

Joint Submission by 69 Climate Action Groups

29 May 2009

Submission on Discussion Papers to the Energy White Paper Secretariat

Executive Summary

The 69 Climate Action Groups signing this submission believe that a major overhaul of Australia's existing energy policy is required, as the current policy:

- Fails to recognise the substantial role that energy efficiency and renewable electricity can play in reducing Australia's emissions;
- Fails to manage the energy security risks surrounding peak oil;
- Fails to map out a clean, renewable energy future for Australia;
- Fails to drive substantial investment in renewable energy;
- Fails to promote investor certainty and confidence in renewables; and
- Fails to encourage our renewable energy experts to remain in Australia.

Groups note that the Energy White Paper process has tremendous potential to facilitate a 'paradigm shift' in Australia towards 100% renewable electricity.

Climate Action Groups believe that a dramatic shift in energy policy would enable Australia to deal coherently with the multiple threats stemming from climate change, the global financial crisis and peak oil. In particular, renewable energy systems can be rapidly rolled out (in years, rather than decades) which is a critical factor in our ability to truly mitigate dangerous climate change.

In addition, a new renewable energy policy would provide major employment growth opportunities over the next decade and would re-invigorate major infrastructure investments in our electricity demand and supply systems as well as our public transportation systems.

This submission outlines 33 recommendations to reform energy policy in Australia and facilitate a shift towards 100% renewable electricity as well as options to repower both public and private transport through transport fuels derived from renewable sources.

The Climate Action Groups signing this Submission thank the Energy White Paper Secretariat for taking the time to consider our views in this crucial area.

Summary of Recommendations – Groups Call on the Secretariat to:

- 1.1 Urgently appoint additional Renewable Energy experts in the areas of solar-thermal, solar PV, geo-thermal and wind power to the high-level committee.
- 1.2 Use the Energy White Paper process to signal to investors that Australia is ready to transition towards 100% renewable electricity.
- 1.3 Prepare a ‘nuts and bolts’ renewable energy implementation plan, as part of the Energy White Paper, including detailed analysis of a rapid transition timeline for 100% renewable electricity (including a 2020 target date).
- 1.4 Work closely with COAG to facilitate the preparation and implementation of a National Energy Efficiency Strategy within the next 12 months, in consultation with a wide range of stakeholders.
- 1.5 Exclude native forest ‘wood waste’ from all definitions of renewable energy, across all energy sector legislation.
- 1.6 Clearly specify in the Energy White Paper that Nuclear Power will NOT be used as part of the energy mix in Australia.
- 1.7 Recommend implementation of mechanisms to ensure that costs of new, renewable energy technologies are cost-neutral to energy consumers, such as: energy efficiency; assistance for low-income households; and community education.
- 1.8 Prepare a detailed strategy as part of the Energy White Paper to rapidly phase-down Australia’s consumption of oil, and thereby end Australia’s dependence on oil.
- 1.9 Recommend an urgent moratorium on new leases for oil exploration projects in Australia.
- 1.10 Move jurisdictional control of public transportation from State/Territory Governments to the Federal Government.
- 1.11 Mandate that all design, development planning and urban renewal programs take into account proximity to public transportation systems, including walking/cycling paths and park-and-ride facilities.
- 1.12 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.
- 1.13 Include the co-benefits of investing in public transportation as a criterion for appraisal for all transportation projects by Infrastructure Australia.
- 1.14 Refer amended legislation to achieve the outcome (of inclusion of co-benefits) to the bipartisan House of Representatives Committee on Sustainable Cities (2003).
- 1.15 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).

- 1.16 Mandate new fuel efficiency standards for all new motor vehicles, trucks and buses, commencing from 2012 or earlier.
- 1.17 Implement tax incentives to improve the competitiveness and financial viability of alternative fuel vehicles as well as help to establish a viable market here in Australia.
- 1.18 Set a mandatory zero emissions vehicle target of at least 5% of our total new car fleet, commencing in 2015. This target should then be doubled every 5 years.
- 1.19 Cancel the fringe benefits tax concession for company / leased cars.
- 1.20 Replace prohibitions / deterrents to cycling and walking to secondary and tertiary education facilities with appropriate infrastructure upgrading and education programs.
- 1.21 Prepare, as part of the Energy White Paper, a detailed national review of existing coal-fired power plants, with a view to phasing out existing plants over the next ten years.
- 1.22 Recommend that any Government assistance to coal-fired generators be conditional upon the ten-year phase-out plan for these generators.
- 1.23 Recommend a legislated ban on all new coal-fired power stations in Australia.
- 1.24 Recommend an urgent moratorium on: 1) new coal exploration and mining; 2) the expansion of existing coal-mines; and 3) the expansion of coal infrastructure.
- 1.25 Recommend that all subsidies, tax incentives and financial support to the fossil fuel industry (including any taxpayer funded plans to expand coal infrastructure) be urgently suspended.
- 1.26 Recommend that all Government funding/support for CCS be redirected into promoting and advancing renewable energy technology, energy efficiency, public transport and land management practices that foster carbon sequestration.
- 1.27 Recommend MRET and existing State and Territory FIT's be replaced with a Gross National FIT modelled on the German FIT by 1 July 2010.
- 1.28 Provide clarity and certainty, through the Energy White Paper process, to investors and industry about the potential for Australia to transition to a 100% renewable electricity supply.
- 1.29 Recommend, as part of the Energy White Paper process, substantial Government funding for community renewable electricity projects.
- 1.30 Recommend that RECs for residential solar PV systems remain at 1 REC per megawatt-hour, rather than the proposed change of 5 RECs per megawatt-hour.
- 1.31 Recommend that the solar PV rebate remains at \$8,000 and is de-linked from the REC system so that a household still receives an \$8,000 rebate irrespective of whether they decide to sell the RECs for their system or not.
- 1.32 Recommend that the rebate system not be changed for at least 2 years, in order to promote investor certainty.
- 1.33 Recommend major investment in an 'intelligent' grid over the next decade, thereby improving energy efficiency and lowering the carbon intensity of the grid.

