

Copenhagen and Carbon Trading: Why the commodification of Nature will not solve climate change

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As the Yes Men hoax of the Copenhagen negotiations and environmental justice movements expose Canada's shameful position on climate change, we are faced with many possible takes on the climate change issue. The Yes Men hoax illuminated Canadian inaction through a fake Environment Canada press release stating that Canada is "taking the long view on the world economy" and reversing its previous woefully inadequate positions on climate change, thereby acknowledging the need to take full responsibility for emissions. Later it emerged that Canada was not, in fact, acknowledging its climate debt to poor nations, and that tar-sand development would continue on as usual. As climate justice movements and the climate debt agents mobilized around the indebtedness issue, others saw 'hope' in Obama's presence at the negotiations.

Many of us were intrigued by the willingness of the United States to participate in this most recent round of climate negotiations and pressed for a meaningful agreement to come out of Copenhagen. Still others were shocked by Canada's placement as 'second to last' in the climate change performance index and are calling on the Harper government to fulfill its Kyoto obligations. However, it appears that the mere push to fulfill Kyoto obligations will not be enough to get us out of the climate peril. That is, when the Kyoto Protocol is examined more closely its 'business friendly' flexible mechanisms reveal new forms of accumulation and enclosure of the biosphere, and the legitimization of a reliance on fossil fuels.

FROM CHICAGO TO KYOTO: A BRIEF HISTORY OF CARBON MARKETS

It was not too long ago that the issue of whether global warming was occurring at all, and whether humans had anything to do with the phenomenon was up for debate. In 1988 the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) organized the Intergovernmental Panel on Climate Change (IPCC), to study the scientific, political and economic information surrounding the risks of climate change due to anthropogenic influences. With the United Nations Framework Convention on Climate Change (UNFCCC), negotiated at the Rio Earth Summit in 1992, the need to address the problem of climate change with a political response was formally acknowledged. The convention called on countries to reduce dangerous greenhouse gas emissions with an acceptance of "common but differentiated responsibilities and respective capabilities."¹ This idea of 'common but differentiated responsibilities' appeared to acknowledge a greater responsibility for rich countries to take action for their unequal consumption of the world's resources. Whilst the convention encouraged these ac-

tions, it was not until the development of the Kyoto Protocol in 1997 that signatories were obliged to take action to reduce their emissions by 5.2% from 1990 levels for the commitment period of 2008-12. At this time, many of the goals of the UNFCCC also became more market-based and flexible.

The Kyoto Protocol allows for countries that are unable to meet their targets through national measures, to use 'flexible' market mechanisms to gain more leverage in how (or if) they attain their reduced emission goals. These flexible mechanisms enable countries to meet their targets in the most 'cost effective' manner, and include 'Emissions Trading,' 'Joint Implementation,' and the 'Clean Development Mechanism.' Emissions Trading began to be discussed within the context of international climate change negotiations with the UN Conference on Trade and Development (UNCTAD) and the establishment of an International Emissions Trading Association (IETA). However, it was not until the mid-90s that discussions surrounding formalizing emissions trading into practice really began to occur.

The growth of carbon markets has accompanied the growth in uncertainty markets from the 1970s and beyond, with financialization gaining momentum at the same time as a growing environmental consciousness and concern over the climate crisis. Governments, financial interests and energy faced environmentalist opposition, and sought out a neoliberal, market-based 'compromise' in the form of a commodified fix to the problem of global warming.² The popular approach to the problem of global warming became the "project of building a single, liquid global carbon market worth many trillions of dollars – backed by the UN, national governments, economists, environmentalists and many in the business sector."³ However, it was not until 1997 with the successful lobbying of the Clinton Administration and the example of United States programs for trading in sulphur dioxide that emissions trading came to be on the agenda of the Kyoto Protocol. With the help of Al Gore and his *Generation Investment Company*, carbon trading and offsets became a popular response to the problem of climate change.⁴

