

Submission to the Productivity Commission

Inquiry: Investing in Cheaper, Cleaner Energy and the Net Zero Transformation

Date: 09/09/2025

Introduction

I welcome the opportunity to comment on the Productivity Commission's Interim Report Investing in Cheaper, Cleaner Energy and the Net Zero Transformation. While I recognise the importance of reducing emissions, the current approach prioritises speed of rollout for wind farms, solar farms, transmission lines and battery storage with inadequate regard for the regional communities, prime agricultural land, and local environments that bear the impacts. This submission draws directly on lived experience in the Upper Lachlan Shire, specifically Woodhouselee and Crookwell, where multiple large-scale renewable energy projects and transmission corridors are concentrated.

1. Genuine Consultation, Not Box-Ticking

Consultation in Upper Lachlan has been limited to information sessions after key decisions were already made. Communities report being misled about turbine size increases, the number of turbines within 2 km, and the cumulative impact of multiple developments. Developers frequently treat engagement as a statutory hurdle, not a genuine two-way process. A reformed framework must mandate co-design with affected communities and ensure independent facilitation, not just developer-led sessions.

2. Environmental Protections at Risk

The interim report suggests amending the EPBC Act to consider the importance of projects to the clean energy transition. This risks weakening protections for biodiversity and water catchments in areas like Woodhouselee, which sit on granite and volcanic geology critical for aquifers. Native species, remnant woodlands, and rural landscapes are being eroded under 'offsets' that rarely deliver equivalent ecological value. Prime farmland is being fragmented by infrastructure corridors, undermining food security.

3. Cumulative Impacts Ignored

Current planning treats each project in isolation. At Woodhouselee, residents are exposed to Crookwell 2 and 3 wind farms (turbines within 1.5 km of dwellings), high-voltage transmission lines 2.4 km away, and proposed additional REZ corridors. The combined effect is not only visual and acoustic, but also measurable in low-frequency noise and vibration, through our own field recordings showing tonal peaks (~150 Hz) and night-time exceedances above 48.9 dB(A) LAeq, breaching the 35 dB(A) +5 dB penalty standard. These exposures are linked with reported health effects: dizziness, vertigo, ear pressure, and chronic sleep disturbance.

4. Fairness and Benefit-Sharing

Benefit-sharing schemes are developer-driven with little transparency. Local landholders under direct contracts receive payments, while neighbours who bear the health and amenity impacts often receive nothing. The Commission should recommend a statutory, transparent, community-wide benefit fund, co-designed with local councils and residents.

5. What Is Really Required

The Productivity Commission should recommend: Independent health and cumulative impact assessments; stronger community participation; protection of prime farmland and water; transparent benefit-sharing schemes; and accountability in planning, requiring disclosure of turbine changes and penalties for breaches.

6. International Expert Evidence

International experts have documented adverse impacts from wind farms. Professor Mariana Alves-Pereira (Portugal) has shown long-term exposure to low-frequency noise can affect cardiovascular and neurological systems. Robert Rand (USA) confirmed infrasound perceptible inside homes correlates with sleep disturbance. The German Federal Environment Agency has warned that dB(A)-only approaches underestimate impacts. The Danish EPA found measurable low-frequency noise in dwellings up to 1.5 km. Japan's NIES found turbine + transmission corridors can amplify resonance. Italian researchers (Bellut-Staack et al.) demonstrated biological mechanisms for dizziness and ear pressure.

Findings from the Virgo Observatory

The Virgo gravitational wave interferometer in Italy detected wind turbine infrasound interfering with its instruments from 20–30 km away. These were microseismic vibrations at blade-pass frequency propagating through the ground, strong enough to contaminate scientific data. If Virgo can measure turbine infrasound at such distances, it is not credible to dismiss resident reports at 1–3 km. This is independent, peer-reviewed, world-class confirmation of long-range infrasound propagation.

7. Outdated Guidelines vs Modern Turbines

SA 2009 Wind Farm Noise Guidelines remain in use though they were designed for 40–45 m, ~1–2 MW turbines. Today's turbines are 157 m tall, 3.6 MW. Despite this massive increase, the same framework is applied. SA2009 does not account for infrasound, cumulative impacts, or modern turbine scale. Real-world monitoring shows exceedances: my calibrated measurement showed 48.9 dB(A) LAeq, with tonal penalty 53.9 dB(A), well above 35 dB(A). Continuing to apply SA2009 is scientifically unsound and socially unjust.

Conclusion

Efficiency in the energy transition cannot be defined solely in economic terms. The real costs — to health, environment, agriculture, and regional communities — are being externalised onto those least able to bear them. The experience of Woodhouselee and Upper Lachlan shows that without robust protections, genuine engagement, and enforceable

benefit mechanisms, the transition will be inequitable and socially damaging. The Commission must ensure its final report reflects these realities.