

# Aboriginal Community

perspectives on microgrids for energy  
resilience on the NSW South Coast

Consultations  
and analysis



Battery Storage and  
Grid Integration  
Program

An initiative of The Australian National University



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Image: Eurobodalla Coast Tourism ©

# Introduction

**This study into the feasibility of installing and operating an islandable microgrid system was commissioned by the School of Engineering at The Australian National University, as part of the South Coast Microgrid Reliability Feasibility (S $\mu$ RF).**

Operating under the auspices of the School of Engineering's Battery Storage and Grid Integration Program, the overarching aim of the broader project is to understand how microgrids might contribute to a better energy future for the Eurobodalla and regional Australia.

This S $\mu$ RF study has been undertaken to assist with understanding the perspectives of Aboriginal people residing in the Eurobodalla LGA about their experiences around the reliability of the supply of electricity to them, as well as other matters such as affordability.

Significant challenges were experienced with the delivery of this project arising from the need of the lead researcher to relocate from the South Coast due to personal reasons prior to the commencement of this project.

Other factors, such as challenges engaging with the community and other competing priorities that coincided, for example the referendum on the Voice to Parliament also contributed.

As a result, it was necessary for this project to pivot slightly from the methodology that was originally proposed. These changes did not significantly impact on the findings of this study. In some respects, they helped with understanding and appreciating the dimensions and scope of the demands that Aboriginal organisations, particularly Local Aboriginal Land Councils, experience.

In spite of the challenges and limitations with the community engagement of this project, it is hoped that it presents an honest and realistic picture about the feasibility of microgrids for regional Aboriginal communities, and adds value to the outcomes of the overarching S $\mu$ RF.

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# Methodology

## **The research methods for this study were a combination of community consultations and workshops, along with a review of literature.**

Given challenges with engaging community members to attend workshops, input was also gained from informal discussions with key representatives of local Aboriginal land councils, officers of community based organisations, and casual meetings with local Aboriginal people. These discussions demonstrated a genuine interest, while acknowledging the relatively limited understanding, about microgrid systems.

There were considerable challenges in implementing the methodology. The researcher experienced significant difficulty connecting with selected organisations who were considered to be the likely key actors in supporting the construction and operation of any microgrid system in an Indigenous community.

There was sound logic for adopting this approach, which is consistent with much of the feedback that was received during the consultations, but challenges were encountered with the deployment of the methodology, which again, can also be partly explained through the feedback of some community participants.

In all, three separate trips were made to the South Coast in an effort to garner support from the community to engage with this study and to actually hold meetings and workshops. This was one more trip than originally planned, however it was deemed necessary due to the challenges with seeking the participation of community members and organisations from a distance. As a result, some of the findings from this study relating to community perspectives were also based on informal discussions described above.

The community consultations, while limited, complemented existing literature, and insights from national networks of First Peoples engagement and other experts working in the renewable technologies space. Alongside this study, the researcher participated in a forum called Powermakers hosted by the First Nations Clean Energy Network, which included Canadian First Peoples through their organisation Indigenous Clean Energy (ICE).

Powermakers was held in Cairns on 23–27 October 2023. Aside from providing valuable information and training (for example, in areas such as negotiating agreements), Powermakers also now operates as an ongoing support network that adds value to enhancing the feasibility of microgrid technologies by supporting 'building the capabilities', allowing individuals to lead their respective communities in transitioning to clean energy technologies.

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While such networks can be of considerable benefit to First Peoples communities, it is important to recognise the context of the transition to renewable technologies, particularly in relation to scale and jurisdiction.

The types of clean energy technologies being considered within these First Nations networks tend to focus more on projects that are designed to operate at the medium to large scale levels. This does not necessarily deal with energy resilience issues for communities at local levels.

Further, renewable energy projects are predominantly being undertaken in jurisdictions other than NSW, which is relevant in so far as those states and territories either have no Aboriginal land rights legislation, or in the case of the Northern Territory, a significantly different legal framework.

Criteria were developed based on these frameworks and applied in this study to assess the feasibility of establishing a microgrid system on the NSW South Coast.

# Aboriginal land tenure and relationships

Indigenous peoples have multi-dimensional relationships with their country that include legal, cultural, social, environmental and economic.

The governance of Aboriginal peoples collective relationships with country within the Eurobodalla Shire primarily occurs through two key legal frameworks:

- *Aboriginal Land Rights Act 1983 (NSW)* (ALRA); and
- *Native Title Act 1993 (Cth)* (NTA).

## The NSW Aboriginal Land Rights system

The ALRA establishes the land rights system in NSW with a network of (currently) 119 local organisations across the state, who operate under the authority and stewardship of a state body, the NSW Aboriginal Land Council (NSWALC). Among other things, the purposes of the ALRA<sup>1</sup> give authority and responsibility to local Aboriginal land councils:

- to have land vested in them;
- to acquire and manage land and other assets and investments;
- for the allocation of funds to and by those councils; and
- the direct and indirect provision of 'community benefit schemes'.

Section 52A of the ALRA authorises and regulates to provision of 'community benefit schemes' by local Aboriginal land councils, subject among other things, to the approval of the NSWALC.

These core functions at face value lend themselves well to supporting the sustainable operation of a microgrid system in certain locations. This is particularly so given that for local Aboriginal land councils in the Eurobodalla Shire, the provision of housing services is the primary 'community benefit scheme' that they deliver.

