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Welcome...

Bula everyone!

The best wishes for the new year have earlier floated around and some would tend to say that it is only a change of numbers from a 2010 to a 2011 but it is still BAU – Business As Usual. I would beg to differ as we can't meet the challenges of 2011 with a BAU attitude.

One only has to look at the news around the region to get a feel for what lies ahead in 2011. On 17 January, motorists at Saipan lined up to fill their cars before a price increase came into effect. On the very same day, new retail price increases of 6.2% for petrol, 4.5% for diesel and 5.5% for kerosene came into effect in Tonga. By coincidence, new retail price increases of 7% for petrol, 6% for diesel and 7% for kerosene came into effect in Fiji on the same day. I was among the few that were not bothered with the increase as I am now driving a 1300 cc car and walk to work every other day. On that respect, 2011 is certainly not BAU for me!

In February, Air Niugini announced fare increases on its domestic and international flights due to a fuel price movement in the domestic sector, which had increased by 13.6% since June 2010.

On the last quarter of 2010, the Chief Executive Officer of Fiji Electricity Authority met with the Suva Retail Association to explain the Authority's financial position and the implications of not changing the tariff rate for electricity. In mid-February, the Palau Public Utilities Corporation (PPUC) announced that it will increase its power rates by 2.5 US cents effective from March 1. The last power rate hike amounting to 9 cents was in June 2010. At the same time, the Tonga government is holding off passing to consumers a new proposed power tariff increase of 8 Tongan cents (approx. 4 US cents) per unit while other options of absorbing the increased costs are being explored.

The current political developments in the Gulf and in other areas of the globe will obviously have implications on the energy sector of our region. With the current oil price hovering around the US$100 per barrel mark and projections of US$150-200 by end of the year, 2011 will not be a BAU.

The region is working hard to recover from the doldrums of the downturn in the global economy through various stimulus packages and programmes. Obviously, the use of petroleum products for transporting people, tourists and goods and the generation of electricity for the services and manufacturing sectors will be at the centre of the recovery effort.

In the short term, getting cheaper petroleum products and using petroleum products in the most efficient and productive ways demand immediate attention and resources too. Too often we hear that Pacific Island countries and territories (PICTs) cannot influence oil prices. While this may be true on the international components of the oil prices, there are still efficiency gains to be made on the regional and national cost components. And when you have a quarter of a cent saving per litre over millions of litres, it will be a significant amount.

The Petroleum Advisory Services (PAS) of SPC's Energy Programme is gearing up for a very busy year. On-going assistance on verifying fuel prices submissions and reviewing pricing templates are being delivered to Fiji, Solomon Is and Tonga. On the assistance to Tonga, our under-resourced PAS is very grateful that Tonga has put up its own bi-lateral funds for SPC to manage and use for the delivery of its requested assistance. Discussions are underway to progress the energy policy-related assistance requested by Samoa and they are happy to cover the costs from their own funds. Similarly, Niue has requested a national training workshop and has put up some funds from its EDF 10 resources to support

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this training. These arrangements are not the BAU and we look forward for more of this in 2011.

At the same time, we must strive to find ways to better coordinate effort on renewable energy and energy efficiency and look at these two areas on a whole-of-sector approach. While funds continue to flow in on renewable energy and energy efficiency, the most immediate and recognisable gains in some island countries and territories will be on petroleum. I am pleased to note that USP, SPREP and UNDP are currently discussing synergies on wind power resource assessments.

Speaking of stepping out of the BAU in 2011 and improving efficiency gains, SPC's Economic Development Division will hold an inaugural joint meeting of the ministers of energy, information and communication technology and transport in Noumea on 4–8 April. It is the first attempt to bring key people in these pillars of economic development to discuss synergies among these sectors and how SPC can better contribute towards economic development of the region. It is in this meeting that we will table the Framework for Action on Energy Security in the Pacific and its Implementation Plan for the endorsement by the full SPC PICT membership. The endorsement of these key documents will chart the new course for coordination and collaboration in the regional energy scene.

2011 will obviously be a challenging year and I would like to repeat my Director's favourite phrase ….. "It is not about working harder, rather it is about working smarter." On that note, I extend to you my best wishes for 2011.

'Ofa atu

Solomone Fifita

Calendar of Events of the Pacific Energy Oversight Group

Date	Event	Venue	Responsible Agencies
16 February	Consultation workshop on the implementation plan for the FAESP	Suva, Fiji	SPC
21 – 25 February	National training workshop on the productive use of RE for food processing	Malaita, Solomon Islands	SPC & Willies Electrical
21 – 25 February	Tonga fuel pricing review and training	Suva, Fiji	SPC & Ministry of Labour, Commerce and Industries
3 – 10 March	Field assessment of the productive use of RE in tourism	Tarawa, Kiribati and Funafuti, Tuvalu	SPC & SPREP
5- 18 March	North REP project management mission and national project steering committee (NPSC) meeting	Pohnpei, FSM	SPC
8 March	PIGGAREP's 12th project board meeting	Apia, Samoa	SPREP
9 March	Due date for the PIGGAREP RFP for wind monitoring and resource assessment – Solomon Islands	Solomon Islands	SPREP
14 - 18 March	Pacific climate change roundtable	Niue	SPREP
14 - 18 March	Follow up workshop on grid-connected solar PV systems	Niue	SPREP
18 March	Briefing meeting on the REP-5 evaluation	Suva, Fiji	Delegation of the European Union for the Pacific
21 – 24 March	National workshop on energy policy, renewable energy and energy efficiency	Niue	SPC and the Niue Ministry of External Affairs
21 – 24 March	Field assessment of the productive use of RE in tourism	Niue	SPC & SPREP
21 – 31 March	Follow up to the Tonga fuel pricing review and training	Nuku'alofa, Tonga	SPC
23 March	Due date for a UNIDO/SPC RFP – RE and EE in industries study	Vienna, Austria	UNIDO & SPC
28 March – 1 April	Field assessment of the productive use of RE in tourism	Rarotonga, Cook Islands	SPC & SPREP
28 March – 1 April	Strategic plan consultation workshop	Nadi, Fiji	Pacific Power Association
April (TBC)	Meeting of the PEC funds joint committee	Suva, Fiji	PIFS
4 – 8 April	Inaugural regional meeting of ministers for energy, ICT and transport	Noumea, New Caledonia	SPC
11 - 15 April	Workshop on the environment impact assessment of energy projects	Nadi, Fiji	IUCN
18 - 22 April (TBC)	Solomon Islands annual petroleum price review	Brisbane, Australia	SPC, South Pacific Oil Ltd, Markwarth Oil Ltd & SI Price Advisory Committee
May (TBC)	Regional workshop on writing project proposals / project activity summary and project management	Nadi, Fiji	PIFS & SPREP
May (TBC)	Utility training workshop	Nadi, Fiji	PPA
21 - 23 June	Vienna energy forum	Vienna, Austria	UNIDO

North REP and ADMIRE collaboration

By Arieta Gonelevu, Energy Specialist, RMI - North REP, Energy Programme, EDD, SPC.

