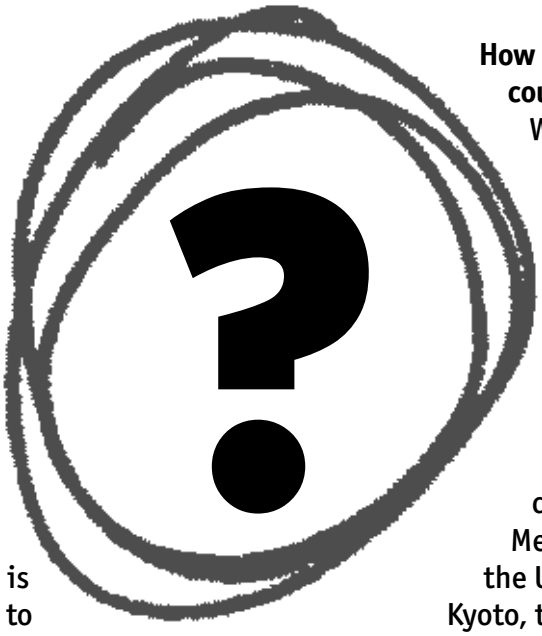
Carbon trading
Your questions answered

World Development Movement

What is carbon trading?
In theory a carbon trading system sets a limit on emissions of CO2 within a set country or region, such as Europe, and from certain sectors, such as electricity generation. The limit is reduced over time to cut emissions. Companies working in the sector are either given or buy permits up to the limited amount. Companies can then buy-and-sell these permits amongst themselves. In theory this means that cuts in emissions take place where it is cheapest to do so.

There are two main carbon trading schemes: the EU Emissions Trading Scheme; and the Clean Development Mechanism which was setup as part of the Kyoto Protocol. The two schemes are linked.



What is the EU Emissions Trading Scheme?
The EU Emissions Trading Scheme is a European policy which is meant to help Europe cut its CO2 emissions. A cap is set for the total amount of CO2 which can be emitted from large industries in Europe, such as power stations and factories. Permits equal to this cap are then distributed to companies. The cap, and thereby the number of permits, are reduced over time. Companies can buy-and-sell the permits between themselves, meaning companies can choose whether to cut their emissions or pay someone else to do so.

There are currently loopholes in the scheme: Companies can also buy permits from developing countries, which are meant to pay for actions in developing countries to reduce emissions. This effectively increases the size of the cap and lessens the incentive to cut emissions in Europe.

In the first phase of the scheme from 2005-2007 there were more permits allocated than emissions, which meant the price of permits dropped to zero and there was no incentive to cut emissions. For the second phase of the scheme which runs from 2008-2012 the price of carbon is currently around €25. This only has a small impact on cutting emissions in Europe, especially as companies can choose to buy carbon credits from developing countries. The EU is currently debating how the Emissions Trading Scheme will work from 2013 on.

How does the trading with developing countries work?
When the Kyoto protocol was created in 1997 the United States insisted on a mechanism where, rather than meeting all targeted cuts by reducing CO2 emissions domestically, rich countries could pay for some of the cuts to take place in developing countries. This is called the Clean Development Mechanism. Despite the fact that the United States has never ratified Kyoto, the Clean Development Mechanism has been heavily used by other rich countries. The UK and EU now see the Clean Development Mechanism as a key way to meet their CO2 reduction targets.

The system works by a company in a developing country applying to be registered for a project to cut emissions. For instance, an Indian factory may want to build a more efficient boiler and estimates how much CO2 this is expected to save. The UN says whether such a project qualifies for carbon credits. If it does, the Indian factory gets a permit saying it has reduced CO2 emissions by the amount stated. The Indian factory can then sell this permit to a European company, who can use it as part of the permits needed to meet its emissions as part of the Emissions Trading Scheme, rather than cutting emissions itself in Europe.

Who buys the carbon credits?

Anyone can buy a carbon credit. Credits are now traded in financial markets in the same way as oil, wheat or money. European companies are the main purchasers or carbon credits, as they use them to meet their requirements under the EU Emissions Trading Scheme.

The Kyoto protocol has also allowed rich country governments to use carbon credits to meet their Kyoto CO2 reduction targets, rather than cutting emissions domestically. Some companies have even introduced carbon offsetting schemes selling individuals carbon credits, claiming that this will 'offset' their emissions from an activity such as flying.

Isn't it good to help developing countries reduce their emissions and develop sustainably?
Unfortunately, the Clean Development Mechanism does not reflect the urgency of what is needed to prevent catastrophic climate impacts for the world's poor. Currently, rich countries, with 18 per cent of the world's population, account for 54 per cent of CO2 emissions. Developing countries, with 82 per cent of the world's population, account for 46 per cent of emissions.
It is a simple fact that to tackle climate change:

- Rich countries like the UK have to reduce their own emissions.
- And *in addition* rich countries like the UK need to help some developing countries, such as China, to curb the growth in, and ultimately reduce, emissions.
- And *also* rich countries like the UK need to help some other developing countries to avoid large increases in emissions.

