Light and Life in the Bush

Case Study 27

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Wandigalla

About this Case Study

This Case Study looks at the community of made in order to get away Wandigalla, its enterprises, and its energy services overcrowding in the nearby history. Wandigalla residents are actively pursuing their livelihood goals through the cattle industry, a CDEP program and a small art enterprise. The provision of reliable 24 hour power through the Bushlight system has made it easier to pursue these developments.

About the Community

Wandigalla is a small outstation 100kms southeast of Borroloola on the Robinson River in the gulf country of the Northern Territory. Wandigalla is the word for 'waterhole' in the local Garrawa language. The traditional owner and community leader of Wandigalla is Tony Jack who lives in this two-house community with his family.

The older of the houses was built in 1998. Prior to this residents camped in a bough shelter and then lived in the shed which was built in 1992. Just prior to the installation of the Bushlight system in June 2007 a duplex house was built, providing another dwelling for the Jack family to inhabit.

Tony Jack and his family settled in Wandigalla on a permanent basis in 1992. In part this decision was made in order to get away from the 'humbug' and overcrowding in the nearby community of Robinson River where Tony grew up.



Wandigalla residents looking at Bushlight resources during Community Energy Planning

Community Aspirations

Part of Bushlight's approach to Community Energy Planning is to facilitate a discussion with residents

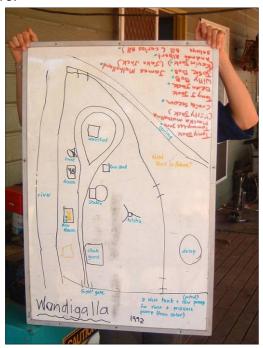
Bushlight's Community Energy Planning Model

Bushlight's objective is to improve livelihood choices for remote communities by increasing their access to reliable energy services. To do so, Bushlight works directly with community members to provide them with independent advice and information about choosing which energy services are best for them, and advice on demand side management, and energy conservation. Using a range of pictorial resources, Bushlight invites communities to consider how they use energy and how much it costs them; and with them, look at what options are available for improving their access to reliable energy services.

Through workshops and community mapping exercises, Bushlight works with residents to prepare Community Energy Plans (CEPs). These plans detail the community's current energy needs as well as any future livelihood aspirations. The CEP documents an agreement between Bushlight and the community by setting out household energy budgets and the roles and responsibilities of the community in using and looking after their solar power system. The responsibilities of Bushlight, the community's service agency, and the system installer are also laid out.

After the initial CEP meetings and completion of the system design, Bushlight coordinates the installation of the RE equipment. Following installation Bushlight provides education and training in system operation and maintenance over several visits during the course of the first year. Bushlight's approach elaborates on the typical RE industry process by involving the community in all key activities and decisions.

about their aspirations and plans for the future to get involved in selling art. Residents also community. articulated that that their key vision for the venture of setting up a road-side store outside community at this time was to secure additional the community to sell art & mend tyres for housing and associated infrastructure to make passing tourists. Wandigalla a more comfortable place for family to live.



One of the first activities during the Community Energy Planning meetings is for residents to draw a map of their community

At this time the community was already very diesel every week at a cost of about \$15,600 active in the cattle industry, as well as starting per year. After the first solar system was

Wandigalla residents identified at this time a potential business



The pre-existing solar system powered Tony's house during the day only

Pre Bushlight Energy Services

Prior to the installation of the Bushlight system the older house at Wandigalla was reliant on a small solar power system and a 10kVA FG Wilson Lister generator.

Before the small solar system was in place at Wandigalla the generator was the sole power supply and residents were using a 200L drum of hours and the generator was still required at no problems. night time.



The upgraded Bushlight system with addition panels at Wandigalla

Bushlight System Upgrade

The Bushlight system at Wandigalla was system.

For a period of 15 months the duplex house was enjoyed 24 hour power courtesy of the Bushlight system, while the older house was still reliant on the generator at night. However, during this time it was agreed that all the houses at Wandigalla should be powered by the Bushlight system. In September 2008, the As of all households in the community.

