

## BAR ASSOCIATION SEMINAR ON CLIMATE CHANGE

24 October 2007

### Background

The best source of information about climate change is the February 2007 report of the Intergovernmental Panel on Climate Change. This records that 11 of the last 12 years (1995-2006) were among the 12 hottest years on record.

Since 1750, the earth has warmed by an estimated 1.6 to 2.4 degrees centigrade, primarily due to fossil fuel burning and land-clearing. The average temperature will increase by a further 2 to 4 degrees by 2100, if greenhouse gas emissions continue to climb at their present rate. Depending on whether one takes the high end or the low end of that range, the result will vary from something that can only be described as "serious" to the catastrophic. See Al Gore's film and book, "An Inconvenient Truth", and Tim Flannery's book, "The Weather Makers".

Australia has the highest rate of emissions, on a per capita basis, in the world. In absolute terms, despite our relatively small population, we are the world's tenth greatest emitter. We are presently on course to double our 1990 level of emissions by 2050.

There is now a general consensus that it is essential to reduce emissions and that the developing countries must take the lead. California has committed to reducing emissions by 80% below 1990 levels by 2050, 25% by 2010. Many countries have adopted a 60% goal for 2050, 20% by 2020.

Greenhouse gases are emitted in a number of ways. In Australia, the most significant contributions come from production of stationary energy (primarily electricity), the burning of transportation fuels, land-clearing and agriculture.

There are many greenhouse gases; however, the dominant contributor is carbon dioxide, emitted by burning fossil fuels during the generation of electricity. This accounts for nearly 70% of total Australian emissions. The burning of transportation fuels is next, with about 16%.

Much can be done to reduce the consumption of both electricity and transportation fuels. Reduction, up to 20%, of both by 2020 is widely regarded as feasible, given a vigorous, government-supported effort.

One of the ways of encouraging a reduction of the use of both electricity and transportation fuels is by adopting an emissions trading scheme. Both the Coalition federal Government and the Opposition have promised to establish a scheme. Neither has given any detail; however, it seems likely there will be Commonwealth legislation establishing an emissions trading scheme during the life of the next Parliament. What would it look like? I do not know. My task today is to alert you to the questions that are likely to arise in its design.

## The concept

The idea behind an emissions trading scheme is that the government fixes an emissions output (usually expressed in terms of tonnes of carbon dioxide equivalents) that is regarded as acceptable at a particular time and issues permits to emit to that level. Non-authorized emissions are illegal. The emission levels attaching to each permit are progressively reduced, thus gradually bringing down the total permissible emission level. Because their individual permissible levels are regularly reducing, permit holders need constantly to improve their energy-efficiency. Emission rights are tradeable, thus providing a financial incentive to emitters to reduce their emissions at a faster rate than is required under the permit and sell off their surplus rights to others.

The most notable existing emissions trading scheme is that of the European Union. This scheme came into operation in 2005. It governs the emissions of the 25 countries which are members of the EU. Daily emissions rights trading generally exceeds one million tonnes of carbon dioxide equivalents. The scheme is credited with having caused a 10% drop in EU emissions in just three years.

In designing an Australian emissions trading system, decisions will need to be made about five key questions: (1) the country's total permissible level of emissions ("the cap") and the rate of its reduction, (2) the coverage of the trading scheme, (3) the method of allocation of permits, (4) the penalties for making or permitting emissions not covered by a permit and (5) the rules about offsets (if they are to be allowed.) Important technical matters include the method of measuring emissions, the mechanism for transfer of entitlements to emit and the establishment of a public register of permit rights and use.

### (1) The cap

Logically, the cap would be determined by reference to the emission targets adopted by Australia. Thus, if it was decided that, by 2050, Australia would reduce its emissions to a figure that is only 40% of present Australian greenhouse emissions, (that is, reduce the present emissions level by 60%), as is proposed by the Labor Party, this would need to be reflected in the chosen cap. But it is not sufficient to work on the basis of a 2050 target. That year is so distant that it imposes no accountability on the present generation of emitters or politicians. A scheme designed today needs also to take account of earlier target figures: for 2020, at the latest; possibly also 2015.

The selection of target figures is essentially a political matter; the choice no doubt taking into account scientific advice, public opinion, the feasibility and effect on the economy of particular target figures, and whatever international pressures are brought to bear on us.

When the total target figures are determined, it will be necessary to consider to what extent individual segments of the carbon economy are susceptible to reduction. This logically leads to decisions about coverage and, in relation to each selected segment, a decision about the maximum permitted emission level in that segment in each year within a specified period.

Issues will arise as to the length of the specified period. In the name of business certainty, emitters may be expected to ask the Government to commit to specific annual targets covering many years. On the other hand, it may be a mistake for any government to look too far ahead. The science of climate change is still developing. Targets thought reasonable (even tough) today may be regarded in a few years' time as woefully inadequate. Perhaps it would be unwise to fix binding targets beyond ten years, with a rolling annual update.

