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ADVANCING ABORIGINAL INTERESTS IN  
THE NEW SOUTH WALES RENEWABLE  
ENERGY TRANSITION

H. NORMAN, C. BRIGGS AND T. APOLONIO

Centre for  
Aboriginal Economic  
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# Advancing Aboriginal interests in the New South Wales renewable energy transition

H. Norman, C. Briggs and T. Apolonio

## Abstract

As the NSW government steers the transition of the energy system to renewable energy, we examine what opportunities this presents for Aboriginal communities. The renewable energy transition could present opportunities for Aboriginal land holders in NSW to participate in new and sustainable economies, leverage land for renewable energy projects, address issues of energy security, derive benefits including collective income generation and capacity-building, and for Aboriginal values and aspirations to be built into the foundation and long-term operation of renewable energy projects. To date, benefits for aboriginal communities have been limited but the NSW renewable energy zone model is the first to include First Nations economic participation and community support in renewable energy auction criteria. Whilst the NSW approach should improve the employment, training and business participation, our research highlights more needs to be done to engage Aboriginal people and enable projects on Aboriginal land where ownership can underpin greater social and economic impact. Our research reveals that Aboriginal land holders are optimistic about the possibilities of renewable energy and can see the benefits of being involved in this sector, but have limited resources to engage strategically in the bold energy transition plans. We argue that Local Aboriginal Land Councils have an important role to play at the interface of community, industry and government, and require support, further resources, and capacity-building in order to support their long-term participation in the state-wide energy transition.

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## Acronyms

ACT	Australian Capital Territory
AEMO	Australian Energy Market Operator Services Limited
ALRA	<i>Aboriginal Land Rights Act 1983</i> (NSW)
ANU	Australian National University
CAEPR	Centre for Aboriginal Economic Policy Research
CEO	Chief Executive Officer
CWOWG	Central-West Orana Working Group
DPE	Department of Planning and Environment
EIIA	<i>Electricity Infrastructure Investment New South Wales Act 2020</i>
EOI	Expression of Interest
FNCEN	First Nations Clean Energy Network
FNG	First Nations Guidelines
FPIC	Free, Prior and Informed Consent
GW	Gigawatt
IRENA	International Renewable Energy Agency
IREZ	Indicative Renewable Energy Zone
LALC	Local Aboriginal Land Council
LTESA	Long-Term Energy Supply Agreements
MW	Megawatt
NSW	New South Wales
NSWALC	New South Wales Aboriginal Land Council
PBC	Prescribed Body Corporate
REZ	Renewable Energy Zone
TO	Traditional Owner
UTS	University of Technology Sydney

## Contents

Series note	ii
Abstract	iii
Acknowledgments	iv
Acronyms	iv
Tables	vi
Figures	vi
Introduction	1
Background: The <i>Electricity Infrastructure Investment Act 2020</i>	3
Aboriginal land	4
Aboriginal interests and the <i>Electricity Infrastructure Investment Act 2020</i>	6
What do LALCs want to achieve in relation to the NSW energy plan?	8
The NSW REZs and First Nations communities: What do LALCs want to achieve in relation to the NSW energy plan?	15
Engaging Aboriginal land interests in energy transition	16
Engagement and governance	17
Energy transition and LALC benefits	17
Aboriginal benefits and interests – different scales of energy development	18
International experience	19
Resourcing and capacity building to support LALC engagement	20
Conclusion	23
Recommendations	24
References	25

## Tables

<b>Table 1</b>	Analysis of Aboriginal land claims located within the Central-West Orana Renewable Energy Zone	14
<b>Table 2</b>	Analysis of Aboriginal land claims located within the New England Renewable Energy Zone	15
<b>Table 3</b>	Analysis of Aboriginal land claims located within the South-West Renewable Energy Zone	15
<b>Table 4</b>	Benefits and interests: Large-scale, mid-scale and small-scale renewable energy	19

## Figures

<b>Fig. 1</b>	Map of New South Wales for the five Renewable Energy Zones declared under the <i>Electricity Infrastructure Investment Act 2020</i> (NSW)	9
<b>Fig. 2</b>	Local Aboriginal Land Councils located within the Central-West Orana, South-West and New England Renewable Energy Zones	10
<b>Fig. 3</b>	Aboriginal land claims within the Central-West Orana Indicative Renewable Energy Zone	11
<b>Fig. 4</b>	Aboriginal land claims within the New England Renewable Energy Zone	12
<b>Fig. 5</b>	Aboriginal land claims within the South-West Indicative Renewable Energy Zone	13
<b>Fig. 6</b>	LALCs that will potentially be impacted by Transgrid EnergyConnect (State Significant Project)	14

## Introduction

Since the 1970s, governments across Australia have responded to Aboriginal claims to land rights and the right to self-determination. Amounting to a break from the prevailing racial and colonial administration of Indigenous people and their interests, the restitution of land to Aboriginal community control was central to realising Aboriginal social and economic autonomy, and some political power, within the life of the nation. Conjoined with recognition of native title rights and interests from 1993, there has been an Aboriginal land titling revolution (albeit uneven). Yet disadvantage persists for Australia's First people on almost every indicator.

As the NSW Government steers the transition of the economy to renewable energy there is a unique opportunity for Aboriginal communities and their economic and land interests and aspirations to be advanced. The renewable energy transition in NSW presents an opportunity for Aboriginal landholders in NSW to participate in new economies, address energy security and poverty, derive benefits including collective wealth generation and capacity-building, and for Aboriginal values and aspirations to be built into the foundation and long-term operation of renewable energy projects. With reference to the land interests of Local Aboriginal Land Councils (LALCs), this paper provides an overview of the NSW renewable energy transition plans, how different Aboriginal interests are being included and excluded, and outlines some necessary actions at the Aboriginal community, government and industry level for these benefits to be realised. One central feature of our findings is limited consideration of Aboriginal held land in the Government's energy transition plans. We argue this confines the benefits for Aboriginal communities, and an issue that calls for further consideration and the development of strategies to enhance Aboriginal participation and benefit as energy transition accelerates.

## Method

Our mixed method approach in this study draws on the authors' respective research areas: NSW land rights (cf. Norman 2015, 2017; Norman et al., 2021) and climate, energy and labour market research and advocacy (cf. Briggs et al., 2021 & 2022). We examine policy and discourse analysis, interviews with LALCs, and spatial analysis to examine the opportunities and limits of the NSW Government's renewable energy transition plans. We centre the interests and aspirations of LALCs and their land estate in the energy transition plans in order to critically examine this as a new moment in the long struggle for Aboriginal rights recognition.

We start with an overview of the NSW legislation and framework for energy transition and interaction with energy regulators and operators and the policy mechanism for Aboriginal community involvement. In the next section, with reference to the NSW *Aboriginal Land Rights Act 1983* (ALRA), analysis of the Aboriginal land estate, and interviews with LALCs, we consider how energy transition plans can be advanced alongside Aboriginal rights and interests.

## Policy analysis

In July 2021, we conducted an initial analysis of the objectives of the *Electricity Infrastructure Investment New South Wales Act 2020* No. 4 (EIIA) in relation to Aboriginal people, to identify what opportunities exist for LALCs to leverage their land estate for economic, social, cultural, and environmental benefits. Drawing on Hansard in relation to the Electricity Infrastructure Investment Bill (NSW) 2020 and other grey literature, we compiled a genealogy of the EIIA to identify how Aboriginal participation in the renewable energy transition was originally conceived by government and when concepts of 'social licence' and 'benefit-sharing' with Aboriginal stakeholders were introduced.

We analysed the NSW Department of Planning and Environment (DPE) First Nations General Guidelines and Central-West Orana region-specific guidelines that were published on 25 August 2022, to consider what kind of benefits were envisaged for Aboriginal people and if there were opportunities for LALCs to leverage their land estate in renewable energy projects.

### Observation

We share insights from our meetings and conversations with government and other stakeholders as the First Nations Guidelines were being developed. By way of summary, between the period July 2021–August 2022, researchers Heidi Norman and Therese Apolonio consulted with government, and met with a Member of Parliament who was involved in the drafting of the *Electricity Infrastructure Investment Bill (NSW) 2020*, in the process of contributing to the development of the First Nations Guidelines. We participated in a First Nations Energy Stakeholders meeting convened by Senator David Shoebridge on 29 July 2021, consulted with DPE’s Aboriginal Engagement Lead on 10 September 2021, provided feedback on draft First Nations General Guidelines on 1 December 2021, and submitted feedback on the Region-Specific Guidelines for the Central-West Orana on 28 January 2022.

### Interviews

We interviewed LALC Chief Executive Officers (CEOs) and office bearers where we asked: how LALCs had been engaged in REZ planning; how they saw their LALC strategically engage with government and renewable energy operators and leverage their landholdings to realise social, cultural, economic and environmental benefits for their members; and their views on the opportunities presented in the energy transition. As we followed the NSW renewable energy transition roll-out of the Electricity Infrastructure Roadmap, our interviews capture how LALCs were consulted by government at a particular moment in time. In addition to interviews of LALC personnel in the Renewable Energy Zones (REZs), we drew on informal networks and public information to build a picture of LALC involvement in the REZs.

We conducted the interviews in the period of early August 2021. We made initial contact (3 August 2021) with LALCs in the REZ where we invited participation in a telephone interview with a representative of the LALC. Participants were emailed questions beforehand. Between 9 August and 13 August 2021, Norman and Apolonio conducted interviews with LALCs (CEOs and other office bearers). Our response rate was 17%. We noted that some LALCs were unavailable or non-operational. These LALCs had either commenced or were about to consult with government on the REZs planned for their region.

We also interviewed the CEO of Thunghutti LALC and, although not located within a REZ, included them in the analysis as they are in negotiations with a renewable energy operator: the Oven Mountain Pumped Hydro Energy Storage Project which was declared State Significant Infrastructure in 2020. As a large-scale pumped hydro energy storage project (600 MW) funded by the Australian Renewable Energy Agency, this project would play a critical role in avoiding curtailment of renewable energy in the New England region through storage where there is surplus generation (Moon, 2022). However, the interview with Thunghutti LALC was limited to general comments and care was taken to ensure that commercial in confidence information was safeguarded.

