

Educational leadership in the delivery of green skills for sustainable development

Why education for sustainability in all courses and qualifications is critical

Objective:

Australian Government policy should intensify technical and vocational education (TAFE and VET) capacity to support Australian Industry Skills Council progress in establishing 'green' Training Packages for industry and students

Growth and development in green technologies and innovation are key elements of a productive and sustainable economy. Essential to this growth are appropriately educated technical and vocational education and training (TAFE and VET) teachers and students.

Currently there are limited professional development opportunities for TAFE teachers and VET professionals to gain the knowledge and skills they require to develop and teach programs which integrate green skills.

TAFE Directors Australia (TDA) advocates on-going and enhanced support for professional development in green technologies and sustainability for all TAFE and approved Registered Training Organisation (RTO) professionals.

TDA proposes that funding criterion for the National Workforce Development Funds enable TAFE and approved RTOs to join with Industry Skill Councils (ISC) in developing the capability of VET professionals at the front-line to support high technological green credentials.

Currently, industry training is limited under criterion for the National Workforce Development Fund, approved under Budget 2012 with funding of \$700 million over four years. TDA proposes that workforce training for sustainability is enhanced through a unique investment for training providers to support targeted, innovative and industry

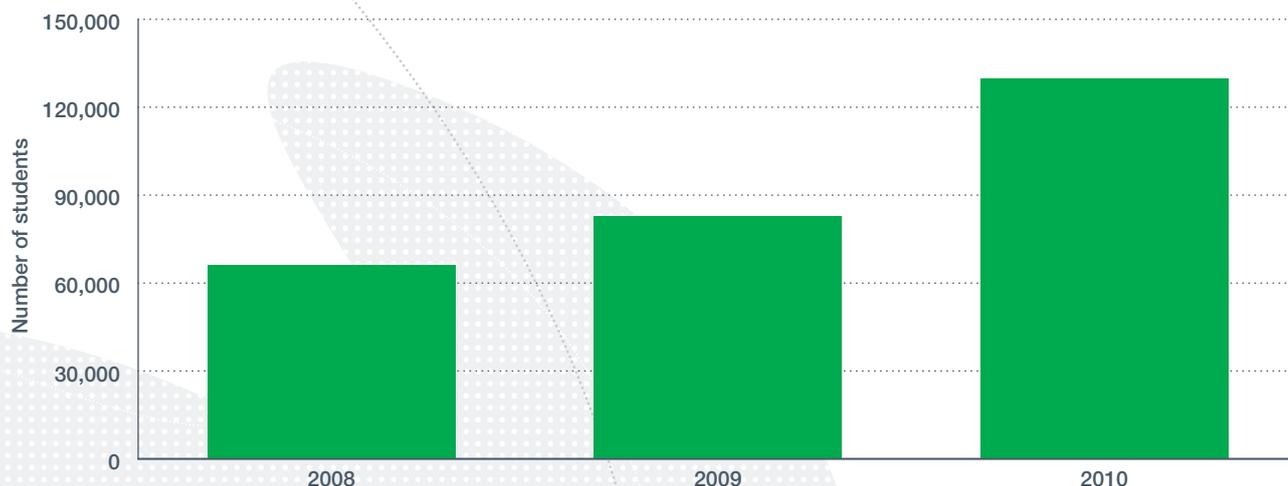
specific sustainability training programs. Such an investment will increase the capacity of TAFE to deliver nationally accredited programs, all of which now incorporate green skills.

The current level of co-investment from 'industry' is extremely low in this area, and continues to impact on the further development of sustainability practices.

Recent reporting on the environmental impact of fast-changing technologies across many industry sectors has linked economic growth with increasing environmental costs globally [Ref: Stern Report (Stern 2007)¹ and the Garnaut report (Garnaut, 2008)²]. In response, a Green Growth Strategy was released by the OECD in May 2011 which defines the concepts of 'green growth'. These include investments focusing on resource productivity, renewable energy, clean technology, green business processes, climate adaptation and ecosystem protection. It is also clear in the report that innovation and education will play a key role in green growth.

In 2009 the Commonwealth government recognised the importance of preparing all students for the emergence of the green economy through the Green Skills Agreement. The Green Skills Agreement (2009)³ tasked Australia's 11 Industry Skills Councils to integrate green skills and sustainability in all Training Packages. The 'greening' of Australia's Training Packages was a major ISC investment, now largely complete with the uptake of green skills training significant across the VET sector (see Graph 1) and students continuing to demand green skills as part of their training [Ref: Dusseldorp Skills Forum in their Gen Green 3 report (2011)⁴].

