

Submission to the Garnaut Climate Change Review
EMISSIONS TRADING SCHEME DISCUSSION PAPER

Discussion paper released on 20 March 2008; submissions due by 18 April 2008

There is evidence that the build up in carbon dioxide (CO₂) levels in the atmosphere follows global warming (Stott 2007) rather than being the fundamental cause of global warming; however, assuming that CO₂ build up is causing global warming then is an Emissions Trading Scheme (ETS) the most cost-effective way of reducing the environmental harm?

The largest ETS, the EU emissions trading scheme (EU ETS), began operation in January 2005. In May 2006, when several countries revealed registries indicating that their industries had been allocated more allowances than they could use, trading prices crashed from above €30/ton to €10/ton, declined further to €4 in January 2007 and to below €1 by February 2007, reaching an all time low of €0.03 at the beginning of December 2007.

The original European Union states (EU-15) who signed up to Kyoto, achieved an average 2% cut in carbon emissions from 1990 to 2005, compared to the 8% cut that they committed to achieve by 2010 under the Kyoto treaty (EEA 2007). European Union CO₂ emissions rose in 2006 and 2007. The EU ETS failed as a market and failed to achieve a reduction in emissions.

Carbon dioxide emissions for developed countries average about twelve tonnes per capita. China's emissions are currently around five tonnes per person. China has overtaken the US as the greatest greenhouse gas emitter. Because of the great disparity in the growth rate of emissions between the US and China, China's emissions will be over 2.5 times greater than that of the US within a decade (Brook 2008). Nevertheless China, through its family planning policy, will have done more to reduce the emissions of CO₂ than any other country. World human population is forecast to increase from its current six billion to nine billion by 2050. Assuming that the energy can be provided to increase the welfare of the population, we can assume that CO₂ emissions will double by 2050.

The thermal coal price has increased threefold to \$150/t in 2008. Electricity charges in Australia will inevitably increase significantly. It will be a very courageous Government that further increases energy prices by imposing an ETS or tax on carbon. Electricity like water is a necessity and a levy on energy is regressive, disproportionately impacting the less wealthy.

China and the USA will continue use of their fossil fuels to increase the welfare of their citizens. History shows that carbon trading schemes do not work. Similarly, a tax on carbon will not reduce CO₂ emissions; however, it seems governments are intent on raising revenue through a tax on CO₂. If all revenue raised from coal fired power stations was put directly into developing carbon capture and geosequestration, then Australia may be able to reduce CO₂ emissions and improve the welfare of its citizens. If this technology was introduced to new coal fired power stations in China then Australia will have made a significant contribution to reducing World CO₂ emissions.

Brook, B. (2008). "China becomes top carbon dioxide emitter - Experts respond."
[Australian Science Media Centre \(AusSMC\)](#).

EEA (2007). Annual European Community greenhouse gas inventory 1990–2005 and inventory report 2007. E. E. Agency.

Stott, L. (2007). Carbon dioxide did not end the last Ice Age. [University of Southern California](#)