

**Submission:
A Medical Opinion
on the
RET Issues Paper**

Submission from
Doctors for the Environment Australia Inc.
David Shearman, Hon Secretary
5 Fitzgerald Road PASADENA SA 5042
Phone: 0422 974 857
Email: admin@dea.org.au
<http://www.dea.org.au>



The following are members of our Scientific Committee and support the work of
Doctors for the Environment Australia

Prof. Stephen Boyden AM; Prof. Peter Doherty AC; Prof. Bob Douglas AO; Prof. Michael Kidd AM;
Prof. David de Kretser AC; Prof. Stephen Leeder AO; Prof. Ian Lowe AO; Prof. Robyn McDermott;
Prof. Tony McMichael AO; Prof. Peter Newman; Prof. Emeritus Sir Gustav Nossal AC; Prof. Hugh Possingham;
Prof. Lawrie Powell AC; Prof. Fiona Stanley AC; Dr Rosemary Stanton OAM; Dr Norman Swan;
Professor David Yencken AO

Summary

There is an overwhelming medical case for making the 2020, 20% Renewable Energy Target (RET) mandatory and strategies for increasing the target should be deployed as soon as possible.

The use of fossil fuels for energy production is harmful to health both within Australia and internationally.

There is no evidence of health harm from renewable energy sources that depend on wind, wave and sun. The replacement of fossil fuels with these modalities should be regarded as a key preventative health strategy.

A more rapid increase in renewable energy deployment is essential in fulfilling Australia's commitment to green house emission abatement and in holding world temperature rise to less than 2 degrees.

Doctors for the Environment Australia (DEA) is a national, independent, self funded, non-government, public health organisation.

Public health today embraces both national and international health imperatives because these are closely linked.

We note that the purpose of the 2020 target as enunciated by the Clean energy regulator, the RET is to:

- Encourage the additional generation of electricity from renewable sources
- Reduce greenhouse gases in the electricity sector and
- Ensure that renewable energy sources are ecologically sustainable

Doctors for the Environment Australia asserts that the emphasis in this review should not be solely on confirming the 20% target but on the fact that the government plan was designed to deliver **at least** 20% by 2020.

Doctors for the Environment Australia believes that the Issues Paper should have reminded the community of the fundamental reasons why the RET is so important. The issue is too frequently lost in the views of

electricity providers with conflicts of interest, and those of some politicians and governments struggling with their conflict between the scientific facts and their ideological stance. The government needs to be up front with their message that this is an issue of human health and wellbeing.

Climate Change is a Health Issue

We believe that where human health is concerned it is our duty to call a spade a spade. The RET addresses the reduction of greenhouse gases needed to reduce the severity of climate change, and climate impacts on human health.

In May 2009 the leading medical journal The Lancet described climate change as the biggest global health threat of the 21st century, a view substantiated by the World Health Organisation (WHO), and subscribed to by all doctors who take the time to review the scientific evidence; it has not been challenged by any medical authority.

The Issues Paper is disappointing. Search for the topic "health" in this 54 page document and the only finding is the reference to the National Health and Medical Research Council (NHMRC) investigation of the impact of wind farms on human health! A thorough review of the peer reviewed literature by DEA had not revealed any adverse health impacts for wind energy but we would support a review if any emerge.

The mention of the NHMRC review might have been acceptable had the NHMRC been asked to collate the national impact on the health aspects of burning fossil fuels which the medical literature documents as costing billions of health dollars within Australia and hundreds of thousands of deaths internationally.

WHO estimates that deaths due to climate change are rising rapidly. It is possible to quantify the number of deaths caused by each increase in greenhouse emissions. Australia as the world's greatest greenhouse emitter per capita is responsible for a proportion of these. Deaths, illness and injuries are also occurring in Australia due to the intensity of fire, flood and heat waves.

Professor Tony McMichael, a member of our Scientific Advisory Committee and former advisor to WHO has reviewed the health impacts of climate change at Chatham House www.chathamhouse.org/publications/papers/view/180439 and we urge all Ministers to spare the time to read this review before making any decisions.

The best available, yet conservative, estimate of the annual number of deaths, globally, occurring because of the small amount of human-induced climate change to date is about 300,000-400,000. Most are children, in poorer countries, the result of climate-amplified malnutrition, diarrhoeal disease, malaria and flooding. However these figures were estimated before the climate season of 2010-2011 when there was unprecedented flooding in several continents and huge loss of life; it is likely the next estimate will have doubled. Illness, displacement and conflict can be added to this scenario of human misery.

DEA's view is that Australia, as perhaps the world's most wealthy country, has a responsibility to offer leadership on this issue. To use an excuse of waiting for others to respond is morally unacceptable and indeed wrong, for many are responding according to their ability. There are countries smaller than Australia with far fewer resources which are making much greater responses than we are.

Renewable energy is a public health measure

Leadership on addressing climate change involves an urgent increase in the use of renewable energy to replace greenhouse producing fossil fuels. The co-benefits of doing this are a reduction in the huge health costs from cardio-respiratory disease caused by using fossil fuels for our energy needs. The renewable energy sources wind wave and solar, have not been shown scientifically to have any health impacts.

The health impacts of coal are reviewed by DEA at, www.dea.org.au/images/general/Briefing_paper_on_coal_2011.pdf
And, the potential health impacts of unconventional gas at www.dea.org.au/images/general/Gas_and_Health_Report_01-2012.pdf

There is scientific concern that control of emissions needs to be sufficient to bring about a peak in world emissions within the next decade and probably before 2020 if a world temperature increase well in excess of 2°C is to be avoided. We subscribe to this view.

Decisions need to be predicated in the light of recognition that the existing 2050 target under the Act of "at least 60% to an amount equal to or less than 40% of 1990 levels" is inadequate, for the science tells us that to remain within a 2°C rise in world temperature we need a 90% reduction in total emissions by 2050 and a greater reduction if we delay.

In Nature 2009 Meinshausen *et al* found that only about a third of economically recoverable oil, gas and coal reserves can be burned if global warming of 2°C is to be avoided by 2100, an amount of fossil fuel that would be burned by 2029 if consumption remains at today's levels.

The most equitable global formula for the apportionment of the "allowable" 1,000 billion tonnes of CO₂ would require Australians to reduce their average current emissions of 19 tonnes per capita to 3 tonnes per capita per annum in order to be able to resist temperature rise above 2°C and this reduction must be done rapidly hence the need for an increased RET for 2020.

It is not within the scope of our expertise to say how this reduction should be achieved, that is up to Government. However we draw attention to the evidence that a much greater contribution to renewable energy could be achieved as shown by the efforts of the SA Government already sourcing more than 20% of its energy through wind.

Nor is it within our expertise to debate the economic arguments; suffice it to say all current debate ignores the economic reality of externalities (including health) from fossil fuel usage; these externalities make fossil fuels expensive under any rational accounting system. It is also obvious to us that Australia is behind its competitors in rolling out renewable energy and this will place us at considerable economic disadvantage in the future, particularly in those States currently choosing to reduce their commitment to renewable energy.

Conclusion

The medical case for rapidly expanding the RET to greater than 20% is overwhelming. The present situation is one of making the medical diagnosis and taking no action. It is as unacceptable to Doctors for the Environment Australia as taking no action over smoking- where the government has advanced with commendable courage. Indeed the unconscionable statements of some energy providers which encourage a flexible target remind us of the activities of the tobacco industry and should be ignored.

Therefore it is essential to avoid disincentive by varying the target; rather the 20% target should be mandatory and there should be incentives to increase it further.

David Shearman PhD FRCPE, FRACP
for Doctors for the Environment Australia Inc.