Carbon Markets: The Policy Reality

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The burning of fossil fuels is by far the major contributor to human-caused climate change. Once taken out of the ground and burned, coal, oil and gas add to the amount of carbon cycling between the atmosphere and the oceans, soil, rock and vegetation. On human time scales, this transfer is irrevocable: once mined and burned, fossil carbon cannot be locked away safely underground again in the form of new deposits of coal, oil or gas, or in the form of carbonate rock, for millions of years. The transfer is also unsustainable: there is simply not enough "space" in above-ground biological and geological systems to park safely the huge mass of carbon coming out of the ground without carbon dioxide building up catastrophically in both the air and the oceans.

At the most fundamental level, therefore, the climate solution revolves around initiating a new pathway away from fossil fuel dependence. Industrialised societies locked in to fossil fuels need to turn to structurally different, non-fossil energy, transport, agricultural and consumption regimes within a few decades to minimise future dangers and costs. Infrastructure, trade, even community structure will have to be reorganised, and state support shifted from fossil-fuelled development toward popular movements constructing or defending low-carbon means of livelihood and social life.

But the main official approach to the climate crisis worldwide – building a single, liquid global carbon market worth trillions of dollars – is likely to make climate change worse, not only exacerbating its social impacts but also generating negative impacts of its own.

The two basic instruments of carbon markets are "cap and trade" and offsets. A country's emissions "cap" is imposed by government regulation. Each industrial installation is assigned the right to emit a certain amount of greenhouse gas. It is then allowed to buy additional pollution rights if it needs them to meet its emissions target – or to sell any rights that it doesn't need.

Cap and trade thus gives incentives to those polluting industries most locked into fossil fuel use, where most change must occur, to delay structural change. Instead of embarking on a lower-carbon historical pathway, such industries can instead buy bankable pollution permits. Further slowing down the shifts needed, all cap and trade systems instituted to date have awarded large numbers of free pollution rights to the worst polluters in order to gain their support for the system, making cap and trade a "polluter earns" system. Adding the market price of these free assets to customers' electricity bills, many electricity generators receiving such government donations have then gone on to invest their windfall profits in more fossil fuel capacity. In many cases, fossil-fuelled corporations have also managed to get their government to hand over more pollution rights than they actually need to meet their legally-mandated targets. In the European Union, the main winners from carbon trading have been, in

addition to energy traders and hedge funds, electricity generators fuelled by coal and nuclear fission, while the biggest losers have been consumers.

At the same time that it undermines effective climate policy, cap and trade has also given rise to distribution problems that could flare into destructive international political conflict. The reason is that cap and trade, like other market systems, requires that the commodity being bought and sold come with ownership rights. In order to work, therefore, cap and trade needs to privatise the earth's carbon-cycling capacity – its physical, chemical and biological ability to regulate its own climate and keep it stable. By awarding its worst-polluting companies huge blocks of transferable pollution permits, Northern governments have unilaterally decided to give them transferable property rights to a disproportionate chunk of this global capacity – which, under a more equitable system, would be made available to everyone equally.

Further undermining both the climatic efficacy and the political sustainability of carbon markets are carbon offsets – the other pillar of carbon trading. Offsets provide the industrialized North with a flow of additional emissions licenses originating from projects designed to "compensate" for its fossil fuel emissions. Examples include forestry schemes, hydroelectric dams or pollution-reducing fuel-switches. Such projects – located mainly in the global South (particularly China, India, Korea and Brazil within the Kyoto Protocol market) – must show that the carbon savings they achieve are a result of the finance they derive by selling emissions permits to big polluters. Under the Kyoto Protocol, such offset projects were devised partly as a compromise between the desire of wealthier industries and states to delay reducing their own emissions and the desire of Southern state negotiators for some financial benefit from the international climate regime.

Unfortunately, it cannot be either proved or disproved that offsets are distinct from business as usual, or climatically equivalent to reducing emissions at source. As a result, no means exist for preventing skilful and well-paid carbon accountants from fabricating huge numbers of pollution rights for sale to Northern fossil fuel polluters by claiming that various conventional industrial projects are "saving carbon." Carbon offsets thus wind up on the whole increasing fossil fuel emissions rather than compensating for them. Even worse, accounting procedures for offset projects set up perverse incentives for credit seekers (including host governments, credit buyers and consultant validators) to bring about "business as usual" scenarios that are the highestemitting possible, since the greater the emissions without the project, the higher the supposed carbon savings that can be achieved with it, and thus the higher payoffs that can be demanded. These obstacles to verifiable offset accounting may in the end spell as much trouble for economic stability as they do for efforts to curb climate change. If the carbon market grows into the world's largest market, as often predicted, with massive participation on the part of hedge funds, energy traders, private equity funds and large global investment banks, the collapse of a sub-prime carbon bubble could have consequences comparable to those of the current financial crisis.

Despite having been defended as a way of financing "green" development, most carbon offset credits are, in addition, generated by projects that in fact reinforce fossil fuel dependence in the South. If Northern industrial buyers of offset credits tend to be large-scale corporate greenhouse gas producers such as Shell, BHP-Billiton, EDF, Endesa, Mitsubishi, Cargill, Nippon Steel, ABN Amro and Chevron, so, too, carbon

credit sellers tend to be corporations strongly committed to continued use of fossil fuels, such as South Africa's Sasol, India's Tata Group, ITC, Birla, Reliance and Jindal, and Korea's Hu-Chems Fine Chemical. It is such well-financed companies – and not green innovators or local communities developing low-carbon ways of life that are best able to navigate the financial and bureaucratic requirements involved in registering offsets for the Kyoto Protocol carbon market. These firms are thus able to use carbon trading not as a way of propelling their countries away from fossil dependence, but, typically, as a means for topping up finance for environmentallyand socially-damaging projects to which they are already committed and which are more often than not in sunset industry sectors. The principal economic incentives offset trading provides are not for technological or social innovators to seek transitions to low-carbon futures, but rather for carbon consultants and policymakers to find or invent new "emissions reduction equivalents" that can be used to manufacture substantial blocks of cheap carbon credits for sale to conventional industries or financial speculators. In shoring up business as usual in this way, carbon trading thus works to the disadvantage of many Southern communities whose land, water and air are usurped by the private sector for "climate reasons" as well as for corporate profit.

Further reading: http://www.thecornerhouse.org.uk/subject/climate