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## A New Economic Policy to Tackle Global Warming

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New ideas are needed if we are to solve the problem of global warming. This article suggests one: We should compensate the present generation for cleaning up the world by paying them in long-dated bonds.

That would be efficient and fair. The next generation pass us their money; we pass them our temperature. Both gain.

Two mistakes are obvious in the current policy on climate change. One is to rely on punishment and not reward. The other is to think that everything will come out well if different nations can be made to cooperate. Wrongly, the focus has been on getting lots of countries to attend meetings and sign up to restrictive treaties. Yet that misses the heart of the matter. What is required is a way to get different generations to agree on a strategy, and to find a way to give people clear financial incentives to reduce emissions.

Even if the Earth were one large country, global warming would require a radical new policy. The reason is that the voters of 2001 do not have the same preferences as will the voters of 3001. Our generation wants to drive to the beach to have barbecues; our great great grandchildren want us not to do that.

Here is the difficulty: The people who today inhabit the Earth receive almost no benefit from cutting back on greenhouse gases. All they get out of climate-change policies is the inconvenience of having to own smaller cars, extra costs on their heating bills and airplane flights, a supply of supermarket products that work less well because

petroleum is not an ingredient, and an altruistic feeling that they may be helping the world (and, in some cases, their children). Those feelings of disgruntlement are most intense among Americans. Ultimately, this is what explains Mr Bush's reluctance to participate in Kyoto. Unborn human beings, many of them unborn US citizens, are the ones who will gain from reductions in greenhouse gases. But they are not yet here to vote.

To solve global warming, the world has to come up with a new set of incentives. It needs, crucially, to find a way to allow the future citizens of the planet to compensate our generation. If those unborn people were already here, they would want to do so. They would be happy to negotiate -- to offer us some incentive to drive smaller Saabs and have cold sandwiches at the beach.

There is a strategy that would work.

First, the world's nations should each issue a new kind of government bond. These certificates would pay a steady stream of income that would begin in the year 2020 and end in 2100 (or perhaps even 3000). The costs of printing would be negligible and, as with other kinds of government bonds, the risk of default would be low.

Second, firms and nations that cut back their emissions today would be compensated by being given these bonds. A simple incentive would thus be created. The details of the payment schedule would have to be worked out by using the kind of data studied in Kyoto. In other words, it would be necessary to make a scientific judgment about the size of reduction in carbon dioxide emission that would be needed to reverse global warming. The size of the marginal reward -- in the form of the number of bonds given out in exchange for each unit reduction of carbon dioxide – could then be calculated.

Third, these bonds, like other government securities, would be allowed to be bought and sold. Because they would guarantee a flow of income in the future, the bonds would have immediate value. Most recipients would promptly sell for cash. Many of the bonds would be purchased by pension funds and other organizations interested in long-term returns (the bonds would not, of course, start paying out until the year 2020). The money from these bond sales would

compensate the current inhabitants of Earth for the necessary change in their behaviour -- namely, burning less fossil fuel.

Fourth, how the bonds were distributed and managed would be an important issue that would have to be tackled. It might be natural to require all nations to deposit a stock of bonds with a world agency, which would be charged with giving out the bonds in a systematic way to reward those companies and countries that demonstrated a drop in emissions. A multi-national agency of this sort could certainly lead to difficulties; it is not ideal. Nevertheless, some kind of independent inspectorate will be necessary under almost any form of strategy to control global warming.

Because of their delayed design, the flow of income from these government bonds would be paid for by the future citizens of the planet. In return for a cooler globe, our offsprings' offspring would pay more tax to the governments of their era. That would be just and effective.

Exactly this type of deal would be struck, in a plainer way, if the citizens of the late 21-st century were already sitting opposite us at the negotiation table. The bonds suggested here are just a way of bringing them to that table before they are born. Some cooperation among nations will still be required, partly because of the 'public good' element of climate-change policy (one country's emissions affect the temperature of its neighbour), but the bonds would solve a key inter-generational issue and fund the needed incentives.

Global warming is a solvable economic problem. We need to use long-dated bonds to compensate our citizens for burning less fossil fuel today. Our great great grandchildren will be happy to pay up.

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