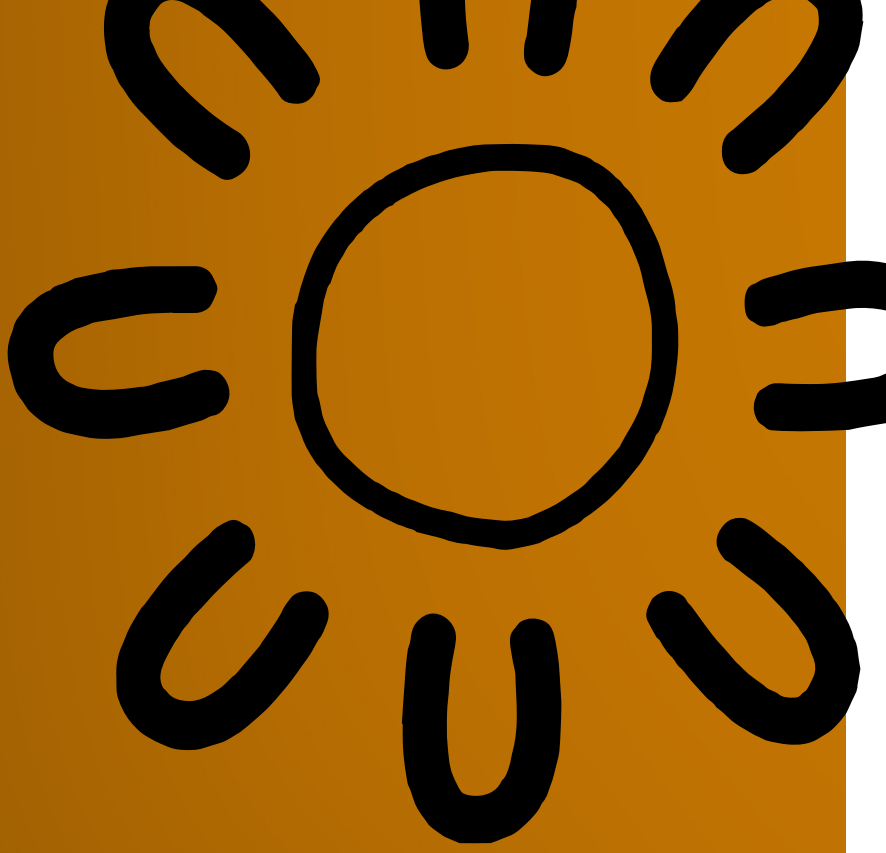

Energy in remote Indigenous communities

Resources to support further research, behaviour change and practice improvements

Contents

Purpose

This resource has been developed to help inform those working with Aboriginal and Torres Strait Islander peoples in remote communities about the latest information, research and key contacts in relation to energy use and energy management. It is currently focused on regional Queensland but could be extended to other areas. It can also be used in advocating for further regulatory and systemic changes in the delivery and use of energy in remote communities.

It is hoped that this resource, alongside the 'Yarnin' Energy Toolkit' developed for ICAN community workers, will help improve understanding and awareness of key ways to support Indigenous households in managing their household energy - and improving their quality of life.

Key issues and approach

Across Australia there are nearly 100,000 Aboriginal and Torres Strait Islander people living in remote communities (Buergelt et al 2017:262). They live in regions that experience the extremes of dry and wet seasons and both high and low humidity, and typically have double or more the number of people in non-Indigenous households. A significant proportion are living in rental housing, which may be of poor quality, leaking cool air or heat. These factors combined with significantly lower incomes and significantly greater health problems means that their energy needs take on particular importance.

The supply of affordable energy to these communities is critical to their daily survival and their longer-term opportunities, including improving their life expectancy and overall wellbeing. While there have been a number of projects looking at the issue of energy in Indigenous communities, this is still a very new field of research and focus.

Based on findings from Energy Consumer Australia's Power Shift project, the key considerations in supporting Indigenous households to manage their energy bills are:

- Use established community links to when engaging with communities to build legitimacy and trust, with face to face interaction wherever possible
- Contextualise information to the participant's education level and cultural lens
- Position energy efficiency as an important life skill for the improvement of wellbeing
- Focus on building the community's capacity and knowledge around energy, not just the individual
- Raise awareness of other helpful programs, don't just focus on single issues
- Use visual materials for education purposes, limit text and technical details
- Meet the community where they are at and build educational resources accordingly.

