# Submission to the Climate Change Authority 2<sup>nd</sup> Draft Report on Australia's Climate Policy Options.

I thank the Climate Change Authority and Environment Minister Hon Greg Hunt MP for this opportunity to submit my opinions on this very important topic.

Like many Australian I have been observing the chaotic approach that our politicians have been following on the climate science that has been evolving over the last 20 – 30 years.

With great respect for their integrity and sincere gratitude for their public service it does appear to me that the system does not allow a sensible bi-partisan approach to this vexatious issue, what some have termed "a wicked problem".

It is well documented that inequality has grown substantially in all major developed countries and that undue influence from segments of our society on our decision makers is a consequence of that occurring.

So when we look at the three policy objectives outlined in the 2<sup>nd</sup> report, 1) cost effectiveness; 2) environmental effectiveness; and 3) equity; we need to be taking into account the current inequality of our BAU trajectory.

Specifically but not exclusively I am referring to the following.

- The social costs of carbon including pollution and climate change effects that are not and have not historically been priced into fossil fuels.
- The massive subsidies that fossil fuels receive internationally that distorts the market and is substantially responsible for and continues to increase inequality.
- The long-term remediation cost of the fossil fuel industry's legacy which is largely borne by taxpayers and evaded by the creating businesses because of inadequate government oversight. eg. there have been media reports of 55000 un-remediated mining sites across Australia with no company liable to be held responsible.

There is clear evidence internationally that economically disadvantaged groups in all developed nation bear a much greater burden of toxic and polluting waste from their society. The recent case of toxic water in Flint, Michigan, USA, is an horrific but not unexpected example. Australia is not exempt from this problem.

So for me, finding the Citizens Climate Lobby approach as a solution to reducing emissions made more sense than any policy I have heard about. While acknowledging that a carbon pricing solution is only one of many actions that need to be undertaken, ie transport, energy generation, buildings, agriculture, land use, and efficiency, a price on carbon is, to quote Dr James Hansen, the 'sine qua non' of any suite of actions.

#### Inability of policy makers to remedy the problem.

The following link is to a webpage from the ABC news called "Carbon Tax: a timeline of its tortuous history in Australia: http://www.abc.net.au/news/2014-07-10/carbon-tax-timeline/5569118

This covers the period from 1997 to July 17, 2014 when the carbon tax was repealed. Tortuous is an apt word to describe this journey.

My own experience of this occurred since joining CCL in late 2014 and attending a lobby meeting in September 2015 with Mr Craig Maclachlan who was representing the Hon Tony Abbott, Prime Minister, as a senior climate advisor. In our meeting Mr Maclachlan was very supportive of the LNP's Direct Action scheme currently being applied by the Abbott government.

Subsequently I found the following statement from Mr Maclachlan about the carbon tax whilst a minister representing Australia in Brussels in 2012.

http://www.euractiv.com/climate-environment/korea-warns-climate-negative-lob-news-516153

20 November 2012.

Excerpt from Brussels roundtable convened by the <u>Prince of Wales EU Corporate Leaders</u> Group.

Craig <u>Maclachlan</u>, the deputy Head of Mission at the Australian embassy, told the Brussels roundtable that in his country, the adoption of a carbon levy on the top 500 firms had had an inflationary effect.

"There is a political consequence for doing this that needs to be addressed," he said but the Australian experience since the scheme's launch on 1 July this year had proved positive.

Australian experience.

"in just a few short months we've had an impact and we're starting to see effects from retail to aviation, in energy and agriculture" Maclachlan said. "The carbon price for us is doing exactly what we wanted it to do – stimulating investment, improving energy efficiency and reducing carbon emissions."

Australia's carbon price has been fixed at  $\in 18$  a tonne until 2018, when it is due to float freely in a link up with the EU ETS. More carbon partners could soon be forthcoming.

Many other politicians have changed course on this sensitive issue. So with all due respect to Mr Maclachlan who was doing the job expected of him, it adds to my claim that politicians cannot be expected to come up with a suitable remedy due to the constraints of our current system of governance where two parties with different ideologies, and factions within those parties compete for the right to govern.

As Australia's carbon emissions are still rising, even though it is claimed we will meet our 2020 (somewhat manipulated) targets, so far it is a very unsatisfactory response to the problem of global warming.

# **Citizens Climate Lobby Carbon Fee and Dividend Proposal.**

The basic ideas of the F&D proposal are outlined below. I will then relate them to the policy objectives as presented in the CCA  $2^{nd}$  Draft Report.

- A steadily rising fee on carbon starting at \$15.00 and rising at \$10.00 per annum.\*
- The fee is applied at point of extraction, ie, the mine, the well, or the port, or whenever the carbon enters the economy.
- 100% of the fee, less administration costs, is returned to householder/citizens in equal shares as a monthly dividend.
- Border adjustments reduce the possibility of carbon leakage and preserves competitiveness.

