

# SUBMISSION

# EFFECTS OF CLIMATE CHANGE ON TRAINING AND EMPLOYMENT NEEDS

the capacity of universities and other research and training institutions to meet current and future demand for climate change professionals, and possible measures to assist understanding of climate change in the Asia-Pacific region, including provision of training and skills assistance



#### INTRODUCTION

#### This submission

The Australian Manufacturing Workers' Union (AMWU) is pleased to make this contribution in response to the Inquiry into the Effects of Climate Change on Training and Employment Needs

The AMWU represents the interests of over 130,000 manufacturing workers employed in a wide range of manufacturing and related industries including food processing, metal & engineering, printing, vehicle and technical, supervisory and administrative sectors, many of which are struggling to come to terms with the challenges of climate change.

The AMWU is Australia's principal union for skilled trades and has had a committed and productive involvement in vocational education and training for many years.

The AMWU has provided representation at all levels of the system including involvement at both state and national levels, and also in the network of Industry Skills Councils and representing workers on a variety of state and territory regulatory bodies.

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#### Summary

- 1. The AMWU welcomes the commitment of the current government both to skills development and to mitigating climate change.
- 2. In general skills and workforce development in Australia is in serious need of attention. For example spending on education in Australia as a proportion of GDP is well below that of comparable countries such as France, the United Kingdom and the United States of America.
- 3. However training to develop skills is only part of the picture. Government also has a role to play in understanding and shaping demand for those skills. This occurs through active collaboration with industry parties, including unions, and through active intervention and industry policies.
- 4. Currently, skills analysis and skills policy is driven by vested interests rather than industry parties, which results in a system driven by supply rather than demand. Unless it is managed correctly training for climate change mitigation will also suffer from this approach.
- 5. The market based and full contestability approach, currently being pursued by the federal government, services only to perpetuate the supply side dominance of the system. This does not serve the interests of workers, industry or the Australian people.

6. A priority for any skills development program must be the protection of the interests of workers in the transition from emissions heavy industry to cleaner alternatives.

#### CONTEXT FOR THIS SUBMISSION

The Australian Manufacturing Workers' Union welcomes the commitments made by the incoming Rudd government to place increased emphasis on Australia's performance in the crucial vocational education and training portfolio.

We welcome also the early steps taken by the government to sign the Kyoto protocol and to commit the new government to the challenge of climate change mitigation.

Whilst the AMWU does not believe that skills are the answer to climate change mitigation, we do believe that skills form a significant part of the answer.

The skills and workforce development situation in Australia today however, is in serious need of attention.

The National Skills Policy Collaboration comprising the Australia Industry Group, the ACTU, the Australian Education Union, Group Training Australia and the Dusseldorp Skills Forum in their paper 'Facing up to Australia's Skills Challenge' has identified at least 6 compelling reasons for government to act on skills:

**First,** Australia faces a significant shortfall in the supply of workers with the required vocational qualifications. Currently 87 percent of available jobs require post-school qualifications, but 50 percent of the workforce lacks these qualifications. The best estimate is that if the supply of people with VET qualifications remains at the same level as in 2005, a shortfall of 240,000 can be expected over the ten years to 2016. To meet the shortfall, net completions will need to increase by 1.9 percent per year for the next decade.

**Second,** Australia faces a significant shortfall in the supply of people with the necessary high-level technical vocational and tertiary qualifications. In recent years, the highest levels of employment growth have occurred in associate professional (e.g. engineering, building, medical, technology) and professional occupations. A serious skills shortage exists in the sciences and mathematics, with an estimated shortfall of 19,000 scientists and engineers by 2012.

**Third,** Australia is struggling to lift school completion rates. Other OECD countries have managed to progressively improve school completion rates, but these rates have barely shifted in Australia over the past 15 years. A dimension of this is reflected in the fact that among 25-34 year olds, Australia now ranks 20th among the OECD countries in terms of school completion.

**Fourth,** the ABS recently estimated that 46 percent of adults – or seven million Australians - had poor or very poor skills across one or more of the five skill domains of prose literacy, document literacy, numeracy, problem-solving and health literacy. This means they did not attain the skill levels regarded by most experts as a suitable minimum for coping with the increasing and complex demands of modern life and work. Early school leavers are especially likely to have lower levels of literacy and numeracy.

