

**Submission
No 104**

SUSTAINABILITY OF ENERGY SUPPLY AND RESOURCES IN NSW

Organisation: Blue Mountains Conservation Society

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Nature Conservation Saves for Tomorrow

Submission by BMCS to Lower House Enquiry

“Sustainability of energy supply and resources in NSW”

11-Sep-2019

Introduction

Blue Mountains Conservation Society (The Society) is a community organisation working to achieve the preservation and regeneration of the natural environment of the Greater Blue Mountains. We believe that the World Heritage status of the Greater Blue Mountains provides an opportunity for local community members to become custodians of the unique biodiversity and scenery of this region.

The Society has more than 850 members. The management committee of the Society consists entirely of volunteers and the Society generally operates through membership contributions, donations and the sale of native plants at market stalls.

The Society seeks to address the majority of the terms of reference of the Lower House Committee's Enquiry. We particularly emphasise proposed tourist infrastructure in the Lithgow area as an example of what the Enquiry is addressing.

Our Society would welcome the chance to further engage with the Committee on the relevant topics.

The capacity and economic opportunities of renewable energy.

The Society understands that the amount of renewable energy in the Australian electricity grid has now surpassed 20%, but that NSW lags behind. We have seen discussion of a potential target of 200% renewable energy for Australia (with the surplus exported). We support these ambitious targets and believe that NSW should be at the forefront of efforts to build renewable energy infrastructure. The advantages of being an economy powered by energy from sun and wind, with massively reduced fuel imports, are many and varied. The replacement of coal-burning and gas burning power stations around the country will have many positive impacts:

- We can stop tearing up the landscape to extract oil, gas, coal and coal seam gas
- We can save huge volumes of water currently evaporated into the air by thermal power stations
- We can stop polluting the atmosphere with CO₂, sulphur dioxide and fine particulates
- We can stop building and burying toxic fly ash dams
- We can be exporting electricity to neighbours by undersea cable, and exporting green hydrogen to the world by ship.

The electrification of transport running on this renewable grid will reduce air pollution from the current internal combustion fleet and reduce import of transport fuels.

Australia should be building renewable energy projects in a sustained and organised way to take us to 100% renewables by 2030, and continue on to 200% or more for export by cable and hydrogen. NSW has abundant opportunities for building renewable energy generation, particularly large-scale solar, west of the Newell Highway where sunny days are frequent.

Emerging trends in energy supply and exports, including investment and other financial arrangements.

The cost of renewable energy infrastructure has plummeted in recent years. Along with the Renewable Energy Target this has led to a significant rollout of wind farms, rooftop solar and large-scale solar arrays. Sites for such infrastructure are in no way exhausted. The potential for large-scale solar farms west of the Newell Highway is also enormous.

While export of excess Renewable electricity by undersea cable is unlikely in NSW, we certainly see potential for export of liquefied green hydrogen produced using renewable electricity.

The coal-burning power station fleet will age and be de-commissioned over time. All new generation built will be renewables. Even with new storage required, firming renewable generation is cheaper than building thermal power stations.

To quote the former Prime Minister Malcolm Turnbull:

The bottom line is renewables + storage are cheaper than new coal let alone the loopy current fad of nuclear power.

Effects on regional communities, water security, the environment and public health.

The effects of coal-powered electricity are of great concern to us here in the Blue Mountains. On the western escarpment around Lithgow, millions of tonnes of thermal coal is mined annually, with huge environmental impacts, including:

- Destruction of natural landscapes for open-cut coal mining
- Cracking of landscapes by underground long-wall coal mining
- Subsequent draining of water tables
- Death of upland swamps as water tables collapse
- Extraction of large quantities of deep aquifer water to enable underground coal mining
- Pollution of local waterways (including Sydney's drinking water) with salts and metals in extracted water
- Evaporation of precious drinking water in cooling towers at Mount Piper power station
- Production of air pollutants at Mount Piper, including CO₂
- Output of toxic fly ash into local ponds, which need to be buried and made safe for centuries
- Distribution of particulates from uncovered coal wagons used for export from the area by rail

All of these impacts will be reduced or eliminated once thermal coal mining ceases in the Lithgow area.

