

December 17, 2010

Mr. David A. Stawick Secretary of the Commission Commodity Futures Trading Commission Via electronic submission

Dear Mr. Stawick,

Friends of the Earth pleased to provide comments to the CFTC and the interagency working group for its forthcoming study on the oversight of existing and prospective carbon markets. Friends of the Earth is a national environmental policy organization that is dedicated to advancing a more healthy and just world. We are the US voice of the world's largest grassroots environmental network, with member groups in over 76 countries.

Friends of the Earth has published numerous articles and reports related to carbon trading, including *Subprime Carbon? Re-thinking the world's largest new derivatives market* (March 2009); *Smaller, Simpler and More Stable: Designing carbon markets for environmental and financial integrity* (September 2009); *Dangerous Distraction: why carbon offsets are a mistake the US cannot afford to make* (September 2009), "Regulatory Challenges for Financial and Carbon Markets," Carbon & Climate Law Review (vol 3, no 2, 2009); and *Ten Ways to Game the Carbon Markets* (May 2010). We have testified before Congress on carbon price volatility (March 2009) and presented in numerous venues, including the 2010 Interpol Environmental Crimes conference.

#### **Summary**

Carbon trading, especially as designed in previous Congressional proposals, presents a host of formidable regulatory challenges. As our comments will detail, the long carbon value chain presents significant opportunities for gaming, fraud and manipulation. Therefore, it will be important to involve a host of regulatory and law enforcement bodies, all of which have varying jurisdictions, and ensure adequate coordination between agencies. Above all, it is critical for policymakers and regulators to adopt environmental effectiveness as a primary regulatory objective in overseeing carbon markets.

Although establishing robust regulatory frameworks to govern carbon markets is crucial, how carbon markets are fundamentally designed will probably have more impact on their financial and environmental integrity than how they are regulated. If markets are designed to be massive and complex, then they will be easier to game and inherently harder to regulate.

Finally, in making its recommendations, we urge the working group to consider not only the lessons learned from state/regional programs and the European Union Emissions Trading System (EU ETS), but also to project how carbon markets might look decades in the future. Taking a longer term view will allow the working group to consider what types of regulations

may need to be in place to effectively govern a market that is bigger, more global (e.g. where linking agreements have connected US markets to others in Europe and Canada), complex and financialized.

## [Question 1: regulatory objective]

We strongly urge the working group to adopt an additional regulatory objective: ensuring environmental effectiveness of carbon markets. Unlike other commodity markets, carbon markets are created from legislative fiat to meet the policy objective of reducing greenhouse gas emissions. Ensuring environmental effectiveness as a key regulatory principle will have significant implications, such as establishing measures to limit the level and type of financial speculation in the market.

Senator Kerry's American Power Act which (May 2010 version) adopted several such measures. It required mandatory exchange trading and clearing of carbon, and also oriented markets so that they were mainly restricted to compliance traders, rather than speculators. Under Kerry's proposal, only a limited number of regulated financial speculators were allowed to participate in the market to provide liquidity, and these speculators could not make "more than a reasonable rate of economic return" on their trading activities. Similarly, the CLEAR Act, introduced by Senators Cantwell and Collins in December 2009, prohibited financial speculators from participating in auctions and trading, and essentially restricted emitters to spot trading only.

Policymakers have also sought to promote price stability in carbon markets. Although price stability is key concern for bona fide hedgers in all commodity markets, it is particularly important for the purposes of climate mitigation, since a stable price is necessary to spur large capital investments in low-carbon alternatives. To this end, Representative Doggett in March 2009 introduced a bill to establish a carbon trading system that would be inherently more stable. Normally, companies would use derivatives to hedge prices, but Doggett's Safe Markets Development Act proposed a carbon trading program with a managed price: the federal government would set a hard emissions cap in 2020, and empower an independent board to publish an eight-year (2012-2020) smooth price path for allowances. Price stability would dissuade financial speculators such as a carbon hedge fund manager who commented in 2008 that volatility "is actually good for us from an investor point of view, so we encourage it."

