### Exhibit 12

**Federal Climate Change Legislation** 

Lorraine Howerton, Baker Botts LLP, "Federal Legislation: What's on the Horizon?" PowerPoint Presentation at Carbon and Climate Change Seminar (April 24, 2008).



# Federal Legislation: What's on the Horizon?

Lorraine Howerton 202.639.7908 lorraine.howerton@bakerbotts.com

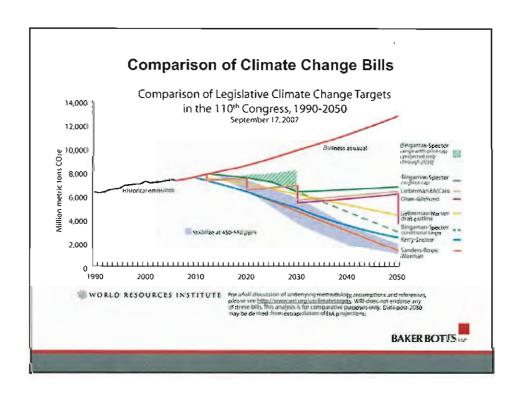
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## **Presentation Discussion Areas**

- Proposed climate change legislation
- Climate Security Act
  - Sectors covered
  - Points of regulation
  - Allocation methodologies
  - Domestic and international offsets
  - Early reduction credits
  - Carbon capture and storage
  - Use of auction proceeds

