BETWEEN DESIRE AND ROUTINE: THE MARRIAGE BETWEEN ENVIRONMENT AND FINANCE IN CARBON MARKETS

PAPER FOR SUBMISSION TO ANTIPODE, SPECIAL ISSUE ON ‘THE “NEW” CARBON ECONOMY’

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ABSTRACT

This article contributes to emerging research focus on the social construction of carbon markets focusing on the mobilisation of desire amongst carbon market actors, and the routinization of financial practices within such markets. We focus on the Clean Development Mechanism markets. First, we look at the stories markets actors tell each other in advertising and at Carbon Expo. Second, we look at the routinization of carbon finance through the borrowing of ideas and tools from traditional financial markets. We suggest that the former animates the markets while the latter enables the markets to become ‘normalised’ for financiers. We also suggest that the two aspects however also work in tension with each other, and that the character of this tension is one way of understanding the distinctiveness of carbon markets.
'Why choose Bluenext? We are the fastest exchange. It takes only 15 minutes to settle a trade. (...) Being fast is important as the environment needs a speedy solution’

Bluenext advertisement, the world’s leading environmental trading exchange

Carbon markets have grown tremendously in a short period of time and have become a core element in the policy response to climate change. But they remain contested. Critics point among others things to the neocolonial dimension of the Clean Development Mechanism (CDM) of the Kyoto Protocol (Bachram 2004; Smith 2007; Lohmann 2005) or the creation of a regime of ‘accumulation by decarbonisation’ (Bumpus and Liverman 2008). Various critics have also highlighted the inefficiency of the mechanism (Wara and Victor 2007) or its high transactions costs (Michaelowa & Jotzo 2005).¹

However, the dynamics through which markets are constructed has received relatively little attention. Historically, carbon markets, like other environmental markets, were originally conceptualised as means to internalize costs that were created by pollution.² These economic models may, as MacKenzie claims, be performative,³ but they have little to say about how a market in practice gets created. In fact they only tend to describe and analyse the policy tools, not the market that results. This rests on an implicit assumption that the two are the same.
Most of the work on carbon markets has thus focused on the role of the State (or in the case of the EU ETS, the EU institutions) in creating those markets through regulation or the explicitly political dynamics surrounding them (Skjaerseth & Wettestad 2008; Aldy & Stavins 2008; Kosobud 2000; Victor & House 2004). Even critics of carbon markets tend to focus on the narrowly political questions surrounding carbon markets, such as the way that carbon offsets are governed (Bumpus & Liverman 2008) or the legitimacy crises they produce (Paterson forthcoming). This focus tends to reify the market as a natural social institution creation and that the only work of social construction involved is the bureaucratic process by which the policy is enacted, as represented in the CDM project cycle (see Fig. 1).

Figure 1. The CDM project cycle

Source: UNFCCC, ‘CDM Project activity cycle’, available at:

By contrast, we contend here that there is an enormous gap between a policy mechanism like the CDM and the markets which are constructed around it. There are many processes involved in the passage from one to the other. There is an embryonic literature focusing on this type of question (Callon 2009; McKenzie 2009; Knox-Hayes 2008, 2009; Lövbrand & Stripple 2008; Paterson & Stripple forthcoming), but there is still much that could be done. This type of approach involves understanding carbon markets as an *assemblage*, an approach that also enables us to have a better understanding of their social construction and the multiple actors and *dispositifs* involved in the process.

In particular, we focus here on the interaction of two elements in the assembling of carbon markets. First we inquire into this social construction by looking at the subjectivities of the actors involved in the market. The mobilization of the subjectivity of actors is a central element of the existence of markets and is achieved through an intersubjective process of a narrative creation. The cultural political economy approach offers useful insights on those subjective elements. Thrift (2001) has for example described how ‘the romance’ was important in the creation of markets. Few studies have explored questions of subjectivity in carbon markets. Paterson and Stripple (forthcoming) have for example looked at the way in which the individuals are governed through carbon practices. In this paper, we want to look more specifically at how the market is being governed by cultural practices (the desire and the routine as socially constructed).
Second, we explore the way that carbon market actors borrow from existing financial practices to make the emerging market readily intelligible. The vision of a naturally constructed market tends also to lead ultimately to the financialization of the market. Some authors argue that the use of the current financial and legal architecture creates more efficiency, because of the diminution of transaction costs (Knox-Hayes 2009). We want rather to explore how financial markets have been mobilized for carbon markets through a cultural political economy dimension that incorporates discursive and affective elements.

