



SEE-Change ACT

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28th April 2009

The Secretary
Standing Committee on Climate Change, Environment and Water,
ACT Legislative Assembly
Canberra

Dear Ms Jaireth,

ACT Greenhouse Gas Reduction Targets. Submission on behalf of SEE-Change
ACT and basis for appearance on Wednesday 29th April 2009

I am writing to confirm that SEE-Change ACT will be available to give evidence to the ACT Legislative Assembly Standing Committee on Wednesday 29th of April at 3 PM.

Our organization will be represented by four of our central committee members, Professor Bob Douglas (Chair), Ms Vanessa Morris (Executive Officer), Dr Vivienne Teoh and Ms Cindy Eiritz.

The propositions that we wish to make to the committee are shown below. A document which argues each of these propositions is appended to this letter. Also included in the submission is a brief summary of the role that SEE-change currently makes and aspires to make in the ACT community. Our recommendations are:

Proposition 1. That the Territory's response to climate change should set the pace for the nation and become its first call on the ACT Budget. (Professor Douglas)

Proposition 2. That the ACT Legislature should publicly seek amendment of the present version of the National Carbon Pollution Reduction Scheme now before the Federal Parliament with much more ambitious targets, and stronger incentives for everyone in Australia to engage actively in a nationwide effort to reduce emissions of greenhouse gases to as near to zero as possible by 2050. (Ms Morris)

Proposition 3. That a 30% greenhouse gas emission reduction target be set for the

SEE-Change Inc: (Society Environment, Economy)

Is a grass roots community program committed to empowering citizens to take action on the future.

Located in The Canberra Environment and Sustainability Resource Centre,
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www.see-change.org.au

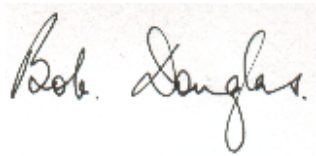
ACT between December 2009 and 2012, using the ISA Ecological Footprint methodology and monitoring progress through an annual household expenditure survey of 1000 randomly sampled ACT households. (Professor Douglas)

Proposition 4. That the ACT “Weathering the Change” policy be modified. All elements of the strategy be harnessed to:

- I) Reduce the Territory's energy consumption and expedite our transition to renewable energy resources;
- II) reduce our greenhouse gases by 30% by 2012;
- III) Our energy consumption should be obtained from at least 60% renewable resources by 2020. (Dr Teoh / Ms Eiritz)

I look forward to our meeting with the committee.

Yours sincerely

A handwritten signature in dark ink, appearing to read "Bob Douglas", is written over a light-colored rectangular background.

Em Prof Bob Douglas AO
Chair SEE-Change ACT



Supporting Document for SEE-Change Submission

Page 2. Background to SEE-Change ACT (Professor Douglas and Ms Morris)

Page 3. Proposition 1. That the Territory's response to climate change should set the pace for the nation and become its first call on the ACT Budget. (Professor Douglas)

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1. Background to SEE-Change ACT (Professor Douglas and Ms Morris)

