Climate Change Webinar Series

The Developing US and International Legal Framework

Today's presenters:
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Mayer Brown is a global legal services organization comprising legal practices that are separate entities ("Mayer Brown Practices"). The Mayer Brown Practices are: Mayer Brown LLP, a limited liability partnership established in the United States; Mayer Brown International LLP, a limited liability partnership incorporated in England and Wales; and JSM, a Hong Kong partnership, and its associated entities in Asia. The Mayer Brown Practices are known as Mayer Brown JSM in Asia.

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Climate Change: The Developing US and International Legal Framework

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Recent US Climate Change Developments

- Significant Events that Influence Federal Climate Change Action in 2007-2008
 - 2006 Elections: control of Congress passes to Democrats
 - 4th Assessment Report of the Intergovernmental Panel on Climate Change – 2007
 - Media / Public Opinion
 - Supreme Court Decision, Massachusetts v. EPA, April 2007
 Re: Clean Air Act Advanced Notice of Proposed Rulemaking
 - Enactment of Energy Independence and Security Act of 2007 with complementary climate-related provisions
 - G-8 Adoption of Greenhouse Gas (GHG) Reduction Goal for 2050
 - Oil prices / Economy
 - 2008 Presidential and Congressional Elections
 - Proliferation of State and Regional standards

Recent US Climate Change Developments

- Key Players
 - Environmental Organizations
 - Agricultural and Forestry Interests
 - Manufacturing and Transportation
 - Electricity Generators
 - Energy Producers Coal, Oil, Natural Gas, Nuclear, Renewables, Hydro
 - Consumers
 - Labor
 - States Governors, Mayors, Attorney Generals
 - Trade Associations

Recent US Climate Change Developments

- Congressional Response to Climate Change Since 2006 Elections
 - Senate
 - Committee Reports S.2191, December 2007
 - June 2008 Full Senate failed to muster votes to allow consideration of Boxer Substitute for S.2191.
 - June 2008 10 Senate Democrats wrote they could not support Senate legislation.
 - House
 - Hearings 2007 and 2008
 - Bills introduced by Waxman, Markey and Doggett (2008)
 - Dingell/Boucher Climate Change "White Papers"
 - Dingell/Boucher Drafting Legislation Republican Skeptic

Potential US Climate Change Program

- Greenhouse Gas Reductions
 - Cover all Six Greenhouse Gases
 - Long-term Goals / Mandates
 - Interim Goals / Mandates
 - Baseline Year: 1990 / 2005 / other
 - Control Years: 2012-2050
 - Point of Regulation: Workability / Upstream-Downstream
 - Legislative Approach: New Law / Amend Clean Air Act
 - Administration: EPA / DOE / Other
 - International Issues / Impact on US Economy

Potential US Climate Change Program

- Regulation Alternatives
 - Performance Standards
 - Carbon Tax
 - Cap-and-Trade Program
 - Multiple Flavors
 - Economy-wide or Sectoral Approaches
 - Potential Effects
 - Transition for Development / Deployment of Technologies
 - Costs to Regulated Entities / Sectors
 - Costs to Consumers
 - Effects on Jobs

Potential US Climate Change Program

- Cap-and-Trade
 - Declining Cap
 - Allowances / Permits
 - Sectoral Allocation
 - Free Allocation
 - 100% Auction
 - Mix Free / Auction
 - Cost Containment Issues / Environmental Integrity of Cap
 - Banking / Borrowing
 - Offsets
 - limited / unlimited
 - domestic / international
 - Price Floor / Ceiling
 - Retirement of Allowances by Environmentalists / Others
 - Credits for Pre-program Investments and Reductions

Federal Climate Change Program

- Cap-and-Trade Auctions
 - Who participates in auctions?
 - Auction Proceeds
 - Accelerate Technologies
 - Carbon Capture and Storage
 - Energy Efficiency
 - Address Impacts of Climate Change on Natural Resources / Wildfire Control in West
 - Consumer Credits
 - Debt Redirection / Tax Reduction
 - Other Uses
- Status of State Climate Programs
 - Regional Greenhouse Gas Initiative 2009