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	Summa	praft as of January 11. 20		n figure for target levels.)	) Congress		
	Who's Regulated	Allowance Allocation	Price Stability	Offsets	Technology	Competitiveness	
Warner (5 2391)	Economission at stratem; oil side process enleading at stratem; oil softens, and olights important; and fings produces and important; and fings produces and important as the control of t	33% has to industry (including electric governous), with phase out; \$1% to entirely contempt; \$2,0% and subtrees (gridually increased to 69,5%) to fund technology deployment, transition assistance, and adaptation, \$% set saids for CCS and exquestimation; \$10,5% to tasks; \$3% for early adding	"Climate fied" with discretion to increase use of borrowing and offsets and temporarly expend cap. Borrowing: up to 15% of allowances, for no more than 5 years.	Up to 15% of obligation can be met with domestic sequestration, and another 15% through international allowances and cradits.	Technology displayment houselves for zero and low- carbon parasition, schemost one, cellulosis blomess, and schanced vehicles (52% of suction revenues).	Bulk, energy- intersive imports from countries w/o compensate policy require permits ofter 2020.	
Singaman- Specter (3 1766)	Economy-wide cap coal and some industrial artistors at anothers; of referent. NO processions, and oil or NG important; and Figas producers and innovaters. (About 50% of artistors consent.)	53% free to industry (with phase out); 34% auctionals to support RAD, transition assistance, adaptation; 14% ast aside for CCS and sequestration; 9% to states.	\$12/metric ton CO; safety valve, riving at E% per year above inflation.	Unimited domestic offsets including methers and \$7s, Links on international offsets (19% of op) and domestic springly and offsets (5% of op).	Cetafect sychology development programs funded from allowance suction revenues (12-26% of auction revenues).	Duff, energy- injuriely imports from countries w/o comparable policy require permits after 8 years.	
Udad-Petri nasy draft and staff tally)	Economy-wide cap: upstream feasil-find sources (e.g., producers and important), along with industrial emissions. (About 60% of emissions covered.)	20% free to Industry, 80% auctioned to support PD4D; developing country engagement; adeptation, dislocation and sequestration; debt reduction.	country safety valve, rising at sequentiation offsets delocation and 3-6th per year above Movement and anche		Catablehas ARPA-E to fund technology advantument, projects (24%-of autition revenues).	Inection by developing countries can justify delay in safety valve successful.	
McCain (8. 280)	Economy-wide cap: large downstream at emitter; transport emissions regulated at refinery. (Appt. 75% of emissions covered.)	Discretion of EPA, with guidance for some free allocation and an auction to fund RSO, transition assistance, adaptition measures.	Borrowing: up to 25% of allowerspace, for no more than 5 years.	Up to 30% of obligation can be met with domestic requestration projects and international offsets.	Revenues from some autopred Micropross used for KDAD,		
(5.485) Waxman	Sconomy-wide cat: point of regulation at discretion of EPA. (Coverage TBO by EPA.)	Discretion of the President with guidence from the DPA.	No provisions.  No provisions.  No provisions.		Valvide emission rules; efficiency & renewable standards for electric		
Songers- scar (5.309)	Economy-wide cap: (PA has decrep	on to implement a mediat-based allowance p	generation; additional bill- specific mandatus.	No provisions.			
Feinstein- Carper 19. 0171	Dectricity-sector cap: power plants. (The electricity sector is	ESW free to industry, based on generation (updated annually), and phased out by 2006.	Sorrowing up to 10%, for no more than 5 years.	Intermeteral offsets up to 3/4 of cap, enterwine domestic biological offsets.	Distributes auton revenues to multitude of technology programs.		
Alexander- Leberman (5. 1168)	34% of US GRG emissions.) (S. 1160 also covers utility SO <sub>L</sub> RO <sub>L</sub> and mercury emissions.)	75% free to including, based on liquit.	No provisions.	Connectic offsets in five categories, including methers, 5%, efficiency, and forest sequestration.	ASPS for CO <sub>2</sub> ensembers from non-electric generation sinks.		
Stark ps.R. 2069)	Economy-wide two facel fuels	107% revenues to US Treasury.	(3)Nestic Ito CO <sub>2</sub> , nsing \$3 avvasely.	Tax refunds for fivel CO <sub>1</sub> securetered downstream; CCS, plastics.	No provisions.		
Larcon (H.R. SH16)	based by CC <sub>2</sub> content at the point of production and import. (Almost, 80% of US GHG emissions.)	L/6 of revenues to RBO, 1/12 to inclusing transition assistance (with phase out), remainder to payrol but relates.	156.5/metric ton CO <sub>5</sub> neing 10% plus inflation annually.	Tax refunds for domestic sequestration and HFC destruction projects.	3/5 of tax revenue, up to \$10 billion enqually goes to dean severgy technology state.	Tax applied to fould fuel imports; feed fuel eroorts are	
Dingell Summary of graft)	Economy-wide twic focal fuels towed by CO <sub>2</sub> content, at point of production and import. Aso, tai on gasoline foot diesel everypt).	Revenues used to expend ETTC and help fund entidenent programs. Ges tax neverues go to highway thus fund (40% mass transit, 60% foods).	\$15/hestric ton CO <sub>3</sub> , roung at Inflacion. \$0.5/guillon gasolina tox (in addition).	No provisiçõe.	No provisions.	<b>ентр</b> С	



## Overview of The Lieberman-Warner Climate Security Act (S. 2191)

- Cap-and-trade program to reduce GHG emissions
- Covered entities: electric power plants, industrial facilities, electricity and natural gas consumers, States, coal mines, farmers and foresters

#### Allowances

- 5.775 billion allowances in 2012
- Reduced to 1.732 billion in 2050

#### Auction

- 2012: 26.5% auction
- 2031: 69.5.% auction

#### Offsets

- 15% limit on domestic offsets
- 15% limit on international credits

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## Cap-and-Trade

- A regulatory mechanism that harnesses market forces to find the most cost effective approach to reducing pollution
- An Emission Allowance Account is expressed as a total number of GHG emission allowances
- Each emission allowance authorizes the emission of one metric ton of CO<sub>2</sub> equivalent in one year

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## Cap-and-Trade (cont.)

