



Sharing sustainable solutions with communities

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Dear Mr Henry

SUMMARY OF SUBMISSION

This submission argues that Australia's Future Tax System should:

1. **Be based on Ethical Considerations**
2. **Recognise that Climate Change, Oil Depletion and Over-Population are the three greatest problems that Australia faces in the 21st century**
3. **Be Bold and Transformative** – new ideas and approaches are needed as the problems we face will not be solved by making changes to the existing tax system
4. **Include an Ecological Tax** - to place a real value on natural resources and to promote greatly enhanced resource efficiency use, demand reduction and alternative energy sources
5. **Include a system of Personal Carbon Allowances** - to fill a major gap in the proposed Carbon Pollution Reduction Scheme, to inspire social cohesion around greenhouse gas reduction targets, to provide motivation for people to change their behaviours and consumption patterns and to allow individuals to respond flexibly by reducing emissions in a manner that suits their circumstances
6. **Provide accelerated or bonus depreciation allowances to Farmers who invest in new equipment to reduce greenhouse gas emissions and/or to sequester carbon in soils**
7. **Provide Farmers with deductions for the cost of agricultural education courses assisting them to adopt organic methods of production and practices that sequester carbon in soils**
8. **By agreement between the Commonwealth and States abolish existing Stamp Duties on Land Sales and replace them with a system of levies based on the Embodied Energy Content of new buildings and renovations** – this would fill a major gap in the CPRS
9. **Abolish the existing system of Fuel Tax Credits, which encourages the generation of greenhouse gas emissions**
10. **Abolish the Baby Bonus**

INTRODUCTORY REMARKS

I write to you on behalf of the members of Permaculture (Sydney) North. Permaculture (Sydney) North has some 350 members drawn from the northern suburbs of Sydney and is an active organisation dedicated to promoting Permaculture. In 2008 Permaculture (Sydney) North hosted the 9th Australian Permaculture Convergence which was attended by over 500 delegates from around Australia and from many other countries.

Permaculture is a design system for the creation of sustainable communities. It is based on three primary ethics (see Note 1):

➤ **Care for the Earth**

Recognising the right of all natural systems and other life forms in the biosphere to exist and recognising that human survival and all human activity is dependent on the resources of the natural world.

➤ **Care for People**

Recognising that all peoples of the earth have a right to access those resources necessary to their existence and recognising that a sustainable society must treat all members fairly and equitably.

➤ **Limiting Population and Consumption**

Recognising the finite resources of the earth and that total consumption is a function of both individual consumption and population.

We note that the Terms of Reference for your inquiry include a requirement to, *“make recommendations to create a tax structure that will position Australia to deal with the demographic, social, economic and environmental challenges of the 21st century and enhance Australia’s economic and social outcomes.”*

This broad charter makes Australia’s Future Tax System a mechanism via which far-reaching and much needed reforms might be advanced.

It is suggested that the reforms that the inquiry recommends should:

➤ **Be based on ethical considerations**

We would not be so bold as to suggest that you should adopt the ethics of Permaculture but a similar ethical foundation would be appropriate.

➤ **Explicitly recognise the three greatest problems that humanity faces in the 21st century**

- ◆ Climate Change
- ◆ Oil Depletion
- ◆ Over-Population

➤ **Be bold and transformative**

The broad goals of the inquiry will not be achieved by fiddling at the margins with the current taxation system or by incremental change. Some completely new ideas and approaches are needed. The current system has proven an abject failure in terms of preserving the environment on which we depend for our livelihoods and indeed our lives.

GIVING SUBSTANCE TO ETHICAL CONSIDERATIONS

Ecological Tax

Without doubt the greatest failing of the market place and modern economics has been to place a zero value on natural resources. Almost invariably natural resources whether they be minerals, forestry products, fisheries, etc, have been priced essentially on the *cost of extraction* plus a margin. In more recent times government intervention may have added to pricing by, for example, requiring mining companies to undertake remediation of sites mined. However, this is simply an addition to the cost of extraction. The natural resources themselves were essentially still attributed a zero value. Prices above the cost of extraction plus the normal margin occur when demand exceeds supply, notably in the case of oil. However, these are cases where super profits are realised by producers not cases where the natural resource itself has actually been allocated an intrinsic value.

The consequence of this failure of the market place and of modern economics has been the squandering of a large part of our total reserves of non-renewable resources, such as oil, in a few generations.

This exploitation of non-renewable resources for short-term profit at the expense of future generations is highly unethical.

