

Australia's Future Infrastructure Requirements

The Australian Workers' Union Submission to Infrastructure Australia

October 2008

Executive Summary

The Australian Workers' Union (AWU) welcomes the opportunity to support the inquiry by *Infrastructure Australia* into infrastructure priorities for the 21st centuryⁱ for support through the Building Australia Fund.ⁱⁱ

The AWU represents over 135,000 workers who are in the forefront of a range of industries which either build and construct major infrastructure facilities directly, exemplified by the recent successful construction of EastLink in Victoria, or utilize infrastructure services. These include the transmission network on the eastern seaboard to power aluminium smelters and the rail and port facilities to transport our steel, and paper, cement, iron ore and other minerals and oil and gas in places like the Pilbara in Western Australia, Gladstone in Queensland and Port Kembla in New South Wales.

Infrastructure is the lifeblood of the economy. At this critical time for our economy, buffeted by the international financial crisis, it is vital that we view infrastructure as an investment in nation building which will see the productive potential of the economy rise over time.

Infrastructure provides the means of achieving sustainable energy supply based on renewable energy and carbon capture and storage (CCS). Australia has some of the most prospective, geothermal, solar and wind resources in the world. What is holding back a greater contribution by renewables to the national energy market is access to the transmission network. For the AWU, this is a key area of priority focus for the Building Australia Fund.

Infrastructure provision improves the quality of services throughout our cities and regions alike. The AWU has been a key supporter of the Eddington review of Melbourne's transport needs, in particular the East-West Link Needs Assessment study.

The livability of our regions will also benefit from improved infrastructure provision, ameliorating key barriers to semi - permanent workforce arrangements, for resource related projects, otherwise dependent on fly-in, fly- out arrangements in places like the Pilbara in Western Australia.

Finally, investing in collaborative infrastructure in addition to building human capital in supporting our health and education sectors and communities is a major priority for the AWU. These are the means to achieve higher productivity through improvements in governance structures regarding policy formulation and implementation which had been cut adrift by the Howard legacy. This mirrors advances in the workplace where collaborative approaches are far more effective than confrontation in achieving mutually beneficial outcomes through agreed strategies.

The AWU congratulates the Rudd Labor Government and the Minister for Infrastructure, Transport, Regional Development and Local Government, the Hon Anthony Albanese MP for revitalising the development of infrastructure policy after more than a decade of neglect under the Howard Government. There is much to be made good, and more again to do and the AWU is very pleased to be playing its part in cooperation with the Rudd Government and Minister Albanese. As the Minister has said, "the Commonwealth Government is back in the business of nation-building."ⁱⁱⁱ The AWU is pleased that it is so.

Introduction

This submission responds to the Government's invitation to address the goals of infrastructure provision in achieving economic, environmental and social outcomes.^{iv} In particular:

- Increased economic standard of living for Australians;
- Environmental sustainability and reduced greenhouse gas emissions; and
- Better social outcomes, quality of life, and reduced social disadvantage in our cities and our regions.

The issues raised in this submission aim to address these goals with a view to the strategic priorities which underpin them:

- Expand Australia's productive capacity;
- Increase Australia's productivity;
- Diversify Australia's economic capabilities;
- Build on Australia's global competitive advantages;
- Develop our cities;
- Reduce greenhouse emissions; and
- Improve social equity, and quality of life, in our cities and our regions

With the addition of explicit acknowledgement of social infrastructure (see discussion below), the AWU would broadly agree that these goals and strategic priorities of *Infrastructure Australia* are correct. The challenge is taking the right steps to make progress in achieving them. The purpose of this submission is to identify a number of key areas of policy focus for the AWU which may assist *Infrastructure Australia* in this regard. The messages are simple:

Infrastructure is the engine for growth

By fostering the longer term physical and social economic environment, investment in infrastructure is a vital counterweight to short termism, uncertainty and credit rationing in skittish financial markets. The Federal Government has an important role to act as both a stabilizer and stimulator of investment in major projects of national significance to underpin the nation's future growth.