**Fifth,** Australia's total public spending on education at 4.8 percent of GDP is below the OECD average (5.4 percent), and well below the Scandinavian countries, France, New Zealand, the UK and the USA.

**Sixth,** more than a decade of sustained economic growth and prosperity has provided the country with an unprecedented opportunity to seriously tackle educational exclusion and disengagement, and to do so in ways that can deliver greater social equity. It is imperative that all Australians have these opportunities in order to lead productive and fulfilling lives.

Climate change mitigation will depend on our ability to redress these shortcomings.

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<sup>&</sup>lt;sup>1</sup> Facing up to Australia's Skills Challenge – 13 March 2008 <a href="http://www.dsf.org.au/papers/200.htm">http://www.dsf.org.au/papers/200.htm</a>

The observations of the National Skills Policy Collaboration are consistent with the observations of the AMWU in that:

- The proportion of Australian adults with at least upper secondary education is now below the OECD average
- A very high proportion of the existing working age population (50.1%) do not have post school qualifications and that proportion is high compared to the most productive economies
- Australia ranks near the bottom of the OECD in terms of the growth rate of science and engineering graduates;
- Despite the long economic boom workforce participation rates in Australia are low when compared to the most productive economies
- There are still more than 11% of the workforce who are unemployed or underemployed
- The proportion of young people not engaged in full time work or full time training has remained static and these (up to half a million) disengaged youth are much more likely to remain unemployed or underemployed and affected by depression, crime, drug abuse, homelessness, poor health and poverty.
- The growth in the proportion of young people successfully completing year 12 or equivalent has stalled during the last decade.
- The number of existing workers completing higher level VET qualifications has declined significantly in the past few years.
- The VET qualification completion rate in the 15-24 cohort is estimated by NCVER to be 23.7%
- There will be a major shortfall of trained tradespersons in the medium term unless there is a change in policy settings.
- Completion rates for traineeships are very low and the completion rates for apprenticeships in most of the key engineering trades have declined significantly during the current decade.
- Levels of public investment in all levels of education and training are well below the leading economies and have been declining at a time when leading economies have dramatically increased their investment. This is particularly true for VET.
- In the years from 1997 to 2005 there has been a very substantial 25% decline in federal funding per VET student.

The policy collaboration has identified 10 key priorities for action that are supported by the Australian Manufacturing Workers' Union:

- 1. A focus on improving the quality and increasing the number of Australians with VET qualifications which meet future industry and workforce needs.
- 2. The centrality of industry.
- 3. Improved youth engagement and attainment.
- 4. A crucial role for student support and for intermediaries.
- 5. National workforce development and existing worker strategies.
- 6. Genuine competency-based progression & improved apprenticeship completions.
- 7. A review of traineeships.
- 8. A public and industry investment strategy for vocational education and training.
- 9. A clear vision for flexible and responsive vocational education providers, and for the future of TA FE in particular.
- 10. A focus on the skills needed for a low carbon economy.

Research has established that increasing investment in education and training and lifting the qualifications level of the workforce is by far the single most effective lever available to improve participation and productivity.

It is in this context that the AMWU comments on the specific issues raised in this Inquiry.

#### AMWU SUBMISSION

The AMWU welcomes the enhanced attention that vocational education and training is getting in the early days of the new Rudd Government.

We welcome the attempts that the new Government is making to ensure that the increased investment it has committed to results in lifting the skills base of the country.

We also welcome the attempts by government to link the additional training places provided for under the Productivity Places Program to nationally recognised qualifications, and higher level qualifications, based on an industry analysis of current and emerging job needs.

We submit however that more needs to be done to align those training places with the needs of the economy and the society it serves. This is particularly true of the needs of our society in respect of climate change mitigation.

Key industry stakeholders like the AiGroup, the ACTU and ACCI have identified that the skills shortages associated with confronting the challenge of climate change are a factor in their assessments that skills shortages are the major capacity constrain facing the economy.