- United Nations Framework Convention on Climate Change (FCCC) of 1992
 - US one of 189 parties to FCCC
 - Applies to all Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances.
 - Conference of Parties (COP) Convention's Supreme Body
 - Adopts decisions by Consensus on implementation and administration.
 - Adopted Kyoto Protocol by decision in 1997

- Kyoto Protocol
 - US not a Party
 - Clinton signed in 1998, but did not submit to Senate for Advice and Consent to Ratification.
 - Bush repudiated in 2001
 - Entered into force in 2005
 - Only developed country Parties have targets; no commitments for developing countries.
 - First commitment period 2008 2012
 - Nevertheless, Protocol is permanent / does not expire in 2012.

- Post 2012 Negotiations Two Separate Tracks
 - Protocol track: Article 3.9 of Protocol requires negotiations by Parties for subsequent commitment period and targets; Protocol Working Group negotiations started in 2005; US not Party to negotiations.
 - Convention track: Bali Decision of 2007 established separate negotiating track by Working Group under Convention for all developed and developing countries re: building blocks of mitigation, adaptation, technology transfer, financial assistance for mitigation, adaptation and technologies; US Party to negotiations.
 - Aim to complete both negotiations by end of 2009 / likelihood.
 - Protocol requires negotiations to result in amendment of Protocol Annex; requires ratification by three-fourths of Protocol Parties.
 - Convention track negotiations to result in "Decision"; uncertain whether a "Decision" means amendment to FCCC or new Protocol requiring ratification or just a COP decision that does not require ratification.

Critical Issues

- Interim Targets and Long-term Goals
- Lead by Developed Nations
- Developing Nations' Commitments
- Trade Issues WTO / GATT
- Flexibility Measures
- Monitoring and Enforcement Mechanisms
- Merger of Two Tracks
- Nature of Instruments
- How to Address Adaptation
- Technology Transfer for Developing Countries
- Financial Assistance for Developing Countries

Federal Climate Change Prospects: 2008 – 2010

- New President's Priorities
- State of US Economy
- Clean Air Act (CAA) Determinations by EPA
- Congressional Action Absent Presidential Legislative Proposal
- Potential Conflict Between Legislation / CAA Regulation
- Preemption Issues
- Results of International Negotiations
- Resolution of Potential Conflicting National, State, Regional Energy, Technological, Economics, Environmental Consumer Interests
- Ambitious 38-year Program
- Timetable

California's Landmark Climate Change Initiative

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Overview: California's Three Pronged Attack on Global Warming

- AB 32: First state to approve cap on GHG emissions and require reporting and monitoring of GHG emissions by major sources. Will reduce Greenhouse Gas Emissions to 1990 levels by 2020.
- AB 1493: Curb tail pipe GHG emissions from cars and light trucks.
- California Environmental Quality Act: Consideration of project impact on GHG emissions in environmental impact review process. (Brown v. County of San Bernardino)

