

THE AUSTRALIAN GREENHOUSE STORY

(In 7 papers)

Paper No. 1. **The Background**

In 1997 a most enthusiastic Robert Hill, on his return from the Kyoto Conference assured everyone who would listen that the Protocol, which bears the name of the host city, was a 'win win win for Australia'. Hill, at the time was speaking as Minister for the Environment.

Since then the Commonwealth Government has repeatedly refused to ratify this international treaty and thus make it part of Australian law. Ministers, from the Prime Minister down, regularly assure us that Kyoto is 'not in Australia's interests'. So what went wrong? Why is a treaty that Australia had such a major share in bringing about and which Hill, no doubt with Cabinet approval, so enthusiastically proclaimed and signed, suddenly become an object of disdain?

The world's environmental scientists in the years leading up to 1997 warned repeatedly, as they still do, that the earth's climate was warming. They said the major cause of this phenomenon was human activity, notably our use of fossil fuels, preference for ruminating livestock products (mainly cattle) and our insistence on clearing large tracts of forest. This, in turn, was substantially increasing the output of a number of carbon based gases.

They agreed there might be other causes but were convinced human activity was the major factor. They said that the greater quantities of carbon based gases being released were trapping the reflected heat of the sun on the surface of the planet rather than allowing it to dissipate into the atmosphere.



In fact, there is continuous movement of CO₂ (by far the most prolific of the carbon based gases) between its gaseous, liquid and solid forms. For example the majority of the world's CO₂ is held below the earth's surface and atmospheric levels of CO₂ can be dramatically increased by major volcanic activity. It is also what animals mostly exhale and there are many other causes of CO₂ emissions. On the other hand CO₂ is absorbed all the time by plants through photosynthesis and also by sea water.

The evidence has continued to mount in support of the scientists' initial diagnosis. The rate of increase in CO₂ levels is greater than anything the earth has experienced in the past 750,000 years and the most likely cause remains human activity. The greenhouse problem is accentuated because CO₂ stays in the atmosphere for about 100 years which means the climate effects it causes remain with us for a century or more after the problem is rectified. It is currently estimated that if the world continues to emit carbon based gases on a 'business as usual' basis for the next 50 years or so, atmospheric CO₂ levels will rise to a level not experienced since the Eocene age about 65 million years ago when, as a result, sea levels stood at nearly 92 metres above present levels, crocodiles roamed the area of the north and

south poles and palm trees grew in Greenland and probably Tasmania as well.

But to return to the theme. The scientists not only correctly diagnosed the major cause of global climate change they also worked out a way of reversing it. They suggested that the emitting of carbon based gases (greenhouse gases) be capped by emitters being required to hold equivalent emission permits. Any emissions in excess of these permits had to be off-set by the purchase of carbon credits representing the capture and retention of gaseous CO₂ by carbon sinks (mostly trees). This arrangement we call, 'Cap and Trade'.

Greenhouse Abatement, as it is called, would then occur by the progressive reduction of available emission permits thereby forcing emitters to buy more carbon credits or reduce their use of fossil fuels. The scientists added to this a plan for what they called an Emissions Trading Market where emission permits and carbon credits could be bought and sold. Such a market has been successfully operating in Europe since 1 January 2005 and is based on the US market for sulphur dioxide in the removal of acid rain. The Australian States and Territories are currently considering a similar market here but the Commonwealth is opposed to it.

McKean & Park papers on the legal requirements of such a market can be accessed on this website or on <http://www.cabinet.nsw.gov.au/greenhouse/emissiontrading>.

To an emitter, the market would be a place where it could buy the right to continue emitting – but at a price. As that price rose so too would the cost of the emitter's goods and services until, if nothing was done, the emitter would price itself out of the market. Alternatively, the emitter could use different products, different methods, different materials and/or different sources of energy thereby reducing its need to buy in the market. Such a market said the scientists, would provide the necessary incentives to produce all the alternatives referred to, including alternative sources of energy that did not pollute the atmosphere.

One of the great benefits of such a system, they said, would be that the market's price would be passed on and reflected in everything. This would cause everyone buying or selling goods or services to continually reassess the cost and to reject those goods and services contributing to the problem. This rejection would not be because the public recognised the pollutants and the harm they were causing but because their prices were becoming increasingly uncompetitive.

ROSS BLAIR