With the Kyoto Protocol, polluter countries that have agreed to emission targets are given emission credits, which are equivalent to their reduction commitments from 1990 levels. Credit quotas are then distributed nationally through 'grandfather' clauses, which allow the biggest polluters to receive the largest allocation of credits. If the polluter does not use the entire pollution credit quota, they can either 'bank' the credits for the future or sell the credits on the open market to be purchased by another polluter. In contrast, if they use up all their credits, they must purchase more from a polluting country that has not used up its

full allocation, or invest in projects in other countries through either Joint Implementation (JI) or the Clean Development Mechanism (CDM).

Emission trading entails the creation of a carbon market which allows countries with emission credits to spare (such as Iceland) to sell them to countries unable to meet their targets (such as Canada). Credit is transferred for emission reductions accumulated through projects to form ‘units,’ which are equivalent to one tonne of CO₂. Units can take the form of a Removal Unit (RMU), or the generation of a unit from the ‘absorption’ of carbon through re-forestation projects or land-use changes. This is accomplished through the use of ‘sinks’ in the form of trees, soils, or oceans for the absorption of carbon. In addition, an Emission Reduction Unit (ERU) may be garnered from a Joint Implementation (JI) agreement between two industrialized countries implementing an emission reduction project in one of the countries. In contrast, the Clean Development Mechanism (CDM) signals that if a project is undertaken between an industrialized country and a developing country, it allows the industrialized country to invest in ‘low cost’ emission reduction technology to generate Certified Emission Reduction (CER) units.

As it will be further clarified, these market mechanisms are problematic, as they do little to change our reliance on fossil fuels, and can be seen to actually encourage the fossil fuel industries through investments in carbon emissions and the allocation of ‘free credits,’ as the polluters are given emissions credits equivalent to their 1990 levels of emissions minus their reduction commitment.⁵ This leads, in effect, to financial rewards for pollution. Emissions trading poses problems due to the fictitious nature of the commodities being traded, the related difficulties with verification, and the encouragement of the commodification and enclosure of the biosphere.

That is, in order that carbon may be traded, it must be made exchangeable in a commodity form. The process of the commodification of carbon is accomplished through abstraction and equivalence into quantifiable terms. The mechanisms encouraging this commodification, however, are largely controlled by the global North, leading to a situation of imperialism into the biosphere, as finance, industry and nations stake a claim to what was heretofore an ‘unclaimed global good.’⁶ The flexible mechanisms and increased financialization thus represent a new form of accumulation and enclosure – yet are simultaneously part of a broader neoliberal agenda of deregulation and privatization.

NATURE AS FICTITIOUS CAPITAL: CARBON MARKETS

Thus it is necessary to analyze the cap and trade mechanisms and the development of carbon markets as part of a broader process of commodification, de-regulation and financialization. It is clear that an analysis of the growth of fictitious capital as applied to carbon markets has much to offer for a critical understanding of how these markets lead to an intensified accumulation and commodification of the earth’s resources.

We can understand fictitious capital to be a paper claim to future wealth. Similarly, credit, as a form of fictitious capital can be represented by a ‘promise to pay later,’ or a ‘bill of exchange, a promissory note with a fixed date of payment, a ‘document of deferred payment.’”⁷ How these concepts relate to ecological and economic crisis is clear, especially when we consider that Marx could be talking about the current state of our financial sector when it is considered that Marx foresaw the potential for the financial sector to appear as an enterprise on to its own.