Carbon markets present an element of novelty in the articulation of the tension between environment and finance. That tension is not new per se but is certainly more acute in the case of carbon markets. We can, in fact, clearly see a tension between the environmental legitimation on which the existence of the market and its commodities are justified, and the financial standardisation that renders the market operational. The social construction of the market is in effect a product of both a desire to do good for the environment but also a routinization that transform carbon it into a banal commodity that can be traded with traditional socio-technical devices used in finance (phones, trading screens, derivative formulas, etc.). This desire to do good environmentally tends to obscure the profit-motive which makes the market functional; the market is thus mobilised by two competing forms of legitimacy. The financial domain is sometimes seen as a source of apolitical and technical legitimacy that can provide massive investment. The environmental legitimation can also help to produce new business subjectivities or present a more environmental side as a greenwashing technique. The debate about the
extent of the difference between financial and carbon markets remains. As many financial actors have jumped into the carbon bandwagon, the present financial crisis has also produced fears of a ‘sub-prime carbon’ (Friends of the Earth 2009). How will the marriage hold in that context?

By adopting a cultural economy approach, we want to highlight the subjective elements involved in creating markets. We thus take some insights from actor-network theory (ANT) in the way a actor-network is constituted and critically examine the process of market creation. This can be contrasted between more eco-Marxist approaches to the construction of markets (Castree, 2003; Bumpus & Liverman 2008), which situate this construction within more structuralist accounts emphasising the power of capital generally and finance more specifically. Some of these authors specifically engage ANT, criticized it for approaching the subject in an under-theorized manner that ends up adopting the definitions developed within neoclassical economics too uncritically (Fine 2005).

Eco-Marxism tends on the other hand to adopt a structuralist approach that tends to pay less attention to micro-social interactions between actors and the discourses that construct the market. In doing so they are missing some of the processes in the market dynamics: ‘While neoliberal economists tend to view market dynamics without seeing the people who create those dynamics, critics of neoliberalism should not make the same mistake’ (Robertson 2007 : 519). If we want to look at what Bumpus and Liverman call
'accumulation by decarbonisation’ (Bumpus and Liverman 2008), then we must also look at the way those markets are constructed.

The mechanisms that render possible the markets are diverse. Robertson (2007) has for example critically examined the process of price setting in the commodification of wetlands and water quality and concludes that the economic models and government regulation gives little guidance to the day-to-day functioning of the market. The markets actors have thus must adopt tactics to settle for a price. Knorr-Cetina and Bruegger (2003) have also looked at the role of devices in traders’ exchange market. Technology has in this case an important role in changing, from networks to the screen, the way prices are discovered or given. We want in our case to look at discursive and auto-representation of actors through the mobilising of desire and the borrowing from financial practices.

**MOBILISING DESIRE**

In this section, we focus on how carbon markets are mobilised through a sort of affective desire. Useful here is what might, following Nigel Thrift (2005), be called the ‘cultural circuit of carbon markets’. These have been central to the generation of an orientation towards such markets which is not simply motivated by calculations of profit and risk, but is mobilised by a sort of liminal energy channelling through the boosters of these markets. It is definitely, as Thrift would elsewhere put it, the ‘romance, not the finance’ which makes carbon markets go round.
Attending an event like Carbon Expo, the ‘Global Carbon Market Fair & Conference’, where around 3000 carbon traders, investors, lawyers, project developers, market infrastructure developers, consultants, and policy-makers meet annually, what is striking is the both the energy and enthusiasm for carbon markets which animate their proponents and participants, and at the same time the occasional anxiety that the whole rapid development of the market may be sustained largely by that energy and enthusiasm. It is an event that operates in part through a collective re-affirmation of the simultaneous environmental beneficence and commercial promise of carbon markets, and a validation of the inventiveness of the market actors in precisely their skill in bricolage, their ability to put together different actors, techniques and products together in myriad ways to manufacture value. It is at the same time an immense networking site, where actors involved in carbon markets do deals and construct relationships on which later deals may be based. Presentations frequently have the feel of a marketing spiel, except that the marketing is for the market as a whole rather than for any specific product or firm, and where the audience is already persuaded.

