

Community relationships

POWERING AHEAD IN KABULWARNAMYO



one fridge and some essential office equipment and a loud generator ran for about 6 hours a day distributing power via a web of unsafe extension leads to the rest of the dwellings. Located 500 kms away from Darwin with no road access for 6 months a year, diesel and generator repairs were a constant drain on limited financial and human resources.

PURPOSE

Understanding each community's specific needs and circumstances is a critical component in the delivery of successful service provision in remote Indigenous communities. Equally important is for residents to have a good understanding of, and opportunity to shape, changes that will affect their lives.

Bushlight's Community Energy Planning Model aims to build residents capacity and confidence to choose and manage energy services and to increase community livelihood opportunities. The process of community energy planning focuses on maximising participation through a process of two way information exchange, ensuring residents are actively engaged in all key decisions.

CONTEXT

CAT believes that effective community engagement lies at the heart of any successful service delivery or infrastructure project in an Indigenous community setting. This is why the Bushlight program developed the Community Energy Planning Model which offers a community driven approach to the planning and implementation of improved energy services.

This case study looks at the Community Energy Planning process in Kabulwarnamyo, a thriving homeland and ranger station in the sandstone country on the West Arnhem Plateau in the Top End of the Northern Territory.

Unlike many Indigenous ranger programs based in larger communities, Kabulwarnamyo was established by traditional landowners to be a remote operations base for land management activities.

Before approaching Bushlight, Kabulwarnamyo's 50 residents were experiencing ongoing frustration with their power arrangements which they found were hampering the group's progress. A small renewable energy system supplied a nominal amount of power for



Using the solar demonstration kit during Community Energy Planning.



The women of Kabulwarnamyo with Bushlight's Nina Brown in front of the new solar array.

SCOPE

Using this well tested approach a detailed profile of the Kabulwarnamyo was built up including an assessment of existing and future energy use requirements. Information was provided to residents on the range of energy options available to them and the benefits and limitations of renewable energy. The community energy planning process is supported by a suite of image based resources using plain English and minimal text to convey technical and nontechnical concepts.

OUTCOMES

In September 2010, a Bushlight Hybrid Renewable Energy System was commissioned at Kabulwarnamyo. Residents are now experiencing 24 hour/day power for the first time in their community.

The diverse scope of land management work and residential needs of landowners, rangers and their families made for a wide variety of energy requirements including:

- heavy power tools and a hydraulic vehicle lift in the workshop;
- laptops and satellite internet communications, as well as battery charging for GPS devices in the office;

- refrigeration, lights, fans, and an entertainment appliance in the residential dwellings;
- streetlights for safety at night; and
- a laundry block for rangers to wash their uniforms.

Diesel use has reduced by approximately 90% since the Bushlight system was installed, freeing up valuable resources that can now be invested into the important work of the ranger station. Prior to the installation of the Bushlight system the community was spending approximately \$21 600 per year on fuel alone. The Kabulwarnamyo ranger coordinator remarked to Bushlight that he no longer has to spend up to a day a week working on the generator and can now invest more time on fire management and other ranger activities. The productivity of the office and workshop has also increased, as workers are now able to work a full eight hour day in the office and heavy tools and equipment can be used in the workshop.

The Community Energy Planning model does not end with the installation of a Bushlight system. In addition to annual scheduled and unscheduled servicing of the system through the maintenance program, residents will also receive ongoing training and support to ensure they are able to continue to maximise the benefits of the energy services.