Overall Comment on the Energy White Paper Process

As mentioned above, Climate Action Groups believe that the Energy White Paper process has tremendous potential to facilitate a 'paradigm shift' in Australia towards 100% renewable electricity.

That said, the process surrounding the nomination of the high-level consultative committee has raised major concerns among Climate Action Groups about the relative importance the Energy White Paper Secretariat will be placing on renewable energy in Australia.

- Of the original 15 Committee members, 9 members represent fossil-fuel companies (Shell, Rio Tinto, Xstrata, BHP Uranium, Santos, Woodside Petroleum, Origin Energy, AGL and Australian Petroleum Production and Exploration Association).
- While Groups welcomed the acknowledgment by the Secretariat at the Sydney consultation on 22 April 2009 that they had made a 'mistake' in not appointing a single renewable energy representative to the committee, they have so far only appointed one renewable energy expert to the committee – Dr Michael Ottaviano (expert in wave technology).
- Climate Action Groups welcome this appointment, as well as the appointment of 2 Non-Government Organisation representatives (from WWF and St Vincent de Paul Society), but believe that additional renewable energy experts are urgently required, particularly in the areas of solar-thermal, solar photo-voltaic (PV), geo-thermal and wind power technologies.

Climate Action Groups note that the renewable energy sector has already had numerous setbacks over the past 14 years stemming from the pre-disposition of both the current and previous Governments towards fossil-fuel based energy supplies, most clearly evidenced by the 'stop-start' nature of existing renewable energy policies. Further 'mistakes' in this area will hinder investor certainty at a time when Australia can least afford it.

Groups therefore call on the Secretariat to ensure that the Energy White Paper process sends a clear signal to investors (both domestic and international) that Australia is ready to transition towards a 100% renewable electricity supply.

RECOMMENDATIONS – Groups call on the Secretariat to:

- 1.1 Urgently appoint additional Renewable Energy experts in the areas of solar-thermal, solar PV, geo-thermal and wind power to the high-level committee.
- 1.2 Use the Energy White Paper process to signal to investors that Australia is ready to transition towards 100% renewable electricity.

Specific Comments on Discussion Papers

Paper 1: Maximising the Value of Technology in the Energy Sector

Question 1: What does the Australian community want the energy technology mix to deliver in 2030?

Australia's Electricity Supply – Shifting to 100% Renewable Electricity

The Climate Action Groups signing this submission believe that Australia's energy technology mix should be rapidly transitioned to 100% renewable electricity. Renewable energy is our preferred technology for the future as it:

- Is a clean, emissions-free and sustainable form of energy;
- Has been demonstrated to be commercially viable, with small, medium and large-scale installations already operating in many countries that have favourable renewable energy policies;
- Can be rapidly rolled out – in years, rather than decades (as is the case for Carbon Capture and Storage (CCS) and nuclear power) – which is a critical factor in our ability to truly mitigate dangerous climate change; and
- Covers a wide range of cutting-edge technologies, such as solar-thermal; geo-thermal; solar PV; wave; tidal; sustainable biomass¹ and wind power.

Groups strongly support Al Gore's call for 100% clean electricity in the US within 10 years. It is in this context that over 150 Climate Action Groups have adopted a goal of '100% renewable energy in Australia by 2020'².

Climate Action Groups believe that the current Energy White Paper process provides an excellent opportunity for the Secretariat to consider options for a rapid ten-year transition to 100% renewable electricity in Australia, similar to the call that Al Gore has made for the US.

Groups therefore call on the Secretariat to prepare a 'nuts and bolts' renewable electricity implementation plan as part of the white paper, including detailed analysis and consideration of:

- Rapid transition timelines for implementing 100% renewable electricity, including a ten year transition timeframe (such as a 2020 target);
- Appropriate renewable electricity supply corridors (including their proximity to the grid) for solar-thermal, solar-PV, geo-thermal, wave, sustainable biomass, wind and other renewable energy technologies;

¹ 'Sustainable biomass' does not include activities that reduce existing 'green carbon' or the diversion of food crops, for example: the use of native forest woodchip waste or palm oil or sugar cane grown specifically for biofuels (both domestically and internationally).

² Position adopted by climate groups on 2 Feb 2009 at "Australia's Climate Action Summit".

