



Community Energy Planning Toolkit





Introduction

The opportunity of renewable energy should and can be available to all. But for many First Nations communities, affordable, secure and sustainable power is not yet a reality.

The First Nations Clean Energy Network was formed to ensure First Nations people play a central role in, and harness the opportunities from, Australia's clean energy boom.



We work to protect Country and make sure the transition to renewable energy in Australia occurs fairly for First Nations people and communities. That includes First Nations consent as well as options for developing, owning, and managing clean energy projects in communities and on land owned and managed by Indigenous interests.

The Network is a partnership of First Nations people, Traditional Owners, community organisations, land councils, unions, academics, industry groups, technical advisors, legal experts, renewables companies and others.

We believe Aboriginal and Torres Strait Islander communities have the means to and should self-determine our own futures and protect our Country.



What's happening?

High energy costs, unreliable power and frequent household electricity disconnections are a big challenge for First Nations people and communities.

We deserve ready access to affordable, clean, reliable, renewable energy.

Right now, there is an historic opportunity to change the way we power our communities.

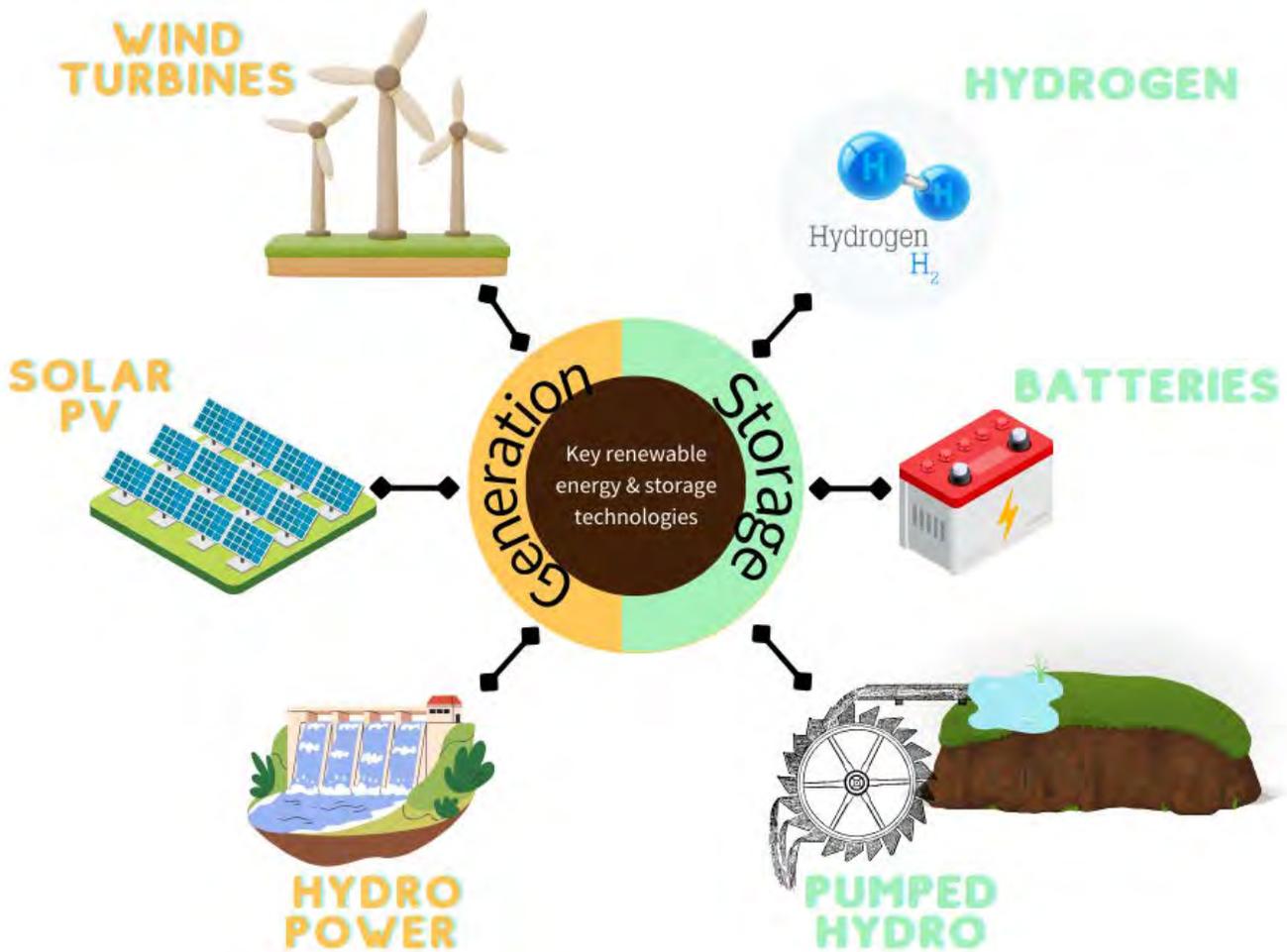
The global transition to renewable energy offers lower cost, more sustainable alternatives to generating power.

Governments, companies and households around the world are turning away from fossil fuels such as coal, oil, gas and diesel that are polluting forms of energy which are warming the planet's climate at an alarming rate.

Instead, they are installing renewable energy technologies which source power from the sun, wind and waters.



Types of renewable energy



Many people are putting rooftop solar and batteries in their houses. And towns and communities are developing large-scale solar and wind farms, and installing microgrids and standalone power systems. These options can reduce the cost of electricity and help protect Country and the planet's climate.

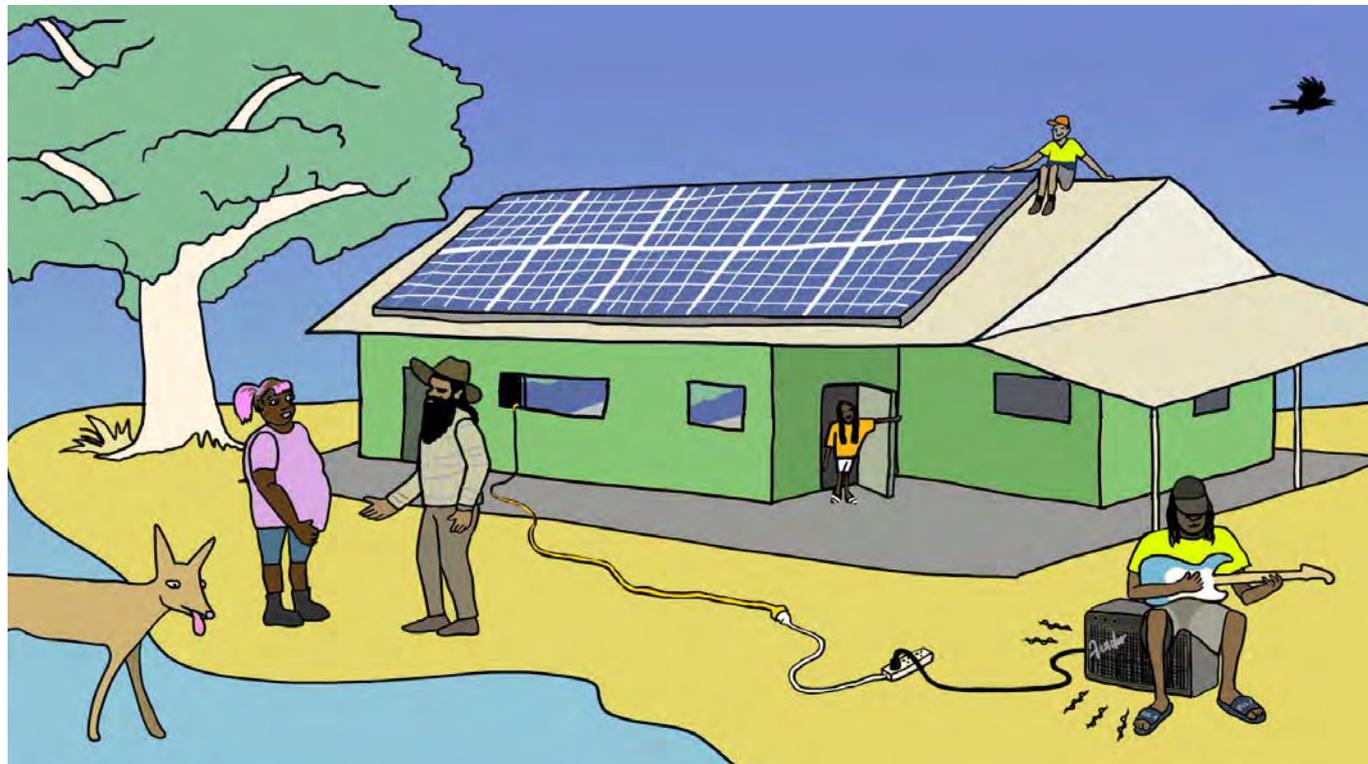
First Nations people also want the opportunity to have clean renewable energy in our homes and communities.

The Network wants to drive community-owned clean energy projects and secure equitable arrangements for small, medium and large scale renewable projects proposed to be built on our lands.

We want our people to benefit from this clean energy boom.



At a local level



A large number of our remote First Nation communities are not connected to an electricity grid but instead rely on local, diesel-powered generators to produce electricity.

Diesel is expensive and delivery can be unreliable due to weather, seasonal accessibility and limited transport options, which means both government and electricity users pay high costs for power.

Many First Nations communities want to develop their own renewable energy systems to improve energy security, reduce electricity costs, and reduce reliance on government or external service providers.

Establishing more reliable community (or community-led) energy systems can secure long-term social, environmental and financial benefits from the transition to cleaner, low cost energy.

Solar power is now the least cost, most reliable and scalable form of electricity generation that our people can harness.

