A sample collection of print media reports

Relating to Pelena Energy

since incorporation 21 April 1998

to

30 November 2018

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VANUATU DAILY POST THE NEWS YOU TRUST

Vanuatu Daily Post - Page 8 - 19JUL2014

Pelena Energy praised for Talise Hydro work

Compiled by Jonas Cullwick

SENIOR REPRESENTATIVES OF THE Government of the Republic of Vanuatu applauded the work of Pelena Energy at a ceremony in Maewo last week.

The official delegation arrived at Talise Village on 10th July. It comprised thirteen members including elected MPs and agency representatives. The Acting President (Head of State) of the Republic of Vanuatu, Speaker of Parliament, and local MP for Maewo, Philip Boedoro,; Acting Deputy Prime Minister of the Republic of Vanuatu, Minister for Climate Change & Energy, and MP for Ambae James Bule, Minister for Infrastructure & Public Utilities, Esmon Saimon were accompanied by various political and agency representatives.

Pelena Energy was represented by Managing Director Mr Peter Lynch, Electrical Engineer Mr Jared Henley, and Solomon Islands Technical Manager Mr Nixon Silas.

The community – comprising almost 400 people on the day — welcomed the official delegation & Pelena Energy representatives with a customary greeting led by the village chief Swithin Ading.

Travelling the previous day by aeroplane from Port Vila to the nearest airport on Ambae Island, the delegation arrived at the Talise village beachfront by fibreglass canoes after travelling the 19km across open ocean from Ambae. The muddy track from the beachfront to the turbine house tested the trekking skills of the delegation until shoes and thongs

All hands to assemble turbine

Various speeches were held at the turbine house until a padlock key was handed, symbolically, from Pelena Energy's Peter Lynch to the Acting Deputy Prime Minister & Minister for Climate Change & Energy James Bule who represented the Government (being Pelena Energy's client in this project). The Minister then unlocked the door of the turbine house and formally handed the key to the Paramount Chief, representing the community.

The delegation was shown the operation of the (Dorrigo built) Pelena Energy turbine and control system. Locally-trained technicians demonstrated a system shut-down and restart. Nerves were very high amongst the technicians as they demonstrated their ability to re-start the system and establish controlled power, frequency, and voltage outputs. Two out of the three technicians have 'educated' audience. Cheers erupted as the system was started and the electric lights of the turbine house shone bright.•Shortly after, there was a rush to the powerpoints to re-charge mobile phones!

The Acting Deputy Prime Minister Hon. James Bule praised the work of Pelena Energy and commented on the significant benefits & opportunities for development that come with electricity, and congratulated Pelena Energy, the Department of Energy and the people of Maewo tirelessly overcoming hardship to make this project a success. He also commented on the appropriateness of this technology in utilising Vanuatu's natural clean energy sources. He acknowledged that this project complemented the range of renewable energy technologies the Government was pursuing to reduce greenhouse gas emissions and

Praise and thanks was also given to the donor agencies that financially supported this project including IUCN (International Union for Conservation of Nature), Governments of Italy and Austria (of Europe).

The Minister for Infrastructure & Public Utilities Hon. Esmon Saimon continually shook his head in surprise at how such a project could have been built by local people, without the need for bulldozers or the like which are notoriously unreliable in these remote places and extremely expensive to operate.

Peter Lynch said "It has been an absolute honour to work with the Vanuatu Department of Energy and the Ministry of Climate Change and Natural Disaster. There have been significant challenges faced, yet together these challenges have been overcome. I was particularly pleased with the attitude of searching for solutions, not searching for problems. In particular, I would like to thank the professionalism of Director of Energy Mr Jesse Benjamin and Program Manager Mr Leo Moli for their untiring efforts to see this project completed.

Mr. Lynch also acknowledged and thanked the "never give up" attitude of the people of Maewo to see this project through, especially given the horrendous weather events of cyclones, floods, and winds that hampered the construction. In particular, he would like to thank Mr Peter Salemalo whom has been a driving force behind this project since 2001. Without Mr Salemalo's local dedication, the project would have struggled to materialize.

electricity because it operates twenty-four hours per day without the need for batteries. There are real kilowatts generated which allows people and entrepreneurs to go to local stores and buy common appliances and tools to improve their own lives. Solar and wind cannot provide this because it is intermittent and requires batteries for storage. Batteries are too expensive resulting in many failed solar and wind systems throughout the Pacific and elsewhere unless heavily subsidised from outside the villages."

