

## The Rise Of The Carbon Fat Cats

The 'carbon market' – trading in an invisible gas which cannot be used – has involved the redistribution of resources to unproductive green pursuits and the creation of a vast bureaucracy. Let's bring it down before it gets any bigger.

*by Josie Appleton*

Adam Smith and Karl Marx disagreed about many things, but they would surely have concurred that the very idea of a 'carbon market' is bonkers. Carbon dioxide is an invisible gas and a naturally occurring substance. When it is produced as a waste product from another process, like burning fossil fuel, it cannot be used for anything else. How on earth could carbon dioxide, as waste product, have a value and be subject to exchange? How could it become the gaseous analogue to money or gold, an atmospheric 'universal equivalent' into which other gases can be converted?

The carbon market in 2007 was worth \$64 billion: how could this be? A market is supposed to be the exchange of products that are the result of somebody's work, for the satisfaction of somebody else's needs. Smith stated that the value of the product is proportional to the amount of work expended in it: 'The real price of everything', he wrote in the *Wealth of Nations*, 'is the toil and trouble of acquiring it' <sup>(1)</sup>. This goes for markets in bread or tables, iTunes or diamonds, no matter what nature the 'work' or how frivolous the 'need'. But a market in carbon: *quoi?*

Quietly and without fuss, all the rules of classical economics are being torn up – in a way that could be very foolish indeed. As we approach the deal-making at the UN conference on climate change at Copenhagen, it is worth thinking about exactly what we are doing here.

### What is a carbon market?

At present, there are several fragmentary carbon markets. The biggest by far is the European Emissions Trading Scheme, tied to EU-wide carbon targets (worth \$50 billion in 2007) <sup>(2)</sup>; then the much smaller Australian New South Wales Greenhouse Gas Abatement Scheme, and voluntary Chicago Climate Exchange. What these markets trade is not carbon dioxide itself, but carbon dioxide emissions reductions – either unused carbon credits, or certified ways in which carbon dioxide production has been reduced.

In addition to these, there are project-based carbon markets – under the headings of 'Joint Implementation' (JI) or 'Clean Development Mechanism' (CDM). These were created under the Kyoto Protocol of 1997, and essentially allow industrialised countries to invest in a carbon-reducing project elsewhere, in order to meet their carbon targets (JI is investment within Kyoto countries; CDM invests in developing countries).

This is nothing compared to the plans of green economists – the most megalomaniac of whom must be Britain's Lord Nicholas Stern of Brentford, currently issuing thoughts for the day on everything ranging from world diet (everyone should go vegetarian) to the desired world total carbon emissions two generations' hence (20 gigatonnes by 2050) <sup>(3)</sup>. Stern envisages a global carbon market – which encompasses world economic production and consumption, as well as the 'work' of trees in removing carbon dioxide from the atmosphere – and hopes that Copenhagen will take us a step in that direction.

(Valuing trees' photosynthetic processes might sound a bit mad, but Australia has shown that this can be done with its set-up of 'carbon rights', which allow the owner of a plot of land to have 'rights' over carbon-removing and producing capacity <sup>(4)</sup>. So if you plant more trees, your investment goes up – if you chop down trees or they burn down in a bush fire, the carbon rights investment goes up in flames, too.)

Stern, of course, was the guru who gave the economic justification for carbon emissions reductions, spelling out in his 700-page UK government report in October 2006 that it would be well worth it to sacrifice one per cent of world GDP to reduce carbon emissions, because the risk of non-reduction would be consumption plummeting by up to 20 per cent <sup>(5)</sup>. Every subsequent alteration in Stern's calculations has been announced with grave fanfare, as if expecting economics ministers of the world to hurriedly adjust their budgets in line with his latest thinking. In June 2008, for example, he revised his estimate to two per cent of world GDP that should be sacrificed in carbon mitigation (apparently this is still a bargain).

Now Stern has condensed and revised his thoughts in the book, *Blueprint for a Safer Planet*. Of all economists, Stern has done the most to theorise the idea of carbon value, and his theories are already being put into practice in the UK government's carbon budgets, under the 2008 Climate Change Bill. The headaches for UK civil servants trying to put Stern's kooky theories into practice should act as a warning against any further expansion of these ideas.

### **The fantasy of carbon value**

Stern defines carbon value (or the cost of carbon) as 'embodying in the price of a good not only the cost of the raw materials, labour, capital and so on used in its production, but also the cost of the damages from the emissions produced in the consumption or production of that good' <sup>(6)</sup>. At base, carbon value is a negative value, which expresses the damage done by industrial activity.

