



Critique of the McKibbin-Wilcoxon Hybrid Emissions Trading Scheme

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Clive Hamilton and Frank Muller¹

1. Background

The debate over an emissions trading system in Australia periodically refers to the claimed benefits of the so-called hybrid model of emissions trading developed by McKibbin and Wilcoxon.² This model has not been subject to critical scrutiny, a gap this paper seeks to fill.

The hybrid model proposes a national system with two types of emissions permits. Big emitters would be allocated long-term or perpetual permits which would allow one tonne of carbon to be emitted each year in perpetuity. The authors suggest that the total number of perpetual permits could be set for each emitter at their 1990 emissions. The permits would be tradable within the national jurisdiction but not internationally.

In addition the Government would issue short-term or annual permits. These would be sold rather than auctioned at a fixed price, with \$20 per tonne of carbon (equal to \$5.45 per tonne of carbon dioxide) suggested. There would be no restriction on the number issued each year, so the annual permits work more like a carbon tax. They would not be traded because anyone can buy any amount from the government for a fixed price.

The hybrid system was developed as an alternative to the systems of targets and timetables embodied in the Kyoto Protocol. It is also contrasted with the cap-and-trade system of the

¹ Clive Hamilton is Executive Director of the Australia Institute. Frank Muller is Professorial Visiting Fellow at the Institute of Environmental Studies at the University of New South Wales.

² See, e.g. Warwick McKibbin and Peter Wilcoxon, 'A credible model for long term international co-operation on climate change', Centre for Applied Macroeconomic Analysis, ANU, June 2006, and various other publications, including: Warwick McKibbin and Peter Wilcoxon, 'Climate Change Policy after Kyoto: A Blueprint for a Realistic Approach', Brookings Institution, November 2002; and Warwick McKibbin, 'From National to International Climate Change Policy', 2006 Sir Leslie Melville Lecture, Lowy Institute, March 2007.

European Emissions Trading Scheme (EU ETS). It is explicitly not an international emissions trading system but a series of domestic systems that may be linked by an agreement to harmonise the domestic price of annual emission permits. This is a deliberate feature of the system designed to prevent ‘shocks’ in one permit market spreading to another, and was initially motivated by claims that international emissions trading would cause severe global financial instability, a claim no longer emphasised by its proponents.

The inability of polluters to meet their emission reduction obligations by investing in cheaper options abroad means that the cost of cutting emissions would be higher, and in many countries substantially higher, than under a flexible international system as provided for by the Kyoto Protocol.

There are several reasons why the McKibbin-Wilcoxon model would fail the various tests of good policy. These are described below.

2. The hybrid model is incompatible with the Kyoto Protocol and the emerging global emissions trading market

The McKibbin-Wilcoxon model is incompatible with the Protocol because it is founded on the construction of a wholly different international agreement in which countries that have adopted the hybrid model agree to a common price for annual emission permits. As it diverges structurally from that of the Kyoto Protocol the model could be accepted only by countries that are not parties to the Protocol, do not expect to become parties and do not intend to adopt an emissions trading system that could at some point be integrated with the global system being established under the Protocol.

The hybrid model is also inconsistent with the EU ETS which forms the core of the emerging global emissions market under the Kyoto Protocol. The basic currency of this market is an allowance to emit one tonne of carbon dioxide (or CO₂-equivalent) during a specified period (e.g., 2008-12). The permits only have value because their supply is limited by the emissions caps agreed to by participating countries.

The hybrid model’s annual permits are neither limited in supply nor internationally tradable. Its perpetual permits confer an ongoing right that does not exist and could not be recognised under the EU ETS or Kyoto Protocol. The emissions caps and permit prices of the EU ETS could not be linked to an Australian hybrid scheme. Nor could such a scheme be linked with those being developed in many other countries and sub-national jurisdictions, notably the north-eastern states of the USA (see below), some of which are being designed to allow trading into the EU ETS.

Thus if Australia were to adopt the hybrid model it would be abandoning any chance for Australian firms to engage in international emissions trading. If Australia were to ratify Kyoto, there might still be an opportunity for Australia to engage in government-to-government trades in national allowances (i.e., Kyoto “assigned amount units”), but this is hardly the kind of system business is seeking.

3. The hybrid model is inconsistent with the trading systems being established by American state governments and with all the major emissions trading proposals currently before the U.S. Congress

Ten north-eastern states are currently jointly establishing an emissions trading scheme for power plant emissions, known as the Regional Greenhouse Gas Initiative (RGGI), which is a cap-and-trade scheme in the Kyoto mould. California is currently developing a mandatory emissions reduction program to achieve state-wide caps for 2010 and 2020 that already have been set in law. It is widely expected that this will include a cap-and-trade scheme that can integrate with the EU ETS and RGGI.

UK Prime Minister Tony Blair and California Governor Arnold Schwarzenegger have signed an agreement to explore the potential for such a linkage. In February, California took a further step by agreeing with four other western states to develop within six months a regional emission reduction goal and within eighteen months a cap-and-trade scheme to achieve this goal.