This stage of the project is just the generation phase. The connection of the electricity to the villages has yet to be undertaken. This electrical reticulation will result in almost 340 houses, schools, clinics, businesses, and churches being connected to the system. The Ministry of Climate Change and Natural Disaster is actively negotiating extra funds with the Government and various donor agencies including private investors to invest in the electrical reticulation which would amount to not more than 100 million vatu.

The technical aspects of the Talise Micro-Hydroelectric system are:

Rated power: 75 kilowatts

Frequency & Voltage: 50 Hertz, 240/415 Volts

Turbine: Pelena Pelton turbine with belt drive to 3-phase alternator

Controls: Pelena PLC-based voltage & frequency with electronic load control

Head: 106 metres gross

Penstock: 250mm uPVC for over 850 metres (fully buried)

Intake: Tyrolean Weir with

"The Minister for Infrastructure & Public Utilities… continually shook his head in surprise at how such a project could have been built by local people, without the need for bulldozers…"

"The official delegation ...comprised thirteen members including MPs and agency representatives …. Acting President (Head of State) …. Acting Deputy Prime Minister …."

"Acting Deputy Prime Minister …. praised the work of Pelena ……"

".. congratulated Pelena Energy, the Department of Energy and the people of Maewo tirelessly overcoming hardship to make this project a success."

"..Locally-trained technicians demonstrated a system shut-down and restart."

The COFFS COAST Advocate
Coffs Coast Advocate 19JUL2014 Page 10

ELECTRIC MOVE: Dorrigo energy company installs micro-hydro system in Vanuatu

Power to village people

DORRIGO micro-hydro company Pelena Energy has had a dramatic reversal of fortunes since being on the brink of closing down last year.

In the face of regulatory hurdles in Australia, the company has continued its work in bringing electricity generation to remote villages in the South Pacific.

The latest project has taken a Dorrigo-built turbine and control system to Vanuatu's remote Talise Village, where the system was installed and community members trained to maintain and operate the equipment.

Vanuatu's acting president and a host of government ministers were joined by Pelena's Peter Lynch, Jared Henley and Nixon Silas at an official ceremony last week.

Arriving by fibreglass canoe after a 19km trip across open ocean, the delegation was joined by about 400 community members in celebrating the milestone of having powered lights in the village.

"Micro-hydro has the grunt to allow for real development through electricity because it operates 24 hours per day without the need for batteries," Mr Lynch said.

"There are real kilowatts generated, which allows people and entrepreneurs to go to local stores and buy common appliances and tools to improve their own lives.

"Solar and wind cannot provide this because it is intermittent and requires batteries for storage.

"Batteries are too expensive, resulting in many failed solar and wind systems throughout the Pacific and elsewhere unless heavily subsidised from outside the villages."

Mr Lynch said this stage of the project was just the generation phase and connection of the electricity to the villages was yet to start.

The end result will connect almost 340 houses, schools, clinics, businesses and churches to the 75kW system.

Pelena Energy has delivered similar systems in the Solomon Islands and developed ways to avoid the use of bulldozers and other large plant, which is notoriously unreliable in remote tropical areas.

"We expect to gain further projects in PNG, Solomon Islands and Vanuatu in the near future," Mr Lynch said.

"The rural-focused technologies Pelena has developed and their increasing acceptance and praise overseas spurs us on to see the proposed Dorrigo Energy Centre become a reality as a hub for further rural development."

LEAP FORWARD: Vanuatu officials and residents inspect the Dorrigo-built turbine and control system installed in Talise Village at an official start-up last week.

"Micro-hydro has the grunt to allow for real development through electricity because it operates 24 hours without the need for batteries."

"There are real kilowatts generated, which allows people and entrepreneurs to go to locals stores and buy common appliances and tools to improve their own lives."

