# Developments in U.S. National Climate Change Policy:

Focus on Congressional Proposals

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#### **Overview**



- American Clean Energy and Security Act (House of Representatives)
- American Power Act (Senate)
- EPA's economic analysis
  - Key results
  - International analysis in detail
- Summary of EPA regulatory actions

### American Clean Energy and Security Act of 2009 (ACES)



- Passed by the House of Representatives
  - Multi-sector cap and trade program
    - 17% reduction in capped sectors by 2020, 83% by 2050, from 2005 levels
    - ~85% U.S. emissions covered, 6 greenhouse gases
  - Flexibility & cost-containment mechanisms such as international offsets, banking, borrowing, and a strategic reserve
  - Competitiveness provisions include output-based allocations and border measures
  - Includes renewable energy standard and various energy efficiency measures

#### **American Power Act**



- Introduced to the Senate as a "discussion draft" on May 12, 2010
- Major provisions very similar to ACES:
  - Same percentage reductions as represented by cap starting in 2013
  - 2 billion tons of offsets allowed annually
  - Provisions to address competitiveness and emissions leakage
- Some differences:
  - Later start year (2013) and longer phase-in of sources (industrial sector covered in 2016)
  - Transportation sector included via a "set-aside" compliance system rather than covered directly
  - No renewable energy standard

### **EPA's Economic Analyses**

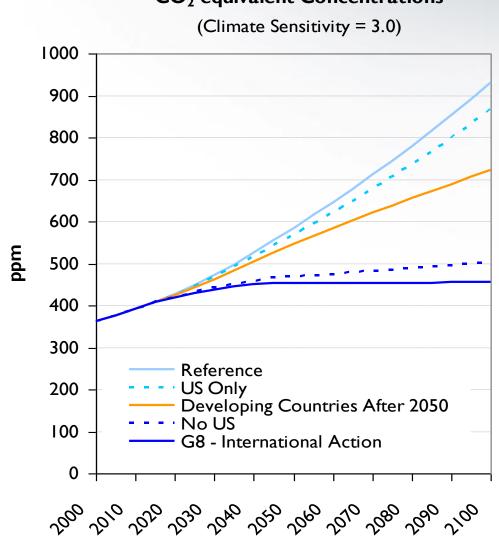


- EPA has developed analyses including:
  - American Clean Energy and Security Act (ACES)
  - Interagency report on international competitiveness and emission leakage
  - American Power Act (APA)
- Our analyses show that these bills:
  - Drive transformation in the energy sector
  - Reduce emissions cost-effectively through trading
  - Do so with relatively modest impact to consumers and tradeexposed industries

## **EPA's Economic Analyses- International action**



#### CO<sub>2</sub>-equivalent Concentrations



- G8 International Action scenario: Consistent with G8 agreement to reduce global emissions to 50% below 2005 levels by 2050.
- •Under the G8 agreement, EPA's analysis shows that CO<sub>2</sub>e concentrations of 450 ppm and temperature rises of 2°C in 2100 are attainable.
- •CO<sub>2</sub>e concentrations through 2100 are presented here assuming a climate sensitivity of 3.0 (CS is the equilibrium temperature response to a doubling of  $CO_2$ . 3.0 is deemed "most likely" by the IPCC).
- Source: GCAM and MAGICC models

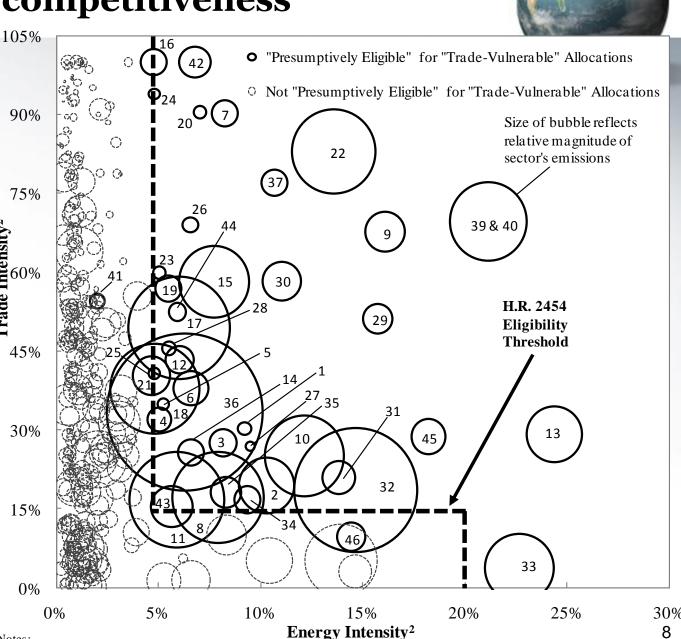
### **EPA's Economic Analyses- International offsets**