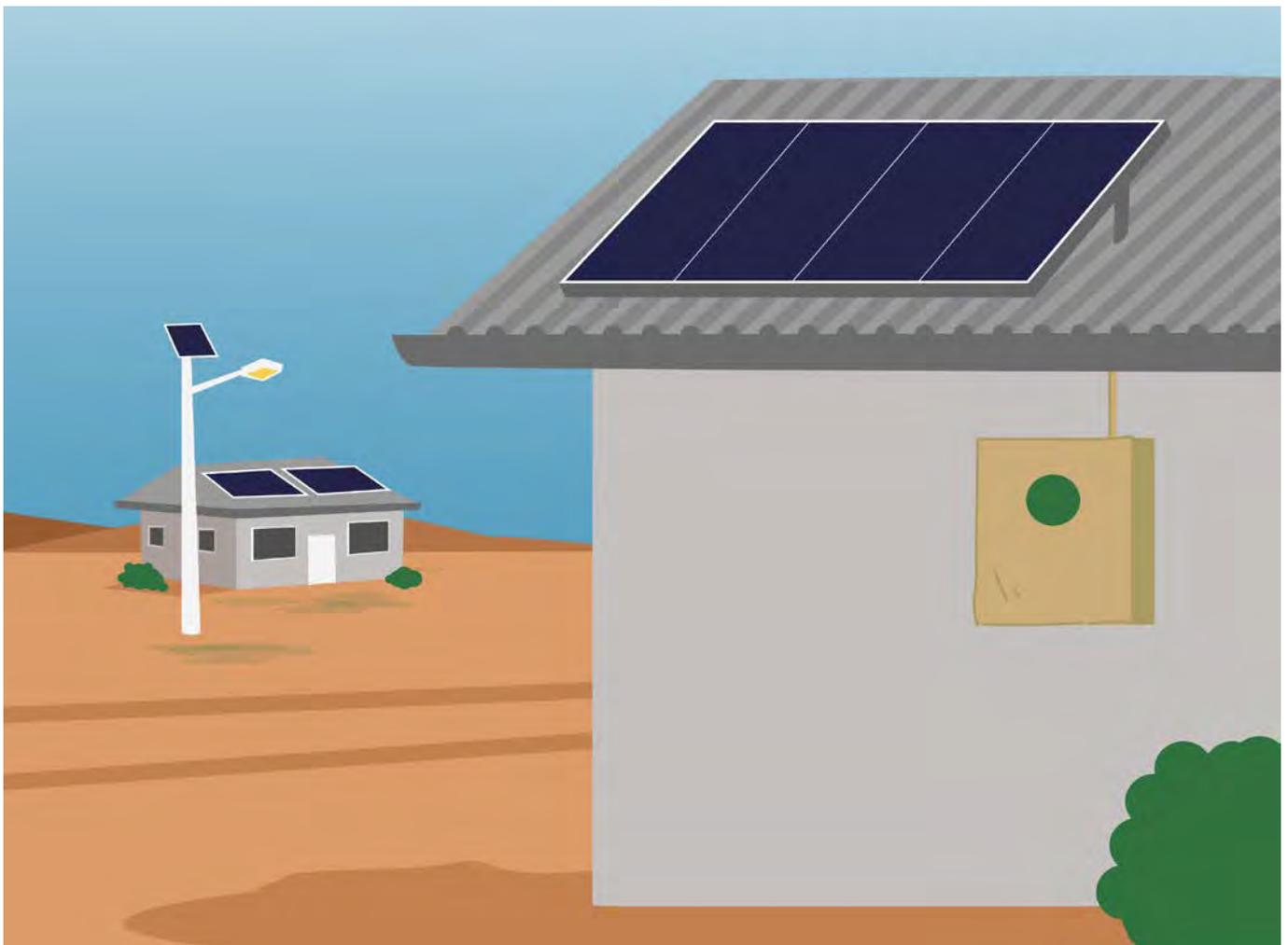
Solar PV technology for the conversion of light from the sun to electricity is well proven, with millions of installations now completed throughout Australia. Very remote areas and First Nations communities in Queensland, the Northern Territory and Western Australia have been some of the first to adopt this technology.



There is significant opportunity to expand renewable energy and energy efficiency measures to all remote communities and households through a combination of solar panels, battery storage and a range of effective energy efficiency initiatives.

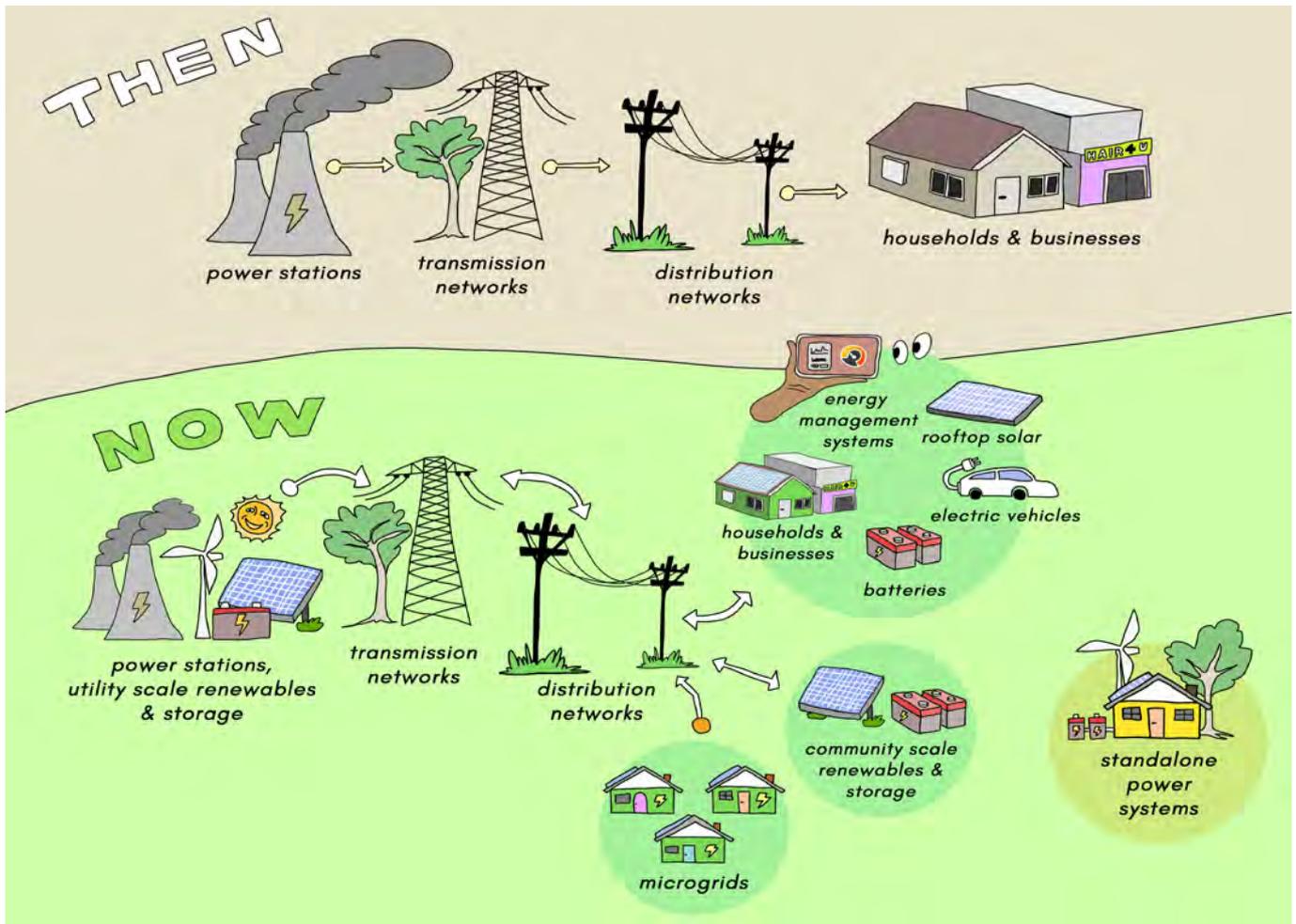
A community solar roll-out program would allow remote Indigenous households to see an immediate benefit through reduced energy costs that will lead to consistent refrigeration for fresh food and the safe storage of medicines. It will also help people stay connected to power.

Community-owned solar power developments built on First Nations land or the rooftops of community-owned buildings will lower the cost of delivering essential services and doing business in regional/remote areas, and could create dedicated, sustainable income streams for First Nations community organisations.





At a nation level



Over the last decade the pace and scale of renewable energy development in Australia has increased dramatically.

As First Nations people have legally recognised rights across 57% of the Australian landmass, we believe our communities should be key beneficiaries of this development. And we acknowledge all lands and waters are First Nations connected.

To date, most of the large-scale renewable energy projects have been developed on freehold land where Aboriginal Land Rights or Native Title rights haven't been determined or have been extinguished.

There is also little to no resourcing, infrastructure or policies in place to ensure First Nations benefit from the use of their lands for these projects, or from the energy they generate.

As development of renewable energy expands across the continent, our communities need to ensure that projects and industry proponents increasingly involve thorough, meaningful engagement and strong agreements with First Nations communities.



Overview of this Toolkit



First Nations people have the desire and the opportunity to develop clean energy projects in our homes and communities, and on Country.

This Toolkit has been developed to assist communities to have discussions about clean energy futures.

It will support you to explore the possibilities that clean energy could provide, and to start planning to create and develop your own clean energy project.

Toolkit: How to set up a clean energy project



This toolkit outlines a 7-step framework for working with your community to develop, design, fund, action and monitor a clean energy project.

- 1 Idea**
- 2 Plan**
- 3 Feasibility and design**
- 4 Seek financing**
- 5 Seek approvals**
- 6 Build**
- 7 Monitor**



1 Idea



Work out if we need a clean energy project

Setting up a community energy project will probably mean installing solar PV, wind, batteries, a standalone power system or renewable microgrid.

What problem are we trying to solve with renewable energy?

The first thing to do is work out whether we really need a clean energy project, and what problem we are trying to solve with renewable energy.

Begin by simply talking to people about their energy wants, needs and challenges. The priorities of the community must be at the forefront of energy planning.

You can then determine your key goals.

Your goals may be reducing electricity costs, reducing diesel fuel usage, building resilience against power failures, creating time where generators can be turned off, or reaching a renewable energy target.

Find out what's most important to your community. Those goals will help you design an energy plan that is right for you.



Consider your energy landscape

It's important to understand the energy system you're currently working with, and the options available to you.

- Which organisation/retailer currently provides power to your house, community, business, etc? For example, Origin, Horizon, Janana, EnergyAustralia, AGL, Alinta, Origin, etc.
- How is power provided? For example, by diesel generator, gas turbines or a combination of sources? Overhead power lines or Underground cables?
- How is electricity currently sold to residents? For example, do households have prepaid power card meters, or post-paid billing options with a retailer?

Consider your electricity needs

The next step in the process of investigating renewable energy systems for your home or community is calculating your electricity needs. This will help you determine the size (and therefore, cost) of the system you will need, how your energy needs fluctuate throughout the day and over the year, and measures you can take to reduce your electricity use.

How much power is currently being used?

You will need to do an [energy load audit](#) to understand how energy is being used in your community, and identify areas for potential saving.

An energy load is a measure of power: how much electricity is required to actually run your house or community.

Type 1 audit (basic energy audit) - A basic overview of your house or community's energy consumption, and estimates of the total power consumption across a typical day, month and year.

Type 2 audit (detailed energy audits) - A more rigorous analysis of your community's energy consumption. It will quantify potential energy savings based on detailed data and analysis of the specific equipment and operating conditions applying to each site. Your audit may also identify opportunities to reduce your consumption through energy efficiency measures.

You can find an accredited energy auditor to assist you through the [Energy Efficiency Council](#).



Can energy loads be reduced through energy efficiency measures or behavioural change?

Your energy load audit may have identified some ways to reduce energy use costs effectively in houses and buildings.