Increasing deregulation and financialization has brought a widespread acceptance of markets and financial instruments as capable of regulating polluting activities. As eco-Marxists have shown, it is in response to the taken-for-granted assumption of nature as capital that neo-classical environmental economists have attempted to account for ecological loss by placing an economic value on the waste products of industry, such as carbon. It is thereby hoped that ‘externalities’ such as pollution will be reduced through the valuation and exchangeability of environmental loss through the trading of pollution credits, and the implementation of the most ‘cost effective’ solution for the ecological crisis. A price is applied through the concept of ‘scarcity’ to carbon, with the logic being ‘we will use less if we have to pay for it.’ Yet, attempts to valorize waste products such as carbon through the application of scarcity principles leads to a contradiction espoused in the quantitative logic of capital – as it abstracts from the qualitative realm of use-value. That is, surplus production and the accumulation of capital leads to the tendency for the economic process to become detached from all qualitative restrictions, and the related tendency to reduce all qualitative processes to the monetary form.⁸

REGULATION OR REVOLUTION

The apparent consensus for achieving sustainability through the extension of the financial sphere to pollution is extremely troubling, especially given the current neoliberal context of deregulated financial transactions. Yet within the neoliberal climate financial regulation is unlikely. However, even if more regulation of the financial sphere was put into place, it would not solve the problems inherent in the commodification of nature. The process of the commodification of nature and pollution through the creation of a carbon market explains the emphasis on ‘sustainability’ as ‘non-declining natural capital,’ thus ensuring the continued supply of natural capital.⁹ The capitalization of nature and the various economic techniques employed in this vein leads to an enhanced perception of the capitalist state’s capabilities for dealing with ecological crisis. This is further enabled by the state portrayal of the ecological crisis as a “series of discrete environmental problems (pollution, global warming, erosion) to be managed.”¹⁰ Yet, despite government involvement in climate change negotiations, climate change has been increasingly addressed in profoundly undemocratic ways. That is, the commodification and financialization of nature leads to increased inequality and new forms of enclosure, and closes off opportunity for participation in decision making surrounding the environment, as it displaces policy decisions to financial interests.

The move to carbon trading and the purchase of offsets is an example of the attempt to commodify nature, in that nature is thought to have a certain economic value in capitalist terms and thus can be exchanged, or ‘offset,’ through the purchase of a modern form of indulgences. Consumers have become aware of their ‘carbon footprint,’ the impact they exercise on the environment through their lifestyles, and are eager to buy their way out of consumer guilt. It appears that the acceptance of carbon finance as a resolution to the climate crisis is widespread in popular opinion. The evolution of carbon markets is not too surprising, however, given the context of neoliberalism, financialization, and the general acceptance of market-based solutions and incentives for social change. One particularly troubling market-based ‘solution’ to climate change is that of the Clean Development Mechanism, a flexible mechanism of the Kyoto Protocol. As we will see, the CDM represents an intensified form of accumulation and imperialism and does little to solve the climate problem.

THE CLEAN DEVELOPMENT MECHANISM

The Clean Development Mechanism is based on the idea that emissions from a polluter can be ‘offset’ or ‘nullified’ through various investment schemes in ‘carbon sinks’ or ‘renewables.’¹¹ As forests, oceans, and soil store carbon, they are known as carbon sinks. Carbon is released into the atmosphere during the burning of fossil fuels and the destruction of forests. Forests, oceans, vegetation, soil and the atmosphere engage in a carbon cycle through photosynthesis,¹² and can be seen in terms of a carbon ‘pool.’ If a pool absorbs more carbon than is released, then it is known as a ‘sink,’ with a ‘source’ being that which emits more than is absorbed. De-forestation turns sinks into sources and thus shifts the balance in the carbon pool to lower levels stored in forests and higher levels released in to the atmosphere. Fossil fuel deposits are also a significant source, but carbon remains untapped unless humans release it through burning, in which case the amount of carbon in the atmosphere is increased.¹³ With the Clean Development Mechanism comes the use of re-forestation projects as ‘sinks’ to absorb carbon such as monoculture tree plantations.

The Kyoto Protocol defines the Clean Development Mechanism (CDM), and stipulates that an Annex I Party (wealthy countries with an emission-reduction commitment) may implement ‘emission-reduction projects’ in developing countries. These projects allow an Annex I country to accumulate Certified Emission Reduction (CER) credits, with each one being equivalent to one tonne of CO₂. These credits can then be used to meet Kyoto targets with the stipulation that projects should be formulated to assist developing countries in the achievement of sustainable development.

