

**A solution  
to the CO<sub>2</sub>-  
problem**

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This discussion paper presents Höglund's flexible emission fee mechanism applied to the carbon dioxide challenge. This proposal ensures market forces converge on the challenge of reducing emission whilst bolstering economic growth.

A fee  
mechanism  
that  
harnesses  
market forces  
for the  
common good

# A solution to the CO<sub>2</sub>-problem

**By The Swedish Sustainable Economy Foundation**

The will and incentive for developing countries like China and India to reduce their emissions of CO<sub>2</sub> from the use of fossil fuels is not particularly great, for obvious reasons, when considering that USA and other 'highly developed' countries have been industrialized and achieved their 'highly developed state', to a large extent, by the use of energy from the use of fossil fuels.

If the already highly developed countries expect the cooperation of the developing countries to take action on the problem of CO<sub>2</sub>-emissions, then justice and common sense demand that the highly developed countries must take the greater part of the burden to solve a problem mainly caused by themselves.

If that form of justice is not accepted, by the 'rich nations', then by what right have the people in the rich nations used up such a disproportionately great share of the fossil fuels – from a sustainability point of view?

Is this historical injustice only to be blamed on earlier generations and their mistakes? If the answer is yes, then who is responsible for the behaviour of the rich nations right now in this day and age?

How long will the developing nations of the world tolerate that 20 percent of the (poor) world population must struggle to survive on something like 1 percent of the natural resources when at the same time another 20 percent of the (rich) world population is consuming 80 percent of the world's total natural resources?

Since the problem of CO<sub>2</sub>-emissions is global the most straightforward and efficient solution to the problem is also global. In other words; the price on CO<sub>2</sub>-emissions, from fossil fuels, should be the same irrespective of the nature of the source and the location of the source since this will make no difference to the global impact of such emissions. Different prices for CO<sub>2</sub>-emissions, for whatever reason – be it political, financial, emotional or other, would result in a less effective solution to this kind of global problem.

A highly efficient solution can be found in a CO<sub>2</sub>-tax. The tax is easily levied on fossil fuels, based on the amount of CO<sub>2</sub>-emissions resulting from their use. The income from the tax can be refunded in full or in part to each individual person on the planet, in equal amount and on a regular basis, through personal accounts, or cash payments.

Sweden has been taxing CO<sub>2</sub> for over a decade and the level of the tax in the year 2009 is close to 100 EUR/tonCO<sub>2</sub>. If only one tenth of this CO<sub>2</sub>-tax were applied worldwide then it would be possible to tax

and refund up to 300 000 000 000 EUR per year on a world basis. Even such a seemingly large amount only corresponds to about 0.7 percent of the worlds' total GNP and, if refunded in full, would not have a negative impact on the world economy. On the other hand, it would have the positive potential to make the world economy more sustainable and fair. The total purchasing power would not be affected but it would be redirected towards more environmentally compliant and sustainable goods and services.

If 0.7 percent is a frighteningly high number for the politicians of the world it ought to be possible to reach an agreement on, for example, 0.07 percent. Even such a relatively small CO<sub>2</sub>-tax, which is close to 1 EUR/tonCO<sub>2</sub> would make it possible to tax and refund an amount up to 30 000 000 000 EUR per year. Any arbitrarily small CO<sub>2</sub>-tax would be fine to start with since the greatest challenge is to gain acceptance for and to implement this effective emissions reduction feedback system.

The tax refund will be of greatest value to the poor people and the poor countries of the world. Every individual on the planet, with less CO<sub>2</sub>-emissions than the average, will be a winner. Fortunately, all the rich people and all the rich countries of the world have the means and resources to change their consumption pattern to reduce their CO<sub>2</sub>-emissions so that they also, in due time, become winners.

With the same logic follows that if poor people and poor countries use their refunded money unwisely, for instance, to increase their CO<sub>2</sub>-emissions then their relative tax advantage will automatically be diminished and diverted to other, wiser, people and countries.

The lesson is that such a relatively simple and straightforward system has the potential to systematically reward an 'environmentally responsible behavior' of individual people, of groups, of companies, of countries and ultimately the whole world.

Another advantage of this proposed tax refund system is that is capable of increasing demand, stimulating environmentally compliant and genuinely sustainable growth and reducing unemployment because of its beneficial reallocation of purchasing power in the economy. These beneficial effects are explained by four simple facts.

The first fact is that poor people, in general, are obliged to spend a greater share of their income and tax refunds than rich people do.

The second fact is that poor people, in general and by definition, can not afford the same amount of CO<sub>2</sub>-emissions that rich people can afford.

The third fact is that there is always a greater number of people with CO<sub>2</sub>-emissions, below the average than there are people with CO<sub>2</sub>-emissions, above the average. So as long as the CO<sub>2</sub>-emissions remain a problem there will automatically be a redistribution of 'purchasing power' from high polluters to low polluters.

The fourth fact is that the CO<sub>2</sub>-tax will permeate the market economy and reduce the amount of CO<sub>2</sub>-emissions by making less polluting goods and services relatively less expensive.

Before attempting to implement a redistribution of economic resources on a world scale a realistic first step is to implement it on a country scale. On such a scale the solution will be less efficient, but still highly efficient. With a CO2-tax refund the system can be made budget neutral and always benefit the majority of people, making it both credible and democratically viable.