Other cap-and-trade bills likewise have promoted price stability. Senators Feinstein and Snowe introduced a stand-alone carbon market regulation bill in July 2009 designed to "minimize the volatility induced by the structure of the marketplace itself in the interest of providing an accurate price signal for regulated entities." An early (September 2009) version of the Senate Environment and Public Works climate bill included draft legislative language that instructed carbon market regulators to ensure that "the price for emissions allowances and offset credits reflects the marginal cost of abatement." The CLEAR Act requires the establishment of regulations that would "limit unreasonable or excessive fluctuations in the price of carbon share derivatives and carbon shares."

<sup>&</sup>lt;sup>1</sup> Szabo, Michael, "Carbon hedge fund to launch in early 2009," Reuters, December 18, 2008.

In sum, the concept that regulators should promote market characteristics such as stability, security, and environmental effectiveness; over innovation, liquidity, and liberalization is grounded in legislative proposals.

[Question 2: market design]

As suggested by the abovementioned legislation, the design of the carbon markets probably has more impact on their financial and environmental integrity than how they are regulated. As Friends of the Earth argued in our 2009 report *Smaller, Simpler and More Stable,* "Congress can fundamentally structure carbon markets in ways that minimize their size and complexity, avoiding problems in the first place, rather than simply relying on derivatives regulations to contain market excesses."<sup>2</sup>

The closer carbon markets are designed to the "Econ 101" version of emissions trading – spot trading between covered entities, with no offsets – the easier they will be to implement. Instead, the House-passed Waxman-Markey climate bill created one of the most complex and inelegant trading systems imaginable, with offsets, a price ceiling and reserve, borrowing and banking, and a mélange of different allocation processes for certain industries.

But even if these markets were simplified to their most basic level, emissions markets are fundamentally different than other commodity markets. For example, carbon allowances have one sole producer and supplier, and no production and storage costs. Moreover, the political and environmental compliance aspect to carbon markets is unique; special care should be paid to issues such as the setting and release of market sensitive information and the risk of insider trading. The one market design element that poses the most problems is offsets, as they are the portion of the carbon markets that are most prone to gaming and corruption.<sup>3</sup>

#### Offsets

Offsets are inherently prone to fraud because in order to earn carbon credits, a developer must prove "additionality," i.e. that without offset revenues, the project would not be possible. A developer also must estimate how many emissions would have occurred without the project, in order to determine how many emissions were avoided, and ultimately many credits they will earn. In the words of the Government Accountability Office, "Because additionality is based on projections of what would have occurred in the absence of the [offset project], which are necessarily hypothetical, it is impossible to know with certainty whether any given project is additional." Therefore, it is very easy for offset developers to stretch their stories, or even commit outright fraud. According to Transparency International, the Clean Development Mechanism (CDM) Executive Board, the body responsible for approving and issuing carbon

<sup>&</sup>lt;sup>2</sup> Chan, Michelle, "Smaller, Simpler and More Stable: Designing Markets for Environmental and Financial Integrity," Friends of the Earth, September 2009 at http://www.foe.org/sites/default/files/CarbonMarketsReport.pdf

<sup>&</sup>lt;sup>3</sup> For more information on carbon market crime, see "10 Ways to Game the Carbon Market," Friends of the Earth, May 2010 at http://www.foe.org/sites/default/files/10WaystoGametheCarbonMarkets\_Web.pdf

<sup>&</sup>lt;sup>4</sup> Testimony of John Stephenson, Director of Natural Resources & Environment, Government Accountability Office, before the Subcommittee on Energy and Environment, Committee on Energy and Commerce, House of Representatives, March 5, 2009 at http://www.gao.gov/new.items/d09456t.pdf

credits for the largest offset market in the world, has already found problems with "attempts of falsification of documents by project participants and information on financial statements."