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<sup>1</sup> See s. 3 Aboriginal Land Rights Act 1983 (NSW)



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The additional benefit that land councils bring is that they have a built-in governance structure established and informed by the ALRA, that has its own quality control mechanism through the approval function of the NSWALC.

The NSWALC is a body of nine elected representatives, elected by their fellow members of the land councils that exist and operate within their respective regions. Supported by decentralised bureaucracy, the NSWALC has often been referred to as both the 'steward' and 'regulator' of the NSW Aboriginal land rights system.

As noted by Norman, Briggs and Apolino (2023) 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. In addition to recovering certain available crown land and enabling for successfully claimed land to be transferred (as freehold title) to LALCs, the ALRA also established a 15-year compensation fund based on 7.5% of state land tax revenue (1983–98) to support enterprise development and the Aboriginal land rights network into the future.

The balance of these funds managed in perpetuity by NSWALC (commonly known as the 'statutory investment fund') serves as a source of funding for the basic operation of LALCs.

It also gives the NSWALC some leverage in being able to support, promote and sometimes drive initiatives that can deliver benefits broadly across the network, or in specifically targeted areas. This fund, along with the scale and structure of the land rights network also enhances the ability of Aboriginal communities to exercise their collective right to self-determination. The issue of self-determination is discussed further in this report.

The ALRA also requires each LALC to develop and implement a member conceived and approved Community Land and Business Plan (CLBP). The CLPBs guide the development of LALC land and other assets, as well as LALC businesses and enterprises (Norman et al, 2023).

There is considerable authority and capacity within the NSW land rights network in the Eurobodalla LGA to assist with assessing and supporting the viability of a sustainable microgrid system. There are, however, also considerable limitations. As a representative of the NSWALC stated, LALCs are 'asset rich and cash poor'. Many smaller LALCs (as determined by the scope and scale of their assets), such as those operating within the Eurobodalla LGA face a range of challenges with leveraging their assets, which limits their ability to undertake the required due diligence to assess the feasibility of innovative benefit schemes such as a microgrid, let alone establish one.

Feedback from consultations also highlighted the reality that LALCs operate at stretching point. They are often the port of call when any outsiders want to engage with the community on any matter. The annual funding allocations from the NSWALC are generally insufficient and barely cover their basic operating costs, limiting their ability to employ people to develop and implement community benefit schemes.

This finding is consistent with the point made in the methodology outlined in this report regarding the challenges in engaging with LALCs and their members to participate in this study. LALCs also experience considerable temporal limitations due to the demands placed on them and their restricted capacity to respond.

Further, the processes for obtaining the requisite approvals for any community benefit scheme are lengthy and require the involvement of multiple key actors, who can often have competing priorities.

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These challenges impact on the feasibility of establishing a microgrid system with the support and involvement of any LALC in two key ways:

1. their ability to make time to undertake the required due diligence in assessing the feasibility of establishing and maintaining a microgrid system, and
2. managing their responsibilities for undertaking and coordinating the actions to ensure that a microgrid is appropriately constructed and maintained to ensure that it delivers meaningful benefits to LALC members.

## Native title

The NTA was passed by the federal parliament in 1993 in response to the 1992 High Court decision recognising the existence of native title rights for Aboriginal and Torres Strait Islander traditional owners.

Similar to the ALRA the NTA enables Aboriginal and Torres Strait Islander traditional owners to make claims over parcels of vacant crown land.

Unlike the ALRA, land returned to traditional owners is not transferred into any other form of land tenure, which then prohibits them from disposing of these assets where they have received a positive determination. This limitation, among others, means that the Prescribed Bodies Corporate generally need to explore options that involve the direct use of their land for other activities that can deliver economic, social and cultural benefits to the people they represent.

Supported by organisations such as the First Nations Clean Energy Network and the National Native Title Council, there is considerable interest and activity with the construction and operation of renewable energy projects, particularly in Northern, Central and Western parts of the continent. These initiatives using native title land, tend to promote medium to large scale renewable energy projects, given that they have the greatest capacity to also generate substantial economic returns and benefits to people and communities.

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## South Coast native title claim

A registered native title claim has recently been lodged covering a large area that incorporates the Eurobodalla LGA. While this claim has largely been motivated by the policing and criminalisation of Aboriginal fishing rights on the South Coast, its registration gives rise to the claim groups right to be consulted about any acts that may impact on their native title rights.

This situation expands the scope of the engagement with Aboriginal cultural leaders that will be required to obtain the consent for any microgrid project. Fortunately, within the Eurobodalla LGA most members of LALCs are also traditional owners. This dual status will help to alleviate some of the challenges that can be experienced with obtaining the Free, Prior and Informed Consent of Aboriginal people for any development activity.

## Traditional ownership and community leadership

Understanding the nature and structure of leadership systems that operate for Aboriginal people in the Eurobodalla LGA, and in other areas of Australia is critical for all developments.

The first and most important point is that an Aboriginal person can be both a community leader and a traditional owner. It is important that there is a distinction between both roles, subject to the matter that is being discussed or decided.

Community leaders will be key decision makers in areas such as the services that wrap around or intersect with a microgrid system. Traditional owners will make decisions regarding the construction of a microgrid system and the values and impact on any heritage places and social significance for the community.

Within the Eurobodalla Shire, there are seven local Aboriginal land councils. All land councils own residential housing properties to varying degrees that they manage independently, or through an 'Aboriginal community housing provider'. In addition, all local Aboriginal land councils hold land assets, which is sometimes alienated to provide capital for other 'benefit schemes'.