Unfortunately, when the contractors were installing equipment as part of the upgrade a component of the EMU failed, and needed to be replaced. Short of leaving Tony's house with no power, the only alternative was to connect the system in such a way that there was effectively no energy budget, and thus limitless power. This remained the case until the replacement part could be installed. It may be expected that the sudden implementation of energy budgets would mean that residents might run out of

installed in 2003 diesel usage dropped by about restricted in this way. However, it seems that one tenth. However, the solar system was such this was not the case and that power use was that it only provided power during the daylight not excessive and remained within budget with

Community Outcomes

Wandigalla is a very active community. The gulf region is well known for its cattle industry and this is the main occupation at Wandigalla too. The cattle enterprise was established here in 2000 with the purchase of 30 cows. Wandigalla currently has 300 head of cattle, 20 working horses, and 25 breeding horses. With the closure of the meat works in Katherine some time ago, Northern Territory cattle workers are left with no local options for processing the animals. Tony sends his cattle to slaughter either by truck to Townsville, or as live export by boat from Darwin to the Asian markets.

In addition to working with his own cattle, Tony and other family members pick up work on surrounding cattle stations and are especially busy during the mustering season.

commissioned in June 2007. At this stage it Aside from the cattle work, several Wandigalla provided power only to the newly built duplex residents supplement their income from CDEP house. Because the older house already had through art sales. They sell their art in access to some solar power from the existing numerous outlets including through the local art system, the resource agency Mungoorbada centre in Borroloola and through an art gallery preferred at this stage to retain the existing in Alice Springs. To pass his skills on to the next generation Tony has been teaching his kids how to paint some of the local cultural stories since they were in primary school, with promising results. Tony's son Jake Jack was recently awarded first prize for his age group in a recent competition run through Tennant Creek's art & culture centre.

identified during Community Energy Bushlight system was upgraded, with additional Planning Wandigalla residents have been solar panels and batteries to ensure enough planning to establish a road-side shop just power was available for all the day to day needs outside the community on the Savannah Way. The Savannah Way is a collection of linked outback roads that provide a route for tourists to travel from Cairns in Queensland all the way to Broome in Western Australia. This road was officially opened two years ago heralding an increase in tourist traffic just a few hundred meters from Wandigalla. Many tourists stop and camp on the banks of the Robinson River next to the community. While most of the interaction with tourists travelling by has been positive Tony has witnessed vehicles spreading out along the river and leaving rubbish around.

power as they would not be used to being To address this issue Wandigalla recently secured funding from the Northern Territory



and Bushlight staff discuss the best place for the solar array to go

During Community Energy Planning Wandigalla residents

Tourist Commission to establish a rest area and campground at the river to contain the visitors and their impact on the country.

In addition, since the closure of nearby Hell's Gate & Wollogorang Roadhousees, there is now a 380kms stretch from Doomadgee to Borroloola without fuel. Tourists have often had to seek assistance from Wandigalla through acquiring fuel or tyre repairs. In September 2008, Tony was planning to maximise the opportunities related to tourism by establishing a campground and setting up a small fuel stop that includes a tyre repair service, from which local art could also be sold to tourists.

Being such an active person, Tony Jack plays several important leadership roles in the local area. He is currently Chair of Mungoorbarda Aboriginal Corporation and has been nominated to stand as Chair of the Southwest Gulf Ward of the new Shire Council.



The cattle yards at the community

In September 2008 Tony told Bushlight that many family members connected to Wandigalla work in the mining industry just over the border in Queensland and that when they come to visit they are really impressed with the solar system and take photos and want to find out all about it. Tony is happy with the Bushlight system and with the community engagement approach underpinning the project "I think it's been great the service from Bushlight".



Wandigalla's pet cockatoo 'Limp Biscuit' has been part of the family for two years