



THE
AUSTRALIAN
WORKERS'
UNION

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The Australian Workers' Union
Senate Select Committee on Fuel and Energy
Inquiry into: The impact of an Emissions Trading
Scheme on the Fuel and Energy Industry
Submission

January 2009

Executive Summary

The AWU has a number of key priorities in the fuel and energy sectors relevant to the terms of reference for this inquiry.

- 1) Every job in every enterprise is important to us and the AWU will be doing everything in its power to retain these jobs for the future to maintain the living standards of our workers and the health of our communities and the future for our children.
- 2) In fact most AWU members live and work in regional Australia. Most of these regional AWU members are also on the frontline of the emissions crisis employed in industries like alumina, cement, steel, oil and gas, bauxite and iron ore mining. We have been consulting and working with these communities to ensure the impact of the introduction of the ETS is balanced and fair and that capital city dwellers understand the concerns of working families in regional Australia.
- 3) We have some of the most well developed production technologies, and methods in Australia. If oil and gas resources are going to be extracted or energy products are going to be produced anywhere in the world in the future, we want to ensure they continue to be extracted, refined and generated in Australia. That does not mean we stand still and we have been working with industry and government to ensure environmentally friendly changes are made wherever possible. It is in our collective interest. Transitional assistance under the CPRS will assist in this regard.
- 4) We have a strong commitment to the oil and gas sector and together with the Maritime Union of Australia (MUA) established an Offshore Oil and Gas Alliance to better represent workers in the offshore oil and gas sector. This is providing us with a good framework to develop strategies for the sector in consultation with industry and government. Important steps have been taken by the Minister for Resources and Energy, the Hon Martin Ferguson MP in developing consultative mechanisms with us to assist in this policy development.
- 5) We will continue to work very closely with the Federal Government on the CPRS to ensure the design and implementation elements are right. As far as the AWU is concerned this applies particularly to impacts on the emissions intensive trade exposed industries (EITEs) where the risk leakage is greatest. By increasing the scale and scope of transitional assistance for EITE industries and applying realistic targets and making future targets conditional on international progress, the Government's White Paper has made a tremendous advance in this direction.
- 6) Our goals in 2009 are to promote bipartisan agreement in principle on the Government's White Paper to ensure the best possible outcome for Australia from international negotiations on the post-Kyoto framework prior to the commencement of the ETS in 2010.
- 7) We do not subscribe to the view that having made gains for our industries and workers in the White Paper we now simply give up in the wake of the financial crisis before we have a chance to level the playing field through this international effort. The White Paper gives a recipe to take forward. The urgency of climate change will not simply go away. Other policies need to play their part in responding to the crisis including stimulus packages, monetary policy and direct support for industry in particular to make up for cuts in discretionary spending by firms. This includes cuts to research and development spending, training and investment in plant and machinery to cope with expected declines in sales.

- 8) The AWU has argued that part of the response to climate change is to ensure that adequate infrastructure is provided to support sustainable energy supplies in the future, including through carbon capture and storage and renewable energy such as geothermal and solar. Access to the energy grid and transmission network is key to bringing them on stream to service our industries.
- 9) Incentives for our oil refining and the LNG sector are important too. Biofuels will also be an increasingly important part of future production and we need to ensure that incentives are in place to maximise production. That will be good for our primary producers and energy security.
- 10) The AWU is working with industry and regional communities to ensure that rather than laying off workers, mines and processing facilities under extreme pressure be placed where ever possible on a care and maintenance schedule ready to be brought back on stream quickly as demand picks up. Workers will be retrained and gainfully employed in the interim elsewhere. We do not subscribe to the view that Australian producers should be giving a free kick to other producers by cutting back and shutting down production and propping up international prices for other foreign producers to enjoy.
- 11) The AWU is keen to work with the government to exploit all options to retain workers in the sector during this period including through ensuring adequate investment in supportive policies such as infrastructure provision and access to facilities in remote communities. The role of the Infrastructure Australia will be important in this regard and the AWU has been an active supporter of this effort. Again, the emphasis is about laying the groundwork to maximise returns from the recovery and thereby easing the risk of overreacting to the immediate term issues.
- 12) Finally, the AWU believes that in view of the rapidly moving events, the vital work of this committee be considered by Government earlier than by the October deadline for reporting back to government.

