APPENDIX A

First Nations Clean Energy Strategy

Case Study Pack

We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past and present.

Table of Contents

Introduction

This report presents a series of case studies showcasing the potential for First Nations involvement and leadership in clean energy projects. These examples show how positive relationships between First Nations peoples and clean energy stakeholders can make a big difference. By looking at these case studies, we gain valuable insights about effective ways to engage with communities and how government programs can better support First Nations involvement in clean energy initiatives.

Although these case studies show important progress in increasing First Nations equity and participation in the clean energy landscape, they also remind us that there is still much work to do. Right now, only a few clean energy projects in Australia include First Nations partnerships or ownership, and those that do are often just getting started, with uncertain outcomes.

The case studies demonstrate a range of barriers to successful First Nations clean energy outcomes, such as regulatory challenges, limited funding, and the need to share clean energy expertise with First Nations organisations. For First Nations-led clean energy projects to succeed, we need greater cultural awareness within industry and government, meaningful community engagement, and targeted funding that equips First Nations groups to negotiate as equal partners.

Success can look different for various First Nations communities. Some may focus on social and cultural benefits, while others might prioritise ownership and equity stakes in project developments. This diversity highlights the need for tailored, place-based solutions that resonate with the unique aspirations and needs of each First Nations community.

The First Nations Clean Energy Taskforce worked closely with those involved in these case studies to share their stories. Initial drafts were developed from desktop research and then shared with proponents and stakeholders for verification, with several rounds of redrafting and discussion to ensure key findings were supported and accurately reported.

The insights in this report are current in 2024 and do not cover all First Nations clean energy initiatives in Australia. As we move forward, these case studies serve as a foundation for continued dialogue and action towards inclusive and sustainable clean energy solutions.

To read about other projects and initiatives, see:

- First Nations Energy Projects - First Nations Clean Energy Network.
- First Nations Guideline - IEA Case Studies.
- Leading Practice Principles: First Nations and Renewable Energy Projects.

More information

Web First Nations Clean Energy Strategy | energy.gov.au

Email FNCES@dcceew.gov.au

First Nations-led clean energy projects: East Kimberley Clean Energy Project (Australia)

Key words: First Nations-led, co-ownership, capacity building, genuine partnerships, economic benefits, culturally appropriate

This case study outlines an innovative and Australian-first model where Traditional Owners are majority shareholders and partners of the development of a large-scale clean energy project. This First Nations-led project provides a best practice project development model for the clean energy industry and highlights the mutual benefits that this approach can provide to both industry and First Nations communities.

> *"This project will show it is possible to design a future where economic prosperity, indigenous empowerment and caring for country work hand in hand."*[1]
>
> - Anthony Watson, Kimberley Land Council Chairman

Aboriginal Clean Energy Partnership

The Aboriginal Clean Energy Partnership entity is co-owned in equal shares by Balanggarra Ventures (subsidiary of Balanggarra registered native title body), MG Corporation (represents Miriuwung and Gajerrong native title holders), Kimberley Land Council and Pollination (climate change investment, project development and advisory firm).

The Partnership was created to lead the development of the East Kimberley Clean Energy Project, a First Nations-led clean energy, green hydrogen, and green ammonia export project.[2] This project will create a major new clean energy export hub in the East Kimberley region that will help Australia to decarbonise and grow new industries. It will also ensure First Nations people in the Kimberley region can participate and share in the benefits of the energy transition.

The Project will include:

- 2000-hectare, approximately 1000MW solar farm developed on MG Corporation freehold land;
- green hydrogen produced by the resulting solar energy combined with water from Lake Kununurra; and
- green ammonia produced from the green hydrogen and utilising the hydroelectric energy from the existing Ord Hydro Power Plant, sold locally as a fertiliser for irrigated agriculture and exported to support the decarbonisation of food production and fertilisers internationally.[3]

[1] Kimberley Land Council 2024, ARENA backs First Nations hydrogen ambitions, accessed April 2024.
[2] Aboriginal Clean Energy Partnership 2024, East Kimberley Clean Energy Project, accessed April 2024.
[3] Ibid.

Project scoping has been completed and the project is now in the feasibility stage. Pending the completion of front-end engineering design and the final investment decision, construction could commence as early as 2026 with the first product by 2028-29.[4]

Early insights - Benefits

Benefits for First Nations communities

As majority shareholders, Traditional Owners will co-develop, co-decide and self-determine the project architecture appropriate for their Country and their economic independence. This puts them in the driver's seat as leaders and decision-makers from the beginning to ensure the Project delivers tangible benefits for their communities. Their participation in the project also provides the opportunity to work on Country.

A key element of the model includes an integrated development process for heritage, native title, environmental and engineering approvals using a co-design and co-decision-making approach.[5] This enables Traditional Owners to directly shape project physical and commercial architecture to protect cultural heritage and Country, and embed environmental stewardship expertise.

The project will also create opportunities to build the capacity of Traditional Owner groups. Pollination brings technical and industry expertise and capacity support to the partnership, for example in advising Traditional Owners on potential investment pathways. The project can also lead to broader economic benefits to First Nations communities and businesses by sourcing goods and services locally. For example, for the planning and implementation of environmental protection and management. Traditional Owners are involved and leading the workforce and capacity building for the project, ensuring employment and contracting opportunities are maximised.