Moreover, the process of offset verification and crediting is characterized by conflicts of interest and corruption risks. For example, project developers pay external consultants to verify the emissions reductions from their project, and some verifiers may also offer project development consulting services. Such conflict of interest dynamics mirror those between credit rating agencies and their clients. The carbon crediting agencies, which issue carbon credits, are also at risk:

The transformation of global warming into a problem of capital management has been accompanied and reinforced by erosion of the concept of conflict of interest, as criteria used to gauge the effectiveness of climate mitigation policy are increasingly influenced by private carbon consultants, big permit buyers, bankers and fund managers. Barclays Capital, a major investor in the carbon markets, boasts openly that "two of our team are members of the Methodology Panel to the Clean Development Mechanism (CDM) Executive Board", part of the UN carbon market's regulatory body, of which Lex de Jonge, head of the carbon offset purchase programme of the Dutch government, is the vice chair.

- The role of carbon markets in preventing dangerous climate change, UK House of Commons Environmental Audit Committee, February 2010

Certain offset types, such as those in the forest or agriculture sectors, pose particular problems because it is relatively difficult to measure biological carbon sequestration with the precision needed to convert these offsets into a compliance-grade tradable commodity. Perhaps the riskiest offset type is REDD (Reduced Emissions from Deforestation and Degradation), or avoided deforestation offsets in tropical countries. From a technical and methodological point of view, measuring tropical avoided deforestation offsets with accuracy and integrity is so difficult that REDD credits are not qualified to trade within the EU ETS. The latest REDD-related scandal example involves a case where a UK businessman was arrested for fraudulently acquiring carbon rights to 400,000 hectares of forest in Liberia, an area equivalent to about one-fifth of the country's forest resources.<sup>6</sup>

International offsets, especially those from countries plagued by corruption or poor governance, pose additional significant risks. One risk involves carbon offset developers who may resort to illegal activities or violence in creating offset projects. In 2009, Peter Younger of Interpol's Environmental Crimes Division stated, "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

<sup>&</sup>lt;sup>5</sup> UNFCCC Executive Board of the Clean Development Mechanism, Thirty-Seventh Meeting report, 1 Feb 2008 at http://cdm.unfccc.int/EB/037/eb37rep.pdf

<sup>&</sup>lt;sup>6</sup> "Special Statement by President Ellen Johnson Sirleaf on the Report of the Special Presidential Investigative Committee on Alleged Carbon Credit Deal," Government of Liberia, 12th October 2010 at http://www.emansion.gov.lr/press.php?news id=1679

happen for you. Absolutely, organized crime will be involved."<sup>7</sup> The Asia Pacific Anti-Money Laundering Group is exploring how crime syndicates may use carbon markets as a front for laundering money,<sup>8</sup> and in December 2010 Italian police seized about 100 bank accounts and began investigating alleged money laundering activities (not limited to offsets) in the Italian carbon market.<sup>9</sup>

Finally, a carbon trading system that is largely comprised of offsets will be subject to the build-up of "subprime carbon," carbon offsets which fail to reduce greenhouse gases and collapse in financial value. As carbon becomes an attractive asset class to institutional investors, institutional money could create a bubble in the offset origination markets. With too much money chasing too few sound projects, unscrupulous actors could develop dubious offset projects to satisfy investors' bullish appetites. Carbon credits promised from these questionable projects can be traded as derivatives (on their own or packed in more complex financial products) long before the project receives -- or does not receive -- credits. "Questionable" offset projects may not only be environmentally ineffective, but they could also involve land grabs, coercion, fraud, corruption, and/or environmental and social conflicts.

The manifold opportunities for gaming, corruption, fraud and conflicts of interest in the offset market require an adequate response from regulators and law enforcement. U.S. agencies that should be involved in preventing abuse in carbon offset markets include the Federal Bureau of Investigation, Department of Justice, the Commodities Futures Trading Corporation, the Federal Energy Regulatory Commission, and the Securities and Exchange Commission.

## [Question 3: spot v. derivative markets]

Regulators should generally pursue the same objectives (environmental effectiveness, transparency, integrity, efficiency, etc.) for both spot and derivatives trading, although specific rules, tools, and surveillance activities would obviously differ.