Reducing loads is a great first step to start saving money on energy bills and will also mean that your renewable energy systems will be smaller and cheaper.

Some appliances, like refrigerators, use electricity (called loads) all the time, while other appliances, like washing machines, use electricity for shorter periods - these are called intermittent loads.

If you can change behaviour to use intermittent loads when renewable energy is abundant (like in the middle of the day if you have solar power), that could mean smaller, cheaper systems too.

What rights do you or your community have to build renewable energy infrastructure on homes, community buildings and businesses, within the community or on surrounding land?

Each state and territory has its own set of codes and regulations that you will need to follow to add a renewable energy system to your home or community.

These regulations can affect the type of renewable energy system you are allowed to install and who can install it.

They can also affect whether you decide to connect your system to the electricity grid or use it in place of grid-supplied electricity as a stand-alone system.

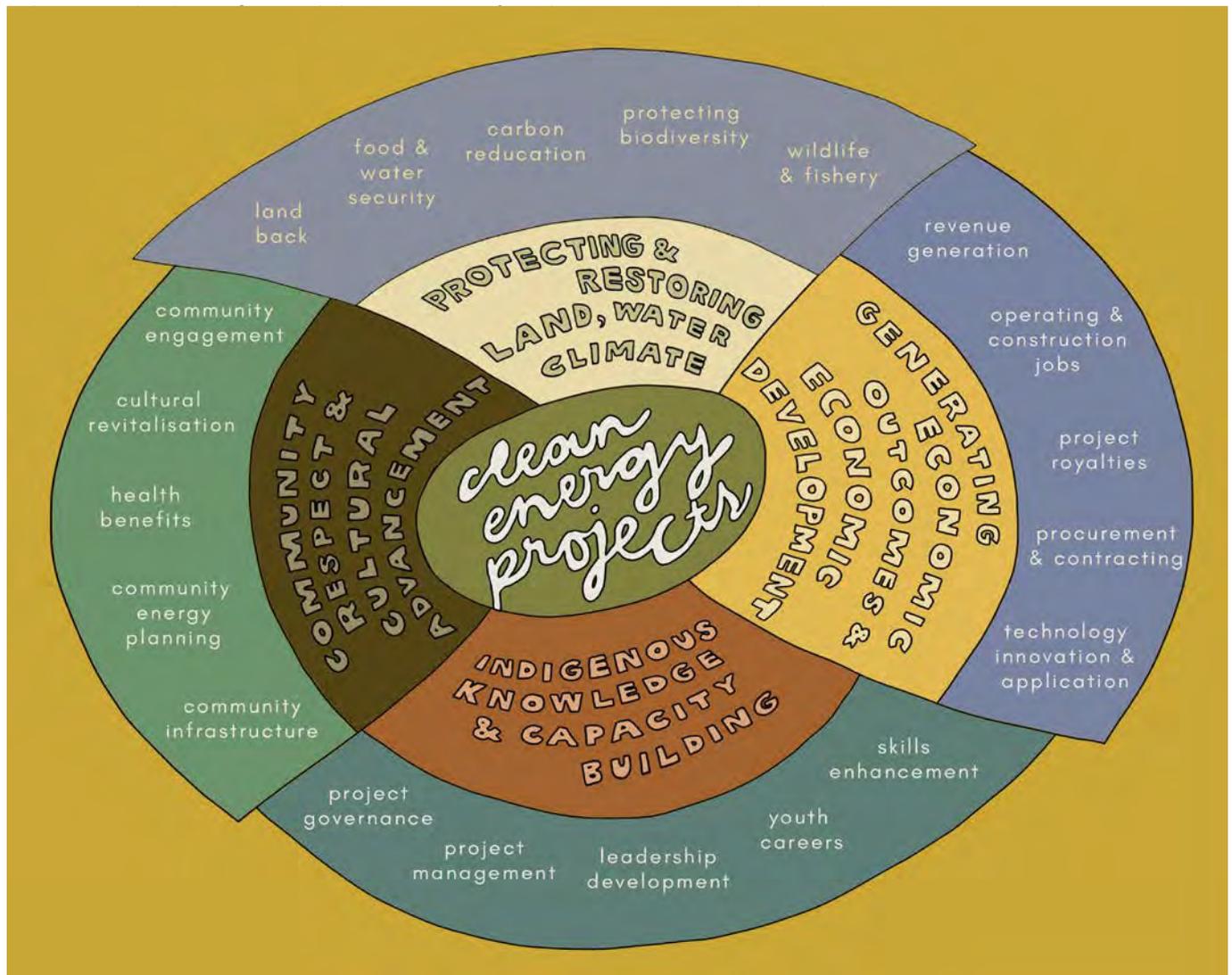
What sort of expertise exists locally around energy services? What sort of external support might you need to progress your project?

The First Nations Clean Energy Network and Original Power can assist with connecting communities with trusted advisors.



Run a renewable energy planning session

Talk about why you want to set up a clean energy project in your community.



Talk about the opportunities for clean energy and the benefits it offers with community members, including any barriers that may arise including home and land ownership/title, financial resourcing, or a lack of industry knowledge.

Your community can also engage with the First Nations Clean Energy Network and other partners to learn more about what clean energy solutions are possible in your specific community or area.



Develop a long term vision



Develop a long-term energy vision that is rooted in the community's needs and wants. This should answer these questions:

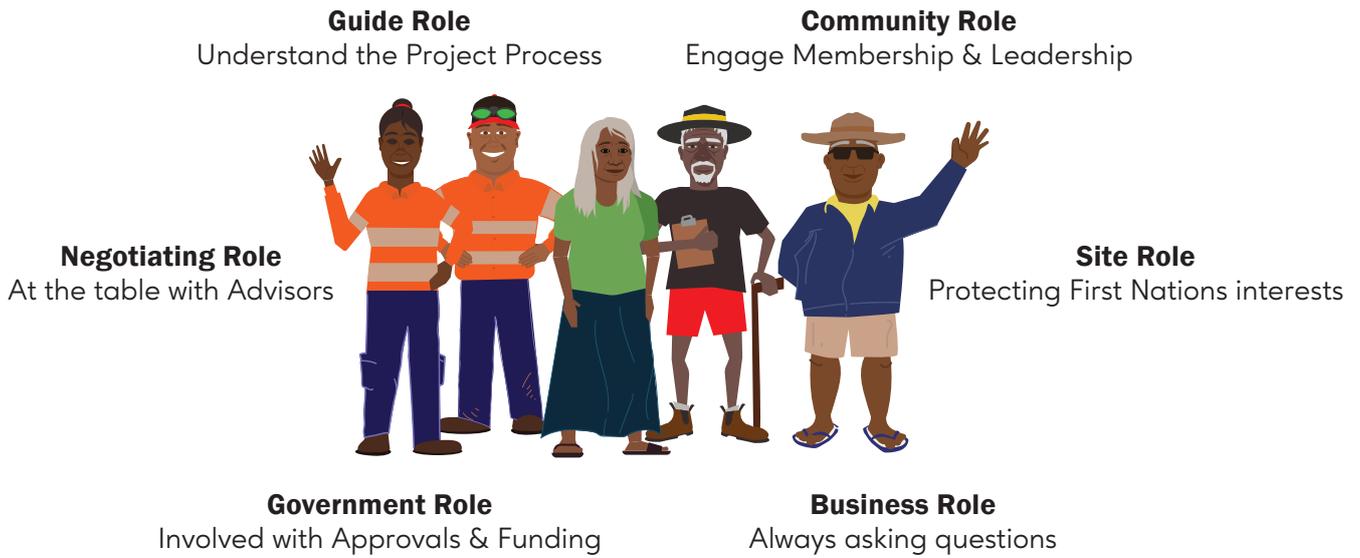
- What are we doing? What challenges are we trying to address in our community? What opportunities are we trying to bring to the community?
- Why are we doing it? What social, environmental and economic benefits drive our project? What are our key goals?
- What is the 'community' we are reaching out to? Or that the project will be serving and impacting?
- What technology options will we explore and what is the scale of the project?
- How will the benefits be shared?
- What capacities do we have or will we need to do it?

If everyone agrees on the vision, then a clean energy project is worth exploring. You can move forward!



Agree on who will be in the Community Energy Team

The Community Energy Team is a small team of people from the community who will oversee the next steps. Sit down with your community and work out who's going to do each role.



Community Engagement

As you move through your clean energy journey, remember to engage with your community every step of the way.





Community discussions will ensure your project development is supported.

They will enhance community knowledge, raise awareness, and support participation in your clean energy project development from leadership, community members and young people.

Learning about energy will help in developing the technical skills of community members, and will encourage them to pursue employment and career opportunities in clean energy.

Your ongoing community engagement through every step of the process will ensure community members play meaningful roles in the deliberation, discussions, decision-making, and implementation of the project.

Tools for engaging with community

There are a number of ways you can engage your community as you move through the steps in this toolkit.

Here are some examples:

- community meetings
- home visits
- workshops
- focus groups
- mapping exercise
- surveys
- participatory decision-making processes
- handouts and brochures
- newsletters
- project website
- social media
- radio interviews and advertising
- visits to other similar energy projects.

Actioning community engagement

Your community will be more likely to support your project if you develop an intentional design with a clear purpose that ‘speaks’ to community members.



Any barriers, needs and solutions must be put on the table so that all members of the community understand the opportunities and risks of going ahead with a project.

Clarify the impact to be expected, and the actions needed, for community members.

Always be transparent to further build trust with community members, and seek and provide clarity when it's needed.

Make sure any community engagement is done in safe and inclusive spaces.

Ensure everyone is involved in making collective decisions.

Community energy engagement = community power!

