

Submission to the Victorian Government on Coal Policy

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67 Payneham Road
College Park SA 5069
P 0422 974 857
E admin@dea.org.au
W www.dea.org.au

Healthy planet, healthy people.

DEA Scientific Committee

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Prof Stephen Leeder AO
Prof Lidia Morawska
Prof Hugh Possingham
Dr Rosemary Stanton OAM

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Summary

Doctors for the Environment Australia (DEA) welcomes the opportunity to contribute to the consultation process of the imminent Victorian Government coal policy. DEA has made many submissions to government Inquiries centred on the health impacts of our environment and the transition of Victoria to renewable energy, and has contributed to discussions within departments on policy development.

DEA is an independent voluntary organisation of medical doctors and students who are concerned by the adverse health effects of environmental damage, particularly global warming and climate change caused by greenhouse-gas emissions; hence our interest in the development of Victoria's coal policy.

A Victorian Coal Policy is important

Significant global warming has already occurred and Australia's average temperature has already risen by 0.9°C since 1920¹. Global temperatures are on track to rise 1-2°C by 2050 and 3-4° C by 2100. Rapid rises of 4°C or more have not been experienced for 10-20 million years and the upper ranges of 'business as usual' scenarios are most likely incompatible with human habitation. There is therefore, an urgency for swift mitigation strategies across all levels of society, as it is undisputed that our current global warming trajectory will have profound impacts on present health and lifestyle standards. To avoid such run-away warming, calculations reveal that Australia must keep 80% of all known coal reserves in the ground for the time-being.²

Victoria has a significant coal industry for electricity generation; hence a Victorian policy on coal is vitally important at this critical time of required rapid greenhouse gas emission reductions and energy source transition. Victoria's transition plans cannot be reliant on either Federal policies or those of other states.

While Victoria has committed to renewable energy targets of 25% by 2020 and 40% by 2025, and net zero carbon emissions by 2050, no interim emission targets have yet been announced. As detailed below, it is essential to move towards emission reductions as soon as possible.

<http://www.delwp.vic.gov.au/environment-and-wildlife/climate-change>.

Most of Victoria's coal is used for electricity generation which is our overwhelming source of greenhouse gas emissions, hence this submission will concentrate on the urgent need to progressively decommission these generators if we are to protect both global and local health.

Recommendations

1. The Victorian Government facilitate the necessary processes to ensure the immediate closure of Hazelwood power station.
2. Victoria develop a comprehensive longer-term plan for the closure of all of the Latrobe Valley coal-fired power stations within the next decade. This needs to include the simultaneous development of strong, practical plans for a transition to renewable energy sources within Australia's south eastern power grid, and future employment and economic initiatives for the Latrobe Valley.

Inclusions of these recommendations in Victoria's coal policy are necessary as:

a) Victoria's carbon emissions are very high

Australia has one of the most carbon intensive and polluting electricity supplies in the world, with around 80% of electricity generation coming from coal.³

Overall, the electricity sector contributes about 35% of our national greenhouse gas emissions.⁴

Victoria is responsible for approximately 22.5% of these emissions⁵ and has amongst the highest greenhouse gas emissions per capita globally, estimated at 22.2 tonnes of CO₂ per person in 2009.⁶

Victoria's electricity production is mainly in the Latrobe Valley from four highly carbon-emitting and polluting generators. (These generators also use vast quantities of potentially potable water). Hazelwood power station is regarded as the most carbon-intense generator in the developed world. According to the Australian Energy Market Operator, Victoria can reduce its reliance on coal-fired power over the next decade provided there is support from other resources.⁷ As Victoria is committed to its progressive renewable energy target, decommissioning Hazelwood would lead to significant reductions in Victoria's greenhouse gas emissions without threatening power supply.

b) Health risks from our coal industry

Climate change is considered the "greatest global health threat of the 21st Century". The coal industry both globally and locally contributes disproportionately to this health threat. Furthermore on a local level every stage in the production of electricity from coal has the potential to threaten health. In particular coal-fired power stations emit a host of potentially toxic chemical substances including particulates, sulphur dioxide, oxides of nitrogen, and mercury - all of which have profound adverse health effects.⁸