We are concerned that the policy road map of the government has a number of potential weaknesses that could compromise the objective of the policy:

- 1. Unless there is a strong and decisive role for industry that delivers on the industry leadership rhetoric, there is a significant risk that the additional 630,000 'Productivity Placess' will represent simply 'more of the same' that will result in 'more of the same'.
- 2. If the analysis of industry skills needs is conducted by the usual raft of consultants and vested interests, and not the industry parties the policy will perpetuate the weaknesses of the current supply driven system that operates in the interests of the training bureaucracy and the training industry rather than the interests of the industry employers and workers.
- 3. Unless the training places are designed to facilitate employment in real jobs at the conclusion of the training, the training will count for little.
- 4. The assertions contained in the paper that 'Introducing greater competition to the training system, including contestability for government funding, and providing public institutions with the flexibility to compete, will ensure that training providers are better able to respond to industry and employer needs.' provide encouragement to those who believe that the solutions to our skills problems lie in the very markets that created the skills shortages in the first place.
- 5. Running counter to the strengths of the policy, and potentially undermining it is the rhetoric about competition and full contestability in other words a continuation of the move to a fully market based approach.

We are concerned this will undermine viability of TAFE and encourage more bottom feeders etc and perpetuate the supply side dominance of the system.

More importantly however it will put in the hands of the employer (for those already in the workforce) and the intermediaries (in the case of individuals outside the workforce) the choice of provider, and risks attraction to the cheapest and dirtiest, a system where the providers make the course fit the subsidy etc.

These mechanisms could operate to undermine the opportunities that this injection of additional funds represents.

Further mechanisms are required to ensure that demand for training in the key skills required in the economy is boosted and directed towards the areas needed for the future of industry, the workforce and the community.

Government intervention is required to ensure that the policy intent is delivered by aggressively targeting training resources to the future skills needs, including climate change related skills, in the interests of the community.

Market forces haven't worked adequately to persuade employers to adequately plan and invest in the training of the workforce. Why exacerbate this problem by allowing their short term imperatives to distort the public provision of training funds?

The short term interests of individual employers often don't match the longer term interests of employees, the industry or indeed the community. The current skills shortages are the best illustration of this.

This is particularly true of climate change mitigation. It would be naïve to rely on market based solutions to climate change related skills shortages when it is that very market that produced the shortages in the first place.

We welcome the establishment of Skills Australia and urge the Government to ensure that the new body is properly integrated into the fabric of decision making in relation to skills and workforce development across the country and is not marginalised. It must also accept some responsibility for being part of the climate change mitigation solution going forward.

We call on the government to ensure that Skills Australia is properly positioned to bring greater levels of integration into the work of the respective State, Territory and Federal governments and the reduction of unnecessary duplication.

With respect, the AMWU believes that the capacity of universities and other research and training institutions to meet current and future demand for climate change professionals is a secondary issue to the need to build Australia's capacity, through the higher, and vocational, education sectors to deliver vocationally relevant climate change mitigation skills to the broader workforce.

The AMWU believes that, with the right government support and investment, tens of thousands of jobs could be created in the transition to renewable energy and sustainable industries.

In making this transition however, we must protect the interests of workers affected by the gradual change from emissions-heavy industry to cleaner alternatives.

At its 2008 Biennial National Conference, the AMWU released a major policy response to climate change entitled 'Making our future – Just transitions for climate change mitigation'<sup>2</sup> which laid out the union's blueprint for a sustainable manufacturing future.

There is little doubt that, for Australia to emerge from the challenges of climate change intact, it will need to effectively exploit the opportunities that will arise from our efforts to make our presence on the planet sustainable.

The AMWU acknowledges that manufacturing industry is indeed strategically important to the state and national economy, greenhouse gas abatement and water savings.

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<sup>&</sup>lt;sup>2</sup> http://www.amwu.org.au/content/upload/files/report/making-our-future 0708.pdf

Manufacturing is a key driver of innovation, productivity and training in the economy; has a key role in the maintenance of high-wage, full-time jobs; is crucial to eradicating our disastrously high current account deficit; and is the most integrated of our industries.

Manufacturing is the largest employer in the Australian economy, with 981,300 full time jobs.

This represents 12.8% of people in full time employment.<sup>3</sup>

Average weekly earnings in the manufacturing sector are relatively high, the seventh highest of all industries at \$1,031.40 per week. This is 17.8% above the average for all private sector industries.<sup>4</sup>

Manufacturing trains more employees than the economy-wide average and spends more on training than all but two industries (\$394.9 million.).<sup>5</sup>

Many service-based firms, such as private scientific establishments and engineering and computer consultancies, depend on demand from the manufacturing sector.

