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The Copenhagen Summit

Stopping climate change

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Rich and poor countries have to give ground to get a deal in Copenhagen; then they must focus on setting a carbon price

AT A time when they are not short of pressing problems to deal with, the presence of 100-odd world leaders at the two-week meeting that starts in Copenhagen on December 7th to renew the Kyoto protocol on climate change might seem a little self-indulgent. There will be oceans of planet-saving rhetoric, countless photographs of politicians wearing dark suits and serious faces and, if things go according to plan, an agreement to cut emissions to avert a rise in temperature that might anyway have turned out to be marginal and self-correcting.

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It might; and then again it might not. Uncertainty about the consequences of climate change makes it hard to persuade people to spend money on it, for where the damage is uncertain, so are the benefits of averting it. Yet uncertainty is also why mankind needs to take the problem seriously. If we were sure that the temperature would rise by 2-3ºC, then we could choose to live with that. But we do not know how far the rise might go. The Intergovernmental Panel on Climate Change (IPCC), the body set up by the UN to establish a scientific consensus on the subject, puts the range of possible increases by the end of this century at 1.1-6.4ºC. At the bottom end of the range, the difference would be barely noticeable. At the top end of the range—well, guesses about what the world would look like then read rather like science fiction.

Although the benefits of averting that sort of catastrophe are incalculably large, the costs of doing so should not be enormous—as little as 1% of global output, if policy is well designed (see our special report). This newspaper reckons that the world should fork out, rather as householders spend similar proportions of their income on insuring their homes against disaster.

Sharing and trusting

Agreeing that the problem is worth tackling is, however, a small step on the way to doing so. Since the United Nations Framework Convention on Climate Change, which spawned the Kyoto protocol, was signed in 1992, global carbon-dioxide emissions have risen by a third. The problem is not a lack of low-carbon technologies. Electricity can be generated by nuclear fission, hydropower, biomass, wind and solar energy; and cars and lorries can run on electricity or biofuels. Nor is the problem an economic one. A percentage point of global

economic output is affordable for a worthwhile project. Saving the banks has cost around 5% of global output.

So the problem is both simpler and cheaper to fix than most people think. But mankind has to agree on how to share out the costs, both between and within countries. That splits into two challenges. The first is to get an international deal, which is what world leaders are trying to do at Copenhagen. The second is to implement that deal at a national level, with better policies than those currently in place, including a credible carbon price. Otherwise the cost will be far more than that 1%.

The prospects for Copenhagen look better than those for Kyoto did. Australia, which initially walked away from Kyoto, has now ratified it (though its government may choose to hold an election on the issue—see article). America's emissions-cutting bill is stuck in the Senate, and may never emerge, but Barack Obama is keen to push on. Some middle-income countries, such as Brazil and Mexico, have announced targets for cutting emissions; China has announced one for cutting the carbon-intensity of its economy.

What it's all about

The arguments at Copenhagen will focus on two issues: emissions cuts and money. Developed countries are required to produce targets for cutting their emissions by 2020. On the basis of the IPCC's figures, their emissions need to drop by 25-40% below 1990 levels by 2020 if the world is to limit the rise in temperature to 2ºC above pre-industrial levels. The offers on the table add up to around 15% compared with 1990 levels by 2020. America, the main laggard, is offering around 4%.

Developing countries are required to come up with "actions" to limit emissions. China, now the world's biggest emitter, and so the country in the spotlight, has committed itself to cut the carbon-intensity of its economy by 40-45% by 2020. America is dissatisfied with that, because that's pretty much where China would get to on the basis of its existing policies.

Emerging countries want governments in the rich world to pay huge sums from their coffers for adaptation to, and mitigation of, climate change. China has mentioned $400 billion a year. The EU reckons €100 billion ($150 billion) a year is more like it—some from exchequers, most from capital markets.

On emissions cuts, both sides need to give ground. Developing countries are right that America's offer is unimpressive compared with 1990 figures, but the trajectory from now on is pretty steep. And, given that the crucial legislation is stuck in the Senate, Mr Obama's decision to put any numbers on the table is a brave one. Senators react badly to the sense that their country is being pushed around by foreigners—as their pre-emptive rejection of the Kyoto protocol showed. A deal on the basis of the numbers America has offered would be better than no deal. Nor is China's offer derisory. The Americans complain that China's existing policies would achieve those cuts with no extra effort. True; but China, unlike America, has already introduced significant emissions-cutting measures.

On cash, money should indeed change hands—both for moral reasons (rich countries are largely responsible for the problem so far but poor ones will suffer most) and for practical ones (some poor countries do not have access to the capital they need to invest in mitigation). But developing countries should not be asking for huge government-to-government transfers. Capital markets are better at allocating resources than governments are. Rich-country governments should help money flow from the markets by subsidising the risk of investing in clean energy in poor countries: public money should be used to prompt larger sums of private capital.

If an agreement is reached at Copenhagen, there will be much relief on all sides; but the job will only just have started. The parties to the negotiation decided to put aside the question of whether, and how, to make the deal legally binding pending the passage of America's emissions-reducing legislation. And an international agreement is only the first step to emissions cuts. National targets have to be implemented through domestic policies which encourage businesses to invest in clean products and processes, and discourage them from investing in carbon-intensive products and processes. This is the second, harder task.

Effective, efficient or neither

A good policy framework would include some regulation in areas where the market doesn't work well, such as the energy-efficiency of buildings and appliances. It would include a modicum of subsidy, on research into technologies that are still a long way from being marketable, such as carbon capture and storage. But it would rely largely on by far the most efficient tool in the policymaker's kit—a carbon price.

A carbon price sends business a price signal to invest in clean stuff not dirty stuff. It doesn't involve

micromanaging business, which regulations do. It doesn't impose a burden on taxpayers, or require governments to pick winners, which subsidies do. It is, according to an American study, twice as efficient as any other policy.

Economists prefer carbon prices, especially those set by taxes rather than cap-and-trade systems, which are more vulnerable to capture by the polluters they are supposed to penalise. Sadly, though, the views of economists carry little weight. Governments and businesses both tend to like subsidies.

Europe has done best. Its cap-and-trade system has set a carbon price and cut emissions modestly in the sectors it covers. But it relies too heavily on subsidies for renewable energy, and too little on its carbon price. Economists reckon a carbon price of around $40 is needed. Europe's is around €13. America does not yet have a national carbon price; and its corn-ethanol subsidy, combined with a tariff on cheaper, greener imports, takes the planet's first prize for the world's most counterproductive "green" policy. The subsidy-laden bill to establish a cap-and-trade system is a step in the right direction; but, since the carbon price it would set is likely to be around $12, rising to $20 by 2020, not a very large one.

Governments see subsidies as a convenient way of easing in emissions curbs which businesses would otherwise resist. That may be so in the short term. But in the long run they make cutting emissions harder. The notion that dangerous climate change can be averted for a mere 1% of global GDP depends on policy being efficient. If it isn't, the costs will mount—and so will the chances that the effort will fail.

The leaders gathering in Copenhagen need to come to an agreement, even if it isn't a very good one. But that will only be the start. The national policies used to implement cuts need to be more efficient than the ones that are so far in place. That requires leadership from the politicians, and support from the voters. The world is, in the end, in their hands.