- Base-load energy supply through renewable electricity generation sources, such as solar-thermal; geo-thermal and wind power connected to pumped hydro;
- Infrastructure investment requirements to improve the capacity of the grid to efficiently integrate energy from a myriad of renewable sources – that is, investment requirements to turn our electricity grid into a ‘smart’ grid;
- Manufacturing capacity to manufacture components for the various renewable energy technologies being considered as part of this mix;
- Detailed economic modelling of the costs and benefits of a rapid roll-out of 100% renewable electricity into the Australian electricity grid, including analysis on economic growth, employment and training / skills growth, investment, energy prices and inflation; and
 - Climate Action Groups note that large-scale implementation of renewable technologies have already led to economic, social and environment benefits including growth in jobs, training and investment in many countries (most notably in Germany, Spain and the US).
- A “Just Transitions” plan to ensure an equitable and fair transition for employees and communities (particularly in the coal sector) affected by a rapid transition to 100% renewable electricity.

RECOMMENDATION – Groups call on the Secretariat to:

- 1.3 Prepare a ‘nuts and bolts’ renewable energy implementation plan, as part of the Energy White Paper, including detailed analysis of a rapid transition timeline for 100% renewable electricity (including a 2020 target date).

Australia’s Electricity Demand – New Energy Efficiency Strategy

Climate Action Groups note that between 1990 and 2006, Australia’s stationary energy emissions grew by 47.3% and by 2006 were responsible for around 49.9% of all emissions³.

Reducing energy use through energy efficiency is a proven, fast and cost effective way to reduce our current energy demand and associated emissions.

- Reducing electricity demand will also ease pressure on already strained electricity supply systems as well as enable a smoother transition to a 100% renewable electricity supply.

Groups welcomed the Government’s \$3.9 billion Energy Efficient Homes package announced in February 2009, and believe that this investment would be enhanced by the formulation of a national strategy for energy efficiency.

- We understand that the Council of Australian Governments’ (COAG) is currently working on a National Energy Efficiency Strategy and trust that

³ Australian Govt Fact Sheet (Dec 2008) “Australia’s Greenhouse Gas Emissions”, pg1.

the Secretariat will work closely with COAG to ensure that a comprehensive new strategy is prepared and implemented.

Groups believe that this new National Energy Efficiency Scheme should provide ambitious new standards for buildings (both commercial and residential) and appliances that are in-line with world's best practice, such as:

- Mandated energy reduction goals for new buildings, for example a 50% reduction by mid-2010 and carbon-neutral buildings by 2020;
- A national public housing program to build 100,000 energy efficient homes with effective public transport links by 2012;
- Retrofits for all Government housing, thereby protecting tenants from energy price increases;
- Retrofit plans for existing buildings (including public housing and private rental accommodation);
- Mandated targets for all major household appliances to become at least 50% more energy efficient by 2020.

This crucial new Scheme would provide much needed guidance and certainty for investors, industry, businesses and householders on the future direction of buildings and appliances in Australia.

RECOMMENDATION – Groups call on the Secretariat to:

- 1.4 Work closely with COAG to facilitate the preparation and implementation of a National Energy Efficiency Strategy within the next 12 months, in consultation with a wide range of stakeholders.

Ensuring Australia's Energy Technology Mix Protects Native Forests

'Wood waste' in native forests play a vital role in maintaining healthy bio-diverse native forest ecosystems.

Climate Action Groups believe that the use of native forest 'wood waste' for the production of bio-energy would place immense pressure on an already fragile ecosystem. These ecosystem impacts are sufficient to render bio-energy from native forest 'wood-waste' a non-renewable energy source.

Continued specification of native forest 'wood waste' as a renewable energy resource would allow inappropriate burning of woodchips from native forests for electricity and fails entirely to take into account the greenhouse gas emissions that come from clear felling native forests, not to mention the associated habitat destruction⁴. In addition, the burning of woodchips from native forests would also produce significant carbon emissions.

⁴ Campbell, P. "Submission on Draft Renewable Energy Bill 2009", http://greenlivingpedia.org/Submission_on_draft_Renewable_Energy_Amendment_Bill_2009

RECOMMENDATION – Groups call on the Secretariat to:

1.5 Exclude native forest ‘wood waste’ from all definitions of renewable energy, across all energy sector legislation.

Ensuring Australia’s Energy Technology Mix Excludes Nuclear Power

Climate Action Groups do not support the use of Nuclear Power as part of the energy mix in Australia.

Significant emissions are produced at every stage of the nuclear fuel cycle and uranium is not a renewable resource. The inherent dangers with nuclear energy, from the lack of a long-term storage solution, to nuclear waste, to the risk of accidents and sabotage, make its use unacceptable⁵ to Groups .

In addition, Climate Action Groups do not believe it is our right to burden future generations with radioactive waste when we have viable, proven renewable alternatives available now.

As outlined above, Groups believe that energy investments in Australia should be focussed on our abundant resources of solar, wind, wave and geothermal power instead.

RECOMMENDATION – Groups call on the Secretariat to:

1.6 Clearly specify in the Energy White Paper that Nuclear Power will NOT be used as part of the energy mix in Australia.

Question 5: How should costs of new technologies be borne by energy consumers?

Climate Action Groups believe that implementation of an ambitious energy efficiency program (as outlined above) can achieve a dual purpose of:

- Reducing energy demand; and
- Making the deployment of commercial-scale renewable electricity technologies cost-neutral for energy consumers.