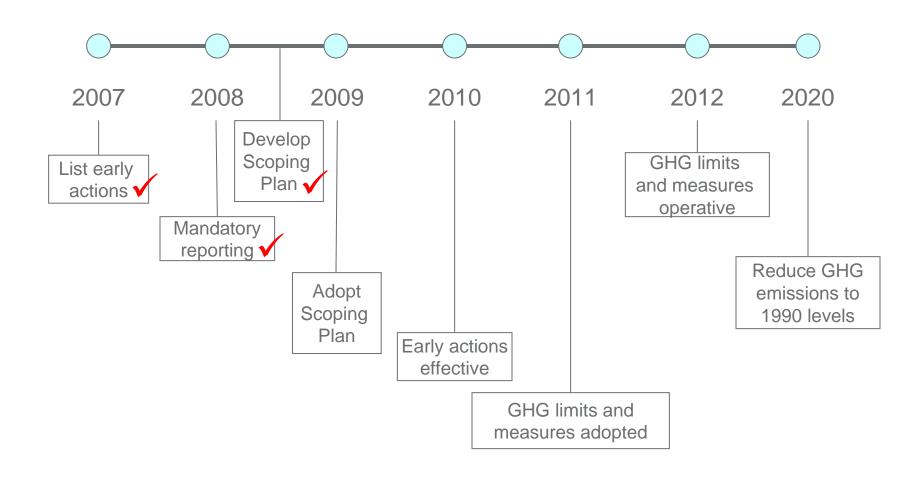
Provisions of AB 1493

- ARB to develop regulations to achieve maximum feasible and cost effective reduction in GHG emissions from motor vehicles. (AB 1493 Stats. of 2002)
- In 2004 ARB regulations set fleet averages on CO₂ emissions between 2009 and 2016.

Implementation Stalled in Court

- United States Supreme Court: Clean Air Act authorizes EPA to regulate GHG emissions from autos (Massachusetts v. Environmental Protection Agency, (127S.Ct.1438, 2007).
- Automakers brought suit in federal court arguing that action was preempted by federal law concerning fuel efficiency standards. Central Valley Chrysler Jeep et. al. v. Witherspoon, (US District Court, EDCA #1:04-cv-06663-AWI-GSA)
- EPA denied California's request for waiver under the Clean Air Act. California sued US EPA.
- Obama and McCain favor waiver

AB 32 - California Global Warming Solutions Act of 2006: Implementation Time Line



AB 32 Provisions: Greenhouse Gases to be Regulated

- Carbon dioxide (CO₂)
- Methane
- Nitrous oxide
- Hydrofluorocarbons
- Perfluorocarbons
- Sulfur hexafluoride

AB 32 Provisions (cont'd): Greenhouse Gas Emissions Reporting

Regulated Parties

- Operators of Petroleum Refineries that emit 25,000 MT of CO₂ or more in any calendar year after 2007.
- Hydrogen facilities that emit 25,000 MT of CO₂ or more in any calendar year after 2007 from combination of stationary combustion sources and hydrogen production.
- Electric generation all retail providers of electricity; or operated by retail provider w/ generating capacity greater than or equal to 1MW and that emit greater than or equal to 2,500 MT of CO₂ in any calendar year after 2007.
- Cogeneration facilities operated by retail provider that have individual nameplate generating capacity greater than or equal to 2500 MT of CO₂ in any calendar yr after 2007 from electricity generating activities.
- Facilities that emit 25,000 MT year of C0₂ or more from stationary combustion sources.

AB 32 Provisions (cont'd): Greenhouse Gas Limits

- ARB required to determine and set statewide GHG emission limits at 1990 levels. (H & S Code §38550)
- 427MMT CO₂e limit established by ARB.
- Will require a reduction of 169MMT of CO₂ statewide by 2020.

AB 32 Provisions (cont'd): Greenhouse Gas Emission Reduction Mechanisms

Command and Control

 "Direct emission reduction" means a reduction action by a greenhouse gas emission source at the source. (H&S Code §38505(e)

Discrete Early Actions

- Low Carbon Fuel Standard
- Restrictions on High GWP Refrigerants Q4 2008
- Landfill Methane Capture Q4 2008
- Reduction of High GWP GHGs in Consumer Products Q4 2008
- SmartWay Truck Efficiency (Draft regulatory language for this measure was recently released) – Q4 2008
- Tire Inflation program Q1 2009
- Reduced PFCs in the Semi-Conductor Industry Q4 2008
- Green Ports (Shore Power for Ocean Going Vessels) Q1 2008

AB 32 Provisions (cont'd): Greenhouse Gas Emission Reduction Mechanisms

- Voluntary Early Actions (H&S Code §38562(b))
 - Directs ARB to develop regulations for voluntary reductions and credits.
- Market-Based Compliance Mechanisms
 - Permissive: ARB has authority to include marketbased mechanisms in AB 32 Regs.

