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Climate Change and the Achievement of Greenhouse Gas Reductions

I accept the scientific consensus that humanity, largely via the burning of fossil fuels, is responsible for the warming the planet has experienced over the last 100 years and will be responsible for further warming that will occur in the C21 as greenhouse gas emissions continue to escalate.

As a philosopher, I take very seriously the ethical dilemma we as a species find ourselves in. We have built a globally interconnected civilisation based on the availability of easily accessed energy in the form of coal, oil and natural gas. For our civilisation to continue in its present form we must continue to burn fossil fuels for energy and we know that source of energy is responsible for greenhouse gas emissions.

However, the possible consequences, if we do not undertake urgent and deep cuts to our greenhouse gas emissions, are profound and include:

- Irreversible change to the composition of the atmosphere and the conditions vital for most forms of life
- Acidification of the oceans and collapse of marine ecosystems
- Warming of the climate beyond the evolutionary tolerances of species
- Sea level rise that has the potential to deliver 80 metres above present levels in a runaway greenhouse event that includes a bipolar meltdown and the loss of the Greenland ice sheets
- Changes to disease patterns that will negatively affect all species
- Profound disturbance to the normal relationships between species and their home environments
    - War over land suitable for habitation, agriculture and potable water
    - Psychological distress over loss of 'home' for humans
        - My ARC funded research in this area (psychoterratic ill health and solastalgia; see attachments 1 & 2)
    - Similar distress for all sentient species as their home environment moves away from them
- Catastrophic impacts on human agriculture, economies and habitats

Even if the science is still uncertain, the ethics of our situation are such that we must now act to prevent the above scenarios from unfolding. It is ethically repugnant to force on innocent and non-consenting parties (our children, all future generations of humans and other life forms) a deliberate decision to increase greenhouse gas emissions or a calculated failure to reduce them to safe levels. We must do the right thing which is to avoid imposing a massive and potentially irreversible risk on them.

The Carbon Pollution Reduction Scheme in its present form, in addition to not meeting scientific estimates of the amount of C02e reduction needed, fails to meet the ethical obligations of our predicament. A 5% reduction in greenhouse gas emissions is insufficient to deliver a path that takes humanity away from the negatives outlines above. Australia must do more and lead the world in a target that, according to our best science, will avoid the possibility of irreversible change to our home, the earth. Our best ethics must match the best science.

Also, given the current situation with the failure of global markets, the idea that (any) market-driven cap and trade system will succeed in delivering a global solution to our dilemma is at best overly optimistic and at worst, dangerously myopic.

The EU ETS scheme has been shown to be dangerously inadequate. Furthermore, we have already seen major objections to such a scheme in the international arena. The Russians have rejected the very idea of limits entailed by a cap and trade system. Vsevolod Gavrilov, the top official in charge of Russia's Kyoto obligations stated in late 2008:

> "As a top energy producer and consumer, Russia welcomed the fact that Kyoto had not limited its carbon emissions and expected the same of any future climate deal."
>
> "Energy must not be a barrier to our comfort. Our emerging middle class... demands lots of energy and it is our job to ensure comfortable supply."
>
> "We don't plan to limit the use of fuel for our industries. We don't think this would be right."

Gavrilov when asked if Russia would resist capping the use of fossil fuels, which emit the planet-warming gas carbon dioxide when burned, under a new climate deal after 2012, answered:

> "In the foreseeable future, this will not be our model, no."

China has indicated that it would resist accounting for the internal greenhouse gas emissions of manufacturing for commodities produced for its export markets. In March 2009 China's top climate-change negotiator, Li Gao, argued that his country should not pay for cutting emissions created by Chinese manufacturing to satisfy the demands of countries importing Chinese goods. He was quoted as saying:

> "These products are consumed by other countries.... This share of emissions should be taken by the consumers but not the producers."

It is clear to me that the Cap and Trade approach to reduction of greenhouse gas emissions is doomed to failure at national and international levels. This is because there will be no agreement on a 'safe' cap, and trade agreements will be hampered by the same difficulties encountered in the collapsed Doha round of world trade negotiations.

I agree with the Chinese position that consumers should pay for the carbon intensity of their consumption and this leads me to the conclusion that an internationally binding Carbon Tax on consumption is the most effective way to solve the problem we face.

Australians should pay a carbon tax for their imported Chinese-made consumer items. If we do, then as the carbon tax bites, producers will opt for less greenhouse intensive forms of energy consumption. Those producers who succeed in producing low carbon products will be attractive to

consumers who wish to reduce their carbon tax burden. Australian energy exports such as coal will become less attractive to manufacturing centres as they convert to carbon neutral forms of energy production. A carbon tax with therefore shift all energy consumption rapidly away from escalating greenhouse gas emissions towards a low carbon economy.

Conclusion

The science and the ethics of global warming and attendant climate change are compelling. The science, while not certain, is more than sufficient for an ethical response based on risk minimisation. The issue of irreversible changes to the global climate is not one that humans can dismiss with scepticism or inaction. The obligation of Australia, along with other wealthy industrialised countries, is to take the lead on greenhouse gas reductions and set a standard that would deliver a safe and predictable future climate to future generations.