Rather than dispose of their land assets, these organisations are now looking towards leveraging them for the construction of housing developments, in which they partner or own.

Like most Aboriginal communities across Australia, those in the Eurobodalla operate with a mix of traditional owners and community leaders, some of whom have what is known as a 'historic relationship' with the country and community. Understanding this context needs to be a critical consideration for any proponents for a microgrid within any Aboriginal community in the Eurobodalla Shire.

**A traditional owner is defined for the purpose of this study as a person who has cultural obligations to and speaks for 'country'.**

**A community leader is defined for the purposes of this study as a person who holds a decision making role in an Aboriginal community-based organisation.**



Image: Eurobodalla Coast Tourism ©

# Community consultations

**While the consultations with community were not as extensive as desired, they still provided a valuable insight into the perspectives of Aboriginal people living in the Eurobodalla LGA.**

These consultations have helped map out some of the key considerations that partners need to be aware of and incorporate into any future engagement strategies with Aboriginal communities in the Eurobodalla LGA with respect to the construction and maintenance of an islandable microgrid system.

## **Narooma consultations**

A workshop with the Narooma community was held at the local library. This workshop was attended by six community members, all of whom are also recognised Walbunja Traditional Owners. All of the participants are currently, or have previously been members of the Wagonga Local Aboriginal Land Council located in Narooma.

The participants were shown the video presentation that was provided for these consultations. The presentation was very well received and all participants indicated that it provided them with a reasonable understanding of what microgrids are and how they operate.

All participants expressed genuine interest and a degree of excitement about the potential benefits for microgrids for Aboriginal communities in the Eurobodalla LGA. However, they also thought that there were limitations regarding where this technology could be applied. The two key areas where participants believed microgrids could deliver benefits was with respect to cost relief and resilience in energy supply, particularly in emergency situations.

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There were two key areas where the participants believed there were limitations with constructing a microgrid in their locality.

The first was that the community lacked the assets and infrastructure needed to establish a microgrid that would operate at sufficient scale to deliver widespread benefits. The only community-based entity that currently has the infrastructure to support the construction of a microgrid, or has the potential to support its development, was the local Aboriginal land council with which they are, or have been affiliated.

Local Aboriginal land councils in the Eurobodalla Shire, as explained by a person who participated in a separate interview, are 'asset rich and cash poor'. These assets are generally held in land, and property which is largely used for the delivery of social housing services to the community.

The challenge with establishing a microgrid in their location was that the properties were not sufficiently proximate at a scale for a viable system.

It was noted however, that LALCs in the region are constantly looking at opportunities to construct more housing and aged-care facilities and participants all agreed that while a microgrid system does not appear to be feasible at this time they should be considered as a part of any new development activity or 'benefit scheme' that their land council might undertake.

Secondly, the issue of benefit sharing through a microgrid system was also identified as a potential limitation and risk on the basis of how many people are beneficiaries. The participants expressed concern about a scenario where the establishment of a microgrid would only benefit a group of some people, but not all.

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It was considered that such a situation would lead to a level of disenfranchisement from those not connected to a microgrid that would likely lead to social upheaval within the community and potential conflict.

While noting this risk, the participants agreed that measures could be taken to mitigate or avoid the realisation of any social upheaval. This could involve constructing a microgrid as part of the development of:

- a facility, for example, a cultural centre that is accessible to and for the benefit of all members of the community and could be used to keep people safe during a natural disaster;
- an aged care facility to provide affordable housing for community elders; and
- an emergency housing facility for people and families who are homeless and/or escaping domestic violence.

## Other Aboriginal participants

Discussions were also held with two other Aboriginal land council representatives: a representative of the land rights movement on the NSW South Coast and an official in a local Aboriginal land council whose boundaries fall within the Eurobodalla Shire. These discussions were of great value as they helped to build an understanding of how renewable energy technology is being considered within the NSW land rights movement generally, and by an individual land council.

This particular local land council has sixteen housing properties and is currently planning construction of a block of twelve units.

This land council is seeking to understand what funding opportunities are available to transition to clean energy supply systems as well as what infrastructure might best suit the organisation and its members' needs.

This was evident in the fact that the organisation was sending representatives to clean energy symposia and events to build their awareness through collaborating with others from communities who are further down the path with embracing clean energy technology.

The views of the representative of the local Aboriginal land council were consistent with those of the regional representative in so far as the level of importance of renewable technology to the community, within the context of other issues they are dealing with.

In this regard both people made the point that renewable energy technologies were not a priority consideration for Aboriginal people living in the region, but it was becoming an increasingly important topic for communities and community leaders.

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This is demonstrated by individual leaders taking the initiative to attend Indigenous renewable technology events to inform themselves about the opportunities and the challenges.

## Locations considered most likely for an islandable microgrid to be feasible

After building an understanding of what microgrids were, all participants agreed that Wallaga Lake was the community where an islandable microgrid would be most feasible. Some people also indicated that they thought that the Mogo Village would also be a feasible option. The two key factors that were stated for this view was that:

- the properties were in close proximity and at a scale where they could deliver a meaningful benefit, and
- they are community owned assets (through their respective land councils), this enables some control over the decisions made and actions taken.

