

# Emissions Trading in the EU – Leaky Caps and Dirty Development

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With the second phase of the EU Emissions Trading Scheme (ETS) due to start in 2008, at some point soon Brussels will have to admit that it isn't working. Carbon emissions aren't going down, industries aren't switching to clean energy technology and, so far, the scheme's guiding principles seem to have been "polluter profits" rather than "polluter pay". Lack of discernible results to date lead to the conclusion that the ETS has been designed on the basis of its ideological compatibility with the free-market rather than for its effectiveness in achieving urgently needed cuts in carbon emissions.

On paper, the "cap and trade" scheme is seductively simple. The amount of permissible carbon pollution is divided up between industrial locations (called "installations" in the scheme) across Europe – this is the "cap" part. If any installation goes over its limit, it must purchase the equivalent amount of permits on the market, and conversely, if an installation is under its limit, it can sell its shortfall on the market – this is the "trade" part. The idea is that the market will create the most "cost effective" reductions possible. The "cap" is supposed to get tighter in successive rounds of the scheme so that the market price of carbon rises, and creates an incentive for industries to make low-carbon modifications at source rather than having to buy costly permits.

The first phase has been a disaster. One of the main problems of the scheme is that every stage of its design and implementation has been subjected to intensive industry lobbying. The economist John Kay wrote in the Financial Times that "when a market is created through political action rather than emerging spontaneously from the needs of buyers and sellers, business will seek to influence market design for commercial advantage". Under sustained corporate lobbying, almost all EU governments made huge over-allocations of permits to industry in the first phase. In 2005, the first year of trading, the relevant industries across Europe emitted 66 million tonnes less than the cap that had been allocated. This meant that the cap was effectively meaningless as it had not forced any net reductions. A preliminary analysis of the 2006 data shows that 93 per cent of the 10,000 installations covered by the ETS emitted less than their allotted quota, in all 30 million tonnes less than the total EU-wide allocation.<sup>1</sup>

Successful corporate lobbying also meant that permits were allocated free of charge to industry in the first phase. But companies have been passing on the "cost" to consumers anyway. A study by UBS Investment Bank showed that the first round of the ETS has added 1.3 euro cents to each kilowatt hour of electricity sold. This sounds negligible, until you consider that the German minister for the environment estimated that the four biggest power providers in the EU – Eon, RWE, Vattenfall and EnBW – had profited by between €6 billion and €8 billion from passing on the imaginary cost of the first phase of the ETS onto consumers.<sup>2</sup>

Apologists for the ETS are quick to claim that these early "design faults" are being ironed out in the second round. For starters, governments are allowed to auction off a percentage of permits to industry rather than simply handing them out for free. Yet in practice, only 10 EU members have chosen to go down this route and, of these, four are auctioning fewer than one per cent of their total allocations.<sup>3</sup> Yet free-allocations to fossil fuel intensive industries continue – in effect, providing a huge subsidy to the heaviest polluters. In the article "Implications of announced Phase 2 National Allocation Plans" from the journal *Climate Policy*, Dr. Karsten Neuhoff (from the Cambridge University faculty of economics) and his co-authors conclude that "the level of such subsidies under proposed second phase NAP is so high that the construction of coal power stations is more profitable under the ETS with such distorted allocation decisions than in the absence of the ETS".<sup>4</sup>

Advocates of the scheme also argue that the tighter caps imposed in Phase II will cause the price of carbon to increase and will incentivise industries to start implementing cleaner technologies and practices. Predictions of higher price

permits in Phase II are somewhat optimistic in the face of the "linking directive"™ which means that companies can also acquire credits by investing in clean development mechanism (CDM) projects—that is, offset projects in the global South through the Kyoto protocol.

This "linking directive"™ represents a serious "leak"™ in the system that undermines the effectiveness of tightened cap. According to the same Climate Policy article, "some market participants anticipate that the European market could be flooded by these [CDM] allowances to such an extent that the EU allowance price would plummet".<sup>5</sup>

It is not only the availability of such cheap credits that undermine the climate credibility of the ETS. The nature of the CDM projects themselves have come under sustained criticism.