In Europe, the high-profile trading scandals (carousel fraud and allowance theft from registries) that have plagued the EU ETS have occurred in the spot market, and spot trading indeed may have certain vulnerabilities. In Europe, commodity spot trades are subject to Value Added Tax, while derivatives are not, opening up numerous opportunities for fraudsters. (Carbon is particularly prone to VAT fraud because physical goods are more difficult to trade across borders.) Europol estimates that in just 18 months, carbon market carousel fraud resulted in the loss of over € 5 billion. After European officials cracked down, trading dropped dramatically; European law enforcement later estimated that "in some countries, up to 90% of the whole market volume was caused by fraudulent activities." Allowance theft (such as the 1.6

<sup>&</sup>lt;sup>7</sup> Creagh, Sunanda, "Forest-CO2 scheme will draw organized crime: Interpol," Reuters, May 29, 2009 at http://www.reuters.com/article/idUSTRE54S1DS20090529

<sup>&</sup>lt;sup>8</sup> "Carbon trading a front for money-laundering: experts," Agence France Presse, July 17, 2010 at http://www.hindustantimes.com/Carbon-trading-a-front-for-money-laundering-experts/Article1-573537.aspx <sup>9</sup> "Italy tax police probe VAT fraud in carbon trading," Reuters, December 17, 2010 at

http://af.reuters.com/article/energyOilNews/idAFLDE6BG18020101217

<sup>&</sup>lt;sup>10</sup> "Carbon Credit fraud causes more than 5 billion euros damage for European Taxpayer" Europol press release, 9 Dec 09 at http://www.europol.europa.eu/index.asp?page=news&news=pr091209.htm

million EUAs that were stolen in November 2010 from a cement manufacturer's account in the Romanian emissions registry) has occurred because of electronic hacking and phishing activities. Thieves quickly trade stolen carbon through various accounts and different countries before putting them on a spot exchange, in hopes of quickly dispensing of them. However, stolen allowances could conceivably end up bundled in derivatives contracts as well.

Moreover, carbon derivatives may have particular vulnerabilities as an asset type. As with other commodities, derivatives trading may vastly dwarf the spot trading. Some analysts have pointed out that in carbon markets particularly, compliance entities are subject to long-term reduction obligations, but they will likely only be able to trade for one, or a very limited number of, vintage year(s). In an effort to hedge prices for the longer term, emitters may over-rely on derivatives, creating a situation where the "tail wags the dog." This can have a distorting effect on spot prices. The CLEAR Act addresses this problem by extending the expiration date of allowances.

In both spot and derivative markets, regulators should particularly scrutinize trading activity and contracts due around: reporting dates, when emitters must report their emissions; surrender dates, when emitters must surrender allowances and credits; and potential "witching days." In the EU ETS, these compliance-related dates create a "bizarre form of seasonality" in which allowances are constantly in demand (largely from utility companies), but excess inventories tend flood onto the market between November and March, when long industrials sell carbon before their March emissions reporting deadlines. <sup>13</sup>

Market regulators should also step up their surveillance in the period before environmental regulators release market-sensitive information (e.g. revelations of emissions levels, and thus whether the market is long or short), and when carbon prices approach trigger points at which cost containment measures come into effect.

[Question 4 & 5: additional statutory provisions, regulatory methods & tools]

Because carbon markets are created to specifically achieve an environmental objective, the CFTC, SEC and other regulatory agencies should be endowed with additional statutory authorities that allow them to intervene in markets for the purpose of preserving its environmental effectiveness. For example, the American Public Power Act gave regulators emergency authority to suspend trading in times of extraordinary price volatility. (Conversely, in recognition of the slow but steady erosion of rules which contributed to the financial crisis, the bill also prohibited the CFTC from issuing exemptions from carbon trading rules in the future.)

<sup>12</sup> However, Emily Gallagher of the New America Foundation points out that in the EU ETS, "Shorting of EUAs was also rampant within ETS, as the usual risks associated with shorting were mitigated by the fact that corporations knew that they would receive most of their future EUA needs for free. Thus, they were not as worried about a sharp EUA price hike just before the term date (the date when the shorter must furnish the EUA) as they would under normal shorting conditions." See Gallagher, Emily, "The Pitfalls of Manufacturing a Market: Why Carbon Will Not Just Sit Down, Shut Up, and Behave Like a Proper Commodity," *New America Foundation*, 14 July 2009.