The market actors are engaged in an intersubjective conceptualisation and performance of the market. Social networks are key in the production of this market. The Expo is an opportunity to consolidate the business culture of carbon by demonstrating how businesspeople can produce changes in the overall social and political response to climate change. It has also an interesting sociological dimension of creating an hybrid culture of environmentalists that have entered the market (the ‘green entrepreneurs’). The identity
of market actors is thus shaped by this reinforcing event and the associated discourse on the environmental moral high ground of acting to fight climate change.

The Expo is also an opportunity for actors to reassess the existence of the market (‘the market is there’, ‘a vibrant speculative market’) and to profess their faith in the market. The development of market products (registries, software, risk hedging, financial products, standards, rating agencies) might look somewhat inflated given some of the uncertainties of the markets, but the majority of the participants are convinced that the market can only grow.

Carbon Expo is also the site where contemporary issues in market development are discussed. In the last two years, these have included the delays in the CDM approval process, which are in part the result of the CDM growing much more rapidly than predicted, but are also used by market actors to put pressure on regulatory agencies to ‘streamline’ processes. There is also a strong desire to expand the market in others sectors such as LULUCF (land use, land change and forestry), aviation and maritime transport. The need for innovation is constantly stressed as the regulatory markets get a lot of inputs and types of projects from the voluntary market (Ecosystem Marketplace & New Carbon Finance 2009). Even if there are some disagreements or differences among the companies involved (low vs big emitters, multinational corporations vs small start-ups), there is an important process of consensus-building that try to use the weight of the market as a political tool.
The carbon market ‘experiment’ is also a form of hybridisation between climate change legitimacy and market opportunity (Matthews & Paterson 2005). Even if the social or environmental dimensions of climate change receives little attention, they are used as a form of legitimising arguments for the expansion of the market. The element of regulatory uncertainty is thus regularly discussed at Carbon Expo and elsewhere as one of the factors hindering the development of the market.

Thrift (forthcoming) argues that we are currently generally in a period where capitalism is generating value and growth through tapping particular cultural veins:

That vein is what I will call the technology of cultural composition, in that it involves charging up the semiotic sphere in order to create and tap bodies of passion which display talent, although, as we shall see, what counts as the sign has changed in nature as the process of composition has become widespread. The result is clear at least: a vast man-made imagination machine, but a machine bent on directing imaginations in particular ways by multiplying promise and boosting potentiality.

This seems to us an apt interpretation of driving forces in carbon market development. Carbon markets actors display precisely this passion on which their work depends. Carbon markets depend not only on a set of normative value-orientations towards climate change on the one hand and broader questions of sustainable development on the other (especially in the offset markets), but more generally on an enthusiasm precisely for the novelty of such markets. Innovation – or ‘imaginnovation’ in Thrift’s terms (referring not
so much to innovation arising out of imagination as innovations which attempt to foster an imaginative response in producers and consumers) – is an end in itself for many in the carbon markets: a new type of project, a new methodology, a new means of selling CERs, a new market coming on stream, constant reflection on the design of markets. In fact, for many, this is far more important as a driving orientation than a set of values around climate change.

Nevertheless, tapping the passions for climate change and sustainable development is central in constructing demand in these markets – the marketing of offsetting firms is clearly couched in such terms. Marketing offsets invokes and helps to construct a series of consumer subjectivities, at the most general level a guilt around their emissions levels, but transformed into a motivation to ‘do good’ by investing in offset projects, especially in the south, sometimes with specific combined ends such as deforestation (forestry projects make up about 33% of the voluntary market as opposed to under 1% of the CDM market, see Capoor & Ambrosi 2008: 29). And the initial guilt motivation can be channelled in particular directions, as in the notion of ‘going on a low carbon diet’, which enables carbon marketers to tap into specific sorts of orientations towards consumption, those motivated by the extreme precision of calculation (carbon and carbs), the relationship between desire, denial, and the ‘treat’, and so on (see Paterson and Stripple forthcoming; Harrington 2008; Gershon 2006).

For the bulk of demand (particularly in the voluntary markets but also in the EU ETS-led CDM market – where firms both meet formal obligations under the EU ETS but also use
CDM purchases for marketing purposes), there is a more complex semiotic chain. Offset
firms tap into the desire amongst purchasing firms (the vast majority of demand in the
voluntary markets is corporate not individual) not only at the level of individual
managers own subjectivities, but in their desire for ‘green PR’. The pursuit of carbon
offsets has become a strategy to motivate both employees and consumers, through
notions such as carbon neutrality (HSBC has perhaps been the most high profile firm
here). This is a means by which they can then transfer the passion of their consumers into
a marketing opportunity, mediated or facilitated by the offset markets which operate
simultaneously, by channelling the passions of consumers for climate change into
marketable products. For financial firms like HSBC, it then can also stimulate an interest
in becoming players in the carbon markets themselves; HSBC decided to do much of its
carbon neutrality project ‘in house’, in order to create a capacity to engage in carbon
trading and investment.