Carbon credits from developing countries are used by the UK government and EU as a means to provide some support to developing countries to not increase emissions, without reducing emissions in the UK and Europe. Support for emission reductions in developing countries has to be in addition to cuts in the UK, not instead of cuts in the UK. Reducing global emissions by 50-85 per cent by 2050 is a massive challenge, which will fail if rich countries create accountancy mechanisms to avoid large-scale cuts in their own emissions.

Do Clean Development Mechanism credits cut emissions in developing countries?
Many do not. One key test is whether the project the credit is supposedly funding is additional. In some cases, credits have been granted after the project had actually taken place, indicating that it would have happened anyway. One estimate is that between one-third and two-thirds of projects in developing countries, which have been granted carbon credits, would have happened anyway.

Furthermore, there is evidence that Clean Development Mechanism credits can actually increase pollution. For example, the largest number of carbon credits has been generated by projects claiming to reduce emissions of the potent greenhouse gas HFC-23, rather than CO2. One study has found that the value of credits given to HFC-23 projects at current carbon prices is €4.7 billion. However, an estimate of the cost of technology needed to capture and destroy the same amount of HFC-23 is 0.1 billion. So these plants have generated a profit of around 4.6 billion which they can now re-invest to expand their polluting operations - money which could have been better spent on measures to reduce CO2.

Indian campaigner against the impacts of some Clean Development Mechanism projects, Mahesh Pandya, says:
"*It is unjust that the rich are allowed to emit whilst paying for more pollution for the poor.*"

Do these projects ever have negative impacts on local people?
Carbon credits can be sold by private companies which are normally unaccountable to the communities in which they seek to implement their projects. Therefore, there is the potential for some of the projects which they fund to be socially damaging.

For instance, a Clean Development Mechanism project has been developed in South Africa to extract methane from a landfill site in a residential area to use for electricity generation. This will reduce emissions of methane, a more potent greenhouse gas than the CO2 released when methane is burnt.

However, local people have been campaigning for years for the landfill site to be shut down, as it exposes local people to cancer-causing pollution and infringes their right to clean air. Concentrations of toxic chemicals are all high in the area. Before getting Clean Development Mechanism funding, there was a good chance the landfill site would be closed down. However, the Clean Development Mechanism has provided finance to enable the landfill site to keep operating.

The Indian state of Gujarat is one of the most industrialised states in India. Lots of Gujarati factories have been allowed to sell carbon credits in return for installing equipment to cut emissions of HFC-23 (see above).

The Gujarati NGO Paryavaran Mitra says that some of the industries funded by Clean Development Mechanism credits produce toxic or hazardous local pollution. The finance from carbon credits has allowed these industries to expand their operations, producing more local pollution, without any regulation of their impacts.

Paryavaran Mitra go on to say that because CDM projects are providing money for Gujarat, there is no incentive for the State government to regulate the projects: "CDM projects are implemented haphazardly in India. The Ministry of Environment and Forests is in a promotional role, not a scrutiny role. Lots of foreign exchange in the name of CDM comes to India but it goes to industry's pocket. Local poor people whose livelihood is changed are neither aware nor benefit from the project implementation. Due to this, sometimes pollution does not come under control and the purpose of CDM projects is not served."

I heard the UK government wants to use carbon credits more in the future?
There is currently a debate within the EU as to how the Emissions Trading Scheme will operate from 2013 on. One proposal is that the number of credits allowed from the Clean Development Mechanism to meet reduction targets should be one-third of targeted reductions. This would be a lot, and would continue to undermine the scheme.

However, leaked documents have shown that the UK government has been arguing for this limit to increase. The UK government has proposed that 50 per cent of the EU's target for reducing emissions by 2020 could be met by buying carbon credits from developing countries. This is not just out of line with the science of what is needed to prevent catastrophic climate change, it is on another planet. If adopted, this policy would mean that the EU will be aiming to cut its own emissions by just 15 per cent between 1990 and 2020.

How is carbon trading related to coal power stations?
The UK government is currently arguing that because electricity generation, including coal power stations, is included in the EU Emissions Trading Scheme, this by itself will cut emissions as needed to tackle climate change. However, the reality is that most of the 'cuts' will be made by paying for carbon credits from developing countries or elsewhere in Europe, allowing Britain to carry-on polluting as normal.