- International offsets are a key compliance mechanism and costcontainment tool in climate bills
- Without international offsets, allowance prices increase substantially, as shown below for ACES (H.R. 2454)

	International Offsets Usage		% Change	% Change from Scn. 8	
	Cumultive	Avg. Annual	Intl Offsets	Allowance	
	(GtCO2e)	(MtCO2e)	Usage	Price	
Scn. 8 - H.R. 2454 (Updated)	30	757	n/a	n/a	
Scn. 9 - No Int'l Offsets	0	0	-100%	54%	
Scenario 9a – Int'l offsets delayed 10 years	28	725	-4%	2%	
Scenario 9b – Int'l offsets delayed 20 years	26	668	-12%	5%	
Scenario 9c – No REDD offsets	15	375	-51%	25%	
Scenario 9d – No domestic offsets	42	1,085	43%	3%	
Scenario 9e – No int'l or domestic offsets	0	0	-100%	126%	
Scn. 13 - 20% 2020 Cap	31	793	5%	0.4%	
Scn. 14 - 14% 2020 Cap	28	721	-5%	-0.4%	

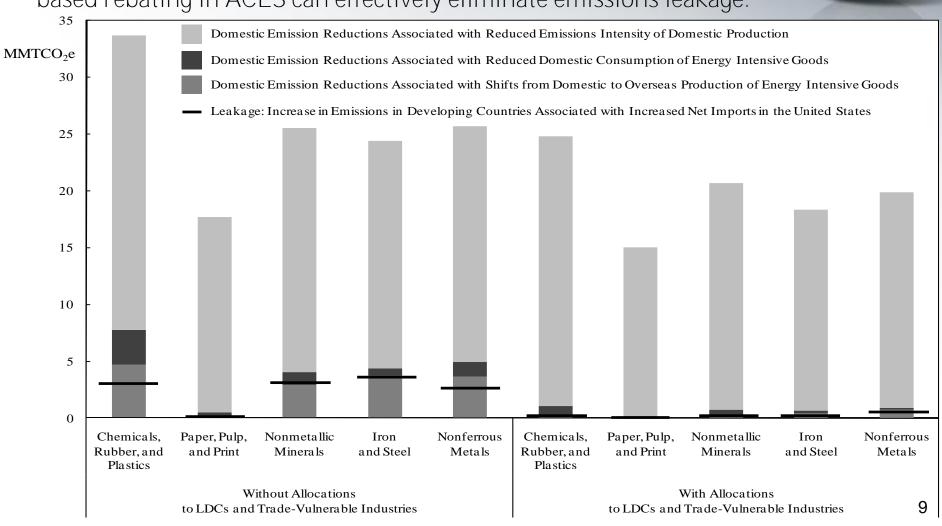
### **EPA's Economic Analyses- International competitiveness**

- •ACES and APA include eligibility criteria for competitiveness provisions.
- •Sectors to the right of and above the bold dashed line are considered "energy-intensive trade exposed" industries in ACES.
- They are mostly in the following industries: chemicals, pulp/paper, iron & steel, nonferrous metals, nonmetallic minerals.
- Full report and figure are on our website.



### **EPA's Economic Analyses- International competitiveness**

• Interagency analysis has shown that the implementation of outputbased rebating in ACES can effectively eliminate emissions leakage.



Source: Interagency Report, http://epa.gov/climatechange/economics/index.html

### **EPA's Recent Regulatory Actions**

- Major rule-makings
  - GHG Reporting Program
  - Endangerment Findings
  - Light Duty Vehicle Rule
  - Tailoring Rule
- Taking a pragmatic, common sense approach focusing on largest emitters and most effective mitigation opportunities
- Still balancing multiple policy approaches

#### For more information



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#### EPA's climate change website:

www.epa.gov/climatechange

Economic analyses:

http://epa.gov/climatechange/economics/economicanalyses.html