

Senate Select Committee on the effectiveness of the Australian Government's Northern Australia agenda, September 2019

Submission by:

Professor Ken Baldwin at the Australian National University's Energy Change Institute

Professor Tony Dreise, Associate Professor Janet Hunt, Dr Lily O'Neill, Dr Kathryn Thorburn and Brad Riley at the Australian National University's Centre for Aboriginal Economic Policy Research

Dr Emma Aisbett at the Australian National University's School of Regulation and Global Governance

Thank you for the opportunity to make a submission to the Select Committee on the effectiveness of the Australian Government's Northern Australia agenda. Our recommendations and their justification are below for your consideration.

Recommendations:

- Recognise the world class renewable energy resources extant on Native Title and Land Rights' lands (the Indigenous Estate) in northern Australia
- Recognise the potential economic benefits for First Nations people in engaging with renewable energy production across scales in northern Australia
- Recognise the need for policy settings that encourage and/or legislate for First Nations' involvement in renewable energy developments on traditional lands.

The Northern Development Agenda notes that Australia is uniquely 'positioned as Asia's energy supplier of choice from a balance of sources,' yet with its stated aim being to 'foster greater innovation and leadership' and 'help business access new markets' for 'long term growth', the Northern Development Agenda fails to mention the renewable energy industry in any assessment of resources in the north. This is a significant oversight when considering that wind and solar photovoltaics accounted for 60 per cent of new net capacity additions to global energy supply in 2017 (Baldwin et al 2018), and northern Australia is especially well placed to contribute to this global energy transformation.

The Northern Development Agenda also envisions sustainable development of the north 'in full partnership with Indigenous Australians, with a focus on creating opportunities through

education, job creation and economic development,' which 'will contribute to achieving the objectives of the Government's Indigenous Advancement Strategy' (p2). The IAS objectives are to improve the lives and outcomes for Indigenous Australians in five key areas, of which (1) 'jobs, land and economy' and (5) 'remote Australia strategies' are the most central to this submission.

Considering that:

- More than 60% of the world's energy demand growth in the next two decades is set to come from Australia's near neighbours in Asia (IEA World Energy Outlook, 2013);
- Australia is uniquely positioned to capitalise on significant renewable energy resources in the north;
- the vast majority of land in the north is subject to Indigenous rights and interests;¹ and
- governments and Indigenous leaders are seeking innovative ways to overcome Indigenous disadvantage in socio-economic outcomes.

Based on the available evidence we propose that renewable energy can and will play an increasingly important role in the future of northern development. Noting that the Indigenous Estate covers a large majority of northern Australia this omission represents a considerable social and economic lost opportunity, both for the renewable energy transition currently underway, and particularly for Aboriginal land holders in the north.

The energy transition

Geoscience Australia reports that Australia has the highest solar radiation per square metre of any continent, providing the best solar energy resource in the world. Neglecting renewable energy from any resource assessment of northern Australia is a deficit in both the near and long term, with both local and global trends indicating that the shift towards renewable energy as a preferred energy source is already underway. Australia is deploying renewable energy technology at a rate four to five times faster per capita than the EU, USA, Japan and China (Blakers et al. 2019) whilst technological advances in storage and transmission offer the potential for renewable energy export. Northern Australia is recognised as being well placed to capitalise on these changes - the region is characterised by large, sparsely populated land areas of high solar energy potential, co-located with night time wind resources, and in close proximity to export opportunities in Asia. Northern Australia hosts significant comparative advantages for the large-scale production of renewable energy, both

¹ See O'Neill, Thorburn and Hunt (2018).

in the form of electricity through wind and solar photovoltaics (see Suncable³), and in the form of green fuels – i.e. hydrogen and ammonia (see AREH⁴).