As outlined in the energy efficiency section above, Government funded measures to assist low-income households implement energy efficiency measures (such as a national public housing program to build 100,000 energy efficient homes and retrofit plans for existing public housing) would help to insulate low-income households from increased energy prices.

In addition, behaviour change can also dramatically lower energy consumption and, therefore, the cost impacts of rising energy prices.

⁵ Nature Conservation Council (Feb 2009), MRET Recommendations.

- Implementation of Government funded community education programs in this area (similar to voluntary programs currently run by Climate Action Groups) would greatly facilitate this shift.

RECOMMENDATION – Groups call on the Secretariat to:

- 1.7 Recommend implementation of mechanisms to ensure that costs of new, renewable energy technologies are cost-neutral to energy consumers, such as:
- Formulating and implementing an ambitious energy efficiency plan;
 - Providing energy efficiency assistance for low-income households; and
 - Implementing community education programs on reducing demand through behaviour change.

Paper 2: Investment, Competitive Markets & Structural Reform

Question 1: What are the key factors likely to affect domestic energy sector (for electricity, gas, transport) development to 2030?

Impacts for the energy sector from carbon pollution reduction response

A major factor likely to affect the domestic energy sector over the next two decades will be the Government’s decision on how to reduce Australia’s emissions as part of its global responsibility to mitigate climate change.

To date, the entire carbon pollution reduction response has been rolled into the Government’s proposed Carbon Pollution Reduction Scheme (CPRS).

The Climate Action Groups signing this submission OPPOSE the latest version of the CPRS. Groups have previously prepared and submitted 22 recommendations to the Senate Select Committee on Climate Policy and the Department of Climate Change to radically reform the CPRS.

While we will not cover the details of our concerns with the CPRS in this submission, we will make a few key points about how the current CPRS and the Government’s overall approach to reducing carbon pollution is affecting investor expectations around energy, in particular renewable energy:

- Climate Action Groups believe that Australia’s emissions reduction target band of 5 – 25% below 2000 levels – which is completely out of step with current climate science and the targets set by other developed countries (most notably the UK, EU and US) – signals to investors that Australia is not serious about reducing emissions and responding to climate change.
 - Since 50% of Australia’s emissions come from stationary energy, this target band suggests to Climate Action Groups that Australia is not

yet willing to undertake major energy reform and rapidly transition to renewable energy as part of its carbon pollution response.

- The CPRS will be providing total compensation through free-permits to heavy emitters of around \$16.4 billion, without any emissions reduction conditionality around that assistance. This does not promote investor confidence around the Government's commitment to transitioning towards a renewable energy supply or an emissions-free economy.
 - If this \$16.4 billion was invested into energy efficiency and renewable energy systems it would signal to investors that Australia is serious about reducing its emissions and reforming the energy sector.
- The inclusion of unlimited international permits mean that Australia's actual emissions won't fall until 2035 (according to Treasury modelling)⁶. This again signals to investors that despite all of the rhetoric it is business-as-usual when it comes to emissions and energy supply in Australia.

Climate Action Groups believe that the above outcomes, combined with the Government's current investment plans into CCS and coal infrastructure (see Question 4 below), signal that the Government is not ready to undertake the necessary reforms to reduce Australia's emissions and shift to a renewable electricity supply.

Energy Security – Implications of Peak Oil:

Another key factor that is likely to affect Australia's domestic energy sector is our society's absolute dependency on oil.

Oil is relied upon in some way for almost every product and service we use, including transportation, manufacturing and plastic products. 50% of our medicines are derived from oil and our food production is increasingly dependent upon it.

Climate Action Groups consider that early action to insulate and build our communities resilience in the face of oil depletion / peak oil is of paramount importance. In particular, a phase down of oil would help to:

- Lower our emissions from oil consumption and assist us in our transition to an emissions-free economy;
 - This is particularly important given that emissions from transport grew by 27.4% between 1990 and 2006, making it the second fastest growing sector in terms of emissions after stationary energy⁷.
- Encourage the use of renewable energy technologies in place of oil;
- Minimise the impact of oil prices on the Australian economy, including impacts on employment, food prices and inflation; and

⁶ Treasury (Oct 08), "Australia's Low Pollution Future: The Economics of Climate Change", p 155.

⁷ Australian Govt Fact Sheet (Dec 2008) "Australia's Greenhouse Gas Emissions", pg1.

- Promote greater peace and security throughout the world⁸.

In this context, Groups call on the Secretariat to prepare a detailed strategy as part of the Energy White Paper to end Australia’s dependence on oil. Key measures in this strategy could include:

- Officially recognising Peak Oil and its unavoidable impacts;
 - We note that some fuel intensive sectors (like aviation) are particularly vulnerable as useable alternatives are limited at this time.
- Major infrastructure investments in public transport (see below);
- Providing subsidies for alternative fuel sources for road, air and sea transport, such as bio-fuels from waste by-products (for example bio-fuels made from algae) and hydrogen made from 100% renewable electricity;
- Providing assistance to farmers to enable them to develop ways to fertilise and harvest crops without using fossil fuel oil inputs; and
- Undertaking a public education campaign to raise awareness on the many benefits of reducing our dependence on oil.