The COFFS COAST Advocate
19AUG2011-Coffs Coast Advocate - Page 4

Small company big power in PNG

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A SMALL local renewable-energy company with a whole lot of heart has received a visit from a special delegation.

Dorrigo's Pelena Energy, the combined enterprise of Peter Lynch and his wife, Selena Bryce, hosted the group from Papua New Guinea (PNG) who arrived to inspect micro-hydroelectric turbines, coconut oil-powered generators and freezer rooms for ice-making.

Of particular interest was the micro-hydroelectric system bound for the village, Ok Tarim, which is located in a remote part of PNG.

Mr Lynch said the equipment Pelena Energy is supplying will be airlifted to the village by helicopter from the nearest road. The project will mean electricity can be generated from water flowing in a small river next to the village of Ok Tarim.

"The main benefits of the electricity will be the supply of quality lighting to houses and streetlights, operation of the health clinic and schools and income opportunities," Mr Lynch said.

One of the members of the delegation was Boka Kondra, a member of parliament representing the electorate of North Fly.

The giant Ok Tedi mine, which caused immense environmental and social issues, is located within his electorate.

"The visit this week by such an important overseas delegation clearly demonstrates that Australia's nearest neighbours are seeking a path of sustainability and renewable energy is key to their future."

Pelena Energy also has projects under way in Vanuatu, Solomon Islands and elsewhere in PNG.

RENEWABLE ENERGY: Tony Carbry, Joseph Bariamu, Peter Lynch, Boka Kondra and Don Manoa. *PHOTO: CONTRIBUTED*

The COFFS COAST Advocate

Coffs Coast Advocate 16JUL2011 page 4

Islanders' lives changed

Ute SCHULENBERG
ute.schulenberg@coffscoastadvocate.com.au

Ferry service is running reliably and has naturally developed into much more, such as emergencies

PELENA Energy, the small renewable-energy company based in Dorrigo, is helping to change thousands of lives in far-flung villages in Solomon Islands, Vanuatu, Papua New Guinea and Fiji.

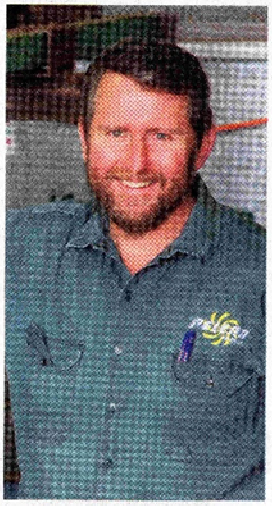
Managing director Peter Lynch said when he and his wife and business partner Selena Bryce established the company 13 years ago, they recognised that whether in the PNG highlands or on a Pacific island, the problems for remote villages were similar.

And it was all to do with energy, infrastructure and transport.

"We witnessed that normal development paths of delivering grid electricity, roads and communication to villages was not an option because of the difficulty of access," Mr Lynch said. "We have approached the problem differently – instead of being an energy provider, we work with the community on a series of integrated activities. We work not only on electrification but also business options and linking the village to markets."

One example Advocate readers might remember was the 2006 story of the shallow-draft boat which Mr Lynch built in Dorrigo, and then sailed to the Solomon Islands as a way to create a reliable ferry service between islands and markets.

"After five years the service is running reliably and has naturally developed into much more, such as providing emergency transport for the sick, being chartered for market needs plus it is totally operated and managed by village people," Mr Lynch said.



SUSTAINABLE: Pelena Energy director Peter Lynch.

The original plan of the boat running off locally-grown and produced coconut oil has not yet occurred due to a lack of funding but may still eventuate.

"The reason this works is because the village people have a strong loyalty to their family reputations plus we built the boat knowing spare parts would be needed – we have worked out ways through the communication difficulties to keep that connection there. Giving people the opportunity to stay in their villages and not get dragged into the cities is important for community wellbeing."

With their reputation established, the Solomon Islands government and others are now approaching Pelena directly with village electrification requests.