However, CDM projects often involve the enclosure of land for large-scale monoculture tree plantations, thus displacing people dependent on the land for survival. In some cases local peoples have been forcibly removed – as was the case in Uganda where 13 villages were evicted for a Norwegian-sponsored carbon sinks project.¹⁴ Further, the Kyoto Protocol permits access to land in upwards of 10 million hectares for re-forestation CDM

projects to generate credits for wealthier countries, leading to destruction of the environment through the use of herbicides and pesticides, loss of biodiversity, and water use disruption due to the planting of non-indigenous species. In addition, the use of tree plantations as carbon sinks eludes the problem of dependence on fossil fuels and allows industry and governments to shirk responsibility for the health of the environment. Climate change and ecological crisis once again emerge as a new ‘market niche’ via the displacement of the real problem of greenhouse gases.

The theory is that these project-centred credits – regardless of origin – are to be ‘fungible’ or equivalent to emissions allowances distributed in the North. According to the development agencies, the CDM provides ‘flexibility’ and standardization for industrialized countries in emission reduction methods:

“It is the first global, environmental investment and credit scheme of its kind, providing a standardized emissions offset instrument, CERs. A CDM project activity might involve, for example, a rural electrification project using solar panels or the installation of more energy-efficient boilers. The mechanism stimulates sustainable development and emission reductions, while giving industrialized countries some flexibility in how they meet their emission reduction or limitation target.”¹⁵

The ultimate goal is flexibility and cost effectiveness, with increased commodification going unproblematized in the development paradigm. With flexible mechanisms, the UNFCCC proudly declared “a new commodity was created in the form of emission reductions or removals. Since carbon dioxide is the principal greenhouse gas, people speak simply of trading in carbon. Carbon is now tracked and traded like any other commodity. This is known as the ‘carbon market’.”¹⁶ The creation of a new commodity out of emission reductions and carbon is seen from this perspective to be a positive thing.

UNREGULATED FICTITIOUS COMMODITIES

However, the potential for fraud is extreme, due to the fictitious nature of the commodities being traded, and the discrepancy between investment in emission trading schemes and their regulation. As a result of this lack of regulation, corporations are being entrusted to produce accurate emission reports. Thus, in effect, the polluter is in charge of regulating the pollution. Whilst the appearance of regulation is maintained, the impossibility of standards becomes a speculative boom for both credit buyers and sellers, since it facilitates ‘skilled accounting’ as the books are largely free from public scrutiny or verification. It thus becomes possible to fabricate pollution rights sold to Northern fossil fuel emitters, who probably will not enquire too closely to their origin. Corporate self-restraint is no more likely in the carbon-offset markets than in the collateralized debt obligations market, making verification of assets impossible.¹⁷

In a neoliberal climate of privatization and deregulation, this lack of verification is characteristic of this political-economic

form, and well represented under the general rubric of the growing phenomenon of ‘corporate social responsibility.’ Emissions trading is one such form of corporate social responsibility, in that corporations can be seen as ‘doing something’ for the health of the planet, even if it is merely the selling of offsets or the creation of financial instruments out of pollution. Yet, the question of whether something is being done at all produces a negligible answer due to the high potential for fraud and the fictitious nature of the commodities being exchanged. This is highly problematic, as the health of the environment – in this case with respect to GHGs – becomes another realm for financial speculation, with financial decisions becoming an even greater factor in whether the earth is protected or not.

HEDGING THE RISK OF FICTITIOUS COMMODITIES

Due to these structural problems inherent in a system shy to regulation, there has been a proliferation of financial instruments designed to hedge risk, such as derivatives. The increase in speculative activities has encouraged a variety of these types of instruments designed to capture future values, or, shares of surplus value that have not yet been produced. This has resulted in an increase in fictitious capitals, such as mortgage-backed securities and collateralized debt obligations (CDO).¹⁸ These new financial instruments lead to financialized gambling on the likelihood of success in the carbon markets, as they are designed to capture future value, yet future rates of profit are uncertain.