AB 32 Provisions (cont'd): Market-Based Mechanisms

- "Market-based compliance mechanism" means either of the following:
 - A system of market-based declining annual aggregate emissions limitations for sources or categories of sources that emit greenhouse gases

<u>Or</u>

Greenhouse gas emissions exchanges, banking, credits, and other transactions, governed by rules and protocols established by the state board, that result in the same greenhouse gas emission reduction, over the same time period, as direct compliance with a greenhouse gas emission limit or emission reduction measure adopted by the state board pursuant to this division. (H&S Code §38505(k))

Provisions of AB 32 (cont'd)

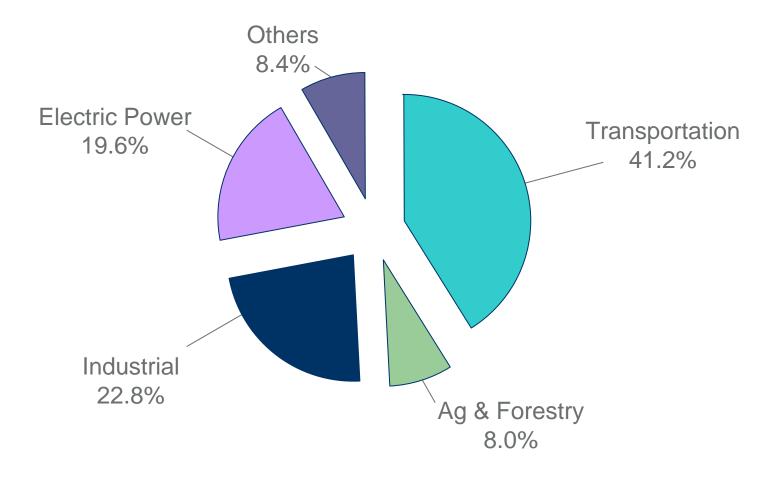
Scoping Plan

- On or before January 1, 2009, ARB must prepare and approve a "Scoping Plan" for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions from sources or categories of sources of GHGs by 2020. AB 32 does not define the term "scoping plan" and ARB does not typically prepare "scoping plans." (H&S Code §38561)
- "Scoping Plan" required to identify and make recommendations on direct emission reduction measures, alternative compliance mechanisms, market-based compliance mechanisms, and potential monetary and non-monetary incentives. (not defined)

Scoping Plan

- Draft Scoping Plan (6/26/08) Identified Proposals for Variety of Sectors
 - Heavy on command and control approach: 80% of reductions.
 - Calls for Regional cap-and-trade market with Western Climate Initiative.
 - Relies heavily on measures already underway at ARB and other agencies.
 - Silent on key issues.
 - Must be adopted by January 1, 2009.

California GHG Emissions by Sector



Source: California Air Resources Board

Key Proposals of Scoping Plan by Sector

	Recommended Reduction Strategies	Sector	2020 Reductions (MMTCO ₂ E)
	The Role of State Government	Various	1-2 ¹
	Reduce carbon footprint		
	Set an example		
	California Cap-and-Trade Program Linked to WCI: Emissions cap of 365 MMTCO ₂ E covering electricity, transportation, residential/commercial		
	and industrial sources by 2020. Shaded reductions contribute to		
	achieving the cap.		
*	California Light-Duty Vehicle GHG Standards	Transportation	32.7
	 Implement Pavley standards 		
	Develop Pavely II light-duty vehicle standards		
*	Energy Efficiency	Electricity &	26.4
	 Building and appliance energy efficiency and conservation 	Commercial and	
	 32,000 GWh reduced electricity demand 	Residential	
	 800 million therms reduced gas use 		
	 Increased Combined Heat and Power (CHP) electricity 		
	production by 30,000 GWh		
*	Renewables Portfolio Standard (33% by 2020)	Electricity	21.2
*	Low Carbon Fuel Standard	Transportation	16.5
	High Global Warming Potential Gas Measures	High GWP	16.2
	Sustainable Forests	Forests	5
	Water Sector Measures	Water	4.8 ²
	Vehicle Efficiency Measures	Transportation	4.8