- Covered electric power and industrial companies hand over to EPA a number of allowances equal to the number of metric tons of CO<sub>2</sub> equivalent that the company emitted from coal combustion in that year
- Importers or refiners of petroleum or coal-based transportation fuel and processors or importers of natural gas hand over to EPA a number of allowances equal to the number of metric tons of CO<sub>2</sub> equivalent contained in the fuels that it put into commerce in that year

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## **Program Administration**

- EPA
  - Holds the entire Emission Allowance Account at the start of each year
  - Allocates allowances to covered entities
  - Monitors, records and tracks allowances
- Climate Change Credit Corporation
  - Administers the proceeds of the auction
  - Receives 26.5% of the Account in 2012 to auction phasing up to 69.5% in 2031

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## **Program Administration (cont.)**

- Carbon Market Efficiency Board (Carbon Fed)
  - Monitors the emissions trading market
  - Authorized to trigger "emergency off-ramps"
    - Extend borrowing periods for allowances
    - Reduce interest rates on borrowed allowances
    - Increase percentage of offsets
    - Increase the Emission Allowance Account in total
  - Submits quarterly reports to the President and Congress
  - Composed of 7 members appointed by the President with 14-year terms

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### **Sectors Covered**

- Covered Facilities
  - Any facility that uses more than 5,000 tons of coal per year
  - Any facility that is a natural gas processing plant or that produces natural gas in Alaska, or an entity that imports natural gas (including LNG)
  - Any facility that produces or imports petroleum- or coalbased fuel, the combustion of which will emit a group 1 GHG (defined under § 4(14) as CO<sub>2</sub>, methane, NO<sub>x</sub>, SH<sub>5</sub>, and perfluorocarbon)
  - Any facility that produces or imports more than 10,000 CO<sub>2</sub> equivalent tons of group 1 GHGs
  - Any facility that emits as a byproduct of production HCFCs with more than 10,000 tons of CO<sub>2</sub> equivalent

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## **Points of Regulation**

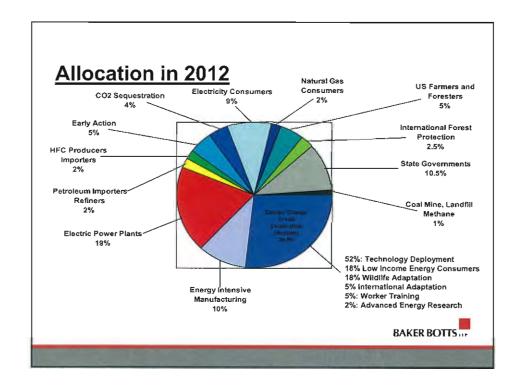
- Direct Regulation of Emission Points (Downstream)
  - Power plants
  - Large industrial facilities
- Upstream Regulation
  - Transportation fuels (refinery or import terminal gate)
  - Natural gas (compressor station)

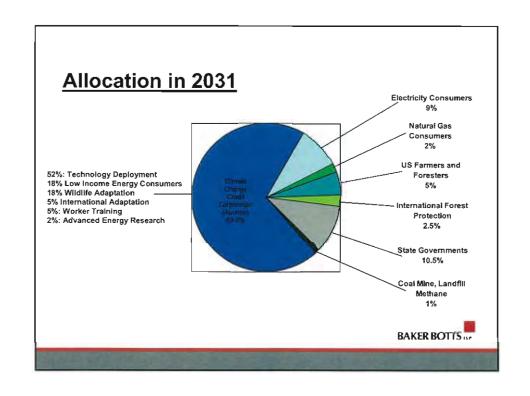
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## Allocation vs. Auction

- Initial Allocation of Allowances Based on Historic Emissions of Covered Sources
  - Allocation -- 68% -- Includes:
    - Energy Intensive industry 10%
    - Electric power sector 19%)
    - Electric and gas distribution entitles 9% and 2%
    - Domestic agriculture and forestry 5%
    - States 10.5%
    - Carbon capture and sequestration 4%
    - International forest protection 2.5%
    - Rural electric cooperatives 1%
  - Auction 26.5%
    - Increased to 69.5% by 2031, at which time emitters will no longer receive allowances