Based on enduring strong demand for commodities exports, the economy is enjoying its best export performance in a generation.^v In order to build on this growth, it is vital that bottlenecks and supply shortages in our ports, rails and road infrastructure are addressed as a priority. A number of projects of national significance are at hand, including the development of inland rail infrastructure between our cities and as hubs to regional centres supporting our mining and rural industries.^{vi}

We need to look through the current financial crisis to the fundamental strength of our trade and investment relationship in our own geographic region. The foresight of previous Labor Governments in encouraging bilateral and regional links with the fastest growing economies is paying dividends in export and investment opportunities.

For the AWU, it is vital that the competitiveness of our emissions intensive, trade exposed (EITE) industries in aluminium and steel, cement, plastics, paper and glass have every domestic policy lever pulled in their direction. These industries face the twin challenges of slower global (as opposed to regional) growth which is curtailing demand for their outputs from some export markets (excluding China and India) and the introduction of an emissions trading scheme (ETS) in mid 2010 which will see a domestic carbon price imposed on the economy for the first time.

As we transition to a more comprehensive international framework for emissions abatement, it will be critical that the competitiveness of local industry is encouraged through supportive policies in order to limit the threat posed by leakage of investment and jobs to unregulated jurisdictions^{vii} and to encourage future expansion of sustainable EITE industries at best practice in Australia - better for our economy and for the global environment.^{viii}

The majority of EITE plants are located outside of Sydney and Melbourne - and that they are a significant contributor to employment and economic development in regional and rural Australia.

Infrastructure to provide sustainable energy supply

Geothermal Energy

As we highlighted in our response to the Government's green paper on the ETS, the AWU is a strong supporter of the geothermal energy industry.^{ix} 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 costs per month^x.

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.^{xi xii} It also extends the opportunity for carbon capture and storage 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 - 5kms from the surface that can potentially be tapped by hot fractured rock (HFR) geothermal technology.

Carbon Capture and Storage

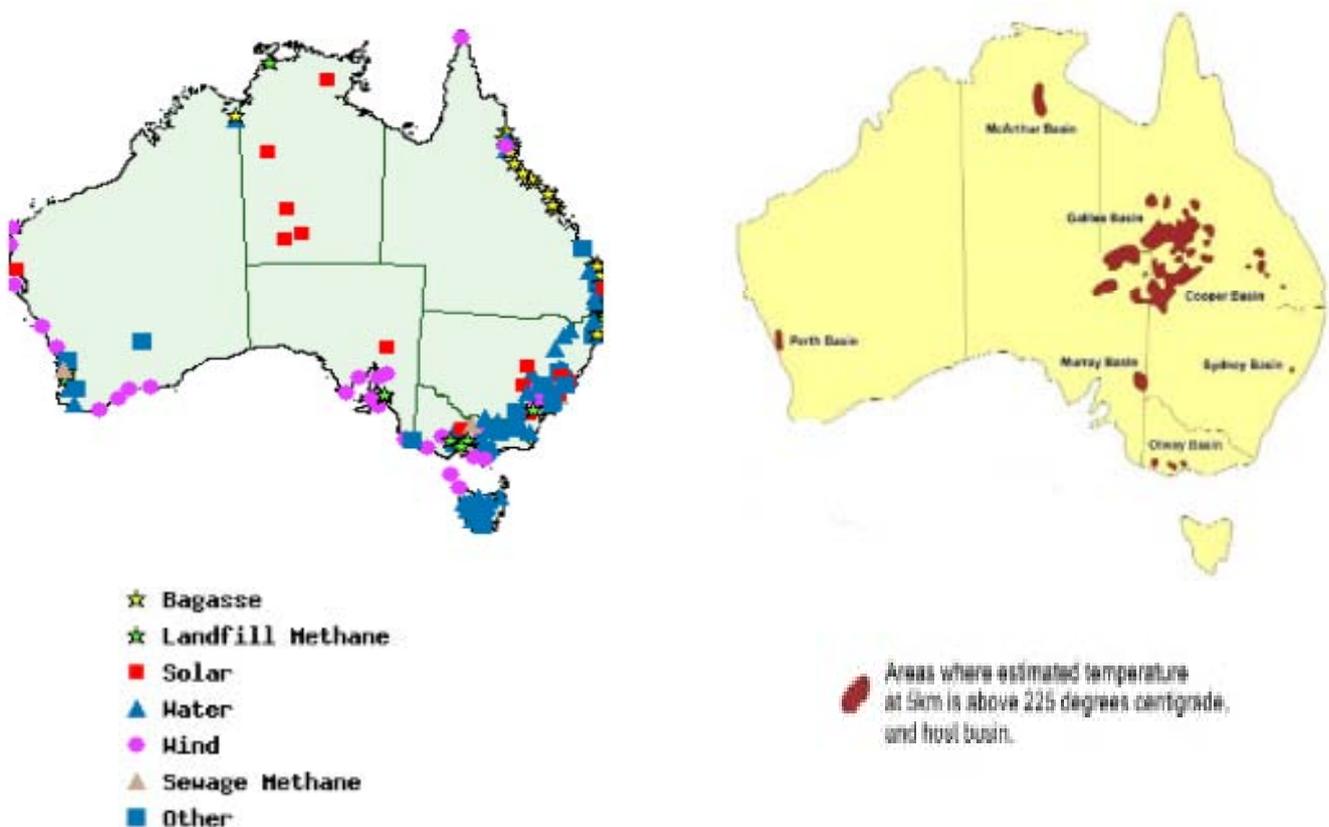
The AWU is a strong supporter of the Government's announced Global Carbon Capture and Storage (CCS) Institute^{xiii} with a budget of \$100 million.