Benefits for industry

This partnership model can significantly reduce project risk for industry proponents. It facilitates early community support for the project by ensuring cultural heritage and environmental considerations are understood early in the project. This derisks the project allowing for more rapid and efficient delivery, with the integrated processes avoiding the need for ongoing rework. The company and project also benefit from Traditional Owners' environmental stewardship, cultural knowledge and expertise to ensure appropriate community engagement.

Early insights – Challenges and Opportunities

The need for early and adequate funding

A key challenge for First Nations led projects is securing funding for feasibility costs. Several of the representative bodies have small balance sheets and limited access to finance for project development. Grant funding can require a significant amount of time and capacity to attract, and grant funding specifically designed and available for First Nations project development is difficult to obtain. While this project has secured $1.67m in grant funding from the Commonwealth

[4] Ibid.
[5] Ibid.

Government,[6] further funds are required to complete feasibility, undertake meaningful community engagement and attract investment on appropriate terms. Given the size and complexity of the Project, the development requires more capital than a renewables-only project.

Funding agencies must adjust their appetite for risk and improve their cultural competency

As an innovative and early adopted model, there is an opportunity to set a new standard for project development. Forthcoming funding is required to prove the success and importance of the model. Funding bodies will need to prioritise support for this kind of partnership models to support the transition. Without this, there will be reduced opportunities to collaborate with First Nations people to develop clean energy infrastructure.

Capacity building needs to be a priority

There is an opportunity to significantly increase the engagement of First Nations communities in projects developed utilising this innovative model. Projects like this can provide broader economic benefits to communities by sourcing goods and services locally. To ensure the economic benefits of clean energy projects are shared with First Nations communities, local workforce capacity building and support for local enterprises needs to be a key priority that is funded accordingly.

[6] ARENA 2024, East Kimberley Clean Energy Project – Stage 1, Feasibility Study, accessed April 2024.

Best practice engagement: Beon Energy Solutions and Iberdrola (Australia)

Key words: best practice engagement, participation, employment, capacity building

This case study shows what can be achieved when energy companies undertake meaningful community engagement with First Nations communities.

> *"This project has brought around generational change. Because not a lot of our women have ever been employed before … we've built self-esteem from zero to twenty … the impacts have been huge."*[7]
>
> - Shaurntae Lyons, Beon community engagement coordinator

Beon Energy Solutions and Iberdrola Australia reach out to Wiradjuri people to build Avonlie Solar Farm

Beon Energy Solutions (Beon), a company focussed on the construction of large renewable energy projects, is an industry leader in engagement and recruitment of First Nations people. Iberdrola Australia is one of the largest renewable energy utilities in the country. This case study details how Beon and Iberdrola Australia developed their relationship with the Wiradjuri people of Narrandera in NSW, and successfully employed more than 30 local First Nations People in the construction phase of the 245MW Avonlie Solar Farm project (Avonlie).[8]

In 2021, Beon was contracted by Iberdrola Australia to build the Avonlie Solar Farm, which is located 20 kilometres south of Narrandera. For several months before construction began in December 2021,[9] Beon undertook extensive engagement with the local Wiradjuri community. To coordinate this process, Beon employed local Wiradjuri and Yorta Yorta woman Shaurntae Lyons, well-known to the local Wiradjuri community, as the company's community engagement coordinator.

With the help of their community engagement coordinator, and their early focus on establishing a respectful relationship between key Beon staff and the local Wiradjuri elders, the company committed the Avonlie project to providing employment and skills development opportunities for Wiradjuri people. With the support of Wiradjuri elders, Beon hosted community meetings and barbecues as its way of introducing themselves to the local Wiradjuri community.

---

[7] Quoted on Solar Insiders 2023, Solar Insiders Podcast: The Power of Putting First Nations First, Podcast, 12 October 2023, accessed April 2024.
[8] Iberdrola Australia, Owned Renewable Energy Assets | Iberdrola Australia, accessed April 2024.
[9] Beon Energy Solutions, Golden Milestone for Avonlie Solar Farm – Beon Energy Solutions (beon-es.com.au), accessed April 2024.

Through these engagement activities, Beon realised that if they were going to be successful in employing Wiradjuri women and men, they would need to address some of the barriers to employment they were facing. For example, many community members, particularly women, had limited prior experience of formal employment due to a range of factors such as extensive caretaking responsibilities.[10] Some community members did not have the official documents needed to register for tax file numbers and superannuation accounts.

To help the local people become job ready, Beon held an 'ID (identity) day' at the local TAFE for community members interested in gaining employment at the Avonlie project site. Beon's ID day assisted community members to secure documentation (e.g. birth certificates and Medicare cards) needed to obtain requisite employment credentials such as White Cards. They also provided a week of pre-employment training which addressed topics such as health and safety in the workplace. The local Wiradjuri community supported this training by organising childcare for participants.

Building confidence and encouraging and supporting community members to pursue employment at the solar farm was key to Beon securing a local First Nations construction workforce for the Avonlie Solar Farm project.

