# Joint Submission by 36 Climate Action Groups

9 March 2009

#### Submission to Senate on "Investment of Commonwealth and State Funds in Public Passenger Transport Infrastructure and Services"

The 36 Climate Action Groups that have prepared this joint submission welcome the opportunity to contribute to this important inquiry.

Between 1990 and 2006, emissions from transport grew by 27.4% making it the second fastest growing sector in terms of greenhouse gas emissions after stationary energy (which grew by 47.3% during the same period)<sup>1</sup>.

Climate Action Groups believe that a major overhaul of transportation policy is required to ensure that emissions from this sector are dramatically reduced in line with the best available climate science to date.

Groups see this inquiry as a crucial first step in designing a new transportation policy for Australia.

Our comments are set out in the following key areas:

- 1. Australia's greenhouse gas emissions from transport
- 2. Repowering transport with 100% renewable electricity
- 3. Public transport cannot cut emissions under current CPRS
- 4. Changing jurisdictional control to the Federal Government
- 5. Reforming urban public transportation systems
- 6. Reforming interstate and rural public transportation
- 7. Funding urban/rural public transportation systems
- 8. Repowering motor vehicles & regulating for efficiency
- 9. Public transportation education programs

<sup>&</sup>lt;sup>1</sup> Australian Govt Fact Sheet (Dec 2008) "Australia's Greenhouse Gas Emissions", pg1.

## 1. Australia's greenhouse gas emissions from transport

Climate Action Groups note that the transport sector accounted for around 14% of Australia's greenhouse gas emissions in  $2006^2$ , with road transport contributing almost 87.1% of this amount (or around 12% of Australia's total emissions<sup>3</sup>).

Between 1990 and 2006, emissions from transport grew by 27.4% making it the second fastest growing sector in terms of emissions after stationary energy (which grew by 47.3% during the same period)<sup>4</sup>.

In the absence of a major overhaul of transportation policy, emissions from transport will continue to experience substantial growth in coming years.

Climate Action Groups believe that a business-as-usual scenario for the transport sector is simply unacceptable, particularly given the myriad of viable alternatives and technologies currently available for implementation.

Climate Action Groups note that the added implications of peak oil (and related energy security threats) on this sector act as a parallel motivation to transform Australia's transportation system.

Apart from the substantial emissions reduction potential in this sector, Groups also note the co-benefits of new transportation systems, including reduced traffic congestion, decreased noise pollution, improved health benefits and potential for social inclusion.

#### 2. Repowering transport with 100% renewable electricity

Consistent with the integral role that renewable electricity can play in reducing Australia's emissions<sup>5</sup>, over 150 Climate Action Groups from across the country adopted a policy of 100% renewable energy<sup>6</sup> in Australia by 2020<sup>7</sup>. This policy, combined with reduced energy use through energy efficiency and public education programs, will transform Australia's energy future.

This mirrors Al Gore's call for 100% clean electricity in the United States within the next 10 years.

<sup>&</sup>lt;sup>2</sup> Australian Govt Fact Sheet (Dec 2008) "Australia's Greenhouse Gas Emissions", pg1.

<sup>&</sup>lt;sup>3</sup> Department of Climate Change (June 2008) "National Greenhouse Gas Inventory 2006, Accounting for the Kyoto Target", pg 8.

<sup>&</sup>lt;sup>4</sup> Australian Govt Fact Sheet (Dec 2008) "Australia's Greenhouse Gas Emissions", pg1.

<sup>&</sup>lt;sup>5</sup> Stationary energy accounted for 50% of Australia's total emissions in 2006 [See: Australian Government Fact Sheet (Dec 2008) "Australia's Greenhouse Gas Emissions", pg1].

<sup>&</sup>lt;sup>6</sup> Climate Action Groups define renewables to include the full suite of wind, wave, solar photovoltaic (PV), solar thermal, geothermal and sustainable biomass. NOTE: Sustainable biomass does not include the use of native forest woodchip waste or the use of palm oil or sugar cane grown specifically for biofuels (both domestically and internationally).