Australia's, and particularly northern Australia's, extensive renewable energy and mineral resources underpin the opportunity for large-scale generation and export of renewable energy in the form of electricity, energy-rich metals and materials, and hydrogen-rich fuels. By transforming our trading relationship with the world, Australia can have far more impact on global carbon emissions than anything undertaken on a purely domestic level. This is the focus for the Australian National University's Grand Challenge: *Zero-Carbon Energy for the Asia-Pacific*.⁵ The emissions from current overseas refining of our iron ore exports alone are up to five times those from Australia's domestic electricity sector, and if refined in Australia could add up to \$200 billion in value-added exports.

Australia's renewable energy resources are so great that most of the renewable energy needed for Indonesia's proposed electricity expansion of 35 gigawatts by 2025 (23% renewable or 8GW) could at least in part be sourced from northern Australia. Furthermore, in 2017, Japan identified Australia as a key potential trading partner for import of hydrogen as part of its future decarbonisation program to reduce Japan's dependence on fossil-fuel imports.

A comprehensive Northern Development Agenda needs to factor these developments into its strategy going forward.

Renewable energy opportunities and Indigenous Australians

These renewable energy opportunities are already being targeted by the Asian Renewable Energy Hub which 'will generate 15,000+ MW of renewable energy in Western Australia. 3,000+ MW will be dedicated to large energy users in the Pilbara region, which could include new and expanded mines, downstream mineral processing and the large-scale production of hydrogen for domestic and export markets.' This development is on the exclusive possession native title land of the Nyangumarta people.

There is the opportunity for multi-generational benefits for Australian Indigenous communities. Large scale developments such as these provide significant potential for Indigenous benefit - primarily through negotiated access and benefit agreement making and opportunities for Indigenous enterprise in services for this new industry. The Nyangumarta people are currently engaged in the process of negotiating an Indigenous Land Use Agreement (ILUA) with the developers of the AREH project.

In examining the history of agreement making practice in the extractives industry in Australia, our research (O'Neill, Thorburn and Hunt 2019) finds that broader economic and social benefits for Indigenous landholders are more likely if:

³ See for example the Suncable project proposing to export renewable energy in the form of electricity from Tennant Creek (NT) to Singapore via Darwin <https://www.suncable.sg>

⁴ See for example the Asian Renewable Energy Hub in north west Western Australia which proposes to export 'green' hydrogen to north Asian markets <https://asianrehub.com>

⁵ <https://www.anu.edu.au/research/research-initiatives/zero-carbon-energy-for-the-asia-pacific>

- Indigenous communities and organisations are well informed and well resourced;
- Indigenous communities and organisations are engaged with meaningfully in the development process;
- developments are progressed in accordance with community priorities; and
- developments include provision for community equity and/or ownership.

Strong government support for Native Title Representative Bodies, enabling them to provide the best possible advice and support to the native title holders negotiating these agreements, can help maximise outcomes for Indigenous people from these developments.

Policy Implications

The role of First Nations people in financially partnering in renewable energy developments has not as yet been broadly encouraged or incentivised by policy in Australia. Whilst there are a number of notable local exceptions⁶, in the international context a much broader conceptualisation of the potential role for First Nations people in renewable energy development can be seen in the legislative and policy frameworks of renewable energy in Canadian provinces – some of which have been driving First Nations involvement in renewables for two decades or more.

In Canada, both the national and provincial governments recognise that the transition to renewable energy can provide an opportunity to advance reconciliation with First Nation peoples, as well as enable socio-economic development in those communities.⁷ Indigenous involvement in renewable energy projects in Canada has benefited greatly by 'supporting regulatory and fiscal policy that were negotiated and adapted to Indigenous sustainability visions'(Karanasios & Parker 2018). In Canada, provincial and territorial government departments with responsibility for energy, climate change and economic development have been driving Indigenous involvement in the renewable energy transition. The preconditions for such an approach would at minimum require the explicit acknowledgment of:

- those renewable energy resources extant on the Indigenous Estate;
- the role of renewable energy in northern development aspirations;
- the potential for owners of the Indigenous Estate to benefit from renewable energy developments across a variety of scales (from kilowatt scale to gigawatt scale developments).