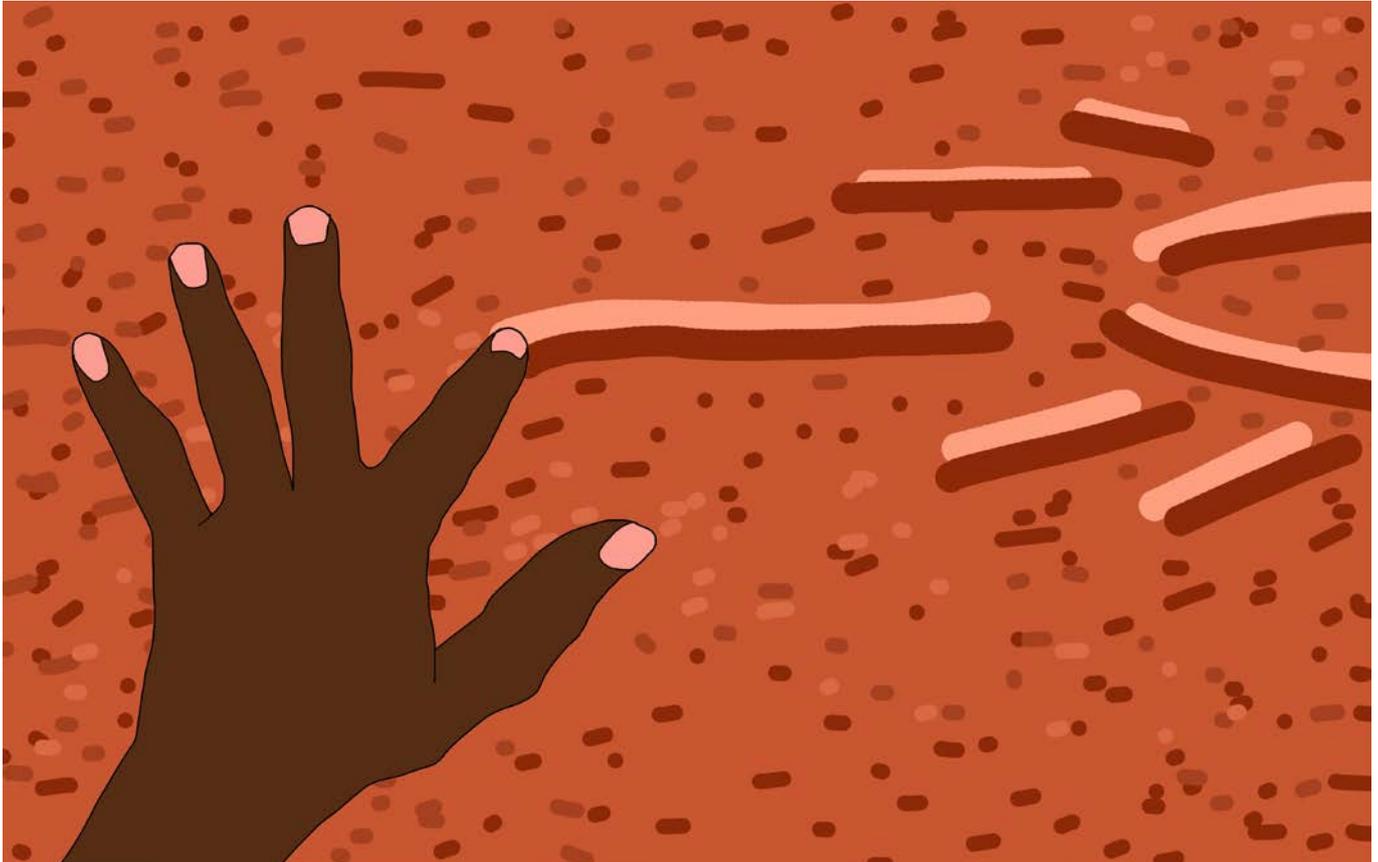
Sustained community engagement and participation reduces risk and builds support for the planning, development, and life of a project.

Is your community ready for the next steps?

- Is there a small team of people in the community who have agreed to take on the role as the Community Energy Team? Is everyone happy with the choice of people? This is important so that decisions can be made, and the outcomes are trusted by the wider community.
- Has the Community Energy Team put time aside to commit to this project over the next 6-12 months? Depending on the scale of the proposed project, regulatory assessment for projects can take significant time to get right, so the urgency of the energy problem facing your community will be a consideration.
- Is the community supportive of developing a Community Energy Plan? Will they participate where possible to benefit the project and community?



2 Create a community energy plan



Once a community decides to pursue a clean energy project, the Community Energy Team needs to produce a community energy plan.

An effective community energy planning process emphasises information, training, and engagement with members of communities.

Effective community engagement enhances community knowledge, raises awareness and support for the community energy plan, and builds social and technical capabilities.

Ensure that everyone is on board with the community energy plan, and any potential risks, problems or positive benefits have been properly considered.

Your community energy plan will need to highlight the scope, program and costs. It will also define the project team who will run it.

Getting your community energy plan organised will enable the Community Energy Team to plan the important stages through development of the project.



Work out current and future energy needs

Do an assessment of the community's current energy needs, and its future energy needs. This assessment will be guided by the community energy vision from Step One.



Work out:

Your current energy environment

- Your current energy mix eg. diesel, gas, etc
- Community energy consumption data (you may need to request this from your electricity provider or install your own meters to collect data over a period of up to 12 months)
- Number of buildings and houses
- Number of people in the community and likelihood of that changing
- Land ownership
- Environmental and cultural heritage concerns
- Past reports or plans about energy in the community
- Economic and community capacity, including skills and capacity of community members
- Recent energy developments in the region



- Types of energy systems you are considering** eg. solar, batteries, microgrid, standalone systems, other
- Project considerations:** funding, management and governance
- An assessment of opportunities and barriers**
- Project readiness:** funding and community capacity
- Need for referral for contractors:** technical/industry

Other things to consider

There are other important things to consider in your community energy plan:

- Who will make the decisions?**
Has your project got the right stakeholders involved to make a decision to proceed? For example, consider ownership of homes, buildings, land and other infrastructure and service providers who may be impacted or be required to give permissions for the proposal to move forward.
- What resources will be needed?**
Funding for electrical engineering and power system design, a range of expert contractors, equipment, land access and legal support will be needed, as well as capacity to negotiate and plan.
- What technical and project management support will be needed?**
Will the community need to fund a project manager?
- Who will manage the project?**
A community reference group or company, existing organisation, or a private company?
- How will the team interact with all the major players?**
Including Traditional Owners, Land Councils, PBCs and/or community organisations, non-government organisations, government, utilities and advisors.
- How will the project be funded?**
Consider options including existing community infrastructure funds, royalty streams, or making an application for a loan, private or government funding or First Nations grant funding opportunities. Are there other sources that could be suitable?



What benefits does the community want from the project?

Reduce power prices? Create jobs? Provide a community income stream? Other?

Will connection be assured?

Connection agreements are a fundamental prerequisite for accessing or building clean energy where it is connected to existing government or privately-owned electricity networks. Meeting regulatory requirements for connection can impose significant costs on a project and these requirements should be carefully checked and understood.

Will you need to negotiate a power purchase agreement / offtake agreement?

A power purchase agreement (PPA) is a long-term contract between an electricity generator (you) and a customer (offtaker) - like a utility, government or company. The customer buys energy at a pre-negotiated price over the life of the contract. In traditional PPAs the transfer is physical (the buyer receives the actual power directly onto their network). Modern PPAs can also be virtual, whereby the buyer doesn't physically receive the power (the buyer uses electrons generated elsewhere but the retailer balances the transactions).

Have you checked ownership of power assets?

This includes things like poles and wires in the community, or existing power generators to understand the rules for connecting your energy project to these assets. A regulatory pathway including advice from experts (including the regulatory authority for the region in which your project is proposed) will be key to understanding your obligations here.

Identify possible projects

Based on the energy assessment and the vision, set energy goals (such as targeting reducing diesel energy use).

Then, identify possible clean energy projects. Possible projects can be ranked according to their alignment with the community vision, cost effectiveness, social acceptance and environmental impacts.

There may be things to consider depending on the project you choose. For instance, there are different pathways and considerations depending on whether the project is a rooftop solar / standalone project, a community scale project, or an export or large scale project.



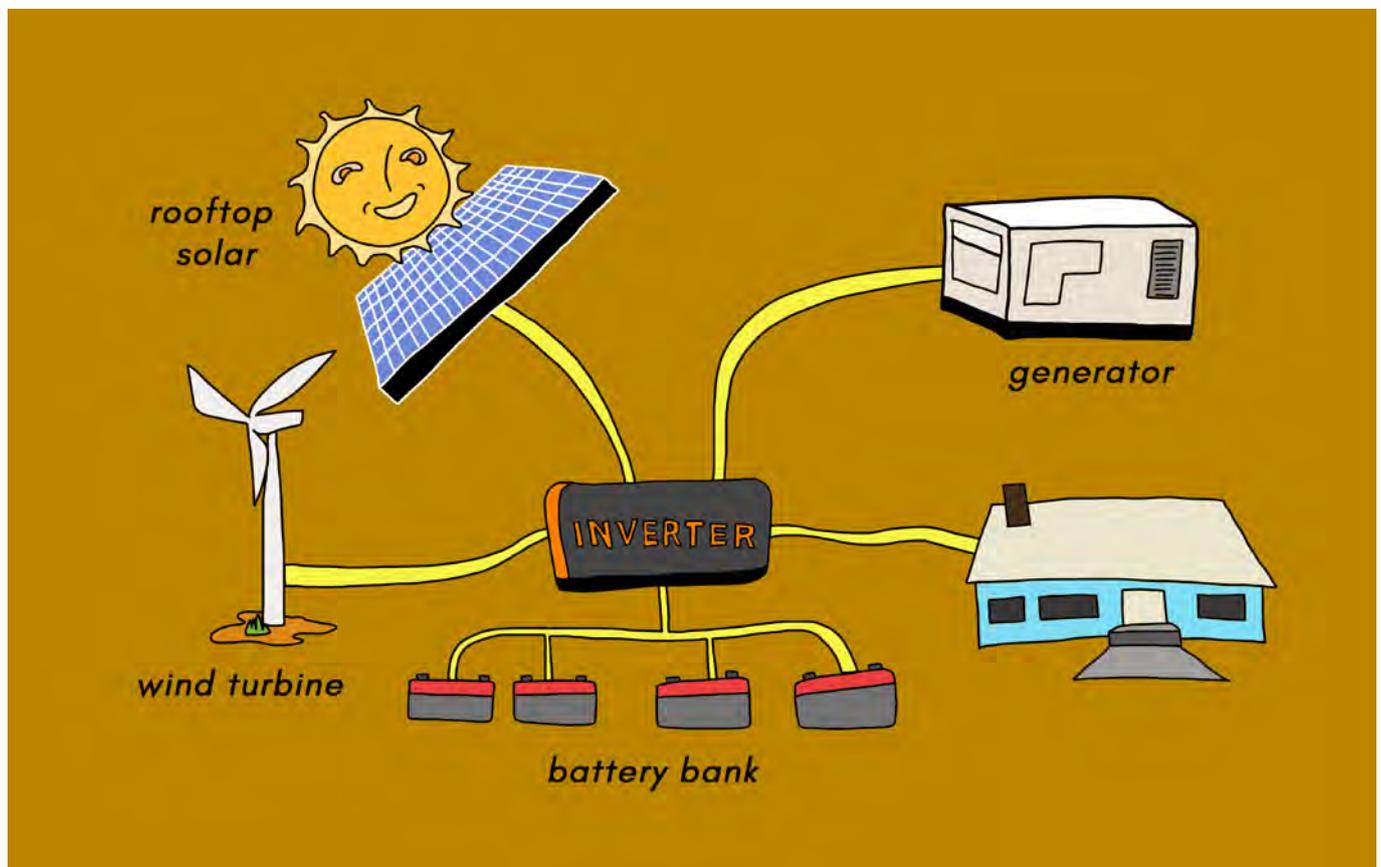
OFF GRID PROJECTS

Standalone power systems (SAPS) operate independently of the poles and wires. They have no connection to the grid (or larger electricity network).