<sup>&</sup>lt;sup>7</sup> Position adopted by the movement on 2 Feb 2009 in Canberra at "Australia's Climate Action Summit", which included 500 participants from 150 Climate Action Groups from across Australia and culminated in 2,500 surronding Parliament House on 3 Feb 09 (first sitting day for 2009).

The rapid roll out of renewable electricity generation systems into the Australian grid can provide substantial options to re-power both public and private transportation systems and, in the process, transition Australia away from its dependence on oil. For example:

- Railway systems that draw electricity from the grid would become emissions free when 100% of Australia's electricity is generated from renewables. Indeed, some railway systems can put power back into the grid as well.
- Plug-In Electric Motor vehicles (which are currently in production overseas and could be produced here with appropriate incentives) could also become emissions free with the move to 100% renewables.
- Alternative fuel cells for road, air and sea transport could be produced under a 100% renewable electricity policy, for example bio-fuels can be used to extend the reach of electric vehicles and can be made from sewerage farm algae, crop residuals and other waste by-products (for example, the French town of Lille uses biogas from sewage to power some of its bus fleet).

Given that transport is the second fastest growing sector in terms of emissions, the move towards 100% renewable electricity can deliver a substantial reduction in emissions for the transport sector (assuming the current form of the proposed Carbon Pollution Reduction Scheme (CPRS) is not implemented – see below).

#### 3. Public transport cannot cut emissions under current CPRS

While the Government's proposed CPRS will set a 'cap' on emissions, by issuing a fixed number of permits to pollute equivalent to 5 - 15% below 2000 levels, it "will also impose a 'floor' below which emissions cannot fall."<sup>8</sup>

As noted by the NSW Independent Pricing and Regulatory Tribunal (IPART), "additional measures to reduce emissions in sectors covered by the scheme would not result in an increase in emissions abatement ... the emissions avoided through undertaking an additional measure would result in an equivalent increase in emissions elsewhere.<sup>9</sup>"

This means that any major investments in public transportation infrastructure that succeed in reducing transport emissions by increasing public transport usage over private vehicle usage would simply enable other industries covered by the CPRS (such as cement, steel and aluminium) to increase their emissions by an equivalent amount.

Similarly, any incentives to increase Plug-In Electric Vehicles (and associated infrastructure) as part of Australia's new car fleet mix will reduce emissions from transport, but won't reduce aggregate emissions as other industries covered by the CPRS will increase their emissions by an equal amount.

<sup>&</sup>lt;sup>8</sup> Denniss, R. (Nov 2008) "Fixing the floor in the ETS – the Role of Energy Efficiency in Reducing Australia's emissions", Research Paper No. 59, pg 14-15.

<sup>&</sup>lt;sup>9</sup> IPART (Dec 2008) "Review of NSW Climate Change Mitigation Measures" pg 28.

The major flaws in the CPRS, combined with this low target range, will not only "lock Australia into inaction on climate change until 2020<sup>10</sup>", it will also severely impact international agreement for a meaningful 2020 target range as part of the new climate deal to be agreed this December in Copenhagen.

- Climate Action Groups note that Australia's target range is completely out of step with climate science, which is calling for reductions of at least 45-50% by 2020.
- Groups also note that the EU and UK have already committed to reduce emissions by 20-30% and 26-32% below 1990 levels respectively<sup>11</sup>.
- Under the current CPRS, firms will be able to purchase an unlimited amount of international permits to meet their obligations, raising worrying questions about whether emissions will even be reduced in Australia or simply offset / reduced overseas.
- Emissions permits are also treated as a property right under the CPRS, rather than a compliance instrument, so any measures to improve the CPRS down the track (including increasing emissions reduction targets) will result in compensation payments to firms, which could amount to billions of taxpayer dollars.

In light of the substantial flaws in the CPRS, over 150 Climate Action Groups from across Australia have decided to oppose the current CPRS.

