

Open Letter to Prime Minister Scott Morrison and Premier Gladys Berejiklian
24 March 2020

The Hon Scott Morrison MP
Prime Minister
Parliament House
Canberra

The Hon Gladys Berejiklian MP
Premier of NSW
Parliament House
Sydney

Expensive, damaging and unnecessary
Snowy 2.0 must be publicly reviewed before proceeding

Dear Prime Minister Morrison and Premier Berejiklian,

We hesitate to divert your attention away from the unparalleled challenges facing our nation from the escalating coronavirus pandemic. But we are very concerned about the merits of the Snowy 2.0 pumped hydro storage project and the possibility of it proceeding without independently validated justification.

We appeal to you both to commission a comprehensive public review of Snowy 2.0 and alternative energy management options before the Commonwealth Government considers its final approval for the project and the NSW Government completes its assessment of the Environmental Impact Statement.

We request that the review be undertaken by the Productivity Commission, and/or Infrastructure Australia, and/or the Commonwealth Chief Scientist and NSW Chief Scientist & Engineer, and include independent experts of international standing.

When the Snowy 2.0 pumped hydro storage project was announced in March 2017, energy industry experts were sceptical about its merits. That scepticism has consolidated as information has emerged. It is now evident that Snowy 2.0 will cost many times its initial estimate, not deliver its claimed benefits and permanently damage Kosciuszko National Park to an unprecedented extent.

In particular, Snowy 2.0 will:

- lose around 40% of the remote source energy that is ultimately delivered to consumers after transmission and pumping/generation cycle losses are taken into account. Snowy 2.0's losses are more than other pumped storage schemes due to its distance between reservoirs (27km) being far longer than any scheme in the world, and its remoteness from load centres and source generators. Also, its losses are far greater than other energy storage options, such as batteries connected to rooftop solar panels (~10%) or controlled demand response (zero loss).
- require substantial transmission works to connect to the grid, costing billions of dollars. The best location for energy storage is at or near major load centres (e.g. Sydney or Melbourne), not 500km away, in order to minimise transmission upgrades, energy losses and constraints.
- store electricity from coal-fired power stations, not renewable generators, well into the 2030's.
- lead to more, not less, greenhouse gas emissions. Over 50 million tonnes of CO₂e will be incurred during construction and the first 10 years of operation (applying Snowy 2.0's pumping projections). Such additional emissions counter NSW's net zero target and bring an associated cost to the Australian economy of over \$100m per annum.
- be largely unused until 2030 – as confirmed by recent AEMO projections and evidenced by the historically low use of the pumped storage component of Tumut 3 station.
- rarely have the claimed 350GWh of storage capacity; taking 3+ months to recharge from empty.

- cost at least 500% more than its initial \$2 billion estimate. A \$5.1bn contract has been awarded for part of the project, with further costs to be added (other works, financing, transmission, contingencies etc). Snowy 2.0's increasing costs and scheduling (initially to be completed by 2021, now 2025) give little confidence of no further increases, particularly with the poor record for delivery of infrastructure projects in Australia.
- cost more than its market benefit of \$4.4 - \$6.8bn (as estimated by Snowy Hydro, though likely to be optimistic), bringing into doubt its financial viability and value to the community.
- increase, not decrease, average electricity prices (according to Snowy Hydro modelling).
- convert extensive areas of Kosciuszko National Park into construction sites (for 8 years), with permanent negative impacts over thousands of hectares of the Park and beyond, including:
 - 14 million cubic metres of excavated spoil dumped in the Park, on land and in Snowy 2.0's reservoirs – with some contaminated by naturally-occurring-asbestos and potentially-acid-forming rock
 - two double-circuit 330kV transmission lines, running 10km through the Park in a 120m-wide easement
 - depressed water tables and stream flows above sections of the tunnel
 - over 100km of new or upgraded roads and tracks
 - destruction of 1,000 hectares of habitat for 14 threatened species
 - spread of pest fish, diseases and weeds throughout the Snowy Scheme and downstream rivers, devastating the aquatic environment and recreational fishing, and probably driving an entire species, the Stocky Galaxias, to extinction. Snowy Hydro have applied for an exemption from the NSW Biosecurity Act to avoid prosecution for such illegal actions.
 - a legacy of infrastructure and landscape scars across 30km of the Australian Alps
 - compounding the recent bushfire damage to the National Park and countering its recovery

Snowy 2.0 is not as it has been publicly portrayed. There are many alternatives that are more efficient, cheaper, quicker to construct, and incur less emissions and environmental impacts – e.g. other pumped hydro, potentially even within the Snowy Scheme, batteries (especially longer duration and electric vehicles), controlled demand response, renewable hydrogen (within a decade or so).

Snowy 2.0 should not proceed on the basis of overstated claims that have never been tested. At stake are billions of dollars of Australian taxpayers' money, tens of millions of tonnes of greenhouse gas emissions and thousands of hectares of Kosciuszko National Park.

We consider an independent review to be essential, so that Snowy 2.0's claims can be publicly and transparently tested.

Yours sincerely,

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Bruce Donald AM LLM(Harv)	Media and environment lawyer; former Partner, Allens; General Counsel ABC; Chair Environmental Defenders Office; Australian Heritage Commissioner
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Peter Graham DipBus, PMD(Harv), MAICD	former Chief Executive Officer, Pacific Power; Chief Operating Officer, Fairfax Media; Chief Operating Officer, University of NSW
John Hancox	former Chief Executive Officer, Clyde Engineering Division, Clyde Industries Limited
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Dr Gavan McDonell DEng, PhD, MA, BE, FTSE, FIEAust	former Sole Commissioner, NSW Enquiry into Electricity Generation Planning; Senior Banker, European Bank for Reconstruction and Development; Senior Economic Consultant, National Electricity Market; Adjunct Professor, University of NSW
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