

## **Submission**

# **2017 REVIEW OF CLIMATE CHANGE POLICIES DISCUSSION PAPERS**

**Submitted by: The Australian Association  
for Environmental Education Inc.**

### **Introduction**

This submission is made by the executive of the National professional association whose key mission is to:

*Connect through education to advance understandings and actions in relation to environmental and sustainability issues across communities and sectors*

The Australian Association for Environmental Education (AAEE) sees climate change as the most significant sustainability challenge of our time and consequently sees these policies, programs and frameworks as a positive contribution.

However, the current set of the Australian Government's Climate Change policies is not maximizing their potential or effectiveness as they consistently lack an educational, community engagement and behaviour change dimension.

Our organisation and members

- Understand that climate change is real and occurring now
- Want to see effective government policy in this area
- Are seeking to include climate change in their education, engagement and behaviour change programs

On this last point AAEE states that the Australian Government's Review of Climate Change Policies documents lacks strong and significant policy direction to help people, organisations and the community to fully understand the need and urgency of action, identify points of entry for all Australians to participate in actions. An example of this being a 'halving of per capita emissions' is explicitly identified in the introduction to the document. However, the policy matrix presented, except for 'Households, small to medium size business and the built environment' exclude specific community and individual emissions reductions behaviours and climate change understanding. This is a significant lost opportunity.

In summary, the policies framework:

- Needs an education and engagement focus, including explicit reference to Climate Change education through the Australian Curriculum and sustainability skills through trades and training institutes
- Needs to include specific community engagement messaging for behaviour change approaches that are specific for the various policies and actions

- Has a strong focus on industry and technology and regulatory frameworks, however ignores the other levers the government has including community engagement, consumer knowledge and individuals' purchasing power
- Needs to include strategies that provide multiple points of entry for households, local government, community organisations, SME's to understand and take action at personal, household, community and organisational levels to participate in learning, behaviour change and capacity building
- Must include specific integration and explanation of relationship of commonwealth and state/territory policies and actions. This will create greater clarity and understanding of the complementarity of policy settings.
- Targeted and specific climate change education and behavioral response materials needs to be developed for the Australian context. An example of the style of materials includes the UNESCO Bangkok Asia and Pacific Regional Bureau for Education<sup>1</sup>

## **Comments in detail and responses to Discussion paper questions.**

### **Australia's Paris target**

AAEE response to Questions

- A clear science evidence and risk management approach needs to be the foundation of Australia's commitment to long term emissions reductions
- Long term emissions goals need to be communicated in a range of ways to appeal to the understanding and engagement of more people in the community, including clear multi-modal communications on achievements of targets.
- Reporting on progress emissions reductions needs to be in formats that allows community wide understanding of the reductions, implications and

### **Electricity Generation**

AAEE response to Questions

### **Households, small to medium-sized enterprises and the built environment**

AAEE response to Questions

### **Resources, manufacturing and waste**

AAEE response to Questions

### **Transport**

AAEE response to Questions

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<sup>1</sup> Education sector responses to Climate Change <http://unesdoc.unesco.org/images/0021/002153/215305e.pdf>

## Land and Agriculture

AAEE response to Questions

Questions

## Research, development, innovation and technology

AAEE response to Questions

- have a couple of brief and not highly substantial comments
  - \* in the community ed section, more could be made of the role of Local Government activity to mitigate CC and the place of education in this. The policy discussion paper almost forgets LG and this in itself is a real oversight - plus the failure to get that lots of LG Climate Change mitigation is Education based [and more should be]
  - \* I like the summary at the end. Maybe word with a little more punch
  - \* Perhaps one or two more recommendations could be added to show a path forward - eg LG, Community activity etc
  - \* Some Formatting - Spell out all acronyms first time used. Maybe put recommendations in italics and number them. Just a general edit as you say Syd

Education professionals and university

Community Groups

Formal Schooling

The Curriculum

Vocational Education

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

To assist in understanding this submission we wish to introduce ourselves. AAEE NSW is a key chapter in 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.

Environmental Educators work in government agencies, schools, businesses and community organisations. AAEE helps them 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 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 skill sharing.

