



# Nature Conservation Council

The voice for nature in NSW

Department of Planning and Environment  
Attention: Felicity Greenway  
Director, Industry and Infrastructure Policy  
GPO Box 39, Sydney NSW 2001

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## Submission on the New Wind Energy Planning Framework

The Nature Conservation Council of NSW (**NCC**) is the peak environment organisation for New South Wales, representing over 150 member societies across the state. Together we are committed to protecting and conserving the wildlife, landscapes and natural resources of NSW.

NCC welcomes the opportunity to comment on the New Wind Energy Planning Framework. This framework has been a long time in the making with the *NSW Draft Planning and Infrastructure Guidelines: Wind Farms*, released in December 2011, having never been finalised, and the Government having committed to finalising wind energy planning guidelines in its Renewable Energy Action Plan, released in September 2013.

Concerned with this delay NCC members passed a unanimous motion at our Annual Conference in October 2015 agreeing to write to Premier Baird and urge the Government to finalise the State's wind farm planning guidelines. That letter also set out our concerns with the policy settings in the Draft Guidelines, including the 2km buffer for establishing turbines near existing residences.

It is clear that the world urgently needs a rapid transition to clean renewable energy; however NSW is making slow progress on installing new wind farms and other forms of renewable energy. This is partly due to lack of certainty around wind farm projects, and regulations that have restricted the design and approval of new wind farm projects. Overall, we believe that much more needs to be done to encourage a mix of large-scale renewable energy projects; otherwise we will be faced with the severe impacts of climate change and a bleak and uncertain future. We hope this New Wind Energy Planning Framework will be the start of a greater shift towards renewable energy projects here in NSW.

While we welcome this new framework, we do have concerns in relation to a number of aspects including the visual impact guidelines, which are outlined in more detail in our enclosed submission.

We urge the Government to consider the feedback received during the public consultation period and finalise the Wind Energy Planning Framework as a matter of priority.

Please do not hesitate to get in touch if you require any additional information.

Yours sincerely,

Kate Smolski  
Chief Executive Officer

# NCC SUBMISSION ON THE NEW WIND ENERGY PLANNING FRAMEWORK

## INTRODUCTION

Increased CO<sub>2</sub> levels in the Earth's atmosphere are causing warming of the atmosphere and oceans, the breakup of ice sheets, glacial retreat, sea level rise, and ocean acidification. Australia is experiencing the direct impacts of climate change with more severe and frequent events such as droughts, bushfires, heat waves, floods and cyclones.

It is clear that as a society we urgently need to reduce greenhouse gas emissions and limit global warming. This was recognised at the historic 2015 United Nations Climate Change Conference in Paris, where 196 nations, including Australia, agreed to limit global warming to less than 2 degrees Celsius (°C) compared to pre-industrial levels, and pursue efforts to limit the temperature increase to 1.5 °C.

This agreement will require an urgent shift away from fossil fuel based energy sources to renewable energy, including wind energy.

Scientists have advised that to have at least a 50% chance of keeping global warming below 2°C throughout the twenty-first century, globally a third of oil reserves, half of gas reserves and over 80% of current coal reserves should remain unused<sup>1</sup>. Even if carbon capture and storage technologically is developed, over 90% of Australian coal reserves would have to remain unburnt before 2050 to meet the 2 degrees °C warming ceiling<sup>2</sup>.

The Australian government has committed to reducing greenhouse gas emissions by 26% to 28% on 2005 levels by 2030<sup>3</sup>. This target is wholly inadequate to do our fair share in solving the climate crisis. In spite of this commitment, it appears that Australia's annual emissions are increasing when other developed economies are cutting their carbon pollution<sup>4</sup>. Further, in 2015 Australia became the first developed country to reduce its national Renewable Energy Target<sup>5</sup>, the current commitment being that 33,000 Gigawatt-hour (GWh) of Australia's electricity comes from renewable sources by 2020<sup>6</sup>.

In NSW, the picture is also bleak. A recent report by the Climate Council found in terms of renewable that NSW 'is the worst performing state as it has the lowest (and falling) percentage of Renewable Energy'<sup>7</sup>. In 2014, only 6% of NSW's energy supply came from renewable energy<sup>8</sup>. At the same time, the NSW Government continues to approve new coal mines and major coal mine expansions.