This is also called the 'marginal social cost' (MSC), or the 'shadow price of carbon'. Stern claims that carbon value captures the 'true costs' of productive activity:

'At the heart of economic policy must be the recognition that the emission of greenhouse gases is a market failure. When we emit greenhouse gases we damage the prospects for others and, unless appropriate policy is in place, we do not bear the costs of the damage. Markets then fail in the sense that their main coordinating mechanism – prices – gives the wrong signals. That is, prices... do not reflect the true cost to society of producing and using those goods.'<sup>(7)</sup>

These costs of CO<sub>2</sub> production, apparently, include 'severe dislocation, with rising sea levels, a greater frequency of intense storms and hurricanes...', which inflict damage on the earth's climate, on people, and on future generations <sup>(8)</sup>.

In an ideal economy, according to Stern, the value of carbon is equal to the marginal social cost (MSC), which is also equal to what is termed the 'marginal abatement cost' (MAC: the cost of reducing carbon emissions, by shifting to low-carbon energy or carbon capture/storage). That is, in a rational economy, people would pay the same for the right to produce carbon – and continue using fossil fuels – as it would cost them to switch to another technology; which is also equivalent to the damage inflicted by their carbon production. Industry will exploit all possible low-carbon technologies up until the point where their costs are balanced out by the price of carbon. Stern represents this reasoning in the following equation:

### **MSC=MAC=CO<sub>2</sub> price**

So the whole thing hangs on the marginal social cost (MSC), the damage done by carbon production. Yet there is a problem: it turns out that MSC is a phantasm. Stern basically admits that MSC, the supposed crux of and basis for all carbon value, cannot be calculated. He says there is a 'very large possible range for the MSC' <sup>(9)</sup>, and that because of the 'huge range of estimates for the SCC [the social cost of carbon]' this 'means that the SCC is a very weak and unreliable peg for policy.'

Indeed, in *Why We Disagree About Climate Change*, Mike Hulme notes the wild variation in estimates for the social cost of carbon, ranging from \$0 to \$2,000 per tonne. Hulme observes that

the mainstream debate in UK circles focuses on whether it is \$14 or \$140 per tonne (which is vast - imagine if people couldn't agree the price of gold within a factor of 10) <sup>(10)</sup>.

So having admitted that MSC and MAC are so vague as to be unworkable, in the book Stern uses an 'alternative route', which 'considers the appropriate targets from the perspective of risk and costs, and seeks out the cheapest method, generally using a price mechanism, of reaching the targets' <sup>(11)</sup>.

UK civil servants, after banging their heads against the wall trying to implement Stern's damage-based carbon value, have now also taken this route. In July 2009, the UK government produced a new report saying that it would abandon valuation of carbon damage as a basis for carbon value – which, following Stern's advice, it had been unsuccessfully trying to implement – and shift instead to the 'cost of mitigation' <sup>(12)</sup>.

That is, the value of carbon is that which persuades industry to meet the carbon target. Carbon price is the price that would persuade people to switch to low-carbon technology by the degree necessary to meet the target.

It is the bureaucratic target – and the target alone – that is actually the rationale and logic for the whole enterprise of establishing carbon value. For the UK government, its target is to reduce carbon emissions by 60 per cent by 2050, with five-year intermediary 'carbon budgets', and it is these bureaucratically invented targets that determine the price of carbon.

### **Carbon value: a bureaucratic invention**

The truth is that carbon is a new, strange kind of value. Most values of commodities develop spontaneously out of the exchanges of sellers who have a product, and buyers who want it. The state may tweak this, or channel it, but the foundation of market value is civil society.

Carbon value, by contrast, is *value created by bureaucratic measures*. The carbon market is not based in the needs of buyers and the productive capabilities of sellers, and has no spontaneous logic or levelling principle. Instead, it is completely created and structured from above.

If there were no carbon legislation, there would be no carbon price. In *The Politics of Climate Change*, Anthony Giddens observed that the price of carbon fluctuates like no other commodity: early on in the European Emissions Trading Scheme, it started out at €31 per tonne, yet 'later it dropped so dramatically that it was worth .001 per cent of that sum' (when it became clear that too many carbon credits had been issued and there was a massive glut in the market) <sup>(13)</sup>. A bureaucratic miscalculation leads to total collapse.