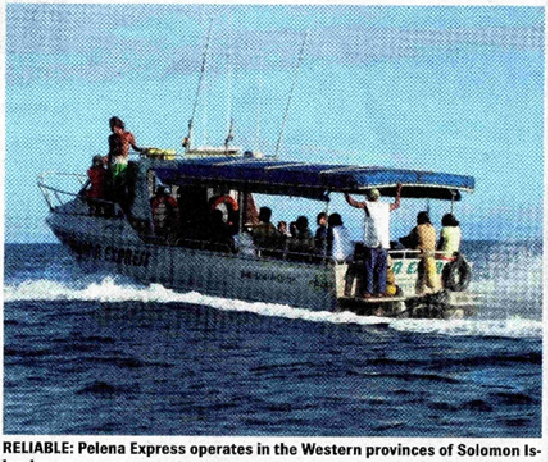
Pelena uses either micro-hydro, solar or coconut oil-powered generators to drive the local economies forward.

Another Solomon Island project uses locally-generated electricity to make ice to freeze fish and preserve them so when the ship service arrives, villagers are ready with their fish in eskies and ice.

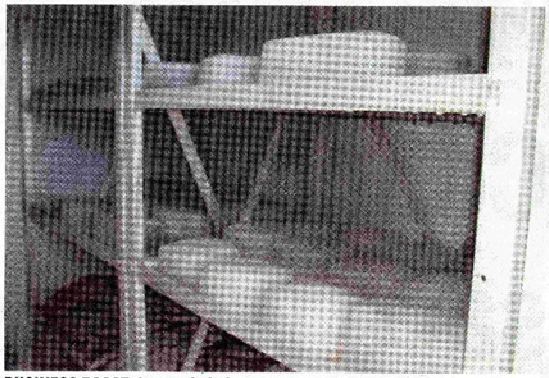
Locally, Pelena hopes to expand sufficiently to allow them to develop micro-hydro on the Dorrigo Plateau.

Mr Lynch said the Bellingen Shire Council had been very supportive and had offered to help Pelena navigate through the multitude of government agencies associated with such a development.

"Dorrigo had the first mainland hydro-electric scheme in the 1920s – I'd like to see that resurrected."



RELIABLE: Pelena Express operates in the Western provinces of Solomon Islands.



BUSINESS BOOST: Ice made in ice-cream containers for freezing fish.

"[We found] the problems for remote villages were similar …… it was to do with energy infrastructure and transport."

"… approached the problem differently …. we work on electrification… [and] business options and linking the village to markets."

"Giving people the opportunity to stay in their villages and not get dragged into the cities ….. important for community wellbeing."

ReNew
Technology for a sustainable future

Renew magazine No 112 - JUL-SEP 2010 - Page 63

Micro-hydro at its best

This freezer/ice-making cold storage room is powered from a 40kW micro-hydro turbine in the Solomon Islands.

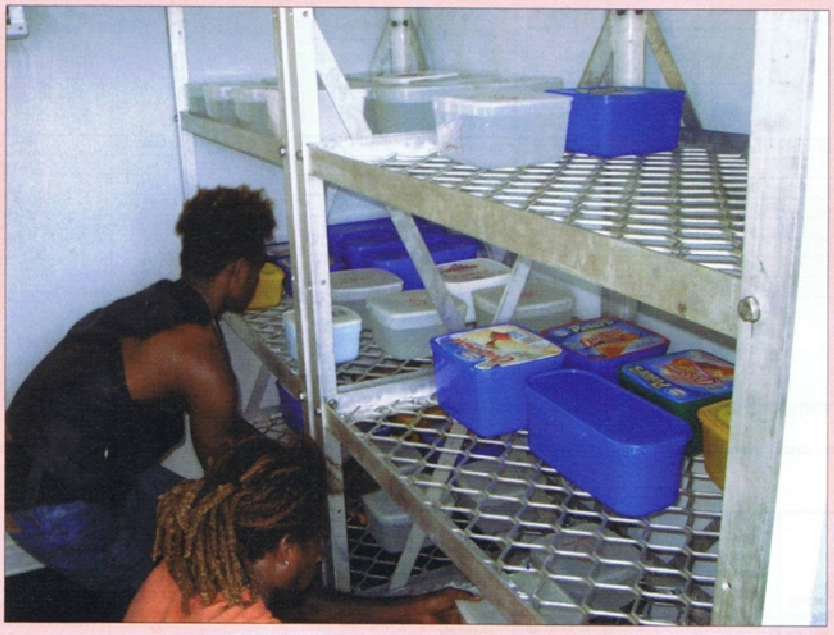
Earlier this year drums, bells and cheering echoed through Masupa Village in the Solomon Islands as the new micro-hydroelectric turbine started up, shining light on the turbine house and foreshores.