Introduction

The Senate Select Committee on Fuel and Energy has been established to inquire into and report on among other matters:

- a. the impact of an emissions trading scheme on the fuel and energy industry, including but not limited to:
 - i. prices,
 - ii. employment in the fuel and energy industries, and any related adverse impacts on regional centres reliant on these industries,
 - iii. domestic energy supply, and
 - iv. future investment in fuel and energy infrastructure.

The Australian Workers' Union (AWU) welcomes the opportunity to make this submission on behalf of its members to the Senate Select Committee on Fuel and Energy. The AWU has been active in debate on the elements of the design and implementation of an emissions trading scheme over the past year.

The AWU is a strong supporter of the sector. It is what we do. The AWU is Australia's principal resources and energy union representing workers in carbon emissions corporations most of whom are based outside of our capital cities. The industries I represent, in mineral and metal processing including steel, alumina, aluminium, manganese, zinc, ceramics, cement, pulp and paper, plastics, oil refining, petrochemicals and liquefied natural gas, are valuable Australian assets accounting for a huge 65 per cent of Australia's total exports, and \$550 billion worth of avoided imports a year.

Impact on prices

In view of the efforts made by the Government to address the cost impost imposed by the ETS on fuel and in the context of transitional assistance provided to the emissions intensive trade exposed industries (EITEs), in addition to consumers including heavy transport users through the fuel tax adjustments, the AWU does not believe that the price impacts will be substantial. The question is rather whether transitional support will be sufficient to absorb the added cost impacts which by definition cannot be passed on by the EITEs.

In this regard, in circumstances where the Government has already increased the scale and scope of assistance under the White Paper, and capped the cost of emissions permits, the real challenge is to ensure adequate burden sharing by other jurisdictions in a post-Kyoto framework. The AWU's submission to the Opposition's Pearce Review argues for early bipartisan support for the Government's White Paper because it provides the recipe for and the best means of achieving international agreement in the lead up to Copenhagen in December 2009.¹ But the AWU would like to make another, related point.

In view of the current layoffs occurring in the mining sector in particular blamed on a slowdown in international demand and lower commodity prices, the AWU is concerned to ensure that the economy maintains its capacity to respond to the turnaround in demand as world growth picks up again by caring for and maintaining our resource assets and avoiding total shutdowns. The AWU does not agree with the knee-jerk market reaction which sees assets shut up or mothballed based on short term views when other producers enjoy the benefits of these actions in reducing supply and putting a floor under prices which give them a head start when growth and demand recovers.

Where there is a need for assistance in finding finance, as a lender of last resort with or without government help, or filling gaps in training or other activities, let's work together to do it. Where Government support for development projects or regulatory approvals could advance projects, let's do that. Wherever there is scope to avoid the loss of valuable skills to a sector and to our communities which has so far shed 8,500 jobs which up to a few months ago was concerned about skills shortages, let's do it. If we truly value our jobs, our industries and communities we should not let the short term outlook for commodity prices deter us from the much more positive longer term view. The AWU stands ready to play its part in this effort to preserve employment and maintain economic activity in cooperation with employers, governments and the community as our mutual investment in the future recovery.

Addressing the risk of leakage

The AWU has led the debate on the risks posed by an ETS to our EITE industries and on ways of addressing these concerns. The AWU held a groundbreaking round table meeting with CEOs of Australia's major energy and resources companies and peak bodies in July 2008. It was agreed at that meeting that there is no reason for jobs and investment to be put at risk from a poorly designed and implemented ETS in Australia. The path was forward looking not backwards. The policy challenge was to ensure necessary coverage of EITEs for sufficient transitional assistance and that Australia measured its effort against the rest of the world. In other words, burden sharing by Australia must, ultimately, be fair.

The AWU responded to the Government Green Paper and articulated 5 core principlesⁱⁱ which also acknowledge that our export industries are characterised by 3 factors:

- Energy intensity;
- Foreign ownership; and
- Regional concentration.

A domestic ETS is an investment in the transition to a future global ETS marketplace and a carbon constrained domestic economy. We simply asked that a broad view be taken of the extent of compensation to trade exposed industries in the wake of this short term market failure during the transition to a global ETS.

The AWU was very pleased therefore when the Government ensured the main concerns raised by the AWU and EITE industries were addressed in the White Paper.

