Inquiry into the Effects of Climate Change on Training and Employment Needs

Senate Education, Employment and Workplace Relations Committee

Submission on behalf of the
Dusseldorp Skills Forum
1 Glebe Street
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Introduction

DSF is an independent, public interest organisation that is focused on equipping Australian workers and industry with the skills and knowledge required to meet our growing environmental sustainability imperatives. We work closely with communities, government and non-government organizations to stimulate innovation and to build networks of common interest.

The attached report, *Growing the Green Collar Economy*, was prepared by the CSIRO and released jointly with the Australian Conservation Foundation (ACF), and commissioned by DSF. It investigates the impact of the transition to a more environmentally sustainable society on skills, innovation and workforce in Australia, and is a ground-breaking analysis of this new economic wave.

Growing the Green Collar Economy Findings

Using two different economic models, CSIRO found:

- If Australia takes significant action to cut greenhouse gas emissions national employment will still increase by between 2.5 million and 3.3 million over the next two decades
- Jobs in sectors that are currently high carbon emitters, like transport, construction, agriculture, manufacturing and mining are forecast to grow strongly in the next decade

- In high environmental impact industries 3.25 million workers will need to be equipped with new, more sustainable skills.

The report leads to the conclusion that climate change is both our greatest economic risk and, ironically, a great economic opportunity. However Australian workers will need to be properly skilled and resourced to underpin truly sustainable industries and workplaces.

The report notes:

- The implementation of well-designed policies can significantly decouple economic growth from environmental pressure
- The transition to a low carbon economy will have little or no impact on national employment
- Employment will continue to grow even in those sectors with high potential environmental impact. Employment in transport and construction sectors will grow considerably faster than the national average
- Current data and information about green skills and workforce capabilities is poor. There is a lack of reliable information about green employment markets and demand and supply patterns in renewable energy, transport, agriculture, innovation, R&D and green accounting/standards
- Chronic skill shortages are affecting the ability and affordability of householders and commerce to switch to more sustainable energy and transport options (eg. solar energy use, LPG conversion), which is likely to negatively impact on consumer demand for green products and services.

Demand for new skills will be most pressing in renewable energy and in the design and construction of green buildings and in manufacturing and maintaining cleaner vehicles and transport systems.

Ways forward

Employment growth in sectors that are currently high carbon emitters, like transport, manufacturing and construction means that new and existing jobs will need to change character. If Australia is to have any chance of reducing its greenhouse gas emissions over time these sectors will need to embrace a sustainable way of working and earning - becoming ‘green collar’ jobs in a clean economy.

The report outlines five key elements to implement a systematic approach to address the transition challenge, which will allow continuing improving living standards while reducing our national environmental footprint:

1. Improved incentives and policy settings for environmental performance

2. Identification of the *green skills* required to deliver this performance and implementation of the appropriate training model
3. Performance assessment and accreditation to inform action
4. Access to appropriate business inputs and components
5. Promotion of a stronger innovation culture

Each key is necessary but not sufficient to meet the challenge of the transition to a high performing sustainable economy: it is necessary to deliberately connect these different aspects and to give particular attention to the role that human skills and labour will play in the implementation of a national response to climate change.

DSF proposals

Thinking about the report, subsequent Australian research and the international literature, in our view significant adjustments are needed to the Government's skills policy to ensure its climate change initiatives can be delivered, and to enable Australian industry to take advantage of the emerging business opportunities associated with climate change adaptation and mitigation.

We recommend nine key steps:

- An assessment of likely demand and supply of Green Collar skills. Areas could include water management; waste and recycling; renewable energy; home audits; facilities management; green teaching and training in the building and construction trades and professions; green accounting for the ETS and emerging capital markets; industry auditing. This research would bring together existing data and knowledge from stakeholders, industry groups and government agencies
- Joint government-industry green skill centres in relevant trades, including building and construction, HVAC [heating, ventilation and air conditioning], refrigeration, transport, facilities management, farming, forestry and other key areas
- A national effort to upskill existing workers in the auditing, accreditation, design and renovation tasks essential for energy efficiency in Australian households and businesses
- A process to 'greenmark' training packages and higher education qualifications so that the best environmental knowledge and approaches are incorporated into VET and professional learning
- A national green skills VET in Schools initiative to encourage whole of school approaches to sustainability that applies VET learning to infrastructure upgrades for schools, pedagogy, and learning-by-doing curricula

- A national marketing and information campaign about potential green careers - the rewards, opportunities, skills and pathways involved
- An Initiative to mobilize Australia's youth around sustainability by offering a structured and accreditation track to a green career
- FEE-HELP relief to encourage stronger student demand for tertiary level green skills courses in environmental sciences, green accounting and accreditation, green design and building, and so on
- Allocation of a portion of ETS dividend to drive skill & workplace change, and to leverage private sector investment in green skills and opportunities.

Conclusion

To date the skills and workforce dimensions of Australia's response to climate change have not received sufficient attention. But developing the right skills at scale will be crucial to a low cost and successful transition to a low carbon economy.

A national Green Skills strategy is required that touches the relevant trades and professions and incorporates existing and new workers. Clearer signposting to new and emerging green careers is also necessary.

We trust that the Committee will duly consider the matters raised in this submission and we thank the Committee for its attention. We would welcome the opportunity to elaborate on this submission or to furnish the Committee with further information.

Yours sincerely,

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