The signing of the memorandum of understanding (MOU) between the Ministry of Resources and Development, which houses the North REP (RMI) and the Office of Environmental Planning and Policy Coordination (OEPPC) that houses the ADMIRE (Action for the Development of Marshall Islands Renewable Energies) (GEF-UNDP) Project was undertaken in January 2011 confirming that the two projects will work together in undertaking 'soft-based' activities in the outer islands for the solar programme that includes surveys, trainings and awareness.

The Minister of Resources and Development, Honorable Matt Zacharias presented a bill in Parliament titled "Exemption for Renewable Energy (RE) and Energy Efficiency (EE) Equipment Bill", which aims to encourage the uptake of renewable energy and energy efficiency technologies in the Marshall Islands. The bill is currently being reviewed through public consultations before its final adoption.

The Ministry of Resources and Development (Energy Office) has concluded and awarded the tender and is now in the initial stages of installing a grid-connected 205-kW photovoltaic (PV) system on Majuro Public Hospital through the Cool Earth Programme.

The Government of Marshall Islands is in talks with the Republic of China (ROC) for the provision of funding of USD400, 000 for solar streetlights that will be installed in densely populated areas of Majuro to provide lighting and also improving security during power blackouts.

Furthermore, the retrofitting of existing streetlights in Ebeye has been completed whilst a similar exercise has commenced in Majuro through the Italian/Austrian funding coordinated by the International Union for Conservation of Nature (IUCN.)

Public and private partnerships have been explored through the North REP where private companies are talking with the Energy Office in how coordination and information/data sharing can be improved for energy related projects in the outer islands.

Through North REP, the Energy Office is also working closely with the Women United Together Marshall Islands (WUTMI) in engaging their services for the collection of electricity tariff from the outer islands for solar home systems that are already installed.

Initial work has also been undertaken to recruit a local counterpart that will understudy and assist the Energy Specialist in RMI for North REP activities. In the conclusion of North REP, it is hoped that the Government of Marshall Islands will absorb the person into the civil service and be based with the Energy Office.

The EU National Authorizing Office here in RMI, which is the Ministry of Finance, donated some office equipment to the North REP office that will be fully utilised by the team in undertaking activities for the project. SPC acknowledges this donation with kind appreciation.

Office equipment for North REP office (Photo: Arieta Gonelevu, SPC)

Gender in adaptation and low carbon development project

By Koin Etuati, Energy Programme Assistant, Energy Programme, EDD, SPC, Suva, Fiji

The objective of Gender in Adaptation and Low Carbon Development project is to contribute to the integration of gender dimensions into climate change adaptation and low carbon development in small island developing states (SIDs) as well as into national and international climate change policy-making. The participating SIDs are Cook Islands, Nauru, Niue, Palau, Republic of Marshall Islands, Kiribati and Tuvalu. The expected outcome of the project is creation of synergies and collaborations among gender, climate change and energy experts leading to sustainability of the project and coordinated policies in the participating countries.

The project proposal was developed in November 2010 between the SPC Energy Programme and the Gender cc Network (an international network of women promoting gender mainstreaming in climate change policies at the international and national level). The Gender_cc Network focal point for the Pacific is currently housed within the SPC Energy Programme and coordinated in line with the Pacific Energy Gender Network.

The project is relevant to the PEG Action Plan (PEG SAP) 2009–2014, under Strategy 3: Strengthen networking and cooperation with relevant international, regional and national institutions. The project is funded by the German Environment Ministry and its implementation will be for a three-year period.

One of the guiding principles under the Framework for Action on Energy Security in the Pacific (FAESP) — 'environment friendly' energy solutions — is also in line with the project. Approaches to low carbon development will be encouraged and promoted during training and consultations however the focus will on equity, which refers to the concept of fairness and access to equal opportunities and the development of basic capacities.

The project has three major components: (i) capacity development on gender mainstreaming; (ii) strengthening cooperation and partnership at the national and regional level on gender, climate change adaptation and energy policies leading to a more coordinated policy development; and (iii) dissemination of information on the project's activities and training tools developed for enhancing global platform for learning.

The project started in November 2010 and consultations at the national, regional and international levels have already started with partners such as the Gender_cc Network Secretariat based in Germany, SPC Human Resources Division based in New Caledonia, and the Secretariat of the Pacific Regional Environment Programme (SPREP) in Samoa as well focal points for climate change, energy and gender in the participating countries. In collaboration with SPREP, SPC presented the project at the Pacific Climate Change Roundtable Meeting convened on the 14–18 March 2011 in Niue.

High tide in Kiribati (Photo: Koin Etuati, SPC)

Regional CDM capacity building workshops to minimise barriers for small islands participation

By Anare Matakiviti, Energy Programme Coordinator,
International Union for Conservation of Nature - Oceania Regional Office, Suva, Fiji

In light of the various barriers encountered by small island countries in participating in the clean development mechanism (CDM) programme, the United Nations Environment Programme (UNEP) Risoe Centre from Denmark with the assistance from the Fiji Department of Environment, the International Union for Conservation of Nature (IUCN), and Secretariat of the Pacific Regional Environment Programme (SPREP) have begun a series of workshops to build understanding and capacity for Pacific Island countries in the effort to assist them to efficiently implement CDM procedures. This is part of the larger capacity building for multilateral environment agreement (MEA) project for ACP (African, Carribean and Pacific) countries implemented and coordinated by UNEP in partnership with European Union and the ACP Secretariat. There are 12 countries targeted in the three regions of Africa, Caribbean and Pacific. In the Pacific Fiji, Samoa and Tonga are part of this capacity building programme.

The first of these series of workshops was held last week in Suva at the Novotel Hotel in Lami from January 24 - 28, bringing together participants from the governments of Solomon Islands, Vanuatu, Tonga, Samoa, PNG, and Fiji specifically from the energy, climate change, forestry and water sectors. The workshop was structured to give more practical and hands-on training to the participants in the areas of project identification, design and implementation.

One of the biggest challenges facing PICs is the lack of legal framework in the countries to allow them to participate in CDM programmes. At present, the only country from the Oceania region which has received carbon credits for its single CDM project is the, now dysfunctional, geothermal project in PNG. Fiji and Samoa are the other two countries that have in place the necessary government authority which enables them to participate in CDM. The lack of legal framework is exacerbated by the characteristics of the projects and the "smallness" of the countries. To realize a better value for carbon credits, bigger projects have more advantages. However, it was highlighted during the workshop that small projects can be bundled together to qualify for the Programmatic CDM. This mechanism also allows for a number of countries to be bundled together to make up for the number to make the CDM project more attractive.

Despite the challenges that CDM portrays, the financing umbrella that CDM covers includes forests and clean energy projects with the possibility of including mangroves and other similar initiatives in the future.

This is indeed an advantage to many PICs that have good forest cover and renewable energy projects such as solar, wind, hydro and bio-fuels. The workshop highlighted that CDM offers a bridging opportunity for the environment and energy sectors and both deserve more attention and are potential funding opportunities to improve the livelihoods of the people.

Participants from the CDM workshop (Photo: Salote Sauturaga, IUCN)

Solar PV powered household freezer systems installed in Marshall Islands

By Island Eco
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Island Eco develops renewable energy projects, provides quality parts, and helps in installing, maintaining, and providing training for renewable energy systems for individuals, governments, and community groups. Its renewable energy store and office is conveniently located at the center of Majuro, and it also have a lagoon-side facility for training outside of town in Ajeltake.