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## **Domestic and International Offsets**

Expand the scope and liquidity of the overall emissions trading market

#### Domestic

- A company may satisy up to 15% of its annual compliance obligation with allowances that have been generated by government-certified emissions-reducing or sequestrationincreasing activities undertaken by US farmers, foresters, and othe entities
- Explicitly accepted: Projects registered in the Climate Registry, the California Action Registry, the GHG Registry, the Chicago Climate Exchange, and the GHG CleanProjects Registry

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## Offsets (cont.)

#### International

- A company may satisfy an additional 15% of its annual compliance obligation with allowances that it has purchased on an EPA-certified foreign emissions trading market, such as the European Union ETS
- Must be purchased from an EPA certified foreign GHG emissions trading market

## **Early Reduction Credits**

- 5% of 2012 emission allowances (declining percentage thereafter) allocated to covered facilities that took actions since January 1, 1994 that resulted in verified and credible GHG emission reductions
- Distributed by EPA

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## **Carbon Capture and Storage**

- Allocates 4% of allowances to carbon capture and sequestration projects in 2012 through 2030
- Criteria and procedures to be established by EPA
- Based on performance standards
- Study to assess feasibility of the construction of pipelines to transport CO<sub>2</sub> and geological CO<sub>2</sub> sequestration facilities

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### **Use of Auction Proceeds**

- 50% to promote zero- or low-carbon emission technologies, advanced coal and sequestration technologies, cellulosic biomass ethanol technologies, clean transportation technologies, and sustainable energy
- 18% deposited into an "Energy Assistance Fund"
  - Low income home energy assistance program (LIHEAP)
  - Weatherization
  - Rural energy assistance
- 5% for "Climate Change Worker Training Fund"
- 18% for "Adaptation Fund"
  - Activities to assist fish and wildlife and their habitat to adapt to the impacts of climate change
- 5% for "Climate Change and National Security Fund"



## **Next Steps**

- Today, April 24, 2008 Senate Finance hearing on tax aspects of a cap and trade system
- negotiations continue between Warner, Lieberman, Boxer, Baucus, Bingaman, Specter on cost containment and international competitiveness
- Managers amendment three weeks prior to Senate Floor to build support
- June time frame for Senate Floor action
- Fall time frame for House Floor action.

Electronic Filing - Received, Clerk's Office, October 1, 2008
\* \* \* \* \* PCB 2009-021 \* \* \* \* \*

### Exhibit 13

Summary Chart of the Major Climate Change Bills Introduced in Congress

Pew Center on Global Climate Change, "Economy-wide Cap-and-Trade Proposals in the 110th Congress: Includes Legislation Introduced as of May 30, 2008, < <a href="https://www.pewclimate.org/docUploads/Cap-and-Trade-Chart.">www.pewclimate.org/docUploads/Cap-and-Trade-Chart.</a> pdf >.



## Electronic Filing - Received, Clerk's Office, October 1, 2008 \* \* \* \* \* PCB 2009-021 \* \* \* \* \*

## Economy-wide Cap-and-Trade Proposals in the 110<sup>th</sup> Congress Includes Legislation Introduced as of May 30, 2008