The fifteen American states now developing cap-and-trade schemes constitute 38 percent of the US economy (i.e., share of total GDP). Their combined emissions are 22 percent of the US total, greater than those of Japan or Germany. As a separate country, they would rank as the sixth largest emitter after the US, China, EU, Russia and India.

Four major greenhouse gas reduction bills have been introduced into the new Democratic-controlled U.S. Congress, all of which seek to establish cap-and-trade schemes. Corporate support for cap-and-trade also has been strengthening as evidenced by the recently released US Climate Action Plan signed by Alcoa, GE, DuPont, Caterpillar, BP and Duke Energy, among others. The plan includes a statement of principles for emissions trading that identifies cap-and-trade as the preferred approach. As the hybrid plan would impose no cap on annual emissions it is wholly incompatible with all of these schemes and would leave Australia isolated.

Proponents of the hybrid model assume that this international momentum for cap-and-trade systems can be stopped, previous efforts will be abandoned and a different type of system will be adopted. This is a fanciful view of national politics and international diplomacy.

4. The hybrid model is an idea whose time has passed – it has no significant government or business support elsewhere in the world

The McKibbin-Wilcoxon proposal's moment of opportunity followed President Bush's rejection of the Kyoto Protocol. It was framed to appeal to an Administration that was both sceptical about climate change and deeply distrustful of multilateralism. In the event, the Bush Administration chose not to advance it either as an alternative to Kyoto or as a domestic strategy. The debate has now moved on in the United States. There is a growing public groundswell for action on climate change and multilateralism is no longer such a dirty word.

When the McKibbin-Wilcoxon proposal was first mooted, the fate of the Kyoto Protocol was uncertain. The Protocol has now been in force for two years and ratified by 168

nations. Nearly 1,500 developing country projects are in the pipeline of its Clean Development Mechanism and are expected to generate nearly two billion tonnes of emission reductions by the end of 2012. The EU ETS has been underway for two years, covering 25 countries and around 12,000 energy intensive facilities. Trading under the Protocol is set to begin in full from next year. To get to this point took a decade and a half of tortuous negotiations. The Australian Government was one of the strongest supporters of Kyoto's emissions trading provisions, yet has now repudiated the agreement.

To imagine that Australia can develop its own unique trading system, fundamentally incompatible with the existing ones, and then persuade the rest of the world to abandon the hard-won gains reflects a naïve and self-important approach to diplomacy. To pursue such a scheme would represent little more than a delaying exercise that would leave Australian companies in limbo.

5. A key rationale for the hybrid model has been a concern over the potential for carbon price volatility to cause instability in the global macro-economy – this risk has been overstated

It is likely that there will be some price fluctuations in the Kyoto carbon market, as there has been in the early stages of the EU ETS. Major price fluctuations occur in other important global markets, such as the global oil market. But these large price variations do not bring about global collapse simply because affected companies are aware of it and take steps to accommodate it. That is why hedge markets exist and there will undoubtedly be hedge markets for emission permits. Moreover, as recent experience indicates, the complex and sophisticated global economy of the 21st century is far less vulnerable to energy price volatility than was the case during the oil price hikes of the 1970s.

6. There are better ways to address the price uncertainty and 'competitiveness' concerns that McKibbin and Wilcoxon claim are uniquely solved by the hybrid model

The most significant determinant of the permit price in a cap-and-trade scheme is the stringency of the emissions cap. With Australia's lenient Kyoto target, permit prices in an Australian ETS up to 2012 can be expected to be low. The stringency of emissions caps beyond 2012 are a matter for government decision, whether agreed as part of an international regime or unilaterally. Another key price determinant is coverage – the wider the sectoral coverage of an ETS, the greater the available abatement opportunities and the lower the likely permit price. These and other design choices enable governments to minimise the risks of high permit prices in a cap-and-trade scheme. Notably, under the EU ETS to date there has been a greater problem of prices being too low, rather than too high.

Nevertheless, cap-and-trade schemes can incorporate a 'safety valve' to guard against high permit prices, without throwing the baby out with the bathwater as McKibbin-Wilcoxon propose. For example, the RGGI scheme includes permit price thresholds that trigger increases in the share of a plant's emissions that can be offset through low-cost abatement projects outside the scheme such as tree planting. An Australian ETS could include similar

price thresholds allowing an increasing share of emissions to be offset through low-cost projects in developing countries under Kyoto's Clean Development Mechanism.

A quite separate issue is the risk that a domestic carbon price might erode the competitiveness of trade-exposed, energy intensive industries that face competition from developing countries without emissions constraints. This risk applies in only a few industries, including aluminium, steel and LNG. Options such as a border adjustment are available under the cap-and-trade model to address this risk without sacrificing environmental effectiveness.

7. The hybrid system uses the environment as the safety valve

Under the hybrid system there is no target and no limit on the amount of greenhouse gas emissions each year. If it is more expensive than anticipated to cut emissions then the environment bears the entire burden, unless the government decides to increase the price of annual permits.

The hybrid system is designed to give maximum certainty to business in a 'carbon-constrained' world. McKibbin and Wilcoxon argue that opposition from business is the main obstacle to a cap and trade system. This not only cedes excessive influence to business in a democratic nation, but now appears seriously out of touch with mainstream business sentiment.