ARB is evaluation emission reduction estimates for this measure, and therefore are not counted in the total

GHG reductions from the water sector may already be incorporated in the 2020 forecast. They are not currently counted toward the 2020 goal. ARB will work with the appropriate agencies to determine whether these reductions are additional.

Key Proposals of Scoping Plan by Sector (cont'd)

Recommended Reduction Strategies	Sector	2020 Reductions (MMTCO ₂ E)
Goods Movement	Transportation	3.7
Ship Electrification at Ports		
Systems-Wide Efficiency Improvements		0.5
Heavy/Medium Duty Vehicles	Transporation	2.5
 Heavy-Duty Vehicle GHG Emission Reduction (Aerodynamic Efficiency) 		
 Medium-and Heavy-Duty Vehicle Hybridization 		
Heavy-Duty Engine Efficiency		
Million Solar Roofs (Existing Program Target)	Electricity	2.1
Local Government Actions and Regional GHG Targets	Land Use and	2
	Local	
	Government	
High Speed Rail	Transportation	1
Landfill Methane Control	Recycling &	1
	Waste	
Methane Capture and Large Dairies Agrice		1 ³
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources		TBD
*Additional Emissions Reduction from Capped Sections		35.2
	Total	169
	Reductions	

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Challenges for Implementation: Will California Lead or Be Left Behind?

- Symbolism or Substance?
- How CA structures program will be critical to whether it becomes a model for US or a relic.
- 13 States have adopted GHG reduction measures.
- 22 States participating in regional cap-and-trade programs.
- 400 cities signed pledge to follow Kyoto protocols.
- Political Factors
 - Next President / Congress sure to act on GHG reductions
 - Legislature
 - Regulated Sectors
 - Environmentalists
 - Costs
 - Time

Challenges for Implementation (cont'd)

- Allowance Allocation: how emission allowances allocated will be hotly contested
 - Free? Auction? Or Mix?
 - Auction / Carbon Tax
 - CPUC Model Rule for Electricity Sector: proposed partial auction of allowances has set stage for a major fight.
 - Draft Scoping plan silent on Allowance Auction but says ARB is considering "Carbon Fees."
 - AB 32 does <u>not</u> authorize auction of allowances but <u>does</u> permit fees to pay for administrative costs.

Challenges for Implementation (cont'd)

- Market-Based Compliance Mechanisms
 - Draft Scoping Plan proposes Regional cap and trade scheme with Western Climate Initiative – CA, AZ, NM, OR, WA, UT and MT and Canadian provinces of British Columbia, Manitoba, and Quebec.
 - Proposed limited use of market compliance to 20% of emissions reductions.
 - WCI Draft: would include electrical, large stationary combustion, industrial, waste, fossil fuel production, and transportation fuels – which could be at odds with CA.
 - Auction of allowances recommended by WCI with phased increase (25-75%).
 - Banking purchasers and covered entities would be allowed to bank in WCI.
 - Borrowing would not be allowed from future compliance periods.

Challenges for Implementation (cont'd): Market-Based Mechanisms

- Will WCI Partners be able to agree?
- AB32 Limitations on Market Mechanisms
 - Environmental Justice "EJ" Concerns
 - ARB must consider "direct, indirect and cumulative emission impacts" from market mechanisms, including localized impacts in communities that are adversely impacted by air pollution.
 - Legislature
- Offsets
 - Local / Regional / International
 - ARB considering requiring that "significant portion" of offsets come from within California.
- Voluntary Action
- Point of Regulation
 - Electricity
 - Cement

Thank you

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