

TEN WAYS TO GAME THE CARBON MARKET

emember how Wall Street traders crashed the economy in 2008 with their gambling on complex mortgage securities, and with "dark market" derivatives? Well, the mortgage bubble may have burst, but the creation of carbon markets – one approach for reducing harmful greenhouse gas pollution – could create a whole new Wall Street casino. The U.S. needs to dramatically reduce pollution to solve the climate crisis, but are carbon markets really the best way?

Carbon trading systems are complex, and the more complex they are, the easier they are to manipulate.

Massive levels of corporate lobbying on climate change have produced convoluted cap-and-trade proposals that are filled with giveaways and concessions to various industries. The larger and more complex the carbon trading system is, the more difficult it will be to regulate and the easier it will be to game. In theory, carbon markets can be small, restricted to regulated entities, and limited to simple spot trading of permits. Instead, leading cap-and-trade proposals are much more complex, relying on hard-to-regulate derivatives, Wall Street speculators, questionable offsets, strategic reserves, price ceilings and other factors that can be manipulated.

Below you will find ten ways that carbon markets could be gamed, at the expense of both our economy and our climate.



How to do it

If you are an industry facing carbon limits, inflate your projected emissions levels in order to claim a greater governmental allocation of carbon permits -- preferably for free. If you are a carbon offset developer, inflate the projected emissions scenario that would occur without your project; then, collect more credits than you really deserve.

How it has already been done

Boosting baselines and collecting free permits is a well-known scam, one that is blatantly on display in the European Union Emissions Trading Scheme (EU ETS). Estimates of windfall profits vary, but a *Point Carbon* analysis shows that in the current phase of the EU ETS (2008-2012), electricity generators in just five European countries could generate some \$36-111 billion in windfall profits by receiving free permits while simultaneously charging higher electricity prices to consumers. A recent report finds that, as a result of over allocated permits and the economic downturn, ten companies now have 35 million tons of surplus emissions -- equivalent to the annual emissions of Latvia and Lithuania. This figure could rise to 230 million in the next five years²:

Little or no actual 'effort' towards emissions reductions need have taken place, yet these companies will be able to literally bank the profits of the sale of their surplus permits or bank the actual permits for future use against climate change targets. Over the five year trading period [2008-2012] we estimate that the value of permits accruing to these ten companies will rise to €3.2 billion (approximately \$4.17 billion). This exceeds by a third the total EU budget for environment and is more than double the funding announced the in European Energy Programme for



Recovery (EEPR) for renewable and clean technologies both over the same period. In addition, the windfall profits companies could make, only just fall short of the total funds promised for renewable and carbon capture and storage in Phase 3 of the ETS covering a period of eight years.

- The Carbon Rich List, Sandbag, February 2010, pp 7-8

U.S. policymakers insist that they have "learned lessons from Europe" and will not over-allocate emissions permits, but aggressive corporate lobbying has meant that leading U.S. carbon trading proposals will make the very same mistake by giving out permits for free.

Similarly, boosting baselines is a well-known scam in the carbon offset market as well; the higher you say emissions would have been in the future, the more your offset project will supposedly save; this entitles you to more credits and more money. Since it's hard to prove otherwise, this scam can be particularly lucrative and is applicable to almost all offset projects.



Scam 2: Ponzi carbon

How to do it

Like any classic Ponzi scheme, the trick is to use the buzz of a little-understood market to attract investors, who you pay off by recruiting new ones. If investors are skeptical of your "all upside, no downside" proposition, you can always point to the true fact that Congress has created a steadily escalating price floor on carbon – up to a 5 percent guaranteed return, after inflation!

But buying and holding carbon is just a way to get unwitting victims in the door: tell investors they can make even more money actively trading carbon – through you of course. Claim that you have a company eager to buy carbon for a high price. All the investor has to do is buy carbon from you at a lower price, you can broker the sale, and they get to pocket the difference. But in reality? There is no purchase agreement; take their money and pay them back with funds from new investors.

How it has already been done

In 2000, emissions trader Anne Masters Sholtz ran a Ponzi scheme off California's pollution trading program, repaying old investors by recruiting new ones. In one particular transaction, Sholtz convinced AG, a New York energy trader, to buy \$12.5 million in permits that she was supposed to sell (at a profit) to Mobil. However, there was no deal with Mobil, and to put off paying back AG, she falsified invoices and sales documents. Investors filed some \$50-80 million in claims against her during bankruptcy proceedings, and Sholtz was eventually indicted on six counts of wire fraud in 2004. In 2005 she pleaded guilty to one charge and received a slap on the wrist – five years probation.