- SEE-Change Inc is a non-profit, voluntary body, established in several parts of the ACT which exists:
 - To empower people of all ages to explore with others in their locality, the need for change in Society, Economy and Environment.
 - To enable the emergence of supportive local networks of people that are built on respect, friendship and a shared understanding of the challenge of sustainability and the need to take democratic action for change.
 - To provide the opportunity to build a new style of democracy -- one in which people in local communities develop a countervailing force to the all pervasive consumerist economy which is seriously endangering the fragile environment on which all humans and living things depend.
 - To assist people to take practical actions in their daily lives which can reduce the size of their ecological footprints.
 - To provide an organizational framework which will facilitate expansion of this movement throughout the ACT and beyond.
- SEE-Change began in 2006 following a Roundtable discussion attended by Hon Mary Porter MLA, Hon Bill Stefaniak MLA and Hon Deb Foskey MLA. This was followed by publication of a booklet "SEE-Change, Grey Power and Hope" launched at the Legislative Assembly by Ms Mary Porter MLA and with a Foreword by The Chief Minister Hon Jon Stanhope MLA. The movement began in response to a perceived need for a new institution in Australian society which could assist people in the suburbs to come to grips with some of the serious challenges facing human society including especially the twin challenges of climate change and the unsustainable size of Australia's ecological footprint.
- Two public meetings attended by about 100 people each at Jamison and Woden, have agreed by huge majorities to establish groups and embark on efforts to attempt to reduce their local ecological footprint by 30% over a 3 year period. In both areas there have been numerous activities and meetings aimed at raising consciousness and providing information and support to householders to meet this objective. A monthly newsletter circulates by email to about 600 participants.
- Activities have focused on energy efficiency, assessment of household footprints, discussions on transport, food choice, renewable energy options (including a highly successful solar panel bulk buy), cycling options, house retrofitting, water use etc.
- A random survey of Jamison households with a 60% response rate in 2008, found that 75% of 141 respondents agreed with the statement on climate change *"I am very worried about it and think we must all play our part in reducing carbon emissions and ecological footprints."*
- Funds provided by the ACT government in a series of grants have enabled SEE-Change to employ a part time Executive Officer and a part time Development Officer. The group's website and membership structure are currently being upgraded and consolidated with a view to expanding SEE-Change activities into a number of other suburban areas. SEE-Change has applied for recurrent funding support under the upcoming budget to enable it to expand its activities across the Canberra region.

Proposition 1. That the Territory's response to climate change should demonstrate national leadership and become its first call on the ACT Budget. (Professor Douglas)

It is now clear that the threat of runaway climate change constitutes the single greatest threat in history to human society everywhere. The most recent scientific consensus recognizes that policies based upon the 2007 IPCC report are out of date and that avoidance of dangerous global temperature rise will require urgent and drastic control of carbon dioxide emissions. The International Scientific Congress on Climate Change of March 2009, which was attended by more than 2,500 delegates from nearly 80 countries, agreed the following key message:

*"The worst-case IPCC scenario trajectories (or even worse) are being realised. For many key parameters, the climate system is already moving beyond the patterns of natural variability within which our society and economy have developed and thrived. These parameters include global mean surface temperature, sea-level rise, ocean and ice sheet dynamics, ocean acidification, and extreme climatic events. There is a significant risk that many of the trends will accelerate, leading to an increasing risk of abrupt or irreversible climatic shifts."*¹

- Targets identified by Professor Ross Garnaut and the Federal Government on the basis of the earlier IPCC report are no longer safe and the evidence is accumulating, that the atmosphere already contains levels of greenhouse gases that make it unlikely that we will avoid a 2 degree rise in global temperature (which is widely recognised as the threshold for dangerous climate change) in coming decades and that unless we get the long term level down to 350 ppm or less, global catastrophe in our lifetimes is quite feasible. Business as usual is unacceptable.
- Australia's per capita CO₂ emissions are amongst the highest in the world and the per capita emissions of Canberra are amongst the highest in Australia. Nothing short of dramatic changes in Canberra's lifestyle will suffice if Australia is to play its legitimate part in mitigation of, and adaptation to, the changes which are already well advanced.
- The Copenhagen meeting in December 2009 is shaping as a pivotal event that will determine whether or not our human species (not to mention the millions of other species) will survive and prosper or progressively decline under the threat of runaway climate change.
- Australia has both a practical and a moral responsibility to take a range of actions that are well understood, which are broadly identified in the ACT's "Weathering the Storm Strategy" and for which, technology is available.
- What is currently lacking is a willingness to give this challenge the priority it demands and to make the essential expenditures which will lead us down a sustainable path.
- The ACT is well-placed to play a leading role in Australia's national mitigation program. There is absolutely nothing more important to the future of Canberra and Canberrans than that we get our response to climate change right.
- Canberrans are ready and willing to take the difficult decisions even though they may have cost implications. No conceivable expenditure is more important than being able to assure our children that they will have a safe and stable climate like the one we enjoy.

We urge cross party commitment to a policy which places climate change mitigation at the very top of government priorities. We believe an Assembly that is united on this point, could help the ACT to demonstrate leadership on climate change mitigation for the nation. A commitment to set the pace (as has already happened on the feed in tariff), would in our view unleash unprecedented innovative energy and job possibilities for Canberra.