As a result of Beon and Iberdrola Australia's community engagement efforts, more than 30 First Nations men and women were employed in the construction of Avonlie Solar Farm. At the conclusion of the construction phase, Beon helped Wiradjuri employees secure new jobs with other local solar PV projects. In some cases, based on the experience gained with the Avonlie project, employees were able to find work with other local employers such as the local council.

The Avonlie project has been described by Narrandera's Wiradjuri community as bringing 'generational change'.[11] Project employment allowed individuals to better provide for their families and extend support to their wider community. In addition to the employment outcomes, Beon's management of the construction project helped deliver other benefits such as the installation of rooftop solar on the local Aboriginal corporation's Gundyarri building and on five community-owned homes. The legacy of this will be permanently reduced electricity bills for these households.[12] For local Wiradjuri people, there is pride in their community's involvement in the project, often expressed in comments made to their children as they drive by the solar farm.

Iberdrola Australia and Beon have committed to further expanding this engagement approach in any future renewable construction projects pursued together.

The impact of meaningful community engagement

"The way Beon have engaged the local Aboriginal community, is a great model for future renewable energy projects."

- George Cowan, GM, Narrandera Shire Council

The Beon and Iberdrola Australia case study demonstrates the value of genuine and early engagement

[10] DCCEEW interview with Beon Energy Systems representatives, Wednesday 24 April 2024.
[11] Renew Economy 2023, From 30 jobs to "generational change:" When solar projects put First Nations first, accessed April 2024.
[12] DCCEEW interview with Beon Energy Solutions representatives, Wednesday 24 April 2024.

with First Nations people. For First Nations people, this value leads to wide ranging, intergenerational benefits such as jobs, which in turn leads to greater self-esteem, empowerment and self-determination.

For clean energy project developers and their contractors, building effective relationships with First Nations communities offers a realistic pathway to securing community support for clean energy developments. Beon's commitment to employing the Wiradjuri labour force helped generate long lasting First Nations community support for the Avonlie project, thereby contributing to the project's social licence.

"*The Avonlie Solar Farm has been a great example of how projects like these and proper Aboriginal engagement based on trust and respect, can not only benefit Aboriginal communities, but also benefit the projects themselves by getting good workers and community support*."

- Gundyarri Aboriginal Corporation

First Nations people sometimes face significant structural barriers to obtaining employment. Beon's approach to working with Narrandera's Wiradjuri community to overcome these barriers required Beon to move away from simple transactional interactions to more authentic relationship building activities. Activities such as employing local First Nations people to engage with their community and introducing programs supporting individuals through the employment process built the necessary links with the community. Above all, Beon's work on the Avonlie Solar Farm project demonstrated commitment to improving the cultural competency of their own organisation.

Overall, what this engagement process with the local Aboriginal community illustrates is that meaningful engagement and the creation of training, employment, and business opportunities, is not only the right thing to do and good for local communities, but it is also good for business.

Genuine partnerships with First Nations communities: Yindjibarndi's Pilbara Project (Australia)

Key words: First Nations-led, partnerships, participation, access to support

This case study highlights a best practice example of First Nations people partnering with multinational businesses to achieve genuine First Nations benefits through participation in renewable energy development.

> "*We know that our country is well located for renewable energy development, so we made the decision early to lead. We established a small team and set out to find a partner with the right capabilities and values, which led us to ACEN.*"[13]
>
> - Michael Woodley, Yindjibarndi Aboriginal Corporation Chief Executive

Yindjibarndi Energy Corporation partners with ACEN Corporation to create Yindjibarndi Aboriginal Corporation

In June 2023, the Yindjibarndi Energy Corporation (YEC) was established as a partnership between the Yindjibarndi Aboriginal Corporation, representative body for the Yindjibarndi people, and international renewable energy developer ACEN Corporation. YEC now operates with a Board of Yindjibarndi and ACEN Directors.

Listed on the Philippines stock exchange, ACEN is one of the fastest-growing businesses for renewable energy in the Asia Pacific region. Its Australian platform has more than 1 gigawatt (GW) capacity of large-scale renewable energy generation in construction and operations, and more than 13GW capacity in the development pipeline across Australia.

YEC is seeking to develop, construct and operate renewable energy and storage projects on Yindjibarndi Ngurra (country) in Western Australia's (WA) Pilbara region. YEC's ambition is to construct up to 3GW of wind, solar and battery storage over the next several years,[14] making this project one of the largest First Nations-led renewable energy initiatives in Australia at present.

Yindjibarndi's journey started back in 2022 when they saw Australia's clean energy transition get underway.

Yindjibarndi seized the opportunity to self-determine their role in the renewable energy developments on Ngurra. In 2022, they created a company to explore and understand the commercial opportunities of renewable energy development in the Pilbara. This included

[13] Yindjibarndi Energy 2023, A Partnership with ACEN, media release 17 July 2023, accessed April 2024.
[14] Yindjibarndi Energy 2023, Empowering First Nations Renewable Energy, accessed April 2024.

undertaking a process to identify an appropriate capability partner, leading them to ACEN. ACEN was identified as a company with shared values and renewable industry expertise in Australia and across Asia. In July 2023, the YEC partnership between Yindjibarndi Aboriginal Corporation and ACEN Corporation was formed.