Proposals to address this failure of the market place through taxation reform have been advanced in the past. In "*Ecological Tax Reform – A Policy Proposal for Sustainable Development*", Ernst Ulrich von Weizsacker and Jochen Jesinghaus, proposed a system whereby a broad-based resource tax would be introduced on fossil fuels, nuclear energy, and all natural resources (see Note 2).

The Ecological Tax was proposed to be revenue neutral with the revenue collected being returned to the public through a combination of income tax and VAT reductions designed to protect low income earners. The tax rate, say 5 % to start with, would be raised by a fixed percentage amount each year.

The concept is that this steady and predicable increase in resource pricing, over 30 to 40 years, would promote innovation in favour of:

- Greatly enhanced resource use efficiency
- Alternative energy sources
- Demand reduction

The proposal was supported by modelling of the price elasticity of liquid fuels and on research into the impacts of the oil shocks of the 1970's.

In the Australian context the Rudd Government's stated intention of introducing a greenhouse gas cap and trade system, the *Carbon Pollution Reduction Scheme (CPRS)*, has pre-empted the adoption of an Ecological Tax on fossil fuels. However, it is submitted that there would still be great merit in the adoption of an Ecological Tax to foster technical innovation, enhanced usage efficiency and preservation of other natural resources.

Personal Carbon Allowances

A second innovation that is recommended is the introduction of **Personal Carbon Allowances (PCA)**. PCA is a system in which '*cap and trade rights*' are allocated to individual energy end users. The British Government has been considering the introduction of such a system due to concerns that the European Emissions Trading Scheme, which allocates carbon cap and trade rights to corporations is not achieving its objectives (Notes 3), and needs to be augmented by other measures. (Notes 4, 5, 6)

In the Australian context the CPRS will create corporate awareness of the need for change and, if the carbon price is appropriate, an economic incentive to take action to reduce greenhouse gas emissions. However, even if the carbon price is pitched at the right level and the CPRS actually works as intended in the corporate sphere, it will still have a significant shortcoming in that it will '*let individuals off the hook*'. Many people may feel that the government and companies, through the CPRS, are taking action to address the problem of climate change and individuals may have little incentive to modify their own behaviours to reduce the emissions for which they are responsible.

In the UK the PCA scheme is intended to apply to all direct energy used by individuals within their household and for personal travel. The advantages of such a scheme are:

- A PCA could inspire social cohesion around national carbon reduction targets.
- It puts individual responsibility for carbon emissions at the centre of policy and engages citizens directly in emissions reductions in their own lives. This would provide a powerful motivation for people to change their behaviours and could greatly accelerate the move to a lower carbon and less energy dependent society.
- It would provide much greater certainty that essential emission reductions will actually be achieved.
- It would allow individuals to respond flexibly and to reduce emissions in a manner that suits their personal circumstances
- A PCA is equitable in that persons on lower incomes would have a measure of protection from higher prices as, generally, emissions increase along with income. Accordingly, persons on lower incomes would, generally, have some capacity to sell carbon credits. The amount of PCA credits allocated to every adult in society would be the same. The British are currently debating whether or not dependent children should be allocated a partial PCA or a nil PCA. A partial PCA would probably be the most equitable approach. (see Note 7)

Some may feel that a PCA is not a tax in the conventional sense. However, it is necessary to understand that the PCA credits allocated to individuals would in effect be a 'Complementary Currency'. It is possible that a PCA scheme might be most efficiently administered through the Australian Taxation Office. Presumably, money earned from the sale of PCA credits would be considered income.

ADDRESSING THE THREE GREATEST PROBLEMS OF THE 21ST CENTURY

Climate Change – Sources of Emissions

Reducing Greenhouse Gas Emissions (GGE's) by the amount required in the timeframe available will be a mammoth task. A number of interlinked strategies will be required. This submission assumes that the Australian Government will eventually adopt targets for GGE reduction in line with the recommendations of the UN International Panel on Climate Change. That is to contain atmospheric CO₂ to a maximum concentration of 450 parts per million GGE must be reduced by 25% to 40% on 1990 levels by 2020, and by 80% to 95% on 1990 levels by 2050. (Note 8)

To achieve reductions on this scale all sources of GGE's must be addressed. From a household perspective, GGE's come from (Note 9):

- **Stationary Energy 17.6%** - primarily electricity generation in coal fired power stations but also gas and other fuels
- **Transport 9.0%**
- **Food /Agriculture 26.1%** - through use of nitrogenous fertilisers and from ruminant animal methane emissions
- **Construction & Renovations 13.1%** - of dwellings and commercial buildings from materials containing high levels of embodied energy
- **All Other Consumption of Goods and Services 34.2%**

While the CPRS and the proposed Personal Carbon Allowance (PCA) scheme will address energy use and transport and feed into the manufacture, distribution and subsequent consumption of goods and services there are gaps with regard to Food / Agriculture and Construction / Renovations.