Systems include renewable energy assets like solar panels and a battery for energy storage connected to a home or building.

Often a diesel generator is included for back-up power, for example, on cloudy days when solar power generation is low.

Standalone power systems can also be multiple renewable energy technologies combined with energy storage and a generator serving multiple buildings. If renewable energy technologies and generators are both in the system, this is known as a hybrid system.



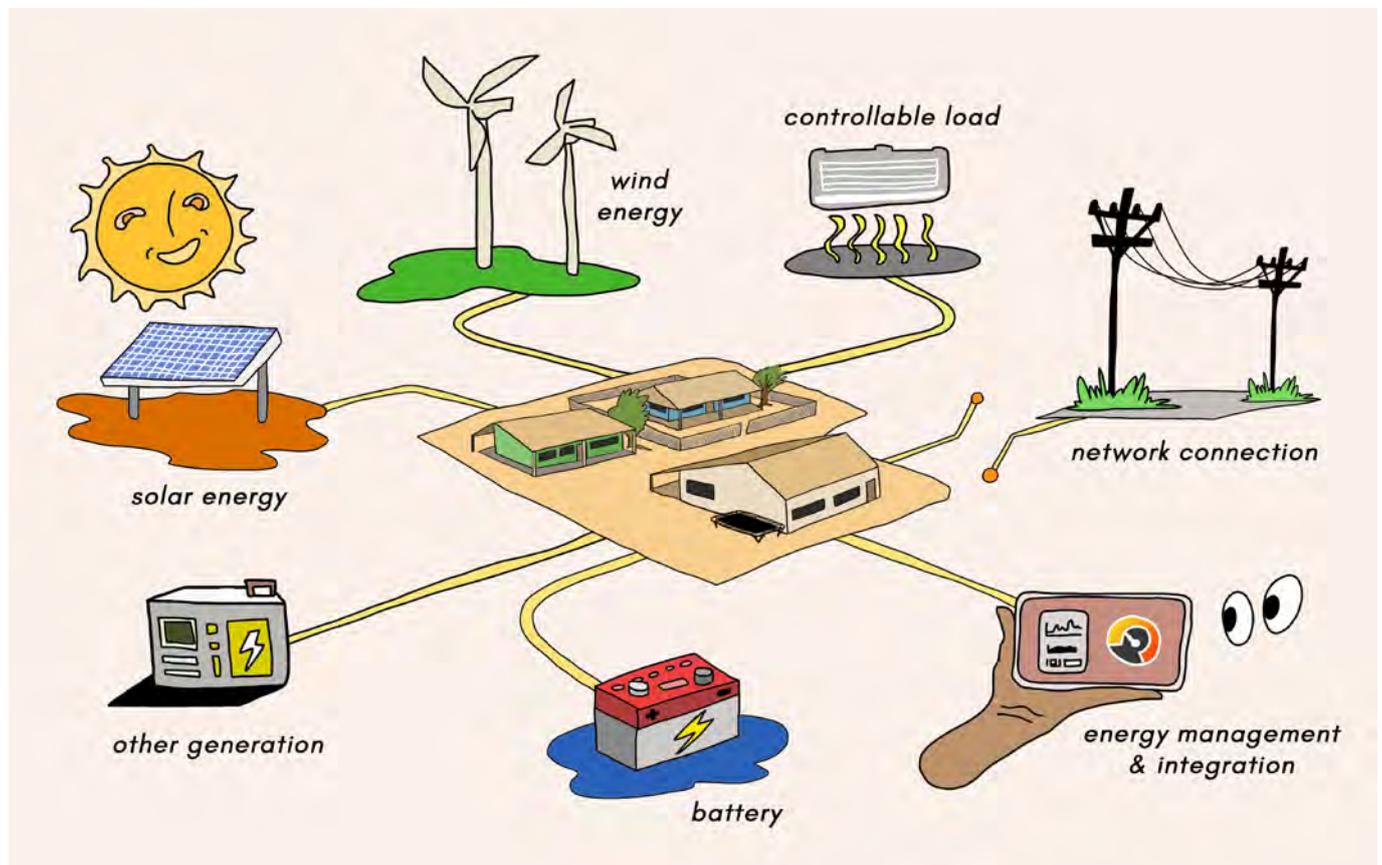


GRID CONNECTED PROJECTS

Community scale projects could include setting up a **microgrid**.

A microgrid is a local network of buildings and/or homes that is grid-connected. It also has energy resources like solar and wind and energy storage that can power it when isolated from the grid.

With multiple dispersed generation sources, and the ability to isolate itself from the larger network, a microgrid can provide a resilient power system.



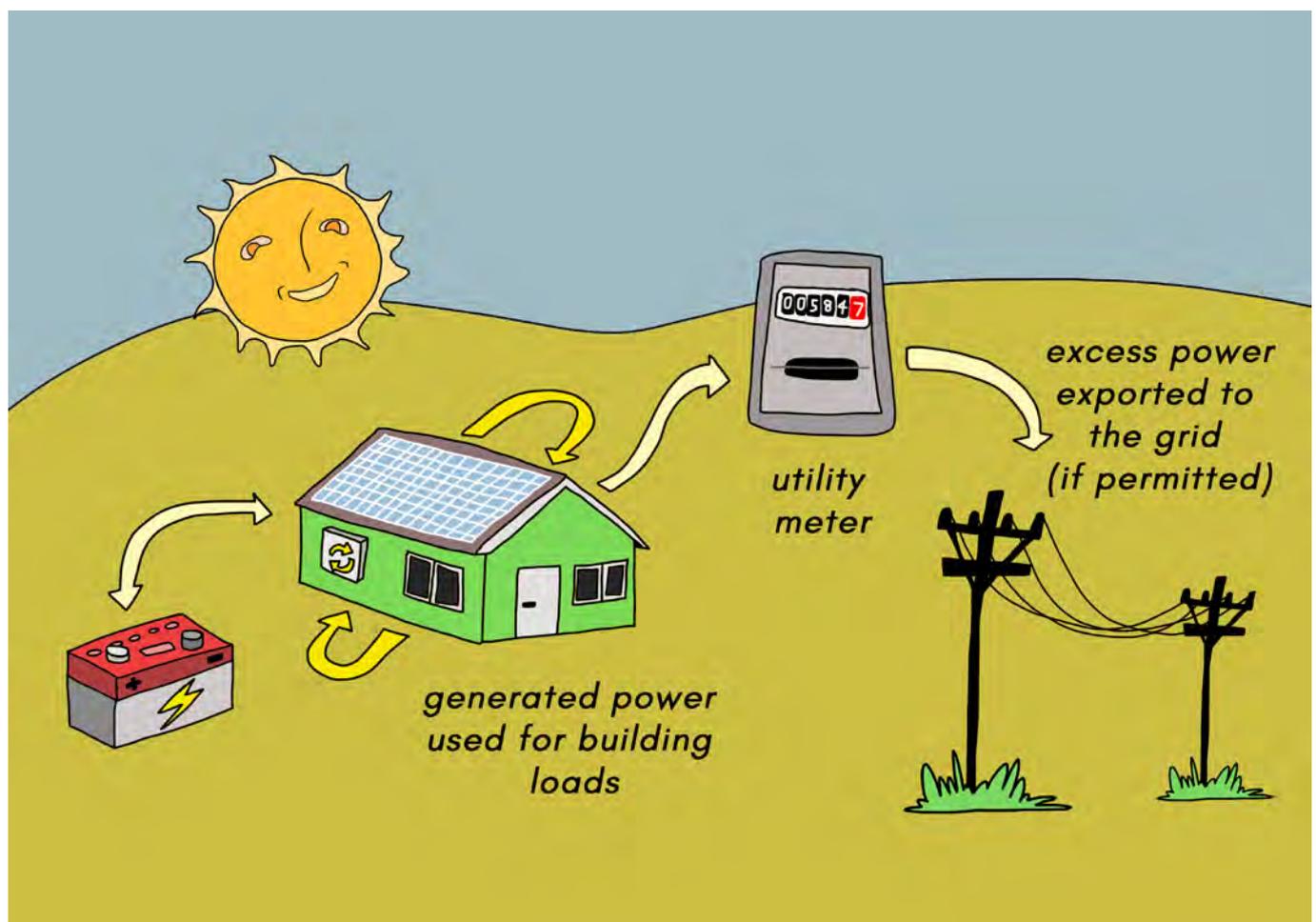


Distributed energy resources (DER) are energy generation or storage assets at houses or non-residential buildings.

The technologies are located “behind the meter”. This means they are installed on the customer side (your side) of the energy meter.

Typical DER technologies are rooftop solar systems, small-scale wind turbines, and batteries.

Energy is first used by the customer and any excess power can be exported to the electricity network if approved by the energy provider. In some cases you can get paid for these exports.





LARGE SCALE PROJECTS

Large and/or export scale projects could include building a large solar or wind farm. The power generated is then sold to the grid or used to produce hydrogen or ammonia.

Communities may be able to negotiate equity and other benefits with project partners interested in building large scale clean energy projects on First Nations land.



Is your community ready for the next steps?

- Have you shown how the plan will be of value to the community?
- Have you addressed any regulatory or policy barriers?
- Has the community agreed to move to the next steps?

3 Feasibility and Design



Once the community has agreed to the Community Energy Plan and decided on the priority project, it is time to assess the design options.

A feasibility study will assess the technology options and system sizes, determine the costs of development, and propose a viable business and ownership model.

Possible funders, project delivery partners, and local capabilities will also be identified at this stage.

Remember to engage with community members. Everyone needs to be on board.

