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TITLE: Emissions trading: a zero sum game?

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Picture this country five years from now, once an emissions trading scheme is fully operational. How will your life be different? Will higher energy prices radically change your approach to work, travel, shopping and leisure?

Some people, particularly firm believers in the Rudd Government's Carbon Pollution Reduction Scheme, ascribe almost magical powers to emissions trading, believing it can transform the moral as well as the economic basis of our society.

The assumption behind the government's policy is that an issue as complex as climate change issue can be addressed via one simple instrument. The CPRS relies on changes in price, to the exclusion of all other factors, to bring about changes in behaviour.

While price is important, it is by no means the only determinant of behaviour. Just as critical is the intrinsic urge to act in one way rather than another due to habit, personality or even the desire to "make a difference".

Unfortunately, there is evidence that the likely rises in the price of electricity will not deliver significant reductions in household energy use, because demand for electricity tends to be insensitive to changes in price. In fact, it has been estimated that a 10 per cent increase in the price of electricity will reduce overall demand by only 3.5 per cent.

This is due to the relatively fixed nature of some important factors in household energy use: house design, the number and type of appliances used and so on. The financial benefits of saving energy often do not accrue immediately, instead becoming apparent only when the electricity bill arrives.

Moreover, electricity actually accounts for a very small percentage of total household budgets. A 10 per cent increase in the cost of electricity will cost most people less than a takeaway coffee. It is therefore naïve to believe that such price increases by themselves can bring about the necessary changes in household consumption of energy.

There is another critical dimension to the way that prices influence behaviour. Research has shown that price signals can undermine intrinsic motivation to undertake a socially

desirable activity, sometimes even reducing overall levels of the activity because people make their decisions based on different criteria. This phenomenon is known as “crowding out”, since other considerations overcome intrinsic motivation as the basis for action.

The potential for price signals to crowd out climate-friendly behaviour makes it imperative that carbon markets are designed in the first instance to complement and reinforce the desire of individuals to make a difference.

Unfortunately, the design of the CPRS is almost entirely inconsistent with this principle. Efforts by individuals (or even whole communities) to reduce emissions will result in increased emissions by big polluters, who can take advantage of the additional permits freed up through voluntary action.

Further, the CPRS legislation creates no causal link between the amount of emissions saved by individuals and the number of permits issued. Neither improvements in household energy efficiency, nor reduced car use, nor the installation of solar panels will reduce overall emissions by a single tonne. Rather, such changes will simply free up additional pollution permits, which will allow other sectors of the economy to increase their emissions.

The CPRS, as currently proposed, creates a zero-sum game in which total emissions are fixed, regardless of what concerned individuals, households, businesses and even governments do to lower them.

Individuals motivated by a desire to “do their bit” donate billions of dollars to charity each year. It is inconceivable that a government would introduce legislation that, while encouraging people to continue to contribute to charity, withdraws one dollar of funding for every dollar donated.

On the contrary, governments sometimes promote matching grants where they promise to match amounts equivalent to those already donated. Such an approach serves to motivate individuals in exactly the opposite way to the proposed CPRS.

This weakness in the CPRS can be overcome by establishing a causal link between the amount of emissions saved through voluntary action and the setting of the national target. If it can be shown that individuals or communities have made savings that are greater than would be expected through the introduction of a price signal alone, the number of pollution permits issued the following year could be reduced accordingly. We have termed this a “cap-and-slice” approach.

Without an effective way to incorporate the benefits of voluntary action, the CPRS will send a contradictory signal to Australian households and business. On the one hand, higher prices for energy and energy-intensive products will encourage reduced consumption; on the other hand, the absence of a causal link between behaviour and overall emissions will discourage co-operative contributions in the spirit of climate goodwill.

The cap-and-slice proposal allows policymakers to avoid an unnecessary choice between voluntary, co-operative action and exclusive reliance on a strict regulatory approach.

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