Economic analysts recognise that carbon value is directly dependent on regulation. *State and Trends of the Carbon Market 2008*, a report by the World Bank, notes that the overwhelming majority of the carbon market is 'compliance driven', related to the EU targets on carbon reduction. The voluntary market in 2007 was \$265million, out of total market of \$64billion <sup>(14)</sup>, and the non-EU market is a tiny fraction of EU <sup>(15)</sup>. The report states: 'In a market where the "production" of the asset or commodity is not in the control of market players, but rather in the hand of a regulator, the risk of regulatory delay must be treated as a core element of commercial risk' <sup>(16)</sup>. Most importantly, the World Bank document observes:

'The carbon market is correlated with energy markets, but it differs in important ways from other booming commodity markets, notably because there is *no natural demand* for carbon reductions. Long-term expectations of future policy and regulation are the primary source of the carbon market's *demand* and action by regulators determine much of the available supply in terms of allocation of sufficient allowances as well as the issuance of carbon credits.' <sup>(17)</sup>

\ The European carbon market is in effect being created by bureaucrats, step by step, and each planned stage involves a lower allocation of carbon, an extension of the market to new areas, and

an increase in carbon credit auctioning. The future of the market is linked to the various pieces of legislation anticipated in the different 'phases' <sup>(18)</sup>.

There will be no natural development of a world carbon market; it has to be forced, through legislative action. Currently, says the World Bank, there is 'a patchwork of currencies, with limited convertibility', each of which relates to a 'specific legislative situation' <sup>(19)</sup>. The uncertainty about future legislation has meant the growth of a large secondary market – guaranteed carbon price – which has 'largely decoupled' from the main carbon price, and is about €10 per tonne higher <sup>(20)</sup>.

### **A tax on production**

At base, carbon markets are a state-sanctioned permission to produce. They are the requirement that any industry wanting to produce anything must go through a system of bureaucratic sanction. If we look at the real-world impact of the carbon market, it is quite clear that this system could only have come out of the sclerotic, over-ripe economies of the European Union.

Carbon credits act as a tax or check on industrial activity – but by the same accounts, they are a compensation for economic stasis. They in effect invert the laws of economics, and make growth appear as a cost, and slowdown as a gain. In this topsy-turvy world of the carbon market, the EU's industrial weaknesses miraculously appear as strengths.

Carbon production varies directly with the intensity of economic growth – especially rapid, Chinese-style economic growth. 'Particularly in India and China, the CO<sub>2</sub> content of the average unit of energy has increased', says Stern disapprovingly <sup>(21)</sup>. Therefore, in practical terms, a carbon price acts as a check on relatively low-tech carbon-fuelled production. This is a source of tension between Eastern and Western Europe: several Eastern European countries are suing the European Commission (EC) because of their allocated carbon emissions, and they see carbon caps as penalising their type of growth <sup>(22)</sup>. The EC cut Latvia, Estonia and Lithuania's proposed carbon allocation by 50 per cent, relative to the levels they proposed, compared to around four per cent for the EU-15 (the wealthier EU nations) <sup>(23)</sup>.

This penalising of manufacturing industry implies an eventual redistribution of funds from the more active productive centres (with relatively growing carbon emissions), to the more stagnant (with relatively falling carbon emissions).

Every economic collapse – in Russia, in Europe in the credit crunch – has resulted in profits made from selling off carbon credits. A crisis or slowdown in production is offset by the 'production' of carbon savings. For example, the closure of a Lithuanian power plant was rewarded by a greater carbon ration, and therefore a compensation for shutdown <sup>(24)</sup>.

As the economic crisis hit, and production was cut, companies rushed to cash in their surplus carbon credits: these were now, in effect, compensation for economic decline. Mark Lewis, a carbon analyst at Deutsche Bank, said: 'This [Emissions Trading Scheme] was not designed as a scheme to give corporates cheap short-term funding options in the face of a credit crunch meltdown... but that appears to be what's happening.' <sup>(25)</sup> Oscar Reyes of the Carbon Trade Watch is quoted saying that 'it is no surprise that it [ETS] is now being used as a cash cow to see firms through a difficult financial phase' <sup>(26)</sup>. Bryony Worthington lamented the fact that the ETS is 'now a cash redistribution exercise' <sup>(27)</sup>.

Creating a carbon market for trees would have a similar production-dampening effect. Stern proposes that developed countries pay less developed countries to not cut down their forests. He explains: 'This involves a potential reward – usually a direct payment – related to the value of the carbon, the biodiversity, the water impacts and so on, as well as penalties for those who undermine preservation efforts.' <sup>(28)</sup>

Stern estimates that funding from the West to the tune of \$15 billion per year will halve the rate of tropical forest deforestation: 'Put crudely, the forest is worth much more standing than cut.'<sup>(29)</sup> The financing of forests is the financing of non-productive land. Leaving trees standing essentially means that the land cannot be used for productive activity, be it agriculture, forestry or manufacturing. In this instance, the resource flow takes the form of a pay-off from the West to less developed countries, for not developing.