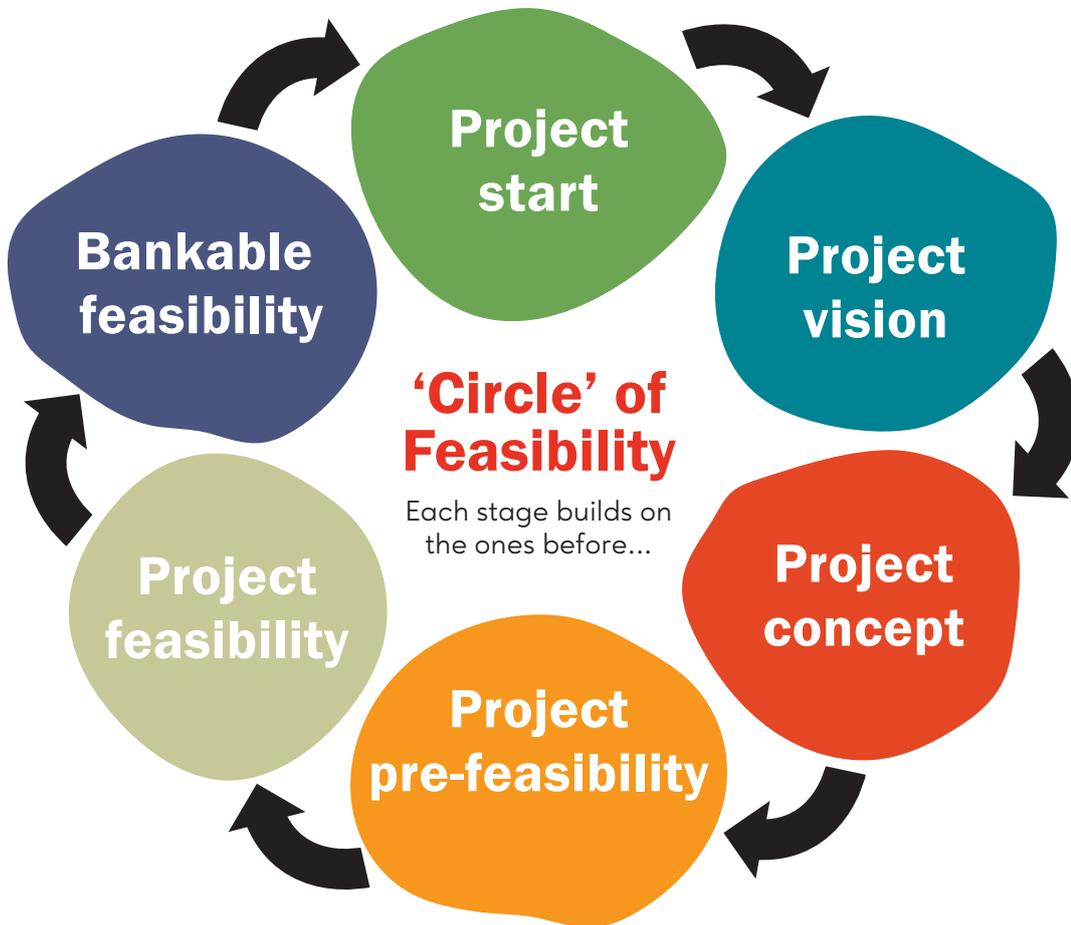
Talk about the project concept, the potential partnerships, and how traditional knowledge is going to be incorporated into the feasibility and assessment.

Inform and educate the community, and do practical exercises like:

- walk with community members around the potential project area
- show videos of other projects in development
- visit other small-scale renewable energy project sites.



Feasibility Study



Typically, the key components of a feasibility study are:

- Assessment of energy needs and costs** - your data will need to be site specific and load specific using either electricity meter data, electricity bills or estimates. Consider future needs, not just present needs. That means, work out what kind of energy use you anticipate after you build your system. For example, will lower power bills result in higher usage? What kind of education will be needed to ensure the power remains stable, and that costs to the consumer are not too high?
- Assessment of local resources** - how much sun, wind or access to flowing water is there?
- Technology review** - comparison of energy technologies and their suitability for your project.
- Technical assessment** - determine the best technologies and system sizes to meet your needs.



- Land requirements** - determine how much land is needed for the equipment.
- Review of potential sites for equipment** - Traditional Owners should advise what land is suitable to use. Consider environmental and planning assessments needed, locating the site away from homes, and access to the distribution or transmission network.
- Review of connection to the main electricity network** - including talking to the network operator about any limits.
- Cost estimate** - approximate development costs based on the proposed technology options and sizing.
- Business model** - planning how the costs will be covered, how any cost savings will be shared, and who will own and operate the energy assets.

The outcome of this exercise is a report that can be used to get formal quotes and seek funding.

Developing your business case

Trusted expert advice is important and will be crucial to putting together a design and business case.

- Establish a stakeholder reference group of people and organisations who have decision-making capacity for the project to move forward.
- Appoint or seek funding for a Project Manager to work alongside the reference group and the Community Energy Team.
- Determine what external and ongoing support is needed.
- Formalise community engagement processes and your Community Energy Plan.
- Appoint a contractor to complete system design and costings. This can be a direct appointment or go through a tender process.

Local partnerships

Other people in your local area – such as farmers, local residents, businesses – may have valuable input into your project. Identifying common energy concerns and needs can lead to forming powerful alliances to better achieve your energy goals.



Local capacity

Energy developments can bring many employment and contracting opportunities for local people and businesses.

Maximise your opportunities by being prepared. Understand what your community, and local people and businesses, can offer.

Undertake a capability assessment by surveying your community members, local people and businesses. Make a list of your community capabilities across these areas:

- Accommodation
- Administration and IT
- Catering
- First Aid
- Human Resources
- Land/cultural surveys
- Management/business
- Security
- Skilled tradespeople, machine operators and labourers

Energy projects can also provide opportunities for local people to develop new skills and experience for those wanting to participate.

Engage with your local community and build interest in potential training and employment opportunities in your project, and the clean energy industry in general.

Is your community ready for the next steps?

- Is the community open to opportunities to collaborate with or learn from other First Nations communities that have done similar projects?
- Is the community open to opportunities to partner with government, companies or financiers on this project, and have they identified appropriate partners, supported by robust legal structures?
- Does the community have a plan for how to get funding for the design, building and operations of the project?
- Has the community agreed to move to the next steps?

4 Seek financing



Once you have decided to proceed with a clean energy project, you will need to work out who will pay for the project, and what entity will manage the project and any income generated from it.

Engage with your community and work out what direction you want to go in. Make sure everyone is on board.

Creating a company or entering a partnership, equity or other arrangement

Ownership of a project by Traditional Owners

First Nations groups and communities can aim to build, own and operate a clean energy project. Many First Nations communities, entrepreneurs and businesses are successful project supporters and/or owners.

If you plan to seek out a loan or apply for grant funding you will need a registered organisation to apply. You can use an existing organisation to apply for funding to cover project costs, or receive and distribute income generated by the export and sale of any power you generate.



Forming a partnership

To assist with developing and financing your project, your community may consider:

- entering a **partnership** with individuals, trusts or companies. Public-private partnerships (PPP) between a government agency and a private-sector company can be used to finance, build, and operate projects.
- total **ownership or joint-ownership** of the project, unlocking additional control and benefits for a legal entity, such as a PBC.
- co-ownership** which could include setting up a community co-operative that may choose to act as investors in the project, or to own a percentage of the revenue stream from the project, so that all community members receive benefits.
- entering **joint venture** arrangements with a renewable energy project developer and/or another corporation to be active partners involved in the establishment of the project. Joint ventures are another way to level-up and develop local expertise.
- setting up an **alliance** where all project participants agree to share collectively in all risk and reward associated with the project.

Partnerships and collaborations can help create or achieve something that might be difficult to do on your own. They might assist you to:

- achieve larger, more high-profile opportunities and further growth
- access critical expertise, services or products
- pursue markets, customers or ventures not possible without the collaboration
- build relationships with key organisations
- improve your reputation or profile.

Choosing a Partner: Key questions to consider

Has the partner -

- Developed clean energy projects with First Nations communities or organisations?
- Disclosed company and financial information?
- Assigned a Prime Relationship and/or Project Manager with their project experience?



- Shown 'Literacy' with the state/territory and energy rules?
- Shared their contacts, connections and references?
- Been open and transparent with all information requests, on a timely basis?
- Shared information about the performance and risks about their past projects?
- Demonstrated they have the commitment and risk capital?
- Proven their project development and operating capacity?
- Been sensitive to local environmental concerns?
- Explained how the community will be engaged on an ongoing basis?
- Committed to a joint project decision-making process?
- Brought forward partnership documents that are clear, fair and positive?

You've found a partner: Setting the rules for working together

- Identify and agree on a suitable model for the collaboration
- Establish governance and management design – establish processes and methods for communication
- Measure, monitor, and assess the partnership – be accountable to what you set out to achieve
- Formalise the relationship.

Formalising a partnership

First Nations clean energy partnerships are formalised through a series of agreements that are detailed and complex. Business and legal advice is required.

Formalising partnerships can include:

- Project Agreement, to include:
 - Environmental protection
 - Cultural heritage protection
 - Employment and training



- Financial payments
- Business development
- Implementation and monitoring
- Arrangements for land use
- Project consents

- Impact/Community Benefits Agreement
- Project Management Agreement
- Construction Related Agreements
- Asset Management Agreement
- Financing / Development and Long-Term Loan Agreement
- Equity Loan Agreement
- Land/Water Use Agreement.

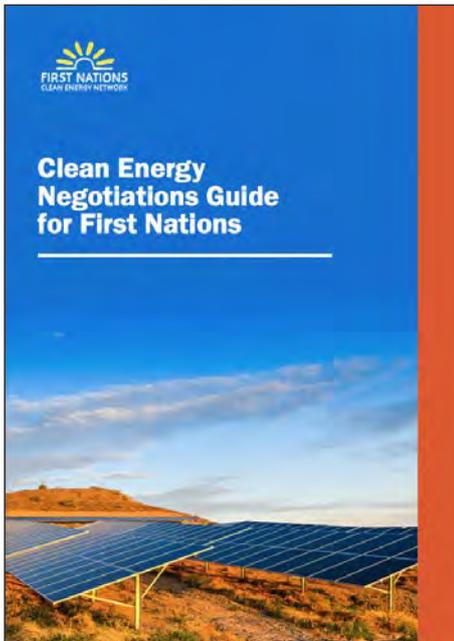
Four key factors conducive to better agreement outcomes

Research shows there are four factors accounting for the wide variability seen in agreement outcomes. They are:

1. The political and strategic power of Traditional Owners and native title holders, and particularly the organisational capacity, to insist that companies and governments meet their claims and obligations. **This is the most influential and important factor.**
2. The ethos of the company/ies seeking to develop the resource, and how committed they are to principles of corporate social responsibility in relation to First Nations people, particularly company leadership.
3. The legislative framework and legal rights in which the development occurs, including land access regimes, environmental and cultural heritage regimes, and whether or not these laws favour First Nations interests.
4. The economics of the proposed project, that is, how profitable the project will be for the companies involved.



Clean Energy Negotiations Guide for First Nations



We have developed a [Clean Energy Negotiations Guide for First Nations](#) to help communities negotiate mid to large scale developments on Country, and assist those wanting to initiate their own clean energy projects.

It covers all aspects such as joining or opposing a project, and getting resources and advice when companies want to build on Country.

The Steps

1. **Get prepared** - actions you can take if a company wants to establish a project on country.
2. **Be represented** - how to work out who you are represented by.
3. **Act as a collective** - assess and map what capacity you have to act collectively. Consider whether you need further resources from the representative body, the government or the company to be better organised.
4. **Set out how you want the company to deal with your representatives** - develop and agree on a protocol before negotiations commence.
5. **Check understanding** - make sure there is sufficient understanding of what is happening and what is being said.
6. **Access external, expert advice** - to help you understand the project or proposal so you can engage confidently in the negotiations.
7. **Alternative pathways** - what to do if your protocol isn't being followed or you aren't being properly consulted by the company, your representatives or your negotiators.
8. **Negotiations** - sharing the benefits and imagining what you could gain.
9. **Protecting country** - information that will assist with your negotiations.
10. **Getting outcomes** - finding opportunities to leverage the best outcomes from the project.