Opportunities to support sustainable economic development in regional and other communities likely to be affected by changing energy and resource markets.

The Blue Mountains Conservation Society has a geographical area of interest that includes (inter alia) all of the Blue Mountains Local Government Area and substantial sections of the Hawkesbury, Greater Lithgow and Wollondilly Local Government Areas.

It is in the Greater Lithgow and Wollondilly LGAs that coal mining has been significant in recent decades and most so in Greater Lithgow (population 20,190 at the 2016 census). The Society has engaged with various entities interested in the environmental and economic sustainability of the LGA in the context of declining direct and indirect employment attributable to coal mining and the coal fired generation of electricity.

Greater Lithgow's potential for sustainable communities

As well as a long association with coal mining and related industries, Lithgow has highly diverse opportunities for small businesses, retirees, people with limited or highly specific income earning potential and for those visiting for tourism or other purposes. The presence of environmentally interesting and scientifically valuable natural areas in the LGA greatly contributes to these opportunities.

Greater Lithgow is connected to various other NSW communities by corridors that provide for long distance motoring, walking or cycling tours. It has multiple daily train services to Sydney via the Blue Mountains and several daily train and coach services to Bathurst and Mudgee.

The corridors (including the alignment of Australia's first inland road, "Coxs Road") that connect to Bathurst and the historic goldfields of the Central West arouse a high level of environmental and historical interest. The corridors between Lithgow and "Capital Country" (Canberra/Goulburn/Taralga/Crookwell) include limestone caves at Jenolan, Wombeyan and Abercrombie as well as spectacular gorges and are extremely rewarding for the tourist. The "Blue Trail" articles being assembled on the "Simply Australia" website (<http://www.simplyaustralia.net/>) provide much information about these corridors. The corridor to the wine growing region of Mudgee is also popular and it partly traverses the "Gardens of Stone", possibly Greater Lithgow's most valuable future tourist asset.

Lithgow is a photographer's paradise for anyone wanting to capture landscapes or townscapes.

Destination Pagoda

(<https://www.bluemountains.org.au/gos2/proposal.shtml> is the link for more detailed information)

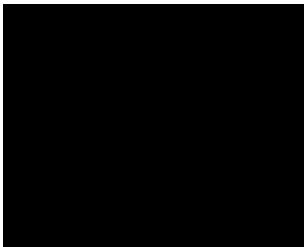
"Dramatically coloured escarpments and headlands, slot canyons, cave overhangs, ancient sand dunes and complex arrays of internationally significant rock turrets known as pagodas." This is a description of the Gardens of Stone region where the Society and others are proposing a new State Conservation Area along with a program of low-key tourist infrastructure to aid the Greater Lithgow Region's transition to an economy less dependent on coal mining.

Note that designated State Conservation Areas allow for underground mining while protecting areas of conservation value through National Parks and Wildlife legislation.

The multi-organisation project to aid the transition has been branded "Destination Pagoda". Prospects for success may be enhanced by the potential for ongoing consensus between conservationists and mining entities regarding the level of environmental regulation of existing coal mines during their remaining economic life. The Society is teaming with Colong Foundation for Wilderness and Lithgow Environment Group among others to promote Destination Pagoda.

This region has impressive credentials to be declared a State Conservation Area, including the presence of 1000 plants and 319 vertebrate species including 42 threatened plant and 42 threatened fauna species. There are 33 identified ecological communities including 15 rare and threatened communities.

Destination Pagoda is an excellent example of the kind of project that deserves government support to assist communities affected by trends in energy supply.



Ross Coster
Membership Secretary
on behalf of the Management Committee
Blue Mountains Conservation Society