Scam 3: Sell fake carbon offset credits

How to do it

Wear a nice suit, prepare a nifty powerpoint presentation, and convince a buyer to purchase carbon credits, preferably generated by a project in a faraway place they will likely not visit. If they do decide to visit, take them to a "Potemkin village" – one carbon offset project that can be shown off

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repeatedly to visiting investors. After they are duly impressed, take their money and run.

How it has already been done

Fake carbon credits are already a problem, particularly in the voluntary carbon markets (where individuals voluntarily buy carbon offsets for their airplane travel, for example). For example, a recent "Dan Rather Reports" episode documented a case where a carbon broker approached an existing landfill gas project to become an offset project under the Chicago Climate Exchange. The project owner began receiving payments from carbon credits for continuing business as usual. Meanwhile, these credits were sold as "reductions" and could be bought for polluters to emit over their promised limit. Fears of fake offsets are so widespread that Attorneys General of several states are backing efforts by the Federal Trade Commission to investigate consumer fraud in the carbon offsets market.

But fake carbon credits can be used to bilk sellers, too. One of the most controversial examples involves a \$100 million case in Papua New Guinea where landowners were allegedly offered bogus carbon credits in exchange for surrendering their rights to forests.

Phony carbon brokers have also tried to cheat local governments. For example, the Indonesian government has warned local authorities to not sign Memoranda of Understanding with fake carbon brokers offering lucrative deals to turn forests into carbon sequestration projects.⁷



How to do it

First, decide who you want to bribe. Is it the verifier that is supposed to measure whether a carbon offset project really reduces the emissions? Is it the agency that awards carbon credits based on supposedly successful offset projects? Perhaps both; pay them with money, favors, or promises of future employment.

Similar to how credit rating agencies are tempted to confer high ratings to those who pay the bills (leading to wildly inaccurate assessments of corporate bonds, mortgage-backed securities, etc.), offset verifiers are paid by the project sponsors who make more money if and when the rating is more favorable.

How it has already been done:

Compared with carbon permits, carbon offsets run a greater risk of bribery. This is because an offset project needs to receive approval from an agency to receive carbon credits. Transparency International has pointed out several bribery risks in the world's largest offsets market, Clean Development Mechanism (CDM):

In order to obtain carbon credits, project buyers need hostand investor-country approval, validation of the project documentation by an accredited third party, international UN approval and third-party verification of project operations compared to the plan. The 'street-level' staff in some of these organisations are not paid particularly well, and can be inexperienced, due to the rapid development of the market.



Project approval by host countries is, arguably, the stage most vulnerable to corruption. Although kickbacks to officials have not been reported, a Russian agency reportedly asked for direct monetary payments. In Southeast Asian countries, it is fairly common for developers to invite the authorities to workshops (with attractive per diems) before submitting projects for approval...

- Corruption and the Private Sector, Transparency International, 2009, p44

After the Enron scandal, accounting firms had to split their financial auditing business from their management consulting work. But in the carbon markets, companies that verify a project's emissions savings may also offer project consulting services as well, creating a conflict of interest.

Scam 5: Commit carousel fraud

How to do it

Buy and import carbon permits or credits tax-fee. Re-sell them, and charge your buyers tax. Disappear without paying the tax to the government. This is called carousel fraud, or "missing trader" deals.

How it has already been done

Europol estimates that in just 18 months, carbon market carousel fraud has resulted in the loss of over €5 billion (approximately \$6.5 billion). After European officials cracked down, trading dropped dramatically; according to the European law enforcement agency, "It is estimated that in some countries, up to 90 percent of the whole market volume was caused by fraudulent activities." For years, criminals have used this scam with mobile phones or computer chips, but with carbon, it's so much easier because no goods have to be physically shipped across borders. Fraudsters often set up phony companies, and trade in countries where requirements for registering with an exchange are lower. 9

Scam 6: Phishing for carbon

How to do it

Like Scam 5 (the carbon version of carousel fraud), Scam 6 exploits existing weaknesses – this time in internet security – to apply to carbon commodities. First, identify companies that need to comply with carbon regulations and notify them that they must re-register their permits with the emissions trading authority. Send them to a fake internet site where they input their account data. Transfer their permits into another account, and re-sell them before you get caught.

How it has already been done

In February 2010, German authorities uncovered a carbon phishing scam perpetrated upon several companies in Europe, Japan, and New Zealand. The fraudsters made off with some 250,000 permits, worth €3 million (approximately \$4 million).¹¹ The German Emissions Trading Authority immediately suspended trading and several other countries followed suit. Trading resumed the following week, but the damage had already been done.¹¹¹



"It is estimated that in some countries, up to 90 percent of the whole market volume was caused by fraudulent activities."