A brief look at advertising within the carbon markets is useful at this point. What is
striking is that much of this advertising focuses on the normativity of climate change
rather than the opportunity of profits. This is surprising given the audience for this
advertising is not a general public. They are rather aimed at other firms in the carbon
markets – verifiers advertising to project developers, lawyers advertising to carbon
finance firms, and so on – not to a general audience. This thus represents one way into
looking at how carbon market actors talk to each other.
Much of this publicity material contains simple banal images such as might be expected. First are images of ‘nature’ – animals, flowers, trees, mountains, glaciers and icebergs. Some of these are climate-specific, especially the frequent deployment of ice looking like it might be melting. Others are more generic. In one (produced by the Ecuadorian DNA), indigenous peoples are included as ‘nature’, representing a long-standing trope in colonial imagery (see figure 2).

FIGURE 2 – Ecuadorian DNA

Second, there are images of various technologies associated with ‘clean development’ – especially wind turbines and solar cells, but also again trees (these get figured as both nature and technology, depending on context). At times are images of more conventional factories with smokestacks, representing ‘dirty’ development which needs carbon finance to help cleanse it.

These banal images do some simple work. They establish the basic legitimacy of carbon markets and their various practices. They help to produce or mobilise one element in the desire animating carbon markets – that of the normativity of ‘saving the planet’. Again, it
is interesting to note the ubiquity of these sorts of images in the context of ads aimed exclusively at the actors involved in the carbon markets themselves, not at ‘consumers’ in the conventional sense.

But some of these images of ‘nature’ go beyond the banal, and start to do more complex semiotic work. These tend to be focused around an image of the planet as a whole. In particular, they frequently conjure up images of security – of the planet as something to be secured. This is most obvious in this image from BlueNext, the exchange established by NYSE Euronext and Caisse des Dépôts (figure 3). This ad deploys the image of the earth cradled in the ‘safe hands’ of the white businessman. The notion that we live now in the anthropocene (Dalby 2007) is ably illustrated here – while the man’s hands work to make the earth safe, it is nevertheless clear that it is he who is now dominant in shaping earth’s future.

FIGURE 3 – BlueNext ‘be in safe hands’.
Other ads pursue similar images. An ad by APX, ‘leading infrastructure provider’ for carbon markets – that is, they work on registries, inventories, management systems, which underpin specific sorts of markets – similarly shows the earth as an entire system, but the security metaphor is more subtle. In that ad, the earth is figured in a drop of water on a leaf, conveying the image that the earth is there in the smallest object, by extension is reflected in every activity, and requires intimate management to be secured. The slogan under APX’s logo is ‘Energy, Environment, Market Integrity’, and the text in the ad focuses on ‘management’ throughout, important in sustaining this signification.

Security is pursued in carbon market marketing in other simpler contexts. Most obvious is in the name of some firms – EcoSecurities being the obvious one, which gives us the
double meaning of security in environmental terms, and securities as financial
ingredients. But security is also closely linked to reliability or trustworthiness in adverts
in the carbon market. This is clearly the case in the APX ad, where integrity – ‘keeping
things whole’ – is the means of indicating that the company is serious in pursuing climate
security. Various other means are deployed to create images of trust. For auditing
company SGS\(^2\) (which verifies around 12% of all CERs in the CDM system) it is about
public displays of ‘commitment’ in one ad which displays a lizard with huge frill putting
on just such a display. For carbonflow (manufacture of software for managing carbon
investment projects), there is a simple claim that ‘trusted carbon projects run on
carbonflow’, alongside the usual banal images of wind turbine, forest, and solar cell. In
one ad for Barclays Capital (the biggest player trading in the EU ETS) ad, one hand is
passing a plant to another, with a hedge in the background and the by-line underneath
‘getting creative in carbon’. There are two possible readings of this ad. On the one hand it
could be an image of two hands holding while collectively carrying the plant symbolising
‘nature’. This is odd for various reasons – nature is symbolised by a pot plant, hardly the
‘wild nature’ normally to be protected. The plant appears to be some sort of carnation (a
highly domesticated plant descended from the wild pinks), and (along with the ivy hedge
behind) is a surreal blue colour, to match the Barclays brand colour. An alternative
reading here is that this is not hand-holding while protecting the plant, but transferring
the plant from one to another, a reading perhaps more coherent with the ‘getting creative
with carbon’ slogan. For South Pole Carbon Asset Management, trustworthiness is
pursued by a different image of the planet, through a world map, with the land in gold (a