RECOMMENDATION – Groups call on the Secretariat to:

- 1.8 Prepare a detailed strategy as part of the Energy White Paper to rapidly phase-down Australia’s consumption of oil, and thereby end Australia’s dependence on oil.
- 1.9 Recommend an urgent moratorium on new leases for oil exploration projects in Australia.

Addressing Peak Oil and Reducing Emissions Through Public Transport

Climate Action Groups welcomed the opportunity to contribute to the current Senate Inquiry on the “Investment of Commonwealth and State Funds in Public Passenger Transport Infrastructure and Services”.

The rapid roll-out of renewable electricity generation systems into the Australian grid (as outlined on page 2-3) can provide substantial options to re-power both public and private transportation systems and, in the process, reduce Australia’s emissions and enable us to transition away from oil.

Climate Action Groups have already made 11 recommendations to the Senate inquiry. These recommendations are listed below, to enable the Secretariat to include these as part of the Energy White Paper process as well⁹.

⁸ These four points have been adapted from the Swedish Government’s plan to phase out oil. See: http://en.wikipedia.org/wiki/Oil_phase-out_in_Sweden.

⁹ See full copy of submission at: <http://www.climatesummit.org.au/policyprocesssummit>

RECOMMENDATIONS – As Submitted to Senate Committee:

- 1.10 Move jurisdictional control of public transportation from State/Territory Governments to the Federal Government.
- 1.11 Mandate that all design, development planning and urban renewal programs take into account proximity to public transportation systems, including walking/cycling paths and park-and-ride facilities.
- 1.12 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.
- 1.13 Include the co-benefits of investing in public transportation as a criterion for appraisal for all transportation projects by Infrastructure Australia.
- 1.14 Refer amended legislation to achieve the outcome (of inclusion of co-benefits) to the bipartisan House of Representatives Committee on Sustainable Cities (2003).
- 1.15 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).
- 1.16 Mandate new fuel efficiency standards for all new motor vehicles, trucks and buses, commencing from 2012 or earlier.
- 1.17 Implement tax incentives to improve the competitiveness and financial viability of alternative fuel vehicles as well as help to establish a viable market here in Australia.
- 1.18 Set a mandatory zero emissions vehicle target of at least 5% of our total new car fleet, commencing in 2015. This target should then be doubled every 5 years.
- 1.19 Cancel the fringe benefits tax concession for company and leased cars.
- 1.20 Replace prohibitions / deterrents to cycling and walking to secondary and tertiary education facilities with appropriate infrastructure upgrading and education programs.

Question 4: What are the main impediments to long-term investment in energy generation?

Impediment 1: The Government's Continued Investment in Coal

Continued Government funding and assistance for coal generators, coal infrastructure and CCS is generating substantial uncertainty around the direction of Australia's future energy technology mix.

Climate Action Groups believe that this lack of certainty is acting as a major impediment to long-term energy investments, particularly in the area of renewable electricity generation systems.

Groups believe that the Federal and State Governments' decision to contribute 2/3 of the funding towards CCS research signals to investors and industry that the Government still favours coal over renewable energy.

- Many senior experts have expressed concern about the feasibility of CCS for coal plants and, in particular, the high costs and substantial environmental risks posed by this currently unproven technology.
- In addition, a number of major CCS demonstration projects have recently been cancelled, as the industry does not yet believe this technology is viable.
- Despite all of this, the Government is still full steam ahead in funding CCS in Australia.

In terms of assistance to coal-fired generators, Climate Action Groups note that the proposed \$3.9 billion of assistance to be given to coal-generators under the current CPRS is not conditional on a phase-out plan for the sector.

- Groups support assistance to the coal sector and affected communities as part of a just and fair transition for this sector, but believe that all assistance given by the Government to this sector should be conditional on an orderly and detailed phase-out plan for the sector

Finally, the Federal Government's decision to fund major expansions in coal infrastructure signals to investors and industry that the Government supports the coal industry's goal of doubling Australia's coal exports by 2030.

- Climate Action Groups believe this is a major mistake and note Nicholas Stern's view that "countries that sink their treasure now into a dirty coal infrastructure or high-carbon production methods are not only jeopardising the health of the planet, they are jeopardising their own economic future."¹⁰

Climate Action Groups believe that Australia's current energy and carbon pollution policies indicate a pre-disposition by the Government to further entrench fossil fuels (such as CCS for coal plants and nuclear energy) as the dominant energy source in Australia over renewable energy options. This lack of clarity is impeding both renewable energy and energy infrastructure investments.

RECOMMENDATIONS - Groups call on the Secretariat to:

- 1.21 Prepare, as part of the Energy White Paper, a detailed national review of existing coal-fired power plants, with a view to phasing out existing plants over the next ten years.

¹⁰ Stern (Mar 09), "Economic meltdown no reason to delay" Carbon & Environment Daily.

RECOMMENDATIONS – CONTNUED: Groups call on the Secretariat to:

- 1.22 Recommend that any Government assistance to coal-fired generators be conditional upon the ten-year phase-out plan for these generators.
- 1.23 Recommend a legislated ban on all new coal-fired power stations in Australia.
- 1.24 Recommend an urgent moratorium on: 1) new coal exploration and mining; 2) the expansion of existing coal mines; and 3) the expansion of coal infrastructure.
- 1.25 Recommend that all subsidies, tax incentives and financial support to the fossil fuel industry (including any taxpayer funded plans to expand coal infrastructure) be urgently suspended.
- 1.26 Recommend that all Government funding/support for CCS be redirected into promoting and advancing renewable energy technology, energy efficiency, public transport and land management practices that foster carbon sequestration.