The CDM is framed in benevolent development rhetoric (the "D"™ in the CDM). The projects are supposed to bring developmental benefits to local communities and the market was expected to create incentives for investment in low-carbon energy infrastructure in Southern countries. But almost two thirds of the 1,534 CDM projects in the pipeline as of early 2007 did not involve either the generation of clean energy or carbon dioxide emissions.<sup>6</sup>

The largest share of CDM credits (30 per cent) has been generated by the destruction of HFC-23. This potent greenhouse gas is created by the manufacture of refrigerant gases. A study in the February 2007 article of Nature showed that the value of these credits at current carbon prices was \$4.7 billion. Not only was this twice the value of the refrigerant gases themselves, but it was also estimated that the cost of implementing the necessary technology to capture and destroy the HFC-23 was less than \$100 million, so something in the region of \$4.6 billion was generated in profit for the owners of the plants and the project brokers.<sup>7</sup>

This enormous sum of money generated by these Kyoto-style trading schemes has not gone to the companies and communities who are taking action on clean energy and energy reduction projects, but rather to big, industrial polluters who are then at liberty to reinvest the profits into the expansion of their operations. In the 2006/07 financial year, the owners of SRF, an industrial and textiles company based in India, reported a profit of \$87 million from the sale of carbon credits derived from the destruction of HFC-23. Ashish Bharat Ram, the managing director, told the Economic Times that "Strong income from carbon trading strengthened us financially, and now we are expanding into areas related to our core strength of chemical and technical textiles business."<sup>8</sup>

Many of the corporate benefactors of CDM money in Southern countries are the target of sustained local resistance from communities who have to endure the often life-threatening impacts of intensive, industrial pollution. In 2005, about 10,000 people from social movements, community groups and civil society organisations mobilised in Chhattisgarh, India, to protest at the environmental public hearing held for the expansion of Jindal Steel and Power Limited (JSPL) sponge iron plants in the district.<sup>9</sup> The production of sponge iron (an impure form of the metal) is notoriously dirty, and the companies involved have been accused of land-grabbing, as well as causing intensive air, soil and water pollution. JSPL runs the largest sponge-iron plant in the world, which is spread over 320 hectares on what used to be the thriving, agricultural village of Patrapali. This plant alone has four separate CDM projects, generating millions of tonnes of supposed carbon reductions that could be imported into the ETS. The inhabitants of three surrounding villages are resisting a proposed 20-billion-rupee expansion that would engulf them.<sup>10</sup> The CDM is not only providing financial assistance to JSPL in making this expansion, but also providing them with green credibility in being at the forefront of the emerging carbon market. ^ ^ ^ ^ ^ ^ ^ ^ ^ ^

The CDM may even act as a disincentive for Southern governments considering climate-friendly legislation. Had it been mandatory for factories to capture and destroy HFC-23, they would not have qualified for CDM status, as the carbon funding would not have been "additional".

As far back as 1991, there were plans proposed for an EU-wide carbon tax, but the lack of political support and the vogue for all things market-related meant that they were stifled.<sup>11</sup> However in February 2007, a study by economist Robert Shapiro, who was undersecretary of commerce for economic affairs in the Clinton administration, stated that carbon taxes are "much less vulnerable to evasion and market manipulation" than cap-and-trade systems. Whereas carbon taxes provide "a more stable and transparent system for consumers and industry alike," cap and trade systems are "much more complex to administer" and "produce much greater volatility in energy and energy-related prices."<sup>12</sup> Around the world, other economists and political scientists are coming to similar conclusions. The question remains how long so much energy and political will-power will be channelled into a mechanism that does little more than bolster the profits and environmental "credibility" of the biggest polluters. Even if the global community won't have benefited from any serious emissions reductions as a result of the EU-ETS, it will hopefully at least have learned a valuable lesson in how not to devise effective climate policy.

1 D Gow, "Smoke alarm: EU shows carbon trading is not cutting emissions", Guardian, 3 April 2007

2 R Oakley, "Greenpeace on the fiasco of the CO2 emissions trading scheme", Greenpeace, 2006

3 K Neuhoff et. al., "Comparison of National Allocation Plans for the Period 2008-2012", <http://www.climate-strategies.org>

4 K Neuhoff et. al., "Implications of announced Phase 2 National Allocation Plans", Climate Policy 6 (2006) 411-422

5 K Neuhoff et. al., "Implications of announced Phase 2 National Allocation Plans", Climate Policy 6 (2006) 411-422

6 M Wara, "Is the Global Carbon Market Working?", Nature, Vol 445, 8 February 2007

7 ibid

8 "Indian chemical company books \$87 million windfall from carbon trading", Point Carbon, 10 April 07

9 from the Mines and Communities website, <http://www.minesandcommunities.org/Action/press728.htm>

10 Larry Lohmann, "Carbon Trading" A Critical Conversation on Climate Change, Power and Privatisation™, Chapter 4, pp254-271, The Dag Hammarskjold Foundation, 2006.

11 "Expert calls for EU-wide CO2 taxation™, ENDS Europe DAILY 2290, 26/03/07

12 "Study favours carbon tax over cap-and-trade™, Point Carbon, 19.02.07