The groups signing this submission note that all of the below recommendations to dramatically improve, expand and upgrade transportation systems in Australia will fail to reduce Australia's emissions if the current CPRS goes ahead.

## 4. Changing jurisdictional control to the Federal Government

Despite a decade of excellent growth and prosperity in most States and Territories, public transportation systems remain chronically under-funded.

When investments have taken place, State/Territory Governments have consistently chosen to invest taxpayer money in roads, backed by Commonwealth investment, rather than investing funds into public transportation infrastructure.

This has meant that despite population increases in most major cities across Australia, expansion of existing public transportation systems have not taken place and in many cases existing technologies are now out of date.

In addition, the practice of State-funding has resulted in short-term planning, favouring the use of bus services to do the transport task of urban rail thereby resulting in further fragmentation of services and accessibility.

<sup>&</sup>lt;sup>10</sup> Denniss, R. (Jan 2008) "Climate policy strategy – where to from here?"

<sup>&</sup>lt;sup>11</sup> Australian Government Fact Sheet – What the rest of the world is doing on climate change, December 2008.

Climate Action Groups believe that the failure by State/Territory Governments to expand and upgrade essential public transportation infrastructure has further perpetuated a culture of private vehicle use and helped to promote the rapid growth in transport emissions that we have seen over the past 15 years.

Groups recognise that the Federal Government could achieve better outcomes than existing State/Territory arrangements by nationalising strategic planning and funding for public transportation systems, particularly for railbased transport in Australian cities and towns.

R1. Climate Action Groups therefore call for jurisdictional control of public transportation to be moved from State/Territory Governments to the Federal Government.

#### **5.** Reforming urban public transportation systems

#### A. Development, Design and Urban Planning

Climate Action Groups believe that all design, development planning and urban renewal programs need to take into account proximity to public transportation systems (such as bus and rail) as well as bicycle transport and walking ('active travel').

In this context, Groups believe that 'Transit-Oriented-Development' principles should be applied to ALL urban renewal and development programs and that high-density living developments should be prioritised in current railway catchment areas (that is, in a 1km radius surrounding train stations).

- Re-zoning of low-density areas into high-density areas that fall outside of railway catchment areas should not be considered prior to the establishment of new, high-density public transportation systems that are designed to deal with the associated increase in demand.
- Major new, high-density developments could cover some of the costs of public transportation infrastructure as part of the development.

To ensure that railway catchments operate effectively, catchments need to be connected to bus transport nodes, walking and cycling paths as well as parkand-ride facilities (which should include new infrastructure for alternative vehicle technologies, such as recharging points for electric vehicles).

Groups note that many existing support infrastructures, in particular cycle ways and footpaths, would require upgrading to ensure safe cycling/walking routes, appropriate end-of-trip facilities and way-finding signage.

R2. Climate Action Groups call for all design, development planning and urban renewal programs to take into account proximity to public transportation systems, including walking/cycling paths and park-and-ride facilities.

#### B. Upgrading and Expanding Existing Public Transportation Systems

Urban public transportation systems, in particular railway systems, are currently running at capacity in a number of capital cities.

If Australia is to transition towards greater public transportation usage, then major reforms of current public transportation systems are required. These reforms could include:

- Mandating that the capacity and efficiency of all current public transportation systems be reviewed in the context of expected demand for public transportation over the next 50 years, with a view to ensuring all new public transportation systems and upgrades to existing systems are designed to meet this future demand.
  - Demand forecasts could include factors such as increased uptake by private vehicle users and internal / international migration forecasts (including increased demand stemming from urban planning that applies to 'Transit-Oriented-Development' principles as outlined above).
- Designing new public transportation systems with the following key, guiding principles in mind:
  - Commuting times should be shorter on public transport than in a private vehicle;
  - Public transport in major CBDs should be more convenient to use than a private vehicle; and
  - Public transport should be cheaper than private vehicles (taking into account vehicle costs such as tolls, parking and petrol).
    - Climate Action Groups note that the Government may need to subsidise fares while commuters are transitioning from private vehicles to public transportation.
    - Groups also note that the Government may need to determine an equitable system of transport concessions as part of a public transport ticketing policy (in particular to ensure that students, pensioners, carers and lowincome families don't fall through the cracks).
- Ensuring that electrified railways form the backbone of all public transportation systems in Australian cities, with major infrastructure investments designed to upgrade and expand all existing rail networks.
  - For Australia's largest cities (except Perth which already has a world class urban rail system), expansion of existing urban rail systems are needed to relieve overcrowding (especially in Sydney and Melbourne) or to extend the reach of the systems.
  - Metro-style systems could be considered as a replacement for existing highly inefficient and out-of-date railway infrastructure for higher density areas (within around 20km of the CBD).

