



2017 REVIEW OF CLIMATE CHANGE POLICIES DISCUSSION PAPERS

SUBMISSION FROM THE AUSTRALIAN ASSOCIATION FOR ENVIRONMENTAL EDUCATION NSW CHAPTER.

1. INTRODUCTION

Thank you for the opportunity to comment on your draft Climate Change Policies.

To assist in your understanding the rationale for this submission we believe it is appropriate to introduce ourselves. The Australian Association for Environmental Education New South Wales (AAEE NSW) is one of a number of state chapters supporting Australia's peak professional body for Environmental Educators. We advocate for Environmental Education and promote best practice and contribute to skills development among educators across the country and internationally.

Our environmental educators work in government agencies, schools, businesses and community organisations. AAEE helps their members stay at the forefront of sustainability education and behaviour change and provides a network for the growing force of cross-sector environmental educators. Climate change is a key concern of AAEE and contributes immensely to climate change education programs Australia wide.

AAEE has three major roles:

- promoting the most extensive and effective use of education to help people to live more sustainably
- supporting its members and others in the sector via professional development, and
- building greater strength in local networks that facilitate collaboration and skills sharing.

More details can be found on our website: <http://www.aee.org.au/>

The Australian Association for Environmental Education NSW (AAEE NSW) congratulates Department of Environment and Energy (DEE) on a well designed draft covering a wide set of policies which recognise the importance and relevance from such areas as emissions reduction, renewable energy target and from solar, renewable energy and Australia's role internationally. The importance of continual research in the draft is also vital. Of some concern, the

draft takes as its start point the Paris target with Australia's offering of a 26 to 28 percent reduction in emissions. All thinking Australians are embarrassed by this ridiculously low target. Educators across or sector and many other groups believe that a 60 percent reduction of greenhouse emissions by 2030 compared to 2000 levels is achievable and a long term emissions reduction goal by post 2030 of net zero Greenhouse emissions is also achievable and economically, environmentally and socially responsible for Australia. We note that to meet Australia's commitment under the Paris Agreement and achieve the goal of net zero greenhouse gas emissions in the second half of this century requires increased ambition and targets now.

While it is pleasing to note that the Commonwealth Government has recognised Climate Change as "one of the greatest threats facing humanity" it has not mentioned that an understanding of it provides an opportunity to create a more just and sustainable world. **This is where education comes in and which is the major omission from DEE's draft policies.**

In addressing a number of other associated issues relating to DEE's policies AAEE mainly wishes to advance clear arguments to counteract this major omission from the draft, namely the **ignoring of the role and importance of education at all levels.**

2. GENERAL COMMENTS

In implementing these policies by the Department of Environment and Energy it is important to appreciate the political environment in which they are to be implemented and how this may weaken and even counteract the achievement of climate change outcomes. Climate sceptics, friends of the fossil fuel industry and media personalities often advance alternative viewpoints and understandings, but largely, the empirical evidence shows the effects of a changing climate on economies, environments and societies are an important topic of study. This alternative campaign to confuse the population, propose unscientific opinions and slow down progress in achieving a more sustainable future has the potential to thwart the best of DEE's intentions unless a more comprehensive, integrated and united set of values is agreed upon nationally. The challenge from these minority groups may be stronger than expected particularly when even a number of our politicians and community leaders still hold alternative, sceptical views. Without an interrelated, collaborative education policy in partnership with other government departments and non-government groups to support the current draft policies these will be difficult goals to achieve or, at least, take a longer time to reach. It is most disappointing that DEE is committed to achieving climate change outcomes when some members of the government and parliament are outspoken sceptics and pose as antagonistic speakers denying the very existence of climate change. Again education and sensible debate is a necessity to tackle this issue.

Education

This submission will outline current areas of Climate Change endorsed by all levels of Australian education departments, not to be presented as academic information in itself, but to provide useful data for DEE to adopt and guide it in the implementation of most of its climate change policies. Education at a formal level is obviously vital but media campaigns, industry and community education programs, VET, local government and other communication techniques are equally important and need to be considered as an additional policy or at least integrated into the current draft policies.

In essence AAEE NSW strongly recommends that the Department of Environment and Energy develop close partnerships with the Department of Education and Training, the Australian Curriculum Assessment and Reporting Authority (ACARA), the Australian Institute of Teaching and School Leadership (AITSL) and all state and territory education departments to gain their understanding of climate change in schools, colleges, TAFE and universities.

Moreover it is recommended that the DEE work with these partners to develop community programs nationally in support of climate change education and become a key centre for briefing them at regular intervals relating to current research in the climate change area.