The AWU is a keen advocate for the potential of CCS as one of the most significant abatement technologies to which the world must turn in order to be able to restrain the escalation in emissions from fossil fuel based energy production.

We support deployment of the technology as soon as possible. Results of recent trials suggest that wide spread deployment by 2020 is increasingly feasible and with it the prospects for cleaner and sustainable production of a range of EITE industries. This will be particularly important for countries with a high and growing coal dependency, including China. Every effort should be made to ensure that CCS is viable as quickly as possible.

Infrastructure priorities should ensure appropriate infrastructure provision in order to facilitate CCS deployment, of particular importance for EITEs located in regional centres.

Map of Australia's Accredited Renewable Energy Power stations



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



Source: CO2 CRC, 2007^{xiv}

Industry super funds have provided important long term capital in renewable energy. The AWU has called for government to match this industry commitment with a commitment to build underground high voltage transmission lines to the Cooper Basin.^{xv} 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.

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.

There is a similar urgent need for the Government to support investment in CCS technologies through complementary policies that reinforce the Global CCS Institute and Clean Coal Fund.

Infrastructure supporting our cities and regions

➤ Our Cities

The AWU has been at the forefront of infrastructure provision in the construction industry. The AWU has been a strong and proud provider of construction services to the recently completed and opened \$2.5 billion EastLink project.^{xvii} EastLink - Australia's newest toll-way, connecting the Monash, Eastern and Frankston Freeways - has set the standard for what Melbournians in future will come to expect of new infrastructure provision in their city. EastLink was completed ahead of time and under budget and was fatality free. However, the EastLink project cannot be considered fully completed until the East-West tunnel has been built.

The AWU therefore has a strong interest in the recommendations contained in Sir Rod Eddington's East West Link Needs Assessment (EWLNA). The AWU provided an initial submission to the Review and is pleased to acknowledge that the AWU's main recommendations, including road and rail tunnels and the importance of an integrated transport network including public transport provision have been adopted in the EWLNA Recommendations.^{xviii} This report represents an important milestone in longer term planning for transport infrastructure in Melbourne which will help to secure future prosperity for the city, state and nation.

