

Global Warming and the World Trading System

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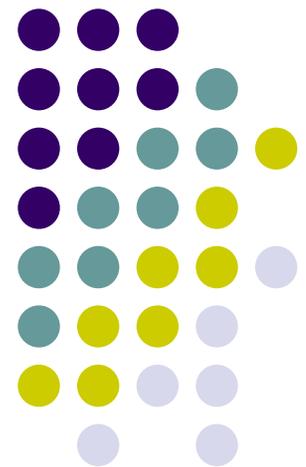
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US Climate Change Policy



- **In the wake of the financial crisis, the Administration linked economy recovery to a low carbon future.**
 - The American Recovery and Reinvestment Tax Act of 2009
 - ❖ Includes money for renewable energy, energy efficiency, and smart grid and electricity transmission – about \$43 billion in spending plans and about \$20 billion in tax provisions.
 - Obama's 10-year budget blueprint
 - ❖ Imposes cap-and trade system (economy-wide) with 100% auction.
 - ❖ GHG emissions cut: 14% below 2005 levels by 2020 and 83% by 2050.
- **EPA CO₂ limits may be used as a hammer both for legislation and international action.**
- **Some states have adopted stringent policies.**
 - California, regional initiatives (RGGI, WCI, Midwest accord)

US Climate Change Policy *(cont'd)*



- **Obama agreed to launch a new clean energy initiative with Canada as a step towards a North American climate change treaty.**
- **Obama also promised an active role in Copenhagen**
 - President will want progress on domestic legislation to strengthen his hand in reaching an international accord.
 - But he will not want US position carved in stone before the international accord.
- **Will the US actually have domestic climate legislation in place before the Copenhagen summit in December 2009? If not, US pledges may be discounted.**

Copenhagen Regime



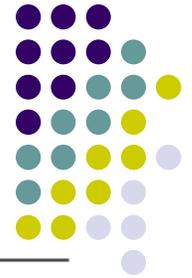
- **The Kyoto protocol expires in December 2012 and its successor regime is meant to be agreed in Copenhagen in December 2009.**
- **In Copenhagen, countries may reach agreement on emission targets and time paths with pledges by both developed and developing countries (common but differentiated responsibilities).**
 - What standard for target levels?: “per capita comparability” or “carbon price equivalency” or “historic emissions.”
 - What financial support and technology transfer to developing countries?
- **Very likely, each country will choose its own method to meet targets.**
- **Reforms to the Kyoto mechanisms (e.g., Clean Development Mechanism).**

CO₂ emissions from fuel combustion (2006, million metric tons of CO₂)



Fuel type/sector	United States	China	EU-27	Russia	Japan	India	Brazil	Big-7 Total	World total
Total	5,697	5,607	3,983	1,587	1,213	1,250	332	19,669	28,003
Percent change, 1990–2006	17	154	–2	–27	13	112	73	30	33
By fuel type									
Coal	2,090	4,641	1,263	445	431	844	47	9,761	11,686
Oil	2,411	864	1,682	321	587	339	246	6,450	10,768
Gas	1,169	101	999	805	190	67	40	3,371	5,445
Other ^a	27	n.a.	40	17	5	n.a.	n.a.	89	103
By sector									
Electricity and heat	2,421	2,796	1,461	913	459	702	34	8,786	11,509
Manufacturing industries and construction	633	1,764	656	222	292	284	98	3,949	5,477
Transportation	1,809	367	952	227	245	101	141	3,842	6,453
Residential	309	247	476	123	63	72	16	1,306	1,860
Other ^a	524	434	439	102	153	90	44	1,786	2,705
CO ₂ per unit of GDP (kg/2000 US dollars)	0.51	2.68	0.42	4.25	0.24	1.78	0.43	0.66	0.74
CO ₂ per capita (tons/capita)	19.00	4.27	8.07	11.14	9.49	1.13	1.76	5.35	4.28
Cumulative CO ₂ emissions, 1950–2004 (percent of world total) ^b	26.70	9.90	21.70 ^c	9.40	4.80	2.60	1.00	76.10	100

CO₂ emissions projections (business as usual) (2005-2030, million metric tons of CO₂)



Country/region	2005 actual	2010	2020	2030	Average annual percent change (2005–30)
United States	5,982	6,011	6,384	6,851	0.5
OECD Europe ^a	4,383	4,512	4,760	4,834	0.4
China	5,323	6,898	9,475	12,007	3.3
Russia	1,696	1,789	1,984	2,117	0.9
Japan	1,230	1,196	1,195	1,170	-0.2
India	1,164	1,349	1,818	2,238	2.6
Brazil	356	451	541	633	2.3
<i>Memorandum:</i>					
World	28,051	31,100	37,035	42,325	1.7

Competitiveness Issues



- **“Leakage” and “Leverage”**
 - Domestic action alone might weaken US firms and lead to the “leakage” of production and jobs to foreign firms.
 - Congress also wants to create “leverage” to encourage developing countries to limit their own rapidly growing emissions.
- **To address these concerns, many US climate bills include specific provisions.**
 - Free allocation of allowances, special exemptions, border adjustments.
 - Other countries have done the same in binding legislation (the European Union) or draft proposals (e.g., Australia and Canada).

Border Measures



- **Border measures are gaining political support.**
 - Limits on imports from countries that do not have comparable climate policies, and some forms of relief for exports of carbon-intensive products.
 - History shows that border adjustments have been decisive in securing political acceptance of value-added taxes (VATs). Many economists contend that, with flexible exchange rates, there is little difference between imposing a VAT at a product's origin or at a product's destination. Yet virtually all countries that adopt VAT systems have opted for destination principle border tax adjustments (BTAs). Under the origin principle, exports pay the tax and imports do not. Under the destination principle, imports pay the tax and exports do not.

Border Measures *(cont'd)*



- **Border measures can be turned around and imposed on the US.**
 - The largest foreign suppliers of carbon intensive goods are countries like Canada and the EU that emit considerably less carbon than the US on a sector or per capita basis.
- **Border measures are unlikely to serve as an effective leverage to developing countries such as China and India.**
 - The US imports small percentage of carbon intensive goods from developing countries such as China and India. China is a large producer of carbon intensive goods but consumes most at home.
- **Border measures stands a fair chance of being challenged by the WTO.**

World Trade Organization



- **Both import restrictions and measures that subsidize exports could be challenged in the WTO.**
 - Unilateral systems of import bans, border taxes, and comparability mechanisms could cause a drawn-out period of trade friction.
 - Existing WTO jurisprudence leaves ample room for conflicting interpretation.
- **Can climate change be linked to future WTO negotiations?**
 - Agree on free trade in “environmental goods and services”?
 - Through sector agreements, restrict international trade in designated goods to countries with GHG emission limits?
 - Write a plurilateral GHG Code of Good Practice?