

Dissenting Report

Decision to release an interim report

1.1 The scheduled reporting date of August 3 allows ample time for the committee to properly scrutinise the evidence and make considered recommendations.

1.2 It is clear that in releasing this interim report, the majority committee members have determined to use committee processes to influence political outcomes with the broader goal of undermining and destabilising Australia's wind energy industry.

1.3 Clearly, this is an unashamed attempt to manipulate Renewable Energy Target outcomes with the explicit goal of targeting the wind industry.

1.4 Labor Senators will respond to the specific recommendations contained within the majority report at the scheduled reporting time after all hearings have completed and there has been enough time to thoroughly scrutinise the evidence.

1.5 Broadly, however, we note that the management of development applications rests with state and territory governments under jurisdictional legislation and/or subordinate codes and guidelines.

1.6 Labor does not support overriding these jurisdictional frameworks by the Commonwealth to override to impose new or additional codes or guidelines.

1.7 Labor supports rigorous assessment and approval processes for all major developments, but we cannot support singling out the wind energy industry for additional, onerous requirements that are in no way based on the majority of expert advice and evidence about the impact of wind developments.

Inadequate terms of reference

1.8 Labor Senators would like to note that significant factors have been excluded from the committee's Terms of Reference, in favour of a number of claims about the negative impacts of wind energy that are unsubstantiated by the evidence. This is to the detriment of a full and proper consideration of important and relevant issues:

- There is no mention of the environmental benefits of wind energy, despite the fact that wind power reduces carbon dioxide emissions by millions of tonnes each year in Australia.
- No allowance is given for consideration of the significant benefits of wind energy to regional economies, where an individual wind farm can generate hundreds of jobs in construction and inject hundreds of millions of dollars into the local economy.
- No mention is made of the need to consider the comparative health, planning and environmental impacts of existing fossil-fuel powered energy sources. Labor believes that any serious consideration of wind energy must consider the role it might play in Australia's broader energy mix now and into the

future. This is especially important in light of AGL's recent statement¹ that 75% of Australia's existing thermal plant is already beyond its useful life.

No credible evidence of wind farm health impacts

1.9 Labor Senators note that most of the recommendations in the majority report are predicated on the implicit assumption that wind turbines cause health impacts. This is deeply concerning given the significant weight of evidence provided to the committee that there is no credible scientific evidence to support this proposition.

1.10 While the majority report recognises 'the importance of research that has a rigorous methodology, a level of independence and outcomes of which are peer reviewed²', it is perturbing that the same report ignores this very research in favour of the subjective testimony of individuals.

1.11 Labor recognises the importance of relying on high-quality research and the findings of peak medical and scientific bodies. Labor Senators note the committee has not been provided with evidence of any national acoustics body, national medical or scientific organisation or national health regulator in the world that holds the position that infrasound from wind farms is dangerous to human health.

1.12 25 reviews of the potential health impacts of wind farms have been completed globally in the past decade³. Not one of these reviews found credible evidence of a causal link between wind turbines and human health.

1.13 Health Canada, in conjunction with Statistics Canada, has undertaken a \$2.1 million epidemiological study into the potential health impacts of sound from wind turbines. This comprehensive, large-scale study included over 1200 residences, a peer-reviewed methodology, medical and acoustics expertise, self-reporting and objective health data including hair cortisol, blood pressure and heart rates and more than 4000 hours of acoustic data⁴. This study found no connection between wind farms and self-reported sleep problems, illnesses, perceived stress or quality of life. It did, however recognise a link with annoyance at increasing noise levels⁵. However, it should be noted that some of the residences in the study were located much closer to wind turbines than would be permitted in Australia.

-
- 1 Nelson, T., Reid, C., and McNeill, J., *Energy only markets and renewable energy targets: complementary policy or policy collision?*, AGL Applied Economic and Policy Research Working Paper No. 43, August 2014, p. 15. <http://aglblog.com.au/wp-content/uploads/2014/08/No-43-energy-only-and-renewable-targets-FINAL.pdf>, (accessed 14 June 2014)
 - 2 Select Committee on Wind Turbines, *Interim Report*, (Majority report), p.5.
 - 3 *Summary of main conclusions reached in 25 reviews of the research literature on wind farms and health*, Chapman, Simon and Simonetti, Teresa. Available at <http://ses.library.usyd.edu.au/handle/2123/10559>
 - 4 http://www.hc-sc.gc.ca/ewh-semt/consult/_2013/wind_turbine-eoliennes/research_recherche-eng.php
 - 5 <http://www.hc-sc.gc.ca/ewh-semt/noise-bruit/turbine-eoliennes/summary-resume-eng.php>

1.14 While the majority report claims that 'people who live in close proximity to wind turbines [are] complaining of similar physiological and psychological symptoms',⁶ Labor Senators note that there is actually enormous variance in recorded claims. Research has found 244 symptoms that individuals have attributed to wind farms.⁷ These include asthma, arthritis, autism, bee extinction, brain tumours, bronchitis, cataracts, diabetes, dolphin beaching, epilepsy, haemorrhoids, leukaemia, lung cancer, multiple sclerosis and parasitic skin infections.

