

Plenary Session – Meeting growing energy needs for energy services through increased use of renewable energy

Wednesday 3 May 10am – 1:00pm

Australian Statement – Renewable energy – remote power supply

It is clear that renewable energy has a role to play in securing future energy needs, especially for remote or rural populations which are not likely to have access to regular grid source of energy. However, in considering how to meet our growing energy needs through technology options, it is important that we each assess options on their merits and not adopt a simplistic generalised approach.

Many countries have highlighted the high cost of renewable and advanced energy technologies. While fossil fuels will generally represent a lower cost source of energy than renewable energy sources, this situation will not apply in all situations such as small scale applications in rural and remote areas. Australia has developed expertise in providing renewable energy to remote communities /localities which may be of interest to other countries.

Australia's geography creates challenges to the supply of electricity with Australians living in remote areas often having to make do with variable and intermittent power. These communities often rely on diesel or small petrol generators for electricity which have a high cost in terms of fuel and labour required to refuel, transport and maintain, and associated health and welfare costs.

In 2002 we established a programme, the Bushlight programme, designed to increase access to sustainable renewable energy services for remote indigenous communities, reduce greenhouse gas emissions by reducing diesel consumption and stimulate further development and deployment of remote renewable energy systems.

A key element of the program is an emphasis on adapting services and technologies to local conditions. Renewable energy plans are developed with the community and the community is trained and supported in the installation and ongoing maintenance of the system.

We have found that establishing appropriate local standards, supporting industry training and developing suitable community information and education are central to building a sustainable renewable energy industry able to meet the needs of remote communities in Australia.

We have also found that with a reliable 24hr power supply, provided by the installed renewable energy systems, communities are able to reallocate resources away from inefficient energy services and towards community development projects. Improved health and welfare has resulted from a desire for community members to stay on the homeland, a reduced need to visit town for diesel, food or entertainment, with the ability to refrigerate perishables, use small power tools, wash clothes and re-establish schools.