The ETS (or CPRS) strikes the balance which the AWU has been calling for regarding the position of EITEs given the risk of leakage in the absence of an international agreement. The 5 per cent unilateral target still equates with a competitive cut in emissions in per capita terms equivalent to or better than EU and provides scope for a more ambitious target conditional on international agreement. Review of assistance after 5 years effectively means that in the absence of international agreement by that time, more assistance should be provided to these industries.

Option to use alternate measures and the lower threshold and the increased number of permits will be of significant value to EITE industries. Perhaps of greatest significance is the recognition for growth in our industries - something the AWU had been calling for - and additional permits up to 45 per cent of the total (including agriculture) will allow for this, in line with growth in the economy.

Significantly, the number of permits will not be fixed, such that the total may be even higher in the event of on-going growth and investment in EITE industries. This is consistent with AWU views that if we are to make any of these products in the world, we should be doing it here in Australia at best practice.

The electricity sector is well catered for through the Electricity Sector Adjustment Scheme - assisting coal fired electricity generators and assisting the most emissions intensive generators (above 0.86 tonnes of CO₂ per megawatt hour), equivalent to \$3.9 billion in nominal terms over 5 years. It will be important that generators pass through savings to heavy users in future contracts, particularly where electricity prices are likely to increase as a result of relative emissions intensity.

The Government has recognised that carbon trading may well assist in establishing new industries and opportunities, but it is not necessary to lay waste to our existing world-class industries to achieve this. Policies that deny costs or view traditional industries as the problem - such as espoused by the Greens and their supporters in the environmental lobby - are bound to create costs for us all.

A sensible transition to carbon trading as outlined by the Government's White Paper will see traditional industries becoming sustainable and growing stronger over the long term. The world will use more aluminium, steel, cement, coal, gas, timber and paper, plastics and chemicals - not less - and more transport.

Industries such as LNG mean cleaner energy in Japan and China; aluminium can provide lighter cars. All of these jobs should be seen as part of a real green jobs solution for Australia's economy. Our members are at the core of a new green deal.

When policy settings are balanced and fair, Australia's EITE sector is automatically part of the climate change solution by applying best practice know-how and leading the world by example as part of a joint global action plan.

Supporting our regions

The Government recognises stakeholder concerns in relation to particular regions, including those that are dependent on coal-fired electricity generation. The Government stands ready to provide assistance through the Climate Change Action Fund where a clear, identifiable and significant impact arises as a direct result of the scheme. The Government has provisionally set aside an amount of \$200 million of assistance for workers, communities and regions through the Climate Change Action Fund from 2010-11.

While welcoming the CCAF's assistance to workers, communities and regions, there may need to be consideration given to substantially increasing the level of financial support for regional workers and communities to account for the added costs associated with the economic slowdown. We must also ensure that we share the benefits of our investments in the clean renewable energy economy of the future with the working communities who will be the most disadvantaged.

Australia has developed a workplace fly-in-fly-out culture in a number of remote centres characterised by extreme heat and distance from major centres including resource-dependent oil, gas and iron ore projects in the Pilbara region in Western Australia.

At the same time, if suitable facilities and amenities were available, workers would be far more receptive to relocating their families to these centres. In this regard, the AWU notes the efforts of Rio Tinto which has recently announced plans to spend \$300 million refurbishing the Pilbara iron ore town of Pannawonica in north-west Western Australia.ⁱⁱⁱ

These investments generate higher levels of national productivity by supporting workers directly, and accommodating their needs, including proximity to support networks and family members. These models serve as useful guides as to what may be able to be achieved in partnership with state governments' and the private sector on a larger scale.

Future energy supplies

The AWU agrees with the views by Des King of Caltex that:

Optimising energy and environmental policy is a truly heroic policy challenge. The defining energy policy objectives of the next half century will be addressing climate change, which means reducing greenhouse gas emissions massively below business as usual trends, and addressing the situation where supply of conventional crude oil will be insufficient to meet world demand based on historical trends in usage^{iv}

Australia has an abundance of oil and gas resources, fossil fuel, uranium, and renewable energy supplies. The AWU does not subscribe to the view that jobs and investment in any one sector are more valuable than those in any other. The AWU has been at the forefront of supporting all our industries, including through our work in the oil and gas sector in cooperation with the MUA; support for sustainable fossil fuels through the application of carbon capture and storage technologies; removing the no new uranium mines policy from the ALP Platform; supporting renewable energy such as geothermal and solar in addition to the exciting future for Australia's biofuels industry.