Impediment 2: Urgent Need to Replace MRET with a Gross Feed-in Tariff

When the Mandatory Renewable Energy Target (MRET) model was originally chosen by the Howard government over a feed-in tariff (FIT), it was a theoretical assumption that an MRET style model would produce least-cost renewable energy generation options and would therefore be the cheapest way to achieve a renewable energy target.

However, in practice this has not been the case¹¹. While early achievement of MRET was initially deemed a success¹², the failure by the Government to expand or extend MRET resulted in MRET effectively becoming a cap on renewable energy development in Australia.

This uncertainty meant that key players in the wind industry had to postpone or cancel substantial planned investment in wind projects in Australia, leading the market to stall.

The “stop-go” nature of the MRET model combined with the short (politically malleable) time frames did not promote investor confidence or certainty, thereby further impeding growth of the renewable energy market.

Finally, the “least cost” nature of the MRET model meant that only the cheapest forms of renewable energy were promoted, such as wind power.

While wind has a crucial role to play in the renewables mix, the MRET model has failed to promote widespread investment in other renewable technologies, most notably solar-thermal, solar PV and geo-thermal. This has, in turn,

¹¹ Most concepts on the MRET/REC model are from: Prest, J. (Aug 2008) “Inquiry into the Renewable Energy (Electricity) Amendment (Feed-in Tariff) Bill 2008”.

¹² The 2010 MRET target of 9,500 GWh was achieved in 2005.

provided little incentive for renewable energy experts in other areas (most notably solar PV and solar-thermal) to remain in Australia.

FITs, on the other hand, have proven to be a highly successful policy instrument in driving substantial investment in a wide range of renewables.

This has been most evident in Germany, whereby, “Germany’s feed-in law, introduced in 1990 has led to a massive boom in investment. There was a 3025% increase in its solar capacity from 64 million kWh in 2000 to 2 billion kWh in 2006.”¹³

In addition to promoting substantial investment in renewables, FITs have also been proven through implementation to¹⁴:

- Have lower transaction and administrative costs compared to MRET;
- Promote investor certainty – the tariff rate is usually guaranteed for a period of around 20 years, thereby reducing investment risk;
- Allow cooperatives and companies to participate;
- Apply across a range of technology bands, rather than simply focusing on the cheapest forms of renewable energy; and
- Recognise the network benefits from reduced transmission losses and generation closer to the source of consumption.

Climate Action Groups believe that a Gross National FIT would greatly facilitate major investment in the renewable energy sector in Australia and would play a crucial role in our transition to 100% renewable energy.

To effectively encourage investment in renewables, the new FIT would need to be modelled on the German scheme. In particular, it would need to:

- Apply to a range of renewable energy technologies, including solar thermal, solar PV, geothermal, sustainable biomass, wave and wind power;
- Apply to ALL the electricity generated from the renewable energy system (gross generation) NOT just the electricity that is surplus and exported to the grid (net generation);
- Be open to all sectors, including residential, commercial, business, local councils, public buildings, schools, churches, agricultural, light industrial and large scale commercial;
- Guarantee purchase and transmission of all electricity generated by connected renewable energy systems;

¹³ Prest, J. (Aug 2008) “Inquiry into the Renewable Energy (Electricity) Amendment (Feed-in Tariff) Bill 2008”, pg 2.

¹⁴ All dot points in this section are paraphrased from: Prest, J. (Aug 2008) “Inquiry into the Renewable Energy (Electricity) Amendment (Feed-in Tariff) Bill 2008”, pg 14-15.

- Guarantee payments for at least 20 years, thereby providing investment certainty and confidence (these payments can be reduced when incremental generation capacity milestones have been reached);
- Provide a payback on electricity generated of around 4 times the standard domestic electricity tariff (this would reduce the payback time on many small – medium scale installations to less than 10 years); and
- Be introduced with retrospectivity, thereby allowing those early adopters to join the scheme from the date of enactment or when the law is passed.

Climate Action Groups note that work may need to be done by the Government to effectively harmonise the new 100% renewable energy target/Gross National FIT with the existing MRET/Renewable Energy Certificates (RECs) system.

RECOMMENDATION – Groups call on the Secretariat to:

1.27 Recommend MRET and existing State and Territory FIT's¹⁵ be replaced with a Gross National FIT modelled on the German FIT by 1 July 2010.

Impediment 3: MRET Phase-Out Plan Promotes Investor Uncertainty

In addition to our concerns over the design of the MRET scheme, Climate Action Groups are extremely concerned about the current phase-out schedule in the MRET legislation.

Despite immense public support for renewable electricity and the fact that the technology already exists and has been demonstrated to be commercially viable, the 2030 phase-out detailed in the new MRET legislation suggests that the proportion of renewable electricity in Australia's energy mix will fall after 2024.

This phase-out plan promotes substantial investor uncertainty about the future of the renewable energy industry in Australia and is acting as a strong impediment to long-term energy investments.

RECOMMENDATION – Groups call on the Secretariat to:

1.28 Provide clarity and certainty, through the Energy White Paper process, to investors and industry about the potential for Australia to transition to a 100% renewable electricity supply.

