

Tyson Slocum, Director  
Public Citizen's Energy Program

[tslocum@citizen.org](mailto:tslocum@citizen.org)

[www.citizen.org](http://www.citizen.org)

Cap & Dividend Policy

What Is The Best Carbon Cap Policy  
For Household Consumers?

January 19, 2010

- Consensus climate legislative approaches relying on free emission allowance allocations to utilities and polluters reflect an *inside the beltway, corporate-driven* approach to political consensus rather than the *grassroots, consumer-oriented* cap and dividend model.

# Highlights of Waxman-Markey

- HR 2454 passed the U.S. House 219-212 June 26, 2009
- Vast majority of emission allowances given away for free for first 15-20 years.
  - Section 782 allocates just 15% of the allowance auction proceeds for “low income consumers”
  - Electric LDCs (Sec. 783) receive about 30%, Nat Gas LDCs 9%, Merchant Coal 5%.
  - Edison Electric Institute calls free allocations to its members “critical to holding down electricity costs for all customers” [www.eei.org/newsroom/pressreleases/Releases/Pages/090609.aspx](http://www.eei.org/newsroom/pressreleases/Releases/Pages/090609.aspx)

- Congress claims LDCs must use the value of the free allowances for “the benefit of ratepayers” —but then fails to define “benefit”, thereby ceding control over how exactly households will be protected to 50 different state utility commissions to define “benefit”
- No “intervener funding”
  - It appears that the House Energy & Commerce Cmte prioritized the lobbying of utilities and their own Committee’s jurisdictional priorities at the sacrifice of superior consumer mitigation strategies

- Evidence that corporate consumers agreed that “benefit” was ill-defined can be found beginning on page 902 of the legislation

[http://energycommerce.house.gov/Press\\_111/20090701/hr2454\\_house.pdf](http://energycommerce.house.gov/Press_111/20090701/hr2454_house.pdf)

- Late in the process, a new section (D) was inserted without a vote titled "Industrial Ratepayers which states, in part:  
"if compliance with the requirements of this title results . . . in an increase in electricity costs for industrial retail ratepayers . . . [the LDC] shall pass through to industrial retail ratepayers . . . the value of the emission allowances . . . to reduce electricity cost impacts."

- Example of a state PUC bowing to utility, not household, benefit:
- In October 2009, Ohio's FirstEnergy announced it was providing 3.75 million compact florescent light bulbs (CFLs) to its household ratepayers – at a cost of \$21.60 for both bulbs, although FirstEnergy's costs to purchase and distribute the two bulbs was only \$3.50. The plan was approved unanimously by the Ohio PUC.
- After a volume of complaints, the PUC accepted the Governor's request to halt the program.

The formula by which the free allowances are distributed to LDCs are half based on emissions and half on electricity sales, or "deliveries"

- Problem: "electricity deliveries" disadvantages households in favor of industrial & commercial consumers

In 2008, there were 3.7 trillion kilowatt hours of electricity sold in America, broken down by the following classes:

Households = 37.2%

Commercial = 36.4%

Industrial = 26.4%

But large users of electricity enjoy steep rate discounts compared to households. In 2008, the average US household paid 11.4¢/kwh, and industrials 7.0¢/kwh. As a result, households paid 43% of the \$364.5 billion in electricity sales, compared to 19% for industrials (Commercials paid 38%)

- Therefore, to adequately shield ratepayers, the allocation formula should be based on revenue rather than deliveries
- The CBO confirms this, concluding that households receive only 1/3 of the \$41 billion worth of free LDC allowances - a ratio lower than the 43% share of revenues paid by households.

[http://energycommerce.house.gov/Press\\_111/20090620/cbowaxmanmarkey.pdf](http://energycommerce.house.gov/Press_111/20090620/cbowaxmanmarkey.pdf)

- Waxman-Markey gives 5% of emission allowances for free to merchant coal generators. In deregulated markets where single-clearing price wholesale electricity market auctions prevail (rather than cost-of-service rates) consumers will pay billions of dollars in windfall payments to merchant coal generators [www.synapse-energy.com/downloads/cap-and-trade.pdf](http://www.synapse-energy.com/downloads/cap-and-trade.pdf)
- The EPA may make a determination that merchant coal generators are earning windfall profits as a result of free allocations – but the only remedy is to “adjust” the formula used to calculate free allocations going forward – the EPA is not authorized to order refunds of any windfall profits earned! Page 911, HR 2454