\(^2\) In July 2007, they were holding 12% of the market share validations (Schneider 2007)
colour signifying value, but also that of the Gold Standard, which South Pole uses exclusively in both CDM and voluntary market projects), displaying the various sites where South Pole is present through its projects, to convey the image of the company as widely present. It conjures up references to imperial pasts, where the world was managed from central locations (here, their office in Zürich, at the centre of the map), and where maps played a role in both representing and organising imperial ventures.

Security and reliability operate fairly obviously as themes in advertising in the carbon market. They enable the emphasis on pursuing environmental goals. But they also enable carbon market actors to present themselves (it’s worth reminding ourselves that this is to each other, not to the outside world) in terms of safety, reliability. In a context where the legitimacy both of financial actors in general, given the crisis which started in 2007, with its origins in various ‘creative’ financial practices, and of carbon markets, with various scandals about carbon offset projects, and more recently tax fraud by carbon traders (Paterson forthcoming; Reuters 20 August 2009), the emphasis on such themes is striking, and we would interpret in part as efforts to shore up the legitimacy of carbon markets.

But security and reliability are not enough; carbon market actors must be motivated. In these ads at least, however, this is not principally done through the desire for performance. As suggested above, the most common way is through the standard normative arguments about climate change. The way however that performance operates is through a link to this, specifically through the theme of speed. As BlueNext puts it in
their brochure, ‘being fast is important as the environment needs a speedy solution’. This ad by SGS exemplifies this theme (figure 4). The snow leopard (whose habitat is of course threatened by climate change) is taken to be exhorting us to speed up the verification process. The leopard is perhaps also deployed to represent the threat of climate change itself – it may say please but we will experience nature’s violence if we fail on climate change. On the back, SGS states ‘faster, more accurate emissions verification is better for business and better for the planet’.

Figure 4 – SGS speed up

All these ads can be understood as general attempts to motivate subjects both with regard to the services of particular firms, but also in relation to carbon markets themselves. One last ad, for Climate Change Capital, a carbon finance firm established by climate change lawyer and former NGO-activist-cum-diplomat for small island states James Cameron, makes this explicit. Its slogan is ‘creating wealth worth having’, and like many such slogans, is best understood through its negation. All this other wealth is not worth having, it implies. In other words, wealth (as money, capital, etc) is to be fundamentally
distinguished from value, or worth. The point of carbon finance is to close that gap – to create wealth that actually has value.

**BORROWING FINANCIAL PRACTICES**

So carbon markets are mobilised in part through the intersubjective production of desire. But desire is not enough. Alongside desire there must be technical knowledge, and more importantly routinized practice. This is partly because of the ideological necessity for financiers to understand their practice in terms of the tenets of orthodox finance theory – as ‘rational economic man’\(^{13}\) – but more importantly so that desire can be efficiently channelled. This paradoxical relationship between desire and economic rationality has been extremely effective in mobilising carbon markets.

The ads do some of this work. They are, by comparison with most advertising, very text heavy, conveying technical information about the financial or other services being offered. But much of this routinization, or even banalization, of carbon markets, has occurred through borrowings from other areas of financial activity. We present three examples of this borrowing here, although many others could be identified.