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<sup>&</sup>lt;sup>11</sup> See for example, Nicholas Institute for Environmental Policy Solutions: http://nicholasinstitute.duke.edu/climate/aces2009/market-oversight

Legislators should also consider giving the CFTC additional authority, if needed, to take corrective actions and make interventions when exchanges do not uphold their own standards. (For example, in the past NYMEX has failed to apply appropriate speculation limits on financial oil speculators by classifying them with commercial interests such as oil refiners. <sup>14</sup>) This would be a departure from Commission's general governance approach, in which they allow exchanges and clearing organizations to self-regulate. We believe that this rather laissez-faire approach is not appropriate for a market designed to achieve a specific environmental outcome. Other measures to deter regulatory evasion include establishing a single, government-managed exchange where emitters could trade, as envisioned in the CLEAR Act. This is not a guarantee of regulatory effectiveness, but it could reduce regulatory arbitrage between exchanges. Other legislation, such as the House-passed climate bill, and the Feinstein-Snowe bill, impose hefty penalties for fraud, manipulation, and other malfeasance in the carbon markets.

However, it is important to note that the House-passed Waxman-Markey bill, although it had tougher penalties, would have created a system that essentially mimicked existing commodities markets, which are excessively financialized. As Mid-American Energy pointed out in Congressional testimony, "Under the Waxman-Markey bill, utilities – the ones that actually need the allowances for compliance – will be forced to compete with Wall Street investment banks, hedge funds and speculators." Indeed, the problems which frustrate bona fide hedgers in other, relatively liberalized, markets could replicate themselves in carbon unless policymakers carefully design markets and regulations. The working group should consider prohibiting certain activities such as long-only index investing, high-frequency trading, naked shorting of carbon, and other purely speculative carbon trading practices. Carbon trading should not be exempt from exchange trading and clearing, as argued by the International Swaps and Derivatives Association and the International Emissions Trading Association. <sup>16</sup>

#### [Question 6: information and reporting]

The carbon market regulation bill introduced by Senators Feinstein and Snow offers some helpful ideas in with respect to information and reporting. It requires "registered carbon trading facilities" to create a "central limit order book" so that every trade is recorded in real time with the CFTC, to publish trading data at least a daily, and maintain records. It also establishes minimum professional standards for registered carbon market traders, dealers, and brokers; this should ameliorate some of the problems the EU ETS has experienced with fraudsters who have tended to migrate to countries with the most lax registration requirements.

<sup>&</sup>lt;sup>14</sup> Testimony of Professor Michael Greenberger before the Committee on Commerce, Science and Transportation, United States Senate, June 3, 2008 at http://commerce.senate.gov/public/\_files/IMGJune3Testimony0.pdf <sup>15</sup> Written Testimony of William J. Fehrman, President, MidAmerican Energy Company, Senate Environment and Public Works Committee, August 6, 2009 at www.midamericanenergy.com/include/pdf/fehrman\_testimony.pdf <sup>16</sup> The ISDA argued that it is not practical to require carbon derivatives to clear because carbon offsets can be so varied in terms of technical, operational, political, currency, etc. risk that a clearinghouse will not "be able to immediately judge the risk inherent in the transaction it is attempting to clear" for determining collateral requirements. See http://www.isda.org/speeches/pdf/ISDA-Response-House-AG-Commttee-Questionnaire.pdf

## [Question 7: unified regulatory oversight]

One of the lessons learned from the sub-prime mortgage crisis was that there was a regulatory patchwork from mortgage origination all the way to credit default swaps, and no overarching body responsible for macro-prudential oversight. We believe it is imperative to have a closely-coordinated regulatory oversight program that would oversee all parts of the carbon value chain.