The study of the renewable energy transition and the Aboriginal land estate sits within a broader research project examining the benefits of Aboriginal land return in NSW and the potential for land-based enterprise opportunities that lead to communal wealth generation and benefits for Aboriginal communities. The broader research project commenced in 2018 and concludes in 2023. This paper is informed by extensive interviews with LALC CEOs and other office bearers and fieldwork sites across NSW. In this paper, we also draw on interviews conducted by Norman with LALCs located outside of REZs, to paint a picture of the circumstances



facing LALCs in regional and rural areas and for more general insights on Aboriginal communities' aspirations for land.

## Mapping

Based on interviews and discussion with LALCs, we conducted geospatial mapping with research assistants, Cara Stone and Charles Doggett, to better understand the implications of REZs on LALC landholdings and land claims. Using data provided by NSW Crown Lands we mapped all land granted and all outstanding land claims under the ALRA since its commencement in 1983, to 30 June 2021.

## Background: The *Electricity Infrastructure Investment Act 2020*

In 2020, the NSW Government passed the EIIA, establishing a framework to transition in NSW from a coal-based electricity system to renewable energy. Under the EIIA, NSW legislated a target of 12 Gigawatts (GW) of renewable energy and 2 GW of storage by 2030 to prepare for the exit of coal-fired power stations. Five 'Renewable Energy Zones' (REZs) were declared to coordinate investment in generation and transmission to unlock the best-quality renewable energy and storage resources in regional NSW: Central-West Orana, New England, South-West, Hunter-Central Coast and the Illawarra region (EIIA, Part 4, Division 1, 23).

Alongside the coordination of new generation, transmission and storage, the objectives of the EIIA include socioeconomic benefits such as increasing local content and employment, community benefits, engagement and support – and benefits for Aboriginal communities. Complementary programs such as the Net Zero Industry and Innovation program aim to build low-carbon manufacturing and hydrogen hubs and to turn NSW into an 'energy superpower'.

New statutory authorities have been created to implement the EIIA and delivery of the REZs (see NSW Climate and Energy Action, n.d.a for summary of entities).

- The Energy Corporation will coordinate the delivery of REZs, under the direction of the Minister for Energy and Environment.
- A 'Consumer Trustee', appointed by the Minister of Environment and Energy, is responsible for administering competitive auctions for access rights to transmission infrastructure within the REZs and Long-Term Energy Supply Agreements (LTESAs) for renewable energy and storage projects. The LTESAs are an options contract under which a renewable energy project can access a minimum fixed price for their output, providing sufficient revenue certainty for the project to secure finance for construction. LTESAs will be awarded to projects by the Consumer Trustee in competitive tenders based on criteria including price, local content, grid impact and local community benefit and 'social licence' (NSW Climate and Energy Action, n.d.b).
- The Renewable Energy Sector Board comprising industry, union and electricity representatives was established to provide the Minister for Energy with a plan to maximise local employment and industry development (NSW Office of Energy and Climate Change, 2022c).
- An Electricity Infrastructure Jobs Advocate was appointed to advise the Minister for Energy on strategies and incentives to encourage investment, development, workforce development, employment, education and training in the energy sector and road, rail and port infrastructure to promote export opportunities for generation, storage and network technology (NSW DPE, 2022).

The key problem that the EIIA and the REZs seek to solve is the ‘chicken and egg’ problem: how to efficiently coordinate new investment in generation and the extension of the transmission network. The volume of demand registered through Expressions of Interest (EOIs) for the REZs demonstrates it is an attractive model for the renewable energy industry. For the New England REZ, the EOI attracted applications of 34 GW from 80 projects for a target of 8 GW (NSW DPE, 2022); likewise, in the Central-West Orana REZ 113 projects totalling 27 GW registered interest for a target of 3 GW (Energy Co., NSW Government, 2023a.). Overwhelming interest on the part of operators was also evident in the epicentre of NSW’s coal sector: in the Hunter Valley-Central Coast REZ 80 projects totalling 40 GW registered through the EOI – equivalent to the output of 10 coal-fired power stations (Energy Co., NSW Government, 2023b).

The NSW Government is implementing a relatively holistic approach to renewable energy development using a multi-criteria approach to the renewable energy and storage auctions that encompasses socioeconomic factors beyond price. This is in contrast to the identified global concern that there is a ‘race to the bottom’ being created by government renewable energy auctions that focus excessively on the electricity price committed to by projects (International Renewable Energy Agency (IRENA), 2019). Whilst low electricity prices are a key focus of the EIIA (in particular, as a source of future comparative advantage for energy intensive industries in a global low-carbon economy), the criteria include a range of other factors such as local employment and community support. Within Australia, the Australian Capital Territory (ACT) and Victoria have also made use of renewable energy auctions, but this is the first time that benefits and the support of First Nations communities have been explicitly included in the tender criteria. As we detail later in this paper, within the tender guidelines, there are ‘baseline’ criteria, which are mandatory, and ‘stretch goal’ criteria – with the advice that ‘high scoring’ projects are expected to demonstrate their contribution to these targets (Australian Energy Market Operator Services Limited (AEMO) Services, 2022). The NSW REZs are an innovative model which open new opportunities for advancement of aboriginal communities.

## Aboriginal land

Since the late 1960s, from a position of almost complete dispossession, settler governments began to respond to the always present demand from Aboriginal people for their land. The Commonwealth government began legislating the return of land to Indigenous groups from 1976 and following this lead, in NSW Aboriginal people organised as the NSW Aboriginal Land Council (NSWALC) in 1977 and pushed the state government to act. An inquiry with an ambitious remit began in 1978, initially investigating Aboriginal land rights and protection of sacred and significant sites (Keane, 1980; Norman, 2015). In March 1983 the NSW Parliament passed the *Aboriginal Land Rights Act 1983* (ALRA) that necessarily recognised the extent of colonial land dealings and disruption to Aboriginal lives wrought by colonisation. The restitution of land to Aboriginal community control from 1983 under the ALRA was intended to rebuild Aboriginal peoples’ political and economic power and social relations. The ALRA included three key features: a mechanism for the recovery of certain available crown land and for successfully claimed land to be transferred (as freehold title) to member-based LALCs; a network of Aboriginal Land Councils and 15-year compensation fund based on 7.5% of state land tax revenue (1983–1998) to support enterprise development and the ALC network into the future (Norman, 2015). Recognising land rights also marked the policy shift to Aboriginal self-determination that created a responsible Minister for Aboriginal Affairs and department. The rationale for land rights in NSW was therefore about realising political power and economic power: economic power was to be achieved through Aboriginal-initiated enterprises funded from the 15-year funding stream and political power through the LALCs, that number over 100 and have a presence in most towns and across the city (Norman, 2015). The ability to protect cultural heritage and rights to resources including to hunt and fish, was delayed at the time of the passing of the ALRA and is still unresolved today.

## The benefits of Aboriginal land rights

Focusing on the benefits of land restitution, research shows wealth or income generation to be one aspect – among others – that has not been realised from the NSW Aboriginal land estate (Collins & Norman, 2018; Norman, 2015, In press). Over the 40-year history of land rights in NSW, generating wealth from land rights – often described in aspirational terms as ‘leveraging’ or ‘activating’ LALC land – is an abiding aspiration and well-worn phrase in narratives of Aboriginal land rights (see NSWALC Annual Reports, 2017, 2020, 2021). However, evidence of economic opportunities arising from the provisions of the ALRA are limited. Three key periods of LALC enterprise are discernible: from 1983 to 1998 LALC (and Regional ALCs until 1991) enterprises wide ranging land-based, tourism, cultural artefact production, property (including pastoral stations, a motel) and building purchase, and cultural activities and business purchase, were funded. Enterprises from this period have not continued, although rental return on properties is one continuing revenue stream from this period. From 1999 through to 2009, income generation was almost exclusively generated from the sale of land. The alienation of land became allowable following amendments to the ALRA in 1991 and land alienation in turn funded LALC operations, building works, member sponsorship and benefits. In the period 2010–2022 there has been greater emphasis on land and development. In the last 12 years along the east coast, several LALCs have engaged in joint venture residential projects, along with tourism and hospitality enterprises.

## LALCs and enterprises: Three changes

The work of LALCs is guided by what is set out in the member conceived and approved Community Land and Business Plan (CLBP). The CLBP guides the development of LALC land and other assets and LALC business enterprises and investments. Secondly, since 2014, amendments to the ALRA allow LALCs to establish separate entities to run enterprises on members’ behalf (ALRA, Division 1A, 52C). Finally, NSWALC initiated grants to support LALC business development (known as the NSWALC Community Fund and LALC Business Enterprise Program) (NSWALC, n.d.a, n.d.b), while initially focused on supporting the development of business enterprises, are increasingly aligned, recognising community development – especially for those LALCs without land of high property value – as integral LALC priorities.

It is beyond the scope of this paper to detail the broader economic conditions and land tenure arrangements that LALCs contend with, particularly as this relates to wealth generation from the restituted Aboriginal land estate. The pattern of declining rural economies interlinked with depopulation, mechanisation on productive lands, and climate change are leading factors that limit Aboriginal-led enterprise outside urban centres. The pattern of land return leads any evaluation of the benefits of land rights in NSW and this extends to government inaction in the processing of land claims (Crawford, 2022). The availability of claimable land being confined (mostly) to what remains of the crown land estate is likely to mean LALC land is fragmented small parcels and overwhelmingly zoned environmental conservation and shape the opportunities available to LALCs to pursue enterprise with their land. An ill-informed and hostile public assuming Aboriginal land continues to be accessible to the public also limits LALC activity, including development on their land (see Norman, 2017; Norman et al., 2019).