The United States Department of Agriculture, in conjunction with Utrok Atoll's Local Government and Island Eco, a solar company located in the Marshall Islands, successfully installed 51 solar PV powered household freezer systems on Utrok Atoll in January 2011. More solar refrigeration systems are scheduled to be installed this year as part of this community-based project, including 15 more for Utrok Atoll, along with 30 for Jaluit Atoll and 33 for Namdrik Atoll.

The aim of this pilot project is to test and introduce a user-driven model of implementation in the Pacific. All households involved expressed a desire for solar powered freezers and therefore contributed a small amount to the overall cost of the systems and participated in the shipping and installation phases of the project. A survey was also carried out to understand the families' needs and they have agreed to routinely monitor and maintain their systems.

An important and unusual aspect of this outer island installation was a training session for the women of Utrok atoll. They learned the functions of the various parts of their solar system, fundamental troubleshooting skills, and the importance of properly maintaining their system. An illustrated solar training book in the Marshallese language and an animation film based on a few chapters of the book's content were introduced at the training session. In addition, house-owners helped to assemble the components and connect their systems as part of the training.

Newly installed pole-mounted monocrystalline PV systems (Photo: Island Eco)

Utrok family admiring their new solar powered DC freezer (Photo: Island Eco)

Solar PV training in Palau

By Karla West, National Development Bank of Palau

The National Development Bank of Palau (NDBP) has been strengthening its Energy Loan Programme (ELP) through the training of local contractors for the installation of on-grid and off-grid solar photovoltaic (PV) systems.

Dr. Herbert Wade, international energy specialist, was contracted by NDBP, as part of the ELP, to train local installers for on-grid solar PV systems in September 2010. A one week follow-up refresher course for on-grid solar system installations provided by Dr Wade commenced on 2 February 2011, followed by a separate two-week off-grid solar system installation course.

As part of the refresher training, the participants took part in installing a 3.4 kWp on-grid PV system on a roof of an NDBP residential customer. The participants that took part in this training comprised four local construction companies, the Palau Energy Office (PEO), Palau Public Utilities Corporation (PPUC) and NDBP staff.

The following two weeks were dedicated to off-grid solar PV system training. A total of 15 participants took part in the training, comprising four local construction companies, PEO, PPUC, and the Governor, and staff, of Hatahobei State. Hatahobei is a state of the Republic of Palau located in the remote South West Islands.

The training consisted of several days of classroom instruction on the characteristics of off-grid solar PV systems, the equipment needed for installing a solar PV system, how to size the system to meet customers' needs, and basic maintenance requirements for keeping the system in operation.

Part of the off grid system training included a hands on installation of an off grid PV lighting system at the Bank's training facility.

To ensure that the ELP becomes a success, the NDBP considers that local capacity must be cultivated and encouraged at every opportunity to install and maintain these systems.

Funding for NDBP's on and off-grid training was provided by the Global Environment Facility–United Nations Development Programme's (GEF-UNDP) Sustainable Economic Development through Renewable Energy Applications (SEDREA).

For more information regarding NDBP's programmes, please contact Karla West on email kwest@ndbp.com; or for SEDREA ,please contact Nyk Kloulubak nyk@palaunet.com at the Palau Energy Office.

Installation of off-grid solar PV systems in Palau (Photo: Herb Wade)

RescoManager software

By Marc Torra Griso and Jordi Llonch

We believe that the technical requirements for the successful electrification of remote areas depends on three factors: (1) appropriate system design; (2) proper installation; and (3) reliable & consistent maintenance. RescoManager is a software application designed to help in these three areas, plus in (a) in financial management, and (b) the required logistics. We believe that with this — plus political consensus, and a sensitive strategy towards the recipients — the success of the electrification service is guaranteed.

The first two versions of RescoManager were funded by the European Union and first implemented in Kiribati in 2003 and 2005 respectively. They were designed to assist the Kiribati Solar Energy Company Ltd (KSEC) to increase the quantity of solar systems from 300 to 2,100 and the coverage from three to eighteen outer islands. Since then the software has proven to be one of the key success factors in the operations of KSEC Ltd.

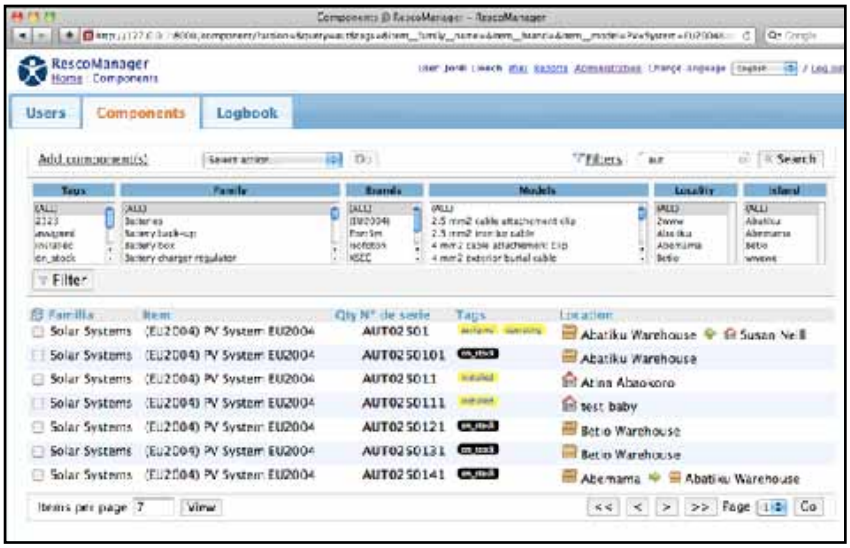
Thanks to the financial assistance from United Nations Development Programme and Pacific Islands Greenhouse Gas Abatement through Renewal Energy Project (PIGGAREP), the team that designed the software back in 2001 has come up with a third version conceived to help any project or organisation in renewable energy and energy efficiency. The current version is open source and web based.

Open source means that it is common and free. Free not just in the sense that it can be used by anyone without having to pay a license, but free because people can use it in their own way, and then share any added improvement with the rest of us.

Web-based means that it works with a web browser and it offers the flexibility and full potential of the Internet to communicate people and to link information. Imagine a technician in the field. One moment he will be browsing the monitoring or financial data stored at the headquarters; the next moment he will be browsing some interactive troubleshooting procedure offered by a regional organisation; and a few minutes later he will be accessing the technical specifications for a component directly from the website of the manufacturer.

Once installed by several organisations, RescoManager 3 will help to create networks. Within these networks: (a) Donors can supervise the use of their funding, (b) Regional organisations can provide capacity building, right on the spot, when it is most needed, (c) Manufactures can monitor the performance of their equipment in the field, and (d) Renewable Energy Service Companies (RESCOs) can provide a better service to their customers.