¹⁵ FITs are currently proposed or operating in the ACT, QLD, SA, VIC and WA.

Impediment 4: No Support for Community Renewable Energy Projects

Climate Action Groups note that while most of Australia's electricity is currently provided through centralised generation and distribution mechanisms, opening our grid to distributed energy would greatly enhance the overall efficiency of the grid and help us achieve a 100% renewable electricity goal.

Community renewable electricity projects have the potential to play a major role in the move to a more distributed electricity supply and have a number of tangible benefits, including:

- Distributing power generation over a wider geographic area, reducing transmission loss, improving overall grid stability and minimising damage to local networks from natural or man-made disasters;
- Building resilience in local communities (particularly in regional areas);
- Providing local jobs and skills as well as new investment and business opportunities;
- Enabling profits and other financial benefits to remain within the community; and
- Empowering communities to play an active role in mitigating climate change.

Climate Action Groups also note the excellent success of similar community scale renewable energy projects overseas, including Samsø Island (Denmark), Woking (England) and Varese Ligure (Italy). In addition, Denmark's ability to achieve its goal of 20% renewable electricity was significantly due to its support for community renewable electricity projects.

Unfortunately, community renewable electricity projects currently fall through the cracks of existing government funding mechanisms.

Climate Action Groups believe that hundreds of communities across Australia would be interested in implementing community renewable electricity projects, if funding assistance and technical support were made available.

RECOMMENDATION – Groups call on the Secretariat to:

- 1.29 Recommend, as part of the Energy White Paper process, substantial Government funding for community renewable electricity projects.

Impediment 5: Policy Changes / Back Flips for Residential Rebates

Overnight cessation and frequent changes to energy policy promotes substantial uncertainty for investors, industry, businesses and households.

For example, there have been 2 major policy changes around rebates for residential solar PV in past 15 months:

- 1) the introduction of a means test for the \$8,000 rebate; and
- 2) from 1 July 2009 the cancellation of the means test and a new *Solar Credits Scheme* which will leave householders around \$2,000 worse off via rebate reduction and will overstate the amount of new renewable electricity being added to the grid. In particular,
 - Under the new scheme a household will now be supplied with 5 RECs for every megawatt-hour of clean energy their system produces. Whereas, under the old scheme a household received 1 REC per megawatt-hour.
 - This means that “four out of the five RECs will be phantom” and that “solar-homes will be selling off five-times the RECs, despite not producing 5 times the clean energy”¹⁶.
 - Therefore, the outcome of this new policy is that it will be easier for electricity retailers to achieve the 20% MRET target on paper, as there will be more RECs available for purchase, even though the amount of actual renewable electricity won't be any higher than under the old Scheme.

These annual policy changes (and back-flips) reflect, in our view, a failure by the Government to take renewable energy seriously. It also perpetuates further investor uncertainty.

RECOMMENDATIONS – Groups call on the Secretariat to:

- 1.30 Recommend that RECs for residential solar PV systems remain at 1 REC per megawatt-hour, rather than the proposed change of 5 RECs per megawatt-hour.
- 1.31 Recommend that the solar PV rebate remains at \$8,000 and is de-linked from the REC system so that a household still receives an \$8,000 rebate irrespective of whether they decide to sell the RECs for their system or not.
- 1.32 Recommend that the rebate system not be changed for at least 2 years, in order to promote investor certainty.

¹⁶ Moyse, D. (Feb 2009) “New Solar Credits Scheme will dumb down the benefits of solar power”, Alternative Technology Association.

Question 9: What is the role of smart networks to 2030?

Failure by Industry and Government to invest and upgrade the nation's electricity grid in recent years has resulted in unnecessary transmission loss and energy wastage.

As Australia transitions to a 100% renewable electricity supply, it is critical that our electricity grid is able to effectively integrate energy from a myriad of renewable energy sources as well as minimise wastage and transmission loss¹⁷.

An "intelligent" or "smart" electricity grid has: a minimal amount of waste; a highly efficient use of power; and uses distributed energy resources and advanced communication and control technologies to deliver electricity more cost-effectively, with lower greenhouse intensity and in response to consumer needs¹⁸.

A major national investment in an "intelligent" grid would improve energy efficiency and lower the carbon intensity of our grid, complementing our capacity to provide 100% of our power from renewable electricity.

- In this context, Climate Action Groups welcome the commencement of the "Intelligent Grid (iGrid)¹⁹" project under the Commonwealth Science and Research Organisation's (CSIRO) "Energy Transformed Flagship".
- This crucial research will help to highlight where the weaknesses are in our electricity grid and provide guidance to Industry and Government on the magnitude and scope of investment and upgrading that is required.

RECOMMENDATION – Groups call on the Secretariat to:

1.33 Recommend major investment in an 'intelligent' grid over the next decade, thereby improving energy efficiency and lowering the carbon intensity of the grid.

¹⁷ Transmission loss through the electricity grid is a form of energy inefficiency as it requires more energy to be expended to make up for the power that is lost in transmission. In Australia, transmission loss through the electricity grid is around 10%. NEMCO (2008) "Statement of Opportunities".