All LALCs have recovered some land, and although uneven across the state there continues to be less than 1% of the land mass returned, with as much as 80% of this land estimated to be zoned ‘environmental conservation’ (DPIE pers. comm. 2021; NSW Audit Office, 2021; Norman, 2017). As of 31 December 2021, 38 257 land claims from across the state await government processing, covering approximately 1.12 million hectares of Crown land (NSW Audit Office, 2021). With the exception of 3–4 LALCs located on the east coast where residential development land is in high demand and in one instance a successful tourism venture is operated, most are without an ongoing revenue stream other than annual administration allocation from the investment fund overseen by NSWALC.

Another mechanism that recognises Aboriginal interests in land and which interacts with land recovered under the ALRA, is native title. One decade after the NSW ALRA, the Mabo decision in the Australian High Court recognised Indigenous rights and interests in land above all others (*Mabo v Queensland* 1992). Responding to this decision, the Commonwealth government passed the *Native Title Act 1993* (Cth) that commenced a process for Traditional Owners to seek recognition of their rights and interests over land that pre-dates and survives colonisation. These two regimes interact in a range of different ways and while beyond the scope of this paper, it is necessary to highlight that land possessed by LALCs in most cases also carries native title rights and interests on that title. The pattern of land recovery under native title has been excruciatingly slow, with cases taking decades to be determined. Despite the difficulty of proving and negotiating native title rights and interests it is clear that there is an enduring interest on the part of Aboriginal people to continue to engage in this process evidenced by the ongoing lodgement of native title claims that as at 2022, cover more than half of the NSW land mass.

Factors canvassed above indicate that Aboriginal-led engagement of their estate in energy transition will play out differently across the country as different histories and laws shape the extent of land restitution, governance arrangements and rights recognition that accrue in relation to land. In the south, where colonisation has been most sustained and dispossession and land dealings extensive, land repossession has been slow, uneven, piecemeal and largely confined to what remains of the Crown land estate. The NSW Aboriginal land estate is limited, but not insignificant, and inclusion in the accelerated efforts towards decarbonisation could yield benefits that have otherwise not been realised over the last 40 years of the operation of the ALRA and NSW ALC network.

## Aboriginal interests and the *Electricity Infrastructure Investment Act 2020*

The EIIA and delivery of the REZs includes several components designed to produce benefits for and incorporate the interests of Aboriginal communities. The EIIA contains objectives for increasing employment and income opportunities for Aboriginal people in NSW. Under the EIIA Part 1, s4(4), the Consumer Trustee is required to take account of the *Guidelines for Consultation and Negotiation with First Nations Communities* (hereafter 'First Nations Guidelines' (FNG)) and the *Plan for the NSW Renewable Energy Sector* developed by the NSW Renewable Energy Sector Board in carrying out its functions. The LTESA tenders, First Nations Guidelines and the Plan for the NSW Renewable Energy Sector are now being implemented.

### First Nations Guidelines

The First Nations Guidelines are comprised of two parts: a General Guideline, applicable to all REZs with an engagement framework detailing how renewable energy proponents will best engage with communities and a Region-Specific Guideline for each REZ. The Region-Specific Guidelines are to be developed in consultation with local and regional Aboriginal organisations (for example, LALCs, native title interest groups and other relevant Aboriginal organisations) within each REZ and are aimed at addressing the local needs and aspirations of Aboriginal communities. The guidelines are not static documents and will be reviewed every two years 'to ensure their objectives and requirements are in line with community expectations and priorities' (NSW Climate and Energy Action, n.d.b.). The General Guidelines, along with the Region-Specific Guidelines for the Central-West Orana REZ were published in August 2022 (NSW Office of Energy and Climate Change, 2022a, 2022b). The First Nations Guidelines have been developed by the NSW Office of Energy and Climate Change in consultation with Aboriginal communities and they set out the key stages where governments and renewable energy proponents will need to refer to the First Nations Guidelines (NSW Office of Energy and Climate Change, 2022a, p. 10–11).

The General Guidelines encourage proponents to consider and prioritise the use of Aboriginal-owned land for 'access agreements, ownership and development of Renewable Energy Zone Infrastructure projects...where legally, culturally, and environmentally practicable, and following relevant local community advice about respectful and appropriate land use' (NSW Office of Energy and Climate Change, 2022a, p. 11). However, it is stipulated that the Guidelines 'are not intended to present an alternative avenue to address issues around grievances and reparations regarding matters of cultural heritage, native title or land rights'.

At the level of governance, the regional-specific guidelines have been developed in consultation with regional reference groups (NSW Office of Energy and Climate Change, 2022a, 2022b). Regional reference groups will play an important role in convening Aboriginal organisations to discuss Aboriginal priorities around REZs and are expected to liaise with government and renewable energy proponents. At the time of writing, these reference groups were underway in the Central-West Orana and New England REZs. In the Central-West Orana REZ, the Working Group is comprised of the NSWALC Regional Offices, LALC, Aboriginal organisations and government departments. In the Central-West Orana Working Group (CWOWG) one LALC is currently listed as a member. LALCs and staff of the peak body, the NSWALC, are actively involved in the reference group. At this stage, the CWOWG outcomes are focused on employment and training, a point we return to discuss.

### **Long-Term Energy Service Agreements**

The procurement process for the approval of Long-Term Energy Service Agreements (LTESAs) includes mandatory requirements and incentives to increase employment, training and participation by First Nations businesses. Under the tender criteria released for the first round of LTESAs, there is a minimum requirement of 1.5% First Nations participation (unless otherwise stated by Region-Specific Guidelines) and a 'stretch goal' of 10% First Nations participation has been set which creates an incentive for projects to achieve higher levels of employment, training and contracting (AEMO Services, 2022). Applicants for LTESAs will be required to comply with the Aboriginal Procurement Policy which specifies a minimum 1.5% of contract value to be sub-contracted to Aboriginal businesses. Approval of LTESAs require preparation of an Aboriginal Participation Plan 'outlining how a prospective supplier will employ and train Aboriginal people or use Aboriginal-owned businesses in supply opportunities' (NSW Office of Energy and Climate Change, 2022a). The NSW Renewable Energy Sector Board's plan (2022) recommends complementary measures for implementation by the NSW Government including:

- strategies to promote First Nations participation, such as an engagement strategy with Traditional Owner groups and engagement with the industry to create inclusive workplaces and recruitment strategies
- establishing a Skills and Workforce Development group for each REZ which includes First Nations guidelines
- reducing barriers to First Nations small and medium-sized enterprises.

Under the EIIA, renewable energy projects cannot be awarded LTESAs or access rights to the grid if 'there is significant opposition from the community in the local area to the proposed infrastructure' (EIIA Part 4 Division 2 Section 29 4a). The consumer trustee will also have oversight of a fund which will be used for 'community purposes' (EIIA Part 4, 26 2), including Aboriginal stakeholders. At the time of writing, the governance, criteria and operations for these funds were under development (NSW Office of Energy and Climate Change, 2022a).

Together, the NSW REZs and the EIIA have the potential to deliver significant benefits for Aboriginal communities in NSW. The development of the FNGs is a first for Australian renewable energy, as is the level of the requirements and incentives for engagement, support and benefits from large-scale renewable energy

projects. The FNGs and tender criteria are yet to be operationalised – but the NSW REZs is a major reform that should lead to increased employment, training, and access to benefit funds for First Nations communities.

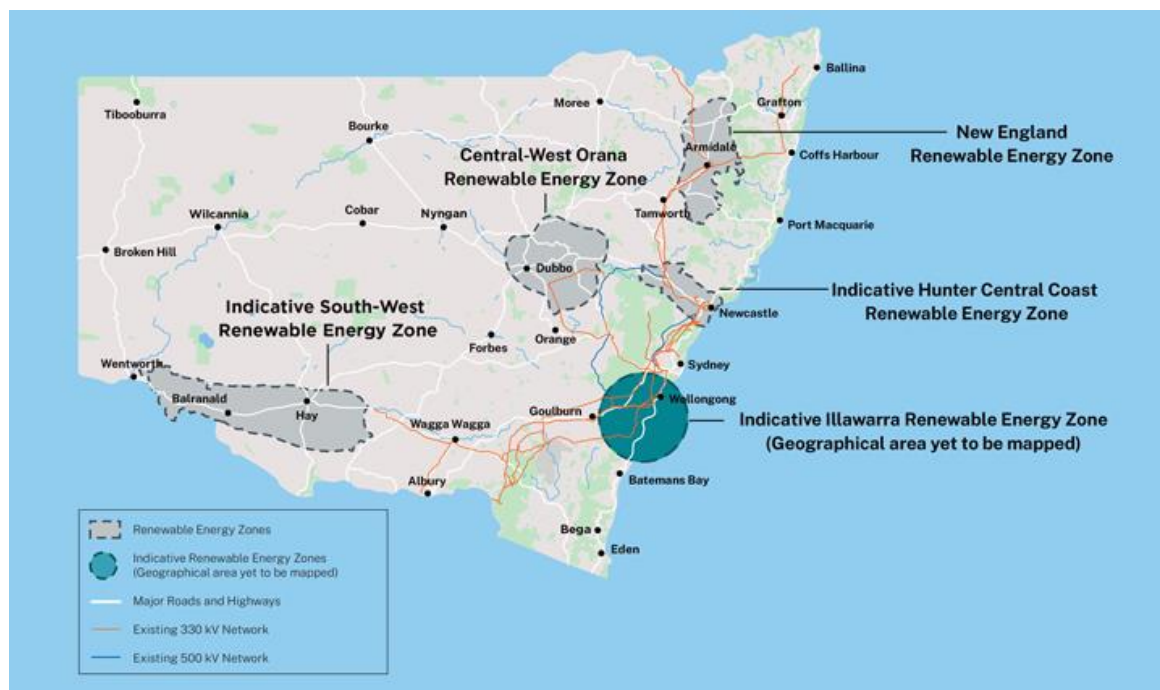
The NSW REZs will have implications for several LALCs that share the footprint along with the surrounding area and transmission corridors. In order for energy transition to contribute to the ability of Aboriginal people to realise their aspirations for self-determination and social and economic autonomy, deeper structural change is needed.