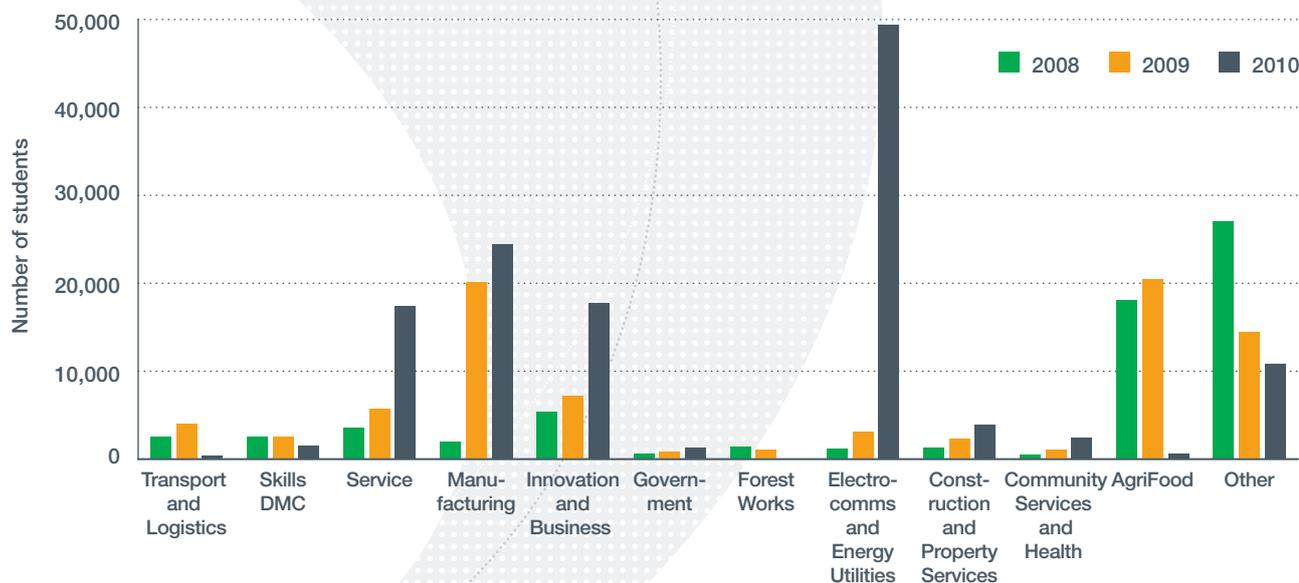
Graph 1: Green Skills/ energy efficiency training enrolments (Aust 2008–2010)



(Source NCVET Students and courses database)

A range of industry sectors have addressed the changes in the Training Packages leading the way in delivering green skills – both technical and generic green skills – in a range of courses and qualifications (Graph 2).

Graph 2: Green skills/energy efficiency enrolments by industry, Australia 2008–2010



(Source: NCVET, Student and courses database)

1. Stern N., (2007) The Stern Review on the Economic Effects of Climate Change Cabinet Office – HM Treasury UK http://webarchive.nationalarchives.gov.uk/+/http://www.hm-treasury.gov.uk/media/4/3/Executive_Summary.pdf
2. Garnaut R., Garnaut (2008) Climate Change Review <http://www.garnautreview.org.au/2008->
3. COAG Green Skills Agreement 2009 <http://www.innovation.gov.au/Skills/SkillsTrainingAndWorkforceDevelopment/ClimateChangeAndSkillsForSustainability/Pages/GreenSkillsAgreement.aspx>
4. Sack F., GEN GREEN SURVEY 2011 Australian apprentices' & trainees' experience of skills and sustainability in 2011, Dusseldorp Skills Forum p3

The Dusseldorp Skills Forum, through its 'Gen Green Surveys', has undertaken surveys each year over three years to determine the demand of skills for sustainability. They report that:

In 2011 it appears from responses that young skilled Australians' (have) very high level of personal interest in sustainability skills ... (p3).

The Gen Green Report of 2011 also reports that, although there has been a 260% increase in the inclusion of green skills in courses, this still only represents less than half the available courses. Much work still needs to be done and the most effective way to deliver this training is through TAFE. Leadership in training for green skills and sustainability in TAFE has been supported by the report which clearly identifies TAFE as one of the main sources of green skills training for these students (Graph 3).

Graph 3: Where do you learn about Skills and Sustainability?⁵



5. Dusseldorp Skills Forum Gen Green 2011 report – www.dsf.org.au

There is strong evidence that continuing and rapid technological innovation will be required to improve Australia's productivity and with this comes the need to train and skill our students appropriately⁶. To encourage the development of technological innovation, in particular through green growth, Australia's innovation agenda and workforce development funding should be extended to support certain specialised upgrading of skills credentials for VET professionals to build industry confidence in TAFE and VET trainers delivering Training Packages and overall capacity for sustainability and green skills in the workforce.

TDA recommends that flexibility in funding under the National Workforce Development Fund may be the most appropriate channel to support the specialised development of green growth and innovation credentials, and should not be impacted by possible legislation to remove the Carbon Tax or associated funding through the Clean Energy Bill.

An additional objective is to ensure continued development of the VET workforce, as recommended in the 2012 Productivity Commission Review of the vocational education workforce. Professional development support is critical to ensuring VET providers' capacity to deliver the key technological and related innovations for industry as outlined in Training Packages.

Our Case

TDA strongly believes that the development of green skills for green growth and innovation will be essential for a sound economy, a healthy environment and a thriving society. TDA submits that on-going support for TAFE and approved RTO workforce development in the area of technical skills and specialised education credentials in sustainability will be critical to ensuring all learners have the capacity to contribute to a technologically driven green growth economy.

Recommendations

1

Australia's National Workforce Development Fund (NWDF) should directly support RTOs through collaborative funding with ISCs for professional development of TAFE/VET teachers, focused on the skills required for green technologies and sustainable development; and

2

Linking this support to the offshore delivery of Australian VET qualifications with the establishment and ongoing support for 'Centres of Skills Excellence' in the broader Asian region by the Commonwealth Government. The establishment of these Centres will transfer the knowledge and credentialed skills required for sustainable development across these countries.

6. Dr Martin Parkinson, Secretary of Treasury The Shann Memorial Lecture SUSTAINABLE WELLBEING – AN ECONOMIC FUTURE FOR AUSTRALIA