For example, China's reliance on coal as a primary source of energy is reflected in the fact that coal makes up 69 percent of China's total primary energy consumption, making China one of the largest consumers and producers of coal in the world. Two new coal-fired power stations are opened in China every week on average.^v

At the same time, significant reductions in worldwide carbon emissions will:

- Increase pressure to lower footprint of minerals/metals production;
- Increase the drive to metal and materials recycling;
- Increase desire for low weight materials for transport; and
- Drive innovation in production, design and manufacturing with metals.^{vi}

The question is how best to balance the competing demands of the economy and environment in mutually productive and sustainable ways. We must adapt existing expertise to new challenges, including new processes. Australian expertise and industry has much to offer the rest of the world.

The White Paper package is pro-environment and pro-business and pro-workers in both the brown and green sectors. It is based on creating a cooperative and consultative rather than punitive, framework. And that is why it has our support. The design features of this scheme will promote business certainty during uncertain times, and provide transitional assistance from commencement of the ETS in 2010.

And this is the fundamental change contained in the Government's White Paper which we must grasp. It is an example of domestic policy setting focused on practical outcomes dealing with climate change which provides critical international leadership. The policy mix of targets and obligations balanced with assistance measures for industry and households is precisely the kind of recipe which other countries could agree to embrace.

As Ross Garnaut said in a recent paper:

There is no room any longer for defending the view that the "differentiation" of effort called for in the United Nations Framework on Climate Change Convention between developing and developed countries should be based on the application of binding emissions targets or policies to the latter and not the former.... Without all major emitters binding themselves to economy-wide targets or policies, given rapid emissions growth, the prospects for the global climate change mitigation effort are bleak.^{vii}

Our energy supplies give us leverage...

The destiny of China and Australia are linked in many ways. The future prosperity of each country is tied to the other. Clearly, China's future role in contributing to lower global emissions is vital to any real progress in lowering global emissions. It is therefore also vital that options which the Australian Government considers for the design and operation of the ETS build on progress made in building the Australia-China relationship and to use our close economic and political ties to generate more bilateral momentum in the environmental area.

The key to securing a long term solution to climate change is of course through concerted international action. Australia has an important responsibility and leadership role as a front runner in establishing the ETS with an early commencement date to ensure other countries understand the benefits and trade offs contained in a policy package such as the White Paper. UN's Climate chief (Yvo de Boer) says Australia's emissions trading scheme is very encouraging and the government should be applauded for entering the carbon market.^{viii} The package will make a meaningful contribution to achieving stronger, more binding commitments from all nations at Copenhagen in 2009 and beyond in a post-Kyoto framework.

Trade exposure and impacts on workers are common international themes in policy responses to the challenges posed by climate change. Despite lost opportunities, Australia has not stood still. Australian industry and workers, scientists and policy makers have, in addition to Australia's rich resources, much to offer in terms of know how, technology and innovation in extraction, refining and in the manufacture of sustainable products.

It is possible for Australia to develop a cooperative model with China based on our close commercial, political and union ties. This model would have at its core the close complementarities between our economies and the ways we may be able to work cooperatively to generate a lower emissions economy and region. We do this by reducing rather than increasing the incentives to industry to relocate their industries and to ensure their competitiveness is not undercut by cheaper imports not subject to a carbon market.

For example, China is seeking greater access to Australia's energy and minerals resources to sustain growth. It is clearly possible to place conditions on this investment by State owned entities and sovereign funds that would see China as a domestic partner in Australia investing in world's best and 'best in class' techniques in Australia which are of mutual benefit.

LNG

Australia has two producing LNG ventures and a third, Woodside's AUD12bn Pluto project, under construction, while at least 12 more have been proposed to meet rising demand in Asia. The nation may become the world's third largest LNG supplier by 2017, according to the the national oil and gas industry association.^{ix}

Production in WA could increase threefold over the next 10 to 15 years. That state and the Northern Territory could host no less than four major LNG production developments. These include the Gorgon LNG plant being pursued by Chevron, ExxonMobil and Shell; INPEX's Ichthys project; Woodside Petroleum's Browse LNG project; and BHP Billiton's Pilbara plan in the Scarborough and Jupiter fields.