Our responsibility at rescomanager.org is to continue developing the software and keep it free for all. We are already announcing the next extra features we plan to add, and inviting donors to provide funding, and the public to suggest ideas. For example: (1) the use of cash-crops instead of money to pay for the service. When added, it will help to replicate in other places the approach implemented by SPC in the Solomon Islands; or (2) a feature for managing not just components, but all the relevant documentation. This will make the implementation of 'window funds' or rebates very simple.



As you can see, we are already working to keep on improving the software. Our policy is transparency, and this is why all the information is already available at our website. If you wish to have more information on how the software can help your organisation, visit the web site, or send us an email to info@rescomanager.org.

RMI - 5th signatory of the Pacific Petroleum Project

By Shakil Kumar, Energy Officer Petroleum,Energy Programme, EDD, SPC, Suva, Fiji

The Republic of the Marshall Islands (RMI) has faced particular problems with rising fuel prices. In 2008, a State of Economic Emergency was declared in response to rising fuel prices. In addition, the rise in fuel prices severally affected the operation of key infrastructure, in particular the Marshall Islands Energy Company (MEC).

In response to the rising price of oil, a memorandum of understanding (MoU) for the Pacific Petroleum Project (Project) was first signed by the Governments of the Cook Islands, Nauru and Tuvalu in October 2008, and by Niue in April 2009.

The aim of the Pacific Petroleum Project is to identify opportunities for Pacific Island countries to reduce the costs of purchasing petroleum, streamline their supply chains, and strengthen procurement and tendering processes.

On 6 August 2010, the Republic of the Marshall Islands signed the Memorandum of Understanding for the Pacific Petroleum Project, the fifth Pacific Island country to sign after Cook Islands, Nauru, Niue and Tuvalu.

As the project was underway when the RMI signed the MoU, a number of the Milestone reports in Phase 1 of the Project has been completed. As a result, Mr. Scott Hook of Pacific Islands Forum Secretariat took a mission to RMI in November last year to undertake the necessary data and information collection necessary to include RMI in the Milestone reports. A draft revised report for RMI was provided to the RMI government for comments in February 2011.

Relative to the other four project signatories, RMI has a high petroleum demand (53.5 million litres) although their volume is still small in comparison with the larger Pacific Island countries. The inclusion of RMI has more than doubled the total volume among the signatories, which is a significant amount in that it opens up more supply options (e.g. larger ships) that are not feasible or economic for the lower demand countries. This can result in more efficient logistics and greater economies of scale, although still a step lower than the high demand Pacific Island countries such as Fiji.

With regard to bulk procurement there are opportunities that might mean Nauru and RMI could work together and optimise the supply to both locations. Such a possibility would get assessed through the tender process.

Truck carrying fuel (Photo: Scott Hook, PIFS)

Tonga petroleum pricing and LPG template annual and review 2011

By Shakil Kumar, Energy Officer Petroleum,
Energy Programme, EDD, SPC, Suva, Fiji

The Kingdom of Tonga regulates its domestic petroleum fuel market through a price control mechanism, which adjusts the price monthly based on a template agreed between the oil companies who supply Tonga and the Tongan Competent Authority (TCA).

Tonga Pacific Energy office (Photo: Rajnesh Prasad, Pacific Energy)

The price control is the responsibility of the Ministry of Labour, Commerce & Industries (Ministry) under the Minister of Labour, Commerce & Industries (Minister). The petroleum price control was supported by the Pacific Islands Forum Secretariat (PIFS) based in Fiji until 2008. This role is now taken up the Secretariat of Pacific Community with the establishment of the Economic Development Division.

The Government of Tonga sent a request for financial and technical assistance to SPC for conducting an annual and triennial review of the Pricing Template. Annual Petroleum Price Review arises from the need to ensure that domestic petroleum prices are based on up-to-date data given that information used to determine the market price for petroleum are mostly updated annually.

This information however is not publicly available or easily verifiable thus requiring assistance from a petroleum expertise that can assist the TCA and government in setting the most efficient price templates.

Tonga has also requested assistance to complete a full review of the LPG template. This task is beyond the current expertise of SPC hence will be contracted out to Hale and Twomey. SPC will be the lead agency for both the Tongan Petroleum Pricing and LPG template review. The review process started in January 2011 and expected to finish by April this year.

The criticalness of the review for Tonga:

1. The annual review minimises errors in petroleum price calculation by ensuring that the price templates used are based on up-to-date information. The consultants who have conducted the reviews for Tonga have identified that a 1 cent error in the template translates into a loss of more than half a million dollars thus suggesting that the absence of an annual review could result in million dollar losses for the country.

2. The costs resulting from the absence of annual petroleum price reviews are ultimately borne by the end-consumers, which are households and private sector firms. Since the largest single petroleum consumer in Tonga is the power company, which uses diesel for electricity generation, calculation errors could lead to significant set-backs in average standard of living and private sector development. Other economic costs that may result include increased inflation, reduced exports and deteriorations in foreign investment hence translating into further economic declines.

3. It is important for the integrity of the price control system that annual reviews are conducted routinely and that significant issues are consistently raised and thenceforth addressed.

4. If the oil industry does not have the assurance that the price control mechanism used is efficient, it may discourage improvements in their service delivery and potential extensions to their investments.

First quarter 2011oil market report (December 2010 – February 2011)

By Ivan Krishna, Energy Programme Support Assistant, Energy Programme, EDD, SPC, Suva, Fiji

The Asia-Pacific benchmark tapis crude maintained its momentum in the first quarter of 2011 as it continued to rise and topped US$120/bbl on 24 February to average the first quarter of 2011 at US$101/bbl. This represents an increase of over 11 percent from the last quarter of 2010. The tapis crude oil moved within a US$90-100/barrel range in December 2010, followed by US$95-105/barrel range in January 2011 and a very volatile February with a US$100-120/barrel range, which resulted in a 11% increase from the previous quarter as reported in the last newsletter.

Among the key factors contributing to the continued price rise has been the geopolitical concerns putting pressure on the market. The political termoil in Egypt, which is affecting the shipping of cargos through the Suez Canal along with the shutdown of the Trans-Alaska-Pipeline and protest in Libya, has brought about erratic price movements. This was more evident on 24 February when the price of tapis crude rocketed overnight by US$10/bbl to a high of US$120.46/bbl.

The popular uprisings against the governments in several countries in North Africa and the Middle East continue to impact the oil market. When the unrest started in Libya, which is a significant oil exporter, prices increased to around US$10/bbl. There is now considered to be US$10-15/bbl geopolitical risk built into the oil price, due to disruptions to the current supply and the prospect of the unrest spreading to other oil producing countries.

Libya's production has dropped over 1 million bbls/day against its normal level. While Saudi Arabia has said it is increasing production to cover the loss, much of that production is heavy crude not the light crude that Libya produces. In addition, some of the Saudi capacity increase was already targeted to meet the increasing demand in Asia.

It is too early to see if the sharp US$10/bbl increase in price during February will have any impact on global demand. Demand in many countries was impacted the last time prices were at this level in 2008 and China is now passing more of the global price increase to their consumers.