Climate Change – Assisting Farmers to Reduce GGE's

Initially agriculture will be excluded from the CPRS. When agriculture is included presumably farmers will need to obtain carbon credits to cover their emissions. While this will drive change it will do so from a negative perspective when much more might be gained from a positive approach offering carrots rather than sticks.

It is suggested that farmers should be allowed accelerated depreciation allowances and/or depreciation bonus allowances of say 150% of capital cost, when they invest in new machinery or fencing or other equipment that allows them to adopt methods of production that reduce GGE's or sequester carbon in soils. Examples of such methods of production are:

- No-till farming
- Cell grazing
- Adopting organic practices – instead of using artificial fertilisers, pesticides and herbicides, which destroy soil micro organisms and lead to a loss of soil organic matter and in turn soil carbon

Farmers could also be allowed tax deductions for the cost of agricultural education courses assisting them to adopt organic methods of production and practices that sequestered carbon in soils.

Reforming our agricultural sector is one of the most effective things we can do to combat climate change.

Climate Change – Encouraging the Construction Sector to Reduce GGE's

To address the Construction / Renovation gap in GGE reduction strategies it is proposed that the Commonwealth and the States work together to transform the current system whereby Stamp Duty is levied on sales of land.

It is suggested that the current Stamp Duty levied on land sales be replaced with a levy based on the embodied energy and hence GGE's of the materials used in constructing a new building or in renovating an existing building. The levy would be imposed not at the time of sale of the land in question but rather when a development application is lodged. For example new buildings containing large quantities of high embodied energy materials such as reinforced concrete would be taxed heavily. Buildings or extensions utilising renewable materials with a low embodied energy content such as plantation timber would attract very little tax.

There is a desperate need to reform the construction sector to reduce GGE's and to encourage the use of renewable natural building materials. The most greenhouse gas efficient strategy we could adopt would be to reuse, with minimum modification, existing residential and commercial building stock. The second most effective strategy would be to use low embodied energy natural renewable materials in construction. It is submitted that the proposed levy on the embodied energy of new construction and on renovations would provide a powerful financial incentive to point the construction industry in the right direction.

Climate Change – Eliminating Current Incentives to Pollute

It is submitted that the current system of Fuel Tax Credits should be abolished. It makes no sense to subsidise carbon pollution at a time when we need to drastically reduce GGE's.

Oil Depletion – Implications and Responses

As oil becomes more expensive and as its availability declines the most significant impact will be that food production and distribution will be disrupted. Our current system of agriculture is heavily dependent on oil to fuel tractors and other heavy machinery and for the production of fertilisers, pesticides and herbicides.

A preview of what is in store for us was provided by Cuba in the early 1990's when that country was largely cut off from oil supplies following the collapse of the USSR. Agricultural production collapsed overnight and food shops were empty. Cubans responded by learning how to grow much of the food people needed (fresh fruit and vegetables) in local private and community gardens. Some 80% of the food consumed in Havana is now grown in, or immediately around, the city. Cuban community gardens and broad-scale agriculture now utilise organic methods of production almost exclusively. (Note 10)

The accelerated depreciation allowances and/or depreciation bonus allowances suggested above would serve the dual purpose of reducing GGE's and encouraging the transition to organic farming methods. It is highly desirable that Australian farming be converted to organic methods before peak oil impacts hence these suggested financial incentives are seen as being of high priority.

As Peak Oil impacts the cost of fuel will inevitably rise sharply and its availability for personal transport will at some point become restricted. It is highly desirable that people start to make the transition to other forms of transport before this occurs. New modes of transport might include, for example, all electric vehicles, compressed air vehicles and new public transport networks.

The system of Personal Carbon Allowances suggested above, to reduce GGE's, would provide a powerful incentive for people to use fuel-efficient or non-fossil-fuel vehicles, to use public transport or to rethink the amount of travel they currently undertake.

Relocalisation of activities such as work, food production, education and health services and entertainment may be the ultimate response demanded by the challenge of Peak Oil.

Over-Population – Implications and Responses

The current population of the world is approximately 6.8 billion people. There are various estimates of how many planets we need to support the current unsustainable global rate of resource consumption. No one could seriously suggest that the current population of the Earth is sustainable.

However, does the fact that the Earth is clearly over-populated mean that Australia is over-populated? Professor Tim Flannery has made the only estimate of Australia's long term sustainable population level, of which I am aware. Professor Flannery has suggested that a sustainable population level for Australia would lie somewhere between 8 million and 12 million people. (Note 11)

However, it is not necessary to form a view as to what our sustainable population level might be to see that the current rate of growth in Australia's population is a huge problem when considered in relation to the need to reduce GGE's.

