



Daily Climate News and Analysis

Low Carbon Prices: Just a Phase or an Indictment of Cap and Trade?

by Matthew Berger - Dec 29th, 2009



In the wake of the weak climate agreements reached in Copenhagen a little over a week ago, the price of carbon has dropped substantially. The main exchange for the carbon emissions allowances that are traded as part of the European Union's [Emissions Trading System](#) saw carbon dioxide emissions [drop to €12.4](#) (\$17.90) a metric ton Monday.

Prices have been volatile throughout the ETS's first five years. Permits had reached a high of €30 (\$43) in summer 2008 before dropping to €8 (\$12) earlier this year.

On the other side of the Atlantic, the U.S. House of Representatives passed a climate change bill in June based on creating a similar cap-and-trade system. Like the ETS, the proposed U.S. system would limit industries' emissions and eventually force companies to pay for

allowances to offset their emissions — or allow them to sell excess allowances if their emissions are lower than expected.

The fact that prices for those allowances are so low in the cap-and-trade systems that already exist might be troubling for proponents of such a system's ability to mitigate climate change.

"Price volatility is a problem in and of itself because it's not sending a clear market signal" to investors, says Daphne Wysham, a fellow at the Institute for Policy Studies and co-director of their [Sustainable Energy and Economy Network](#).

She also points to offsets, such as the [Certified Emissions Reduction](#) credits created by the Kyoto Protocol's Clean Development Mechanism to pay for such projects as keeping forests unlogged, as "a drag on price because they're the cheapest option out there" for meeting the emissions targets on paper.

"You're essentially keeping the price low by allowing for carbon offsets," she says.

Other factors are at play as well. The price of carbon, as with that of any commodity, is seen as a function of demand. The current dip in prices, then, is a reflection of the low expectations for carbon dioxide regulation following the disappointing summit in Denmark and the stalling of climate legislation in the U.S. Senate. It is also a product of the slow economy, as less economic activity has meant lower emissions, and thus a lower volume for buying emissions permits.

The EU system and any future U.S. system are supposed to encourage a movement away from dependence on high-emitting, fossil-fuel based production by making those activities more expensive relative to cleaner alternatives. It is all about motivation. But for businesses to be sufficiently motivated to reduce their emissions they need a price incentive.

Carbon around 13 euros per ton is not expected to provide that push, and many analysts believe that, ultimately, prices will need to be much higher than they have been for cap and trade in carbon to achieve its ends. The International Energy Agency's [World Energy Outlook](#) for 2009 said carbon prices should be at \$50 (€35) a ton in 2020 and \$110 (€67) in 2030 in order to provide the incentives that will push companies to invest in cleaner technologies.

The non-binding international accord announced by the U.S., China, India, Brazil and South Africa and "[taken note of](#)" by the other countries is not likely to raise demand enough to push up that price.

Meanwhile, the [Regional Greenhouse Gas Initiative](#), which caps emissions in 10 northeastern U.S. states, is creating a fragmented market for firms, and one that is very dependent on political decree — a major factor in the price volatility seen so far.

Prices in RGGI dropped to around \$2 in the most recent quarterly [auction](#) of emission allowances, at the beginning of this month. Analysts say [supply is easily overpowering demand](#) as that system tries to hit its stride after getting its start last September. The EU ETS also faced the early problem of having [allocated too many allowances](#) at its start.

What these low prices mean for the future of cap-and-trade systems is still a matter of debate. NASA climate scientist



James Hansen has railed against a cap-and-trade system since before the lead-up to the House bill's passage.

"Because cap and trade is enforced through the selling and trading of permits, it actually perpetuates the pollution it is supposed to eliminate," Hansen says. His main issue with the system is not so much with the price level as with elements of the system like loopholes and offsets, which in turn lower the price of allowances.

Others have contended these low prices and other concessions to industry are simply unavoidable growing pains of implementing a brand new regulation.

Jill Duggan, a senior fellow with the World Resources Institute who has helped run and design emissions trading schemes in the UK, EU and U.S., has questioned whether the over-allocation that plagued the early years of the ETS and can be seen in RGGI is really over-allocation. Perhaps the EU just "underestimated how cheap and easy it would be for companies to reduce their emissions," she suggests.

"Companies, once they started to implement greenhouse gas reduction measures, were quite effective at cutting back on emissions, and needed fewer allowances than predicted," Duggan wrote in November. She also says the price of allowances has been no more volatile than other energy commodities in the past year.

The Future

As for the future of cap and trade, the currently low prices are not expected to, themselves, slow the momentum toward a cap-and-trade system in the U.S. or elsewhere.

"A more 'realistic' market will soon come into play as early allowances begin to expire and the cap begins to lower," says Michael Clingan, who has researched the business side of climate regulation as a partner at Ascendant Consulting.

The ETS prices are low right now, he says, due to the "overly generous initial allowance" that "expedited the political process needed to launch cap and trade." He says this both delayed emissions reductions — and stretched the patience of those hoping to see reductions — and allowed emitters and markets time "to develop the machinery" needed operate under a cap.

Gregory Casas, an attorney who focuses on energy and natural resources law at Greenberg Traurig and who has written and lectured on carbon markets, expects emissions to grow as the world economy pulls out of the recession. But he sees this increase bringing, paradoxically, an eventual decrease, as "this will lead to a renewed call for cuts in emission allowances, which will in turn bolster cap and trade programs and an increase in the price of allowances."

The biggest unanswered question remains what the U.S. Congress will do. Several conservative Democratic senators have told the White House and congressional leaders that legislation to cap greenhouse gas emissions would be **too contentious** for them to support when a climate bill comes up for a vote next year.

Others, like Hansen, have critiqued cap and trade for not being radical enough in its approach to saving the planet from the worst effects of climate change. Many of them have advocated a direct carbon tax on emissions rather than a market-based trading system.

A carbon tax might not face the same difficulties in terms of price level, but it would have its own problems with volatility as, being more easily repealed than an established carbon emissions market, it would be more subject to the political whims of the moment — if it made it into law at all. Paul Krugman, a Nobel laureate in economics, says a tax and a cap would have equivalent effects. The difference, he says, is "we have a real chance of getting a serious cap-and-trade program in place within a year or two. We have no chance of getting a carbon tax for the foreseeable future."

"My thoughts are that cap and trade will survive internationally and will be put into place here in the U.S.," says Casas, though he is less sure about the time frame for that U.S. legislation.

But for cap and trade to achieve its ends — that is, for emitting greenhouse gases to become more costly for the emitters in the short run — carbon offsets and derivatives based on the carbon markets need to be eliminated, says Wysham. "But all that is implicit in any cap and trade system ... the entire approach and the entire architecture of that approach is flawed," she says.

Duggan is more optimistic, at least in terms of the effect of low carbon prices.

"Companies do not need to know what the carbon price will be in 2020 (just as they do not know the price for oil or coal will in 2020)," she says. "They do need to know that there will be a carbon price in 2020, and in Europe at least, they know that the ETS is here to stay."

See also:

[Cap and Trade in Perspective: Stopping Acid Rain](#)

[Cap and Trade in Perspective: Carbon Trading in the Northeast](#)