> -Europol (European Law Enforcement Agency)

Scam 7: Falsify information

How to do it

There are so many ways to commit fraud in a carbon trading system. But if you are a carbon offset developer, fraud is particularly easy. An important part of the offsets business is telling a story about how your project would not be possible without offset revenues (i.e. "proving additionality"). You also can overstate how many greenhouse gas emissions would have been emitted were it not for your project (see Scam 1, "Boosting the baselines"). Since no one can ever prove these counter-factuals with any certainty, it is easy to stretch your story.

How it is being done

Offset companies are not just stretching their stories, they are forging documents to back them up. In the largest offset market in the world, Clean Development Mechanism (CDM) projects, the body responsible for approving and issuing carbon credits for offset projects has already found problems with "attempts of falsification of documents by project participants and information on financial statements." ¹²

Transparency International notes examples of project developers backdating documents or manipulating rate of return calculations in order to demonstrate that they "need" CDM credits in order to make the projects viable. Since CDM projects must go through a public consultation process, developers or their consultants have been known to cut and paste boilerplate public comments to project documents to supposedly "prove" that the consultation occurred. ¹³

Scam 8: Round trip your carbon

How to do it

This is an easy one for companies needing to buy carbon offsets: first set up a special purpose entity, preferably in an offshore tax shelter, to develop carbon offset projects. The special purpose entity charges your company a hefty \$75 million to develop a \$60 million offset project, and refunds the excess \$15 million to you. Fraudulently book the \$15 million as revenue, giving a boost to your bottom line. This trick is your classic round-trip tax scam with a carbon twist.

How it has already being done

Some \$11 trillion is already socked away in tax havens, ¹⁴ which not only allows companies and investors to evade taxes, but regulations as well. Round tripping is a type of transfer mispricing, When it is done with carbon, it becomes a form of carbon credit fraud, which according to Deloitte is "the white collar crime of the future." ¹⁵

Tax havens can also be handy for financial speculators. Use a tax haven to create a special purpose entity which you own, but whose identity is difficult to trace back to you. By setting up many of these entities, you can evade position limits, and if you are smart, you might even be able to secretly collude to fix prices.

Scam 9: Recycle your carbon

How to do it

Find an inventory of credits or permits that have already been used. Buy them for a discount and re-sell them quickly. Look for buyers in the over"In the future, if you are running a factory and you desperately need credits to offset your emissions, there will be someone who can make that happen for you. Absolutely, organized crime will be involved."

- Peter Younger, environmental crimes specialist, Interpol
- "Forest-CO2 scheme will draw organized crime: Interpol," Reuters, May 29, 2009

the-counter market, where monitoring is more lax; launder it through a foreign exchange, which is not subject to the same regulations, or hide it in a bigger transaction.

How it has already been done

Two European exchanges had to suspend trading in March 2010 when it was discovered that a trading firm was dealing in "recycled" carbon credits – credits that had already been used and were supposed to be retired. Recycling is actually legal; a government is allowed to re-sell used carbon credits as long as they cancel an equivalent number of permits, and do not sell them in the same market.

But here's how it went wrong: Companies surrendered 2 million carbon credits to the Hungarian government, which then re-sold them for €9 (approximately \$11) each to a trading company called Hungarian Energy Power (which had set up its website only two weeks prior). Hungarian Energy Power then sold the credits to Microdyne, a trading company incorporated in the offshore tax haven of Cyprus. Microdyne in turn sold them to an unnamed "rogue trader" in Hong Kong, who put them on BlueNext, a carbon exchange. European banks and brokers unwittingly bought the credits (now illegal for use in Europe) for €11.50 or 12 (approximately \$15). This resulted in a tidy – and fast – profit of €2 million (approximately \$2.6 million) for the fraudsters. Microdyne claims that its contract with the Hong Kong firm prohibits them from revealing the rogue trader's identity.



Scam 10: Manipulate carbon prices to enrich your offsets business

How to do it

This scam is possible thanks to the way Congress will likely set up a carbon trading system. The exploitable element is the strategic carbon reserve, a mechanism that is contained the House-passed climate bill and the Kerry-Lieberman bill. The purpose of the reserve is to ensure that carbon prices don't get too high. If the price of carbon reaches a certain trigger price, the government will release extra carbon from the reserve, which is filled with permits and potentially lots of offset credits.

To game this system, first set up a carbon trading desk on one hand and a carbon offset company on the other. On your trading desk, bid up carbon prices in order to hit the trigger. This will unleash massive demand for carbon credits and enrich the offsets part of your business.

How conflicts of interest already exist

The biggest derivatives traders already trade carbon and have bought offset businesses as well. For example, JPMorganChase not only does carbon trading, it owns offset developer EcoSecurities and ClimateCare. Similarly, Goldman Sachs is a strategic investor in BlueSource, another offset company. Banks which originate carbon credits could enrich the offsets part of their business by rallying up the price of carbon on their trading desks or issuing bullish recommendations on carbon.