Marx’s description of the situation of credit and fictitious capital is hauntingly resonant with the problems of verification in carbon markets today. “The shares in railway, mining, shipping companies, etc. represent real capital, i.e. capital invested and functioning in these enterprises as capital. It is in no way ruled out here that these shares may be simply a fraud.”¹⁹ As these shares represent fictitious capital, there is great difficulty in ascertaining their value. David McNally explains the significance for our current situation: “Since 2000, mortgage-backed ‘securities’ have been the flavour of the month, often in the form of Collateralised Debt Obligations (CDOs) – that is, debts backed

up by collateral (in this case houses). But if the value of the underlying asset (houses) plummets, no longer equal to the paper debts themselves, then the ‘collateral’ is increasingly fictitious.”²⁰ This illustrates the volatilities of a system so reliant on fictitious capital, a volatility that touches the carbon market as well, making “self-restraint no more likely in the offset markets than it was in the collateralized debt obligations market.”²¹ Just as the subprime mortgage based securities present an asset valuation problem, so it is also the case with carbon credits and the tendency to encourage the development of a secondary market of speculators. The danger of a loss of confidence in offsets is apparent as the system relies on predictions of future profits, such that an environmental derivatives market very quickly emerges with credits sold in bulk quantities to speculators on the price of carbon. Clearly the system is more oriented toward accumulation and profit rather than the stated goals of ‘sustainable development.’

SUSTAINABLE DEVELOPMENT?

The Kyoto Protocol is simultaneously touted as the way forward in ‘sustainable development’ whilst it is regarded as an inadequate agreement, but better than ‘doing nothing at all.’ This consensus has led to the subsumption of opposition from many ecological groups in the interest of ‘working together’ (e.g. government, business, environmentalists) to solve the climate crisis. It is necessary for environmentalists to look more closely at the flexible mechanisms to understand the process of the financialization of the biosphere and the deeper extension of accumulation into the natural realm, and to question whether increased accumulation is an effective way to deal with the climate problem.

It is clear that CDM projects will continue to place the blame on the ‘third world’ for the ecological crisis, whilst exploiting the availability of cheap materials in undeveloped locations. The CDM projects are merely an avenue for the expansion of capital and the commodity form. CDM projects in undeveloped locations facilitate a low-cost solution to innovation and are potentially less ‘riskier’ if they fail, as less capital has been invested. As climate justice movements organizing around the Copenhagen talks illustrate, these projects will not address the north’s climate indebtedness to the south for its development and will further place poorer countries in debt through financialized non-solutions to climate change.

CONCLUSIONS

It is evident that financialized solutions to climate change are problematic due to the vulnerability of the financial system to crises of fictitious capital, a vulnerability that is magnified with the impossibility of regula-



tion of the financial system. Not only does the financial system encourage increased inequality as an intensified form of accumulation, it also displaces policy decisions to investor interests.

The flexible mechanisms of the Kyoto Protocol are part of a wider trend of neoliberal deregulation, commodification of the commons, and increased financialization. They represent a shift in the relationship of capital to the environment in an effort to ‘internalize the externalities’ – a change in accumulation strategy. Clearly the move to create a fictitious capital market for carbon will have disastrous effects on the environment, as projects will not be funded on the basis of environmental benefit, but in the interests of profit. As the Copenhagen negotiations have illustrated, the wealthy countries and the ruling elite within India, Brazil and China that lead the negotiation process are refusing to take responsibility for the climate change problem yet are eager to achieve ‘consensus’ in a non-committal agreement. Yet not only is the Accord non-committal, it further continues along the path of market-based solutions to climate change. It is necessary to look for alternative agreements and actions that do not justify the commodification of the environment as a necessity for its salvation, such as the environmental groups involved in the Durban Declaration on Carbon Trading and the environmental justice movements opposing the Copenhagen negotiations.