¹ See: http://climatecongress.ku.dk/newsroom/congress_key_messages/

Proposition 2 That the ACT Legislature should support major amendment of the present version of the National Carbon Pollution Reduction Scheme currently before the Federal Parliament with much more ambitious targets, and stronger incentives for everyone in Australia to engage actively in the effort to reduce emissions of greenhouse gases to as near to zero as possible by 2050. By setting the targets that focus on broad lifestyle change that we propose for the ACT, we believe that our community can play its part in setting the pace for the nation. (Ms Morris).

- There is serious disquiet in the ACT community and amongst the membership of SEE-Change at the present status of the national Carbon Pollution Reduction Scheme and its proposed targets and benefits to the polluting industries. While this is a matter for federal politicians, the nature of the scheme that is legislated nationally will have substantial implications for the ACT, its public policy and its legislation.
- Many thoughtful people are advocating defeat of the federal legislation and that includes a number of our members because it provides insufficient incentives for reducing greenhouse gas emissions. Others believe that it is possible to amend the federal legislation in ways that will provide much stronger incentives to Australians at every level to play their fair share in reducing the nations unacceptably high carbon emissions.
- For the ACT legislature, we believe the challenge is to set ambitious and achievable targets both for emissions and renewable energy that can move our community urgently towards carbon neutrality.
- Accordingly, we propose that the ACT government should encourage its representatives in federal parliament to support much more ambitious targets than those in the current CPRS legislation and should set local targets in accordance with that scenario. It is felt by much of our membership that industry has displaced the voter, as the primary powerbase on this issue at a federal level. We believe the ACT government is in an excellent position to counter that perception by willingly accepting responsibility for the health of the Territory's future population.
- Although we are not able to provide modeling data, it is our judgment that a 30% reduction in ACT emissions is achievable over a three-year period as advocated in Proposition 3, and that it should be feasible, with appropriate political leadership, for the ACT to reduce its emissions by 60% by 2020 and by 90% from 2009 levels by 2050.
- Australia should be a pace setter for the world on this issue and ACT should be a pace-setter for Australia. It is also our experience that local people are looking for significant leadership on this issue. We believe it would be a source of great pride for many thousands of local residents if the ACT government were to partner with the community to set the highest international benchmark for emissions reduction and large-scale renewable take-up, based on the evolving scientific evidence..We can see there is a motivated local community who we think would be willing to help drive change and who see Canberra as the ideal place from which do do this. The order of the magnitude of the reduction required for Australia to play its fair role in reducing global emissions is dramatic. If we want our descendents to avoid potentially overwhelming environmental change then we have no choice but to legislate for high emission targets. There is nothing more important than that as a global community we meet that goal.
- Broad lifestyle changes will be required to reduce emissions in the short, medium and long term, but need not be too difficult and could indeed invigorate the jobs market and community/government relations. Encouraging green energy uptake through a shift in price incentives (Proposition 4) could protect ACTEW-AGL income whilst simultaneously transforming the region into a fully renewable energy market. Price incentives and altering ACT Government rental rules, could see mass retro-fitting of commercial buildings, significantly increasing the number of green building jobs and businesses. Free bus travel could overnight change the weight of the public transport usage argument, opening the way

for a serious consideration of light rail. In addition, the sanctioning of community gardens and encouragement of backyard gardening and chicken rearing, for example, could increase positive neighborly interactions and foster long-term community development.

Proposition 3. That a 30% greenhouse gas emission reduction target be set for the ACT between December 2009 and 2012, using the ISA Ecological Footprint methodology and monitoring progress through an annual household expenditure survey of 1000 randomly sampled ACT households. (Professor Douglas)