Another way to push up carbon prices is for a company like Goldman Sachs, which publishes commodity indexes for investors, to adjust their index weightings to include more carbon. The adjustment

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would result in a rush of money into the carbon markets, which could also drive up the price and unleash demand for carbon credits.

Conclusion

Before Congress contemplates creating a carbon trading system, it should:

- Adopt robust derivatives regulations as it overhauls the financial sector. This means not only requiring mandatory exchange-trading and clearing for all derivatives, but also reforming commodities markets. Consumable commodity markets should serve the needs to bona fide end-users – rather than be playgrounds for financial speculators.
- Adopt new and additional regulations for carbon markets. Carbon markets are supposed to achieve an environmental objective; therefore the Commodity Futures Trading Corporation and other regulators should be empowered with additional authorities and duties to ensure that carbon markets best achieve their ultimate purpose.
- Consider other strategies to price carbon, and design carbon markets to be inherently less prone to gaming and easier to regulate. A small market, comprised only of permits (no offsets), which is off-limits to financial speculators and includes 100 percent auction of permits would be much less prone to gaming. Adopting a managed price approach would provide price stability and fundamentally eliminate the need for a hardto-regulate carbon derivatives market.

Printed in-house.

ENDNOTES

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 1"EU ETS Phase II The potential and scale of windfall profits in the power sector," Point Carbon for WWF, March
 28, 2008 at http://assets.panda.org/downloads/point_carbon_wwf_windfall_profits_maro8_final_report_1.pdf
 2 Pearson, Anna. The Carbon Rich List: The Companies Profiting from the EU Emissions Trading Scheme, Sandbag,
 February 2010 at http://www.sandbag.org.uk/fles/sandbag.org.uk/carbon_fat_cats_march2010.pdf
 3 Chip Jacobs, "Air of Deceit," Pasadena Weekly, 20 Aug 09 at http://www.pasadenaweekly.com/cms/story/detail/
 an_air_of_deceit/7616/
 4 "Carbonomics," Dan Rather Reports, Episode 435, 2009.
 5 See for example, "States seek fraud protection for carbon offset market," 25 Jan 2008 at http://www.ensnewswire.com/ens/jan2008/2008-01-25-091.asp
 6 Marian Wilkenson, "Australian firm linked to PNG's \$100m carbon trading scandal, The Sydney Morning Herald,
 24 Sept 09 at http://www.smh.com.au/environment/australian-firm-linked-to-pngs-100m-carbon-tradingscandal-2009090-fazy.html

- 24 Sept og at http://www.smh.com.au/environment/australian-firm-linked-to-pngs-100m-carbon-trading-scandal-20090903-fazy.html
 7 Adianto Simamora, "Beware of fake carbon brokers, says govt,"The Jakarta Post, 25 Oct og at http://www.thejakartapost.com/news/2009/10/25/beware-fake-carbon-brokers-says-govt.html
 8 "Carbon Credit fraud causes more than 5 billion euros damage for European Taxpayer" Europol press release, 9
 Dec og at http://www.europol.europa.eu/index.asp?page=news&news=prog1209.htm
 9 Mason, Rowena, "Carousel frauds plague European markets,"The Telegraph (UK), 30 Dec 2009 at http://www.telegraph.co.uk/finance/newsbysector/energy/6912667/Carousel-frauds-plague-European-carbon-trading-markets.html
 10 Carus Eelicity. "Carbon trading fraudsters steal permits worth 52 7 million in 'phishing' scam "The Guardian
- 10 Carus, Felicity, "Carbon trading fraudsters steal permits worth £2.7 million in 'phishing' scam,"The Guardian, February 4, 2010 at http://www.guardian.co.uk/environment/2010/feb/04/carbon-trading-fraudsters-steal-
- 11 Michael Gassmann, "Hacker greifen Emissionshändler an," Financial Times Germany, 2 Feb 10 at http:// www.ftd.de/unternehmen/finanzdienstleister/:gestohlene-co2-zertifikate-hacker-greifen-emissionshaendleran/50069112.html
- 12 UNFCCC Executive Board of the Clean Development Mechanism, Thirty-Seventh Meeting report, 1 Feb 2008 at http://cdm.unfccc.int/EB/037/eb37rep.pdf
 13 Corruption and the Private Sector, Transparency International, 2009, p43 at http://www.transparency.org/
- publications/gcr/gcr_2009

 14 As estimated by the Tax Justice Network, at http://www.taxjustice.net/cms/front_content.php?idcat=103

 15 Carbon credit fraud: the white collar crime of the future, Deloitte Forensic Australia, Nov 2009 at http://www.deloitte.com/assets/Dcom-Australia/Local%20Assets/Documents/Services/Forensic/Carbon_credit_fraud.pdf