The partnership provides for Yindjibarndi equity participation of 25% - 50% in all projects, approval of all site areas, as well as supply chain access security for Yindjibarndi owned businesses to support the development, construction and long-term operation of the projects.

This initiative has yielded results, with YEC's projects now some of the most advanced renewable energy projects in WA (on land where Native Title exists), having already secured:

- Section 91 Licence to Occupy Crown Land granted under *the Land Administration Act 1997* (WA), providing permission to commence on-ground investigations;
- Registration of an Indigenous Land Use Agreement by the National Native Title Tribunal, providing Native Title consents for the development of large-scale renewable energy projects on Yindjibarndi Ngurra; and
- Yindjibarndi Aboriginal Corporation approval to develop their first two project sites.

YEC's proposed production of renewable energy aligns with the Yindjibarndi community's vision to create 'profitable and sustainable community owned commercial businesses that protect country, build a stronger community and respect culture'.[15]

YEC projects will support decarbonisation and electrification goals for the Pilbara region, whilst also ensuring Traditional Owner participation in the energy transition

YEC's plans will contribute to the WA Government's forecast of 41GW of renewable electricity generation capacity required for the Pilbara by 2051. In October 2023, Rio Tinto and YEC signed a memorandum of understanding (MoU) committing them to joint exploration of opportunities to collaborate on renewable energy projects on Yindjibarndi Country.

Commercial discussions are taking place with other potential customers to purchase YEC renewable energy.

Key insight: Partnerships can deliver clean energy value for all

Empowering First Nations peoples through information sharing is important so that they can understand the potential economic use of their Country. Accurate and timely information, when combined with Indigenous Land Use Agreements, technical expertise and adequate funding of the community consultation processes, ensures negotiations deliver fair and equitable outcomes and long-term partnerships.

Yindjibarndi and ACEN are now well placed to achieve their business and cultural objectives by building on their establishment and nurturing of respectful, long-term relationships.

[15] Ibid.

ACEN has helped Yindjibarndi Traditional Owners identify the potential scale of the opportunity available to them with the development of renewable energy infrastructure on their lands. This allowed the Traditional Owners to leverage their growing knowledge of renewable energy to effectively negotiate progressively better outcomes for their community. Beyond agreements to employ local First Nations people, self-determined involvement in projects can deliver a diverse range of benefits such as acquisition of a share of project owners' equity or the gaining of rights to participate in a project's supply chain.

This case study highlights the benefits to the clean energy industry of undertaking meaningful engagement with First Nations groups on the opportunities of proposed clean energy projects, including Native Title Holders who have a significant stake in renewable energy development. It further shows what's possible when First Nations organisations have both the resources and business acumen needed to engage on a level playing field.

Best practice engagement and remote energy security: the Bushlight program (Australia)

Key words: best practice engagement, capacity building, partnerships, energy security

"You must invest in community engagement if you want programs to be successful."

— Michael Tuckwell, General Manager Ekistica, former Community Engagement Manager of Bushlight

This case study describes how best practice engagement with First Nations communities was combined with fit-for-purpose technical design to create an innovative and unique remote energy solution.

The Bushlight philosophy was based around reliable and affordable power enabling community livelihood opportunities.[16]

Operating between 2002 and 2013, the Remote Indigenous Energy Program better known as the Bushlight program (Bushlight), oversaw the installation of more than 150 standalone renewable energy systems in 130 small remote communities across Central and Northern Australia. Bushlight was a $40 million program, funded by the Commonwealth Government and led by the Centre for Appropriate Technology (CfAT), an Aboriginal organisation based in Alice Springs, Northern Territory.

Bushlight applied a community development approach to develop principles of best practice engagement with a strong emphasis on culturally informed and relevant education and outreach. The program also drew on the technical expertise of engineers to develop a robust stand-alone solar PV system with a traffic light demand management signal to help people understand their energy supply and consumption.

The program was designed in response to a review in 2000 which found that many remote First Nations communities reliant on diesel generation experienced poor energy security due to high fuel costs, non-existent or limited backup generation, a lack of maintenance support, and limited capacity to manage their energy use.[17]

The review also found that the lack of standardisation in design, equipment and functionality of existing renewable energy systems, combined with the remoteness of communities, added further complexity and expense to troubleshooting, issue resolution and repairs processes.

[16] Centre for Appropriate Technology, Bushlight Energy Archive 2002-2013 <https://cfat.org.au/bushlight-archive>.
[17] Australian Cooperative Research Centre for Renewable Energy and Centre for Appropriate Technology, 2000.

The Bushlight Model

The Bushlight model emphasised community engagement and shared decision-making. First Nations communities were empowered to determine their own energy needs and co-design the solution with service providers through a Community Energy Planning (CEP) model. This CEP model involved whole of community planning of energy budgets and practical strategies and tools to support community residents manage their electricity use in an informed manner. The CEP model expanded over time to include training in the ongoing monitoring and maintenance of energy systems, systems operation and troubleshooting.[18]

Bushlight's legacy

The Bushlight legacy was documented in the newsletters published over the course of the project. The newsletters include stories of small communities benefitting from energy security and highlight the positive social and economic outcomes linked to a secure clean energy supply.[19]

The program addressed reliability issues with the provision of more dependable and affordable energy services with ongoing maintenance support for remote communities. Communities indicated in a 2005 evaluation report that they had made substantial savings on diesel costs, with estimated average savings of $5,500 per household.[20] The financial savings on fuel helped communities to remain on Country and funded cultural and social activities.