**Citizens Climate Lobby** commissioned **Regional Economic Modelling Inc,** (**REMI**), a highly respected bi-partisan economic modelling agency to model this proposal across the USA.

\*REMI modelled the proposal starting with a \$10.00 fee increasing \$10.00 p/a

The highlights from this study show the following. (All figures assume the F&D is implemented in 2016)

- Emissions decreased by 33% after 10 years and by 52% after 20 years from 1990 baseline.
- The economic stimulus of monthly dividends to all citizens created 2.8 million jobs over 20 years. This is more than 1% above BAU estimates.
- 13,000 premature deaths are avoided annually after 10 years due to reduced pollution adding up to 227,000 lives saved over 20 years.
- A cumulative increase in GDP due to F & D of \$1.375 trillion over 20 years.
- Coal fired electricity generation is phased out by 2025.
- Electricity prices peak in 2026 and then begin to decrease.
- The study covered nine regions across the US

The above statistics are from the CCL website page presenting an overview of the REMI study.

This overview, an independent 4 page summary, the full REMI study, plus media releases & press reports are all found on the following link.

http://citizensclimatelobby.org/remi-report/

#### The full REMI study is a 125 page pdf document entitled **The Economic, Climate, Fiscal, Power, and Demographic Impact of a National Fee-and-Dividend Carbon Tax.**

It was prepared by Regional Economic Models, Inc. Washington, DC Synapse Energy Economics, (Synapse) Cambridge, MA

**Note.** Professor Ross Garnaut in a brief introduction to the Fee & Dividend proposal was of the opinion that it would raise a much greater amount of money if implemented in Australia than what the above model shows for the USA.

Another highly regarded analysis of the study's benefits is to be found at <u>http://climatecolab.org/plans/-</u>/plans/contestId/1300404/phaseId/1300604/planId/2802

This analysis entitled **\_The Little Engine That Could: Carbon Fee And Dividend"** is one of the richest resources in terms of links, source materials, and related analysis. However it is not the official Legislative Proposal.

Some of the points highlighted in this study are :-

- 1. **Full dividend return**: This feature will inject billions into the economy, protect family budgets, free households to make independent choices about their energy usage, spur innovation and build aggregate demand for low-carbon products at the consumer level.
- 2. **Transparency**: CFD is elegant in its simplicity, accessible to public scrutiny and clear in its signals and benefits.
- 3. **Bipartisan appeal**: CFD does not increase the size of government, require new bureaucracies or directly increase government revenues. The dividend increases real disposable income, protects personal spending decisions and will recruit widespread, sustained engagement.
- 4. **Border tax adjustments** (<u>6</u>): Import fees on products (<u>7</u>) imported from countries without a carbon fee, along with rebates (<u>8</u>) to US industries exporting to those countries, will create a fair competitive environment for exporters and motivate other countries to adopt similar carbon pricing policies. Existing tax and trade systems avoid complex new institutional arrangements.

5. **Predictability**: A structured rising price on GHG emissions will focus business planning on optimizing investment priorities to thrive in a carbon-constrained world.

Other key benefits of F & D presented in this analysis are :-

- CFD is politically viable: understandable by the public, nonpartisan, equitable and economically efficient. Political stability is one of its major advantages.
- The psychological benefits\_of engaging the nation to fight climate change are incalculable. CFD provides an opportunity for widespread optimism and popular participation.
- The strategic benefit of U.S. leadership on climate cannot be overstated. When the U.S. leads, our moral, diplomatic and economic position in the world will be greatly enhanced.

# Relating the Fee & Dividend proposal to the CCA assessing principles.

I refer the CCA to the aforementioned studies for detailed examination of these assessing principles but I give a brief summary below.

The modeled price of \$10/\$10p/a could be adapted to suit the Australian situation.

#### **Cost Effectiveness.**

#### **Direct Implementation Costs.**

These are referred to as costs of the energy transition sparked by the introduction of Fee & Dividend in **"The Little Engine That Could"** 

Under the heading, "**What are the Proposals Costs**", (referenced) examples from IRENA, IPCC, IEA, and CERES are presented estimating the trillions of dollars that need to be invested internationally to avoid catastrophe over the next 15-35 years. (About 0.6% GDP)

Compared with their estimated costs of how much climate change is already costing, (ie 1.6% of global GDP), these investments will more than pay for themselves in the long term.

#### Transaction costs (see REMI study)

Pricing carbon where it enters the economy, at the well, the mine, or the port, means this is more straightforward and presumably cheaper than pricing carbon at the point of emissions.

Administration and distribution costs are estimated by CCL at 3.4% for the first year declining thereafter.

These costs cover dividend distribution, and creating administration to measure compliance with the various aspects of the proposal most of which can be done through existing agencies. Once this process is established the cost should decrease especially if most of the dividend distribution is done electronically.