Key programs/organisations

Centre for Appropriate Technologies - Energy Resources
https://cfat.org.au/energy-resources
CFAT is an ATSI controlled not-for-profit organisation working with Aboriginal communities and organisations to deliver practical, integrated project design, technical innovation, training and infrastructure products and services – supporting livelihoods and growth in economic opportunities across remote areas. Organisations include: Aboriginal Land Councils; Federal, State, Territory and Local Government jurisdictions; tertiary and VET educational institutions;, the private sector, NGO's and philanthropic organisations. Based in Alice Springs with offices in Cairns and Darwin.

- National Indigenous Infrastructure Guide, 2010, Energy Module
- A whole series of renewable energy initiatives were undertaken through the Bushlight brand during 2002-2013 (case studies and reports available through https://cfat.org.au/bushlight-archive)

Fourth and Centre, Reducing Energy Bill Stress in Aboriginal Social Housing (Dubbo)
https://fourthandcentre.com.au/our-work/

- This 2018 project aimed to assist tenants in 150 Aboriginal social housing properties in Dubbo to reduce their energy bill stress through education about energy, and through the installation of solar PV systems
- Two local Aboriginal businesses were engaged - recruiting, training and employing eight local Aboriginal men to undertake the installations
- At the end of the project, 90% of tenants surveyed reported that their energy bills had been reduced and over 84% reported being less worried about their bills. Importantly over 70% said their homes were now more comfortable
- Savings over a 5-year period are expected to be around $414,000
- The project was the winner of the NSW Premier's Award for improving government services in 2018.

Fourth and Centre also received a grant from Energy Consumers Australia in 2019 to develop a step-by-step guide to help low-income households reduce their utility costs – the kit can be accessed at
https://energyconsumersaustralia.worldsecuresystems.com/grant-archive/995-managing-energy-bills-for-low-income-and-vulnerable-consumers

Indigenous Consumer Assistance Network (ICAN)
Yarnin' Money Report 2019
http://ican.org.au/wp-content/uploads/2019/04/YMReport2019.pdf

- Report on the development and delivery of the Yarnin' Money program from 2015-2018 and the outcomes for Aboriginal and Torres Strait Islander peoples in acquiring financial capability knowledge and skills through the program
- Describes the journey of building a new methodology for developing and delivering education and training, based on Aboriginal and Torres Strait Islander ways of being (ontologies) and ways of knowing (epistemologies), so that the material and engagement would be culturally relevant and meaningful. Equally relevant in the energy field.

Recent research - Indigenous communities and energy

Bedggood R, Perenyi A, Meyer D, Farquharson K, Johansson C, Bedggood P, Milgate G, 2017, 'The Living Conditions of Aboriginal People in Victoria', *Science Direct Energy Procedia 121* (2017): 278-283

- Findings from research based on a Koorie Energy Efficiency Project (KEEP) from 2013-15, demonstrating the complexity of energy-related disadvantage faced by Aboriginal households in Victoria. The KEEP report can be downloaded at https://energyconsumersaustralia.com.au/wp-content/uploads/KEEP-Koorie-Energy-Effiency-Project_Kildonan-UnitingCare-VIC.pdf
- Many Aboriginal households have limited capacity to improve the energy efficiency of their homes (largely because they are renting), at the same time as having inefficient fixed appliances or even no fixed appliances in many cases
- Based on data from 867 Aboriginal households, it was found that 86% of homes are rented and two thirds (67%) built over 20 years ago meaning they are hugely inefficient to heat and cool, with 36% having no insulation
- With 12% reporting having no cooking oven or stove and 13% reporting having no fixed heating appliance, they are using smaller appliances that are more costly to run and less efficient
- Efforts to support Aboriginal households - primarily through governments as the landlords of social housing - to become more energy efficient would both reduce their energy use and costs, and also improve health and well-being.