The AMWU acknowledges that manufacturing also has some way to go in relation to greenhouse gas abatement and sustainability generally.

The AMWU notes the work being done by the NSW Government to develop a Green Skills Implementation Plan<sup>6</sup> and acknowledges that the five strategy elements identified in the plan are necessary components of a sustainable skills strategy.

The AMWU supports the conclusion that a transition to a truly environmentally sustainable society will require substantial efforts in training new entrants and workers for new jobs, and also retraining existing workers in high impact industries.

This task goes beyond the identification of, and training in 'green skills'. There is significant work for industry to do in managing the work organisational and job design changes that will form the basis of a shift to sustainability.

Industry will need support to build its capability in these areas.

We note that the implementation plan is heavily geared to 'training' solutions which will be an important part of any transition, but in our view, not the only solutions that are worthy of support.

The AMWU supports other implementation methods based on workforce development concepts beyond the traditional training delivery mechanisms.

The AMWU is also concerned about the prospects for supply of training in sustainability skills to drive demand in a counterproductive way.

The AMWU does not support leaving the delivery and funding of such initiative to the 'market'.

Public funds should be allocated to this purpose strategically.

The AMWWU strongly supports an element of compulsion in driving elements of the green skills strategy in existing industry partnerships, particularly where public funds are applied.

In respect of manufacturing industry specifically, the AMWU offers the following observations:

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ABS 6291.0.55.003 Labour Force, Australia, Detailed Quarterly.

<sup>&</sup>lt;sup>4</sup> ABS 6302.0, November 2007.

<sup>&</sup>lt;sup>5</sup> ABS 6362, "Employer Training Expenditure and Practices", 2001-02, p.19.

<sup>&</sup>lt;sup>6</sup> https://www.det.nsw.edu.au/industryprograms/pdf\_docs/indprogs/pdf/greenskills\_strategy.pdf

#### • Key environmental challenges

In addition to those challenges identified above the AMWU submits that the following is also a key challenge:

• The lack of capability in the industry to identify and properly articulate the skills required at the enterprise and occupational levels to meet the challenges of climate change mitigation.

This challenge, similar to that experienced in the general skills shortage challenge is a major constraint in effectively preparing mitigation strategies in relation to climate change and greenhouse gas abatement.

## • Key environmental opportunities

Whilst skills are not the answer to climate change, skills will form part of the answer. Other parts of the answer should include the following:

- Adopting interventionist industry policies, inclusive of government purchasing policies, support for research and development, skills training and the take-up of appropriate technologies
- Establishing Just Transition programs, so that the costs of moving towards a greener economy do not fall on displaced workers, trapping them in contingent employment or lowwage jobs
- Expanding the potential for recycling and reuse initiatives in industry
- Creating a viable industry within Australia based on the production of low or no emission vehicles
- Ensuring the equipment for renewable energy is locally produced
- Introducing a carbon tariff beyond 2012 and the Kyoto Agreement period
- Including environmental obligations in trade agreements
- Using accumulated superannuation funds for the remediation of climate change and the development of associated industry

the capacity of universities and other research and training institutions to meet current and future demand for climate change professionals, and possible measures to assist understanding of climate change in the Asia-Pacific region, including provision of training and skills assistance

Australia's capacity to deliver technical knowledge and skills to individuals is world class. The issue, in the view of the AWMU, is one of delivering the right knowledge and skills, and the ability to apply that knowledge and skill, in a vocational context, and in a way that meets the challenges represented by climate change.

It is a matter of having the right people, with the right skills, in the right place at the right time, for the right reason.

We say it is the analysis of what jobs, require what knowledge and skills, and in what context, that should drive the capability building in the vocational and higher education sectors. That analysis can only take place in industry, by industry.

It will take more that just climate change professionals to reverse our dependence on current high emissions technology. The existing workforce, and those who enter the workforce in the future, must form the basis of the answer through targeted training and workforce development solutions geared to building awareness and commitment to climate change mitigation strategies.

Top down exhortations by climate change 'professionals' will fail unless they are complemented by dedicated programmes designed to encourage take-up from the workforce and the community generally.