It needs to be highlighted that the US crude often used when referring to the "market price of crude", the CME light sweet crude futures (WTI – West Texas Index), is trading substantially lower than most other crudes (by about US$10/bbl). This is because this price is set at an inland location in the United States and currently stocks are very high in that location. As a result, US inland crude prices are being discounted and their price has become delinked from the rest of the market (the rest of the crude market is ultimately linked by the ability to ship crude from one location to another). The Asia-Pacific refineries are likely to be buying crudes from the Dubai or Brent markets rather than WTI and these have been above US$95/bbl for much of the month.

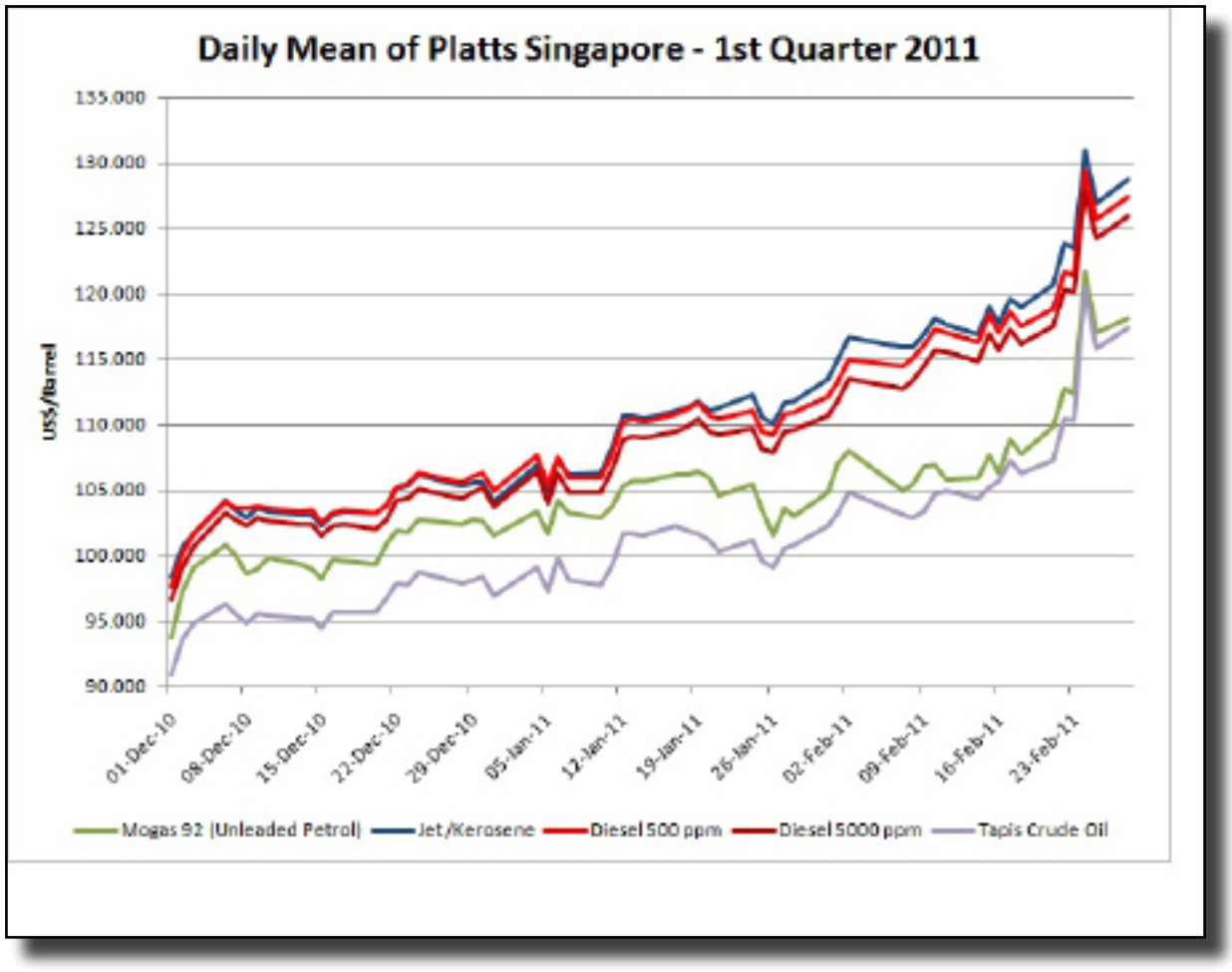
As a result all products in Singapore have traded above US$100/bbl for January and February with jet fuel being the highest, averaging nearly US$110/bbl. As consumption statistics are estimated for China for the past quarter, it has become apparent that crude oil consumption has jumped significantly in the past year (there are no firm statistics but apparent demand is estimated to have increased 12% over 2009). This is one of the main reasons for the strong increase in prices – while the demand in China and other Asian countries continue to grow, the demand in developed countries has stabilised. Therefore global demand is now increasing strongly again while OPEC production continues to be restrained by quota limits.

OPEC believes the market is well supplied and state that they have 6mn b/d of spare capacity so there should be no concern with shortages. Certainly in comparison to 2008, there is plenty of spare capacity in the system, both within OPEC for production and in the refining system. Therefore there are not the same pressures on the system that took the price to US$140/bbl last time US$100/bbl was breached.

However, there is concern that the unrest in North Africa could spread to the larger oil producers in the region (such as Algeria or Libya) or into the Middle East itself. The implications for oil supply of such an event could have significant implications for the price of oil.

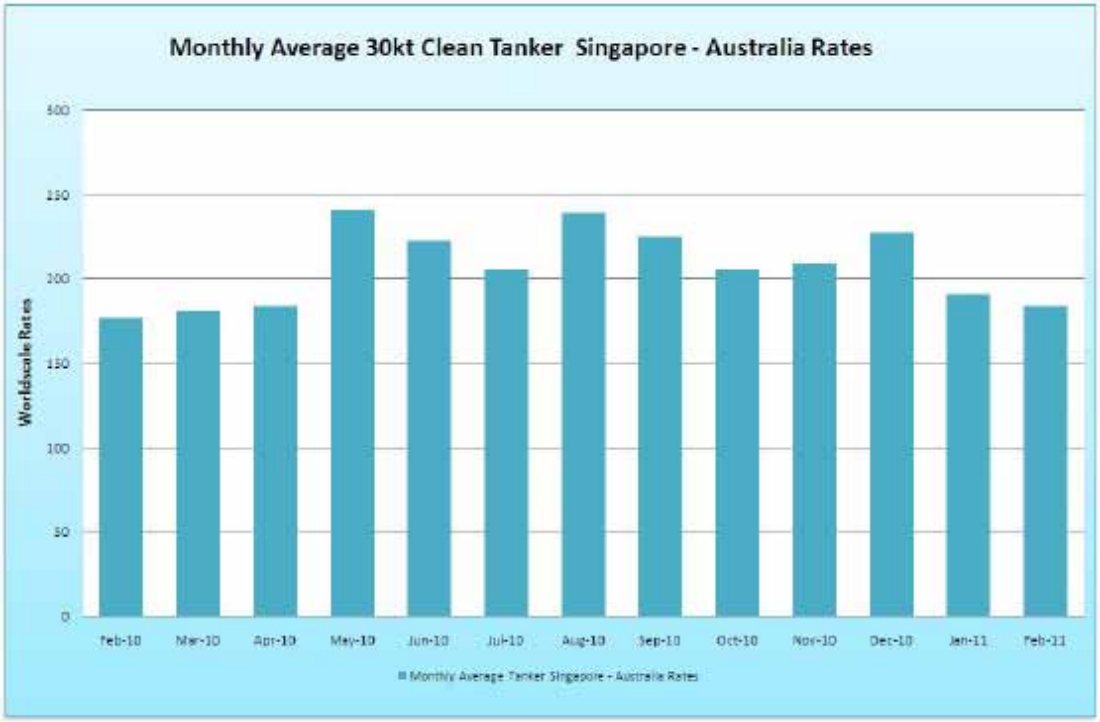
Product prices again rose more than crude in this region. All products are well supported by demand in the region, with jet in particular recovering with refineries shifting production into winter heating kerosene rather than jet fuel. This has helped balance supply and demand resulting in an increased margin over crude.

