

SUBMISSION TO THE SENATE SELECT COMMITTEE ON CLIMATE POLICY

From Estelle Ross

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CONVERSION FROM FOSSIL FUEL INDUSTRIES TO GREEN INDUSTRIES

Australia's dependency on fossil fuel industries must be phased out as they are the worst contributors to the increase in CO₂ emissions. Instead the \$millions in subsidies they receive each year should be given in the form of substantial grants for innovators to establish new green technologies such as;

- Wind farms
- Solar power manufacture
- Wave and tide electricity generation
- Exploration and establishment of geothermal capabilities
- Thermoelectric solar towers like the one in Spain which will provide enough power for the city of Seville
- Electric vehicle manufacture
- Combined heat and power systems such as the commercially operating fuel cells in Woking, UK

There should be no free permits for any 'dirty' industries; instead they should be fined unless they can clean up their act.

PROVISION OF INNOVATION SCOLARSHIPS

Over the years Australia has missed out on commercialising so many wonderful inventions by failing to nurture these talented inventors. This must cease. Research scholarships should be provided to nurture this talent.

EMISSIONS' TARGET

Australia's pathetic target of 5% – 15% reduction in CO₂ emissions depending on similar targets from other countries must be increased to at least 20% immediately.

MANDATORY INSTALLATION OF SOLAR POWER AND WATER TANKS

There should be an immediate nationwide planning law which makes it mandatory to have solar power and water tanks installed in all new buildings, commercial and residential. Some Government rebates already apply to retrofit existing properties and feed-in tariffs for solar power should be applied to help encourage this.

EMISSIONS TRADING AS A CENTRAL POLICY

Companies that plant trees in the form of monoculture plantations to offset their carbon emissions will have a disastrous effect on our increasingly dwindling ground water supplies as these new plantations suck up gigalitres of water and use up ever diminishing farmland. **Instead these companies should be made to decrease the output of their carbon emissions.** A more sensible

approach would be for these polluters to pay forestry companies and private plantation owners to keep already established trees in the ground. **Even more important would be to keep the wonderful biodiversity and sequestration of carbon possible by protecting our native forests from being logged.**

CARBON SEQUESTRATION USING BIOCHAR

It is vital that the Federal Government supply generous funding for research into biochar production. There are many companies worldwide and in Australia who have carried out important research which has proved the viability of this process. It has been a commonplace agricultural process in the Amazon region for centuries and would be an excellent means of turning not only green urban waste (thus sparing our landfill sites) but also agricultural waste (which might be burnt thus polluting the atmosphere with CO₂) into a product which would provide a source of income to the manufacturer from sales of char and also be carbon negative in the process.

This is a truly amazing product. Slow Pyrolysis of this material creates 2 main products;

- gas (methane and hydrogen) which can be used as an energy source to run the plant
- and char that contains roughly 60% of the carbon contained in the original waste product

Char itself is inert and highly porous, enabling soil to retain both water and nutrients and if then sold and used as a soil improver, not only sequesters carbon, becoming 'carbon negative' in the process, (vital if we are to reduce the amount of carbon in the atmosphere) but also provides an income to its manufacturer while at the same time improving degraded and arid areas of farmland in Australia.

REDUCTION OF CO₂ OUTPUT IN CITIES NATIONWIDE USING THE WOKING, UK MODEL

An engineer called Allan Jones who was employed by the Woking Borough Council in the UK back in the 1990's was able to reduce the city's power usage from the centralised energy source by 80%. Not only that but he was able to produce electricity at a price of 9p per kilowatt hour as opposed to the grid's price of 10p.

He had been given the mandate to update the town's heating system and did it by installing 80 combined heat and power units throughout the town complemented by masses of solar panels. By 2004 Woking was producing 80% of its own power and had dropped its CO₂ emissions by 77%.

Large municipalities in Australia should be given incentives by the Federal Government to do the same here.

All establishments should be encouraged to lower their emissions because in so doing they inevitably save money as well.

PETER ANDREWS' NATURAL SEQUENCE METHOD OF FARMING AS A MEANS OF HALTING EFFECTS OF CLIMATE CHANGE

The whole Australian landscape has changed irrevocably since European settlement began around 200 hundred years ago. We have cleared the land and by doing so destroyed the natural balance.

- Waterways which once traversed the countryside were higher than the immediate areas so that following rain the water did not rush through as it does today in deepened channels and cause ever more scouring of riverbanks. Instead the water flooded the land and through a series of wetlands was able to soak it up like a sponge leaving a vast underground supply so perfect for a country where surface water would evaporate quickly away.
- Removal of so much of the vegetation has changed the local microclimates and blocked the natural air-conditioning effects of native forests; used to cool the air during the day and keep it warmer at night.
- Vast tracts of broad acre farming when lying fallow especially down the eastern seaboard of Australia are the direct cause of the more serious storms that have been experienced there over latter years.
- Instead of cutting down riparian vegetation we should be encouraging it. It helps support the banks and also creates habitat for birds and animals and shades the water, lessening effects of evaporation.
- Modern intensive irrigation has exacerbated the salinity problem as do the installation of dams.
- Excessive sale of water rights has wrecked the Murray-Darling Basin and caused massive salinity problems, water shortages and decrease in biodiversity of flora and fauna
- **Peter Andrews' Natural Sequence Farming method used on his own and other properties has proved that it is reasonably easy, relatively fast and inexpensive to reverse the effects of land degradation, salinity and lack of water. What is required, however, is massive government support both financially and practically.**
- **I have been informed by several Federal Departments which I contacted that he has received the pathetic amount of \$1 million over the past 4 years for his research and yet he has the key to saving the Murray Darling Basin but will the government listen? No. They would rather spend \$billions supporting the fossil fuel industries. This has to stop.**

I hope that you will take into account the matters I have mentioned here when discussing Australia's Climate Policy.

Signed Estelle Ross