## (2) Coverage

The decision about coverage will determine what segments of the carbon economy the scheme will cover. Those with tidy minds may argue it should cover all emitters, but it seems to me this is not a practical approach. Some segments are easier to regulate than others. The operation of an emissions trading scheme in respect of agriculture, for example, would be extremely problematic. The same difficulty may not apply in relation to transportation, but it may be more effective for a government to deal with that segment more directly; for example by mandating the inclusion of a specified proportion of biofuels in transport fuel sold at retail level and/or requiring all car manufacturers who sell on the Australian market to meet stipulated average fuel-efficiency standards..

The overseas practice has been to concentrate, initially, on electricity; later gradually extending to other segments of the economy. Given the dominance in the Australian carbon economy of electricity generation, that may be the course taken here.

As I previously indicated, the issues of cap and coverage are intertwined. The trick will be to choose caps, in relation to the covered segments, that will ensure that Australia meets its overall adopted targets.

## (3) Allocation of permits

There are several alternative methods of allocating permits. One option is to give permits, free of cost, to existing emitters. The argument is that this cushions the shock of the changed rules; however, it puts pressure on existing market players to tighten up their emission performance.

This option has two disadvantages. First, it is anti-competitive. Free allocation favours existing market participants over new players. New market players would need to purchase their permits, the cost being an additional, significant barrier to entry. Second, to give away the permits is to forego the revenue that could be raised by their sale. This revenue could be used for projects designed further to reduce emissions or to mitigate the effect on poorer consumers of rising energy prices.

The downside of selling all the permits at auction is the possibility, perhaps slight, of someone buying up all, or a major part, of them and holding others, including existing generators, to ransom.

Comments made by the Prime Minister in Sunday night's debate seem to indicate that he favours the sale of permits at auction, not free allocation.

A third possibility is a combination of free and sold permits, thereby combining the advantages and disadvantages of both alternatives. A further possibility is for some permits to be issued to existing players, at a reasonable fixed price, and the remainder put to auction.

#### (4) Penalties

If an emissions trading scheme is to be effective, it is obviously necessary to impose severe penalties on those who emit outside the authority of the permits. It seems to me essential that the penalties exceed whatever it would have cost the emitter to purchase, on the market, the right to emit the relevant quantity of emissions. If this is not done, it will be more profitable for emitters to ignore the legal restrictions and pay their fine when caught. One way of ensuring that the penalty always exceeds the price of emissions would be to require the court to calculate the penalty by reference to the going purchase price. My idea would be to have the penalty calculated at a rate, say, twice the highest price per tonne of emissions traded in the quarter, or year, immediately before the offence.

#### (5) Offsets

Offsets are perhaps the most controversial aspect of any emissions trading scheme. The idea behind offsets is that, instead of an emitter purchasing more entitlements or paying penalties, the emitter may offset its excess emissions against something that is designed to mitigate the general effect of greenhouse emissions.

The theory behind offsets is attractive, particularly to politicians who might see offsets as a way in which they may take the credit for sundry environmentally-virtuous actions. However, it is now evident that there are dangers in permitting offsets.

First, it will always be necessary for someone, generally a public servant, to evaluate the offset. Experience should have taught us that, when a public servant sits down to negotiate with a private entrepreneur, the resultant deal usually favours the entrepreneur. It is not that public servants are dishonest: just that they always have less at stake, in a personal sense, and usually less experience, than the representatives of the entrepreneur. And public servants may be overborne by politicians inappropriately beholden to commercial interests.

Second, the countenance of offsets inevitably means that the total volume of emissions cannot be predicted in advance. In designing the scheme, how much allowance should be made for offsets? An unexpectedly high offset level may easily lead to the collapse of the market price of emissions, as has recently happened with the embryonic New South Wales scheme. If this should occur under a national scheme, it would greatly reduce the financial incentive to emitters to become more energy efficient.

Another problem about an offset regime is its policing. Who is to say whether the offsetting event would have occurred anyway? Unless great care is taken,

governments can find themselves rewarding initiatives that are simply a commercially-logical response to the changed energy market. And the regulatory authority may have to accept a monitoring role of indefinite duration. Consider the case of tree-planting, perhaps the most popular form of offset. What if the trees die through lack of water or are destroyed in a fire? What if they are harvested in 20 years time? The only form of tree offset that is worth having is one that will ensure the trees are maintained for a very long time, say 100 years or more. And who can guarantee that?

Because of worries such as these, many environmentalists are opposed to an Australian emissions trading scheme making provision for offsets. They say the only rigorous policy is to reduce or eliminate the emissions themselves.

### The future

I imagine there will be an opportunity for public input into the design of an Australian emissions trading scheme. I hope the Bar Association, as an institution, and you, as individuals, will take advantage of that opportunity. The problem of climate change is so great that it is enormously important that we get this right. As lawyers, we should all be concerned to ensure that the scheme is simple, efficient and fair. As citizens, and on behalf of the children and grandchildren whose interests are most at stake, we should be concerned to ensure it is also effective.