There is little evidence that people, in general, will stop driving cars, start growing their own food or will reduce personal consumption in order to reduce their emissions. In the news recently it was reported that retail sales in February 2009 fell by 2% and this was seen as something akin to a national disaster! The government is handing out money to keep consumption high! With this prevailing culture, population growth will increase emissions. Unless there is a revolutionary change in peoples behaviours, if the population doubles emissions will double. Australia's population growth rate from ABS statistics was 1.8% per annum for the 12 months to the end of September 2008. At this rate Australia's population will double by 2048 to approximately 43 million.

Consideration of the impact of population growth on the working of the proposed Personal Carbon Allowance Scheme also illustrates the problem. If our objective were to reduce GGE's by say 30% over the next ten years, in line with IPCC recommendations, we would have to reduce everyone's PCA by 3% per annum relative to the base year. However, if the population were growing at 1.8% per annum we would have to reduce everyone's PCA by approximately 4.8% per annum to achieve the same reduction in absolute terms. People may not be able to adjust their behaviours and consumption patterns this quickly and ten years of 4.8% reductions or 48% by 2020 seems beyond reach.

At the end of the day Australia's GGE's will be a function of individual consumption and population. The most important thing Australia could do to address Climate Change would be to stabilise its population as soon as possible. Approximately 60% of our population growth is driven by immigration and 40% is the result of natural increase. Net migration should be reduced to zero as soon as possible.

It is submitted that the Baby Bonus Scheme should be abolished as soon as possible.

Yours Sincerely

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Notes

1. Ethics of Permaculture sourced from, “*Permaculture A Designers Manual*” by Bill Mollison, see page 2. Tagari Publications ISBN 0 908228 01 5
2. See “*Ecological Tax Reform*”, by Ernst Ulrich von Weizsacker and Jochen Jesinghaus. Zed Books 1992 ISBN 1 85649 095 5 see http://esl.jrc.it/dc/etr/ecological_tax_reform.htm
3. Article in *Newstatesman*, ‘*An Inconvenient Economic Truth*’, which outlines the failings of the European Union Emissions Trading Scheme. Authors Tricia Holly Davis and Jonathan Leake. See <http://www.newstatesman.com/environment/2009/03/carbon-price-climate-hope-co2>
4. See article “*The Idea of Carbon Rationing*”, on website ‘CarbonEquity – ration the future’ at <http://www.carbonequity.info/rationingidea.html>
5. See article “*Carbon Taxes or Carbon Quotas?*” a copy as a PDF may be obtained from www.sfsf.com.au/CarbonQuota.CarbonTax.leaflet.pdf this document provides a table showing the advantages of Quota Schemes over Carbon Taxes
6. See Working Paper “*Personal Carbon Trading: notional concept or workable proposition? Exploring theoretical, ideological and practical underpinnings*” from the Centre for Social and Economic Research on the Global Environment (CSERGE), School of Environmental Sciences, University of East Anglia. Authors Gill Seyfang, Irene Lorenzoni and mike Nye ISSN 0967-8875
7. Report produced by **Oxford University’s Environmental Change Institute**, ‘*Trialing Personal Carbon Allowances*’, for the UK Energy Research Centre. Report authors – Tina Fawcett, Catherine Bottrill, Brenda Boardman, Geoff Lyle. UKERC Report No.:UKERC/RR/DR/2007/002 ISBN: 1 874370 44 3
Section 3 relates income to emission levels from a sample of several hundred Oxfordshire households – it was found that the top 10% of emitters (households) were responsible for 43% of total emissions, while the bottom 10% of emitters were responsible for only 1% of total emissions. Air travel was a major factor in producing this highly skewed distribution of emissions.
8. Sourced from “*Climate Action Network Australia Position Paper – Greenhouse Gas Emission Targets for Australia – August 2008*”. CANA, in turn, sourced these reduction targets from the “*UN International Panel on Climate Change Fourth Assessment Report*”.
9. **Australian Conservation Foundation Consumption Atlas** – figures quoted are for NSW and have been rounded so that they total 100%. See http://www.acfonline.org.au/custom_atlas/index.html
10. See the DVD “*The Power of Community – How Cuba Survived Peak Oil*”, <http://www.powerofcommunity.org/cm/index.php>
11. See “*The Future Eaters : An Ecological History of the Australasian Lands and People*” by Professor Tim Flannery, pages 369, 394 400-1 Reed Books ISBN 0 7301 0422 2