Pelena Energy was commissioned to design and construct the project, which cost AU$120,000 and was fully funded by a Rural Electrification Development fund. Over 13 days over 200 community members constructed a 12-metre-wide concrete weir, a concrete settling tank and forebay, finalised the digging of a trench, and joined and buried over 300 metres of 200mm diameter PVC pressure pipe for the penstock. They also constructed the turbine house, installed the turbine and generator with all electrical controls and constructed and assembled a freezer room to produce ice and store fish ready for market. Preliminary training to technicians in operation and maintenance was also provided.

Most of the new turbine's electricity will go towards operating the freezer room, with the community's first esky load of fish delivered to Honiara on February 11. The next stage of the project is to construct a transmission line to the village to provide lighting and help improve income opportunities for the Masupa community.

The A'ero Freezer Room Trust Committee was formed to manage the power station and freezer. The trust includes members of the landholding tribe that play host to the facility. This project empowers the rural community to manage their own resources and boost economic activities through fishing, in turn opening up job creation within the community.

Videos of the construction can be found at www.youtube.com/profile?user=pelenaenergy



Top: Inside the turbine house; Left: The cold room helps the community with the preservation of food.

The Bellingen Shire Courier-Sun

Bellingen Shire Courier-Sun - page 2 - 13NOV2013

Dorrigo Energy Centre a boon for plateau

BY ALICE BURNET

MORE than 70 people attended a Dorrigo town meeting on Wednesday, October 30 to ask questions about the proposed Dorrigo Energy Centre.

The Dorrigo Energy Centre is a concept put forward by the owners of local business and renewable energy developer, Pelena Energy.

The aim of the Dorrigo Energy Centre is to be an Australian first.

It will provide information and showcase full-scale models of a diverse range of energy technologies.

The centre will have a rural focus but it will also provide people with an understanding of household renewable energy technologies and their direct impact on day-to-day life.

Pelena Energy owner Peter Lynch also espoused the virtues of having a new and large company based on the Dorrigo Plateau.

A specific emphasis was made to the creation on local jobs, rural innovation and regional business opportunities.

It is anticipated that should the Dorrigo Energy Centre be established, 30 to 40 full time jobs would be created for the local community.

The layout for the Dorrigo Energy Centre were displayed at the meeting.

Palena is exploring financing options to purchase this site based on a current option to purchase.

The business model of the centre was yet to be decided, with a variety models suggested.

However, it is understood that this venture is an initiative by Palena in collaboration with the Dorrigo community.

The attendees also discussed the current impediments to this proposed development.

Current state government regulatory barriers and an unsupportive bureaucratic framework were identified as key obstacles in moving the project forward.

The meeting concluded with a call to lobby the Member for Oxley and NSW Deputy Premier Andrew Stoner.

More information can be found at www.dorrigoenergycentre.org

Members of the community can contribute and campaign for the Dorrigo Energy Centre by downloading a proposed letter form the above mentioned website.

The Bellingen Shire Courier-Sun

Bellingen Courier Sun pg 9 - 18SEP2013

Energy centre to power Dorrigo employment

BY JESS GRACE

A PROPOSAL for a Dorrigo Energy Centre aims to create and retain local employment in the area as well as provide examples of different energy sources and how they are utilised.

The centre also proposes to train people in different types of energy, as well as provide accreditations and opportunities for practical learning associated with some university and TAFE modules.

With a focus on rural people, the centre would allow everyone to see all the types of energy sources available.

"It's [the centre] not intended to be primarily a renewable or alternative energy centre, just to show the types of energy for practical application," Dorrigo Energy centre organiser Peter Lynch said.

The range of energy options include micro-hydro, solar, thermal, photovoltaic, wind and biomass (focussing on farm waste to energy).