# Senate Legislation – S.1733

- Passed the EPW Cmte on November 5, 2009
- Largely follows free allocation formula set up by Waxman-Markey.
- In response to lobbying by consumer groups, the industrial rate protections are extended to households (page 600 <http://thomas.loc.gov/cgi-bin/bdquery/z?d111:S.1733:>)

but they remain too weak, as state PUCs still have wide latitude to determine rate protections

- While households in the bottom quintile will see rebates, on average, due to auction proceeds - the 2<sup>nd</sup> and 3<sup>rd</sup> quintiles representing moderate income households see price

increases [www.cbo.gov/ftpdocs/103xx/doc10327/06-19-CapAndTradeCosts.pdf](http://www.cbo.gov/ftpdocs/103xx/doc10327/06-19-CapAndTradeCosts.pdf)

- Public Citizen has been told by multiple Senate offices that they will seek to reduce the amount going to the bottom quintile because no one should “benefit” – only be held harmless. But utility CEO John Rowe of Exelon boasts that Waxman-Markey will directly result in \$1.5 billion in additional revenue/year

# Cap & Dividend

- EPA concludes that "freely distributed allowances to firms tends to be very regressive. Higher income households may actually gain at the expense of lower income households under this policy. This is because the asset value of the allowances flow to households in the form of increased stock values or capital gains, which are concentrated in higher-income households . . . Auctioned allowances with lump-sum distribution of revenues to households is the least regressive cap-and-trade policy . . . and has been shown to be progressive in some cases." (page 49

[http://energycommerce.house.gov/Press\\_111/20090623/hr2454\\_epaanalysis2.pdf](http://energycommerce.house.gov/Press_111/20090623/hr2454_epaanalysis2.pdf))

# Cap and Dividend

- On August 25, 2009 – two months *after* the House passed Waxman-Markey, President Obama submitted to Congress his Mid-Session Review Budget of the U.S. Government his 100% auction, 80% dividend climate plan that would raise \$80 billion/year  
[www.whitehouse.gov/omb/budget/MSR/](http://www.whitehouse.gov/omb/budget/MSR/)

# Cantwell-Collins

- Bi-partisan legislation that features 100% auction and a 75% per-household “energy security dividend” with 25% for an open-ended “clean energy reinvestment trust fund”
- Prohibits entities producing or importing fossil carbon or processing carbon to trade carbon derivatives
  - <http://cantwell.senate.gov/issues/CLEAR%20Act%20-%20Leg%20Text.pdf>

# Success of RGGI

- While featuring low carbon prices (~\$2/ton) and only applying to power plants, it does feature a 100% auction which maximizes the tools available for state governments to direct consumer relief and energy efficiency investments – a review of how RGGI states use the auction proceeds is available at
- [http://des.nh.gov/organization/divisions/air/tsb/tps/climate/rggi/documents/rggi\\_annual\\_rept.pdf](http://des.nh.gov/organization/divisions/air/tsb/tps/climate/rggi/documents/rggi_annual_rept.pdf)

# Carbon Tax

- “Emissions trading was invented in the United States” and can “minimize the role of government choice and of government constraint” compared to alternatives like a carbon tax – Henry Derwent, President & CEO, International Emissions Trading Assn, as quoted by Simon Lomax, "Financial Crisis 'Bad Luck' for U.S. Carbon Plans, Traders Say," November 3, 2009, [www.bloomberg.com/apps/news?pid=newsarchive&sid=aX6zWnAsaDYw](http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aX6zWnAsaDYw)
- Similar distributional effects to an economy- wide, 100% auction, just with the word “tax”
- [www.climatetaskforce.org/2009/06/25/addressing-climate-change-without-impairing-the-us-economy/](http://www.climatetaskforce.org/2009/06/25/addressing-climate-change-without-impairing-the-us-economy/)
- Both Waxman-Markey and Kerry-Boxer feature a limited carbon tax (Section 114 in W-M and Section 125 in K-B) raising up to \$1.1 billion/year that is administered and collected by electric utilities and can only benefit CCS!