The CEP model allowed communities to manage their own energy while ensuring the availability of ongoing support from trusted providers. The trustful and enduring relationships between communities and service providers were highly valued and an essential component of the success of Bushlight. This relationship was key to exceptional program outcomes and is widely referenced as a benchmark in working collaboratively to First Nations communities.

Bushlight was recognised for the 2006 Northern Territory Engineering Excellence Award for Engineering for Regional Communities and the 2005 award from the Business Council for Sustainable Energy.

The Bushlight model was also exported to India, with the Bushlight India program delivering energy solutions to remote communities in Eastern India from 2008 to 2011. The Bushlight India Project was selected from 50 national finalists to win the Sir William Hudson Award for Engineering Excellence at the 2011 Engineering Excellence Awards. This demonstrates the ability of innovation in program design to have broader impacts and applicability in international contexts.[21]

---

[18] Centre for Appropriate Technology 2011, Bushlight's Community Energy Planning Model, accessed April 2024.

[19] Centre for Appropriate Technology 2013, Bushlight Energy Archive 2002-2013, accessed April 2024.

[20] Report to Department of Family and Community Services 2005, Bushlight Evaluation Final Report, accessed April 2024 .

[21] The Bushlight India project worked with a range of remote communities, NGO's, government and industry partners to share and adapt the Bushlight approach to the context of remote communities in eastern India, with two demonstration systems established and the localised community energy planning model developed and detailed in both Hindi and Oriya languages. While the project's technical outcomes continue to have a direct positive impact on the partners communities in India, of equal importance is the recognition that First Nations communities in Australia can be active contributors to internationally relevant best practice approaches to community development. Also, that First Nations communities in Australia can leverage their

Lessons from Bushlight

The importance of working collaboratively with First Nations peoples

Bushlight prioritised investing time and resources to build relationships between First Nations peoples and service providers. This gave communities access to the right technical and social support they needed to design and maintain their energy services.

The availability of ongoing support depended on the commitment and collaboration of other resource agencies and technical service providers, underpinned by the necessary financial investment. This recognises that communities do not exist in isolation but within broader networks, and that a holistic approach to bringing the social and technical together is needed when developing community energy programs.

The value of investing in long-term solutions and ongoing relationships

Federal funding for the Bushlight project was discontinued in 2013 with ongoing maintenance transferring to the Outback Power program run by the National Indigenous Affairs Agency (NIAA).[22] Outback Power is a Commonwealth funded program that delivers maintenance, repairs and minor upgrade services to renewable energy systems in 180 remote First Nations communities in the Northern Territory, Western Australia and Queensland.

Reduced funding to Outback Power and the new governance structure led to a focus on maintenance services and the technical aspects of the program. As a result, remote communities with Bushlight systems were no longer supported with the additional community engagement that distinguished the program.

In 2024, many of these systems are approaching end of life and require maintenance or possible decommissioning and replacement. Securing adequate funding to ensure Bushlight communities do not revert to diesel dependant power generation remains difficult and highlights the importance of designing programs with a long-term view.

The importance of clear ownership and responsibility

A key challenge faced by Bushlight, and now the Outback Power program, is clarifying who holds the responsibility for service provision to remote First Nations homelands and outstations. While Bushlight was funded through the Federal government it was developed and implemented by a non-government organisation with no legal responsibility for service provision.

The communities were geographically spread across remote the Northern Territory, Western Australia and Queensland. Each jurisdiction takes a different approach to addressing the needs of outstations and homelands, leading to a fragmentation of responsibility between all parties. This creates a problem for ongoing maintenance, replacement and duty of care, leaving Bushlight communities without a clear ‘owner’ of this valuable program.

knowledge and experience in developing and maintaining infrastructure and services in remote areas to be active participants in the economy.

[22] National Indigenous Australians Agency n.d., Outback Power, accessed April 2024.

Tailored, place-based solutions

Lessons from Bushlight demonstrate the importance of implementing solutions that are responsive to the needs of communities. For example, initially a training program was not part of the project, but as employment outcomes were highlighted as an aspiration of communities, a pre-training program was implemented.[23] A regional support model gave communities a clear contact point for maintenance queries and enabled First Nations people to ring up and work through technical problems with dedicated Bushlight staff.

The distinguishing features of Bushlight that led to positive outcomes for communities demonstrates the importance of meaningful and ongoing community engagement, the value of combining social and technical expertise in program design, and the need for collaboration across government agencies and service providers. It also highlights a key learning for future program design, namely that renewable energy programs like Bushlight need a long-term commitment to plan for success and enable First Nations communities to benefit over time from the substantial investment required to achieve clean energy security in remote areas.