## What do LALCs want to achieve in relation to the NSW energy plan?

As our spatial mapping reveals, the NSW REZs cover the territory of more than 30 LALCs – and many more when the surrounding area and transmission corridors are taken into consideration. Fig. 1 and Fig. 2 illustrate the REZ and LALC shared footprint. Based on interviews and discussion with LALCs, Norman and Apolonio conducted geospatial mapping with research assistants, Cara Stone and Charles Doggett, to better understand the implications of REZs on LALC landholdings and land claims. Using data provided by NSW Crown Lands we mapped all land granted and all outstanding land claims under the ALRA from 1983 (when the ALRA commenced operation) to 30 June 2021. One limitation of this data is that it does not include land that was purchased by LALCs on the open market. Using the Indicative Renewable Energy Zones (IREZs) for Central-West Orana, New England and South-West REZs made available by the NSW Government on 11 November 2021, we looked at how LALC land was located and how many outstanding land claims there were within the REZs. The purpose of mapping was to identify what Aboriginal-owned land, if any, might be used for renewable energy projects. More research is needed to determine the suitability of these lands for renewable energy projects e.g., community aspirations for this land, land value (financial, environmental, cultural etc.), the wind and solar resources, projected energy generation capacity (Norman & Apolonio, In press).

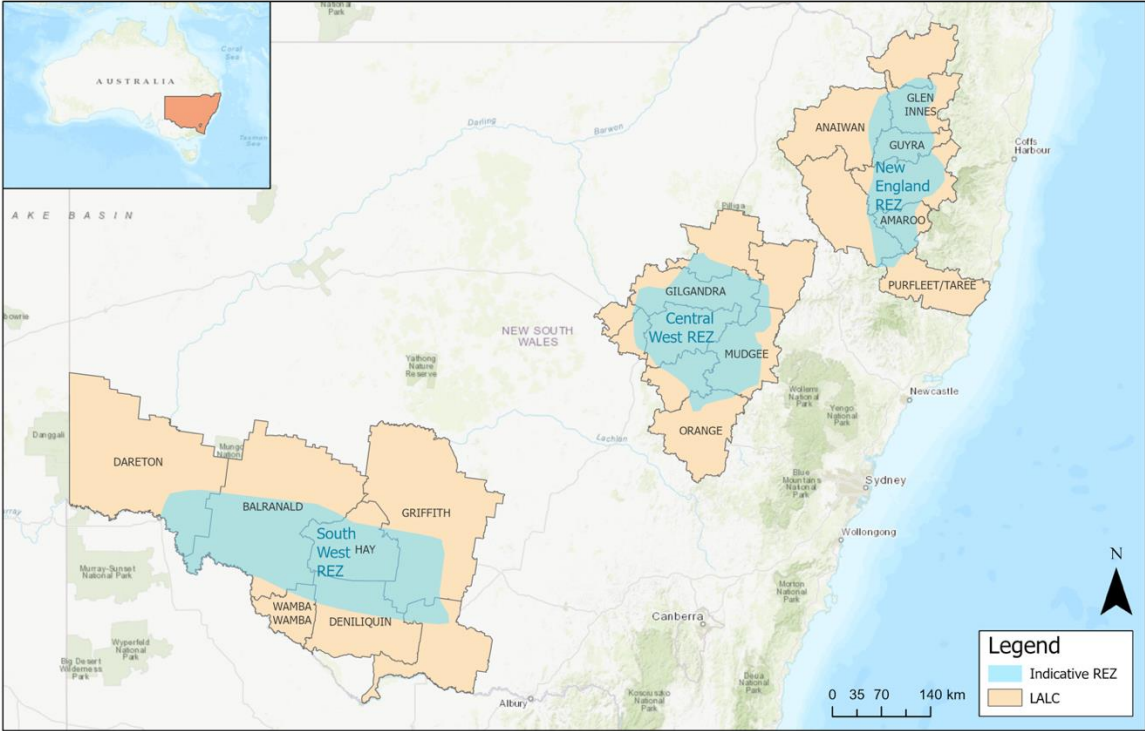
The data analysed is confined to LALC land recovered under the ALRA and does not include land purchased on the open market. Using the IREZs for Central-West Orana, New England and South-West REZs made available by the NSW Government in November 2021, we mapped LALC land including those determined and outstanding land claims. The purpose of mapping LALC land successfully claimed and awaiting determination was to identify what Aboriginal-owned land, if any, might be used for renewable energy projects. Forthcoming research examines the suitability of these lands for renewable energy projects alongside community aspirations for this land, land value, the wind and solar resources, and projected energy generation capacity (Norman & Apolonio, In press). Given the dates of each data source, our maps do not contain any land granted and land claims lodged between 1 July and 11 November 2021. Since our initial analysis of three IREZs in November 2021, the NSW Government has updated Central-West Orana, New England and South-West REZs and the boundaries differ slightly to the IREZs used in our paper; in December 2022 the Minister for Energy formally declared the Hunter-Central Coast REZ under the EIIA and the NSW Government has released an IREZ for this area (see Fig. 1); and the process for declaring a REZ in the Illawarra Region has commenced. While we have not analysed land claims in the Hunter-Central Coast IREZ and the Illawarra region in this paper, we mention these new REZs to highlight the acceleration of energy transition in NSW and to flag sites for future research.

**Fig. 1** Map of New South Wales for the five Renewable Energy Zones declared under the *Electricity Infrastructure Investment Act 2020* (NSW)



Source: Energy Co., NSW Government. (2023c). *Renewable Energy Zone Locations*. <https://www.energyco.nsw.gov.au/renewable-energy-zones/renewable-energy-zone-locations> .

**Fig. 2** Local Aboriginal Land Councils located within the Central-West Orana, South-West and New England Renewable Energy Zones

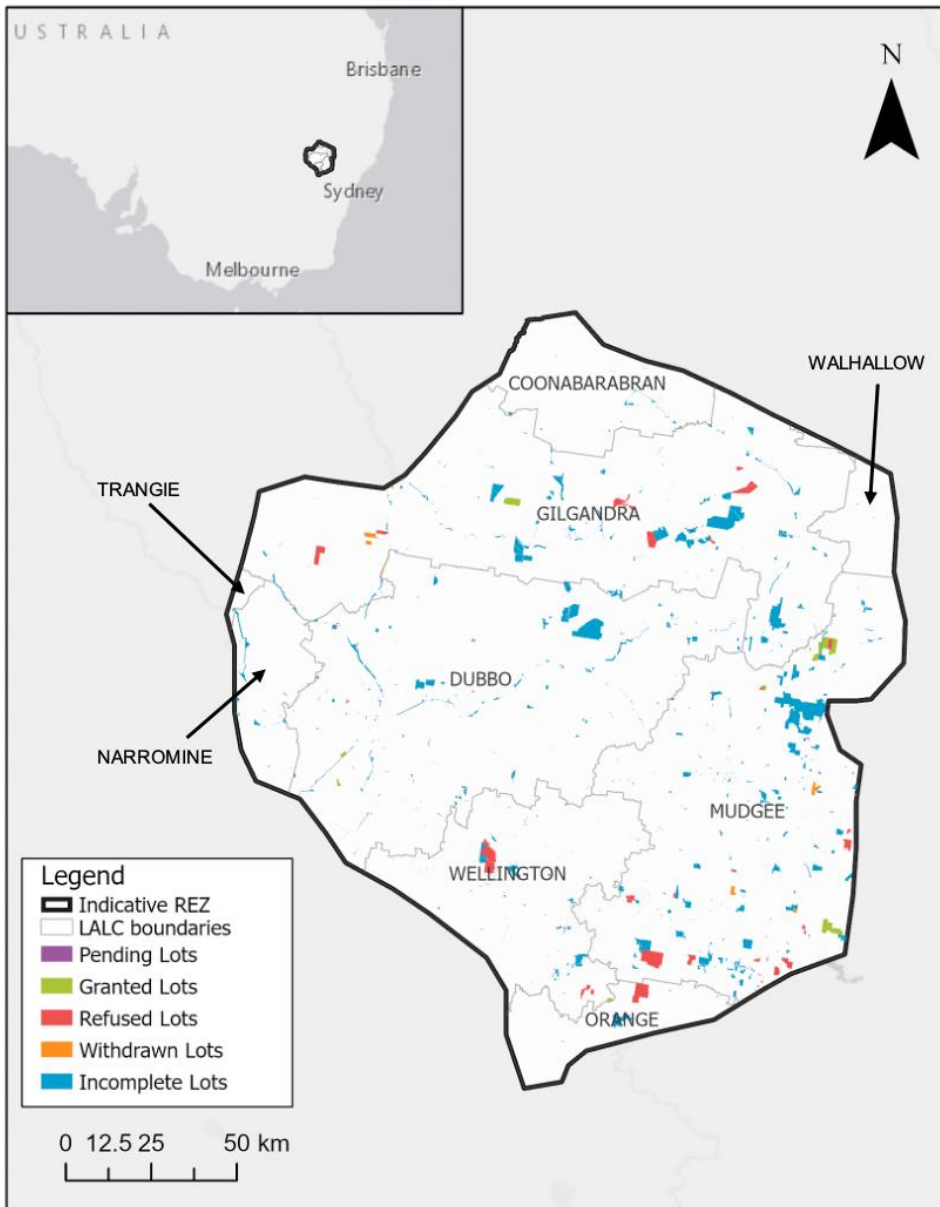


Source: Map created by H. Norman, T. Apolonio, C. Stone & C. Doggett using data from Esri, HERE, Garmin, FAO, NOAA, USGS, SS-SFS, Crown Lands NSW.



The Central-West Orana REZ falls within the boundaries of eight LALCs: Coonabarabran, Gilgandra, Dubbo, Wellington, Mudgee, Orange, Narromine and Walhallow LALCs as Fig. 3 illustrates.