#### **Indirect Costs**

There would be significant pass-through of the cost from upstream producers to downstream consumers, everyone in the energy supply chain would feel the influence from the carbon tax. Every dollar, 100% of the proceeds from the carbon tax would enter into a "fee-and-dividend" (F&D) system that refunds the money to all households with cheques or direct deposits on a monthly basis.

This extra household spending will increase health, retail and housing sectors and stimulate the local community economies creating more local employment while fossil fuel related enterprises will be stimulated to and given a known timeline to adapt their business models. Some sectors will obviously have to change or even be phased out but that is the essence of the need to decarbonise the energy system.

#### **Environmental Effectiveness.**

The Fee and Dividend proposal exceeds Australia's current INDC as presented at COP21 in Paris in September 2015.

As outlined before, the REMI study shows USA emissions reductions of 33% after 10 years and by 52% after 20 years from 1990 baseline. This presumable would be similar if applied in Australia.

This proposal will need to be modelled for Australia and the amount charged per tonne of carbon adjusted to suit Australia's situation.

To quote from "The Little Engine That Could", "A powerful catalyst is required to unleash the financial forces capable of shifting the world's energy economy toward low-carbon sources Full dividend recycling permits a steep ramp up without harming the economy".

Carbon leakage and competiveness for (Australian) companies is also discussed in the REMI report and the Climate Co-Lab analysis.

Obviously politics is such that Australia has interests that will demand a rebate, lest their business model be challenged. This is absolutely predictable, and is routine politics.. This is what happens every day in societies where anyone has access to policy-makers. However, Australian policy makers need to be aware of the high cost of failure when implementing any actions to avoid global warming.

We must remember that our future generations way of living will ultimately depend on the actions we take in the next few years.

### Equity

The Fee & Dividend proposal creates equity across the economic strata with lower income groups suffering no disadvantage.

I present the following graph from Kevin Ummel from the Center for Global Development from a study entitled **"Who Pollutes? A Household Level Database of America's Greenhouse Gas footprint."** <u>http://www.cgdev.org/publication/who-pollutes-household-level-</u> <u>database-americas-greenhouse-gas-footprint-working-paper</u>



Figure 1: Average GHG footprint and income per person<sup>15</sup>

In this graph, you have mean greenhouse gas emissions per person per year in CO2equivalents (CO2e) on the vertical y-axis, and on the x-axis you have 7 categories. The left-most category is the national average per-person emissions in the US; ie. 21.8 tons per year. The next 5 categories to the right describe the emissions for the poorest to wealthiest Americans (a quintile is one fifth, so the first quintile is the poorest 20% of Americans, the second quintile includes Americans in the 20-40th percentile of wealth, etc). The author notes that in this figure the wealthiest 2% of Americans have been broken out of the data, and are reported in the right-most column. So, the 5th quintile in this graph reports emissions for Americans in the 80-98% category. Each column is color-coded to show where the emissions come from, and the key is on the right of the graph. Note that quintiles 1-3, the poorest 60% of the population, are below the average level of emissions. Since CCL's policy returns a dividend based on US average emissions, households below average will earn back more than they spend in increased prices.

The author notes that only Utilities and Gasoline, i.e. emissions from turning on the lights or filling up our tank, are "direct emissions". All other emissions are

"indirect", i.e. they are embedded in the production process of the food and drink, shelter, other transport, other services, and other products we buy. For the average American (left-most column), 64% of the 21.8 tons of CO2e emitted come from these indirect sources.

This is really important. It is important because when most people think about carbon emissions, they think about turning on lights or driving cars; i.e. direct emissions. But, these only account for 36% of our emissions. This means that for a little less than 2/3 of our carbon emissions, we are not even aware that we are making a climate-relevant decision!

This also explains why an upstream, economy-wide carbon tax is necessary: we need the price signal on the 2/3 of climate-relevant decisions we don't realize we're making. Further, anyone who wanted to keep burning fossil fuels with the dividend would only be able to do it for  $\sim 1/3$  of their emissions; 2/3 of the time they'd be making climate-friendly choices without even knowing it.

# Summary of Ummel's paper by Dr Daniel Richter. Legislative Director at Citizens Climate Lobby. USA

This summary and graph point out the inequality in carbon footprints across the US which would apply equally to Australia. Fee & Dividend can be seen to be very equitable on those who can least afford rising costs.

Of most interest is the distinction of our direct emissions and our indirect emissions and the need for an upstream pricing of carbon to cover all products and services.

The spending power of people would also stimulate the shift to low carbon products and services as carbon containing items became more expensive.

I thank the CCA once again for encouraging citizens to become involved in this policy making process.

I hope that Citizens Climate Lobby's proposal is given serious consideration as it seems to me to be a very sensible equitable proposal that would both get the emissions targets met and stimulate the economy at the same time. Given the difficulty that the current government is experiencing in dealing with the contracting of the mining boom, this could be a very effective policy.

Yours sincerely

Alex Nicolson CCL volunteer.