¹⁸ See definition on iGrid homepage: <http://www.igrd.net.au>

¹⁹ iGrid is a collaborative research project running from July 2008-June 2011. It will contribute to the CSIRO's Energy Transformed Flagship research goal of halving greenhouse gas emissions and doubling the efficiency of the nation's new energy generation, supply and end use technologies.

Conclusion

As outlined above, the 69 Climate Action Groups signing this submission believe that a major overhaul of Australia's existing energy policy is required, and that the Energy White Paper process has the potential to facilitate a 'paradigm shift' towards 100% renewable electricity in Australia.

Inclusion of the above 33 recommendations in the Energy White Paper would provide a new direction for Australia's electricity generation and public transportation systems.

It would also help to dramatically reduce Australia's emissions as well as provide substantial new employment and investment opportunities over the next decade.

We thank the Secretariat for giving us this important opportunity to outline our vision and policies on Australia's energy future.

Contact for this submission: Tracey Tipping (Convenor, Community Climate Policy Team), 0411 861 269, tracey@eternalsource.com.au

Signatories to this Submission:

1. Above Water, WA
2. Alpine Riverkeepers, NSW
3. Ararat Greenhouse Action Group Inc, VIC
4. Bathurst Community Climate Action Network (BCCAN), NSW
5. Bayside Climate Change Action Group (BCCAG), VIC
6. Beenleigh Community for Cool Change, QLD
7. Bendigo Sustainability Group (BSG), VIC
8. Beyond Zero Emissions, VIC
9. Boroondara Sustainability Network, VIC
10. Ballarat Renewable Energy and Zero Emissions (BREAZE), VIC
11. Citizens Climate Campaign, NSW
12. Clean Energy For Eternity - Bega, NSW
13. Clean Energy For Eternity - Bermagui, NSW
14. Clean Energy For Eternity - Eurobodalla, NSW
15. Clean Energy For Eternity - Jindabyne, NSW
16. Clean Energy For Eternity - Manly, NSW
17. Clean Energy For Eternity - Mosman, NSW
18. Clean Energy For Eternity - Palerang, NSW
19. Climate Action Canberra, ACT
20. Climate Action Darwin, NT
21. Climate Action Hobart, TAS
22. Climate Action Newcastle (CAN), NSW
23. Climate Action Newtown, NSW
24. Climate Action Now, Wingecarribee (Canwin), NSW
25. Climate Action Pittwater, NSW
26. Climate Action Tomaree (WG of EcoNetwork Port Stephens), NSW
27. Climate Change Balmain-Rozelle, NSW

28. Climate Emergency Network, VIC
29. Communities Combating Climate Crisis (C4) Healesville, VIC
30. Darebin Climate Action Now, VIC
31. Drummoyne/Canada Bay/Lowe Climate Action Group, NSW
32. Emerald for Sustainability, VIC
33. Epping Beecroft Climate Action Group, NSW
34. 450ppm, NSW
35. Families Facing Climate Change, VIC
36. Gold Coast & Hinterland Environment Council (GECKO), QLD
37. Greenleap Strategic Institute, VIC
38. Green Coast Catalysts, NSW
39. Healesville Environment Watch Inc. (HEWI), VIC
40. Hills Climate Action Group (Perth), WA
41. Katoomba Area Climate Action Now (KACAN), NSW
42. Kyogle Climate Action Network, NSW
43. Lismore Climate Action Group, NSW
44. Locals into Victoria's Environment (LIVE), VIC
45. Monash Environment Group (MEG), VIC
46. Monash Student Association (MSA) represented by the Monash Student Council (MSC), VIC²⁰
47. Moonee Valley Climate Action (Melbourne Metro), VIC
48. Mount Alexander Sustainability Group (MASG), VIC
49. Parramatta Climate Action Network (ParraCAN), NSW
50. People for a Safe Climate (Inner City Sydney CAG), NSW
51. Plug-In Australia, NSW
52. Quest 2025, QLD
53. Ryde Gladesville Climate Change Action Group, NSW
54. St John's Wood (SJW) Sustainability, QLD
55. South East Forest Rescue, NSW
56. South-East Region Conservation Alliance (SERCA), NSW
57. Stawell Climate Action Group, VIC
58. Surf Coast Energy Group, VIC
59. Sustainability in Stonnington, VIC
60. Sustainable Environment Education Development Inc (SEED), VIC
61. Sustainable Hepburn Association Renewing the Earth (SHARE), VIC
62. Transition Towns Triangle Plus, NSW
63. UQ Climate for Change (Students and Staff at UQ), QLD
64. Unfolding Futures, NSW
65. Western Region Environment Centre, VIC
66. Wodonga and Albury Towards Climate Health (WATCH), VIC
67. Yarra Valley Climate Action Group, VIC
68. Yarra Climate Action Now!, VIC
69. Youth Against Warming, VIC

²⁰ Monash Student Council (MSC) Motion (29 May 2009): "That this MSC (Monash Student Council) endorses the Joint Submission by Climate Action Groups with a view to encouraging the Energy White Paper Secretariat to consider the investment of research and infrastructure funding in light of the future conditions of its constituents".

More about Climate Action Groups

Climate Action Groups are collectives of ordinary but highly concerned 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.

Groups generally have no political affiliations, and often represent the people and sentiments of a broad cross-section of Australian society.

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. The summit has led 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.