The Durban Declaration on Carbon Trading came out of a meeting that occurred in Durban, South Africa in October 2004 of representatives from organizations and peoples’ movements. The declaration condemns carbon markets for encouraging a reliance on fossil fuels and the commodification of the biosphere, in that the commodification of carbon will lead to increased inequality through the transformation and enclosure of environments into ‘carbon dumps.’ The burden of carbon dumps will disproportionately fall to “small island states, coastal peoples, indigenous peoples, local communities, fisherfolk, women, youth, poor people, elderly and marginalized communities.”²²

It is imperative for environmentalists to reject reformist politics and attitudes such as ‘it’s better than nothing,’ as clearly, the financialization of carbon will lead to worse consequences than ‘nothing.’ Yet there is also growing opposition to carbon trading from groups such as the Durban Group, the Indigenous Environment Network, the Mobilization for Climate Justice, and Carbon Trade Watch, among others. These network of groups argue that climate change is a human rights and environmental justice issue, as those least responsible for GHG emissions will be the most effected by their impacts. Clearly there is mobilization that continues on after Copenhagen, and a growing recognition of the problem of market-based approaches to climate change. As the Yes Men hoax and the climate justice movements illustrated, not only is Canada’s position on climate change shameful and inadequate, but the whole process of international climate change negotiations is flawed with the continued reliance on a financial system that brought the world to ruin with its collapse. **R**

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Endnotes

1. United Nations Framework Convention on Climate Change (New York, 1992), <http://unfccc.int/resource/docs/convkp/conveng.pdf>. p. 1.
2. Lohmann, Larry. “When Markets are Poison,” *The Corner House*, No. 40 (2009), p. 26.
3. *Ibid.*, p. 26.
4. Lohmann, Larry. “When Markets are Poison,” *The Corner House*, No. 40 (2009), p. 26.
5. Bachram, Heidi. “Climate Fraud and Carbon Colonialism: The New Trade in Greenhouse Gases,” *Capitalism, Nature, Socialism*, Vol. 15, No. 4 (December 2004), p. 7.
6. *Ibid.*
7. Marx, Karl. *Capital Volume III*, (London: Penguin, 1991), p. 610.
8. *Ibid.*, p. 88.
9. Barry, John. “Marxism and Ecology,” in Gamble, Marsh, and Tant (eds.) *Marxism and Social Science* (Chicago: University of Illinois Press, 1999), p. 268.
10. *Ibid.* My own clarifications in parentheses.
11. Bachram, Heidi. “Climate Fraud and Carbon Colonialism,” p. 11.
12. William P. Cunningham and Mary Anne Cunningham, *Principles of Environmental Science* (3rd ed.) (New York: McGraw-Hill, 2006), p. 39.
13. “Carbon Sinks 101,” www.sinkswatch.org.
14. Bachram, Heidi. “Climate Fraud and Carbon Colonialism,” p. 11.
15. UNFCCC, “Clean Development Mechanism,” (September 2008) http://unfccc.int/kyoto_protocol/mechanisms/clean_development_mechanism/items/2718.php.
16. “Emissions Trading,” (No date) UNFCCC https://unfccc.int/kyoto_protocol/mechanisms/emissions_trading/items/2731.php.
17. Lohmann, Larry. “When Markets are Poison,” p. 52.
18. McNally, David. “From Financial Crisis to World Slump: Accumulation, Financialization, and the Global Slowdown.” *Historical Materialism* 17 (2009) 35-83, p. 48.
19. Marx, Karl. *Capital Volume III*, p. 597.
20. McNally, David. “From Financial Crisis to World Slump.”
21. Lohmann, Larry. “When Markets are Poison,” p. 52.
22. *Ibid.*, p. 2.