The centre aims to be a not-for-profit organisation, which would provide greater access to government funding.

Mr Lynch and his wife and business partner, Salena Bryce, have met with many groups in the Dorrigo community to discuss their proposal.

"There is a significant amount of [energy innovation] passion in the Bellingen Shire, that's why we are pursuing this," Mr Lynch said.

The intended site of the centre is at the original micro-hydro weir in Dorrigo, built in 1922.

Mr Lynch and Ms Bryce have researched the concept since 1996.

Since selecting Dorrigo in 2003, they have been working closely with Bellingen Council who have been supportive.

The estimated cost of the centre is $2.7 million, however, most of the building would be done as part of a training course.

"In the future, I see Waterfall Way being known as the Energy Way whereby people journey from the coast through energy-aware towns like Bellingen and Dorrigo leading through to the proposed community wind farms near Armidale," Mr Lynch said.

Meanwhile, Pelena Energy, which Mr Lynch owns, is restarting its project in Talise Village, Vanuatu, to create a micro-hydro system.

Due to the business opportunity, Pelena Energy has been able to re-employ one part-time person.

However, there is not enough business to fully re-open its doors at this stage.

Anare Matakiviti, Philip Boedoro and Peter Salemalo from Talise Village in Vanuatu with Peter Lynch from Pelena Energy in Dorrigo

The Bellingen Shire
Courier-Sun

Bellingen Courier Sun – 02MAY2018 page 4

Cyclones and volcano hamper hydro project

BY JANENE CAREY

Local helpers carrying HV cable from the village of Tam to step up

DORRIGO'S Peter Lynch, managing director of Pelena Energy, has returned from an eventful month in Vanuatu that featured three cyclones, one volcanic eruption and 20 days of rain.

It's hardly surprising that his work on Stage Two of the Talise Hydroelectric Project on the island of Maewo didn't quite go according to plan.

Stage One in 2014 involved the construction of the 75-kilowatt generation plant, a run-of-river micro hydro system that Pelena Energy designed.

The goal for Stage Two was to lay 6km of high voltage cable underground from the generator at the Talise River valley to the coast, bringing power to four villages: Tam, Talise, Naroworowo and Nasawa.

Each of the villages will have a step-down transformer that takes the voltage from 11,000 volts to the standard 240 volts supplied to houses, schools, clinics, businesses, and churches.

However, drenching rain, fierce winds, high seas and falling ash meant they only got 1.5km done, despite having 200 members of the community lending their labour to unload equipment from boats, dig long trenches by hand, and haul cable through the jungle.

The volcano that erupted on March 24 is on the island of Ambae, famous as the inspiration for James Michener's paradise Bali Hai.

Standing on the beach at Maewo, 17km across the water, Peter watched as the lava shot a kilometre above the top of the mountain.

No one was injured by the eruption but major devastation has been occurring from ash and acid rain falling on Ambae and other islands.

Plants that the villagers and their animals rely on for sustenance have been destroyed, water supplies have been contaminated and tracts of formerly green jungle have turned monochromatic grey.

Technical officers taking care of the hydro system on Maewo have been checking that the corrosive ash is not damaging the equipment.

Peter said these young locals were carefully selected and trained for the role of technical officer.

Volcanic activity as seen from Talise, Maewo Island. The volcano is spewing so much ash that the island of Ambae, home to 11,000 people, is becoming uninhabitable.

"We don't target highly formally educated people," he said. "We target people who have demonstrated a willingness and enthusiasm to stay living in their rural area, in their village. These are the types of people where we've really been able to blossom both their careers and our business."

Peter plans to return to Vanuatu in June, when the wet season is over.

As well as finishing the cable laying, Pelena and its community taskforce will be putting lights and power points in two boarding schools and a medical clinic as part of Stage Two.

The Vanuatu government is seeking funding for Stage Three of the project, which will supply electricity to houses in the villages.

Vanuatu is one of the most remote, dispersed nations in the world, and in 2014, when its rural electrification project launched, three-quarters of its population was living without access to electricity.

The government has set a target of 90 per cent access by 2020, with 65 per cent power generation from renewable energy.