### **Redistributing to a bureaucratic green elite**

There is one effect of carbon markets that predominates: which is to redistribute both resources and control over resources away from both industry and consumers, to a state/managerial bureaucracy. The bureaucratic elite is – in the first instance – the creator of carbon value, and their interests are also served by it.

The carbon market system involves a lot of work for bureaucrats – an awful lot of work – including setting targets for different countries/industries, evaluating their records, ensuring reductions are genuine, and a whole lot more. Stern's *Blueprint for a Safer Planet* is actually a job creation scheme – for green bureaucrats like him.

Stern suggests the creation of an international body that would oversee and supervise the growing global carbon market. Its long list of jobs would include: 'the development of global and distributed emissions targets, timetables and milestones'; 'the creation of systems to supervise, monitor and verify delivery against commitments including any pilot global sector agreements'; 'the emerging forestry carbon regime'; 'the development of processes for dispute resolution'<sup>(30)</sup>.

This micromanagement of industrial production is hard work. Just imagine the job of calculating the carbon value of the forests of the world; or the carbon cost of every product, borne both by the place where it is produced and consumed; and setting carbon targets for particular industries and particular activities... There would have to be teams of Sterns all over the world: they would be the guildmasters of the twenty-first-century economy.

We see this creaming off for a bureaucratic elite with the clean development mechanism (CDM). There are a mere 400 projects registered a year, notes the World Bank document, and projects are taking an average of one to two years to be issued because of bottlenecks and a shortage of officials to apply the complex project assessment rules. ('This does not even include the six months or so that it is taking to book the services of an [auditor]')<sup>(31)</sup>. The World Bank laments the fact that 'Transaction costs can easily reach \$500,000 per project'<sup>(32)</sup>, and the CDM has been unable to reduce these, 'despite various efforts to do so'<sup>(33)</sup>.

The CDM procedures for calculating exactly how much carbon has been reduced, and whether this reduction is 'additional', are complex and opaque. Each method of reducing CO2 has a laborious methodology for assessing it, and these methodologies are constantly being revised (indicated by the fact that some CDM documents available online have their 'tracked' revisions still in place)<sup>(34)</sup>. And so we find that under the guise of saving the planet, perhaps it is rather that Nicholas Stern is actually saving himself. The implication of his proposals is to justify the creation of a vast bureaucracy of green economists, to supervise and sanctify world industrial production. Perhaps it is time to challenge the myth of carbon value, before these bureaucrats are allowed to build their global castle in the sky.

**Josie Appleton** is head of the civil liberties campaigning group, the *Manifesto Club*.

*Blueprint for a Safer Planet: How to Manage Climate Change and Create a New Era of Progress and Prosperity*, by Nicholas Stern, is published by The Bodley Head. (Buy this book from [Amazon\(UK\)](#).)

*The Politics of Climate Change*, by Anthony Giddens, is published by Polity Press. (Buy this book from [Amazon\(UK\)](#).)

*Why We Disagree About Climate Change*, by Mike Hulme, is published by Cambridge university Press. (Buy this book from [Amazon\(UK\)](#).)

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- (2) *World Bank, State and Trends of the Carbon Market 2008*, May 2008, p7
- (3) [Nicholas Stern sees good chance for deal in Copenhagen](#), Reuters, 4 November 2009
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- (8) *Blueprint for a Safer Planet*, Nicholas Stern, Bodley Head 2009, Stern, p29
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- (20) *World Bank, State and Trends of the Carbon Market 2008*, p21
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- (25) [Britain's big polluters accused of abusing EU's carbon trading scheme](#), *Guardian*, 27 January 2009
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- (27) ['Just a money redistribution exercise where we foot the bill'](#), *Guardian*, 28 January 2009
- (28) *Blueprint for a Safer Planet*, Nicholas Stern, Bodley Head 2009, p168
- (29) *Blueprint for a Safer Planet*, Nicholas Stern, Bodley Head 2009, p167
- (30) *Blueprint for a Safer Planet*, Nicholas Stern, Bodley Head 2009, p201
- (31) *World Bank, State and Trends of the Carbon Market 2008*, p21
- (32) *Blueprint for a Safer Planet*, Nicholas Stern, Bodley Head 2009, p160
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- (34) [Approved consolidated baseline and monitoring methodology](#), UNFCCC