

John Carter, Committee Secretary,
Senate Standing Committee on Education, Employment and
Workplace Relations,
Department of the Senate
PO Box 6100 Parliament House,
CANBERRA ACT 2600

RE: Submission to the Senate Inquiry – the effects of climate change on employment and training needs.

Dear Mr Carter.

The Electrical Trades Union, Southern States Branch (ETU) welcomes the opportunity to provide a submission on the employment and training needs in response to the impacts of climate change to the Senate Committee.

The ETU covers electrical workers in both Victoria and Tasmania, its membership covers more than 18,000 individuals. We work to protect the rights and interests of our members. The ETU believes in social justice, equality and human rights and acts to defend and advance the electrical trades in the electrical, communications and contracting industries. The purpose of the ETU is to improve working and living conditions for members and their families through industrial, political, social and community action.

In monitoring the employment needs of our members, it has become apparent that the existing workforce of electrical workers does not have the required skill set to meet the growing demand for 'green' skills. It is the ETU's opinion that the current curriculum for the electrical trades lacks the breadth at present to cater for the present and future demand of 'green' skills.

## ELECTRICAL TRADES UNION OF AUSTRALIA SOUTHERN STATES BRANCH

Communications, Electrical, Electronic, Energy, Information, Postel, Plumbing and Allied Services Union of Australia

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The ETU's position has been formed through evidence obtained from a variety of sources. In particular, the ETU recently surveyed employers of electrical workers to investigate current skills needs. Responses indicated an inability to fill electrical worker positions requiring advanced skills in renewables. Of the skills sets currently in demand, advanced renewable skills, rated equal second highest.

At present over 19% of respondents are urgently seeking advanced renewable skills. Responses from this survey were collected over July and August 2008.

A report on a skills and training analysis of electrical workers was released by EE-Oz in February 2008, called Environment Scan. The ElectroComms and EnergyUtilities Industry Skills Council LTD trading as EE-Oz Training Standards has an established network of individuals, technical experts and practitioners, enterprises, industry and government. It provides advice to governments and industry on:

- Policy Formulation and Planning
- Operation and Implementation of government policies and strategies

EE-Oz Training Standards' Environment Scan makes observations on differences between states that influences the working and training environment for electrical workers employed within that sector:

All-in-all the Australian energy sector is growing rapidly and changing significantly. This is likely to produce a significant increase in the demand for skilled workers and ultimately training. Privatisation of segments of the electricity industry in NSW and Queensland, however, may well disrupt training schemes. The experience in Victoria was that public companies provided stable employment and training for large cohorts of apprentices; a system which was not maintained following privatisation. Hence, there is a risk that a change in the pattern of ownership in NSW and Queensland could also impact training programs.



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This EE-Oz report also indentifies workforce development needs. Within the trades area, it nominates renewable/ sustainable energy personnel as a workforce category/ occupation experiencing growth. Electricians with specialist/ advanced technical maintenance skills & knowledge, including renewable energy is nominated in the report as a trade area with a current skill shortage."

The report to the Dusseldorp skills forum undertaken by CSIRO and the Allen Consulting Group titled 'Growing the green collar economy,' is most likely familiar already to this inquiry. Released in June 2008, it makes reference to the huge shift required to provide appropriate skills to new workers while also re-skilling key sections of the existing workforce. It is noted that the EE-Oz report was not consulted in the preparation of this report however the need to develop green collar skills within the trades was highlighted.

As we move to increase our uptake of renewables, it is essential that investing and promoting up-skilling occurs concurrently. Support for skill transitioning for electricians was emphasized in Industrial Constraints and Dislocations to Significant Emissions Reductions by 2050.' This report was commissioned by WWF Australia and undertaken by Climate Risk.III It was released in early August 2008. The report highlights that meeting the Government's carbon pollution reduction plans will create a huge demand for skilled workers including electricians to build and operate green power plants and industries. An article published by the Herald Sun (07.08.08) titled 'Green skills lacking' mentions that report co-author Karl Mallon, believes that investment is needed to retrain workers in areas such as the La Trobe Valley to work with low-emissions technology. The ETU strongly supports retraining to retain employment in key locations that are currently heavily dependent on coal fired power generation.

It is clear from research taken from a number of sources that providing appropriate skills to new electrical workers while also supporting the re-skilling of existing electrical workers needs to occur immediately. Despite this need, it is the ETU's opinion that the current curriculum and education system is insufficient to meet this need for a number of reasons.