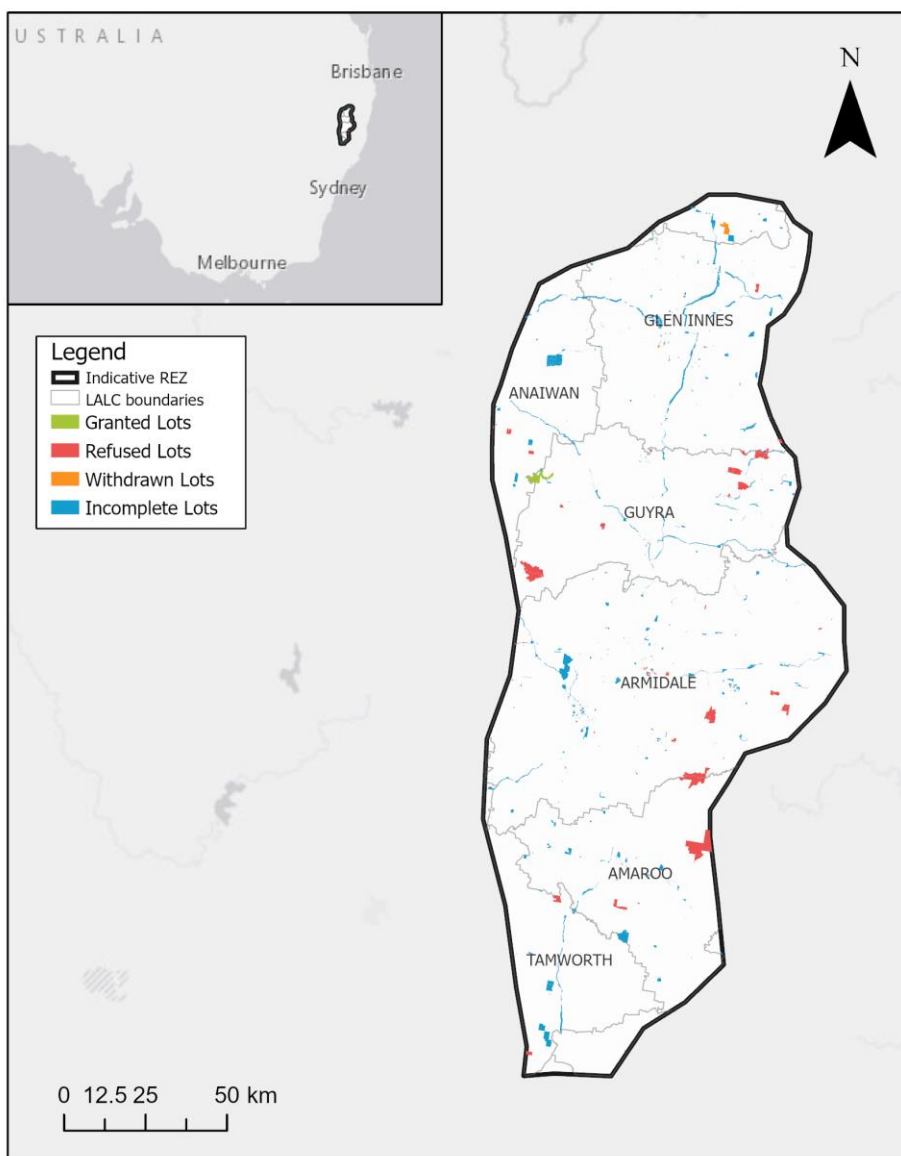
**Fig. 3** Aboriginal land claims within the Central-West Orana Indicative Renewable Energy Zone



Source: Map created by H. Norman, T. Apolonio, C. Stone & C. Doggett using data from Esri, HERE, Garmin, FAO, NOAA, USGS, SS-SFS, Crown Lands NSW.

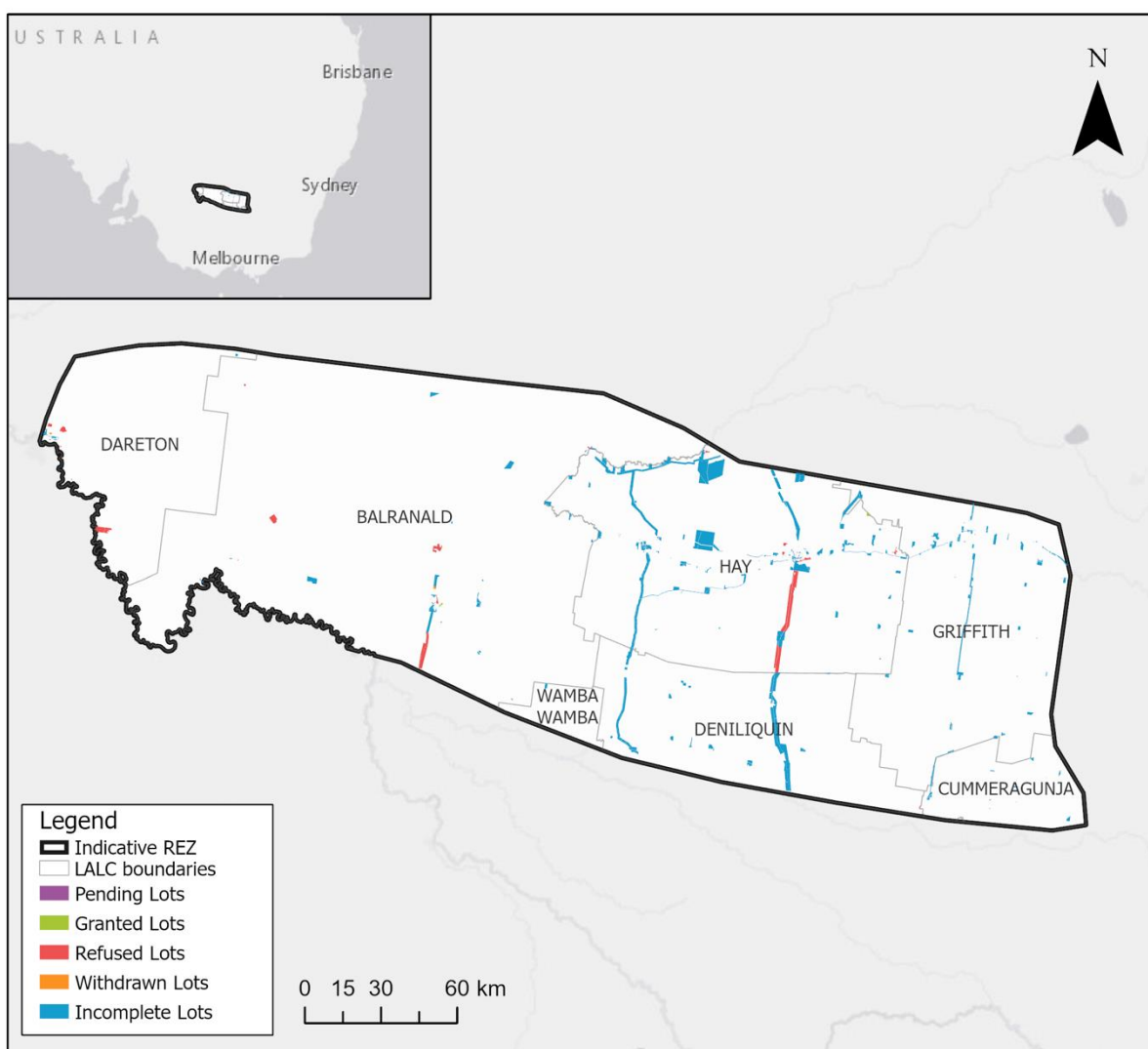
The New England REZ falls within the boundaries of eight LALCs: Moombahlene, Glen Innes, Anaiwan, Guyra, Armadale, Tamworth, Amaroo, Purfleet/Taree LALCs as Fig. 4 illustrates.

**Fig. 4** Aboriginal land claims within the New England Renewable Energy Zone



Source: Map created by H. Norman, T. Apolonio, C. Stone & C. Doggett using data from Esri, HERE, Garmin, FAO, NOAA, USGS, SS-SFS, Crown Lands NSW.

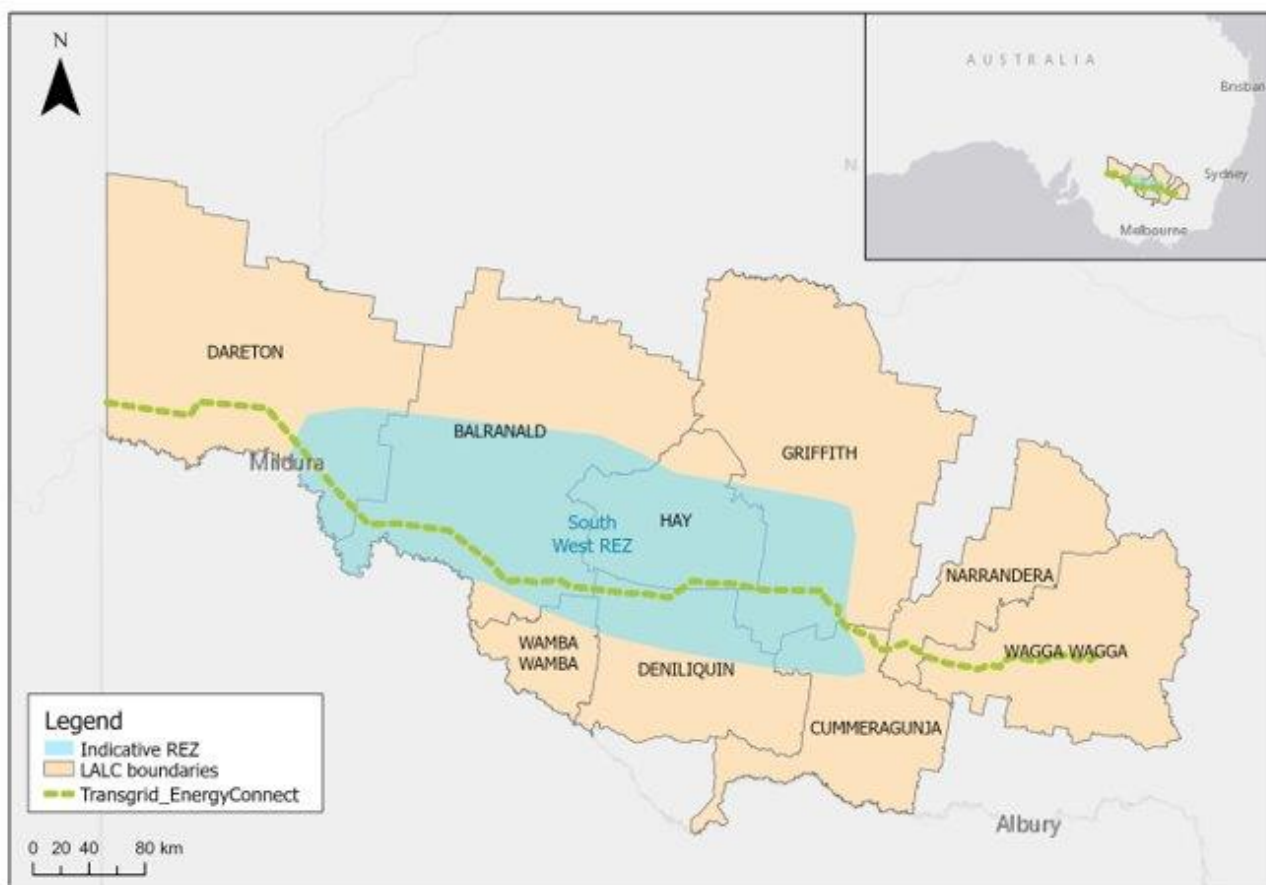
The South-West IREZ falls within the boundaries of seven LALCs: Dareton, Balranald, Wamba Wamba, Hay, Deniliquin, Griffith and Cummeragunja LALCs as Fig. 5 illustrates.