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<sup>1</sup> C. McGlade & P Ekins: *The geographical distribution of fossil fuels unused when limiting global warming to 2degrees C*, Nature, V. 157, 8 January 2015, pp 187-190

<sup>2</sup> *Unburnable Carbon: why we need to leave fossil fuels in the ground* by Will Steffen (Climate Council of Australia), 2015

<sup>3</sup> [www.environment.gov.au/climate-change/publications/factsheet-australias-2030-climate-change-target](http://www.environment.gov.au/climate-change/publications/factsheet-australias-2030-climate-change-target)

<sup>4</sup> *Carbon emissions on rise despite Direct Action*, Australian Financial Review, 1 February 2016, [www.afr.com/news/politics/carbon-emissions-on-rise-despite-direct-action-20160131-gmif6a](http://www.afr.com/news/politics/carbon-emissions-on-rise-despite-direct-action-20160131-gmif6a)

<sup>5</sup> *Game on: The Australian Renewable Energy Race heats up* by Andrew Stock and Petra Stock (Climate Council of Australia), 2016

<sup>6</sup> [www.environment.gov.au/climate-change/renewable-energy-target-scheme](http://www.environment.gov.au/climate-change/renewable-energy-target-scheme)

<sup>7</sup> *Game on: The Australian Renewable Energy Race heats up*, above no 5.

<sup>8</sup> Ibid

We urgently need improved action in NSW to transition away from fossil fuels and increase our investment in renewable energy. It is in this context that we respond to the New Wind Energy Planning Framework (Draft Framework).

There are a number of positive aspects to the new Framework including an increased emphasis on community engagement and consultation; a shift away from arbitrary, strict buffer zones; and confirmation that wind turbines do not cause adverse impacts on health. However we are concerned that the new Framework puts too high an emphasis on the visual impacts of wind turbines.

Our submission addresses each of the elements of the Draft Framework below.

## **DRAFT WIND ENERGY: ASSESSMENT POLICY**

The Draft Wind Energy: Assessment Policy provides a useful overview of the New Wind Energy Planning Framework including the assessment process and key issues for wind farm development.

### **Strategic Context**

The inclusion of a Strategic Context in the Wind Energy: Assessment Policy is useful, however we suggest that it could include additional detail about the implications of climate change and the urgent need to transition away from fossil fuels to renewable energy. Similarly, we also suggest that there could be further detail about the significant local and public benefits of wind farms including emissions reductions and local economic benefits.

### **Health**

We support the Government's position on the health impacts of wind energy projects, which are informed by the scientific findings of the National Health and Medical Research Council (NHMRC) and its position that 'there is currently no consistent evidence that wind farms cause adverse health effects in humans'.

We note that the FAQs clearly outline the position of the NHMRC that 'there is currently no consistent evidence that wind farms cause adverse health effects in humans' whereas the Wind Energy: Assessment Policy does not include this exact statement. For clarity, we suggest including it in the Wind Energy: Assessment Policy.

We also note that the Draft Secretary's Environmental Assessment Requirements (SEARs) requires proponents to consider and document health issues of wind turbines, however this requirements seems inconsistent with the Government's adopted position that there is currently no consistent evidence that wind farms cause adverse health effects in humans. We therefore suggest that this requirement be removed from the SEARs.

### **Community understanding of issues around wind energy**

We recognise that there are people in the community who have concerns or questions around wind energy. It is important that there is clear, trusted and reliable information available to support the Government's efforts to increase investment in wind energy in NSW. The Wind Energy: Assessment

Policy is a good starting point. We note that the former Department of Environment, Climate Change and Water had prepared a public resource titled *Wind Energy: Myths and Facts*<sup>9</sup> which addressed major issues related to wind energy. We suggest a similar, updated resource may be useful as part of the New Wind Energy Planning Framework.

#### **DRAFT WIND ENERGY: NOISE ASSESSMENT BULLETIN**

We note that the Draft Wind Energy: Noise Assessment Bulletin generally adopts the noise limits and methodology from the South Australian EPA's 2009 Noise Guidelines, with some variations. The variations proposed for NSW include a stricter base noise criteria and guidance on special noise characteristics such as tonality and low frequency noises and are described as 'some of the strictest noise limits in the world'.

While we generally support the consistency of regulation between jurisdictions we are concerned that such strict guidelines, including the additional requirements for NSW, may act as a deterrent to investment in wind energy here in NSW.