The AWU urges every level of government - local, state and federal - to work collaboratively to implement the Eddington recommendations as an integrated package. The recommendations hold the keys to unlocking an economic, social and environmental dividend but only if Melbourne's transport challenges are addressed swiftly and effectively. The world does not stand still. Without action now, the benefits which the recommendations infer could be lost. These are obvious priorities for consideration by *Infrastructure Australia's* infrastructure audit.

➤ **Our regions**

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.

A need for better health services and facilities

AWU Delegate Matthew Parker lived in the regional city of Newman for 17 years. He recently moved to Perth and now works as a Fly in Fly out delegate for the BHP Billiton iron ore mine in the Newman region. Matthew considers Newman to be a great place to live in terms of activities for families and the community. Newman has quite highly developed sporting infrastructure, both a state-of-the-art sports complex and a motor speedway.

However, Matthew believes that greater attention needs to be given to health infrastructure in the area. "You're alright if you have a minor illness but if it's anything serious they will send you out to Perth". Matthew recounts that when his wife was in the final stages of her pregnancy there was no option for her to have the baby in Newman. Matthew took Annual Leave to move his family to Perth for the last few weeks of the pregnancy, 1200 kilometres away.

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.^{xix}

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.

Collaborative infrastructure and social infrastructure improving productivity

Collaborative models of behaviour work far more effectively than systems of contracts (which are limited by rules and which cannot enforce trust between economic agents) or confrontation in enabling our economy and society to operate effectively. We need look no further than the destructive nature of loss of trust in our financial markets stemming from the contagion spreading as a consequence of US sub-prime lending practices or the impact of the Howard Government's Work Choices legislation which divided Australians at a most fundamental level in what we considered was decent and fair in the workplace.

It is important that we learn from this experience and put in place consultative mechanisms which facilitates optimal decision making. The Government's appointment of the statutory advisory council of *Infrastructure Australia* chaired by Sir Rod Eddington is an important step in this direction.^{xx}

However, in addition, the AWU would like to have Trade Union representatives' views hardwired into the statutory advisory arrangements or at least have a formal consultative link between the advisory council and unions. The views of relevant construction and major project unions (such as the AWU) should form part of the formal consultative framework and the current inquiry offers the Government an opportunity to implement such a reform. As implementers of great infrastructure projects such as EastLink, and oil and gas extraction operations our members have a unique depth of wisdom and insight on implementation and effectiveness issues relating to major infrastructure projects which can feed back into planning for future projects.

The AWU recognises the importance of public investment in health, education and our communities as contributing to higher productivity and living standards. A range of good work has been undertaken by the Council of Australian Governments on these issues. It is important to ensure that the priority list of infrastructure projects is cognisant of the value of this public investment in people, enhancing the skills and opportunities for employment and in the spirit of both cooperative federalism and partnership between government, business and workers and their representative unions. These should form part of the immediate priorities of the Building Australia Fund.

Conclusion

The importance of investing in infrastructure once part and parcel of the nation building ethos which literally shaped Australia has in more recent years lost out to short termism as a consequence of the combination of the political cycle, ideological obsession with opposing support for the public sector and public spending and cost shifting between the Commonwealth and the States. The Rudd Labor Government rightly deserves credit for facing up to a range of longer term supply constraints holding back the economy from achieving its full potential and the strategies required to remove these impediments.

This submission has raised the importance of public investment in the triple bottom line of economy, environment and people. Our view is that this is the right approach and will provide the prospect of the nation achieving a better balance between matching our potential in terms of resources and strengths and the capacity to transform these advantages through new jobs, investment, and exports to higher living standards and new opportunities for all Australians. The AWU commends the Government for establishing *Infrastructure Australia* and looks forward to its future efforts in the national interest. The AWU stands ready to assist in this work and would welcome a more direct role in this regard.