Project management and designing the power system

This is a specialised task that should only be undertaken by an accredited contractor. Check with the [Clean Energy Council](#) to find appropriate accredited designers and installers of the energy system you want to install.

If your energy project will be connected to an electricity grid, you will need an individual or entity to enter a Power Purchase Agreement (PPA) for the export and sale of any power generated from your project. A PPA is an agreement for the supply and purchase of energy between an independent power generator or vendor (which in this case is your community energy project) and a purchaser (often called the ‘off-taker’).

Project costs

Capital costs or capital expenditure (CAPEX)

These are the costs of developing your project. Your total project cost will include:

- materials (eg solar panels, batteries, cables etc)
- installation labour (tradespeople in civil and electrical)
- materials transportation
- design (engineering)
- development approvals/permitting (electrical network applications and build permits)
- mobilisation costs (worker food, accommodation, transportation)
- community engagement activities (outreach to the community to inform them of the project and collect their views/concerns/feedback).

Operational costs or operational expenditure (OPEX)

These are the ongoing costs of operating and maintaining your project. Your ongoing operational costs will include:

- maintenance (labour for cleaning, regular inspections and part replacement)
- parts (replacement of equipment at end of life or failure)
- monitoring (if your system is being monitored remotely by a company)
- security (this may include guards or video camera surveillance if you are concerned about the safety of the systems).



Note that a period of operational costs can be requested upfront in a funding application. For example, an application may request CAPEX funds plus-5 years of OPEX funding until the project is able to cover its own costs. This would be considered during the feasibility stage.

Ongoing maintenance



Before you invest in a new energy system, make sure you prepare an ongoing management plan. This should include maintenance either from within the community or through external contractors. This applies to primary equipment as well as backup power generation and support systems.

Training

Local people can be recruited for installation and some of the ongoing work, such as cleaning solar panels and undertaking visual maintenance inspections. Conduct research on which Registered Training Organisations and contractors can deliver training appropriate to the installation and maintenance of your energy system.



Financing a project

Maximising funding (grants or conditional support) for project development reduces project costs and risks.

Funding (financing a project) may come from your own sources, or from banks, investors, utilities, State or Territory governments, the Federal government, local municipalities, not-for-profit organisations, or from the community itself.

If you can demonstrate the project is ticking all the boxes for your community, it might increase the likelihood of funding being approved.

Talk to others to see if they know of energy funding programs and incentives available.

For instance, the Clean Energy Regulator has incentives available for those investing in and generating renewable energy. Or a particular bank or source of finance for your project (say, a superannuation fund) might have a social responsibility or impact policy, or potentially a Reconciliation Action Plan (RAP).

As 100% of the funding of a project from one source is unlikely, sources of finance for a project need to be found.

In addition to grant funding, projects might be funded by equity finance or debt finance.

Equity finance does not need to be paid back, but it relinquishes ownership stakes to the shareholder. If a project doesn't perform well, equity holders need to cover any shortfalls.

Meanwhile, debt has to be paid back, with interest, on a set timetable. Debt generally has first call on project revenue after operating costs.

Communities should make sure they get professional advice and assistance when it comes to financing a project - both debt and equity have their advantages and disadvantages.

Sources of capital

Savings / retained earnings	Debt finance	Equity finance	Grants
Own source funds – might be savings account or business profits	Money borrowed and repaid with interest	Money invested in your business in exchange for part ownership	A gift that does not have to be paid back
	<ul style="list-style-type: none"> Commercial banks Commercial finance companies Leasing companies Non-bank lenders 	<ul style="list-style-type: none"> Private investors Institutional investors 	<ul style="list-style-type: none"> Philanthropic Governments



In determining where the funding and finance to progress the project is coming from, there are other factors that need consideration:

- Are there any requirements attached to the funding?** For example, does the funding require a return on investment, or does it require security over an asset (e.g. land or a building) to be provided? Is this the best option?
- Does the funding cover the full project lifecycle?** i.e. from community engagement through to long term operations and maintenance support? If not, then how will these other project stages be funded?
- Which individuals or entities will be responsible for ongoing management and maintenance of the energy system to ensure it continues working efficiently into the future?**

Visit the [First Nations Clean Energy Network](#) website for more information on available finance and funding options.

Is your community ready for the next steps?

- Has the community secured funding and finance for the building and implementation of the project?
- Has the community agreed to move to the next steps?

5 Seek approvals



You should seek to understand the different sorts of approvals and project assessment processes that exist in the State or Territory you plan to construct your project in.

For large-scale projects, completing studies such as environmental impact, cultural heritage, and connection agreement applications are necessary legal obligations for any project assessment.

For smaller household projects, there are still legal requirements, such as a connection application with the electricity provider, and sometimes a structural condition report is needed to assess the roof strength of a building.

Talk with your community. Make sure everyone understands what's happening, and is on board.

Cultural heritage

Protecting cultural heritage is critical for our communities. Often there are consultation processes available to assist with this, while creating leverage to strengthen your position. Cultural heritage matters will need to be considered



early on and appropriate strategies put in place to ensure appropriate consultation, protection and conservation measures.

First Nations requirements

There may be specific First Nations requirements relevant to your project, mandated by planning, environmental and regulatory schemes. For example, your project may require an agreement under native title or land rights legislation, or specific engagement with First Nations interests in the case of environmental approvals.

Government approvals

Depending on the project's size, location and potential impacts, planning and/or environmental approvals may be required by any (or all) of the three tiers of government.

It may be important for your community to make a submission about the project and to contact the relevant government agency to discuss your community's views.

Some specific things to keep in mind include:

- Is a permit required to clear native vegetation on the development site? If the answer is no, this does not necessarily mean that other environmental approvals will not be required.
- Fauna and flora surveys may need to be undertaken in accordance with relevant guidelines.
- Other specialist studies may be required, including visual amenity, noise, social impact and traffic assessments.

Your local government may need approvals under a local development control plan, environmental plan or planning scheme. For instance, for building codes, easements, local covenants and ordinances, and technology-specific requirements.

State and Territory governments have approval regimes under environmental protection legislation and in some cases 'major project' legislation that you may need to navigate. Click the links to visit the approval regimes for each state and territory.

- [Australian Capital Territory](#)
- [New South Wales](#)
- [Northern Territory](#)



- [Tasmania](#)
- [Queensland](#)
- [South Australia](#)
- [Victoria](#)
- [Western Australia](#)

Australian government approvals may include:

- environment and heritage approvals
- customs and biosecurity approvals
- foreign investment approval
- import tariff concessions.

Energy Regulation and Policy

The Australian government has developed a tool called the [Regulation Navigator](#) that filters and navigates Australia’s current energy regulations. You can use it to better understand what regulations may impact your energy project’s business model.

Find below links to energy regulations and policy in each State and Territory.

- [ACT](#)
- [New South Wales](#)
- [Northern Territory](#)
- [Queensland](#)
- [South Australia and here](#)
- [Victoria](#)
- [Western Australia](#)

Legal approvals

It is important to understand the legal processes associated with getting approval for a project, and which stakeholders need to be consulted. This may include Government departments, authorities and local councils. You should obtain and rely on legal advice.



Energy provider approvals

All energy projects connecting to the electricity network (including isolated community networks) must go through a formal connection agreement process with your distribution network service provider (DNSP). ([Find out your DNSP](#))

This means lodging a connection application with your local distribution network service provider (DNSP) such as Horizon Power in northern WA, Power and Water Corp in the NT, or Ergon Energy in regional Qld.

Connection applications are very technical. We recommend you engage an expert to assist you. It's important to engage them early so that you understand the issues of proceeding with a project that might be outside of the network provider's limitations.

Community energy projects

Some types of community energy projects (for example, installing a microgrid) may require you to work through unchartered territory.

You may be establishing new types of agreements or partnership models with your distribution network service provider (DNSP) and/or retailer that haven't been done before. This means you may need to navigate regulatory and policy hurdles to get your project approved.

These negotiations can be lengthy and complex, and may require you to engage some specialist advice.

Initially, it's a good idea to find examples of where a project like yours has been proposed or completed - particularly if there are any in your State or Territory - as rules can vary.

Projects connecting into small isolated networks are more challenging due to the lack of regulatory support and distribution network service provider (DNSP) policies. This is largely driven by the increased difficulty of keeping small systems stable with multiple sources of energy generation (for example, wind and solar, and diesel). The unique nature of these small networks means there are no turn-key solutions (a turn-key solution is a type of system built end-to-end for a customer that can be easily implemented into a current business process). If this is the case, you may face rules that discourage non-utility ownership of energy assets.

There are also barriers around housing ownership and prepayment metering limitations that present barriers to household-scale solar systems.

With effort, however, the regulatory environments and DNSP policies can be altered to create opportunities for new energy delivery models. This is already happening around the country as First Nations are challenging the status quo of energy delivery in their communities.



Small grid-connected projects

In general, small grid-connected projects are less likely to experience regulatory challenges as there are existing rules and regulations in place.

Export or large scale projects

The DNSP will help determine where large export focused projects can connect into the grid and what amount of power they can accept in that part of the network. This may involve detailed technical studies by the DNSP to determine the impacts the project will have on the wider network. They may charge fees to undertake this analysis in some cases.

Large scale grid-connected projects (particularly systems over 5 megawatts) have complex regulations attached. However, the pathways to approval are well-established.

Is your community ready for the next steps?

- Has the community addressed all approvals needed for the project?
- Has the community agreed to move to the next steps?

6 Build



This step is focused on building your energy project, which is already supported by a solid business case and financing.

Critical path items in this phase are planning, grid connection, offtake agreement and design development.

Communities will finalise project agreements and proceed with construction, commissioning and operation.

Remember to talk with your community every step of the way.

Bring the community along for a groundbreaking ceremony. Use social media and local media to share new updates, and post video and photos. Visit safe places where community members meet, and organise meetings and workshops to make sure everyone is informed and on board. Highlight potential training and job opportunities, and assist people into those opportunities.



Project Delivery Methods

There are a number of different ways you can build your project.

Construct only

The community funds a contractor to build the project using a design that has already been completed and approved for the project.

Design and Construct

The contractor designs and constructs the project in accordance with the required specifications. This delivery method reduces the community's risk but increases the contractor's risk.

EPC approach

Community scale projects may want to use an EPC approach.

Engineering, Procurement and Construction (EPC) companies deliver a complete package from design through to construction. They can hire other companies to complete different parts of the project, as required.

Under an EPC contract, a contractor is obliged to deliver a complete project to a developer (the community) who will only need to "turn a key" to start operating the facility.

EPC services typically provide a single responsible source for executing a project, so it alleviates risk for the community. There is a financial premium for this option, however, if planned appropriately, it can be managed.