In particular we note that:

- The South Australia 2009 Noise Guidelines do not identify excessive levels of low frequency noise as an issue and contains no requirements for low frequency noise. It is unclear why this has been included in the NSW Draft Framework.
- Queensland deals with the issue of tonality in its Wind Farm Guidelines 2016 by providing that wind farm developers should avoid installation of wind turbines which exhibit sound with tonal characteristics by specifying the supply of wind turbines from a manufacturer which guarantees that the supplied wind turbines will not exhibit tonal characteristics at residences.

#### **DRAFT WIND ENERGY: VISUAL IMPACT ASSESSMENT BULLETIN**

We are concerned that the New Wind Energy Planning Framework puts too high an emphasis on the visual impacts of wind turbines. The Draft Wind Energy: Visual Impact Assessment Bulletin is a major component of the entire framework. We do not agree that the visual impacts of wind energy projects are that much more significant than other major projects, such as open cut coal mines or high-rise residential buildings, that they warrant a more stringent assessment. A trip through the NSW Hunter Valley easily demonstrates the significant cumulative impacts of multiple open cut coal mines on that rural landscape, yet there are no robust guidelines for visual impact assessment for those projects.

This overemphasis on visual impacts suggests that protecting the view of a small minority of landholders is more important than investment in renewable energy and the local and broader public benefits that would bring. As outlined above, the Draft Framework as a whole must provide greater opportunity to consider the benefits as well as impacts of wind energy projects.

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<sup>9</sup> <http://masg.org.au/wp-content/uploads/2008/06/Wind-Energy-In-NSW-Myths-and-Facts.pdf>

That said, we are pleased that the Government has moved away from its position in the 2011 Draft Guidelines which set an arbitrary requirement of 2km in distance from houses to wind turbines. We did not believe that there was any basis for that position.

Instead the Visual Impact Assessment Bulletin uses two new preliminary screening tools for early identification of potential visual impacts that require further detailed consideration. It is our understanding that the outcomes of these tools do not prohibit turbines that are identified by the tool, but require further consideration of the impacts of those turbines. However the tool gives the false impression that turbines identified by these tools are inappropriate.

The **Preliminary Screening Tool** works on a sliding scale of turbine height to distance. Despite arbitrary buffers being removed, the outcome of that tool is that for turbines of average height (150 - 160 metres), 2km is the distance that triggers further consideration. This seems overly precautionary, given that separation distances in other jurisdictions are not as great. For example:

- Germany has no requirements for separation distances although local authorities have recommended a 500m exclusion zone from dwellings;
- Denmark recommends that turbines over 25m must be placed at least four times their height from all residences;
- Canada has no requirements although Ontario and Brunswick provinces recommend 550m and 500m respectively; and
- Victoria now has a 1km exclusion zone.

It is unclear what information has informed the development of this Tool and the positioning of the line on the graph.

The **Multiple Wind Turbine Tool** is intended to assess cumulative impacts of wind farm turbines in the landscape. Again, we note the irony of such robust cumulative impact assessment for wind energy projects, when the Department has still not finalised effective guidelines for assessing the cumulative impacts of open cut coal mines. The Multiple Wind Turbine Tool suggests assessing visible impacts in 60 degree quadrants and identifies existing or approved turbines within 8km of each resident for each quadrant. If there are turbines located in three or more quadrants then further detailed consideration of the visual impacts is required.

Again, the settings for the Multiple Wind Turbine Tool appear arbitrary. There is no explanation of how this Tool was developed.

While we are pleased that the Government has not carried over the 2km buffer, we are concerned that the setting in these tools are too stringent and may give the false impression that turbines 'below the line' are inappropriate. Wind energy has significant benefits to the people of NSW and the NSW government must ensure its new Wind Energy Planning Framework strikes the right balance between impacts and benefits and promotes investment in wind energy here in NSW.

## **DRAFT STANDARD SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SEARs)**

The draft SEARs that have been developed as part of the Wind Energy Framework can provide greater certainty to proponents and the community and address the key issues covered by the Wind Energy Framework.

We recognise that the Department has developed standard SEARs for other types of major projects, including:

- Critical State Significant Infrastructure Standard Secretary's Environmental Assessment Requirements
- Indicative Standard Secretary's Environmental Assessment Requirements for state significant mining developments

However, as noted above, the requirement in the Draft SEARs to consider and document health issues should be removed as it is not consistent with the Government's adopted position that 'there is currently no consistent evidence that wind farms cause adverse health effects in humans'.