Emissions Permits Trading versus Direct Investment

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Recommendation 1: The Australian government develop a plan to introduce a nation-wide surcharge on the retail cost of all energy with the money collected to be redistributed to those whose lifestyles generate few greenhouse gas emissions.

Recommendation 2: The Australian government immediately trial the system in the ACT by funding a surcharge on electricity to be distributed back to frugal consumers of electricity.

Claim: A direct investment market-based approach to reducing greenhouse emissions will cost less to produce a given reduction in emissions than will any form of carbon or emissions permits trading.

Reasoning

To reduce greenhouse gas emissions we require investment in ways to generate emissions-free energy.

Trading in emissions permits or carbon credits are indirect means of encouraging investment in ways to reduce greenhouse emissions. The systems work by increasing the cost of emissions-producing energy so that it is priced higher than energy generated without emissions. Once the price rises high enough organisations will find it profitable to produce emissions-free energy and so the market will encourage investment in emissions-free energy to replace the emissions producing energy generation.

An alternative approach is to encourage the existing market in emissions-reducing technologies to flourish by supplying potential buyers with money to invest in the market. This direct approach will cost less to reduce emissions – by any amount – than would the indirect permits or credits system.

The reasons for this are twofold:

1. For an emissions permit system to work effectively requires an increase in the cost of emissions, enough to make emissions-free energy competitive with energy created by burning fossil fuels. If the price of all energy is not the same as emissions-free energy then investment is unlikely to happen on the scale needed to make a significant difference.

2. In the main, fossil fuel burning technologies are mature, while renewable technologies are still emerging. We know that the cost of renewable energy production is likely to drop as it is introduced. This also means that in the future the value of emissions

permits will drop as less incentive is needed to encourage investment.

With a direct investment approach to emissions reduction, the cost of investment required to achieve a given level of reduction can be estimated and investment can proceed over many years at a lower average cost. Simple modelling of direct investment versus investment encouraged by higher prices from carbon trading shows that direct investment is at least 80% lower than indirect investment and is likely to require 50% or less investment to achieve the same level of emissions.

The other advantage of direct investment is that it is certain to work. We know how to produce emissions-free energy - it is only a matter of funding.

The argument against a carbon tax is that it stifles market development, because the government has the money and governments are not good at picking the best places to invest.

Implementation

In the past the solution would have been for a government to impose a carbon tax and to build emissions-free power plants, such as occurred with the Snowy Mountains scheme. Economic orthodoxy says that this approach leads to an inefficient allocation of resources, not withstanding the fact that the existing fossil fuel burning energy industry was established this way. Economic orthodoxy says that markets are needed to allocate resources efficiently and there is much evidence to show that when markets operate fairly, this is true.

There is good evidence from other areas to suggest that the most efficient allocation of funds will occur in a market place where there are many buyers who can freely choose from many sellers of the same product. This same result will occur even when the market place is disturbed by external events such as the introduction of a completely new technology.

Given this, if we distribute the money collected by a carbon tax so that it is spent in the market place of energy-saving infrastructure or to generate emissions-free energy, we will have the least cost method of achieving any level of emissions in any time frame.

Energy Rewards is one way to create a market place with many buyers with money to spend. It is a fair system where a surcharge (not a tax) is put on all fossil fuel energy. This surcharge is redistributed back as Rewards to those consumers whose lifestyles generate few emissions. These Rewards must be spent in the market place of green infrastructure. As the money is a redistribution (and not an expenditure item) there is no change to the GDP of any country adopting this system - just a redirection of investment away from consumption to renewable energy infrastructure.

Existing sellers of appropriate infrastructure will flourish because there will be many buyers wishing to buy. New technologies will develop because there are potential buyers of these technologies.

Conclusion

It is estimated that Australia could have zero net emissions within ten years with a 30% surcharge on the retail cost of energy redistributed as Energy Rewards.