- As part of the expansion/upgrading process, both heavy and light rail should be considered to support transport infrastructure in outlying areas.
- Encouraging alternative modes of public transport (including buses) to be utilised to support / complement the rail network, rather than the current practice of buses competing with existing rail routes.
- Ensuring that each state / territory has a well-integrated public transport ticketing policy in place that is valid on a number of different travel systems (such as light and hard rail, buses, ferries etc).
- Investing in an integrated network of active travel options (walking and cycling) that connect with bus / rail transportation nodes.
  - As outlined above, existing facilities would need to be upgraded to ensure safe, direct cycling/walking routes, appropriate end-oftrip facilities and way-finding signage.
  - In addition to upgrades / expansion, governments can help to establish mechanisms to encourage greater uptake in cycling as a means of transport. For example, provisions for bicycle storage proficiency programs in schools, tertiary education facilities, hospitals, health services and government workplaces.
- Investing in new park-and-ride infrastructure at bus / rail nodes, including integrating alternative fuel/electricity refuelling points and preferential parking for alternative vehicles, such as electric cars.
- R3. In this context, Climate Action Groups call on the Federal Government to produce a discussion paper for public consultation on options to reform urban public transportation systems in Australia, with the primary goal of facilitating major investment in upgrading and expanding public transportation systems (including electrified rail, bus, cycle ways and footpaths) and increasing public transport usage.

#### C. Co-Benefits of Major Upgrades / Expansion of Public Transport

There are substantial co-benefits of increasing public transportation usage through major expansion and upgrading of existing facilities:

- Every person that substitutes away from private vehicle use and into public transportation will help to reduce Australia's greenhouse gas emissions (this assumes that the current form of the proposed Carbon Pollution Reduction Scheme is not implemented see Section 3 above).
- Infrastructure investment into public transportation systems would inject a major stimulus into the economy and create new jobs during a time of economic uncertainty and hardship for many Australians.
- New public transportation systems would dramatically improve labour force productivity due to greater mobility, lower commuting times and increased leisure time.
- Individuals, households and businesses would be insulated from the looming impacts of peak oil.
- Urban congestion problems would be greatly eased and new transportation systems would pave the way for further congestion work to be done by the Government in this area.
  - For example, Australia could introduce congestion charges in major cities (similar to the one introduced in London) as a way to fund a larger-scale, more modern, efficient and far-reaching public transportation system.
- Air and noise pollution would be substantially decreased.
- New public transportation systems would facilitate a cultural shift in Australia away from over-reliance on motor vehicles and towards public transportation, thereby promoting better health outcomes (due to higher levels of cycling/walking) and encouraging social inclusion.
- R4. Climate Action Groups call on the Federal Government to include the cobenefits of investing in public transportation as a criterion for appraisal for all transportation projects by Infrastructure Australia.
- R5. Groups further suggest that amended legislation to achieve this outcome be referred to the bipartisan House of Representatives Committee on Sustainable Cities (2003).

#### 6. Reforming interstate and rural public transportation

Investment in rural public transportation systems, in particular interstate rail transportation links, has been extremely poor over the last few decades, leading to substantial increases in road transport over existing rail options.