- 30% reduction in the ACT's greenhouse emissions is both achievable and highly desirable over the next three years. It should not be a question of how much it will cost but whether it demonstrates the ACT is committed to contribute to the global changes which must now occur. We are at crunch point on this issue and we should not be in any doubt that the whole world must act. If it fails to do so, the consequences will be ominous for us all. We have a moral responsibility to act and to expect that nations everywhere will respond to the challenge.
- This is an opportunity for the ACT Legislative Assembly to exercise national cross party leadership on this question.
- We believe that if this happens, the ACT community will be both relieved and excited, and that the community has both the resources and the motivation to bring about radical change in the level of greenhouse emissions. We propose that the ecological footprint should be central to the campaign.
- Greenhouse gas emissions contribute about 50% to the average household ecological footprint. The footprint and the emissions for a household can be calculated from a household expenditure survey for a full week's diary of expenditure. A probability estimate of the footprint and emissions resulting from the lifestyle decisions of a suburb can be made by collecting household expenditure data from a random sample of houses from that suburb.
- The ACT Government has worked closely in the past with the ISA group led by Dr. Manfred Lenzen at the University of Sydney. SEE-Change has been working with Dr. Lenzen in our efforts to monitor progress in reduction of the ecological footprint in the Jamison area.
- We have established to our satisfaction that an annual, ongoing household expenditure survey across Canberra conducted by ABS would provide a valid monitoring mechanism that would be meaningful both to community members and to government in its endeavor to assess progress in a campaign to reduce greenhouse gas production in the ACT. ISA have derived scientifically validated estimates of greenhouse emissions, water use and the land impact from the footprint calculation that is derived from the expenditure survey data. Nationally comparative data are available in the atlas published by the Australian Conservation Foundation.
- In order to establish valid and relatively fine-grained measures of progress, in a city of 350,000, we believe a sample size of household expenditure surveys from a random sample of one thousand households would provide a valid and valuable monitoring approach. That would need to be confirmed with Dr Lenzen.

Proposition 4. That the ACT “Weathering the Change” policy be modified. All elements of the strategy be harnessed to:

IV) Reduce the Territory's energy consumption and expedite our transition to renewable energy resources;

V) reduce our greenhouse gases by 30% by 2012;

VI) Our energy consumption should be from at least 60% renewable resources by 2020. (Dr Teoh / Ms Eiritz)

Canberrans and the ACT are in a unique position to expedite the transition to safe climate sustainability because of:

- the notable absence of polluting industry;
 - the city/state nature of our existence; and
 - our awareness, education, concern, commitment and affluence.
- Canberra is a significant contributor of greenhouse gas emissions. Australia's per capita emissions are roughly equivalent to the emissions of five Chinese people. Canberra has the highest per capita greenhouse gas emissions in Australia. With 350,000 people, Canberra's greenhouse gas emissions are equivalent to a Chinese city of 1.75 million people. With a projected population of 500,000 Canberra would be equivalent to a Chinese city of 2.5 million.

Building Renewable Infrastructure

- The ACT Government needs to ensure the highest possible emission reductions result for each taxpayer dollar spent. Emphasis must be placed on moving past comparatively small scale ‘feel good’ programs to transformational initiatives, such as large-scale community owned distributed renewable power generation infrastructure.
- 70% of the ACT's total emissions is electricity consumption. In Australia the static energy sector (gas and electricity) contributes about 48% of Australia's total greenhouse gas emissions. Reducing the electricity consumption in buildings will have a significant effect on reducing the ACT's greenhouse gas emissions and making it easier to achieve higher greenhouse reduction targets without significant reduction in quality of life. SEE-Change is active on a community basis in this area with its solar hot water and PV cell bulk buys.
- We strongly support the government's feed-in tariff and PV cell initiatives. These initiatives could delay the development of new power stations and lessen the chance of power outages occurring during the height of summer.
- Many Canberrans are concerned about global warming. However, only about 5% of us use green power in any form. The policy to offer green power in all new buildings is supported but is unlikely to significantly increase its take-up.

Addressing perverse pricing effects.

- Current pricing signals punish those who are doing the right thing. Green power pricing should be cheaper than black power whilst allowing for innovation and increased access to renewable energy. Michael Costello recently remarked that if all of Canberra used green power it would be equivalent to taking 500,000 cars off the road! SEE-Change welcomes the government's ‘opt out’ green power initiative but believes that the government needs to have further strategies to work towards this aim.
- The ACT government should also work with energy providers, researchers and community groups to:

- increase the availability of green power which could address the disincentives identified above,
- reward communities where new renewable power facilities may be cited,
- create public awareness initiatives that build understanding and trust in how investment in green power is managed, and
- expand initiatives where community groups can receive a commission for helping members and others to change to green power.