While the many attempts to meet with a group of members of the Wallaga Lake community did not succeed, it was possible to have a number of conversations with a representative of Merrimans Local Aboriginal Land Council. Some of these conversations took place at the land council's office located at the Wallaga Lake Village.

The nature of these discussions did not permit the presentation of significant materials to inform the representative, however, they did give an insight into the realities facing the community and their priorities. As with other participants, microgrids seem like a good idea and present significant advantages. At this point in time, renewable energy technology of any form is not a priority issue for the community given other challenges and issues they are facing.

## Generic regional challenges identified

Organisations managing Aboriginal social housing programs in the region already face significant challenges with getting tenants to pay sufficient rent to meet the operating and maintenance costs for those properties. Placing an Aboriginal community-based organisation in the position of also having to collect money to cover the costs of an islandable microgrid system will place an additional burden on an already stretched organisation.

The potential risks with such a scenario include the organisation:

- experiencing difficulties with collecting sufficient funds from the users to enable the required levels of maintenance of a microgrid system, resulting in heightening the possibility of a malfunction
- having to manage the behaviours of users to ensure that all connected households are accessing and utilising the resource fairly and contributing their fair share to the maintenance and management costs.

An important point to note is that the supply and reliability of electricity to Aboriginal households and enterprises in the Eurobodalla LGA is seen as a more peripheral issue at this time. This was evident from both the challenges in generating interest for people and organisations to engage with this study, as well as the feedback from community members.



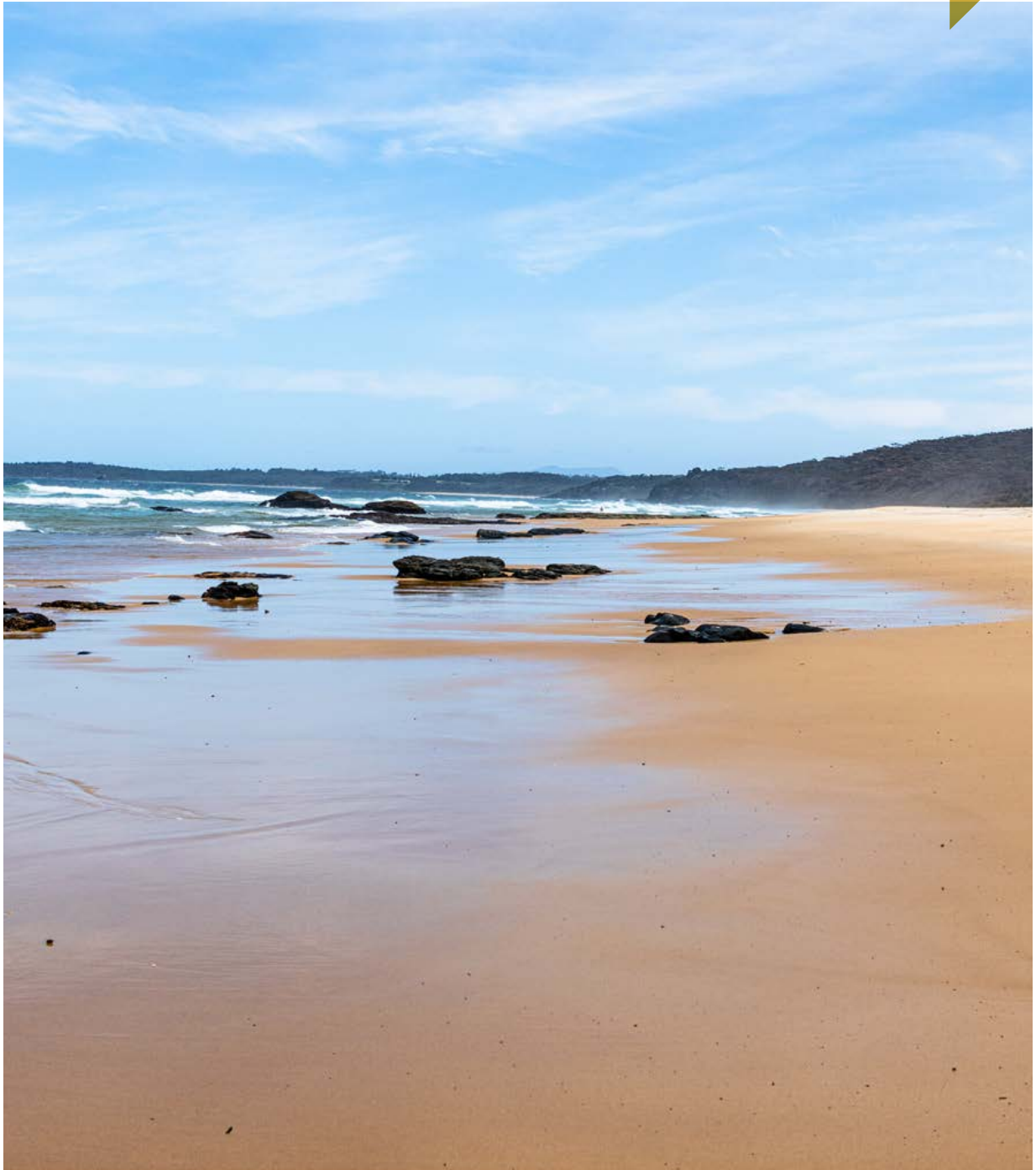


Image: Eurobodalla Coast Tourism ©



Image: Eurobodalla Coast Tourism ©

# Policy, programs and support

There is evidence of significant recognition Aboriginal and Torres Strait Islander peoples rights, interests and aspirations regarding climate change and initiatives to combat its impacts through government policy and programs. A particular focus of the policy posture of governments with respect to Aboriginal and Torres Strait Islander peoples is the heavy emphasis that is placed on supporting communities to take up the opportunities available in the renewable energy space.