Development and investment of interstate electrified 'fast trains' and reinstatement of rail freight services (to replace reliance on road trains) would deliver substantial environmental and economic benefits, including:

- Helping to lower the greenhouse gas emissions intensity of transport;
  - For example, one freight train between Melbourne and Sydney would replace 150 semi-trailers and save 45,000 litres of fuel and 130 tonnes of greenhouse gas emissions.
- Injecting a major stimulus into the economy and creating new jobs, particularly in rural areas;
- Improved transit times and cost effectiveness of the transportation of goods (in particular food and manufactured goods); and
- Cutting commuting times between and within states / territories.
- Reducing road maintenance costs dramatically.

Climate Action Groups note that rural Australia is extremely vulnerable to fuel price rises and that communities are often highly limited in transport options other than motor vehicles.

- While school bus routes help enormously, there may be more innovative local solutions to reduce transport emissions that could be supported. For example, the development of a network of multi tasked mini buses for transport of people and goods between centres.
- R6. Climate Action Groups call on the Federal Government to produce a discussion paper for public consultation on options to reform interstate and rural public transportation systems in Australia, with the primary goal of facilitating major investment in upgrading and expanding interstate and rural public transportation systems (particularly railways).

#### 7. Funding urban / rural public transportation systems

As outlined in sections 5 and 6, the co-benefits of upgrading, expanding and creating new urban and rural public transportation systems are substantial. Potential funding mechanisms for these new systems could include:

- Funding currently set aside in the Infrastructure Fund.
- Redirection of 'new' road budgets at all levels of Government into public transportation infrastructure investment, noting that we cannot build our way out of congestion and that 'new' roads will therefore do little to ease congestion or greenhouse gas emissions.
- Redirection of revenue raised through the fuel excise tax and GST on petrol could also be re-directed into public transport.
- Cancellation of the fringe benefits tax concession for company/leased cars would increase consolidated revenue by around \$1 billion p.a.

## 8. Repowering motor vehicles & regulating for efficiency

As noted in Section 1, road transport accounts for around 12% of Australia's total greenhouse gas emissions so it is essential that options to repower private motor vehicles and regulate for greater efficiency are included in a comprehensive National Transportation Policy Plan.

#### A. A New National Fuel Efficiency Standard

Climate Action Groups believe that tougher regulations on vehicle efficiency would greatly assist householders to reduce their consumption of petrol, thereby insulating householders against the potential impacts of peak oil and reducing Australia's greenhouse gas emissions (assuming the current form of the proposed CPRS is not implemented – see Section 3 above).

- R7. Groups therefore call on the Government to mandate new fuel efficiency standards for all new motor vehicles, trucks and buses, commencing from 2012 or earlier.
- In particular, a progressive mandated increase in the fuel efficiency (or lower greenhouse emissions intensity) of the new passenger vehicle fleet, similar to new European standards.
  - For example, year-by-year fuel economy/emissions standards could be implemented such as a progressive 0.3litre/100km reduction every year for a petrol-fuelled car.

#### B. Tax Incentives for Alternative Fuel Vehicles

Climate Action Groups believe that tax incentives for purchases of vehicles that exceed the year-by-year standard (outlined above) could also be implemented to encourage purchase of alternative fuel vehicles.

- Groups note that the magnitude of incentives can be made proportional to the improvement beyond the standard.
- For example, the United States offers tax credits of up to \$7,500 per vehicle for Hybrid Electric Vehicles (HEVs), Plug-in Hybrid Electric Vehicles (PHEVs) and Electric Vehicles (EVs) depending on vehicle attributes.
- R8. Groups note that these incentives would improve the competitiveness and financial viability of alternative fuel vehicles as well as help to establish a viable market here in Australia and therefore call on the Government to implement tax incentives as soon as possible, in conjunction with renewable energy incentives.

In addition, Climate Action Groups believe that regulations should be enacted to enable retrofitting options for the existing national car fleet with low or zeroemissions technology.

• Retrofit schemes could qualify for the same tax incentives as new alternative fuel vehicles, so long as retrofits satisfy regulatory requirements.