[23] Indigenous Energy Australia 2021 , First Nations Guideline: Case Studies on First Nations community engagement for renewable energy projects, accessed April 2024.

Energy education: Energy Education in Communities Programme (New Zealand)

Key words: energy awareness, energy use education, affordability, energy efficiency

"*Trust and diversity were key in building understanding – learn while doing, do no harm while learning*"

- SEEC pilot programme designer, Ministry of Business, Innovation and Employment

This is a case study on a New Zealand government initiative that has delivered community-led energy education and, in turn, improved energy use education and affordability for 18,903 New Zealand households experiencing energy hardship. Diversity, inclusion and accessibility are key features of this programme and it is designed to offer a holistic approach to supporting households in energy hardship.

About the Support for Energy Education in Communities Programme

The Support for Energy Education in Communities (SEEC) Programme is part of a suite of New Zealand Government initiatives to lift people out of energy hardship. The SEEC Programme includes funding to build and expand the network of services to support people experiencing energy hardship to achieve warmer, more energy- efficient homes and lower their energy bills.

The Programme started in 2021 and is managed by the Ministry for Business, Innovation and Employment (MBIE). It complements other initiatives across government, the community and private sector focussed on making homes warmer and more energy efficient. Eligible groups, businesses and organisations can apply for funding from annual contestable SEEC funding rounds to expand the capacity of existing energy hardship initiatives, pilot a new scheme or deliver related training.[24]

Core to the SEEC Programme design is funding partner providers who are active in their community and have connections with, and the trust of, those in need. SEEC Programme funded support can include advice on energy use for well-being in the home, the best electricity plan for the household, and small energy-saving items such as LED lights, timing sensors and draught stoppers. Providers can also connect with agencies such as curtain banks[25] and referrals to other government or community programmes.

[24] MBIE 2024, Support for Energy Education in Communities Programme, accessed April 2024.
[25] Not for profit community organisations that upcycle pre-loved curtains and provide them to low-income families.

Some examples of potential projects that are considered for SEEC funding include:

1. preparing and delivering education material
2. community information sessions to provide advice and resources to project participants
3. training community-level advisors
4. providing personalised advice in a range of settings such as in-home, over the phone or at events.

As statistics found that Māori and Pacific peoples are more likely to experience energy hardship, so the focus of the 2023/24 funding round – up to $2.95 million NZD – is to support more projects that help Māori and Pacific households.

Early insights

This scheme is helping households in energy hardship achieve energy well-being in their homes and lower their energy bills by equipping them with the knowledge and skills to effectively manage their energy use and choices.

Early insights include the importance of building trust with communities and households – projects that draw on tikanga Māori principles have been effective in reaching Māori and forming partnerships with community groups such as Māori community service providers and Pasifika churches has proven to be successful in reaching communities in need.

Another stand-out feature of this program is the accessibility of the funding programme. Barriers typical to funding application processes, such as the requirement to write a business case, were removed and applicants were given greater flexibility to determine what information was required to support their application. A number of community information sessions were also held to demystify the process for applicants and encourage collaboration.

Energy security and capacity building: the Māori Housing Renewable Energy Fund (New Zealand)

Key words: energy security, diesel displacement, culturally appropriate, capacity building, economic benefits, environmental benefits

This case study describes a New Zealand Government initiative, the Māori and Public Housing Renewable Energy Fund (the Fund) to deliver energy savings, warmer homes and greater energy resilience to an estimated 1,270 Māori households through 49 clean energy projects. [26]

An important component of this initiative is the approach taken to designing and implementing the funding program. The funding criteria was designed to attract applicants that would offer meaningful opportunities for Māori through a high level of project flexibility that allowed the funding recipient kaitiaki[27] run projects as they determined and build their own capability, resulting in an inclusive and culturally appropriate program design. [28]

To date, the Fund has delivered more affordable and locally generated clean energy for Māori, capability development of kaitiaki and Māori energy business growth.

About the Māori Housing Renewable Energy Fund

The Fund, established in 2020, [29] was designed to trial small-scale renewable energy technologies on Māori housing and to improve energy affordability and security in target Māori households experiencing energy hardship. The $28 million funding pool, managed by the Ministry for Business, Innovation and Employment (MBIE) was shared between projects for public housing and Māori housing.

The Māori housing funding was allocated to 49 projects over four years through multiple contestable funding rounds. Most projects are expected to be completed by the end of 2024 and an evaluation of the Fund is currently underway, with the final evaluation report scheduled for mid-2026.

This program has funded a range of different renewable energy projects, including:

- household solar PV generation, battery storage and solar water heating
- community owned solar array and batteries

[26] MBIE 2024, Spotlight on completed projects, accessed April 2024.
[27] Trustee, minder, guard, custodian, guardian, caregiver, keeper, steward (maoridictionary.co.nz).
[28] MBIE 2024, Renewable energy projects for Māori housing goals, objectives and funding criteria, accessed April 2024.
[2929] MBIE 2024, Māori and Public Housing Renewable Energy Fund, accessed April 2024.