## Federal Government

The overarching policy framework of the Commonwealth government with respect to the clean energy transition is called Powering Australia. This plan is focused on creating jobs, reducing pressure on energy bills and lowering emissions by boosting renewable energy (DCCEEW). While comprehensive plans for each economic sector are being developed through the [Net Zero Plan](#), the Powering Australia agenda is being delivered through commitments in the following areas:

- National climate leadership
- Energy
- Industry, agriculture and carbon farming, and
- Transport.

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## First Nations Clean Energy Strategy

The Australian Government has committed \$5.5 million to develop the First Nations Clean Energy Strategy (Strategy), which will give Aboriginal and Torres Strait Islander peoples a say in renewable energy policies and programs.

The strategy has been designed to identify improvements and areas for future investment and aims to identify ways to support First Nations aspirations to:

- participate in and benefit from the clean energy transformation
- ensure access for reliable clean energy for all Australians
- ensure First Nations cultural heritage, knowledge and connection to land and sea Country is respected, and
- assist government and industry to create opportunities to build deeper collaboration, consensus and new ways of working with First Nations peoples.

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## Regional Microgrids Program

Administered by the Australian Renewable Energy Agency (ARENA), the Regional Microgrids Program seeks to support the development and deployment of renewable energy microgrids across regional Australia. There are two streams of funding through this program, one of which is for First Nations Community Microgrids. (ARENA)

The outcome ARENA is seeking through the First Nations stream of the program are:

1. Reduced cost of energy and other community benefits for First Nations communities.
2. Cleaner and more reliable energy in First Nations communities.
3. Empowering First Nations communities to participate in their electricity supply arrangements and the development of energy infrastructure.
4. Resolving one or more of the barriers to deployment of microgrid solutions.

## First Nations Clean Energy and Emissions Reduction Advisory Committee

A First Nations Clean Energy and Emissions Reduction Advisory Committee is a non-statutory mechanism established on 30 April 2023 to advise the Minister and Department on First Nations perspectives on Clean Energy and Climate Change.

This committee has participated in working sessions on potential priority areas for the Strategy and has advised the Commonwealth government on:

- Approaches and mechanisms to support First Nations peoples to participate in, and benefit from the clean energy transformation, and
- Access to reliable and affordable clean energy for First Nations peoples (DCCEW, 2023).

Key messages that have been delivered by the committee to the Minister and the Department include the:

1. need for action now.
2. importance of strong collaboration with the Minister's ministerial colleagues.
3. importance of appropriately resourcing the Strategy to ensure its finalisation and to support implementation.
4. need to ensure that the clean energy transition does not result in a widening of the current gaps in access, affordability and security of electricity, especially in remote communities. (DCCEW, 2023)

## NSW Government

First Nations Guidelines have been established under the NSW Government Electricity Infrastructure Map. The purpose of the guidelines is to set out the expectations for increasing employment and income opportunities for Aboriginal peoples and communities in the construction and operation of new electricity infrastructure projects in NSW delivered under the NSW Electricity Infrastructure Roadmap (the Roadmap).

The roadmap is of indirect relevance to the purposes of this feasibility assessment, however, the guidelines do provide an important body of 'best practice' principles as follows:

- identifying Aboriginal stakeholders (refer to [Schedules 2 and 3](#) in the guidelines)
- engaging with Aboriginal stakeholders with an understanding of Free, Prior, Informed Consent Principles
- pre-consulting with Aboriginal stakeholders before commencing consultation discussions
- information gathering and input from the local community to assist in decision-making
- ongoing participation throughout the project completion
- maintaining the relationship even after the immediate project has been completed
- all participants being treated with dignity and respect
- being informed about cultural awareness and protocols.

## First Nations Clean Energy Network

The First Nations Clean Energy Network (FNCEN) is made up of First Nation people, communities and organisations, collaborating with industry, investors, unions, academics, legal and technical experts to:

- support community-owned renewable projects to deliver lower-cost and reliable energy
- power job opportunities and strong economies so 'our mob' can live and work on Country, and
- form strong industry partnerships and sharing the benefits of a renewable future.

There are three pillars to the work of the FNCEN that focuses on:

1. Community
2. Industry Partnerships, and
3. Policy Reform

(FNCEN).

In the executive summary of a working paper on *First Nations and Clean Energy Transmission: Emerging Issues in New Transmission Infrastructure*, the FNCEN states that 'certainty, community acceptance and social licence are essential to delivering the transmission infrastructure required to support a rapid renewable energy transition' (FNCEN).

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The FNCEN offers eight actions that it considers will support Australian governments to partner with First Nations in the clean energy transition.

1. Provide energy security for First Nations families by removing policy and regulatory barriers to clean energy.
2. Scale community-driven clean energy solutions to replace diesel generators.
3. Embed principles of Free, Prior and Informed Consent into legislative, policy, and decision-making processes and systems.
4. Plan for Country, culture and people to facilitate mutually beneficial outcomes.
5. Embed First Nations in the energy system through Power Purchase Agreements (PPAs) with First Nations clean energy suppliers.
6. Build First Nations ownership of clean energy infrastructure through innovative finance solutions.
7. Support First Nations-led clean energy projects to supply electricity to markets.
8. Build First Nations participation in the clean energy workforce and supply chains.