#### C. Other Incentives to Increase Uptake in Alternative Fuel Vehicles

Climate Action Groups note that preferential access to transport infrastructure for alternative or highly-efficient vehicle technologies can further assist uptake in alternative fuel vehicles over petrol fuel vehicles.

• For example, special charging spaces or preferential access to carpool lanes. Such schemes have proven highly effective in the United States to date.

The Government could also provide subsidies for alternative fuel cells for road, air and sea transport, for example bio-fuels can be used to extend the reach of electric vehicles and can be made from sewerage farm algae, crop residuals and other waste by-products (the French town of Lille uses biogas from sewage to power some of its bus fleet).

#### D. Incentives For Implementing Alternative Vehicle Infrastructure

Climate Action Groups also believe that incentives should be provided for development and investment in infrastructure to support these alternative vehicle technologies, for example public recharging points in designated zones for electric vehicles.

#### E. Mandatory Zero Emissions Vehicle Target

Climate Action Groups note that mandatory zero emissions vehicle targets will enable manufacturers to plan/design their automotive cycle requirements appropriately.

- Groups note that in November 2008 Germany set a goal of putting 1 million electric and hybrid electric vehicles on their roads by 2020<sup>12</sup>.
- R9. In addition to the call for major expansions in public transportation systems, Climate Action Groups call on the Government to set a mandatory zero emissions vehicle target of at least 5% of our total new car fleet, commencing in 2015. This target could then be doubled every 5 years.

#### F. Tax Incentives for Alternative Vehicle Manufacturing

Climate Action Groups believe that tax incentives could be provided to HEV, PHEV and EV manufacturers to relocate to Australia and/or for existing Australian manufacturers to establish alternative vehicle manufacturing plants.

#### G. New Australian Design Rules

Climate Action Groups note that a new category of vehicle could be created within the Australian Design Rules (similar to the Neighbourhood Vehicle designation in the US).

 $<sup>^{12}</sup>$  "Germany Aiming for 1M EVs and PHEVs by 2020",28 November 2008, see: http://www.greencarcongress.com/2008/11/germany-aiming.html#more

This would allow consumers to legally register and operate lower-functionality vehicles that are typically smaller, lower-performance, lower cost and more efficient in their operation. This segment of the market is also a lower-cost entry point for many alternative vehicle technologies.

#### H. Promoting a New Car Sharing Industry in Australia

Climate Action Groups note the potential for one vehicle to service the needs of many people or organisations through a car-sharing program (distinct from car pooling).

Climate Action Groups believe that the Federal Government should set up a national clearinghouse on car sharing, as a sunrise industry in Australia.

The clearinghouse would liaise with industry and provide advice to developers, councils and local communities about ways of implementing car sharing to reduce car ownership. The clearinghouse could also contribute to basic and ongoing professional education in the many disciplines involved in sustainable transport.

#### I. Cancelling the Fringe Benefits Tax Concession for Motor Vehicles

Climate Action Groups believe that the tax system should encourage the uptake of energy efficient / low emissions vehicles.

Groups note that the fringe benefits tax concession for company and leased cars promotes usage of private vehicles over public transportation. This concession makes no delineation between low and high emissions vehicles and therefore sends an inappropriate signal to the market.

R10. In this context, Groups call on the Government to cancel the fringe benefits tax concession for company and leased cars.

• Groups note that this measure would increase consolidated revenue by \$1 billion per annum, which could be re-invested in upgrading pubic transport systems.

#### 9. Public transportation education programs

Climate Action Groups note that the move towards higher levels of 'active transport' use (such as cycling and walking) pose major benefits for lowering emissions, traffic congestion and improving health and surrounding environments.

R11. Groups call on governments to replace prohibitions / deterrents to cycling and walking to secondary and tertiary education facilities with appropriate infrastructure upgrading and education programs.