Build, Own, Operate and Transfer (BOOT)

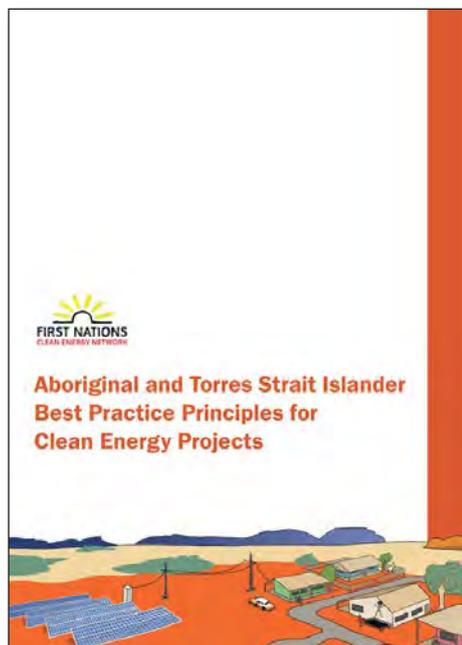
In this option, the contractor has ownership of the energy project once construction is completed, and the contractor also operates the energy project, providing a service to the community (developers) for an agreed period of time. At the conclusion of that time, the ownership of the energy project can be transferred to the community, or it may remain with the contractor.

Selecting a Company / Contractor

Many companies now have Reconciliation Action Plans (RAPs) or statements on their websites about values in relation to social responsibility, sustainability, or engaging with First Nations communities.

Select a company that is acting according to its own policies, statements and commitments.

Aboriginal and Torres Strait Islander Best Practice Principles for Clean Energy Projects



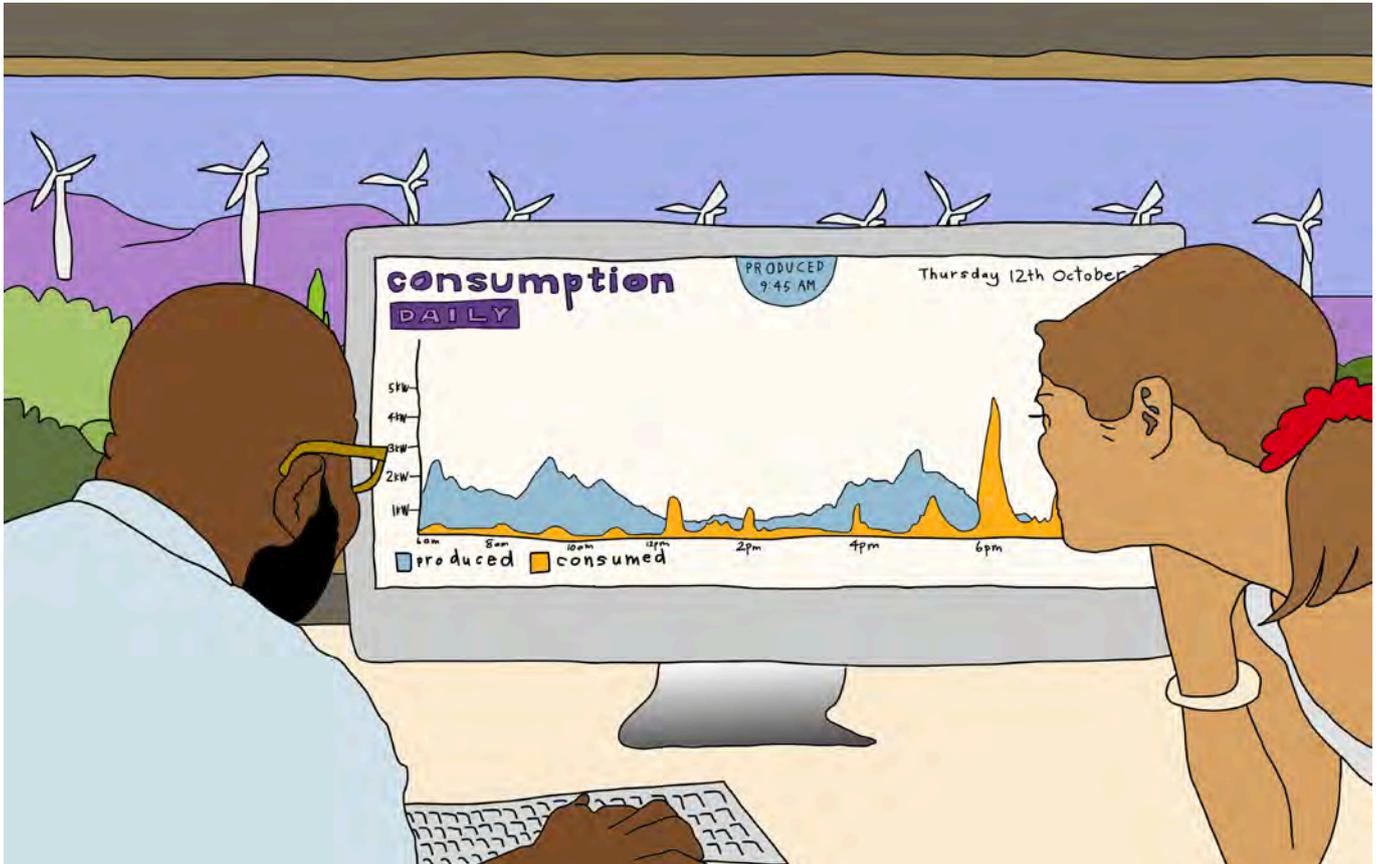
We have developed a set of [Best Practice Principles](#) to support you to play a key role in the development of small, medium and large-scale clean energy projects and to negotiate well with companies on an even playing field.

The 10 principles cover such things as making sure companies ensure projects provide economic and social benefits, mutual respect, clear communication, cultural and environmental considerations, landcare and employment opportunities.

The Principles

1. Engage respectfully
2. Prioritise clear, accessible and accurate information
3. Ensure cultural heritage is preserved and protected
4. Protect country and environment
5. Be a good neighbour
6. Ensure economic benefits are shared
7. Provide social benefits for community
8. Embed land stewardship
9. Ensure cultural competency
10. Implement, monitor and report back

7 Monitor



Congratulations!

You've worked hard to get this far. It's time to celebrate with your community.

Organise an opening ceremony. Bring everyone along and invite local media to attend. Video the event to share on social media and with your neighbour communities. You are sending a message of success!

Monitoring

Once your energy project is operational, its performance needs to be monitored throughout its life.

Monitoring technology can show you in real-time how much power is being generated and possibly even where it is being used. This data can be made available through a web page or app, so you'll need to make sure there are some people who know how to access it and understand it. The data will let



you determine if it's performing as expected and highlight if there are any issues. It will also help you to change your energy consumption habits to get the most out of your renewable energy generation and energy storage system.

Your community will be keen to stay informed about how the energy systems are providing benefits to everyone. Share regular stories on social media, and in community gatherings and meetings, about how the project is operating. Be transparent about how it's working, and about the project costs and earnings. Talk about the jobs and training opportunities it's created. Celebrate the successes and learn from any mistakes.

Your community will continue to support the project if they remain informed about it.

Making changes to the project

We are currently living in a continuously changing energy landscape. Your community energy needs will change and likely grow over-time.

Part of your monitoring process involves re-assessing your needs every now and then.

You may find that you need to expand your energy systems at some point or that it's time for an equipment upgrade earlier than expected.

One of the great benefits of renewable energy systems is that they can be modular (easy to add to) and flexible (easy to change).

Your Community Energy Plan should be treated as a "living document", one that evolves over-time to meet changing needs and circumstances. The community has the opportunity to adjust plans and timelines to accommodate changing situations and priorities.

Deciding not to go ahead with a company

As a first step, you should identify why the company should take your suggestion on board for not going ahead.

You could frame your suggestion as a benefit to the company if it will reduce the impact on the environment or cultural heritage, create better community outcomes, or show the company has not demonstrated its commitment to its stated goals and values in relation to sustainability, First Nations engagement, social licence, or the agreement you have made.

You should explain the issue and your request to the company, and why the company should take it on board. If possible, you should meet with the company and send something in writing, even if it's just a short email.



Check whether other people, communities, groups or experts share your concern.

- If other First Nations communities share your concerns, this will strengthen your position.
- If an environmental group shares your concern, they may help with environmental reports that will strengthen your position.
- If other people or stakeholders share your concern, present your collective evidence to the company.

Sometimes your threat of using alternative strategies (among them, approaching the media, getting legal advice) may be enough to get companies to negotiate fairly and to listen to the community.

If the company won't listen to your suggestion or request, raise the issues as soon as you can among other stakeholders with influence over the project.

For example:

- raise it with the Government department or consent authority that will decide on approval. At the appropriate time you will need to make a submission about it, but you don't have to wait until that stage to make your concern and suggestion clear – the earlier you raise it, the better.
- raise it with other Government stakeholders
- raise it with the company's financier
- consider asking the media to report on your concerns
- seek legal advice.

Your legal options will depend on the kind of concerns you have about the project and the company involved. Tell your lawyers as much as you can so that they can present options.

Once you have told your lawyers about your concerns, ask whether you have legal standing to challenge aspects of the process that you believe are inadequate or whether you have other legal rights you can use.



How a company might respond to your requests or objections

If you ask for changes to the project, like wanting to increase or decrease the scope of the project and/or revise agreement terms, companies that are committed to best practice should, as a minimum:

- listen to your concerns or ideas and consider how these can be addressed or accommodated
- communicate clearly with your representatives or negotiators and, where possible or appropriate, your whole community
- provide clear information including in relation to any proposed change to the project scope
- provide accurate information about likely impacts, including jobs.

Companies committed to best practice should not:

- communicate with some families and not others (split off families)
- provide different information to different people or cause confusion in the community
- threaten to cancel the project or the negotiations because your community is asking difficult questions or raising difficult issues
- ignore your representatives
- increase or decrease the scope of the project without talking to you and/or revise agreement terms.

To best deal with any attempt by a company to divide communities, it is important for your community to develop strategies to stay united and strong.

Open and regular communication within the community ensures everyone feels their concerns are being heard by community representatives and gets everyone's input into your clean energy strategy.



Need support to take the next steps?

There are many organisations and groups that may be able to assist you in your clean energy journey.

Visit our website to learn more:

www.firstnationscleanenergy.org.au/links_to_other_organisations



Contact the First Nations Clean Energy Network

Email: info@firstnationscleanenergy.org.au

Website: www.firstnationscleanenergy.org.au



Disclaimer

This Toolkit has been prepared using a variety of persons and sources, including from *Indigenous Clean Energy*.

Information in this document should not be relied upon as legal advice. Each situation will be different and you should obtain and rely on legal advice for your own situation.

No warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by, the stakeholders consulted or the First Nations Clean Energy Network in this Toolkit.

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