**Fig. 5** Aboriginal land claims within the South-West Indicative Renewable Energy Zone

Source: Map created by H. Norman, T. Apolonio, C. Stone & C. Doggett using data from Esri, HERE, Garmin, FAO, NOAA, USGS, SS-SFS, Crown Lands NSW.

The Hunter-Central Coast IREZ is expected to fall within the boundaries of seven LALCs: Bahtabah, Awabakal, Mindaribba, Worimi, Wanaruah, Darkinjung and Biraban. The Illawarra IREZ is yet to be mapped. In addition, new State Significant Infrastructure projects' projects will be declared that enable the transmission of energy generated in REZs across the state, especially to South Australia (Project Energy Connect) and Victoria (VNI West), that will also traverse Aboriginal-owned land. Fig. 6 shows a projected transmission line that could impact LALC landholdings. Under the NSW Electricity Infrastructure Roadmap, the government has announced the Strategic Benefit Payment Scheme which compensates private landholders for hosting certain infrastructure associated with major transmission projects (NSW Government, 2022). This scheme will see Transgrid pay private landholders \$200,000 per kilometre of transmission hosted. Public landholders are ineligible for payments. The authors have sought clarification from Energy Corporation as to whether Aboriginal landholders classify as private or public landholders under this scheme and at the time of publication they were yet to confirm the eligibility of LALCs (J. Fermio, personal communication, 12 December, 2022).

**Fig. 6** LALCs that will potentially be impacted by Transgrid EnergyConnect (State Significant Project)



**LALCs impacted by Transgrid EnergyConnect (State Significant Project) and South West REZ**

Authors: C. Stone & C. Doggett  
 Layer Credits: Esri, HERE, Garmin, FAO, NOAA, USGS, SS-SDS, Crown Lands NSW

Source: Map created by H. Norman, T. Apolonio, C. Stone & C. Doggett using data from Esri, HERE, Garmin, FAO, NOAA, USGS, SS-SFS, Crown Lands NSW.

### Geospatial mapping of REZs: Findings

Our geospatial analysis finds that there is currently LALC-owned land located within the REZs and the potential for further additions with the resolution of land claims under ALRA.

As Table 1 illustrates, the total area of the Central-West Orana REZ is 20 983.5 km<sup>2</sup>. Of this land, 0.26% has been granted to a LALC (including land granted and pending transfer) and this could increase by 2.6% if outstanding land claims are granted.

**Table 1** Analysis of Aboriginal land claims located within the Central-West Orana Renewable Energy Zone

	Area (km <sup>2</sup> )	Percentage
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<b>Central-West Orana IREZ</b>	20 983.5	100.00%
<b>Granted land claims</b>	54.7	0.26%
<b>Incomplete land claims</b>	545.6	2.60%
<b>Withdrawn land claims</b>	12.2	0.06%
<b>Refused land claims</b>	169.0	0.81%
<b>Pending land claims</b>	0.1	0.00%

As Table 2 illustrates, the total area of New England REZ is 15 083.5 km<sup>2</sup>. Of this land, 0.26% has been granted to a LALC (including land granted and pending transfer) and this could increase by 2.08% if outstanding land claims.

**Table 2** Analysis of Aboriginal land claims located within the New England Renewable Energy Zone

	<b>Area (km<sup>2</sup>)</b>	<b>Percentage</b>
<b>New England IREZ</b>	15 083.5	100.00%
<b>Granted land claims</b>	39.9	0.26%
<b>Incomplete land claims</b>	313.5	2.60%
<b>Withdrawn land claims</b>	5.5	0.06%
<b>Refused land claims</b>	140.7	0.81%

As Table 3 illustrates, the total area of South-West IREZ is 31 869.5 km<sup>2</sup>. Of this land, 0.01% has been granted to a LALC (including land granted and pending transfer) and this could increase by 2.88% if land outstanding land claims are granted.

**Table 3** Analysis of Aboriginal land claims located within the South-West Renewable Energy Zone

	<b>Area (km<sup>2</sup>)</b>	<b>Percentage</b>
<b>New England IREZ</b>	31 869.5	100.00%
<b>Granted land claims</b>	2.1	0.01%
<b>Incomplete land claims</b>	918.5	2.88%
<b>Withdrawn land claims</b>	1.5	0.00%
<b>Refused land claims</b>	102.8	0.32%
<b>Pending land claims</b>	0.02	0.00%

## The NSW REZs and First Nations communities: What do LALCs want to achieve in relation to the NSW energy plan?

All LALCs stated they were interested and open to hosting renewable energy projects on their land but required technical expertise and resources to identify which parcels would be suitable for renewable energy. As Greg Livermore (2021), CEO at Tingha LALC, explained:

*Although we've had recent success with land claims, these land claims are scattered all over the shop. Where those claims have been granted may not be suitable or not in those REZ zones. But where they are, it would be good to go into some sort of partnership and say, 'we'll supply the land, you supply the infrastructure'.*

Similarly, Leanne Kelly (2021) at Ashford LALC, speculated the LALC owned 'a couple of little blocks' that could be suitable for renewable energy. Tara Stanley (2021), CEO at Wellington LALC speculated that LALC land had the potential to be part of renewable energy projects, some of which is in Wellington Shire Town, saying that 'if we were approached, which I don't think we have been previously, we have quite a lot of land'.

The LALC CEOs we interviewed identified key points that attracted them to renewable energy. They highlighted lower energy prices for their members, income generation for the LALC, better opportunities to live and work locally, energy sovereignty/security, autonomy and jobs. No LALCs we spoke to nominated climate change as a driving principle for engaging with renewable energy, but instead emphasised the need to create economic activity and jobs, so that their people could continue to remain on country and attached to their hometown.

LALCs did not offer any views on the different renewable energy models and had no experience of engaging with renewable energy providers beyond jobs and, in one case, a jobs broker for Aboriginal workers for a solar farm (Stanley, 2021). One LALC has been in negotiations with a project developer seeking access through their land for energy transmission (Bain, 2021). On the whole, LALCs said they were not prepared or fully aware of the possibilities for engaging with renewable energy operators or projects on their land.

Our research reveals limited and uneven engagement with Aboriginal communities on renewable projects in the Central-West Orana REZ and other declared REZs. In the Central-West Orana REZ, we found some engagement with one LALC on employment and training and in the New England REZ, another LALC was invited to attend governance meetings convened by a Member of Parliament. These findings align with other research (Frangos et al., 2022; Hicks et al., 2020) that highlights the benefits for Aboriginal people in energy transition have been limited to date.

## Engaging Aboriginal land interests in energy transition

In order for energy transition to address the aspirations Aboriginal people hold for realising self-determination and social and economic autonomy, deeper structural change is needed. We start from first principles to help frame the understanding and analysis of Aboriginal interests in the energy transition. The answer to this question is in part dependent on the scale of the development and the associated inter-section with ownership and land interests. Whereas the opportunity for benefits in large-scale renewable energy is likely to comprise economic participation and benefit-sharing due to the scale of capital investment, there is a greater opportunity for ownership of renewable energy projects at mid-scale (e.g. 1–10 megawatts (MW)) and smaller-scale levels (up to 1 MW). Advancing Aboriginal interests in the energy transition needs strategies for different scales of renewable energy developments.

LALCs interviewed for this research highlighted the transformative potential of employment in a range of different ways. They viewed renewable energy enterprises as less destructive on country, cultural sites and heritage as other industries, such as mining, have been. Several LALCs reported they received income from conducting cultural heritage assessments for renewable developments. Greg Livermore, at Tingha LALC, where renewable energy projects have been operating in the district for many years, characterises the relationship between renewable energy proponents and the LALC as 'very positive' (Livermore, Interview, 2021). As Livermore puts it,

*...we get to go out and do the cultural heritage assessments. That gives us an opportunity to get out on Country to not only earn a bit of money but have a look at what's out there, as well.*

The employment of Aboriginal people during the construction phase, Livermore elaborates, ranges from 'security to labouring jobs; our mob have done pretty well out of it', he reflects. He further commented that,

*It was good to go out on the road for a drive past where they were putting up the turbines and seeing our fellas there on stop and go signs. You think, 'that's good'.*

Livermore spoke with enthusiasm of the employment of young people doing security: 'Aboriginal security guards', he was keen to emphasise, noting the obvious shift from the more deficit-focused representations of Aboriginal people. Livermore was mindful of broader community opposition to the renewable energy projects, but he viewed them as a great benefit and observed growing community support.