# Essential Components of Effective Environmental Market Regulation

- **Transparent Markets Are Efficient Markets**
  - All trades must occur under the full jurisdiction of the CFTC – no unregulated OTC trading.
  - Limit participation by financial speculators that lack a direct economic interest to the underlying commodity.
  - Limit offsets and permit banking to ensure integrity of emissions cap and the derivatives market.
- We must learn lessons from deregulated energy markets: lack of regulatory oversight + infusion of financial players = harmful speculative bubble.

# Speculation Documentation

- *"Large purchases of crude oil futures contracts by speculators have, in effect, created an additional demand for oil, driving up the price of oil to be delivered in the future in the same manner that additional demand for the immediate delivery of a physical barrel of oil drives up the price on the spot market...large speculative buying or selling of futures contracts can distort the market signals regarding supply and demand in the physical market or lead to excessive price volatility . . . At the same time that there has been a huge influx of speculative dollars in energy commodities, the CFTC's ability to monitor the nature, extent, and effect of this speculation has been diminishing. Most significantly, there has been an explosion of trading of U.S. energy commodities on exchanges that are not regulated by the CFTC."*
  - The Role Of Market Speculation In Rising Oil And Gas Prices: A Need To Put The Cop Back On The Beat, Permanent Subcommittee on Investigations of the US Senate Committee on Homeland Security & Governmental Affairs, June 27, 2006, [http://hsgac.senate.gov/public\\_files/SenatePrint10965MarketSpecReportFINAL.pdf](http://hsgac.senate.gov/public_files/SenatePrint10965MarketSpecReportFINAL.pdf)

# Speculation Documentation, Cont'd

- *"We find that noncommercial players now constitute about 50% of those holding outstanding positions in the U.S. oil futures market, compared to an average of about 20% prior to 2002. The change in market composition was driven by the rapid entry of noncommercial participants and was the principle factor behind the increase in total open interest. It is also highly correlated with the run-up in oil prices."*
  - Who is in the Oil Futures Market & How Has it Changed?, James A. Baker III Institute for Public Policy, Rice University, August 2009, [www.bakerinstitute.org/publications/EF-pub-MedlockJaffeOilFuturesMarket-082609.pdf](http://www.bakerinstitute.org/publications/EF-pub-MedlockJaffeOilFuturesMarket-082609.pdf)

## Speculation Documentation, Cont'd

- *“While market fundamentals obviously played a role in the general run-up in the oil prices from 2003 on, it is fair to conclude by looking at a variety of indicators that speculation drove an oil price bubble in the first half of 2008. Absent speculative activities, the oil price would probably have been in the \$80 to \$90 a barrel range.”*
  - The 2008 Oil Price “Bubble”, Peterson Institute for International Economics, August 2009, [www.iie.com/publications/pb/pb09-19.pdf](http://www.iie.com/publications/pb/pb09-19.pdf)

# Move Over Oil: Carbon Markets May Be Bigger

- Goldman Sachs estimates that a global carbon trading market will trade 9x the underlying permit value
  - At 29.2 billion tons of CO<sub>2</sub> in 2006 and each contract worth 1,000 tons, Goldman estimates over 260 million metric tons of emissions traded in a derivatives market, and projects potential CO<sub>2</sub> open interest (value of contracts/amount of permits) to turn over up to 80x annually, resulting in up to 300k contracts/day in the US and 1.5 million globally, projecting the market to be larger than crude oil.
    - Carbonomics: Measuring Impact of US Carbon Regulation on Select Industries, Goldman Sachs, June 25, 2009.

# Carbon Markets Will Be Unique From Other Energy-Related Commodities

- Carbon/offset derivatives will be based on products produced by the government (permits) and will be in finite supply, designed to *decrease* in number over time, thereby intentionally creating a Peak Carbon pricing scenario.
  - Markets based on finite and shrinking supplies require additional safeguards from manipulation.

Waxman-Markey and Kerry-Boxer allow users to “bank” permits forever – thereby creating additional demand and expanding opportunities to corner the market – in contrast, the Europe Trading Scheme allowed only limited banking in Phase I, meaning the underlying permit has a short shelf-life (banking is significantly expanded in Phase II, however).

Expect exchange-traded & carbon index funds to proliferate.

With only the government creating the underlying permit, there is no “marginal cost of production” associated with the underlying value of the commodity.

# Existing American Environmental Markets Aren't Comparable to Proposed National Carbon Markets

Existing Acid Rain program trades 9 *million* permits/year – cap and trade will create 5 *billion*. Technologies to remedy acid rain (scrubbers, etc) were easily deployable – not so for carbon mitigation.