8. The proposed hybrid scheme effectively privatises rights to the atmosphere and leaves taxpayers rather than polluters to foot the bill for the deep emissions cuts that ultimately will be required

In order to guarantee certainty to investors, the hybrid system proposes to allocate a large quantity of emission permits in perpetuity, constituted as property rights. Allocation of an amount equal to 1990 emissions (as suggested by the authors) would be a gross over-allocation far worse in its environmental and fiscal consequences than the over-allocation of water licences by state governments.

It is generally accepted that emissions in Australia will need to be cut by at least 60% by 2050 and more likely 90% in order to avoid the worst effects of climate change. If we are to meet these goals then it would be necessary for the government to buy back and retire most of the perpetual permits, probably at huge cost, even though these permits initially would have been allocated free of charge or at a very low price. As in the case of the over-allocation of water permits, forcing the tax-payer to pay for past mistakes is inequitable and bad policy, especially when it can be foreseen.

The property rights approach is at odds with best practice elsewhere in the world, including the EU ETS, the US acid rain program, and the RGGI scheme being developed by ten north-eastern US states. In all these cases, permits constitute a license, not a property right. The RGGI Model Rule, for example, states:

No provision of this rule shall be construed to limit the authority of the regulatory agency to terminate or limit such authorization to emit. This limited authorization does not constitute a property right.

Scientific understanding of climate change is evolving rapidly and there is a growing body of evidence that the impacts will be worse and experienced earlier than believed even just a few years ago. New knowledge, such as the recent concern about the feedback effects of the melting of the Arctic ice-cap, could at any point serve to mobilise the international community into agreeing on stronger action. Australia's climate policy should be sufficiently flexible that it can be adapted (strengthened, if necessary) in response to such advances in scientific understanding. Climate policy will be a learning process. It is a folly to believe we can design in 2007 a perfect scheme, locked in by secure property rights in perpetuity.

9. Unlike in the McKibbin-Wilcoxon worldview, businesses are skilled at managing risk

All businesses face uncertainty and have to manage risk. Successful businesses continuously manage risk across their operations, finances, governance and strategy as well as in relation to legal compliance and liability. The regulatory risk associated with greenhouse policy is an inherent consequence of our tampering with the climate system, not the result of capricious government. It represents a real economic cost of emitting greenhouse gases that should be borne by those who are responsible for the emissions. The proper allocation of this risk provides an added incentive for investment in zero- and low-emission technologies, which would be a desirable outcome.

In any case, shielding polluters from the costs they impose on society is not a sensible, nor likely to be a successful, long-term strategy for managing risk. A better approach is to implement a long-term comprehensive policy framework for pricing emission that can gain broad and enduring public support.

Governments and the community will face difficult economic and budgetary choices should steep emissions cuts become necessary to avoid dangerous climate change. Imposing an additional compensation bill would make it even harder for the community to respond adequately. To date, the arcane details of emissions trading have attracted little public interest. As public scrutiny grows, however, we expect there would be considerable concern at any proposal to privatise rights to the atmosphere and leave taxpayers with a potentially huge compensation bill. The McKibbin-Wilcoxon scheme would attract little public support and would be seen as a "polluters' charter".

10. The McKibbin-Wilcoxon proposal is based on an outdated view of climate science

The hybrid model was initially developed because the authors believed that the science of climate change, and possible impacts of global warming, were too uncertain and that there was a danger that governments would move too quickly thereby creating unnecessary nervousness among investors. McKibbin and Wilcoxon stress the dangers of precipitate

action; for example, ‘The scientific evidence is mixed. I believe there is enough evidence to suggest that global warming might be a serious issue but this is highly uncertain.’³

Climate science is much more certain now and the case for co-ordinated global action is stronger than ever. The hybrid scheme is therefore based on an outdated understanding of climate science.

11. The hybrid scheme is impractical and inefficient as a global system

While the Kyoto Protocol is a binding international agreement for nations that ratify, the proposed hybrid scheme proposes an international system in which nations can agree to apply a jointly agreed carbon price for annual permits. It allows each nation to allocate as many perpetual permits as it chooses. There is no international trading in permits and therefore no opportunity for companies to consider the cheapest emission reduction opportunities in other countries.

Under the hybrid model, there is no framework for bringing nations into the scheme and becoming part of an international community. This is based on the view that it is not possible to apply pressure on non-complying nations. This is untrue; the GATT rules impose penalties on countries that do not stick to the rules; exclusion means no longer receiving most-favoured nation status. The trend in climate negotiations is indeed towards considering penalties for nations that refuse to comply. It has been proposed that imports into Europe of goods from non-complying nations be taxed. Japan has proposed a tax on coal imports.

12. The hybrid proposal is not transparent

One of the recognised hallmarks of good policy is simplicity. The hybrid system is complex and many audiences have been left confused after being presented with the system. The Kyoto Protocol is complex in its detail but the essential idea of mandatory caps on emissions for industrialised countries is easily understood and widely supported by the public and by business.

³ Washington Post Online, 25 July 2001.