It is regrettable that such an educational liaison used to occur at a national level and was disbanded when it was chaired by the then Department of Environment in the late 1990s and early 2000s. AAEE NSW does not recommend returning completely to the past but emphasises that since the demise of the National Environmental Education Council the Commonwealth currently receives no advice in tackling major issues like climate change from the education community and this lack of engagement and understanding of their perspective shows.

As a final general comment, AAEE NSW believes **the current Safeguard Mechanism policy is flawed in its commitment to purchasing from industry in their introduction of cleaner, more sustainable production initiatives.** The former policy of industry paying for pollution was showing success, the rate of emissions was declining and it still seems to be accepted in general by the major captains of industry.

3. EDUCATION THE MAJOR OMISSION

Therefore the lack of an education policy or set of education policies is an unfortunate omission from the DEE's draft policies document.

There are very good reasons for including an educational component in DEE's policies for climate change and why it is an important element for all public and private bodies to endorse. Education builds active, engaged, informed communities so that they can contribute meaningfully to government proposals,

policies and agendas. The government's behaviour for instance in relation to the proposed Adani coal mine confirmed there is a role for education in building a community capable of forcing governments to do the "right" thing enabling communities to speak up for the "Australian" values they want to see promoted.

AAEE NSW therefore provides a summary of major education trends relating to climate change currently valued by formal and informal institutions and organisations across Australia. These principles and sources of information are submitted for four reasons:

- To alert the Department of Environment and Energy to a number of current climate change education initiatives currently in operation Australia wide. In being more conversant to what is occurring among community groups, local government and formal education institutions, the DEE will be in a better position to understand the level and diversity of activities occurring in Australia and be able to appreciate the priorities adopted by most education groups. It is important that educational institutions and DEE speak with a unified voice and be able to ensure national policies are in tandem with each other.
- Conversely by developing closer links with education groups, the DEE will be in a better communicative position to give advice to them on current research developments. This would lead to an effective two-way supportive communication system.
- The knowledge, values and skills valued by education groups in relation to climate change education would have relevance and influence on how the DEE implements its policies. An exchange of ideas would benefit both parties.
- The principles of teaching in schools and other institutions can be applied in many cases to community education as a whole and should be considered by the DEE when communicating with all age groups.

Community Groups

The Department of Environment and Energy should be aware of the current state of climate change programs already existing in the country. Space cannot do justice to outlining everyone of them but examples will demonstrate the extent and variety of approaches taken by various groups.

Perhaps one of the biggest groups is the Australian Youth Climate Coalition (AYCC) which has a network of 110,000 members with a straightforward mission to build a "generation wide movement to solve the climate crisis before it is too late" (AYCC 2015, para. 1) Members and friends of the AYCC think "climate change is the single greatest threat facing humanity, and puts young people and future generations at risk. They also think that addressing the climate crisis is our biggest opportunity to create a world that is more sustainable.

The Aboriginal and Torres Strait Islander branch of the AYCC have their focus on climate justice. Over half of all Aboriginal and Torres Strait Islander people in Australia are under the age of 25. People living in the Torres Strait have little

choice but to take climate change very seriously as their traditional country is increasingly underwater (Green et al., 2009).

AYCC is one of many groups DEE should work with.

Formal Schooling and Curriculum

There is no separate study or subject known as Climate Change in the Australian Curriculum. Instead it is integrated across the key learning areas in a number of ways. Schools support the study of climate change from a broad number of perspectives. Teachers employ a more holistic, pedagogically relevant and integrated approach to teaching and learning that addresses the science of climate change, as well as mitigation and adaptation in ways that are developmentally appropriate for a diverse range of students across all age and year levels. The term climate change itself is mentioned specifically 42 times across all learning areas but by inference it can be integrated within a plethora of other topics and themes in Australian syllabuses. :

- Climate change can be taught through most **syllabuses** and **learning areas** in Australian schools.
- Climate change is taught as one of the mandatory **cross curriculum priorities** viz: the Sustainability Cross Curriculum Priority
- Climate change can be taught when addressing the **General Capabilities** as noted in the Australian Curriculum. (e.g. The best climate change education promotes independent and **critical thinking**, the capacity to **appreciate more than one point of view** and a range of different interpretations, and **the communication of substantiated arguments**.)

The above summary is only a brief outline of the Australian Curriculum and its implementation of climate change studies in our schools but more extensive information can be found in websites managed by ACARA and state government education departments.

Local Government

Most local government agencies offer a variety of sustainability programs including the awareness of climate change, installation of renewable energy devices, how residents and industry can take action to mitigate climate change and advice on their capability to adapt to it at some inevitable level. The former National Environmental Education Council had a close liaison with local government, with the sharing of ideas and projects and providing funds for on ground programs at community level. A return to this arrangement is vital for successful policy outcomes. There is also a close link between state governments and local government so the a similar relationship between the commonwealth and local government would be equally beneficial.