# Key considerations for microgrid projects

**There are a variety of examples and templates for engaging with Indigenous communities, both domestic and international, with respect to renewable energy infrastructure construction and operation.**

They generally cover the following key themes:

- Recognising and giving effect to Indigenous peoples right to 'Free, Prior and Informed Consent'
- Ensuring that any project delivers fair and equitable benefits across the community
- Providing traditional owners with the authority to determine where infrastructure will be located to minimise damage to the environment and their people, and
- Providing guidance on how to respectfully engage with Indigenous communities and organisations.

## **Indigenous peoples human rights**

There are a significant number of international human rights instruments that to varying degrees seek to provide protection for Indigenous peoples across the world. It is of critical importance that government agencies and other potential partners understand them because their standards are increasingly being applied by Aboriginal peoples and communities in Australia, thus establishing expectations for their engagement in association with any infrastructure developments taking place on their country.

## **United Nations Declaration on the Rights of Indigenous Peoples**

The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) is the principal and most comprehensive instrument adopted by the United Nations General Assembly that sets out the standards for the recognition of the rights of Indigenous peoples. It is important to note that the UNDRIP is not legally binding on any nation states who support it. That said, the Australian government has given and maintains its support for the UNDRIP.

Key articles of relevance contained in the UNDRIP associated with the construction and operation of a renewable technology system include the following:

### **Article 3 - Self-determination**

Affirms Indigenous peoples collective right to self-determination and to establish their own institutions to pursue their political, economic, social and cultural aspirations.

### **Article 23**

Indigenous peoples have the right to determine and develop priorities and strategies for exercising their right to development. In particular, indigenous peoples have the right to be actively involved in developing and determining health, housing and other economic and social programmes affecting them and, as far as possible, to administer such programmes through their own institutions.

### **Article 32**

1. Indigenous peoples have the right to determine and develop priorities and strategies for the development or use of their lands or territories and other resources.
2. States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.
3. States shall provide effective mechanisms for just and fair redress for any such activities, and appropriate measures shall be taken to mitigate adverse environmental, economic, social, cultural or spiritual impact.

## **Self-determination and Free, Prior and Informed Consent**

Much of the literature on the rights of Indigenous peoples promotes the need to recognise the right to Free, Prior and Informed Consent. While this is critically important there is a consistent failure within the literature and with the advice given to understand that this Free, Prior and Informed Consent is contextualised within Indigenous peoples right to collective self-determination.

It is arguable that this situation has arisen from the tension that has and continues to exist between Indigenous Australians and governments regarding the recognition of the right of self-determination. In international law self-determination generally applies at two levels: the right of individuals; and the right of nation states. Prior to its adoption governments generally argued against Indigenous peoples right to self-determination out of concern that it would undermine the authority of the governance arrangements for nation states.

Free, Prior and Informed Consent can in effect be seen as a setting out criteria and procedure for the effective recognition and implementation of the right to self-determination. The failure of potential partners of Aboriginal communities with a microgrid project to understand the primacy of the right to self-determination runs the risk of falling short of community expectations for how they give or withhold their right to Free, Prior and Informed Consent.

## **Benefit sharing**

The fair and equitable return of benefits to the Aboriginal community arising from a renewable energy project and their fair and equitable distribution among community members is a critically important consideration for any proposed microgrid project.



This goes as much for the risks associated with the uneven or unfair allocation and distribution of benefits as it is for the actual benefits that might be realised.

Microgrids could play an important role for communities in edge-of-grid (remote parts of the network where reliability is an issue) or off-grid (no connection to the main grid) contexts. Microgrids 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 microgrids. Microgrids centred around renewable energy and storage are cleaner than grid electricity and diesel generation. Microgrids could provide some employment benefits – but the major benefit is greater energy security and resilience to reduce energy poverty and associated impacts (Norman et al 2023).

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While Norman et al (2023) recognise the potential for microgrids to deliver a range of benefits to Aboriginal communities, many of the benefits that may be realised are associated with systems that are connected to the grid. Islandable microgrids have potential to deliver a range of benefits. However, there are significant challenges in gaining revenue through the export of energy back to the grid. If these challenges could be overcome, this source of revenue could, at the very least, be used to contribute to the running and maintenance costs for a microgrid system.

A primary benefit of Aboriginal community ownership of an islandable microgrid system would result if it could reduce energy bills for households that are close to or living under the poverty line. Another significant benefit would arise if a microgrid system could also assist with mitigating the risk of disconnection, particularly during situations where there is a disruption with the transmission of energy from the grid.

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People 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 are costly and polluting. Renewable energy was viewed as an attractive option for many regional and remote LALCs to address energy security, health, and wellbeing. (Norman et al, 2023)

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## Community authority and capacity

The feasibility operating a microgrid system in an Aboriginal community in the Eurobodalla LGA inherently requires granting those communities to independently make critical decisions on a range of issues, including where the infrastructure will be located.

As noted by Norman et al (2023), the office bearers for the LALCs that were interviewed viewed renewable energy as a better option that was more culturally aligned with their land aspirations. This included their responsibility and protection of landscapes. These office bearers also speculated that renewable energy held the possibility for a greater LALC role in care for country and cultural sites.