- Regional systems like RGGI feature tiny carbon prices and limited industry participation.

# Gensler Moves Into the Void

- In August, CFTC moved to classify the Carbon Financial Instrument contract on the Chicago Climate Futures Exchange as a price discovery contract. Such a move will place the CFTC in charge of regulating the cash carbon market.
- CFTC Chair Gensler has called for all standard swap carbon contracts to clear through an exchange regulated by the CFTC.
- 90% correlation between EU Emission Allowance Futures and Energy Futures – CFTC understands we must restore transparency to energy markets before we create new carbon markets.

# Federal Legislation – House

- Section 342 of Waxman-Markey (HR 2454) that passed House in June includes "emission allowance, compensatory allowance, offset credit, or Federal renewable electricity credit" under the Commodity Exchange Act
  - Spot market is given to FERC
  - Additional Market Assurance regulates OTC energy trading, mandates aggregate speculation limits across all energy markets, eliminates the classification of a swaps dealer as a bona-fide hedger and ropes in Foreign Boards of Trade
    - Section 358, added late in the process, renders "null and void" all energy regulation sections upon passage of financial services reform legislation.
    - Speculator's Loophole: Section 724 -"The privilege of purchasing, holding, selling, exchanging, transferring, and requesting retirement of emission allowances, compensatory allowances, or offset credits shall not be restricted to the owners and operators of covered entities"

# House Legislation Cont'd

- In February, the House Agriculture Cmte passed HR 977 which:
  - Section 3 ropes in Foreign Boards of Trade; Section 13 requires clearing for OTC; Section 17 allows the CFTC to prosecute criminal violations of the Commodity Exchange Act. This is a strong bill.
    - House-passed financial services reform legislation does not specifically call out carbon markets, but the derivatives reform package carves out enormous end-user exemptions to regulate the OTC derivatives market.

# Federal Legislation – Senate

- Kerry-Boxer (S.1733) – currently mum on carbon derivative regulation. Section 131 - Carbon Market Assurance – is simply a placeholder – most likely for elements of Feinstein-Snowe (S.1399)
- S.1399 does what?
  - Creates an Office of Carbon Market Oversight @ CFTC, giving the agency authority to regulate spot & futures emission markets. It does NOT appear to include jurisdiction over offset, REC etc futures markets.
  - Requires all entities seeking to trade emissions derivatives to register and be approved by the CFTC, and all transactions must be cleared through a single CFTC regulated Carbon Clearing Organization.

## Senate Legislation, Cont'd

- S.1682 introduced in Sept. by Sen. Maria Cantwell beefs up the CFTC's market manipulation standard to match those of the SEC, FTC & FERC.
  - The CFTC currently must show that an alleged violator demonstrated "specific intent" to do harm in manipulation cases while the other agencies need only to show there is reckless conduct.

# Senate Legislation, Cont'd

- S.1588 by Sen. Ron Wyden would require financial speculators to pay taxes on capital gains from their commodity trades as regular income, which feature tax rates higher than their current beneficial classification as capital gains, thereby creating a speculation disincentive more efficient than a Tobin Tax.

# Banks Shift Strategy, Put Their Clients In Front of Lobbying And Leave Systemic Risk

- Banks were beginning to lose the debate over whether standard OTC contracts would have to go through an exchange.
- Summer of '09 saw end users argue that Congress must preserve their right to access an unregulated OTC hedging market.
  - Banks don't require their clients to post collateral in OTC market (they easily recoup this through fees). The exchanges require collateral - insurance against systemic risk.
  - The Banks sell multiple services to their clients (financing, hedging etc.) but the end users don't have access to a competitive OTC pricing market as all hedging is done through existing relationships dominated by a small group of banks.

# Public Citizen's Carbon Market Assurance Proposal

- Use Feinstein-Snowe (S.1399) as a platform, but add:
  - Restrict secondary market to entities receiving allowances, offsets, RECs – no bank proprietary trading, no ETFs, no index funds
  - Cantwell's S.1682 to beef up CFTC's manipulation standard.
  - Wyden's S.1588 speculation tax disincentive
  - Peterson's HR 977 CFTC criminal enforcement authority
  - Extend authority to include offsets, RECs by adopting Section 342 from Waxman-Markey