The resultant health costs from coal fired power stations produce a significant economic burden. Air pollution from coal contributes to four of the five leading causes of death in western society: lung cancer, respiratory diseases, stroke and heart disease. Even short exposures to particulate matter (a few hours to weeks) can trigger cardiovascular deaths and illness, while longer term exposure (over a few years) greatly increases the risk for cardiovascular mortality and reduces life expectancy by several months to a few years.⁹

The air pollution health cost of coal burning in Australia is estimated at \$2.6 billion annually.¹⁰

For Hazelwood alone, externalities of health and social costs have been recently calculated to amount to AUD\$900 million per year.¹¹

Therefore reducing green-house gas emissions from coal fired power plants will also lead to significant, immediate, local community health and public health cost benefits.¹²

c) Victoria should take the lead in our energy transition

Australia's federal government has been unable to move effectively to reduce emissions for decades due to conflicting political viewpoints. Australia is not alone with this problem and other sub-national states throughout the world such as California have made considerable progress in reducing emissions while retaining economic growth.¹³

Throughout the world there are more than twenty countries, including USA and the UK, which have more progressive emission reduction policies than Australia and yet have maintained a growth in GDP.¹⁴

Hence Victoria should look to the future and set the state on a path where economic and social benefits from new industries and technology can be gained - acting as a pace-setter for other Australian states in our necessary energy transition.

d) Other economic considerations

Sustainable forms of energy production can be cheaper than coal-fired power when all the subsidies and externalities (including health-care costs) are taken into account.¹⁵

A study of the Hazelwood power station found that if all externalities were taken into account, the true cost of coal-fired electricity from Hazelwood was \$87/MWh. This was almost triple the wholesale price of electricity in Victoria for that period of \$30/MWh. Therefore it was estimated Hazelwood power station imposes an external economic cost on Australians in the order of \$90million per year.¹⁶ A USA study found that if all the externalities of coal were taken into account, electricity prices in the USA would have to be doubled to offset the costs.¹⁷

The generation costs of renewable energy sources is expected to continue to decrease, with solar generation soon expected to be on a par with coal, and that from wind generation already being cheaper.¹⁸

When comparing the costs of our energy production, it is important to include externality costs beholden on communities, the environment and healthcare facilities as well as tax payer funded subsidies for a true analysis.

e) Renewable energy and emissions pathway

At the Victorian government's announcement on 9th June 2016 of anticipated changes to the Climate Change Act 2010, a commitment was made to reach net zero emissions by 2050. Importantly the Victorian Government plans to develop towards the end of 2016 a commitment to immediate action through an interim target to reduce emissions leading up to 2020, rather than delay until post-2020 as suggested in the Review. DEA commends the government for their plan as we have been strongly arguing for more immediate targets than the Review had suggested.¹⁹

Considering the high carbon emissions from electricity generation as outlined earlier, it would clearly not be possible to achieve any useful target without reducing the burning of coal in the Latrobe Valley in the near future. Victoria should adopt its own emissions reduction pathway even in the unlikely event that the federal government shows an inclination to legislate for reduced emissions throughout Australia. If there is a change of direction, it would almost certainly be too tardy and too little to have any meaningful outcome. In addition, it is important to provide clear goals for industry and business, with targets that are clear and unwavering and not subject to the vicissitudes of the federal government.

Over the last decade, there has been much discussion between state and federal governments and the owners of the Latrobe valley generators, with owners at times having expressed a willingness to consider closure.²⁰

Recently, the CEO of the parent company, Engie, which has a major share in Hazelwood indicated they were "studying all possible scenarios including closure.....".²¹

We assume therefore that the current Victorian government has conducted discussions with Engie in an effort to find a solution which will allow Victoria to commence a shift away from coal-mining and burning to enable its zero net emissions target by 2050 to become reality. Bearing in mind the delays inherent in decisions of this nature, we urge the government to pursue discussions vigorously so that strong emission reduction targets can be met.

Conclusion

An effective coal policy for Victoria should be centred on the planned closure of the Latrobe Valley coal-fired electricity generators, starting with Hazelwood in the near future and extending to the others, with the concurrent increase of energy from renewable energy sources.

Decommissioning our coal fired electricity generators will lead to vast benefits in health both regionally from reduced pollution and globally from reduced carbon emissions as well as tax payer funded externality costs. Not only will Victorians benefit, but the example set might assist other Australian states and subnational states to transform their carbon economies.

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