- retrofitting solar panels onto Māori social housing
- installing and testing community micro-grids to share the renewable energy with whānau (extended family group)
- installing solar PV on homes to leverage co-funded home repairs and energy efficiency programme
- Returning to traditional geothermal energy sources through ground source heat pump technology for supplying homes with heating and hot water
- Small scale hydro generation.

Greater energy security and independence in Māori households

The funded projects have benefitted many Māori households in energy hardship, including low-income Māori households, high-needs housing, Māori buying their first homes, remote Māori communities including where households were reliant on diesel generators, households with vulnerable people including kaumātua (respected tribal elders), children and elderly members, and off-grid households.[30]

Overall, these projects provided a more reliable and affordable energy supply and renewable energy technologies that provide more affordable heating. This has led to reduced energy costs, improved energy security and warmer homes for the target Māori households in energy hardship.

In addition to energy security and affordability, projects enhanced energy independence of Māori by enabling communities to generate their own power and providing knowledge to whānau about energy efficiency, use and costs and provided opportunities for Māori to grow their own energy businesses.

The Fund also trialled new ways of generating energy and integrating it with existing electricity networks, in support of the New Zealand Government's commitment to renewable energy generation and its climate change goals. This means less reliance on diesel generators and reduced emissions.

This initiative is providing valuable insight into the operational, economic, environmental and wellbeing impacts of introducing renewable energy systems. It will also help inform future renewable energy solutions.

When complete, these projects will support more than 1,200 homes, generate an estimated 4207 kWh of electricity and have 2839 kWh of battery storage.

Key learnings

An early challenge was identifying and engaging suitable applicants. This was mitigated by partnering with government agencies focussed on Māori policy and programmes. The risk of project non-completion was mitigated through MBIE's information and support for project kaitiaki and project monitoring.

[30] MBIE, Spotlight on completed projects, accessed April 2024.

The assessment criteria and process for applying were designed to make it open and accessible to applicants and encourage Māori organisations to apply. This demonstrates it is possible to design programs that improve energy insecurity for households in energy hardship while providing opportunities to build capacity and capabilities of local service providers and the broader community.

This initiative demonstrates some key learnings for future government initiatives, particularly in program design and implementation. Well-designed government initiatives support First Nations people as they innovate their own clean energy solutions through culturally appropriate funding programs and focus on knowledge growth, self-management and building capacity in their First Nations businesses.

Wah-ila-toos: A 'No-Wrong-Door' Approach for Indigenous, Rural, and Remote Clean Energy Initiatives (Canada)

Key words: diesel displacement, accessibility, reconciliation, culturally appropriate

This case study describes one approach for how government programs can be designed to be more accessible, collaborative and responsive to the needs of Indigenous communities.[31]

The Government of Canada's approach to breaking down barriers and improving access to clean energy funding led to the creation of Wah-ila-toos, a 'no-wrong-door' access point for Indigenous, rural and remote communities to obtain funding and resources for clean energy initiatives.

Wah-ila-toos began in 2022 as part of the Government of Canada's commitment to achieving net-zero emissions by the year 2050 while rebuilding and strengthening relationships with First Nations, Inuit, and Métis Peoples based on the recognition of rights, respect, and partnership.[32]

> *"With Wah-ila-toos, the Indigenous Council brings Community to the decision-making table and humanizes policy and program decision-making. Through this collaborative governance model, innovative approaches are considered, the Government is held accountable, and we, as Council members, bring critical technical expertise and lived experience in building and operating energy projects in the Community setting."*
>
> - Grant Sullivan, Member of the Wah-ila-toos Indigenous Council

Canada's Reconciliation Journey

In 1982, the Parliament of Canada passed the *Constitution Act, 1982*, which was the first law that explicitly acknowledges the rights and interests of Indigenous peoples in Canada, including individually recognising First Nations, Inuit, and Métis Peoples.

This set the legislative foundation that would enable a series of reforms and initiatives intended to redress past harms and to support the advancement of self-determination by Indigenous Peoples in Canada.

[31] The term 'Indigenous' reflects the language used by the Government of Canada to describe all First Nations, Inuit, and Métis Peoples within the boundaries of Canada. Indigenous peoples and communities (rcaanc-cirnac.gc.ca)
[32] Government of Canada 2024, The Reconciliation Journey, accessed April 2024.

In 2016, the Government of Canada formally endorsed the United Nations Declaration on the Rights of Indigenous Peoples and adopted it into law by passing the *United Nations Declaration on the Rights of Indigenous Peoples Act* in 2021.[33]

What is Wah-ila-toos?

Wah-ila-toos is a government initiative collaboratively led by Natural Resources Canada (NRCan), Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), Indigenous Services Canada (ISC), Environment and Climate Change Canada (ECCC), and Infrastructure Canada (INFC). This initiative includes core funding programs from NRCan and CIRNAC, who have several years of experience in funding projects through the Northern Responsible Energy Approach for Community Heat and Electricity (Northern REACHE) program, the Clean Energy for Rural and Remote Communities (CERRC) program, and the Indigenous Off-Diesel Initiative (IODI). Wah-ila-toos provides a 'no-wrong-door' approach to support Indigenous, rural, and remote communities seeking funding and resources for clean energy initiatives.