Woodside, operator of the AUD20 billion North West Shelf venture is planning ventures in the Sunrise and Browse fields off northern and north-western Australia. US based Chevron and Japan's Inpex are among companies also planning LNG projects in WA and NT.

There is currently approximately \$40 billion in new LNG related projects. With the global demand for gas continuing, most of these projects will move to the construction phase within the next 5 years. Construction will be both off and onshore, with process facilities such as trains for LNG and domestic gas requirements. The value of each of the projects is estimated as follows:

| | |
|-------------|-----------------|
| Pluto | \$6-10 billion |
| Gorgon | \$11-14 billion |
| Inpex | \$6-10 billion |
| Scarborough | \$6-10 billion |
| Browse | \$6-10 billion. |

It is commonly stated that for each project there is to be around 6000 direct and indirect jobs with around 1700 to 2000 exclusively in the state where the project is located. That equates to a total of at least around 30,000 jobs.

And LNG has a vital role as a transition fuel to a lower carbon economy. Australian producers, at best practice, are exemplars to global LNG suppliers. Australian producers have been working in cooperation with the MUA-AWU Offshore Alliance^x to reduce the emissions intensity of domestic LNG production also relevant to non-Annex B LNG producers. The LNG sector must be able to cater for growing demand in cleaner burning gas as a transition fuel under a global ETS.

Carbon Capture and Storage must be supported

The AWU rejects the view among the Greens and their supports in the environmental lobby - that there is no future for coal in the Australian or global economy. Carbon Capture and Storage (CCS) technologies represent potentially the single most important abatement measure to secure safely future emissions without stranding enormous reserves of coal resources and assets or the EITEs which rely upon it.

CCS technologies offer the potential to significantly reduce global greenhouse gas emissions, particularly from coal-fired power generation. Because of Australia's high reliance on coal to generate electricity, and our position as a major coal exporter, we have a vital interest in the successful commercialisation of CCS as part of the domestic and global response to climate change. The Government's commitment to assist the development and deployment of CCS technology reflect the technology's importance in meeting Australia's longer-term emissions reduction objectives. (White Paper).

The AWU has therefore strongly endorsed the Prime Minister of Australia's announcement that the Australian Government will spend \$100 million on establishing the Global Carbon Capture and Storage Institute^{xi} and other measures.

Investment in CSS complement innovation in other areas of the economy including in manufacturing techniques and processes to define a positive future for our minerals processing and manufacturing activities in an emissions trading framework and help secure the jobs of thousands of AWU members who now work in the alumina, steel and resource-based industries. This should serve as a demonstration to all countries on the benefits of actively participating in these arrangements rather than avoiding them.

A recent British study clearly shows how liquefied carbon dioxide can be pumped into depleted gas fields, where impervious rock would stop it escaping. It is a concept we should look at closely in Australia. The proposal would see the creation of a carbon capture and storage network which would connect major producers of carbon emissions and remove their CO₂ emissions via a pipeline leading to the seabed. Our energy and industrial companies should work with Federal Government authorities to produce Australian data to confirm the feasibility of a similar project here. It would help create hundreds of new climate change jobs in regional Australia, if we invested in storing industrial carbon emissions under the sea near our gas fields.

Biofuels have a growing role

Alternative transport fuels will play a key role in meeting the twin challenges of climate change and energy security. Biofuels - ethanol and biodiesel made from plant materials and waste fats respectively - have a lower greenhouse gas emissions than petrol or diesel over the whole of life cycle of production and use. They will also help to fill the gap when conventional crude oil supply starts to fall short of demand.

We join with Caltex in urging support for Australia's alternative transport fuels policy as part of an integrated policy framework that accounts for the range of existing major initiatives such as the Carbon Pollution Reduction Scheme and Renewable Energy Target, Energy White Paper, Henry tax review, car industry plan and green car scheme, Auslink and Infrastructure Australia Fund.^{xii}

Governments will not solve climate change and energy problems for us but markets will, based on scientific and technological innovation. Governments can support these efforts.

Australian farming practices for producing feedstocks to make biofuels have a high level of sustainability. Our ethanol comes from wheat, in the form of waste from wheat starch manufacturing, from molasses, a byproduct of sugar refining, and soon from sorghum, a stock feed. Biodiesel is made using locally grown feedstocks processed in Australian plants. It does not compete with food supplies and will not result in food shortages.