For example, many financial institutions that own carbon offset companies may also actively trade carbon on their own proprietary trading desks or operate commodity indexes. Carbon traders could attempt to push prices high enough to trigger the release of carbon offsets from a strategic carbon reserve; this could unleash significant demand in the offsets market, increasing the risks of fraud and corruption. In such an instance, those agencies monitoring carbon derivatives should notify law enforcement so they can increases their vigilance in the offsets market. Carbon prices could also be pushed up by simply increasing the weight of carbon in commodity indexes, creating similar risks on offset markets. The activities of "massive passives" in the carbon derivatives market might have implications for secondary spot markets. A unified oversight regime over various parts of the carbon market will be able to increase regulatory coherence and effectiveness.

# [Question 8: interaction with foreign regulators]

It is critical for US regulators to coordinate closely with carbon market regulators in foreign jurisdictions. In the United States, for example, the Western Climate Initiative (WCI) contemplates creating a carbon trading system between several Western US states and Canadian provinces. The WCI alone would therefore require coordination between US regulators and the securities commissions of Ontario, British Columbia, Manitoba, and Quebec; as well as Environment Canada, and law enforcement agencies such as the Royal Canadian Mounted Police.

Many carbon market proponents envision a global carbon market,<sup>17</sup> where emissions trading systems would be linked through various agreements. If this is achieved, it would require an enormous amount of regulatory coordination, as emitters and traders would naturally gravitate towards the jurisdiction with the most lax regulatory environment. Regulatory arbitrage is already a problem in the EU ETS. For example, in November 2010, a surge in "suspicious" trading activity on the Italian GME exchange (where volumes on the spot market exceeded those on the futures market, and carbon traded at a discount) seemed to be the result of fraudsters switching their activities from Spain to Italy, one of the few exchanges that still charged VAT<sup>18</sup>; Italian regulators suspended trading on the GME on December 1.<sup>19</sup> Regulatory coordination

<sup>&</sup>lt;sup>17</sup> See for example, the <u>World Business Council for Sustainable Development</u>, the <u>World Bank</u>, and the <u>International Emissions Trading Association</u>,

<sup>&</sup>lt;sup>18</sup> "Traders suspect VAT fraud in Italy as volumes surge," ICIS Heren, Nov 26, 2010 at http://www.icis.com/heren/articles/2010/11/26/9414464/emissions/edcm/traders-suspect-vat-fraud-in-italy-as-volumes-surge.html

<sup>&</sup>lt;sup>19</sup> "Italy tax police probe VAT fraud in carbon trading," Reuters, December 17, 2010 at http://af.reuters.com/article/energyOilNews/idAFLDE6BG18020101217

among the EU ETS has also been a challenge; reportedly France and Germany refused to give Danish authorities, who were pursuing VAT fraud, access to trading accounts on grounds of data protection. Given the fact that the effectiveness of new US regulations over Foreign Boards of Trade has yet to be tested, and global derivatives regulation is far from being realized, international regulatory coordination is a significant undertaking.

In addition to trading activities, coordination must also occur among law enforcement agencies, including those responsible for illicit financial flows, tax evasion, money laundering, and organized crime. Collaboration among environmental law enforcement agencies is also critical to ensure that emissions levels are reported accurately. As carbon trading spreads to countries such as China (whose trading system is expected to begin by 2015), Chile, Indonesia, and Mexico, <sup>20</sup> environmental regulators in the US need to be able to work with agencies in other countries to address potential problems in other jurisdictions, and vice versa.

### [Question 9 & 10: experiences in regional and SO2/NOx programs]

Although it is instructive to garner lessons learned from existing US emissions trading programs, it is also important to understand how carbon markets will be different than the acid rain trading program and the Regional Greenhouse Gas Initiative (RGGI).

Both programs are easier to regulate from an environmental enforcement perspective, as they focus on a relatively small number of large point source of emissions (power plants). Carbon dioxide emissions, on the other hand, may occur from non-point sources and be more difficult to measure accurately. As a result, EPA allows emitters to use engineering estimates and modeling software, in addition to direct measurements, in reporting carbon emissions. This poses additional challenges to agencies responsible for confirming the veracity of company-provided emissions reports.