## Engagement and governance

When it came to engagement in the nascent community Working Groups, most LALCs we spoke to did not appear to view participation in the community Working Groups as a priority. They noted endless invitations to be consulted and were time-poor with competing demands for the time of their one staff member.

Others offered a more positive account of their experience engaging with a renewable energy project. Tara Stanley (Interview, 2021), CEO of Wellington LALC, explained there was 'very little engagement with [Wellington] LALC' in the first large scale solar project in her area. She explained that many jobs were promised, but no real outcomes. She said, 'We didn't hear back from them and then pretty much the job was finished'. On a more positive note, when approached by another large-scale solar project, Stanley explained they had a lot of engagement. She explained they approached her LALC directly to assist them recruit Aboriginal workers. In this example, the LALC, ahead of a job agency, became the first port of call for Aboriginal job seekers, with applicants registering for work through the LALC. As Wellington LALC CEO explained, (Stanley, 2021), 'we got a lot of people through the doors, and I found that very popular; I'm very happy with the way Suntop went ahead' attributing the successful relationship to 'communication and them just keeping us in the loop'.

## Energy transition and LALC benefits

The LALC office bearers we interviewed viewed renewable energy as a better option that was more culturally aligned with their land aspirations, including their responsibility and protection of landscapes, over other land development options, particularly mining. They speculated that renewable energy held the possibility for greater LALC role in care for country and cultural sites. They were conscious of the impact of ever-increasing hot days, particularly for their older community members. Affordability of electricity was one factor and reliability another. On this point, LALCs preferred reliable and affordable energy to manage heat stress and administer critical health care (such as dialysis). Three LALCs emphasised energy security and explained the regular electricity drop-outs they experience damages white goods and causes bulk food supplies to perish. Repairs to existing energy infrastructure could take days or weeks and the backup diesel generators costly and polluting. Renewable energy was viewed an attractive option for many regional and remote LALCs to address energy security, health, and wellbeing.

Some LALCs viewed renewable energy as attractive because of the possibility of multiple land-use and ongoing access to their land. They imagined the possibility of agistment revenue alongside solar farms, or visiting sites where renewables were installed. That is, that renewable energy projects would not prohibit their ongoing use and enjoyment of land or damage culture and heritage. LALCs raised the possibility of renewable energy

projects attracting improved infrastructure from government and private investment, such as roads, water and telecommunication.

One LALC explained that in their small town they were the main source of Aboriginal employment. They were energised by the prospect of new economies because they knew they had to think creatively to generate options for their current and future generations to remain in the town, in their community and on country. Others imagine the possibility of reconciliation if they were able to take a role in providing energy in their small remote town and for visiting tourists. With good humour, one LALC imagined a future where they literally ‘had the power’. Every LALC supported renewable energy options if it improved opportunities to live and work locally.

LALCs identified several barriers to engaging with renewable energy projects and enterprises. Most were quick to nominate limited landholdings, and all were mindful of the limitations of land dealings a result of native title rights and interests also operating on LALC-owned land title. Most LALCs felt they had little or no information or knowledge about renewable energy, about the scales at which projects might operate, or how they could benefit.

## Aboriginal benefits and interests – different scales of energy development

We start from first principles to help frame the understanding and analysis of Aboriginal interests in the energy transition. The answer to this question is in part dependent on the scale of the development and the associated intersection with ownership and land interests. Whereas the opportunity for benefits in large-scale renewable energy is likely to comprise economic participation and benefit-sharing due to the scale of capital investment (e.g. the capital expenditure for a 200MW wind farm is around \$520 million), there is a greater opportunity for ownership of renewable energy projects at mid-scale (e.g. 1–10 MW) and smaller-scale levels (up to 1 MW). Advancing Aboriginal interests in the energy transition needs strategies for different scales of renewable energy development.

A sketch of the types of benefits and interests for Aboriginal people at different scales of renewable energy development is outlined in Table 4.



**Table 4** Benefits and interests: Large-scale, mid-scale and small-scale renewable energy

Scale	Benefit	Notes
<b>Large-scale renewable energy</b>	Jobs	Employment and training (e.g. apprentices) on wind farms, but especially solar farms and transmission construction which provide greater opportunities for entry-level employment. Quantified employment and training commitments for First Nations should be a component of a labour strategy for the renewable energy build-out and reducing socioeconomic inequity in regions. There is a shared interest between renewable energy project developers in increasing local labour supply and reducing the disproportionately high unemployment rate amongst First Nations people.  As construction phase jobs can be short-term, it is important that employment increases in other project phases (e.g. ongoing operations and maintenance) and links to longer-term employment and training.
	Businesses	Expenditure targets for Indigenous-owned businesses should also be a component of procurement strategies to expand and develop capabilities that can be applied to other projects and sectors.
	Community benefit-funds	It is standard practice for renewable energy projects to make annual contributions to community benefit funds which can be a significant source of funds for investment in local infrastructure, services, training and recreation. Frangos et al. (2021) found little evidence of these funds supporting First Nations communities to date. The investment of community benefit funds in projects that support First Nations persons is a mostly untapped opportunity for economic and social development.
	Ownership	Due to the large capital investment required for large-scale solar and wind farms (typically hundreds of millions of dollars) – which are getting larger in scale – significant ownership stakes are unlikely. Community ownership and equity can be established within large-scale renewable energy projects but these can be complex; there is a mixed track-record with successful implementation and will be inherently a small component of the project
<b>Mid-scale renewable energy</b>	Ownership	International review indicates the greatest benefits come when renewable projects are undertaken on indigenous land with ownership. Most international 'best practice' projects are mid-scale – around 1–10 MW (see Frangos et al., 2021). Ownership creates greater control, revenue streams that can be used to fund other priorities e.g. health programs) and supply energy for business and services.
<b>Micro-grids</b>	Ownership, energy security	Micro-grids could play an important role for communities on the edge-of-grid or off-grid. Micro-grids are now often cost-effective relative to grid connection for edge-of-grid locations, leading electricity distribution networks to investigate opportunities to convert edge-of-grid locations to micro-grids. Micro-grids centred around renewable energy and storage are cleaner (especially where diesel is being used) than grid electricity. Micro-grids could provide some employment benefits – but the major benefit is greater energy security and resilience to reduce energy poverty and associated impacts.
<b>Small-scale</b>	Reduced energy bills/poverty	Rooftop solar (and batteries) can reduce household bills (which can be very expensive in hot, remote locations) and also be a source of local jobs (e.g. installation, ongoing maintenance). Community-level or neighbourhood roll-outs of household renewable energy have been implemented effectively within First Nations communities (e.g. Bushlight, 2011).

## International experience

International experience illustrates that some of the most beneficial projects have occurred on First Nations owned land as there is greater equality in development and benefits accruing as owners. Developing projects on Aboriginal-owned land will take more time to develop local capacity and consent but can deliver much greater benefits for First Nations communities.

Work by Indigenous Energy Australia and the Institute for Sustainable Futures (Frangos et al., 2021) found that the best outcomes often occur from renewable energy projects on Indigenous-owned land as there is greater equality in development and benefits accruing as owners. We offer three examples of advantageous outcomes (for further detail see Frangos et al., 2021).

- The Ramahyuck Solar Farm (Longford, Victoria) is wholly owned and operated by the Ramahyuck District Aboriginal Corporation. Following government funding to develop project feasibility, debt funding was secured for construction. The profit generated from the development will be redirected to education and health programs.
- The Tuaropaki Geothermal Power Station, New Zealand, is owned 75% by the Māori, Tuaropaki Trust, and 25% by Mercury Energy (a large energy company). The Tuaropaki Trust was developed through a series of financial partnerships with government support including pastoral farming, dairy production and the power station. These developments produced a long-term income for community programs and other commercial ventures.
- The Altin Hydro Project, Canada, is a 100% Indigenous owned and operated project. Government support was critical in establishing the project. Once established, revenues were distributed based on joint clan meetings to uses such as health and a 'Land Guardian Program'.

The common features to these projects are Indigenous ownership and ongoing revenue supporting community development beyond direct project benefits such as employment.

There is no requirement to engage the interests of LALCs and their landholdings, or other Aboriginal landholding groups, in the energy transition. Incentives to negotiate the inclusion of Aboriginal land, subject to 'Free Prior and Informed Consent' (FPIC) could see Aboriginal people as significant beneficiaries of the energy transition. Incentivising renewable energy operators to develop partnership projects on Aboriginal land could see significant long-term returns for those communities.

## Resourcing and capacity building to support LALC engagement

If the First Nations Guidelines are to work well in practice with the participation of First Nations communities, there will need to be resourcing, capacity-building and support for LALCs. There is an important piece of work missing in the renewable energy plans and that is for LALCs to develop their own local- and regional-level renewable energy strategy identifying what they want from this momentous economic change; for LALCs to identify, supported by research and evidence, their needs and aspirations and regional-level strategy. In Victoria, for example, the state government introduced the Traditional Owner Renewable Energy program in 2020 which provided \$100 000 to nine Registered Aboriginal Parties to support the design and implementation renewable energy plans and aspirations (Victorian State Government, n.d.). We argue it is imperative that LALCs, and Aboriginal people, have the resources to think through what NSW Aboriginal landholders want the renewable energy transition to mean for them. We have emphasised the need for the First Nations Guidelines to include resources to support local level Working Groups in their dealings with renewable energy proponents. Further to this, we identify a step well before LALCs are engaging with energy projects to allow them to assess what they would like to achieve from the renewable energy transition.

The development of a LALC renewable energy strategy could include an audit of skills needed to capture the opportunities. The REZ and renewable energy transition success will be measured against Indigenous aspirations and the Closing the Gap targets. Therefore, it is imperative that there be opportunities for the Working Groups (such as CWOWG) to articulate their aspirations, build knowledge, capacity and resources among Aboriginal landholders and communities to engage meaningfully in this significant moment in the NSW energy transition.