Endnotes

ⁱ Infrastructure Australia Discussion Paper 1: Australia's Future Infrastructure Priorities
http://www.infrastructureaustralia.gov.au/files/DP1_OJ_1130_0109.pdf

ⁱⁱ \$20 billion for nation-building projects, The Hon Anthony Albanese MP, Minister for Infrastructure, Transport, Regional Development and Local Government, May 2008
http://www.minister.infrastructure.gov.au/aa/releases/2008/May/budget-infra_15-2008.htm

ⁱⁱⁱ As above

^{iv} Infrastructure Australia Discussion Paper 1: Australia's Future Infrastructure Priorities
http://www.infrastructureaustralia.gov.au/files/DP1_OJ_1130_0109.pdf

^v The strength of the Australian economy, in the face of a global slowdown in evidence of the important contribution exports are making to economic growth, confirmed in the June quarter Balance of Payments which showed a narrowing of the current account deficit to \$12.8 billion in the quarter thanks to a solid export performance which assisted in achieving the first quarterly trade surplus since the March quarter 2002 and the June quarter National Accounts which indicates that business investment is continuing to support growth, rising by a strong 4.0 per cent in the quarter to be 9.9 per cent higher over the year. See <http://www.alp.org.au/media/0908/mstres010.php> and <http://www.treasurer.gov.au/DisplayDocs.aspx?doc=pressreleases/2008/098.htm&pageID=003&min=wms&Year=&DocType=>

^{vi} The AWU is a strong supporter of the Australian Transport & Energy Corridor Ltd (ATEC), longtime proponents of the Inland Railway.

^{vii} Don't let companies move to nations with laissez-faire environmental regulations, 30 September 2008, *Statement by Paul Howes, National Secretary, AWU*, http://awu.net.au/national/news/1222722510_23233.html

^{viii} The energy-intensive manufacturing sector and downstream activities employs more than 1.1 million Australians. The EITEs account for more than \$230 billion of annual Australian business turnover and are highly exposed to competitors overseas -- with their production accounting for 60 per cent by value of exports and competing against 93 per cent by value of imports. Getting it wrong will cost jobs - CLEAN ENERGY - SPECIAL REPORT, **Keith Orchison, The Australian**, Page 3 (Sat 11 Oct 2008)

^{ix} *Working to get the ETS right for Australian industry, exports, investment and jobs*, AWU response to the Green Paper, September 2008
<http://awu.net.au/national/news/files/Working%20to%20get%20the%20ETS%20right%20for%20Australian%20industry%20final.pdf>

^x Geodynamics 22-Aug-2008 Presentation by CEO to Australian Geothermal Energy Conference.

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

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

Electricity Generation from an Engineered Geothermal System using a Supercritical CO2 Geothermal Siphon Hal Gurgenci, Victor Rudolph, Tapan Saha, Peter Jacobs, Joe Dong, Max Lu.

^{xiii} AWU says Govt carbon capture initiative important for jobs, 19 September 2008, Statement by Paul Howes, National Secretary, AWU http://awu.net.au/national/news/1221804433_18943.html

^{xiv} Demonstration of geological storage in Australia, Dr Peter Cook, *Chief Executive, Cooperative Research Centre for Greenhouse Gas Technologies, (CO2CRC), Australian Coal Association, Annual Conference September 2007.*

^{xv} *Working to get the ETS right for Australian industry, exports, investment and jobs*, AWU response to the Green Paper, September 2008
<http://awu.net.au/national/news/files/Working%20to%20get%20the%20ETS%20right%20for%20Australian%20industry%20final.pdf>

^{xvi} Garnaut Climate Change Review, Draft Report 2008, Chapter 17 Network Infrastructure, Market Failures.

^{xvii} EastLink Welcomed By Those Who Built It, 29 June 2008, http://awu.net.au/vic/news/1214778048_30872.html

^{xviii} Submission on the Eddington East-West Link Needs Assessment Study, Cesar Melhem, State Secretary, AWU, July 2008,
http://210.15.220.118/ewlna_submissions/1474_EastWestResponse_160708_TheAustralianWorkersUnion.pdf

^{xix} <http://www.abc.net.au/news/stories/2008/09/23/2371880.htm?site=northwestwa>

^{xx} http://www.minister.infrastructure.gov.au/aa/releases/2008/May/AA043_2008.htm