Buergelt P T, Maypilama E L, McPhee J, Dhurrkay G, Nirrpuranydji S, Manydjurrpay S, Wunungmurra M, Skinner T, Lowell A, Moss S, 2017, 'Working together with remote Indigenous communities to facilitate adapting to using energy wisely: barriers and enablers', *Science Direct Energy Procedia 121* (2017): 262-269. Accessed 20 June 2019, https://reader.elsevier.com/reader/sd/pii/S187661021733480X?token=ED4FA50DFAE647F1AC74AC8F999006D67507091E9014949EBFC959AD3747DAB5C7C62860B278B980FBD36A5E7A9CB937

- Findings of a project by Indigenous and non-Indigenous researchers that employed and educated over 80 Yolnu people in the Northern Territory to trial energy efficiency education and technologies. The project looked at the barriers and enablers of Indigenous and non-Indigenous people working together to address an identified community need. The Manymak project report can be downloaded from https://energyconsumersaustralia.com.au/wp-content/uploads/Manymak-Energy-Efficiency-Project_Indigenous-Essential-Services-NT.pdf

- The energy-related outcomes of the project were the local community having a better understanding of how to use power more wisely, as well as becoming more interested in power and how to use it more efficiently
- It was revealed through the use of local Yolnu educators that many of the Yolnu don't yet understand power and water stories (at the end of the 12 month project) and wanted the discussions and sharing to continue, indicating that short and one-off interventions are insufficient to address the issue more thoroughly
- The project also identified the ongoing importance of fire as a key element of survival and culture, and a strong desire to continue using this as a source of energy for heat and cooking, as well as staying connected to their cultural and ancestral ways.

Queensland Council of Social Service (QCOSS), 2014, *Empowering Remote Communities: experience of Aboriginal and Torres Strait Islanders using electricity pre-payment meters in Qld*. Accessed 15 May 2019, https://www.qcoss.org.au/wp-content/uploads/2017/11/20140819_QCOSS-Report-on-Remote-PPM-Customers-Final.pdf

- Presents findings from QCOSS research into the experiences of Aboriginal and Torres Strait Islander energy consumers living in remote communities in Queensland, where the electricity is supplied through card-operated pre-payment meters (these meters are not permitted in any other part of Queensland)
- While there are some perceived advantages of the pre-payment meter system, and they were originally introduced with agreement from local councils, there are also issues around accessibility and affordability including:
    - Households unable to afford credit being without electricity for long periods
    - Households in financial hardship prevented from accessing government-funded concessions and hardship assistance available to those on mains power
    - Limited uptake of off-peak tariffs and renewable energy options, general difficulties accessing and using the meters, limited understanding of electricity usage and support measures available.
- Since this report the Queensland Government has convened a taskforce to explore many of the issues raised in this report with a number of small wins already achieved, such as pre-payment meter customers now able to make complaints to the Energy and Water Ombudsman Queensland (EWOQ) - previously not covered by this body.

McKenzie M, 2013, *Pre-payment meters and energy efficiency in Indigenous households,* Bushlight Centre for Appropriate Technology. Accessed 20 June 2019, https://static1.squarespace.com/static/5450868fe4b09b217330bb42/t/547530c1e4b08b6cd903ce46/1416966337194/Bushlight-Report-PPM-Energy-Efficiency-Feb131.pdf

- Pre-payment meters are widely used across the Northern Territory for residential electricity. This raises some unique issues around energy use and energy management for people living in these communities (and that can be translated to other communities using pre-payment meters)
- While communities generally express a high degree of satisfaction with pre-payment meters and generally preferred them to standard quarterly billing, there were a number of additional challenges raised
- The report noted very high rates of disconnection, in terms of frequency and duration. That affects health and wellbeing of those households, such as not purchasing fresh food.
- Access to power cards can be difficult, especially after hours
- The average spend on electricity is significantly higher than in mains powered communities
- There is a low uptake of energy concessions among pre-payment consumers, and the application process appears onerous
- There was little understanding of energy efficiency principles and measures that could be taken to reduce energy use, and high use of energy hungry fixed appliances (stoves and heaters).

Mudge L and Saman W, 2017, 'The impact of air conditioning system upgrade on energy use and comfort in low income housing', in *Science Direct Energy Procedia 121* (2017): 26-32 Accessed 20 June 2019, https://reader.elsevier.com/reader/sd/pii/S1876610217334513?token=BB38A12B3EA98110CF47F7EFECB7E1293EF0FA21523850A6565DB4DDF73DA573A549AA9265F4BF4690D83FC0AF5B3EE8

- Findings from a Commonwealth funded Low Income Energy Efficiency Program (LIEEP) project called 'Beat the Heat', looked at improving comfort and wellbeing of people in low income housing in a very hot summer climate (Adelaide)
- Showed that an average 16% reduction in energy use following the replacement of old and inefficient air conditioner units with new efficient split systems
- New units were installed on the basis that landlords agreed to a 'rent freeze' for a 12 month period - and supplemented by a home energy assessment to assist residents better manage their energy consumption, along with an in-home display.