General Education Principles

There is a widespread recognition that education and curriculum policies have a key role to engage mind-sets, shift dispositions, and enhance young peoples' abilities both to acknowledge contemporary problems and to develop and apply their knowledge and skills in remediating unsustainable practices in the future

(Sterling, 2014; Wals, 2011). Such strategies have relevance for influencing sceptics and others who are unaware of the impact of climate change.

As stated previously learning principles can be employed widely and across different age groups with the inclusion of adults.

Vocational Education

Educators working in the community and preparing people for the world of work have a particular concern for the implementation and development of climate change policies. While DEE may see these recommendations as the responsibility of other government departments it is important these are issues that affect all commonwealth departments, including DEE itself, and are better implemented with DEE support.

In relation to the opportunities and challenges of reducing emissions from the electricity sector there are particular concerns or opportunities with respect to jobs, investment, trade competitiveness, households and regional Australia that should be considered when reducing emissions in the electricity sector.

The government needs to embed permanent change by promoting a higher level of sustainability across all national accredited courses. They can do this by engaging with the Industry Reference Committees and Skills Service Organisations who coordinate reviews of the national training packages under the Australian Quality Framework (AQF). During the UN Decade of Sustainability (2004-2014) a minimum level of sustainability was added to all AQF VET courses but a higher level of sustainability and more specific examples are required to embed permanent change in all industry sectors to implement federal policy.

In addition the government **should encourage industry to add a base level of environmental, resource and energy efficiency knowledge by embedding a structured workplace training program**. This should be made a requirement of getting access to government grants:

Examples of training that could be customised include nationally recognised units of competency from the MSS Sustainability training package are:

- MSMENV272 “Participate in environmentally sustainable work practices” (or equivalents) suitable for foundation level staff
- MSMEN472 “Implement and Monitor Environmentally Sustainable Work Practices suitable for team leaders
- MSMENV672 “Develop Workplace Policy and Procedures for Sustainability” suitable for managers

Alternatively government should develop “lean” and “critical” thinking in staff by undertaking nationally recognised qualifications from the MSS Sustainability Training package. Courses in Competitive System and Practices range from Cert II to Advanced Diploma level.

Real estate services and strata services – promote changes to real estate certification and curriculum to:

- better manage buildings in a sustainable way

- increase understand of national rating systems and what the rating mean for tenant/owners in running costs
- implement and understand energy monitoring system

NSW government needs to **build and enhance a higher level of sustainability across all strata management AQF courses**, and the development of more specific units in each course speciality area, to ensure that future graduates have the skills needed to help the government meet the 2050 goals. TAFE NSW, for example can engage with industry through our Skills Points contact to develop the curriculum changes.

4. Opportunities and challenges of reducing emissions for households, SMEs and the built environment Implications for policy.

In relation to the hydrocarbon policy, immediate changes should be made to the refrigeration **National Training Packages** to embed better maintenance and the new gases into the curricula.

Governments need to embed permanent change by promoting a higher level of sustainability across all building based construction and electricity and fit out national accredited courses: They can do this by engaging with the Industry Reference Committees and Skills Service Organisations who coordinate reviews of the national training packages under the Australian Quality Framework (AQF). Specific examples include how to improve air tightness of buildings. This has been raised as an innovation challenge by the Greenstar rating system and the air tightness of the Ecoflame house was essential to it winning the China solar decathlon in 2013. Other examples include improving waste management and recycling.

5. SUMMARY OF RECOMMENDATIONS

The Australian Association for Environmental Education NSW strongly recommends the Department of Environment and Energy:

(1) Incorporate a set of education policies within its draft document covering all stages of education: schools K to 12, VET, tertiary and community programs

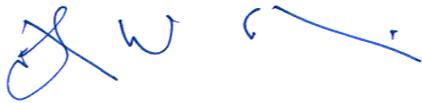
(2) Establish a council or liaison group to enable the access of current information on teaching developments in climate change and employ suitable learning strategies that will enhance the promotion of climate change mitigation to the Australian community

(3) Work with the Industry Reference Committees and Skills Service Organisations, who coordinate reviews of the VET national training packages under the Australian Quality Framework (AQF), to ensure that CORE topics (not just electives) are in each training package that support federal climate change policies

(4) Work more closely with other government departments, commonwealth, local and state, in implementing climate change policies

(5) Work more closely with local government in developing partnerships in common programs and projects

(6) Work with the Commonwealth Government to review emission targets and embark on a long term campaign to educate the community on the importance of mitigating climate change and to plan for some inevitable changes in the future.

A handwritten signature in blue ink, consisting of a stylized initial 'J' followed by 'W' and a long horizontal line ending in a small 'r'.

For the NSW Chapter of the Australian Association for Environmental Education