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

The Australian Association for Environmental Education congratulates your officers 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 is also commendable. Unfortunately the draft takes as its start point the Paris target with Australia's offering of a 26 to 28 percent reduction in emissions.

Well might we all be embarrassed (or worse) by this ridiculously low target. The majority of educators and many other groups believe that a 60 percent 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 by 2046 is achievable and economically, environmentally and socially responsible for Australia. To meet Australia's commitment under the Paris Agreement and achieve the goal of net zero greenhouse gas emissions in the second half of the century will require increased ambition and targets.

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 such understanding provides an opportunity to create a more just and sustainable world. **This is where education comes in and which is the major omission from these policies.**

In addressing a number of other important issues relating to the department's policies AAEE wishes to address this major omission from the draft, namely the **ignoring of the role and importance of education at all levels.**

## **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 will affect the achievement of climate change outcomes. Climate sceptics, friends of the fossil fuel industry and media personalities often have alternative viewpoints and understandings, but largely, the empirical evidence shows the effects of a changing climate on economies, environments and societies as an important topic of study. This alternative campaign to confuse the population, advocate unscientific opinions and slow down progress in achieving a more sustainable future has the potential to thwart the best of the department'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 we still have a number of our politicians and community leaders holding alternative sceptical views, (as we do now). Without an interrelated, collaborative education policy in partnership with other government and non-government groups to support the current draft policies these will be a difficult goals to achieve or, at least, take longer to reach. It is most disappointing that this department is

attempting to achieve climate change outcomes when some members of the government and parliament are outspoken sceptics and serve as antagonistic speakers on the very existence of climate change. Again education and sensible debate is a necessity to tackle this issue.

This submission will outline current areas of Climate Change endorsed by all levels of Australian education departments, not presented solely as academic information in itself, but as useful data for the department to adopt and include in its 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 and other communication techniques are equally important and need to be considered as one of the policies.

**In essence AAEE NSW 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 various state education departments to gain their understanding of climate change in schools, colleges, TAFE and universities. Moreover it is recommended that the Department of Environment and Energy work with these partners to develop community programs nationally in support of climate change education and become the centre for briefing them at regular intervals on current research in the climate change area.**

It is regrettable that such a 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 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 engagement perspective and it shows.

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

## **EDUCATION THE MAJOR OMISSION**

As indicated in the General section above the lack of an education policy or set of education policies is an unfortunate omission from the DEE's draft policies document. AAEE NSW therefore provides a summary of major education trends relating to climate change covered 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 existing Australia wide. In being more conversant to what is occurring among community groups and formal education institutions, the DEE will be in a better position to understand the level and diversity of activities occurring Australia wide and appreciating the priorities adopted by most education groups. It is important that education groups and the department 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 communication position to advise them of current research developments. This would become a two way communication system.
- The knowledge, values and skills adopted by education groups in relation to climate change education could have relevance and influence how the DEE implements its policies. An exchange of ideas could 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.

### **Community Groups**

The Department of Environment and Energy should be aware of the current state of climate change programs already existing in the country. 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.

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 the department should work with.

## Formal Schooling

### The Curriculum

There is no separate study or subject known as Climate Change in the Australian Curriculum. Alternatively, 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 with a plethora of associated 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 one of 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.

### 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 including 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 more than one department 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 NSW 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 Adv 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 NSW government meet the 2050 goals. TAFE NSW can engage with industry through our Skills Points contact to develop the curriculum changes.

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.

The NSW government needs 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 which won the China solar decathlon in 2013. Other examples include improving waste management and recycling.

## SUMMARY

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

- Incorporates a set of education policies within its draft document covering all stages of education: schools K to 12, VET, Tertiary and community programs
- Establishes a council or liaison group to access current information on teaching developments involving climate change and employ those learning strategies that will enhance the promotion of climate change mitigation to the Australian community
- Gives serious consideration to the recommendations relating to courses envisaged by TAFE
- Gives serious consideration to and influence government on the amended emission targets as proposed in this submission.
- Works more closely with other government departments, commonwealth and state, in implementing climate change policies

Signed



Mark Caddey, President, AAEE

Date 21 / 04 / 2017