The first is the development of a credit rating agency in carbon markets. Credit rating agencies have become key players in many financial markets, providing quick indications of the judgment of the agency as to the credit-worthiness of firms, governments, or other institutions, and simplifying investment and lending decisions for financiers (see Sinclair
They also produce a form of simplified market structure, with access to capital and the quality of capital (interest rates, loan conditions, repayment times, etc), standardising based on the rating given by Standard & Poors or Moodies. Within carbon markets, IDEACarbon built on this by developing a credit rating agency for the carbon markets, now called simply the Carbon Rating Agency. The rating system is borrowed directly from those existing in other financial markets, with ratings from AAA down to D. The ratings are intended to provide investors with a set of third party expert judgements about the riskiness of different types of CDM or JI projects. As a consequence, business models underpinning projects as well as overall firm strategies would start to coalesce around a limited number of types (see figure 5 below); these centre on four different types of risk to do with getting projects through the CDM cycle or selling on CERs in the secondary market. This centres around the relationship between risk and reward – investing earlier in a project cycle means greater potential reward, as the investment occurs when price is low, realising gains in the secondary CER market where prices are higher, but entails higher risk, to do with project failure but also regulatory risk (the CDM approval process). The project is only young (starting in early 2008) and cannot be said to have achieved these results but the intent is clearly to shape what the market looks like. The coalescing of CER prices around 4 specific types of risk is a construction of the market rather than a simple reflection of a ‘naturally existing’ market logic. As the Agency puts it, the aim of credit rating is to ‘help establish a clearer relationship between the price of carbon and the delivery risk, thus helping the carbon market to mature’.
Figure 5: IDEACarbon credit ratings

A CDM project is at validation and plans to request registration by the end of 2008. How much would you currently pay per CER for the 2008-2012 strip with the following characteristics (all payment on delivery):

(a) The validation, registration and volume risk are taken by the buyer
(b) As (a), but the seller takes the validation risk
(c) As (b), but the seller takes the registration risk
(d) As (c), but the seller takes the volume risk

Results revealed the following prices for the four different scenarios:

<table>
<thead>
<tr>
<th>Results (€)</th>
<th>Scen. (a)</th>
<th>Scen. (b)</th>
<th>Scen. (c)</th>
<th>Scen. (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max.</td>
<td>9.00</td>
<td>11.00</td>
<td>12.00</td>
<td>15.50</td>
</tr>
<tr>
<td>Avg.</td>
<td>6.30</td>
<td>8.63</td>
<td>9.50</td>
<td>13.38</td>
</tr>
<tr>
<td>Min.</td>
<td>0.00</td>
<td>4.00</td>
<td>5.00</td>
<td>10.00</td>
</tr>
</tbody>
</table>

Source: IDEACarbon, pCER Survey results, week 2. Available at:


The second illustrates the range of financial derivative instruments in carbon markets, borrowed directly from such instruments in other financial markets. A booklet produced by Barclays Capital, ‘Emissions Trading at Barclays Capital’ (Barclays Capital 2008). In that document, alongside a very detailed analysis of shifts in prices for European Union Allowances (EUAs) and the relationship between EUA prices and CER prices, and general marketing of their carbon market services, is a detailed account of the sorts of ‘risk management structures’ available to clients operating in carbon markets, in particular in those markets ‘fully commodified’. These include descriptions of the full range of derivative products (options, futures, swaps), but then further detail on several of
them. For example, there is a discussion of the means of transforming CERs into EUAs, both the means Barclays Capital proposes to do it (a straightforward swap with a €7.00 cash payment reflecting, although of course cementing, the rough price differential between the two), as well as the strategies to adopt given the price difference between CERs and EUAs, the flat ‘forward curve’ for CER prices, and that these allowances can be banked between different years in the schemes operation. Thus the ‘2008 EUA – 2012 CER optimal swap’ is to buy 2012 CERs in 2008, and wait until 2012 to transform them into EUAs. Barclays Capital also outlines what they call a ‘zero-cost collar structure’. This is designed to enable clients to hedge against price movements (up or down) without paying a premium, and involves a structured relationship between a call option by the client and a put option by Barclays Capital (see figure 6). The document outlines a number of other such arrangements. Our point is not to get too much into the details of any particular scheme, but to draw out a more general point. These models are on the one hand direct borrowings from existing financial markets, adapted to particularities of emissions trading systems (in particular the character of permits as property rights, the requirement to surrender permits at specific dates, and the linking mechanism between the EU ETS and the CDM), and on the other actively construct the market that emissions trading proponents suggest exists ‘naturally’.