Making sure that the Commonwealth and ACT Government Policies are used to maximum effect

- Weathering the Change (p.23) identifies the projected trends of greenhouse emissions. The diagram shows that while emissions may plateau around 2010, there is no significant decrease in emissions until after 2020. The ACT's targets to reduce per capita greenhouse emissions need to be accelerated to meeting a 30% target reduction by 2012. Our energy consumption should be from at least 60% renewable resources by 2020.
- We are mindful of the current pitfalls of the Commonwealth's Carbon Pollution Reduction Scheme in this context and consider that the ACT Government should be concerned about its own initiatives being undermined with the proposed approach. The individuals who participate in SEE-Change would be unhappy to see their efforts and financial investments undermined by ineffective government policies.

Preserving Canberra's livability as a sustainable city

- Canberra's livability also depends on adequate water for the population, transport and accessibility to community facilities, as well as planning and home energy effectiveness. If a significant increase in population growth were to be part of government policy, per capita greenhouse emission reduction targets would need to be strengthened accordingly. The nature of development, population size and greenhouse gas production are linked.

Transport

- Other areas making significant contribution to achieving the 30% reduction by 2012 are increased public transport usage. There needs to be an integrated transport strategy which places public transport at its core. Electric and hybrid vehicles should be used by politicians and for ACT government business. There may be a potential for a new car sharing and car hiring industry where people use cars when they need them and need not own cars outright. The existing car hire companies may be interested in such schemes. Cyclists should also be part of these strategies even though we do not discuss them here.

Addressing the perverse effects of car leasing

- The ACT government should lobby the Australian Government to address the perverse effects of car leasing schemes which give tax benefits for purchasing private vehicles and increased tax benefits if those vehicles are driven over 25,000 kms per year.

Planning and house design

- Subdivisions and new developments need to reflect the best principles of siting, passive solar energy and accessibility to facilities. The CSIRO has advised the ACT Government that the smaller sized land blocks in the ACT do not have adequate solar access. Given the increased preference for medium and high density developments, the ACT Government needs to seriously consider how it will enable these smaller blocks to achieve energy sustainability. There may be a need to develop new options for sharing solar water, heat pumps etc and to enact appropriate enabling legislation.
- Similarly there is a need to consider how much of a block, a building may occupy. In the recent heatwave, some residents in Gungahlin reported that the proximity of buildings in their suburb created a heat radiation problem over and above the reported daily

temperature. This effect would have added significantly to their energy consumption.

- Consideration also needs to be given to incorporating community gardens into each subdivision. This would enhance community wellbeing, would provide increased open space and improved solar access and contribute in a small way to reducing the agricultural footprint.

Are government policies sustainable?

- There are several other issues that need to be considered. Any new policy initiatives need to be tested for sustainability. For example, the ACT response to the first home buyers initiative should reflect good design principles for the future. Our understanding of housing affordability should not be limited to the up-front construction costs but should consider the ongoing running costs to the new occupants over the life of the building or the period of occupancy. It may be more affordable and comfortable to live in a smaller passive solar house closer in to the city over the longer term than in a larger house at the edge of the city.

Growing new green industries

- Maintaining a revenue base for the ACT is a critical issue. We consider that there is an opportunity for new green industries in the ACT and its surrounding regions. The ACT government should be discussing the potential of new growth green industries in the region with the government of NSW. This would broaden the revenue and skills base of the ACT.

Changing peoples habits at home and work

- Education and awareness is the key to changing personal habits. We support the home energy advice and sustainable school initiatives.
- The ACT government should also introduce sustainability education into all public schools and consider how this might be done at TAFE. For example, increasing awareness and changing the personal habits of High School and College students may have an immediate impact on overall household energy usage including the length of showers and number of cars on the road. Giving this knowledge to new tradespeople could have a positive impact in energy reduction and broader sustainable work practices.
- Commercial property owners and lessees need to be made aware that a reduction of one degree in heating or cooling could reduce their energy usage by 10%. The ACT government could apply this to all of its offices. People would learn to dress for our climate to reduce need for heating and cooling.
- Public education campaigns could also be run to increase awareness of energy saving habits. Smart meters should be readily available to provide incentives for people to reduce their energy consumption.