Future investment in infrastructure

Geothermal Energy

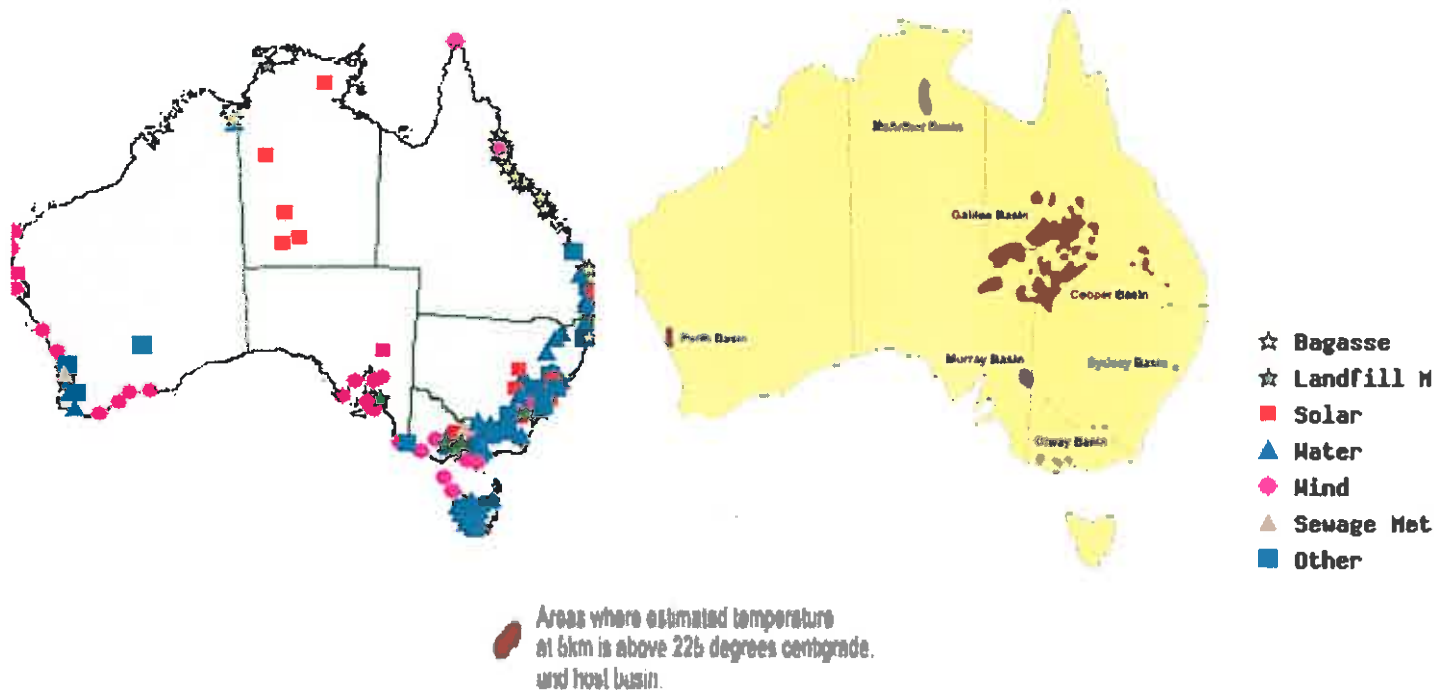
AWU is a strong supporter of the geothermal energy industry.

AWU invited Tim Flannery to the National Conference in 2007 to speak on renewable energy in particular geothermal energy. Since then the first Australian geothermal power station has been completed and the Cooper Basin town of Innamincka will be powered by early 2009 saving \$15,000 in diesel per month^{xiii}.

Rapid developments in geothermal energy technology include Engineered Geothermal Systems (EGS) which sequester carbon dioxide. The levelised cost (average cost) of electricity from EGS is compared against other energy sources.^{xiv xv} It also extends the opportunity for CCS applications beyond coal.

A major impediment is the distance of our best geothermal resources from electricity users. Australia has large volumes of identified high heat producing granites within 3 to 5 km from the surface that can potentially be tapped by hot fractured rock (HFR) geothermal technology.

Map of Australia's Accredited Renewable Energy Power stations



Source: Office of the Renewable Energy Regulator and Geodynamics Hot Fractured Rock in Australia

Industry super funds have provided important long term capital in renewable energy. EGS is already being targeted by a sizeable industry, including ten Australian companies listed on the stock exchange with a combined market capitalisation of over A\$700 million.