Bill	Scope of Coverage	2010-2019 Cap	2020-2029 Cap	2030-2050 Cap	Allocation	Offsets and Other Cost Controls	Early Action	Technology and Misc.
Boxer- Lieberman-Warner Climate Security Act of 2008 Substitute amendment to be debated by full Senate in June 2008; originally introduced 10/18/2007 as S.2191	All 6 GHGs  Economy-wide, "hybrid" – upstream for transport fuels & natural gas; downstream for large coal users and GHG manufacturers; separate HFC cap	4% below 2005 level in 2012	19% below 2005 level in 2020	71% below 2005 level in 2050	Free allowances total 75.5% in 2012, including: 18% to power plants and 11% to manufacturers (transitions to zero in 2031), 12.75% to electricity and natural gas local distribution companies for consumers, 15% to states, etc. Increasing auction: 24.5% in 2012 rising to 58.75% from 2032- 2050 4.25% set-aside for domestic agriculture and forestry	30% limit on supply of domestic and international offsets, with additional limits on each category Creates cost-containment auction using future year allowances  Borrowing up to 15% per company Creates Carbon Market Efficiency Board to monitor trading and implement specific cost relief measures, including increased borrowing and expanded offsets	5% of aliowances reserved for early actors starting in 2012 with all value distributed within 4 years of enactment	Bonus allocations for carbon capture and storage and renewables Provides funds for technology, and human and ecosystem adaptation to climate change Cap-and-trade system performance and targets subject to review
Bingaman- Specter S. 1766 – 7/11/2007 Low Carbon Economy Act	All 6 GHGs  Economy-wide, "hybrid" — upstream for natural gas & petroleum; downstream for coal	2012 level in 2012	2006 level in 2020	1990 level in 2030 President may set long-term target ≥60% below 2006 level by 2050 contingent upon international effort	Some sector allocations are specified including: 9% to states, 53% to industry declining 2%/year starting in 2017 Increasing auction: 24% from 2012-2017, rising to 53% in 2030 5% set-aside of allowances for agricultural	Provides certain initial categories including bio sequestration and industrial offsets  President may implement use of international offsets subject to 10% limit  \$12/ton CO <sub>2</sub> e "technology accelerator payment" (i.e., safety valve) starting in 2012 and increasing 5%/year above inflation  Allows banking	From 2012- 2020, 1% of allowances allocated to those registering GHG reductions prior to enactment	Bonus allocation for carbon capture and storage Funds and incentives for technology R&D Target subject to 5-year review of new science and actions by other nations
McCain- Lieberman S.280 – 1/12/2007 Climate Stewardship and Innovation Act	All 6 GHGs  Economy-wide, "hybrid" — upstream for transportation sector; downstream for electric utilities & large sources	2004 level in 2012	1990 level in 2020	20% below 1990 level in 2030 60% below 1990 level in 2050	Administrator determines allocation/auction split; considering consumer impact, competitiveness, etc.	30% limit on use of international credits and domestic reduction or sequestration offsets  Borrowing for 5-year periods with interest	Credit for reductions before 2012 Early actors may use offsets to meet 40% of reductions	Funds and incentives for tech R&D, efficiency adaptation, mitigating effects on poor
Sanders- Boxer S.309 – 1/16/2007 Global Warming Pollution Reduction Act	All 6 GHGs Economy-wide, point of regulation not specified	2010 level in 2010 2%/year reduction from 2010-2020	1990 level in 2020	27% below 1990 level in 2030 53% below 1990 level in 2040 80% below 1990 level in 2050	Cap and trade permitted but not required. Allocation criteria include transition assistance and consumer impacts	Includes provision for offsets generated from biological sequestration "Technology-indexed stop price" freezes cap if prices high relative to tech options	Program may recognize early reductions made under state or local laws	Standards for vehicles, power plants, efficiency, renewables, certain categories of bio sequestration
Kerry-Snowe S.485 – 2/1/2007 Global Warming Reduction Act	All 6 GHGs  Economy-wide, point of regulation not specified	2010 level in 2010	1990 level in 2020 2.5%/year reduction from 2020-2029	3.5%/year reduction from 2030-2050 62% below 1990 level in 2050	Determined by the President; requires unspecified amount of allowances to be auctioned	Includes provision for offsets generated from biological sequestration	Goal to "recognize and reward early reductions"	Funds for tech. R&D, consumer impacts, adaptation Standards for vehicles, efficiency, & renewables