Wah-ila-toos programs seek to centre relationships and collaboration, prioritise capacity building, support local economic development, and create skilled jobs within First Nations, Inuit, and Métis communities. Wah-ila-toos prioritises investment in Indigenous-owned or Indigenous-led projects and provides flexibility to funding and support for all stages of project development for a diversity of clean energy technologies, including wind, solar, geothermal, hydro and biomass.[34,35] These projects reduce the use of diesel and other fossil fuels for heating and electricity by increasing the use of local renewable energy sources and improving energy efficiency. [36] Additional eligible projects include capacity building (e.g. training, skills and curriculum development, energy literacy), research, development, and demonstration projects. Funding eligibility for both CERRC and Northern REACHE extends to First Nations, Inuit and Métis communities, governments, development corporations and organisations, including Canadian businesses, not-for-profit organisations, and provincial, territorial, regional and municipal government organisations.

Wah-ila-toos aims to advance Indigenous Climate Leadership by putting Indigenous voices at the forefront of the decision-making table for programming with respect to clean energy policy development and the broader energy transition. An Indigenous Council was established to collaborate with government officials, hold government accountable, participate in decision-making processes, provide guidance and community perspectives to ensure clean energy benefits flow to communities.[37] The Indigenous Council consists of First Nations, Inuit, and Métis representatives of diverse ages from different parts of Canada who have technical skills and experience building and operating clean energy projects. Their involvement in Wah-ila-toos ensures that Indigenous perspectives are embedded in clean energy programs and policy development.

[33] Government of Canada 2021, 'Principles respecting the Government of Canada's relationship with Indigenous peoples', accessed April 2024; Government of Canada 2021, 'Backgrounded: United Nations Declaration on the Rights of Indigenous Peoples Act', accessed April 2024.
[34] Government of Canada, CERRC Program, accessed May 2024.
[35] Government of Canada 2023, Northern REACHE Program, accessed April 2024.
[36] Government of Canada 2024, Wah-ila-toos: Clean Energy Initiatives in Indigenous, rural and remote communities, accessed April 2024.
[37] Government of Canada 2023, Indigenous Council for Wah-ila-toos , accessed April 2024.

Wah-ila-toos is an Indigenous name gifted by three Elders and Grandmothers in a sacred naming ceremony.[38] It is a blend of Indigenous languages and cultures and bestows a responsibility to be in right relationship with all living and non-living beings, as we are all related. The name speaks to the commitment of working together in the spirit of kinship – across government departments and with Indigenous Peoples – to develop and deliver programming that advances Indigenous-led climate action and takes a community-centred approach to support the unique priorities of individual communities.

A 'No-Wrong-Door' Approach

Indigenous, rural and remote communities have clearly identified barriers within existing federal systems that require them to navigate a wide range of funding streams and program requirements to access clean energy opportunities. To streamline access and reduce the administrative burden on applicants, Wah-ila-toos implemented a 'no-wrong-door' approach, providing a single access point to enhance coordination. The programs utilize an on-going intake, rather than a call for proposals with a deadline, to meet community readiness to take on a project, and allows more flexibility with a project's timeline.

Additionally, a single application form is used to streamline access to Wah-ila-toos programming. This approach aims to reduce administrative barriers and fatigue experienced by communities when applying for federal funding. Prior to applying, prospective applicants are linked with a project officer who works to understand their needs and provides guidance on which program is the best fit. Throughout the application a relationship-based process is maintained, with regular check-ins and avenues for feedback.

Wah-ila-toos also established pathfinding support so that applicants that do not meet specific eligibility criteria could be assisted by a dedicated project officer, to identify other programs that better align with their interests and priorities. This includes non-Wah-ila-toos programs listed in a well-maintained database, removing much of the administrative burden that applicants previously needed to undertake independently. The benefit of this approach is having a single point of contact throughout the entirety of the application process and offering alternative pathways if applicants do not meet eligibility criteria.

Outcomes of the Wah-ila-toos Approach

Through its 'no-wrong-door' approach, the creation of the Indigenous Council, pathfinding support, and capacity funding stream, Wah-ila-toos has taken steps to address systemic barriers to the participation of Indigenous Peoples in the clean energy transition. Additionally, Wah-ila-toos works to strengthen Indigenous Peoples' participation in federal programming – from application intake to funding and reporting. Wah-ila-toos seeks to respect and reflect collaboration with Indigenous, rural and remote communities, ensuring that projects have the full support of communities and that the benefits flow back to them.

Wah-ila-toos offers a different approach and creative solutions through a demonstrated commitment to collaboration and working in a spirit of kinship across multiple federal departments

[38] Government of Canada 2023, The Clean Energy in Indigenous, Remote and Rural Communities Hub gifted an Indigenous name, accessed April 2024.

and the Indigenous Council. This approach enables Indigenous, rural and remote communities to advance projects that meet their needs while reducing bureaucratic complexity. For the Government of Canada, this is a new process that requires a willingness to grow and adapt, all while learning and collaborating with an Indigenous Council and supporting clean energy projects in Indigenous, rural and remote communities. The investment by the Government of Canada in resourcing Wah-ila-toos is helping communities achieve their clean energy goals and support the advancement of Indigenous self-determination through the energy transition.