Recent research – empowering energy consumers

GEER Australia, 2017, *Driving Change: identifying what caused low-income consumers to change behaviour*, Energy Consumers Australia.
https://energyconsumersaustralia.com.au/publication/driving-change-caused-low-income-consumers-change-behaviour/

- GEER Australia reviewed the Low-Income Energy Efficiency Program – 20 pilots that trialled 44 initiatives to help low-income households manage their energy usage. The pilots collected data from nearly 19,000 respondents. ***Driving Change*** digs into that rich evidence base, to identify which of the initiatives had greatest impact, and the approaches and information that helped drive behavioural change. It is an important resource for the designers and evaluators of energy efficiency programs.
- The report was authored by GEER Australia, commissioned through Energy Consumers Australia's *Power Shift* project. *Power Shift* aims to assist government and industry deliver programs and products that support low income and vulnerable households to manage their energy efficiently. The intended outcome is to help consumers have sufficient energy to live safely and comfortably and to manage their bills, with indirect benefits to the wider economy and social inclusion.

ACIL Allen, 2017, *Multiple impacts of household energy efficiency: an assessment framework,* Energy Consumers Australia.
https://energyconsumersaustralia.com.au/publication/multiple-impacts-energy-efficiency-assessment-framework/

- The report was commissioned through Energy Consumers Australia's *Power Shift* project, which aims to assist government and industry deliver programs and products that support low income and vulnerable households to manage their energy efficiently.
- This Framework is a tool to help managers and designers of energy management programs to define and capture the full suite of benefits that arise – not just financial - when households are given the capacity to manage their energy.
- The Framework underlines the full value to consumers of energy management programs and products. The outcome will be that consumers have sufficient energy to live safely and comfortably and to manage their bills, with indirect benefits to the wider economy and social inclusion.

ACIL Allen, 2018, *Supporting households to manage their energy bills: a strategic framework,* Energy Consumers Australia. https://energyconsumersaustralia.com.au/publication/supporting-households-to-manage-their-energy-bills-a-strategic-framework/

- Research shows that to meet the needs of consumers in the rapidly evolving energy market, a sophisticated approach is needed, responding to consumers' diverse needs and preferences. There is no 'one size fits all' solution – to be effective, assistance and information must be delivered in a format and channel that suits the way consumers live.
- This Strategic Framework is designed to help decision-makers – in government, regulatory bodies and industry – understand what will work in meeting consumer needs
    - It identifies the range of actions that households can take to manage their energy bills
    - It details where households have similar needs and constraints, and groups them according to how they receive and act on information and assistance measures
    - And it recommends initiatives and tools that will be of most value to those consumers, and alerting decision-makers to where there is work underway.

Key contacts - Queensland

Ergon Energy - www.ergon.com.au

Contact: 13 10 46 7.00am - 6.30pm Monday to Friday or online contact form.
Sole energy supplier for regional and remote Queensland.

- Power Card contacts - Where to purchase power cards in remote communities across Queensland
- Customer Assist - for help with paying energy bills and information about the hardship program
- Guide to Using Power Cards
- Customer Assist Program - Ergon

Energy and Water Ombudsman Queensland - www.ewoq.com.au

Contact: 1800 662 837 8.30am - 5.00pm Monday to Friday or complaints@ewoq.com.au
Independent dispute resolution service for unresolved complaints with your electricity, gas or water supplier.

- **Indigenous Complainant Accessibility:** EWOQ's complaint handling officers are trained in cultural awareness and cross-cultural communications, however we also have a dedicated Indigenous officer to help Aboriginal and Torres Strait Islander communities. When you contact our office you can request to speak to this officer.

Financial counselling support and assistance

ICAN	1300 369 878	www.ican.org.au
National Debt Helpline	1800 007 007	www.ndh.org.au
No Interest Loan Scheme	13 6457 (13 NILS)	www.nils.com.au

Energy Rebates and Concessions

To find out what state and territory government energy rebates and concessions are available in Queensland, and elsewhere, click on the relevant link:

- Queensland
- Australian Capital Territory
- New South Wales
- Victoria
- South Australia
- Western Australia
- Tasmania
- Northern Territory