In the last newsletter issue, we discussed the refiner's margin aspect in fuel pricing. In this issue. we will highlight the retailer's margin. The retailer's margin is the distribution margin that represents the difference between the pump price and the acquisition cost. It includes the operating expenses of a service station as well as the retailer's profit. In places where fuel prices are regulated, the retailer's margin is usually a constant variable with it being either a fixed percentage of the acquisition cost or a certain number of cents per litre of fuel. In the case of unregulated fuel prices, the retailers margin is determined by the competition in the retail market.



Freight rate

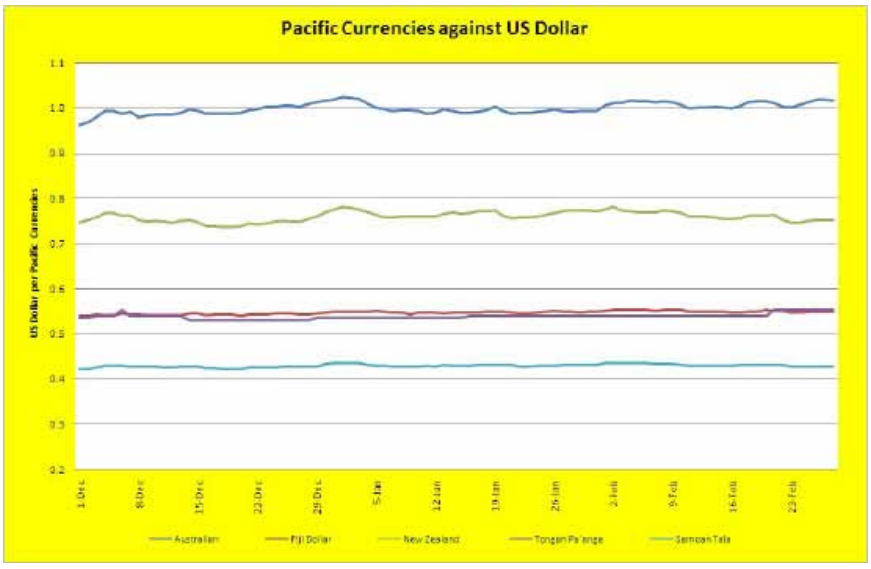
As highlighted in the last issue, the Singapore-Australia quote is a better representation of voyages coming into the Australian/ Pacific region. The freight rate for the 1st quarter of 2011 has remained stable following a declining trend for the 4th quarter of 2010, being just slightly higher when compared with rates of the same period last year.



Exchange rate

The major currencies showed a slight appreciation against the US dollar, however they all remained stable with very little fluctuations. The effect on pricing should be slightly positive, helping to dampen the recent gains in fuel prices.

Fiji, Tonga and Solomon Islands have all reported an increase in retail price of fuel, however, Samoa has reported a slight decrease in retail prices.



Possible impact on retail prices of fuel in the Pacific Islands

Despite the increase in crude prices, the freight market has weakened a little. That could be taken as an indicator that recent increase in supply related (problems in North Africa/ Middle East) rather than demand related. The value of common Pacific currencies against the US Dollar was relatively stable so is not having an effect on price change.

The rise of global petroleum prices with the political unrest in producing countries means that Pacific Island countries prices will increase for the in the First Quarter of 2011. Samoa, Tonga, Solomon Islands have reported increase in retail prices for the sixth month in a row.

Tina river hydro power development project

By Fred Conning, Deputy Project Manager, Honiara, Solomon Islands.

The Tina River Hydropower Development Project (TRHDP) is a project of the Ministry of Mines, Energy and Rural Electrification (MMERE) of the Solomon Islands, which is aimed at substantially reducing the Solomon Islands Electricity Authority's (SIEA) dependency on imported fuel.

The TRHDP should allow SIEA to have more control of its fuel bill thus resulting in more affordable electricity bills for the citizens of Solomon Islands.

TRHPDP aims to provide more than 75% of the current electrical power demand of Honiara and Guadalcanal when it comes on line in 2015.

TRHPDP will be a run off river scheme utilising the Tina River in Central Guadalcanal, about 30 km from Honiara to develop a 12-20 MW hydro scheme in its first stage.

There is potential for a second and third stage development from the same river and the second and third stage development should bring the total power output of the scheme to about 44 MW, which should cater for most of the future power need of Honiara and the surrounding areas of Guadalcanal.

TRHDP is a project of significant importance to the Government and people of Solomon Islands as it is one of the major undertakings by the Solomon Islands Government after a period of social unrest and loss of investors' confidence in the country.

The successful implementation of TRHDP will result in restoring investors' confidence and also allow the community of Solomon Islands to realize that hydropower is a realistic developmental idea and may open up the same development in other islands of the country.

TRHDP will also eventually see the emergence of Independent Power Producers (IPP) in the Solomon Islands electricity market. The development of TRHPDP will be undertaken by an independent developer who will sell the electricity produced to SIEA.
The Tina Hydro Project office is managing the project on behalf of the Ministry of Mines and Energy and coordinating the activities of stakeholders on the project to ensure that milestone activities are achieved and the project is delivered to the Government and People of Solomon Islands according to the proposed schedule.

The TRHDP office is currently working closely with international organisations such as the World Bank, the European Investment Bank and the International Financial Corporation to work on the technical aspects of the project and also to market the project to potential developers.

One of the main stakeholders of the project is the landowning group of the Tina River Catchment. It is of paramount importance that the project involves and maintains continuous and open communication with the landowning group throughout the period of project development.

TRHDP is aimed at setting a standard with regards to participation of resource owners thus the project is providing all avenues for the resource owners and other stakeholders to contribute meaningfully to the development phase of the project.

Fiji Fact Finding Mission

As part of an ongoing communication process between the landowners, Government of Solomon Islands, Guadalcanal Provincial Government and the Project office, a study tour to Fiji was organised by the project from 11–18 January 2011 to consult with the different stakeholders in Fiji's Monasavu hydro projects. Fiji was chosen for the study tour as it has very similar context to the Solomon Islands in the development of hydro projects. The study tour would therefore provide invaluable knowledge to the stakeholders of TRHDP.

The fact finding mission involved meeting with the Fiji Ministry of Public Works and Department of Energy, Fiji Electricity Authority (FEA), Native Land Trust Board (NLTB), Secretariat of the Pacific Community (SPC) and the landowning groups of the Monasavu Dam and Wailoa Power Station.

