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Submission to the ACT Government Standing Committee on Climate Change, Environment and Water

Inquiry into ACT Greenhouse Gas Reduction Targets

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Zero net emissions by 2020.

It is recommended that the ACT Legislative Assembly set a target of zero net emissions by ACT residents by 2020. It is recommended that the funding required to achieve these targets be obtained by asking to Federal Government to increase the money supply required by the Territory to fund its anticipated regular growth though the system called Energy Rewards outlined in this submission.

The problem of green house gas emissions can be resolved by investing enough money. If we invest enough in ways to reduce green house gases we can bring emissions down to whatever level we wish and we can start to remove green house gases from the atmosphere. The maximum investment needed to make Australia Carbon Neutral is \$30 billion invested each year in electricity generation for 10 years. This scenario is if all energy used in Australia was achieved through generating electricity. Investing this amount of money in existing renewable methods of electricity generation such as geothermal and solar thermal will give Australia zero net emissions within ten years. This means Canberra needs to invest a maximum of \$600M each year for ten years to achieve zero emissions.

This submission outlines a process that will achieve the goal of zero net emissions. The investments will be paid for from the profits from the production of energy and from savings on energy reductions. There will be NO increase in the debt of the ACT government or the Federal government. There is NO reliance on overseas capital. The price of energy is likely to drop significantly and the system will bring stability to Australian money markets.

How do we get money into investments in greenhouse gas reducing technologies?

We could encourage investment by putting a price on carbon. That increases the price of pollution which should ultimately make investing in renewables more attractive. This may or it may not work. The evidence so far is that it is difficult to implement and that, at best, it may achieve its objectives slowly. So called market based solutions where we put a price on carbon are problematic because markets will not stabilise if any of price, supply or demand are fixed. In the case emissions permits trading supply is predetermined because of the cap. The internal dynamics of markets will fail to bring price stability and so prices will become unpredictable and are not reliable enough to be used for investment decisions. To encourage an investment of \$30 billion a year through price increases in polluting energy would require a very large increase in the price of energy.

A simpler way to achieve the level of investment required is to give zero-interest loans to people who will invest in ways of reducing ghg emissions. The money will be paid back over time from the profits on the investments. That is the loans are only loans from the point of view of government bookkeeping. For the individual recipient of the loans they are like grants. This means that we reduce the cost of finance to zero, thus removing one of the major stumbling blocks for any kind of infrastructure investment. It's also a move that immediately makes almost all renewable energy projects and ghg

emission reduction projects financially viable. For bookkeeping purposes the loans will be paid back from taxes collected on the investments.

Investing does not cost money in the long term if you get back more money than you put in. In fact the whole idea of investing is to make us wealthier than before. The issue is not whether we can do it and afford it but what is the most efficient way to do it so that we reduce ghg emissions for the least amount of money.

We need to address the following issues:

- From where do we get the money?
- Who gets the money?
- How do we ensure it is spent on ways to reduce emissions?
- How do we get the best value for money?

It turns out that it matters little where the money comes from. It could come from selling permits, putting a tax on carbon, putting a surcharge on all energy or it could come from printing special purpose money.

Printing special purpose money is the method recommended because it can supply the required large amounts of money without distorting the economy. Rather it will help stabilise the financial system by creating money without creating debt. If we print the money for zero-interest loans secure in the knowledge that the funds can only be used to invest in infrastructure and tangible goods, we will finally have found a way to equate the creation of money with productive assets and we'll be one step closer to solving the current financial crisis. We can prove it does not matter how much special purpose money is created because if we print too much the special purpose money it becomes inflated not the general currency. This means we can adjust the amount of special purpose money printed to achieve our zero emission target in the required time frame.

Who gets the money also does not matter with respect to the objective of reducing ghg, so long as we know that it will be invested in ways to reduce ghg emissions. A politically acceptable solution would be to compensate the people who are disadvantaged by the introduction of the scheme or by the existing distribution of wealth in the community. The first of these would be the owners of power stations and the owners of coal mines. Other groups are those with few assets and those who use the least energy now and hence are contributing less to the problem. Any or all could be eligible to receive the special purpose money.

The last two points - ensuring that the money is spent on ways to reduce emissions and getting the best value for money - are covered by the one mechanism. We create a highly internally regulated and controlled electronic market place where people can only buy goods and services that are investments in ways to reduce greenhouse gas emissions. Think of an online service not too dissimilar to Amazon online stores. If this is the only place where people can spend their zero interest loans this will ensure that the money is spent on appropriate goods and services. Because it is a competitive market place and given the availability of modern tools such as buyer feedback forums and ratings, we can expect vendors to compete to deliver the best value for money. And because the funds are being invested, buyers can anticipate a return on the money.

Unregulated market places have proven less than satisfactory in delivering social objectives. Regulation has proven difficult to implement and is often counter productive in terms of social goals it is meant to address. The reason is that "external regulation" is difficult but if we build social objectives and regulation into the fabric of the market then we know we can achieve our objectives. The reason is that if anyone uses the system they automatically obey the regulations. That is enforcement is automatic. If people

abuse the system we simply do not let them participate rather than try to invent new regulations.

One important attribute of such a system is that it is open to making adjustments to the value of the market place money. For example, we could decide that the special purpose money is converted at a different rate depending on how much reduction is achieved per dollar spent. This will create a positive feedback system whereby the more ghg emissions we save, the more we invest and the more we save.

The ACT government can put a proposal to the Federal Government for a zero interest grant of \$600 million per year for ten years to be distributed as special money called Energy Rewards to ACT residents. Energy Rewards are guaranteed to be used to create infrastructure assets that will reduce greenhouse emissions. \$600 million for the ACT is the equivalent of \$30 billion for Australia. The money would be notionally repaid from taxes on the profits generated by the investments. An electronic market place will be built to regulate the market and to keep track of the expenditure money and of the taxes paid on the investments so that both governments can be assured that the money has been spent wisely. The approach is disciplined and cost effective, and it does not require the Federal Government to borrow any money to fund the project. Thus there is no increase in budget deficit. Arrangements will be made for the ACT Government loan to be notionally repaid from a percentage of the taxes collected on the infrastructure assets built from the loans.

30 billion per year for ten years is an approximate figure for the amount of money needed to reduce Australia's emissions to zero. It is based on the capital cost of generating electricity. We know that there are more cost effective ways of reducing ghg emissions than generating zero carbon electricity so this is the maximum investment needed. The figure is arrived at by working out how much money is needed to get to an installed capacity of 186GW of electricity generation. 186GW of installed capacity will produce the total amount of all energy needed by Australia in the year 2020. The exact amount of money and energy needed will be adjusted in the light of experience and the measured net emissions but it is recommended that the scheme starts with the maximum required.

\$30 billion introduced into the Australian community as Energy Rewards will not cause inflation of unrestricted currency. The reason is that the money only becomes unrestricted - that is it can earn interest - after it has been converted into a productive asset. Inflation occurs when there is too much money chasing too few assets. If money comes into existence and there is a productive asset backing it then the money will not cause inflation because there are assets that can be purchased with the money. Energy Rewards money can become inflated. That is, if there are not enough opportunities to invest Energy Rewards then the value of Energy Rewards will drop. This will encourage more suppliers to come into the market in investments in ways to reduce ghg emissions which is the objective of the exercise.

In the year 2008 the M3 money supply increased by \$170 billion dollars. Introducing \$30 billion for reducing emissions is not going to be enough new money and if the government decides to adopt this approach to creating new money other worthwhile community projects could be funded through this approach.

