

Must we Manipulate the Market to Save the Market?

by Steve Zwick and Logan Rhyne

The US Congress is considering a cap-and-trade bill based on the "Safe Markets Approach", which aims to reduce short-term volatility and focus attention on long-term, cumulative emission reductions by tweaking supplies of allowances. Backers liken the solution to the Federal Reserve Board. Critics say that's the last thing we need.

27 March 2009 | William (Bill) Whitesell says he started out as a critic of cap-and-trade, but over time has come to see its advantages: primarily the dual benefit of having both a rigid cap on emissions and the flexibility to achieve them in the most efficient and cost-effective way.

But he still sees what skeptics see: the volatility, the susceptibility to manipulation, and all of the other baggage that markets bring.

He also understands the pros and cons of a carbon tax: namely, less volatility than cap-and-trade, but also no mechanism for channeling resources to the most efficient solution, and no direct connection to emission reductions.

As Director of Policy Research at the **Center for Clean Air Policy (CCAP)**, he's come up with a third solution: one that he believes can steer the market clear of short-term disruptions and still harness – or even improve – the market's ability to funnel money to the most efficient long-term reduction solutions. He calls it the "Safe Markets Development Approach to Cap-and-Trade", which forms the basis of the "Safe Markets Development Act of 2009", a bill introduced this past Tuesday by Representative Lloyd Doggett (D-Tex).

The bill proposes the creation of a Climate Program Oversight and Coordination Board, which Whitesell says would provide "training wheels" to keep a cap-and-trade market steady in its early years by defining a narrow band of steadily-rising target carbon prices and then manipulating supplies to meet the price targets.

"The Approach borrows time-tested methods that the Federal Reserve uses to manage interest rates," he says. "The Safe Markets Development Approach also enforces cumulative emissions reductions while allowing some fluctuation in annual emissions as needed to stabilize allowance prices in the early years of the program."

The bill has been written as an amendment to the Internal Revenue Code, largely because Doggett serves on Rep. Charles Rangel's (D-NY) House Ways and Means Committee, which is responsible for tax legislation. Ultimately, however, the bill is

designed to complement whatever overall cap-and-trade regime emerges over time. Doggett says he would like to see it merged into a bill being crafted by Rep. Henry Waxman's (D-Cal) Energy and Commerce Committee.

The Critics

The proposal immediately drew fire from proponents of pure cap-and-trade, who say that managing a price for carbon is little different from simply imposing a tax.

"This bill proposes to repeat the mistakes of the European Commission in seeking to fix a price or price range for carbon," says Eric Bettelheim, Chairman of Sustainable Forestry Management Limited (SFM). "This is the antithesis of a market approach and is, in fact a tax masquerading as a price."

The Market Philosophy

"The whole point of a market-led approach – and that includes volatility and speculators – is to send price signals based upon a wide number of actors with differing perceptions as to various approaches to reducing emissions," adds Bettelheim. "That is how the market finds the most efficient routes to solving the problem, while the 'experts' approach is the kind of top-down regulation which you expect from socialist planners – not from those who support open economies."

He argues that the best way to reduce volatility and prevent manipulation is to ensure deep liquidity in the market from the outset and encouraging as diverse a range of participants as possible.

The Reasoning

Whitesell, however, stresses the temporary nature of his proposal, and laid out his reasoning at a hearing held Thursday before the Ways and Means Committee. The hearing focused broadly on methods of reducing price volatility in climate-change legislation, and not only on the bill.

He argues that volatility and manipulation are compounded in emission allowance markets because both the *product* (reduced atmospheric CO₂) and the *price* (either the cost of re-tooling or the cost of buying allowances) are out of synch with the *process* (cap-and-trade schemes as they currently exist).

Specifically, he points out, CO₂ is a long-lasting pollutant, and planning for capital expenditures is a long-horizon process. Both last decades, while cap-and-trade schemes run in cycles that last years, and speculators often think in terms of days or minutes – even though the schemes are generally implemented to achieve targets that are decades away. As a result, prices aren't sending industry the kind of reliable signals they need to plan ahead, and mini-booms and busts are almost pre-programmed into the system.

Over the past year, for example, the price of CO₂ allowances under the European Union Emissions Trading Scheme (EU ETS) surged to more than €30 per ton – a price at which it's worthwhile for some industrial companies to re-tool with green technology. But the price has since dropped to near €10 – a price at which re-tooling just doesn't make

economic sense (at least for its own sake; the issue of carrying out necessary upgrades that are inherently more "green" is a rabbit hole we can't explore here).

That wild ride was fueled as much by energy prices and the global economic slowdown as it was by ongoing climate talks, reflecting what **Whitesell** and supporters of the bill believe is an irrational attachment to short-term turbulence in the markets.

to be fair, critics also attribute much of the volatility to the European Union's attempts to micromanage the EU ETS - not to mention the issuance of free allowances as opposed to the auctioning of credits with a price. **Whitesell's** approach does require that allowances be auctioned, and CCAP opposed the EU's giving away of free allowances under EU ETS.

