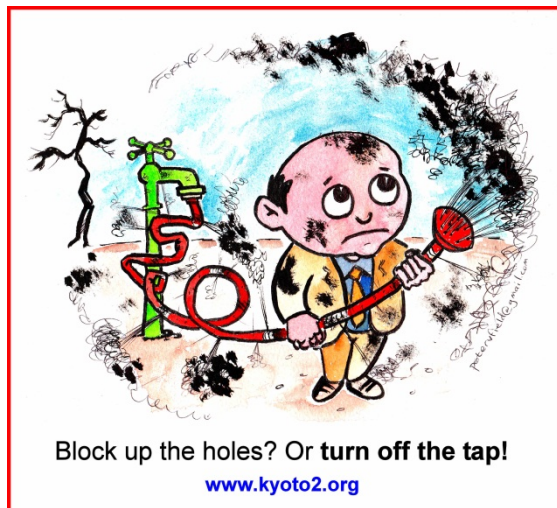


Turn off greenhouse gases at source

If we are looking after sheep, it's easier to keep them in a field with the gate shut than to let them escape and try to round them up later. In a similar way, it is simpler, cheaper and more effective to control fossil carbon 'upstream'—at the relative handful of places where coal, oil and gas come out of the ground—than trying to control emissions 'downstream' at the much larger number of emissions-producing businesses or individual people. Likewise for other industrial greenhouse gases.



That is the central idea in new proposals for reforming the EU's Emissions Trading System—which may also serve as a model for any country or region that may be considering introducing a cap-and-trade system to control emissions of industrial greenhouse gases.

In the reformed system, it would not be necessary to issue allowances to emissions-producing businesses in the EU. Instead, permits would be required to extract coal, oil or gas from the ground within the EU, or to import them. Permits would be auctioned and may be traded, and the numbers issued each year would be progressively reduced.

Some people may say of the EU ETS, “If it ain't broke, don't fix it”. But its impact on emissions has been small, it is vulnerable to fraud, it has several other problems, and without upstream reform it cannot deliver the cuts in emissions that are now urgently needed.

Although about 12,000 emissions-producing plants fall within the scheme, more than 50% of emissions—from homes, cars, small businesses and so on—are not covered. Over-allocation of allowances and giving them away for nothing has led to windfall profits, a price for emissions which is too low, and little incentive for businesses to reduce their emissions. And offsetting of emissions by means of the Kyoto Clean Development Mechanism and related schemes brings with it complexity and several problems including 'additionality' (funding for projects that would have gone ahead anyway), perverse incentives, spurious accounting, and fraud.

Issuing permits for the extraction or import of fossil fuels instead of allowances to emissions-producing businesses would be a relatively simple change. And with some associated reforms, it would solve the problems just described.

In one step, the scheme would cover 100% of emissions of fossil carbon within the EU, instead of less than 50% as things are now. All the emissions from smaller sources, which are a headache for the present downstream system, would be covered automatically.

With the relative simplicity of controlling fossil carbon at source, with numbers of permits being determined in the light of climate science, and with the auctioning of permits instead of free allowances, excess allocations would disappear and it is likely that the price of fossil carbon would rise much closer to its proper level. That would remove a major distortion in energy markets and drive reforms which are urgently needed.

Since, in a reformed system, there would be no allowances issued to emissions-producing businesses, there would be no need for them to offset their emissions via the Clean Development Mechanism or related schemes. Thus all the associated complexities and problems would be avoided. With upstream controls, the goal of economic efficiency would be served via the trading of permits.

A problem with any kind of rationing system that is applied within a region like the EU is that it may put businesses within the region at a commercial disadvantage compared with businesses in other regions with less stringent controls. This is especially true of businesses making high-emissions products such as steel or cement. In cases like that, there may be 'leakage' of industries to other regions. Worries about those kinds of problem are the main reason why, in the EU, many allowances have been and still are given away for nothing.

In the new proposals, problems of competition and leakage are overcome, firstly, by requiring permits not only for imports into the EU of coal, oil and gas but also for other products to reflect the fossil carbon that is used in their production, and, secondly, by giving credits for exports at the same rates as the corresponding categories of imports. These kinds of 'border levelling' measures could be added to the EU ETS as it is now—but there are advantages if border levelling is combined with upstream reform.

Of course, the need for border-levelling measures would decrease if other regions were to adopt compatible systems of upstream controls. That in itself would be an encouragement for other countries and regions to adopt the upstream approach—with a reformed EU ETS providing a model for how things can be done and demonstrating the advantages of upstream controls. Thus upstream reform of the EU ETS could snowball into a global system

of upstream controls on emissions of CO₂ and other industrial greenhouse gases.

There would be several advantages in such a global system, in addition to those already mentioned. With controls applied at the level of coal mines, oil wells and gas wells, there would be no need for legally-binding national targets for reductions in emissions. One benefit would be that there would be no need to worry about fossil carbon that is 'embedded' in imported products, sometimes called the problem of 'import emissions'.

More importantly, elimination of legally-binding national targets would do away with all the beggar-thy-neighbour complexity and horse-trading of international negotiations over what those targets should be. And it would also do away with the difficulties of putting whole countries in the dock and enforcing penalties if they fail to meet their targets. In general, it is very much easier to ensure that the operators of coal mines, oil wells and gas wells play by the rules. Of course, there would still be a place for national initiatives for cutting emissions, but without confrontations.

With controls on fossil carbon applied at source, there would be no need for special arrangements for international aviation and shipping. The operators of planes and ships would simply buy their permit-paid fuel in the normal way, plus permits for emissions such as nitrous oxide from jet engines.

Overall, an upstream system would give us greater simplicity and lower costs in administration, fewer anomalies, a smoother path for negotiations, and fewer opportunities for fraud. There would be much more effective control over emissions, driving innovation and the development of an efficient low carbon economy in Europe and the rest of the world.

Let's start the snowball rolling!

A fuller account of these proposals is in *'Upstream' reform of the EU Emission Trading System* which may be downloaded via a link from www.k2support.org.