Recent events such as the 'approved' destruction of the Jukkan Gorge rock art site in the Pilbara has brought significant attention

to the impacts of development activities on Aboriginal cultural heritage sites. The legal destruction of a culturally significant site to enable the expansion of an iron ore mining operation has created a watershed moment that governments and Indigenous peoples are now having to respond to.

For this reason organisations such as the FNCEN have developed guidelines specifically for renewable energy projects to assist with preventing damage and destruction to culturally significant places through developments that seek to combat climate change (FNCEN).

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As noted by Norman et al (2023) in the case of the NSW Aboriginal land rights system, if the First Nations Guidelines<sup>2</sup> 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. They 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.

This highlights the importance of engaging with Aboriginal communities in NSW on the basis of offering them a holistic range of renewable energy technologies to consider. That is not to say that microgrids

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2 See NSW Government Energy Infrastructure Roadmap, First Nations Guidelines, Increasing income and employment opportunities from electricity infrastructure projects, [NSW First-Nations-Guidelines.pdf](#)

are not viable option for Aboriginal communities in NSW. What it means is that in order to meaningfully assess the feasibility of a microgrid system. Aboriginal communities also need to be informed about alternative options in order to determine what is best for them.

Norman et al (2023) also note LALC's unique position as 'representative organisations' that hold land assets that could be mobilised in the renewable energy transition. However, in the absence of a strategy and plan by and for those LALCs, they risk being unprepared and ill-equipped to effectively engage in this transition.

**LALC's unique position as 'representative organisations' that hold land assets that could be mobilised in the renewable energy transition. However, in the absence of a strategy and plan by and for those LALCs, they risk being unprepared and ill-equipped to effectively engage in this transition.**

It has been observed that there is a limited commitment on the part of the NSWALC to drive engagement in the renewable energy economy. It 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. (Norman et al 2023)

It should be noted that this situation was recognised by one Aboriginal person with a close relationship with NSWALC. It was acknowledged that NSWALC were very interested in supporting LALCs with investigating and initiating renewable energy projects, however, rather than drive the agenda, they were more inclined to play a supporting role where local and regional communities had taken the lead.

The apprehension of the NSWALC to take the lead in driving a renewable energy strategy is understandable. While the NSWALC is a well resourced organisation, there are very high costs associated with maintaining their operations and at the same time adhere to their statutory obligations to maintain a healthy balance in their investment fund. Similar to LALCs, the NSWALC is also an organisation that is dealing with multiple demands for its attention on a complex and wide range of policy areas.

The NSWALC also acknowledges the primacy of enabling LALCs to operate as autonomous bodies and is understandably cautious about taking any action that may be seen to interfere with their authority to decide on and drive their own initiatives. The problem with this approach is that it maintains the strategic inertia that is inhibiting LALCs from building the capacity they need.

One recommendation, among others, that has been made is that the New South Wales Government resource an independent group to work with local Aboriginal Land Councils, Traditional Owners groups and communities. This group could 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 (norman et al, 2023).



Image: Eurobodalla Coast Tourism ©

# Findings

**At face value there is no reason why a microgrid system to supply electricity to Aboriginal households and/or enterprises would not be feasible. While not without their complexities, this study has found islandable microgrid systems to be relatively simple to understand. There is a logic to microgrids that appeals to Aboriginal people and there are examples of where they do operate well in Indigenous communities, both in Australia and internationally.**

Aboriginal people, households and organisations in the Eurobodalla LGA experience a number of pressures due to their socio-economic status. The establishment of a microgrid connected to homes in which Aboriginal people and families reside has the potential to provide considerable relief to this situation, but will not in themselves relieve their situation. This in itself does not mean that establishing a microgrid system to provide electricity to Aboriginal households and enterprises is not feasible, however, there is evidence from this study that microgrids may not necessarily be the type of renewable energy technology that appeals most to them.

The one consistent response from all the Aboriginal people residing within the Eurobodalla LGA was that there was one particular location that was cited where it was considered that a microgrid system would be beneficial. This was the Wallaga Lake Village located at the southern end of the LGA. The key reasons why people considered the Wallaga Lake Village to be a good location for a microgrid was due to it being a 'discreet community' that held ownership over its own land assets and provided housing services at a scale that could deliver meaningful benefits.

This view is supported by the evidence of other existing microgrid systems operating in Indigenous communities. Microgrid technology has been successfully deployed in Indigenous communities located in remote areas. The experiences of these communities, particularly in Australia, is that they experience high costs with accessing electricity, and their remoteness has prohibited them from being connected to the grid, largely due to the high infrastructure costs.

While somewhat isolated, the Wallaga Lake Village is connected to the grid, resulting in the reliable supply of power to households and enterprises. This gives rise to the question as to the need for households at Wallaga Lake, do they need to be connected to a microgrid system? A microgrid system in this location may bring some relief in terms of the cost of supplying electricity, however, it also places other demands on the community such as providing maintenance and managing back-up systems such as diesel generators at times when the microgrid is unable to supply the level of power that is required.

## Cost

The cost of connecting Aboriginal households and enterprises to a microgrid is prohibitive because they lack the financial capacity to independently construct and maintain such a system. As one person interviewed commented, in order for this technology to be feasible, it will require considerable investment from either public or private sources. While government policy settings and programs have been established to facilitate investment in microgrid technologies in Australia, they tend to be targeted towards other locations.