Figure 6: Barclays Capital’s ‘zero-cost collar structure’
A third example comes from the attempt to explain carbon markets through the medium of a ‘for dummies’ volume. ‘Environmental commodification for dummies’ is written for financial actors that have an interest in environmental markets. It stresses the possibility of profits in this sector and tries to present the market with simplicity, insisting on the importance of the integrity in the market. It begins by making the business case for the adopting environmentally-friendly behaviour. ‘Going green used to be a commitment that carried a higher price tag, but that’s not always the case anymore, and in fact, there’s money to be made by being green’ (APX 2008: 1). It then highlights the ‘real value’ in such commodities even if they may seem intangible; ‘Even if you can’t reach out and touch them or taste them, environmental commodities are nevertheless real. They have real value, so they can be bought and sold’ (APX 2008: 6). The potential of high value
for the carbon credits is omnipresent and constructed as a normal process for businesses ‘from green to gold’ (APX 2008: 36). The legitimising dimension of the environment is also always present: ‘Plenty of organizations are motivated on their own by the desire to “do the right thing” and at the same time, there’s an increasing desire to also make things happen from a regulatory perspective’ (APX 2008: 7). A special importance is put on the integrity of the market as the company is involved in the registry business and tries to sell the idea of serial numbers for environmental commodities. It thus constructs carbon and other environmental commodities as any other ‘product’ that has to be tracked and inventoried. By getting financiers to ‘Focusing on the plumbing and piping’ (APX 2008: 25), it serves to help make carbon markets familiar and manageable to them.

CONCLUSION

Together, these two aspects of the construction of carbon markets can be captured well by two points made very effectively by Nigel Thrift in relation to the ‘new economy’. We put new economy is put in quotation marks because it is understood by Thrift as a discourse about the transformation of the economy through ICT rather than the claims by boosters of this economy as ‘real’ change, although the discourse then itself mobilises changes in the ‘real’ economy.

First, Thrift suggests that ‘Effective social movements need to create background, a taken-for-granted world which, if you like, assumes the new economy’s assumptions’ (Thrift 2005: 117). This seems to us a useful analysis of the process occurring as carbon
markets have developed. One of the effects of the establishment of this liminal energy around carbon markets, combined with their normalisation through the borrowing of financial practices, is that carbon markets have become common sense, the ‘taken-for-granted world’.

Second is the basic point in the title of Thrift’s article – ‘it’s the romance, not the finance …’. In practice, in his article, this framing becomes ‘it’s the romance of the finance’. But the point is nevertheless apposite. From around 1997 onwards, carbon markets became romanticised by their protagonists. They became understood as a heroic, romantic effort to marry climate mitigation and economic growth. Opposition to carbon markets became understood as opposition to action on climate change itself. This romance has continued to date. Interviewing carbon market actors, or attending events such as Carbon Expo or IETA side events at a UNFCCC COP, one is struck by the affective economy of such markets, that they are driven and sustained as much by an emotional investment in carbon trading as in narrowly financial assessments of investment opportunities and strategies. Indeed, following Thrift’s logic, it is this emotional investment, this romance, which creates the energies to engage in more ‘cold’, ‘rational’, investment strategies. In conversations with carbon traders, occasionally they get a moment of anomie where they worry that the whole thing is sustained solely by their enthusiasm, which is simultaneously for the money making opportunities and for the contribution to greenhouse mitigation (and frequently, for the development benefits of things like CDM or voluntary market projects).
We have tried here to contribute to the emerging studies focusing on the social and cultural construction of carbon markets. We have tried to suggest that an important element in this construction is through a relationship between desire and routinization. The desire to do good and the routinization of financial practices applied to the carbon markets are thus vital elements of the market. But this relationship is also in some sort of tension. The legitimising dimension of environment in the context of a profit-making business is constantly stressed at the same time that carbon is being banalized as a simple commodity. As a consequence, the door is opened to the critiques of carbon markets that suggest they are simply a form of greenwash, a cooptation of rhetoric about emissions reduction which in practice do nothing to achieve such cuts. But given the narratives that market actors tell about their own motivation (as evidenced in the advertising discussed above and at events like Carbon Expo), this tension plays out not only on the level of overt political conflict between proponents and opponents of carbon markets, but also within the identities of market actors themselves. The tension can thus be expected to play a role in how such actors construct markets on a daily basis – there are limits to the cognitive dissonance which would be produced by entirely ignoring the goal of emissions reductions while constantly telling a story about such reductions.
Bibliography


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1 See Paterson (forthcoming) on the contested legitimacy of carbon markets.

2 Economic models for property rights on pollution advocated by different economics dates back to Coase (1960) and have been applied more recently in the case of carbon by Barrett et al. (1992).

3 Mackenzie (2006) has for example demonstrated the performative character of academic financial models in the normalisation of financial practices.