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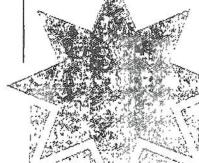
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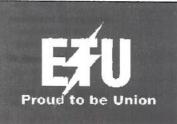
At present an electrical apprentice may as an elective, undertake a unit specifically on renewables. Presently there is low uptake as there is no perceived market for this skill. In addition, there is no stand alone renewables qualification at trade level. Extensive education and marketing is required to alter this current perception.

In addition, many ETU members will not/ can not take time off work to undertake a certificate IV in renewables. Enrolling in this course costs money and also requires members to take a cut in income while studying. Attending classes requires taking time off work. In addition this length of time commitment is seen as unnecessary. Many will only undertake the grid connect component. Electricians are attracted to the grid connect component as it provides eligible customers to apply for a rebate of up to \$8,000, thereby significantly reducing costs for the customer.

Some ETU members however, have indicated how much they enjoy working in the renewables field. "I couldn't think of a better way of going to work every day than installing renewable energy," says ETU member Wes. Another member Stuart, says he has been an environmentalist for many years, "Installing solar is a way to bring my trade and my love of the environment together."

The growth in green collar jobs and the ability of the existing Victorian TAFE system to deliver this was the study of a recent research report undertaken by a group of 6 TAFE institutions called the Specialist Energy Training Network. This report is titled 'Renewable Energy Training Needs Assessment Report'. It was published in November 2007. Key sections relevant to this inquiry include:

The renewable energy industry is likely to grow rapidly over the next decade due in large part to the acknowledgement of and as a response to climate change and its effects (sic) on the planet. The rate of growth will most significantly be influenced by government policy. Business is also a major driver but it is clear that businesses are hesitant about making breakthrough investments without appropriate leadership and support from government.



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It could be argued that the renewable energy industry is in a similar position to the IT industry during the early 1980s. In 1980 no one could have accurately predicted what the IT industry would look like today, just a quarter of a century later. In making this point it is clear that the renewable energy industry will evolve rapidly and will continue to change. Some technologies will fall by the wayside and new ones will emerge. Therefore the skill sets required by the industry will continue to change.

The countries and businesses which are able to respond to technological changes and meet the emerging needs quickly are the ones that are most likely to build viable industries in the renewable energy sector. Those that are not will become net importers or will simply miss out.

When the political signals are right, there will be a massive demand for skilled Renewable Energy workers. However, there are two complications in this equation. Currently there is a skills shortage and an aging workforce. Both issues are prevalent in the skilled trades such as electricians, plumbers, builders, welders, and the professional engineering disciplines. These are the trades with the base skill sets which the renewable energy industry is most likely to need.

It is also clear that TAFE does not have the necessary equipment and even more critical, the skilled and experienced staff to respond effectively to an upsurge in demand for specialist training. To effectively meet any increase in demand, the TAFE sector, the renewable energy industry and government will all need to work collaboratively to ensure that the facilities and staff are available to deliver high quality programs.

The TAFE sector struggles to attract qualified electrical workers as trainers. An experienced electrical worker, employed within their trade, is likely to earn at least double that of a TAFE teacher.

It is essential that we support mature renewable technologies that can replace our dependency on coal. We already know that some technologies can contribute to a stable electricity grid. In addition research<sup>iv</sup> indicates that more jobs exist within the renewable sector than in polluting coal-fired electricity generation.



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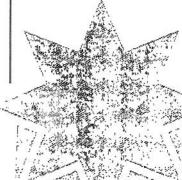
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The ETU calls on the Government to act quickly to tackle climate change. The sooner the Government sets up an emissions trading scheme the better from a union perspective.

As such, the ETU supports the objectives of this inquiry and will actively participate in workshops, meetings and forums where relevant to assist in identifying solutions. We look forward to an on-going dialogue to ensure green industry skill needs are met.

Yours sincerely

STATE SECRETARY



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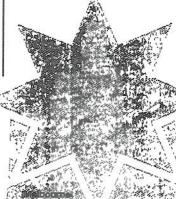
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The full report can be found at http://www.ee-oz.com.au/resources/misc/4562.pdf

See pages 17 and 18.

The full report can be found at http://www.climaterisk.com.au/2008/08/07/industrial-constraintsand-dislocations-to-significant-emissions-reductions-by-2050/

Graenpeace Australia Pacific & European Renewable Energy Council. Australia's energy revolution (2008).