## Electronic Filing - Received, Clerk's Office, October 1, 2008 \* \* \* \* \* PCB 2009-021 \* \* \* \* \*

## Economy-wide Cap-and-Trade Proposals in the 110<sup>th</sup> Congress

Includes Legislation Introduced as of May 30, 2008

Bill	Scope of Coverage	2010-2019 Cap	2020-2029 Cap	2030-2050 Cap	Allocation	Offsets and Other Cost Controls	Early Action	Technology and Misc.
Olver- Gilchrest H.R. 620 - 1/22/2007 Climate Stewardship	All 6 GHGs  Economy-wide, "hybrid" — upstream for transportation sector; downstream for electric utilities & large sources	2004 level in 2012	1990 level in 2020	22% below 1990 level in 2030 70% below 1990 level in 2050	Administrator determines allocation/auction split; considering consumer impact, competitiveness, etc.	15% limit on use of international credits and domestic reduction or sequestration offsets  Borrowing for 5-year periods with interest	Credit for reductions before 2012 Early actors may use offsets to meet 35% of reductions	Funds and incentives for tech R&D, efficiency adaptation, mitigating effects on poor
<b>Waxman</b> H.R.1590 – 3/20/2007 <u>Safe Climate Act of 2007</u>	All 6 GHGs Economy-wide, point of regulation not specified	2009 level in 2010 2%/year reduction from 2011-2020	1990 levels in 2020 5%/year reduction from 2020-2029	5%/year reduction from 2030-2050 80% below 1990 levels in 2050	Determined by the President; requires unspecified amount of allowances to be auctioned	Not specified	Goal to "recognize and reward early reductions"	Standards for vehicles, efficiency, renewables

#### Illustration of Total U.S. Greenhouse Gas Emissions Targets

This chart provides a rough comparison of the reduction targets for U.S. emissions contained in each legislative proposal. The percentage of emissions to be covered under a cap-and-trade program varies across the bills, as does the specificity regarding which entities and sectors are covered.

- Boxer-Lieberman-Warner includes an overall goal of reducing total U.S. emissions
  through a combination of a cap on about 87% of U.S. emissions (including a
  separate cap on HFCs in commerce) and complementary policies (e.g., low carbon
  fuel standard and energy efficiency standards). The chart assumes the targets apply
  to total U.S. emissions; however, emissions from uncovered sectors may continue to
- McCain-Lieberman includes a cap on about 87% of U.S. emissions (transportation, electric power, industrial, and commercial sectors). The chart assumes these targets (e.g., 20% below 1990 levels by 2030) apply to total U.S. emissions; however, emissions from uncovered sectors may continue to grow.
- Olver-Gilchrest includes a cap on about 87% of total U.S. emissions (transportation, electric power, industrial, and commercial sectors). The chart assumes these targets (e.g., 22% below 1990 levels by 2030) apply to total U.S. emissions; however, emissions from uncovered sectors may continue to grow.
- Sanders-Boxer and Waxman include targets for total U.S. emissions, however, the sectors to be covered by the cap are not specified in the bill. The chart reflects these overall targets.
- Kerry-Snowe includes targets for total U.S. emissions, however, the sectors to be covered by the cap are not specified in the bill. The chart reflects these overall targets.
- Bingaman-Specter includes a cap on about 88% of total U.S. emissions. The Bingaman-Specter policy case reflects the change in emissions as estimated in the EIA's January 2008 analysis of the bill based on triggering the "TAP" (or safety valve) in the 2017-2020 timeframe. The Bingaman-Specter goal case assumes multiple low-carbon policies, including:
  - → Car & light truck fuel economy of 41 mpg by 2027
  - → Federal RPS of 15% by 2020
  - → Optimistic assumptions about new technologies coming online Implementation of these policies may delay triggering the "TAP" until 2026-2027 according to EIA, but it will be triggered and the goal will not be met in those years. In addition, the overall emissions targets for this case apply to total U.S. emissions; however, emissions from uncovered sectors may continue to grow.