## More about Climate Action Groups

Climate Action Groups are collectives of ordinary but impassioned Australians who have come together in their local communities to act on climate change. Climate Action Groups have experienced extraordinary growth over the past few years, with over 200 groups (representing thousands of people) currently operating in local communities across Australia.

The dedication and determination of these groups is testimony to a deeply felt community concern about the threat of climate change and increasing unease in the community about the direction of climate policy in Australia.

Climate action groups generally have no political affiliations, and often represent the people and sentiments of 'middle Australia' and beyond.

In early February 2009, the first ever Climate Action Summit was held in Canberra, bringing together over 500 participants representing around 150 Climate Action Groups and culminated in 2,500 people surrounding Parliament House on 3 Feb 09 (the first sitting day for 2009).

The summit was a tremendous success and has lead to greater organisation, communication and collaboration among groups.

Climate Action Groups are rapidly proving themselves to be a powerful force in the public climate debate in Australia.

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## Signatories to this Submission:

36 Climate Action Groups from across Australia have signed this submission. They have a combined membership covering thousands of people and are doing phenomenal work in each of their communities to raise awareness on climate change and to facilitate the transition to a safe climate zone.

Each signatory is listed below:

- 1. Alpine Riverkeepers, NSW
- 2. Ararat Greenhouse Action Group Inc, VIC
- 3. Beenleigh Community for Cool Change, QLD
- 4. Bendigo Sustainability Group, VIC
- 5. Beyond Zero Emissions, VIC
- 6. Boroondara Sustainability Network, VIC
- 7. Clean Energy For Eternity Bega, NSW
- 8. Clean Energy For Eternity Manly, NSW
- 9. Clean Energy For Eternity Palerang, NSW
- 10. Clean Energy For Eternity Snowy River, NSW
- 11. Climate Action Newtown, NSW
- 12. Climate Action Pittwater, NSW
- 13. Climate Action Tomaree (WG of EcoNetwork Port Stephens), NSW
- 14. Climate Change Balmain-Rozelle, NSW

- 15. Crisis Coalition, NSW
- 16. Drummoyne/Canada Bay/Lowe Climate Action Group, NSW
- 17. Edmund Rice Centre, NSW
- 18. Emerald for Sustainability, VIC
- 19. Epping Beecroft Climate Action Group, NSW
- 20. Families Facing Climate change, VIC
- 21. 450ppm, NSW
- 22. Greenleap Strategic Institute, VIC
- 23. Lighter Footprints, VIC
- 24. Lismore Climate Action Group, NSW
- 25. Locals into Victoria's Environment (LIVE), VIC
- 26. Pacific Calling Partnership, NSW
- 27. ParraCAN, NSW
- 28. Plug-In Australia, NSW
- 29. Ryde Gladesville Climate Change Action Group, NSW
- 30. South-East Region Conservation Alliance (SERCA), NSW
- 31. Surf Coast Energy Group, VIC
- 32. Sustainability in Stonnington, VIC
- 33. Wodonga and Albury Towards Climate Health (WATCH), VIC
- 34. Yarra Climate Action Now, VIC
- 35. Yarra Valley Climate Action Group, VIC
- 36. Zero Carbon Network

## **References:**

- 1. Australian Govt Fact Sheet (Dec 2008) "Australia's Greenhouse Gas Emissions"
- 2. Australian Govt Fact Sheet (Dec 2008) "What the rest of the world is doing on climate change"
- 3. Denniss, R. (Jan 2008) "Climate policy strategy where to from here?"
- Denniss, R. (Nov 2008) "Fixing the floor in the ETS the Role of Energy Efficiency in Reducing Australia's emissions", Research Paper No. 59.
- 5. Department of Climate Change (June 2008) "National Greenhouse Gas Inventory 2006, Accounting for the Kyoto Target"
- 6. "Germany Aiming for 1M EVs and PHEVs by 2020", 28 Nov 2008, see: http://www.greencarcongress.com/2008/11/germany-aiming.html#more
- 7. IPART (Dec 2008) "Review of NSW Climate Change Mitigation Measures".