



ORIGINAL POWER

A community-focused, Aboriginal organisation that builds the collective power of our people and backs our leadership, skills and capacity to genuinely achieve self-determination in our community and on country.

Transition vs Transformation

- Decarbonise
- Democratisise
- Decentralise
- Decolonise

*Energy sits at the nexus of the fundamentals for thriving,
including the ability to leverage greater **agency** for communities.*

The Opportunity of Transformation

ENERGY PAIN POINTS...

- Regional economies impacted or disappearing after resource 'booms'
- Climate vulnerable communities with poor resilience to increasingly extreme weather
- Farmers' yields dependent on the cost of energy and usefulness of energy tariffs
- Remote First Nations communities on prepay meters experience deep energy insecurity with critical wellbeing impacts
- Land rights have been historically ignored in the use of land for energy infrastructure

TRANSFORMATION LOOKS LIKE...

- Energy Market value bases, nature of participation, and transparency mechanisms poised to shift
- Skills and workforce transition, locally
- Local economic *investment* from the income of community and landholder agreements
- Local climate resilience and adaptation
- Energy upgrades and retrofitting to assist affordability
- Water and food security unlocked by improved energy security, affordability
- Local productivity unlocked by energy affordability and access

Consumer Centric Outcomes

While we grapple with decarbonisation targets and what smart energy means for new energy markets, fundamentally greater flexibility should be designed to serve the needs of communities, households, and consumers.

A lateral shift of legacy energy economics will not deliver the transformative consumer outcomes possible.

Co-design of place based planning and investment is essential to securing meaningful and lasting outcomes in the energy transition.

Original Power's Community Energy Planning Approach

ENERGY CHALLENGES IN FIRST NATIONS COMMUNITIES

- Energy security challenges, vulnerable or end of life assets
- Affordability challenges for prepay meter consumers resulting in high disconnection rates and flow on wellbeing impacts
- Climate vulnerable communities face months long outages, sometimes community relocation
- Land rights bypassed in strategic planning and investment decisions
- No access to renewables for social housing residents
- Poor housing efficiency increasing energy consumption, health impacts

CO-DESIGNING ENERGY SOLUTIONS WITH COMMUNITIES

- Engage communities by invitation only
- Identify current energy experiences
- Identify energy aspirations across community
- Identify existing governance and decision-making groups
- Identify existing and future infrastructure, consumption, loads, etc.
- Assess present regulatory landscape, barriers and opportunities
- Assess current funding and investment opportunities
- Establish relevant decision-making body
- Design Community Benefit Plan, guiding star

Solution Design Considerations

TECHNICAL

- Reduced diesel reliance
- System performance during extreme climate events
- Procurement from First Nations businesses, local
- Cradle to cradle design
- Supplementary household efficiency and retrofitting
- System sizing accommodating increased
- Small networks mean big impact, work closely with utility

COMMERCIAL

- Recognition of land rights in commercial agreements
- Revenue reinvestment strategy
- Reduced wholesale cost to retailer
- BESS can modernise/improve existing system operations
- Full value stack of benefit offered by a smart energy system may not be recognised in PPA
- Considerable regulatory uncertainty means a risk premium on PPA price

OPERATIONAL

- What degree of network ownership/management is the community open to?
- What local skills and workforce development is needed?
- Remote monitoring can help reduce operation costs
- Scheduled maintenance to reduce emergency callouts
- Machine learning to predict maintenance and repair works

West Island & Borroloola Case Studies

ENERGY AND WATER MONITORING ON WEST ISLAND HOMELAND

- Diesel + solar end of life, no planned reinvestment
- Diesel costs made homeland unsustainable
- Solar + BESS system with remote water and energy monitoring installed with local workers
- Remote fault detection and scheduled maintenance reduces operational call out costs
- Energy and water security allowed return to homeland after many years
- Food garden made possible due to water security

DERISKING COMMUNITY ENERGY INTEGRATION

- Expensive prepay meter costs result in 10+hour disconnections every 4 days
- Existing utility solar spills, not cost savings pass through with high diesel reliance
- Community co-operative established to build, own, maintain system, capacity building and local jobs
- PPA includes bundled wholesale cost, LGC, community benefit program (PPM credits, >30% bill reduction)
- Utility benefits: cheaper wholesale price, diesel price hedging, utility O&M cost reduction, BESS system efficiencies
- Community proponent forces definition of fit for purpose regulatory processes

A First Step to Building Equity

When designed well, the revenue from a community energy system can be invested in near and long term outcomes that provide the means for deeper self-determination and democratisation.

