projected for the regulated future, rather than the state of the art at present"
 - Ratchet down NSPS every 8 years
 - Post-combustion capture for fossil fuel-fired industrial boilers
 - EPA can find "legally sound" ways to limit NSR/PSD exposure for smaller emitters
 - Opposes streamlined BACT for larger sources
 - Opposes NAAQS & MACT approaches
 - Silent on emission trading under NSPS (EDF supports)

- California & Connecticut Attorney Generals:
 - Climate change "most serious environmental challenge we have ever faced"
 - Can't wait for Congressional action
 - Legal obligation to act
 - CAA has great track record of dealing with complex issues
 - Controls can be implemented in "cost-effective manner"
 - Grant California mobile source waiver, implement other mobile source standards, LCFS
 - Make endangerment finding immediately
 - NSPS for power plants, forest products, cement, iron & steel, refineries, etc
 - BACT for large stationary sources

- Florida DEP:
 - Supports immediate endangerment finding, California mobile source waiver, NSPS with regular updates
- Massachusetts Attorney General:
 - Statutory duty to regulate under the CAA
 - Endangerment not in doubt
 - NAAQS provisions can work; no problem with national nonattainment
 - Modeling & technical work for NAAQS could be done by EPA; set budget and let states figure out how to meet it
 - NSR/PSD concerns overblown

- State AG's et al (Ariz., Calif., Illinois, Iowa, MD, NJ,NY, Oreg., Wash., VT, Mayors of Minneapolis, SLC, Seattle, bunch of state environmental agencies):
 - Climate change "most serious environmental challenge we have ever faced"
 - Congress should pass legislation, but could take years, so EPA should act now
 - NSPS, BACT, mobile source controls, LCFS
 - CAA has "proven track record"
 - EPA has discretion to prioritize regulatory activities

GHG Reporting Rule

- According to Reid Harvey on 12/8/08:
 - Rule still at OMB
 - Several issues (why move forward, why not one-time report)
 - Expects rule to come out quickly under new Administration
 - If rule came out this year, some chance EPA could still have final rule by June 2009
 - Reality is that promulgation unlikely until end of 2009

WCI Final Cap & Trade Design Principles

- Program goal: 15% GHG emission reduction (from 2005 baseline) by 2020; 6 GHGs (CO2, methane, nitrous oxide, HFCs, PFCs, sulfur hexafluoride)
- Emission threshold for coverage: 25,000 tonnes/yr CO2e, subject to review
- Program coverage:
 - Industrial sources (process & combustion)
 - Electricity providers (1st jurisdictional deliverer); treatment of combined heat & power (CHP) TBD
 - Residential, commercial, industrial fuel use for sources below the threshold (2nd phase)
 - Transportation fuel combustion (2nd phase)

WCI Final Cap & Trade Design Principles (cont.)

- Initial GHG emission cap based on "best estimate" of actual emissions expected in 2012; <u>each state to</u> <u>determine</u>
- Cap will decline each year, though sources will have a 3-year compliance period
- Individual source allowance allocations to be determined by states
- <u>States</u> must auction at least 10% of their allowances, with minimum rising to 25% in 2020; uncertain prospects for a price cap or safety valve
- Unclear what post-2020 program will look like

WCI Final Cap & Trade Design Principles (cont.)

- Early reduction allowances will be available for actions taken between 1/1/08 & 1/1/12
- Banking will be allowed
- Offsets can be used to cover up to 49% of total <u>state</u> emission reductions; not clear how this will work for sources. Sources "encouraged" to find offsets within WCI
- WCI states <u>may</u> address some sectors uniformly
- Biofuel combustion considered carbon neutral across WCI; biomass combustion carbon neutrality to be determined by each state

WCI GHG Reporting

- Much of WCI's draft "essential requirements" come from the Climate Registry program & California's reporting rule
- Individual states will have responsibility for crafting their own reporting rules; efforts are under way in Oregon and Washington; Oregon's rules were finalized October 23-24

WCI GHG Reporting (cont.)

- WCI recommends a 10,000 tonne CO2e threshold
- Direct emissions only (to avoid double counting)
- Biofuels and biomass emissions should be reported, but separately
- For industrial sources, combustion, process, fugitive, and accidental GHG emissions must be reported
- Key decisions: reporting level (unit or facility), inclusion of de minimis reporting level, how to deal with CHP emissions

WCI GHG Reporting (cont.)

- Mandatory measurement/monitoring to commence in January 2010
- Reporting to commence in "early 2011" for 2010 GHG emissions
- "In general, emissions data are not considered confidential"
- GHG emission quantification methods must be "rigorous"
- Third party verification of reported emissions will be required
- Measurement methods for GHG emissions from landfills & wastewater treatment plants TBD

MGA Cap & Trade Design Principles

- Program goal: 15 to 25% GHG emission reduction (from 2005 baseline) by 2020, 60 to 80% by 2050; 6 GHGs (CO2, methane, nitrous oxide, HFCs, PFCs, sulfur hexafluoride)
- Emission threshold for coverage: 25,000 tonnes/yr CO2e, or 25MW nameplate capacity, subject to review
- Program coverage:
 - Industrial sources (process & combustion)
 - Electricity providers (1st jurisdictional deliverer); treatment of combined heat & power (CHP) not addressed (yet)
 - Residential, commercial, industrial fuel use for sources below the threshold may be included
 - Transportation fuel combustion may be included

MGA Cap & Trade Design Principles (cont.)

- Initial 2012 GHG emission cap based on 2011 actual emissions (growth factor?); <u>each state to determine</u> <u>consistent with MGA principles</u>
- Cap will decline each year, though sources will have a 3-year compliance period
- Individual source allowance allocations to be determined by states
- Allowance allocation methods yet to be determined, though mixture of auctions and free allocations recommended; uncertain prospects for a price cap or safety valve
- Linkage with WCI, RGGI, EU, others

MGA Cap & Trade Design Principles (cont.)

- Early reduction allowances will be available for actions taken between model rule release & 1/1/12; other early actions <u>may</u> get credit
- Banking will be allowed; limited borrowing
- Offsets can be used; limited to between 10 and 50% of required emission reductions; not clear how this will work for sources. Sources must use offsets from within MGA area initially; broadened over time
- MGA states to address sectors uniformly
- Biomass combustion carbon neutrality <u>not</u> addressed (yet)

MGA GHG Reporting

- MGA recommends a 10,000 tonne CO2e or 25 MW reporting threshold; individual states may go lower
- Direct emissions only (to avoid double counting)
- Biomass emissions should be reported, but separately
- For industrial sources, combustion & process GHG emissions must be reported; ?fugitive and accidental?
- Key decisions: reporting level (unit or facility), inclusion of de minimis reporting level, how to deal with CHP emissions

MGA GHG Reporting (cont.)

- Mandatory measurement/monitoring to commence in January 2010
- Reporting to commence in January 2011 for 2010 GHG emissions
- Confidentiality of emissions data not addressed
- GHG emission quantification methods not addressed
- Third party verification of reported emissions will be required unless not covered by cap & trade program

Dingell/Boucher "Discussion Draft"

- Comprehensive cap & trade bill covering ~88% of US GHG emissions
- Step-based glidepath, gentle at first: 6% below 2005 levels by 2020, 44% by 2030, 80% by 2050
- 4 options for allocations, but all have auctioning
- Federal preemption
- Performance standards for new industrial sources not covered by program; otherwise prohibition on regulating GHGs under the CAA