The series of consultations held with the above groups have provided invaluable knowledge for the study tour team to reflect on issues that needs to be seriously considered when it comes to the development of TRHDP.

The Permanent Secretary, Director of Energy, and the CEO of FEA have all shared the same sentiment in the development of a hydro power project. The sacrifice rendered by the resource owners towards a hydro scheme is all for the benefit of the country and resource owners are fully entitled to receive the appropriate benefits from the project.

TRHDP is fully aware of the potential benefits of such a scheme to the resource owners and having such a message relayed by the stakeholders of a similar project in a different country will allow the landowning group of the Tina River to work cooperatively with the project in the development of the hydro scheme.

The meeting with NLTB was also useful as it showed the process of land consultations that was undertaken in Fiji with regards to development of major hydro projects.

NLTB also advised on investments conducted on behalf of resource owners and this has encouraged the landowning group to see further than the usual royalties and compensation payments made by investors in Solomon Islands.

The consultation with SPC has also been very fruitful as most of the study tour team has not been aware of the roles of regional organisations in the development of a national project.

The study tour group have enquired with SPC on the possibility of SPC delivering assistance by offering independent technical advice on issues such as environmental monitoring of the project.

SPC's Deputy Director (Energy) EDD, Mr. Solomone Fifita, and the Energy Advisor, Rupeni Mario, have offered the study tour team fruitful advice on the various services regional organisations can provide and the approaches that TRHDP may undertake to tap into these services.

SPC is also interested to see the involvement of IPP in the Project as it would eventually see the emergence of IPP in the electricity market in Solomon Islands and if successful may be adapted to other countries of the Pacific.

The visit to Nadarivatu and Monasavu projects provided an opportunity for the study tour team to appreciate the level of commitment that is required of them to successfully implement a project.

The team also appreciated the benefits of having the project located in the interior of Viti Levu as it provides the community with important infrastructure such as roads and electricity, which will otherwise be non–existent in such a remote location.

TRHDP will also be built in a similar difficult terrain on the Island of Guadalcanal. The landowning members of the team have realised the benefits of having access to such infrastructure.

The opportunity to consult with the landowning groups of Monasavu Dam and Waialoa Power Station has offered the team some views on the grievances of the landowning group.

Despite the successful operation of the Monasavu Hydro electric scheme, there are issues that are still outstanding as far as the landowners are concerned.

The issues raised during the consultation has allowed the management team of TRHDP to be aware of the grievances so that similar issues can be addressed during the development stage of TRHDP .

The study tour undertaken in Fiji was very successful as it provided first hand information to TRHDP stakeholders on issues relating to the development of a project of such significance to Solomon Islands.

TRHDP would also like to take this opportunity to thank all the parties that met with the study tour team in Fiji.

The consultations and support offered by the parties have been very valuable in assisting the stakeholders of the TRHDP to realise the contribution and support they may have to offer the project.

TRHDP also greatly values the generous contribution of the Global Environment Facility, UNDP and SPREP via the PIGGAREP, which assisted in covering the costs of the trip and would like to acknowledge the kind understanding of the PIGGAREP Project Board in approving the request for assistance towards this important study tour.

Productive use of solar energy in food processing and food safety training

By David Iro, Willies Electrical and Solar Power,
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A training on the productive use of solar energy in food processing, food safety and value adding was conducted at the Community Training Centre of Maluu Provincial Centre, Northern Malaita, Solomon Islands from 21–24 February, 2011. The training was part of the United Nations Industrial Development Organization (UNIDO) project, "Productive Use of Renewable Energy in Selected Pacific Island countries", implemented by Willies Electrical Company (WILLIES), a private solar company owned and managed by David Iro of Solomon Islands.

The Community Training Centre was built in September 2010 with local communities contribution while the installation of the solar photovoltaic (PV) systems was done from 28 November to 2 December 2010. The training was facilitated by Ms Koin Etuati of the Energy Programme, of SPC's Economic Development Division, while the food processing was delivered by Ms Apiame Cegumalua, Export Processing Marketing Officer of the FACT (Facilitating Agricultural and Commodities Trade) of SPC's Land Resources Division. There were 39 participants of which three were men including a chief and a pastor.

Women learning to make fruit juice (Photo: Koin Etuati, SPC)

The objective of the project is to provide opportunities for rural and remote communities to improve their livelihoods through the use of renewable energy. One of the many challenges for rural communities is access to market cash crops and local produce due to expensive transport costs and remoteness (long hours of travelling). For example, the cost for one person to travel from Maluu to Auki (the main town area), which normally takes three hours , is SBD100. However during rainy days, same journey takes four hours due to bad road conditions. The project assists communities in remote areas such as northern part of Malaita to process their surplus fruits and crops through value adding and preservations to extend shelf life especially of seasonal fruits, prevent food losses, ensure a continuous supply and basically increase food security.

The training also highlighted the importance of reducing the dependency and reliance on imported foods and drinks but resort to local processed food such as local jams, chips, use of virgin coconut oil for frying, and fruit juice for ice block.

The technical capacity of the solar system was based on a load assessment of 2530Wh (watt hour) per day on the uses of 2 x 40 Watt (W) fluorescents lights and 3 x 14W CFL lights, 2 freezers (150W) and two sewing machines (200W). A total energy supply from 8 solar panels x 175Wh, 24 volts (V) was installed at the roof top of the storage building. Other components of the system include a 2300W 24V Latronic sine wave inverter, a 60 Readymade controller 24V and 12 x 1000Ah 2V SLA batteries (1000Ah Battery bank). The estimated cost was Euro25,000.00.

At the closing of the training, and after the presentation of certificates, six women who paid 50% of the cost of the system, were handed over their solar PV LED lighting systems (2 LED lights, 21Ah lead acid battery and 15W solar panel) and were very happy that they will no longer pay for kerosene for lightings and will have better lighting for children to study. Participants were encouraged to use the Community Training Centre for value adding activities to generate household income as the centre is equipped with processing equipment and refrigerators that is powered by renewable energy source.

Productive uses of Energy in the Tourism Sector

By Chris Andrew, Chief Executive Officer, Greenlight Technology Group Pty Ltd, New South Wales, Australia

The Fiji Low Carbon Tourism initiative was a short term development project to showcase pathway opportunities for public/private sectoral engagement to accelerate energy efficiency and renewable energy technology investment in Fiji's hotel and resort sector. For Fiji, as with the majority of Pacific nations, tourism represents the dominant industry sector accounting for around 30% Gross Domestic Product.

The project was implemented by Green Light Technology Group from Sydney and funded by The Renewable Energy and Energy Efficiency Partnership (REEEP). The project was active from June 2009 to August 2010. A number of subsequent projects have stemmed from the initiative and interest in the concept has been widespread throughout the Pacific.

The Fiji Low Carbon Tourism initiative provided a unique model for maximizing stakeholder support, accessing sustainable energy funding and sourcing effective technology solutions.