The AWU calls for government to match this industry commitment with a commitment to build underground high voltage transmission lines to the Cooper Basin. We support geothermal industry calls for a Transmission project of national significance which provides renewable energy with equal access as defined by existing power generators. A National Transmission Planner could undertake this work.

Current electricity market reforms propose the introduction of a National Transmission Planner to promote the development of a strategic and nationally coordinated transmission network.^{xvi} Garnaut notes the Council of Australian Governments and the Ministerial Council on Energy have provided some guidance on the characteristics of the new arrangements. The AWU made a more detailed submission on these issues to Infrastructure Australia's Inquiry into Australia's Future Infrastructure Requirements.^{xvii}

The AWU welcomes Eddington's Infrastructure Audit

The Australian Workers' Union (AWU) broadly agrees with the nation wide challenges identified by Sir Rod Eddington in his report to the Council of Australian Governments on Australia's Infrastructure priorities. In particular, the challenges relating to boosting exports, supporting climate change solutions, including investing in carbon capture and storage technologies and support for rural communities are important priorities shared by the AWU.

The AWU also welcomes the initial list of priority projects under the themes of creating a true national energy market; competitive international gateways; a national rail freight network; and transport in our cities.

The AWU highlighted in its submission to Infrastructure Australia a number of projects of national significance, including the importance of extension of the transmission network to capture renewable energy from solar and geothermal sources; access to infrastructure for workers in remote locations; a national rail freight network and revitalized and improved infrastructure and investment in public transport in our major cities.

The AWU commends the report for recognising that many of Australia's regional and remote communities have faced reduced access to services over the last twenty years as a result of shrinking populations, significant distances for service provision and rationalisations by service providers and underinvestment by successive governments'. This has had – and continues to have – an impact on the quality of life in these communities.

Australia's participation in the global economy through international trade is dependent upon agriculture and natural resources. In 2007, exports of primary products were \$101 billion, just under 50 per cent of all exports. Most of these exports emanate in the vast expanses of regional and remote Australia.

Investment in rail freight, including the East-West, and North-South rail freight corridors and in port and port related infrastructure are the kinds of nation building projects which will assist Australia meet future demand for our exports and provide an important signal to stimulate activity in the short term.

Carbon capture and storage projects have the potential to secure on a sustainable footing Australia's abundant coal reserves. Support for our own CCS solutions will build on the Rudd Government's commitment to make progress toward commercialization of this technology as soon as possible.

Power generation using geothermal, solar, wind and gas resources could be located in rural and regional Australia and would have the potential to satisfy growing demands for low carbon power. However, new investment in transmission infrastructure will be required to connect these new generators, as well as increased investment in fast response back-up capacity for intermittent generators such as wind farms.

The AWU commends the work of Sir Rod's team and stands ready to assist Infrastructure Australia in refining its priority projects list early in 2009.



Conclusion

The AWU welcomes the opportunity to offer this submission to the Select Committee. We have outlined our main points and why we believe it important to achieve bipartisan support for the White Paper to maximize the opportunity for the Australian Government to secure agreement at Copenhagen on a post-Kyoto framework which will level the playing field for our energy and fuels sector. In order to support the preparations for these efforts, the AWU supports an earlier report to Government on the findings of this review.

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The Australian Workers' Union

