

central coast business

# Turning water into power

**Light means knowledge for villagers**

By DEAN GOULD

A WUY Wuy firm is changing the lives of remote villagers in the Solomon Islands.

Pelma Pty Ltd supplies micro-hydro turbines to the Solomon Islands and is able to bring eco-friendly electricity and lighting to communities previously in the dark ages.

Pelma has been endorsed by the Solomon Islands Village Electrification Council and managing director Peter Lynch has established an office in the Solomon Islands.

"We believe our success is that we are providing a technology - not just a product," Mr Lynch said.

"We provide the support services of training, spare parts availability, appropriate manuals and cultural sensitivity."

"In a way we are providing information technology to support our hardware technology."

Pelma supplies to an Australian Agency which is the project manager for each site. The turbines cost around \$20,000 but the overall project including installation and maintenance - establishing a weir, piping and running electrical cabling to every village house is worth around \$250,000.

"The Solomon Islands most villages are located on a fresh water river or creek," Mr Lynch said.

"The micro-hydroelectric system that we supply use the villagers' own natural resources - the water - to generate electricity. The water is not used up or polluted - it is returned unspilled to the river after it flows through the turbine."



ANY WAY THEY CAN Wire cabling needed to create electrification is transported by boat to a village work site.

"All the turbine does is extract the energy of the falling water which would otherwise be dissipated as the water flowed down the river over the rocks."

"Electricity through the villagers' own renewable energy resource, is the key to development."

Mr Lynch said the turbines were making a huge difference to the quality of life in the remote Solomon communities.

With electricity, a village can:

- Improve health. Electricity can be used for storing medical supplies and powering clinics.
- Provide better lighting, eliminating the need for costly kerosene and torch batteries.
- Provide better schooling through lighting. Light allows the children to study at night.
- Allow for the construction of better and stronger houses through the use of power tools.
- Allow for communication through radio, and eventually telephone and internet.

Mr Lynch oversees each unit's installation.



SCHOOLHOUSE NEWS: New lighting helps ease the difficulties of darkness.



INSTALLATION: Islanders do the hard work on installing a hydro-turbine.