The focus of the project was two-fold:

1. Proof of concept for a multi-stakeholder approach to low-carbon tourism sector

The project established the benefits for a multi-stakeholder approach to energy efficiency and renewable energy in Fiji's hotel and resort sector. It drew together an alliance between the government and the tourism sector and showcased selected clean energy technologies to maximise the cross-sectoral benefits achieved from advancing Fiji as a low carbon tourism destination.

2. Capacity building for a tourism sector Clean Development Mechanism project

The program developed a feasible platform for a tourism sector based carbon offset project. It has mobilised funding interest from a leading global environmental NGO and internationally recognised carbon project development company. The Fiji Tourism Energy Efficiency carbon Offset Program is scheduled to commence early in the second quarter of 2011.

Key to the Fiji Low Carbon Tourism initiative was to present both a strategic and operational view to the tourism sector for moving towards more sustainable energy solutions. From a long term strategic perspective, the project introduced the marketing, financing and technological benefits of lowering tourism's carbon footprint.

On an operational level, the project introduced technologies that addressed key energy usage areas in hotels and profiled how renewable energy technologies could be used to support positive behavior and messaging.

For most hotels, the major energy demand stems from air conditioning and refrigeration. Moreover, the Pacific conditions demand technology solutions that are proven, robust, and can be easily retrofitted to existing equipment to minimize capital expenditure and waste disposal. With the assistance of the World Bank's Sustainable Energy Financing Project, the project identified air conditioning and refrigeration technology currently deployed throughout major international convenience food outlets in the US and Australia for trial in Fiji. The technology developed by XDX has been installed and monitored under a major operational trial at a leading Suva hotel. The performance results are due by the end of the month. Key to the process was the need to still test proven equipment under Pacific conditions.

Another feature of the Low Carbon Tourism project was the Department of Energy's "Hotel Solar System Offer", which saw a selected number of Solar PV systems installed at iconic Fijian hotels. Exemplifying the powerful messaging such technologies can have within the tourism sector, the Shangri-La's has recently mounted a small-scale system on top of their "Little Chiefs Club".

Sustainable energy is by nature a long term initiative, requiring solutions that evolve along economic, environmental and social lines. The REEEP-funded Low Carbon Tourism project has proved a successful "proof of concept" venture, bringing together key stakeholders and mapping out a plan for promoting renewable energy and energy efficiency within the sector. For continued success, the initiative now requires institutionalized local capacity and funding for on-going management of the project in Fiji's tourism sector.

The finalization of the Implementation Plan and a monitoring system for the Energy Security Framework

By Solomone Fifita, Deputy Director (Energy), EDD, SPC, Suva, Fiji

Through the generosity of the European Union Energy Initiative Partnership Dialogue Facility (EUEI PDF), SPC was able to conduct two back-to-back one day consultative workshops on 16 and 17 February in Suva. In addition to the workshops, the EUEI PDF also engaged the services of Mr Gerhard Zieroth as facilitator of the two events. Gerhard was also tasked with drafting the energy security indicators.

The first workshop discussed the draft baseline energy security indicators. With the coming final adoption of the energy framework at the Noumea joint ministers meeting in early April, it is very important that we establish where we are in terms of energy security so that in future, we are able to measure appropriately how far we have progressed in implementation.

The workshop was attended by representatives of the Pacific Island countries and territories (PICTs), the Pacific Energy Oversight Group (PEOG) and development partners. There was a general feeling of support among participants that this was a worthy exercise and one which promotes transparency and accountability.

The indicators for six countries (Niue, Marshall Islands, Samoa, Solomon Islands, Tonga and Tuvalu) have been completed and will be presented to the joint ministers meeting in April. These indicators are in the four key elements of Energy Security: Access to Energy, Affordability, Efficiency and Productivity and Environmental Quality. There are also indictors relating to each of the seven themes of the energy framework. So these indicators will measure the impacts of interventions under each theme and the overall impacts on the energy security of a country.

The other workshop was on the energy implementation plan (IP). It was established that the IP should be for PEOG (CROP agencies plus IUCN) who are collectively reporting to the CROP Executives Meeting and through the energy officials and energy ministers meetings, and the SPC Conference to the Leaders.

This workshop emphasised the need to identify agencies that are involved with each activity in the IP, the timeframe for each activity and their budget.

Similar parallel activities were taking place at SPC during the same week. Transport officials were finalising the IP for the transport framework while the ICT experts were finalising the IP for the ICT gramework. The three implemetation plans will be presented to the joint ministers meeting in April.

Partcipants from the Implementation Plan meeting (Photo: Atishma Lal, SPC)

Rupeni moving up North

In this issue of the *Pacific Energiser*, we congratulate Rupeni on his appointment as the Team Leader of the North Pacific ACP (African, Carribean and Pacific) Renewable Energy and Energy Efficiency Project (North REP).

Fortunately for Secretariat of the Pacific Community's (SPC) Energy Programme, this is not a farewell as Rupeni will still be working for the Programme but he will be based in Pohnpei, Federated States of Micronesia (FSM) and will still assist with the running of the Programme.

The North REP is a special and unique programme where three islands member countries of SPC (FSM, Palau and Republic of Marshall Islands(RMI)) come together and pool their combined 14.4 million Euro of EDF 10 resources, which they have been identified for development of the energy sector in northern Pacific countries and SPC has been entrusted with the responsibilities of managing it on their behalf. It highlights a special partnership between a provider of technical assistance and services and its recipient member countries.

This special partnership has been made possible through SPC's outreach and physical presence throughout the region. Pohnpei hosts SPC's regional office for the North Pacific and will be the control centre for Rupeni and the SPC North REP energy specialists who are based at FSM, Palau and RMI.

The North REP has a special mission. It envisages at least to reduce average monthly electricity consumption in urban households by 10%; provide a total of 12,739 people for the first time to access electricity in FSM and RMI; and will assist 21 health centres and 32 schools access basic electricity.

It is definitely a special project and a matching special person to be its Team Leader.

With all the best wishes from the Economic Development Division and the team from SPC Suva!

Solar PV installation in Yap, FSM

Other news...

IUCN welcomes Larissa Brisbane

Hi, my name's Larissa Brisbane. Born in Australia, I've had the privilege of living and working in different places and overseas for a substantial chunk of my life, leaving me quite confused when people ask where I'm from. I did most of my growing up in Wollongong, and did an Environmental Science degree at the university there. I worked for the state government in their waste reduction efforts, moving to a local council in London in a more community-focussed waste reduction role.

After a brief detour into road safety, I returned to environment, working for a major consultancy in Sydney for five years. The diverse range of projects saw me use skills in EIAs, greenhouse gas accounting, environmental management and auditing, sustainable design, and everything in between. With industries as diverse as mining to renewable energy, water, transport and electrical infrastructure, I learnt how to rapidly understand the client's point of view and focus on solving problems.

Moving on, I took a one year placement at Fiji's Department of Environment, placed there in partnership with the Environmental Defenders' Office NSW and funded through the Australian Youth Ambassadors for Development program. This deepened my understanding of Pacific culture and immediacy of climate change impacts on the region, and I was keen to continue working in these areas. I start in IUCN's Energy and Environment program with a great deal of enthusiasm to implement the existing program and partner with the many excellent experts in the field to develop future opportunities.




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