NEWCASTLE HERALD
VOICE OF THE HUNTER

The Herald 30SEP2003 page 37

Turning water into power

Light means knowledge for villagers

By DEAN GOULD

A WOY Woy firm is changing the lives of remote villagers in the Solomon Islands.

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

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

"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 accessibility, appropriate manuals and cultural sensitivity.

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

Pelena supplies to an Australian agency which is the project manager for each site. The turbines cost around $35,000 but the overall project including set-up, training, establishing a weir, piping and running electrical cabling to every village house is worth around $220,000.

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

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

"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 Solomons 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;

■ Allows for communication through radio, and eventually telephone and internet.

Mr Lynch oversees each unit's installation.

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

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

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

The COFFS COAST Advocate
Coffs Coast Advocate - 17June2009 Page 8

Course welds new career for Jamie

HANDS ON: Jamie Mears is working on a hydro-electric project which will bring electricity to a village in Solomon Islands.

By **UTE SCHULENBERG**

JAMIE Mears loves welding.

But it's a talent he only discovered thanks to a TAFE/ Dorrigo Youth Service course last year, which put the tools in his hands out at Pelena Energy's workshop.

Managing director Peter Lynch was so impressed with Jamie's skill level and attitude that he offered him a traineeship.

Now Jamie is Peter's offsider as they work on the construction of a hydro-electric turbine bound for the Solomon Islands village of Masupa'a.

"I'm enjoying learning all the new skills," Jamie said.

"And it's great to have work doing something I'm good at."

Mr Lynch said it was not only the young man's talents for welding that drew his attention, but also the swag of skills gained from growing up on a farm in Dorrigo.

"Jamie has a practical understanding of various engineering concepts and technologies. These are directly transferable to our needs, which are linking rural Australia with the rural South Pacific," Mr Lynch said.

As Jamie works on the turbine on the plateau, villagers in Masupa'a are busy digging trenches for pipes, which will carry water from a small weir down the hillside to the turbine. The high speed water will spin the turbine which is connected to the generator to produce electricity for the 1000 inhabitants. Pelena Energy is currently in negotiation with Solomon Islands' government for a Memorandum of Understanding to allow the development of 500 village electrification projects coupled with sustainable income generation projects.

Australian job opportunities: *"Jamie has a practical understanding …. directly transferable to [Pelena's] needs, which are linking rural Australia with the rural South Pacific."*

The Daily Telegraph

The Daily Telegraph, 06SEP2003 page 5

Local engineer plugs Solomons into power

Gemma JONES

HUNDREDS of embattled Solomon Islanders have been connected to cheap, reliable and green electricity thanks to the commitment of a Central Coast businessman and his wife.

Mechanical engineer Peter Lynch, who has started a company that makes hydro-electric turbine systems, has provided electricity to five villages in the war-torn nation.

Civil war and the hard slog to build his family a home have not quelled Mr Lynch's desire to help the hundreds of Solomon Islanders he met as an aid worker.

The Lynches have an office in their home at Woy Woy and a small factory in Somersby, where Mr Lynch singlehandedly designs and constructs the turbine systems.

Yesterday, federal member for Robertson Jim Lloyd unveiled Mr Lynch's latest turbines, which took eight weeks to build and will provide power to 450 people in the village of Nairiao.

Mr Lynch said he was expecting the same reaction in Nairiao as in the other communities that now have power.

"There will be no screaming or celebration immediately but a pause, a time to reflect and stand in awe, then an eruption of celebratory joy," Mr Lynch said. "Life will never be the same — it will be better."

In remote areas, kerosene and diesel are used to supply power but both are expensive and crucial supplies have been hard to access during war time.

Life for the 600 students who board at Bula High School in Bulelavata village has been made easier with one of the turbines allowing them to freeze local fish rather than import canned products.

Students now do their homework under fluorescent lights.

Communities with turbines built by Mr Lynch's company, Pelena, were the only ones to maintain power throughout the civil war and Mr Lynch said the technology was creating jobs in poor communities.

Hydro-electric turbines have proven to be a lifeline in other third world communities, with one operating in Papua New Guinea and 15 in Indonesia.