The First Nations Guidelines outline that CWOWG will represent Aboriginal interests, with and between industry, government, and community. However, there is no detail about how CWOWG will operate, its structure or governance, how it will represent and report to member organisations, how the interests of non-member Aboriginal organisations will be captured or whether LALCs will be members of CWOWG. There are no resources to provide capacity and relevant technical expertise to CWOWG. Although the CWOWG will likely be engaged in long-term work in negotiation and planning, at the time of writing there are no resources to support this complex and lengthy undertaking. In relation to the operation of CWOWG, it is imperative that they are set up to be sustainable and succeed over a long period of time. This must necessarily include the provision of support in a range of areas including technical expertise and advice, skills and resources, modelling, surveying, land data, enterprise investment, administrative support and business support. We suggest a funded position for a REZ Liaison Officer be established within these organisations and additional CWOWG funding to contract independent experts to advise the CWOWG and ensure informed decision-making.

LALCs are currently under-resourced, overwhelmed with requests to participate in consultation and have very limited capacity to be involved in negotiations (Norman et al., 2021). This under-resourcing is manifest on many fronts including personnel, resources, technical expertise, capital and capacity. It is imperative that, if LALCs are to participate effectively in the energy transition, LALCs will need to be adequately resourced.

Several resources and community guides have been developed to improve knowledge, literacy and capacity of project developers to engage with Aboriginal communities that include guidance on community engagement and renewable energy (Hicks et al., 2020; Lane et al., 2017, 2019). Other guides emphasise strategies for best practice engagement to improve Aboriginal community outcomes (Frangos et al., 2021) that identify four best practice engagement 'principles':

- meaningful and ongoing relationships
- cultural connection
- capacity development, and
- Closing the Gap targets.

The First Nations Clean Energy Network (FNCEN), the national peak body that advocates for Indigenous communities to share in the benefits of energy transition have released two key documents. The first is FNCEN's Best Practice Principles, which aim to create more equitable conditions for First Nations people engaged in negotiations around medium to large renewable energy projects. The guide is specifically for project proponents and government, who are encouraged to:

*...follow these Principles, from the initial planning stage of any clean energy development onwards, regardless of what the minim legal requirements to receive project approval might be (FNCEN, 2022a, p. 4).*

This would apply, for example, in building, development, operation, and ownership plans as well as in government approvals process, procurement, employment policies and grant funding. The second document is FNCEN's 'Clean Energy Negotiations guide for First Nations people' which has been conceived as:

*...a tool for any First Nations community which wants to participate in, engage with or respond to clean energy project behind developed on your country (FNCEN, 2022b, p. 5).*

It provides support for communities, who are aware of renewable energy projects being proposed on their land, who are negotiating agreements with energy proponents, or who want to initiate a renewable energy project (FNCEN, 2022b). These guidelines explain the basic building blocks for developing an enduring relationship with First Nations people through what they refer to as 'sharing the benefits'.

What is missing is the voice of Aboriginal people, and the member-based landholding LALCs. The questions might be asked: What do LALCs, and the Aboriginal people they represent want from the renewable energy transition? What do Aboriginal people want from the renewable energy transition?

In these initial reflections, we see both the potential for Aboriginal inclusion in renewable energy but also the urgent need to prepare LALCs for equitable negotiations with government and renewable energy proponents. For LALCs to be positioned for negotiation, they need to be better informed what land is suitable for renewable energy, if there is any land under claim that would be suitable for renewable energy, what solar and wind resources are on their land, the zoning of land and cultural heritage, among other points. Within LALCs, there needs to be adequate opportunity to consult with community and collectively come to an understanding about the benefits and limitations of hosting renewables on LALC land.

An NSWALC renewable energy strategy could include an assessment of energy needs, LALC land assets and future land assets, an assessment of wind and solar resources, modelling the energy generation potential of these lands, understanding the communities' cultural heritage priorities and values, and member and community capacity for engaging in renewable energy projects. LALCs are representative organisations both of their members and wider Aboriginal community – and with land assets that could be mobilised in the renewable energy transition – but in the absence of a strategy and plan by and for those LALCs, they risk being unprepared and ill-equipped for this once-in-many-generation regional economic transition.

The opportunities for engaging in renewable energy by First Nations communities are broad. They include different types of involvement and benefits in large-scale renewable energy projects, such as training and employment, product supply and services from First Nations businesses, partnerships between LALCs and project developers, lease arrangements and rents, profit sharing, joint ventures, co-investment, and co-ownership. At a mid-scale project level (up to 5–10 MW), First Nations communities could own utility-scale solar, hydro and storage projects, creating revenue streams for investment with their communities in social services and infrastructure. At a community level, there are opportunities to establish micro-grids in remote and regional communities, community battery storage, rooftop solar and other types of 'decentralised energy resources' which can improve energy security (supporting better services) and deliver financial benefits.

We have observed limited commitment on the part of the NSWALC to drive engagement in the renewable energy economy. The peak body, NSWALC, is yet to adopt a position in relation to engaging in renewable energy or opportunities for engagement as new economies emerge. Their public documents, such as strategic plans (draft NSWALC Strategic Plan, 2022), are yet to express their views about the impact of climate change on their landholdings or strategy for economic opportunities that ameliorate the most damaging aspects of climate change. Further, the REZs have a regional footprint that takes in several LALCs with boundaries, as the maps included in this paper reveal. Our research indicates that that interest in renewables certainly exists on a local level and support from regional offices is emerging for some LALCs (NSWALC Western Zone, pers. comms. 2021). This points to the need for LALCs to work at the regional level, with the potential for LALC-led renewable energy projects, along with opportunities for training and maintenance teams to be developed.

This is already a feature of some aspects of CWOWG, which will work as a coalition of local and regional Aboriginal organisations. This level of regional governance and decision making has long been a feature of Aboriginal public policy and was a defining feature of the NSW Aboriginal land rights until Regional Land

Councils were abolished by a hostile reforming government in 1991. Since this time, LALCs have had limited opportunities to work on scales beyond their local town and genuinely collaborate at regional levels, a geography that reflects Aboriginal nations and language groups and decision making. The manner in which CWOWG works regionally and the opportunity for LALCs to work together, represents significant benefit and potential exercise of political power and maximising opportunities through the land estate. The adoption of an ALC regional network and framework for advancing economic engagement could strengthen LALC negotiations with renewable energy operators, assist in sharing resources and expertise, and enhance political power of LALCs.

## Conclusion

The draft First Nations Guidelines as reviewed by the authors – and as the parliamentary debate over the EIIA reveals – emphasise training, employment and procurement opportunities for Aboriginal people and communities. However, the renewable energy transition has the potential to involve Aboriginal people in far more active ways when these options extend to energy projects on Aboriginal-owned land. Where Aboriginal people's economic engagement has been limited, this transition has the potential to be shaped by Aboriginal values and aspirations and achieve the long-sought wealth creation through the Aboriginal land estate where communal enterprise and collective income generation can be derived.

Most LALCs expressed their ambitions for self-sufficiency and saw energy as part of this big picture – to reduce the burden of cost of electricity, and to create opportunities for survival on their own country. Most LALCs were deeply mindful that there was very limited economic activity that they could lead or engage with. They noted the consistent downturn in regional economies and towns and felt themselves to be outliers in what economic activity continues – both as individuals and in terms of LALC-initiated enterprises.

The draft FNG for the Central-West Orana region highlights that there is a critical opportunity to advance the 'long-term economic aspirations' (NSW Office of Energy and Climate Change, 2022b, p. 6) of the local Aboriginal landholders and 'meaningful long-term relationships with local Aboriginal communities' and 'inclusion [of Aboriginal people] on the journey to delivery of the Renewable Energy Zone infrastructure projects' is crucial to the success of NSW state's energy transition. In order for the long-term economic aspirations for Aboriginal landholders to be advanced there is an urgent need for resources to support an Aboriginal renewable energy strategy.

Research conducted by the UTS-based Aboriginal Land and Justice Research Group (Norman & Apolonio, 2021) revealed a low level of engagement thus far in the Central-West Orana REZ, limited capacity (personnel, expertise, experience) on the part of Aboriginal landholders, no Aboriginal land engagement and no resources or templates about what might be possible from engagement with the renewable energy, storage and transmission projects. This is despite the stated intention of the EIIA to involve LALCs in regional reference groups comprised of the Member of Parliament, shire councils and relevant state agencies and – in the Central-West Orana region – CWOWG.

For many reasons, some canvassed in this paper, the restitution of Aboriginal land has not yielded the anticipated transformation in Aboriginal collective lives or relations with the dominant settler society. The energy transition could yet contribute to that transformation, but it is imperative that LALCs, and Aboriginal people, have the resources to think through what NSW Aboriginal landholders want the energy transition to mean for them and consider the opportunities to engage Aboriginal land in renewable energy projects.

## Recommendations

1. That the New South Wales Government resource an independent group to work with Local Aboriginal Land Councils, Traditional Owners groups and community to support the development of Aboriginal-led strategies to meet local needs and priorities, develop best practice on how they engage with the new renewable energy economy, and define broad principles and aspirations for working together.
2. That the New South Wales Aboriginal Land Council collaborate with a team of researchers and renewable energy practitioners to run workshops across New South Wales with Aboriginal landholders to raise awareness of climate change impacts, adaptation and mitigation activities, and future industries.
3. That a range of resources be developed for Aboriginal landholders to inform their dealings and engagement in new energy economies and climate change mitigation.
4. That the New South Wales Aboriginal Land Council establish a climate change unit that works to create opportunities at the regional level for Local Aboriginal Land Council participation in climate change adaptation and mitigation activities including grid-connected renewable energy, decentralised energy, and other decarbonisation activities, on Aboriginal-owned land.
5. A program be developed in parallel with the roll-out of the Renewable Energy Zones to develop opportunities for renewable energy developments on Indigenous-owned land in partnership with Local Aboriginal Land Councils and other Indigenous stakeholders.

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