Training Wheels

In October, **Whitesell** co-authored two papers with **Stacey Davis, CCAP's Manager of Domestic Programs**: Preventing Market Disruptions in Cap-and-Trade Programs and Cost Containment in Cap-and-Trade Systems: a Review of the Options.

In the first, he laid out the "managed trading" approach that has become the core of the new bill: a board of experts whose job is to chart a path to whatever emission-reduction target the United States finally agrees to set for itself. This board would navigate the market along that path by keeping prices in a narrow band from 2012 through 2019, and set it free in 2020.

The emission target for the first eight years would be a "soft" target, while the emission target after 2019 would be a "hard" target.

During that soft-target period, the board of experts would survey the entire emissions landscape, taking into account new technologies, economic growth, the amount of carbon credits being banked by regulated entities from one period to the next, the amount of potential offsets entering the market, and of course the agreed-on 2020 target.

After taking everything into account, the board would project the price that members feel would best induce a gradual reduction of emissions to meet the 2020 target, and they would then do everything in their power to steer the market towards that price – essentially by making their desired price known and then issuing more or fewer allowances depending on how the market responds.

Wagging the Dog?

Under such a scheme, the price becomes the guiding signal, and the number of emission allowances issued becomes the means of following that signal – even though reduced emissions are the ultimate goal.

That means the board may auction more allowances than the cap allows in some years if the prevailing supply/demand structure seems destined to push the price of emissions above the target price – but only if they feel the prevailing supply/demand structure is temporary in nature. It's even permissible for the whole scheme to miss its target for the eight-year period ending in 2019 – but then, it's payback time.

Graduation Day

In 2020, the training wheels come off; the board stops tweaking supply, and perhaps even ceases to exist. The system, in short, evolves into something more closely resembling the standard cap-and-trade model, with the government setting rigid, inviolable emission caps and leaving price to the market.

What's more, any emission-reduction shortfalls from the "soft" phase now have to be made up in the "hard" phase.

"To keep it simple, let's say that we get to 2020 and emissions are 5% higher than they should be," says Marty Spitzer, CCAP's director of legislative affairs. "Then what happens is we take off an additional half-percent for each year through 2029."

In many ways, that represents a variation on system banking and borrowing, which lets the authority that issues credits either "bank" excess reduction allowances for future use, or "borrow" current reduction allowances from future allotments.

That, in turn, is a twist on firm-level banking and borrowing, which lets individual companies either bank excess allowances from a year where they exceed their allowances, or borrow against future allotments.

Most of the cap-and-trade proposals kicking around both houses of Congress have provisions for regulating banking and borrowing, while the "Safe Markets" bill focuses more tightly on the role of the board itself.

"Whatever banking and borrowing is happening, and whatever the secondary market is doing, and whatever offsetting provisions exist – these are all factors that the board will take into account when it sets its target price," says Spitzer, adding that the board itself will only have a mandate to recommend the issuance of more or fewer allowances – and will have no say over the nation's policy regarding offsets, including those that reduce emissions from deforestation and degradation (REDD).

He concedes the hand-holding phase seems counterintuitive at first, but says it's the best way to avoid disaster coming out of the chute.

"The thing to remember is that we are focusing on cumulative emissions," says Spitzer. "If we start out with a market price that's too high or too low or too volatile, this whole thing could fall apart."

The Hearing

Indeed, that was the theme of Thursday's hearing on how to reduce volatility and promote credibility in US carbon markets.

At one end of the spectrum, Michelle Chan, Director of Friends of the Earth's US Green Investments Program, went so far as to recommend a cap-and-trade system that only recognizes allowances and does not recognize offsets – including REDD offsets

"Subprime carbon – called 'junk carbon' by traders – are contracts to deliver carbon that carry a relatively high risk of not being fulfilled and may collapse in value," she said.

"They are comparable to subprime loans or junk bonds, which are debts that carry a relatively high risk of not being paid."

Other speakers offered detailed explanations of current and proposed risk-management tools, including borrowing and banking. Their testimony can be accessed [here](#).

Specifics of the Bill

The bill essentially codifies **Whitesell's** Approach and gives the President the authority to appoint the six experts sitting on the board – none of whom can come directly from the energy sector, and all of whom then serve full-time. The heads of the Environmental Protection Agency, the Department of Energy, and the Treasury Department would all serve as ex-officio members.

Some time before the end of April, 2012, the board would be required to "publish a forecast of gradually-rising allowance prices for the trading years through 2020 that the Board expects shall be associated with a gradual reduction in emissions greenhouse gassed of covered entities until reaching a level of 4,911 tons in 2020."

Then the Board would use quarterly auctions to tweak supplies by establishing "procedures for auctions of allowances that would achieve the target price on average over all trading of allowances during the year."

Many practitioners are withholding comment on the bill until they've had a chance to digest its implications, but everyone is taking it seriously.

"I think they're going to push this thing," says environmental attorney David M. ("Max") Williamson, who represents the Carbon Offset Providers Coalition. "They've now found this creative vehicle that they believe marries up the price certainty of a tax with the environmental certainty of a cap, and it will be interesting to see where it goes."

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