4 In the CDM, GHG reductions are conceived of via a series of stages: design, validation/registration, monitoring, verification/certification and issuance. Each stage involves different actors: project participants, Designated Operational Entities (DOE), Designated National Authorities (DNA), the CDM’s Executive Board and Methodology Panel. First, a participant (usually the project developer) proposes a project. They have to gain the consent of the DNA in the host country. The PDD is developed and must be approved by a DOE and then registered with the CDM Executive Board. The project must either use existing approved methodologies (for making claims about emissions reductions) or go through a separate process of first getting the methodology approved by the CDM Methodology Panel. After the project is registered and put into operation, the emissions reductions must be verified (by a different DOE to those who approved the design document) before the CDM EB will award credits (Certified Emissions Reductions, or CERs).

5 Ecosecurities, one of the main buyers of CERs has been bought by JP Morgan (Reuters 20 September 2009).

6 We have each been to one Carbon Expo. Paterson attended in 2008; Descheneau in 2009. These were to the largest, based in Europe; there are also Carbon Expo North America and Carbon Expo Asia conferences at other points in the year. Methodologically, the research has involved extensive observation and informal conversations with participants.

7 Indeed, the desire to be ‘cool’ on the part of carbon market actors sometimes attains comic proportions. One workshop at the 2008 Expo was entitled ‘Pimp my ERPA’, referring to the MTV show ‘Pimp my ride’. In this case, the painfully self-aware title masked a dull talk about the sorts of problems and pitfalls
involved in legal negotiations over the form of the Emissions Reductions Purchase Agreement (ERPA), the basic contract between a CDM project developer and an investor.

8 A good part of the discussions and presentations have been directed toward the possible expansion of markets in the US and Australia among others and the eventual profit opportunities.

9 This analysis draws on material collected at Carbon Expo by the authors. It is supplemented by some material from company websites. We chose a selection from different types of carbon market actors – financiers, auditors, governments agencies acting as DNAs within the CDM process – to try to get a roughly representative sample of advertising within the carbon markets. We focused on those pieces of publicity which contained striking images or sharp slogans, since these are likely to have the most semiotic effect on audiences and thus contain the themes through which carbon market actors seek to motivate audiences and themselves. We don’t claim that this provides the basis for an exhaustive analysis; that would be beyond the scope of this paper. But we do claim that the themes we identify are reasonably representative of those which appeared in the ads we have examined. We only produce a selection here visually, for reasons of space, although we describe more images than we can show.

10 There are of course limits in using adverts to demonstrate processes of subject formation, and the evidence this gives us should be read in conjunction with the other evidence we provide here. Specifically regarding our claim that this is part of how carbon market actors talk to each other, and our surprise about the environmental content of the ads, we would need to know more about the production of the adverts to sustain the claim more forcefully. It may be that these images were selected by ad agencies external to carbon markets with little input from the firms themselves, which is a qualification about the interpretation we make here. We are grateful to Virginia Haufler for pointing this limit out.

11 It is notable that of the ads surveyed, only Barclays Capital makes any reference to the creativity that finance has come to be associated with.

12 SGS has, in the face principally of Robert Dornau, been at the forefront of pressure by IETA on the CDM Executive Board to speed up the approval process. Of course the auditing firms have distinct interests from project developers or traders, since their credibility in the process depends on their capacity to make claims about the ‘environmental integrity’ of the projects, while the other firms care most about speed itself. Thus
SGS markets its services to carbon traders and investors using the speed motif, while positioning the auditors as a sector in terms of integrity and reliability since this is their overall market niche.

13 To reflect the changing paradigm of the techno-economic networks markets, Callon (2007) refer to the homo economicus 2.0 that is part of the network as opposed to the former taylorist economic man.


16 We mean this here in the sense that financiers use the term – traders at Barclays Capital or CantorCO2e can quickly observe price movements for different carbon asset classes and engage in arbitrage on the basis of their expectations of those movements in the short term. This is in sharp contrast to the usage of the term commodification in the social sciences, where, we tend to refer to commodification as referring to any process of production for market exchange, mostly going back to either Marx or Polanyi. Financiers refer to a product as commodified only if it can be represented as something totally standardised and thus comparable to each other by quick visual signals (the classical TV screens we see of city traders) displaying price movements between different products. In other words, only when they are fully commensurable are products commodities.

17 Under the EU ETS, a company must have enough EUAs to cover its total emissions, for each year of the particular phase of the ETS. But it is allowed to transform CERs (or ERUs, the unit in the Joint Implementation mechanism in Kyoto, although the CDM has become much the bigger of the two institutions) into EUAs.