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## Capability of the community

As partly demonstrated by the challenges with garnering the interest of Aboriginal people and organisations to participate in this study, the fact is that in many cases they are simply overwhelmed with various demands for their time and attention. Representative organisations located in the Eurobodalla LGA such as LALCs operate at a stretching point in supporting the needs of their members and lack the time and resources to apply the necessary due diligence to make an informed decision about microgrids.

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The other critical issue with respect to community capability is that there is also a lack of technical capacity within to operate and maintain a microgrid if one were to be established. Given the limited capacity of an islandable microgrid supplying electricity to Aboriginal households and enterprises to generate revenue, it is difficult to see that this technology would be sustainable without the provision of technical support from an external partner.

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.

When it came to engagement in the 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 (Norman et al 2023).

## Community priorities

Aboriginal people and organisations located in the Eurobodalla LGA face a high number of competing priorities in their lives and businesses that is a separate issue to their capability. The cost of living is a perennial issue for a significant proportion of the Aboriginal population. There are limited employment opportunities for Aboriginal people living in the Eurobodalla LGA and

representative organisations such as LALCs are often seen to be the go-to organisation for people needing relief and support.

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LALCs in the Eurobodalla LGA offer a range of community benefits to their members and the community at large, which has to take precedence for their leaders. This impacts on their ability to give ideas such as microgrids the attention that is required, particularly with respect to planning. What this means is that even where there might be interest within a community to explore microgrids as an option, considerable time and resources will need to be invested just to get a project from the point of conceptualisation to construction and operation.

## Benefits

There is evidence that the construction and operation of a microgrid system could deliver to the connected Aboriginal households and enterprises, however, there is also considerable potential for these benefits to be undermined due to the limitations in their distribution.

An islandable microgrid system will only deliver benefits to those households and enterprises that are connected to it. So what about those who are not connected to a microgrid? This is a likely scenario that has the potential to cause considerable disharmony among members of a community who are not connected. The potential for a microgrid to exacerbate the existing tensions that exist among Aboriginal people in the Eurobodalla LGA could have very serious consequences.

The question of who will benefit from being connected to a microgrid and how they will benefit is a matter that needs to be considered from the outset and is one that in spite of all efforts many never be resolved to the satisfaction of all community members.

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A way of mitigating any disharmony that might arise from the limited distribution of benefits from a microgrid system is to link them to other benefits. Two options include, connecting to:

1. a microgrid to any new housing development for Aboriginal people, or to an aged-care facility
2. people who are seen as being among the most vulnerable in the community, such as elders,

is more likely to be broadly accepted by community members rather than the benefits being delivered in a manner which could be viewed as simply being opportunistic.

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## Existing infrastructure

The model for an islandable microgrid that was presented to participants in this study was based largely on using existing housing to install solar panels that feed power into a community battery. The logic of this model is very sound, however, the reality is that the quality of housing for those people who might benefit the most is often very poor.

Organisations who operate social housing services to Aboriginal people in the Eurobodalla LGA face many challenges, particularly with collecting rents at a sufficient level to support the ongoing repairs and maintenance. Many of the housing properties are in a serious state of disrepair which creates considerable risk for installing any additional infrastructure. Further, much of the housing stock is old and has been constructed using materials such as asbestos, which adds further complications and will significantly impact on the cost of constructing and installing a microgrid.



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As previously indicated, this situation lends itself to constructing and installing a microgrid system in concert with the construction of new housing and infrastructure.

## **Policy, programs and strategy**

While government policy settings and the arising programs and strategies are evolving towards creating opportunities for Aboriginal communities and organisations to embrace renewable energy technologies, they are not targeted in a way that supports the needs of people living in the Eurobodalla LGA. These policy setting, programs and strategies consider microgrids among the mix of renewable energy technologies that are available, however, they tend to favour medium to large scale systems established in more remote parts of the continent.

The reliability and affordability of the supply of electricity to Aboriginal households and communities is an important consideration for government and peak Indigenous

organisations such as the NSWALC. Other priorities such as creating employment opportunities and generating a source of revenue through the operation of renewable energy systems on Aboriginal owned land tends to take precedence.

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There are programs that offer financial support to enable Aboriginal communities and organisations to inform themselves about microgrids, however, these communities generally lack the capacity to dedicate the time and resources to apply for these funds.

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. (Norman et al 2023)

# Conclusion

**From this analysis it has been concluded that at this point in time that connecting Aboriginal households and enterprises to a microgrid is not feasible.**

There is considerable evidence that microgrids are a reliable and affordable source of electricity for Aboriginal communities, households and enterprises, both in Australia and overseas. That said, the circumstances of the communities in which microgrid technology has been successfully deployed is significantly different to the experiences of Aboriginal people, households and communities located within the Eurobodalla LGA.

It is important to note that while there is a limited understanding generally about clean energy technologies and their potential to supply reliable and affordable electricity to Aboriginal people, households and communities, there is some interest. Clean energy technologies may not be front-of-mind, but evidence from this study is that people are capable of understanding how they might be applied and how they might provide benefits.

Moving forward, it is important that Aboriginal people are provided with a range of options for the supply of electricity through clean energy technologies. Microgrids can serve as a viable option in some circumstances, however, Aboriginal communities and their leaders need to be informed about the range of available options to enable them to make informed decisions about which type of technology best meets their needs and is consistent with their broader aspirations.

**Moving forward, it is important that Aboriginal people are provided with a range of options for the supply of electricity through clean energy technologies.**

# Resources

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