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Endnotes

ⁱ AWU Submission to the Opposition's review of the CPRS, January 2009

ⁱⁱ Carbon Pollution Reduction Scheme – AWU Core Principles

- 1) The AWU supports an ETS measured against global progress towards a global ETS.
- 2) A domestic ETS introduces market failure into the domestic economy in the short term in particular regarding the EITEs because they face prices and costs which cannot be passed on in the absence of a global carbon price.
- 3) Our industries and workers are in the climate change “front line” and at risk. We need to acknowledge their value and role to Australia in the economy.
 - The AWU is Australia's principal resources and energy union. Most AWU members live and work in regional Australia and most of these regional AWU members employed in industries like alumina, cement, steel, oil and gas, bauxite and iron ore mining.
- 4) Our workers have rights and entitlements in addition to industries. A well thought out carbon reduction plan should ensure on-going job security for our members if the Federal Government supported existing corporations in their shift to the low-carbon technologies of the future. This implies using a profit measure to assess liability under the ETS.
 - Plans should include a proposal by the AWU to allocate emission permits to industries with conditions attached. The main condition is that permits revert to workers in the event the industry activity ceases or is relocated offshore. This is a form of carbon insurance as workers' permits and different to allocating free permits because the permits are not allocated condition-free.
 - In our view there is no impediment to the Government being generous in its allocation of such conditional “workers' permits” because they will enable unions in cooperation with affected industries to manage the transition to a competitive ETS framework.
- 5) Cooperative models work best and are more likely to maximize the benefits of the ETS and minimize costs building on existing and future abatement efforts by industry and workers.
 - Focus on financial rather than physical measures to calculate support for EITEs. Prefer conditional permits over cash. The government can therefore afford to be more generous as these permits may be different to auction permits.
 - Prior abatement activities should be recognised and future investment protected.

Source: *Working to get the ETS right for Australian industry, exports, investment and jobs: AWU Response to Green Paper, July 2008.* http://www.awu.net.au/working_to_get_the_ets_right_for_australian_industry_final.pdf

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^{vii} Emissions in the Platinum Age: The Implications of Rapid Development for Climate Change Mitigation, Ross Garnaut, Stephen Howes, Frank Jottzo and Peter Sheehan, May 2008

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^{ix} Asia Pacific Oil and Gas, Insight June 2008, Issue 26 Business Monitor International.

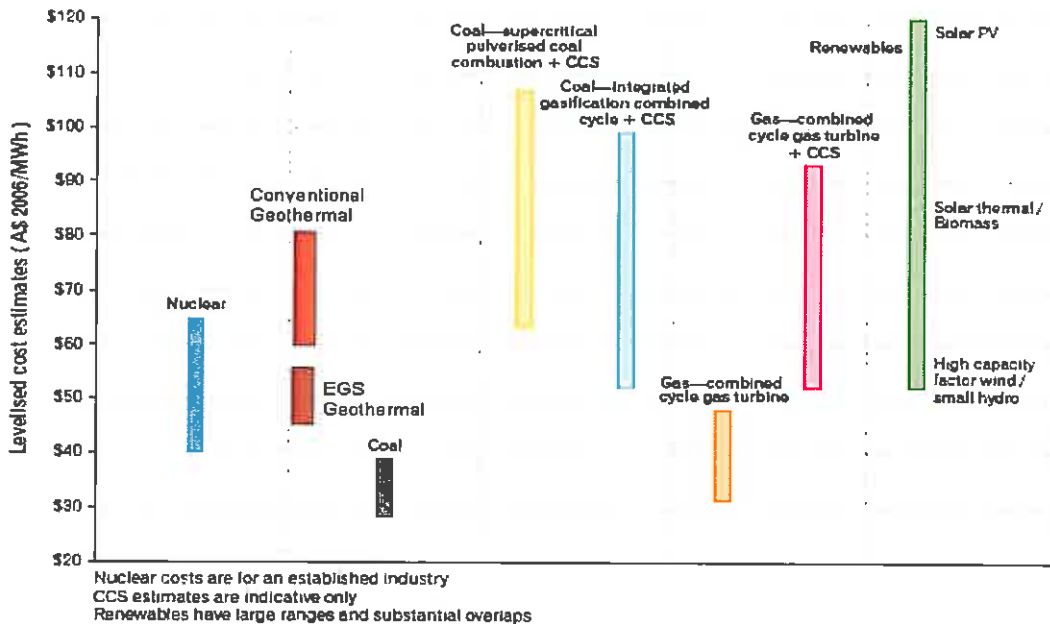
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^{xii} CEDA Address by Caltex CEO Des King, 2008

^{xiii} Geodynamics 22-Aug-2008 Presentation by CEO to Australian Geothermal Energy Conference.

^{xiv} Relative costs from Switkowski, with the conventional geothermal energy cost adapted from Somerville (1994)¹ using an annual rate of increase of 7% and the hot rocks geothermal (EGS) cost estimates from Geodynamics Ltd.



Source: Submission by EGS to the Garnaut Review

^{xv} Garnaut Review Submission : Issues Paper 4 – R&D: Low Emissions Energy Technologies

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^{xvii} Australia's Future Infrastructure Requirements, Submission to Infrastructure Australia, by The Australian Workers' Union, October 2008