The fact that energy companies in the UK want to build new coal power stations shows that the EU Emissions Trading Scheme is not effectively cutting emissions. If it were, new coal power stations would be too expensive and risky an option for companies to consider. Therefore, measures beyond the Emissions Trading Scheme are needed to shift the UK towards being a low carbon economy.

Why are WDM calling for a limit on carbon trading in the climate change bill?
In the climate change bill, carbon credits from overseas can be counted towards meeting the target for UK emissions reduction. Therefore, the climate bill does not actually mean we have to make large cuts in emissions in the UK.

The House of Lords objected to the unlimited use of carbon credits in the bill, and voted in an amendment that to meet the climate bill targets, at least 70 per cent of any reduction in emissions would need to take place in the UK. Unfortunately the government have removed this amendment.

Whilst WDM argues that the UK needs to ultimately make all the targeted emissions reductions in the UK, and in addition pay for cuts elsewhere, the House of Lords amendment is better than what the government are proposing. Therefore, we are calling on MPs to support the amendment saying that at least 70 per cent of the emissions reduction has to take place in the UK.

If this amendment is included in the bill, it will create more pressure to cut emissions in areas such as electricity generation and coal power stations.

Isn't it true that it doesn't matter where emissions cuts are made in the world, and it makes economic sense to do this where it's cheapest?
It is true that emissions anywhere in the world have the same climate impact. However, it is also true that the world needs to start reducing emissions in the next few years; by 2015 at the absolute latest, with a global cut in emissions of 50-85 per cent by 2050.

The only just way such cuts will happen is if rich

countries both cut their own emissions by as much as possible as soon as possible, and in addition pay for cuts in developing countries. The concentrations of greenhouse gases already in the atmosphere mean there is no space left for offsetting emissions in once place and continuing to emit elsewhere.

I've been told aviation will be included in the Emissions Trading Scheme. Does this mean we don't need to worry about emissions from aviation anymore?
The EU has agreed that from 2012 CO2 emissions from aviation will be included in the Emissions Trading Scheme. However, as usual, there are a number of loopholes in this plan.

Firstly, only CO2 emissions will be included and not the non-CO2 effects of aviation. The non-CO2 impacts of aviation are estimated to have 50 per cent more impact on global warming than those from CO2.

Secondly, aviation will be included based on its emissions in 2004-06, which means it does not have to cut any emissions which are the result of growth between 1990 and the mid-2000s. UK aviation emissions more than doubled between 1990 and 2004.

Thirdly, the level of permits for aviation will stay the same every year from 2012 on. This means the sector does not have to pay for any reduction in emissions, it only has to pay for permits if it increases emissions.

Finally, the other problems of the EU Emissions Trading Scheme all still apply, such as the fact that aviation can buy carbon credits from developing countries rather than pay to reduce emissions in the UK or Europe.

WDM has calculated that the increase in aviation's total contribution to climate change from 2013 to 2020, will be more than double any claimed reductions in CO2 emissions that aviation will pay for other industries to make, in the UK or Europe. This is in a period of time when the UK needs to be cutting emissions by 40 per cent on 1990 levels by 2020.

Theoretically, if the loopholes with carbon trading schemes were removed, would they be OK?
This is a very theoretical question; it is currently hard to imagine carbon trading working without the loopholes. WDM is campaigning for action in the UK and Europe for measures in addition to the EU Emissions Trading Scheme, because the Emissions Trading Scheme is currently ineffective at cutting emissions. Theoretically, a carbon trading scheme without the loopholes would set a cap for the UK or Europe which does not allow in any credits from elsewhere in the world. The cap would be set at 4-5 per cent below current emissions, and fall by 4-5 per cent every year. If enforced rigorously, this would ensure that emissions within the UK or Europe did fall as needed.

However, how these cuts were made would be decided entirely by the market. There would be no guarantee that cuts would be made in a fair way. For instance, there could be large increases in the price of gas to ensure that less gas is used in people's homes. This would be likely to impact on those living in fuel poverty, who are the most likely to stop using gas in response to an increase in price. In contrast, an alternative policy would be government programmes to subsidise and support insulation and alternative heating systems such as solar water heating and ground-source heat pumps, which would actually reduce fuel bills.

Similarly, in electricity generation, developing renewable technologies to generate electricity such as off-shore wind, tidal and wave power requires government subsidies. If it were left to a carbon trading scheme, the market may decide to cut electricity use from poorer people by making it too expensive, rather than investing in new technologies which take a longer time to make a return on the investment.

The problem with the current EU Emissions Trading Scheme is that it is ineffective at cutting emissions. A trading scheme without the loopholes may be effective, but left to itself it would not necessarily be just. Therefore, we need government intervention such as regulations, subsidies and targeted taxation to ensure we cut emissions, and do so in a fair way.

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