Pelena turbines are installed in river systems near villages and use the water flow to create electricity, which is used for lighting, freezer systems to store food and to power local industry.

Mr Lynch's wife Salena said yesterday the family was committed to Solomon Islanders, having spent time there as aid workers, but said they were struggling to find funding to build the turbines, which cost thousands.

The family has won the support of Mr Lloyd, who said he was keen to see local small businesses succeed and acknowledged the risk and sacrifices the Lynches had made.

"Small business is the lifeblood of the Central Coast," Mr Lloyd said.

"It never ceases to amaze me that these small businesses export things like turbines to the world. I think we need to be shouting more about that."

Family business: Peter Lynch and wife Salena Bryce with their children Hugo and Matilda at the launch of the turbines for Nairiao yesterday. *Picture: TODD MARTYN-JONES*

Don Dorrigo Gazette and Guy Fawkes Advocate

Telephone: (02) 6657 2010 Email: dgogazette@westnet.com.au Fax

Vol. 102 — No. 16 DORRIGO Wednesday, May 23, 2012 The ONLY pa Providing ne P

Pelena Has The Power

Off to the highlands of western PNG, Dorrigo's Pelena Energy recently sent a Hydro-Electric-Turbine to Ok Tarim to generate power for a clinic, village school and all houses.

Peter Lynch, who established Pelena Energy with his wife Salena Bryce, is excited about this project and will fly to Ok Tarim later his month to oversee the installation.

"The generated hydro energy at this village is very small due to the small stream," said Peter Lynch, "It will only generate five kilowatts, However, this amount is sufficient to provide streetlights and lighting in each house, power for radios and phone charging, and electricity to run a clinic and school. The isolation of the village — less than two kilometres from the Indonesian border — will mean it can offer modern services and medical facilities to benefit a very large area," Pelena's client is Western Power, a subsidiary of PNG Sustainable Development Programme.

Established in 1998, Pelena Energy relocated to Dorrigo just over six years ago. Managing Director (and outgoing Chamber President) Peter Lynch said, "We chose Dorrigo for a number of reasons including our preference for the distinct and varied climate. Also closeness to the coast and road, rail and airports played an important factor. The size of own, primary and secondary schooling, hospitals, ambulance, & police was also a significant factor". Due to the high rainfall and mountainous terrain we expect to grow and expand our business in the area of hydro-electric systems.

The current project was shipped in early March via Brisbane to Port Moresby.

The fully packed container travelled by ship across the Gulf of Papua to the mouth of the Fly River; from there it was loaded on a barge to travel 850km upstream to the inland port of Kiunga where it arrived a few days ago.

From Kiunga, the container will travel by road to Ningerum and will be unpacked and airlifted by helicopter to the village of Ok Tarim.

Once all goods are in Ok Tarim, Peter Lynch and a supervisory team from Solomon Islands and PNG will work with the village community to construct the hydro. Peter Lynch said, "There are no roads or airstrips nearby, only tracks, so the hydro will benefit a very large number of people".

"With a focus on rural energy and enterprise development in Melanesian countries such as Solomon Islands, Papua New Guinea, and Vanuatu, Pelena is also involved in coconut oil extraction and utilisation in engines, boat building, village food processing technologies & partnering with village communities for income generation. Last financial year, 94% of Pelena's income was sourced from exports, with this year looking like being closer to 99%. Pelena's approach is to engage with communities to assist them to construct the systems, eliminating the need for roads, bulldozers and trucks".

Peter Lynch, "Dorrigo is surprisingly suited to manufacturing for us. Processes like welding are better suited to the cooler climate due to employee comfort benefits. Additionally, we've discovered that our location in a rural part of Australia is extremely attractive to our clients as they believe we can relate to their logistical rural isolation".

"We'd like to become the micro-hydro centre of the South Pacific" said Mr. Lynch. "Holding us back is the red tape for installing micro-hydros in NSW. It's virtually impossible to install a micro-hydro in NSW for income generation without expending more than $120,000 on environmental assessments".

Pelena specialises in turbines capable of generating up to 250kW. Refer: www.pelena.com.au