Also, a national carbon market is likely to affect much more of the economy than RGGI or the acid rain program ever did or will. This will have at least two effects: first, the program will be much larger and attract more financial speculators. Carbon is already being touted as a new asset class to institutional investors, and several exchange traded carbon funds and carbon commodity indexes have been launched to help investors gain exposure to carbon. Similar investment products were never created for acid rain trading. Second, the broader economic impact of carbon markets will prompt investment consultants and asset managers to offer carbon risk management products and services to institutional investors wanting to hedge carbon prices. Already several carbon risk-oriented equity indexes, such as the FTSE carbon risk indexes, have also been developed; in the future, we will likely see derivatives products developed to help institutional investors hedge against carbon prices in their portfolios.

 $http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,, contentMDK: 22785667 ^{pagePK}: 34370 ^{piPK}: 34424 ^{theSitePK}: 4607, 00. html$ 

<sup>&</sup>lt;sup>20</sup> "New Multi-Million Dollar Fund For Developing Country Carbon Trading Initiatives," World Bank press release, December 8, 2010 at

# [Question 11: market participants]

It is relatively difficult to ascertain the precise proportion of trading activities that are done by covered entities versus financial speculators. Some large covered installations, such as EDF, have significant trading arms which engage in both speculative activities as well as bona fide hedging in the EU ETS. For example, the World Bank points out that in 2009 the carbon options market, "which used to be dominated by banks and utilities, witnessed a growing presence of funds, energy-trading firms, and increasingly sophisticated utilities and industrials that used the options market for hedging (both volumes and prices) and profit-making transactions."<sup>21</sup>

Various surveys of carbon market participants appear to indicate that currently compliance traders tend to focus on allowance trading (such as EUAs, European allowances), while the offsets market (such as CERs, CDM offset credits) attracts more financial speculators. This is logical given the fact that in the EU ETS, a significant proportion of EUAs are allocated directly to covered installations; in contrast, CDM offset projects are so diverse that they often require brokers and aggregators to market them. In particular, the secondary CER market (sCER) is largely comprised of financials; many sCERs have been sold as guaranteed delivery contracts, with creditworthy financials taking the delivery risk from originators and selling the CERs to covered entities for compliance purposes. Financial and technical trading, rather than bona fide hedging, also dominates the carbon options market.<sup>23</sup>

Although compliance entities may tend to focus on allowance trading, financial speculators comprise a significant portion of allowance trading volume; in early 2009 spot trading of allowances shot up some 400%, largely due to VAT carousel fraud perpetrated by non-covered entities. In the same vein, US traders are starting to participate in the European market; given that they are not subject to European emissions caps, this activity is obviously capital gains-motivated. In 2009 "U.S. funds and trading companies...represented 10–15% of trade volume on London's European Climate Exchange (ECX), primarily through a small number of trades of large EUA lots."

Finally, while it is instructive to examine the current composition of traders in the EU ETS, we urge the working group to also take a longer view of how carbon markets may likely develop over time, especially since federal carbon trading proposals envision establishing a trading system that extends many decades in the future.

<sup>&</sup>lt;sup>21</sup> World Bank, *State and Trends of the Carbon Markets 2010*, Washington DC 2010, p 16 at http://siteresources.worldbank.org/INTCARBONFINANCE/Resources/State\_and\_Trends\_of\_the\_Carbon\_Market\_2 010 low res.pdf

<sup>&</sup>lt;sup>22</sup> See for example Bajracharya et al, "An Analysis of Trading Motivations in Phase II of the European Union Emissions Trading Scheme," April 2010 at http://www.wm.edu/as/publicpolicy/documents/prs/world\_bank.pdf <sup>23</sup> World Bank, p 16.

<sup>&</sup>lt;sup>24</sup> World Bank, p 7.

Thank you for the opportunity to provide input into this important study, and we hope that some of this input is helpful to the working group. Please feel free to contact me if you have any questions: mchan@foe.org, 415.544.0790 x214.

Regards,

Michelle Chan

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