1.15 Labor is persuaded by the advice of key academic, medical and scientific bodies that the quality of research supporting the proposition that wind farms have health impacts is extremely low and often suffers from a number of issues including poor research design, small sample size, lack of a control group and the absence of formal peer-review.

Wind farm complaint distribution

1.16 Labor Senators recognise the compelling evidence that there is an uneven geographic and temporal distribution of complaints about wind farms, both in Australian and across the world.

1.17 Professor Simon Chapman undertook a study⁸ of all wind farm complaints in Australia. This study found that only 131 individuals had complained about Australian wind farms; and that the majority (64.7 per cent) of wind farms in Australia generated no complaints.

1.18 Witnesses have testified to the committee that health impacts of wind farms are rarely raised in a number of countries. While there are a number of other countries where concerns have been raised about the potential health impacts of wind farms, one analysis suggests that these concerns seem, by and large, to come from English-speaking countries⁹.

1.19 This is supported by the evidence of representatives from the world's largest turbine designer and manufacturer Vestas, who agreed that in their personal experience the preponderance of complaints and community concern is found in English-speaking countries.¹⁰

1.20 Vestas representatives also testified that in their workforce of 5500 staff globally who work directly on wind turbines, there have been no health complaints.¹¹

6 Majority report, p.3

7 Chapman, Simon. *Symptoms, Diseases and Aberrant Behaviours Attributed to Wind Turbine Exposure*. Available at <http://ses.library.usyd.edu.au/handle/2123/10501>

8 Chapman, Simon. *Spatio-temporal differences in the history of health and noise complaints about Australian wind farms: evidence for the psychogenic, 'communicated disease' hypothesis*. Available at: <http://ses.library.usyd.edu.au/handle/2123/8977>

9 <http://etwasluft.blogspot.com.au/2013/03/the-disease-with-perfect-english.html>

10 Mr Nielsen, *Committee Hansard*, 9 June 2015, Melbourne, p.25

11 Mr McAlpine, *Committee Hansard*, 9 June 2015, Melbourne, p.31

1.21 If there is a legitimate causal link between wind farms and health issues, it is difficult to see how this wouldn't be reflected in the distribution of complaints and concerns in Australia and across the globe.

Psychological factors

1.22 Labor Senators note with concern that recent research at the University of Auckland¹² found a correlation between exposure to anti-wind messages and an individual's perception of the impact of infrasound from wind turbines on their health. In this study, healthy volunteers, when given information about the expected physiological effect of infrasound, reported symptoms that aligned with that information, during exposure to both infrasound and sham infrasound.

1.23 This research supports the findings of Professor Simon Chapman¹³ that 72 per cent of complaints about wind farms in Australia related to just six wind farms which have been heavily targeted by wind opponent groups.

1.24 Despite wind farms being in operation in Australia since the late 1980s, Professor Chapman also found the vast majority of health complaints occurred after 2009 when wind opponent groups began to add health concerns to their wider opposition¹⁴.

1.25 On the basis of this research, Labor recognises that misinformation about health impacts of wind farms could see individuals self-diagnosing wind turbines as being the cause of legitimate health concerns, and foregoing necessary medical treatment on this mistaken assumption.

1.26 Labor Senators are deeply concerned that by ignoring expert scientific advice and the findings of decades of scientific research, the majority report will only serve to unjustifiably increase the anxiety of those living near wind farms and unnecessarily inflame tensions in regional communities.

Infrasound

1.27 Labor is concerned the majority committee members have privileged the subjective testimony of individuals over the advice of the peak acoustics body and the findings of decades of research.

1.28 It is extremely worrying that the scientific consensus is being disregarded by individual committee members, many of whom who have publically voiced their personal opposition to wind farms.

12 [Crichton F1](#), [Dodd G2](#), [Schmid G2](#), [Gamble G3](#), [Petrie KJ1](#). *Can expectations produce symptoms from infrasound associated with wind turbines?* [Health Psychol.](#) 2014 Apr;33(4):360-4. doi: 10.1037/a0031760. Epub 2013 Mar 11.

13 Chapman, Simon. *Spatio-temporal differences in the history of health and noise complaints about Australian wind farms: evidence for the psychogenic, 'communicated disease' hypothesis.* Available at: <http://ses.library.usyd.edu.au/handle/2123/8977>

14 Chapman, Simon. *Spatio-temporal differences in the history of health and noise complaints about Australian wind farms: evidence for the psychogenic, 'communicated disease' hypothesis.* Available at: <http://ses.library.usyd.edu.au/handle/2123/8977>

1.29 In its Position Statement on Wind Farms, peak industry body, the Australian Association of Acoustical Consultants (AAAC) states that:

Investigations have found that infrasound levels around wind farms are no higher than levels measured at other locations where people live, work and sleep.