The Northern Development Agenda needs to more accurately reflect current trends in cost, technological innovation and consumer demand - each of which are rapidly driving renewable technologies as a 'preferred energy source' both in Australia and across our

⁶ See for example Power and Water NT's Solar SETuP program, Horizon Power's Solar Incentives scheme in Western Australia, and Perth Noongar Foundation and Indigenous Business Australia as co-equity investors in the 10 MW Northam Solar Farm.

⁷ See <https://www.nrcan.gc.ca/20093>

region. It also needs to identify risks and opportunities for owners of the Indigenous Estate across all scales.

How renewable energy could transform Indigenous economic futures

Energy is a central driver of social, economic and political development. Nowhere is this more apparent than in Australia's north where despite myriad incentive schemes, subsidies and cross-subsidies many First Nations people remain exposed to some of Australia's most expensive electricity and energy costs.⁸

Over four decades, renewable energy has demonstrated the capacity to improve many Indigenous communities' access, availability and affordability of energy supply. Through engaging communities in appropriate and meaningful community energy planning processes, and supported with dedicated maintenance services, renewable energy developments can improve outcomes in Indigenous enterprise, education and health and wellbeing.⁹

The changing nature and scale of renewable energy developments proposed on the Indigenous Estate presents a unique opportunity to amplify the scale of these benefits and form the basis of a different kind of economic future for First Nations people.

It could also do much toward achieving the aims set out in the Northern Development Agenda, however this requires the inclusion of renewable resources extant on traditional lands in any estimate of the resource base of northern Australia, and pathways, policies and legislative frameworks supportive of First Nations' participation in and ownership of developments seeking to capitalise on these resources.

References

Australian National University (2018). *Media Release: Energy policy needs to board the renewable energy train*. Australian National University, Canberra

Baldwin, K., et al. (2018), *Australia's renewable energy industry is delivering rapid and deep emissions cuts*, <https://energy.anu.edu.au/files/Australia%27s%20renewable%20energy%20industry%20is%20delivering%20rapid%20and%20deep%20emissions%20cuts.pdf>

Blakers, A., et al. (2012) 'Asia Pacific Super Grid – Solar electricity generation, storage and distribution' *Green*, Vol 2 Issue 4.

Blakers, A., Stocks, M. and Lu, B. - *Australia: the renewable energy superstar*, <http://re100.eng.anu.edu.au/publications/assets/100renewables.pdf> (2019)

⁸ See AECOM's 2014 report 'Australia's off-grid clean energy market'

⁹ See for example the 37 Case Studies and 31 Newsletters produced by the Centre for Appropriate Technology's Bushlight project between 2002 – 2014 <https://cfat.org.au/bushlight-archive>

Chambers, I., et al. (2018) 'Australia's north, Australia's future: A vision and strategies for sustainable, economic, ecological and social prosperity in northern Australia' *Asia Pacific Policy Studies* 5: 615-640.

Climate Council of Australia. 2017. Renewables Ready: States leading the charge. Melbourne, Victoria: Climate Council Australia.

Diesendorf, Mark, and Ben Elliston. 2018. "The feasibility of 100% renewable electricity systems: A response to critics." *Renewable and Sustainable Energy Reviews* 93:318-330. doi: <https://doi.org/10.1016/j.rser.2018.05.042>.

Deloitte Insights <https://www2.deloitte.com/insights/us/en/industry/power-and-utilities/global-renewable-energy-trends.html>

International Energy Agency, *World Energy Outlook* (2013).

Karanasios, K. and P. Parker (2018) 'Tracking the transition to renewable electricity in remote indigenous communities in Canada' *Energy Policy* 118: 169-181

O'Neill, L, Thorburn, K, & Hunt, J. (2019) Ensuring Indigenous Benefit from Large-Scale Renewable Energy Projects: Drawing on Experience From Extractive Industry Agreement Making, CAEPR Working Paper no 127/2019

Thorburn, L. O'Neill, L. Hunt, J (2018) Renewable energy projects on the Indigenous estate : Identifying risks and opportunities of utility-scale and dispersed models, Energy Change Institute, Australian National University.