Those investigations conclude that infrasound levels adjacent to wind farms are below the threshold of perception and below currently accepted limits set for infrasound.¹⁵

1.30 This is echoed in the findings of a South Australian Environmental Protection Authority study which looked at infrasound at houses in rural and urban areas, both adjacent to a wind farm and away from turbines, when the wind farms were operating and also switched off.

1.31 The study concluded that

the level of infrasound at houses near the wind turbines assessed is no greater than that experienced in other urban and rural environments, and that the contribution of wind turbines to the measured infrasound levels is insignificant in comparison with the background level of infrasound in the environment.¹⁶

1.32 The report also noted that the lowest levels of infrasound were recorded at one of the houses closest to a wind farm, and some of the highest levels of infrasound were found in the EPA's own urban office building.¹⁷

1.33 On this basis, Labor finds it would be a significant waste of government resources to establish further bureaucratic infrastructure given that infrasound from wind turbines has been found to be of less impact than that generated when walking.¹⁸

Steven Cooper's Cape Bridgewater study

1.34 Labor is surprised that the majority report calls on the work of acoustician Steven Cooper to support changes to planning arrangements for wind farms.

1.35 This suggestion stands in direct contradiction to the advice of Mr Cooper himself when he said in a joint statement¹⁹ with wind farm operator Pacific Hydro that:

15 Australian Association of Acoustical Consultants (AAAC), *Supplementary submission 194*, p. 2.

16 EPA South Australia and Resonate Acoustics, *Infrasound levels near wind farms and in other environments*, p. iii, available at: www.epa.sa.gov.au/files/477912_infrasound.pdf

17 EPA South Australia and Resonate Acoustics, *Infrasound levels near wind farms and in other environments*, p. iii, available at: www.epa.sa.gov.au/files/477912_infrasound.pdf

18 Stead, M., Cooper, J. And Evans, T., *Comparison of Infrasound Measured at People's Ears When Walking to that Measured Near Wind Farms*, Acoustics Australia, Vol. 42, No. 3, December 2014, pp. 197-203, <http://www.acoustics.asn.au/journal/Vol42No3-LOWRES.pdf>, accessed 14 June 2015.

- The study was not a scientific study.
- This was not a health study and did not seek or request any particulars as to health impacts.
- The report does not recommend or justify a change in regulations.

1.36 It must also be noted that the peak acoustics body, the AAAC, has submitted that 63 per cent of the data gathered by Mr Cooper did not support his hypothesis, and noted that participants registered sensations on many occasions when the turbines were turned off.²⁰

1.37 AAAC representatives also agreed with the statement that Mr Cooper start[ed] with the underlying assumption that wind farms are the cause of residents' health concerns and work[ed] backwards from there, ignoring contradictory evidence.²¹

1.38 Mr Cooper's work has been heavily criticised for:

- small sample size, and lack of a control group and medical research supervision²².
- lacking any basis in statistical analysis²³
- lacking a basis for assertions regarding the level of infrasound noise and the impact of infrasound²⁴
- systematically failing to take into account findings that were adverse to the intent of the study²⁵

1.39 In this light, Labor Senators are persuaded by the AAAC's assertion that Mr Cooper's study 'provides no new credible scientific evidence, and further, no scientific evidence to support the media reporting positively of [Mr Cooper's study]'²⁶ and we find this work to be a very poor basis on which to consider changes to Australian wind industry regulation.

19 PacificHydro and The Acoustic Group, *Joint Statement – Pacific Hydro & the Acoustic Group*, 16 February 2015, <http://www.pacifichydro.com.au/files/2015/02/Pacific-Hydro-The-Acoustic-Group-Joint-statement-16-February.pdf>

20 *Submission 194*, p.[2]

21 *Committee Hansard*, 10 June 2015, Adelaide, p.11

22 Jacqui Hoepner and Will J Grant. *Wind turbine studies: how to sort the good, the bad and the ugly*, The Conversation, January 22 2015. <https://theconversation.com/wind-turbine-studies-how-to-sort-the-good-the-bad-and-the-ugly-36548>

23 AAAC, *Submission 194*.

24 AAAC, *Submission 194*, pp. 1-2.

25 AAAC, *Submission 194*, p. 3.

26 AAAC, *Submission 194*, p. 1.

Recommendations

Labor Senators will respond in full in August to the Committee's final report.

In the meantime, we urge the government not to make rash commitments or legislative changes based on the poorly informed and unsubstantiated recommendations of this committee.

Senator Anne Urquhart

Senator Gavin Marshall