Greetings from the Penthouse

As the summer months approach, temperatures inside the Penthouse continue to steadily rise as the outside ambient temperature climb. In a quick audit earlier in the year it was recorded that there could be as much as 10°C difference in temperature between the lower level of the Energy Unit building and the Penthouse. I now understand why the previous occupant was all smiles as he packed his boxes of books and shifted to a floor level office. It might have been hot shifting but that was only 1 day at 35°C as opposed to 6 months per year for the immediate future at least.

It is actually interesting as visitors and colleagues who climb to meet me in the Penhouse ask how can you work in this heat? My first reaction is one of suggesting that I should turn the space into a solar crop drying room, that usually is greeted with looks of surprise. The instay is that the building was designed originally as a house. As a measure of expediency it was purchased and converted to an office, obviously not an appropriate design for either.

On this note it raises the most important/serious need for at least some consideration to be given to building envelope design. Such design taking into account the hot and intense tropical summers that we experience, not only here, but in other countries in the equatorial zone as well. But don’t be fooled that only tropical climates need to be considered, no, it is all climates both hot and cold alike. Regardless of the extremes of hot and cold, consideration of the climatic parameters when designing a building can have a significant impact on energy consumption and future potential energy savings within a building envelope. Not to forget the essential benefits and the comfort of the occupants.

Generally around the region there has been inadequate levels of attention paid to this aspect of a building envelope. I will not elaborate on this issue here, but pose it as a topic for future discussion and hopefully you as readers will react to this issue and forward us your views and experiences enabling us to make this the focus of a future issue of PEN.

The real reason for picking on such a practical aspect as building envelope design is that it is climate or temperature focused. Focused in the context of increasing, which is and has been an all important consideration of our Small Island States (SIS) in their joint interest through the Alliance of Small Islands States (AOSIS) in changing climate and the focus of this issue of PEN.

The AOSIS meeting held in July in Majuro to address the Clean Development Mechanism in the context of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, recognized the importance of impacts and the consequences of climate change. The declaration from the meeting has been provided in the body of this PEN.

At a second meeting, the International Workshop on Sustainable Development in the Small Island Developing States, held in Lofoten, Norway from 18 – 20 August. It was identified that climate change, sustainable management of the marine environment, and energy are among the major and priority issues confronting SIDS. The workshop was convened to extend and deepen the dialogue on challenges and opportunities for Small Island Developing States (SIDS). Building on the AOSIS workshop held in Majuro, Marshall Islands it assisted in the preparations for the UN General Assembly Special Session (UNGASS) on Small Island Developing States. In particular, it “sought to build on the message that the focus should be on issues that unite rather than those that are likely to cause confrontation”.

I hope that you enjoy reading this issue of PEN and look forward to receiving your comments.

On this note I will leave you to read on !!!

FROM THE COORDINATOR’S DESK

CONTENTS

From the Coordinator’s desk 1
Regional News 2
National News 3
Feature Articles 6
AOSIS Workshop on CDM/Lofoten SIDS 6
Meetings/Workshops/Vacancies 10

SOPAC ANNUAL SESSION - 1999
SOPAC’s Annual Session will be held in Nadi at the Tanoa Hotel from the 23-29th October.

In the case where member country Energy Officers are not included in the official delegation to the meeting we would encourage all of you to liaise with your National Representatives prior to departing for the meeting and brief them on the important energy issues for your country and priorities. For those of you that will be in Nadi we look forward to meeting with all.

It is also important to note that this year during the STAR (23/10) session there will be a separate Energy Working Group convened.

So as to ensure good representation and the setting of priorities for the energy sector into the new millennium please fully brief your Official delegate to the Annual Session.
The Australian’s International Greenhouse Partnership Office (IGPO) and the Forum Secretariat’s Workshop/Meeting at Nadi on 26 – 30 July.

The Energy Unit was invited to participate in this workshop. The workshop originated from an announcement by Australia at the 1998 Pohnpei Forum meeting and was aimed at providing an opportunity for PICs participants and for regional organizations to further their understanding of the CDM within the context of the ongoing UNFCCC negotiations. It was also an opportunity to examine particular projects that may be of benefit to the global environment.

Participants at the Nadi CDM workshop were introduced to CDM, updated on the ongoing negotiations on CDM, identified the opportunities in the energy sector and also shared their experiences with renewable energy, energy conservation and energy efficiency projects.

Energy Offices of the Cook Is, Fiji, Kiribati, Palau, Solomon Is and Tonga were represented at the workshop so were SPREP, SPC, the FAO Regional Office for the Pacific and representatives of the Australian Energy Industry.

The Energy Unit played a major role in the workshop with presentations on opportunities in the energy sector, the experience with the Pilot Phase JI projects and SOPAC’s current work on the Environmental Vulnerability Index. The Energy Unit chaired the workshop sessions relating to the energy sector and was assigned a facilitating role in the group discussions that followed. It was encouraging to note that the active participation of the national energy representatives made the energy sessions one of the more lively and interesting sessions of the workshop. Rutete Ioteba of Kiribati presented a paper on Kiribati’s experience with the electrification of its rural areas using PV. A copy of this paper is available from the Energy Unit upon request.

While the negotiations on CDM are still ongoing, it is definite that the energy sector is going to be a critical sector in meeting PICs mitigation-related obligations under the climate change conventions and protocols. An earlier SPREP study\(^2\) to identify the climate change mitigation options in PICs highlighted the opportunities in the energy sector, particularly in renewable energy, energy conservation and energy efficiency.

The last day of the workshop was devoted to a proposed World Bank/ AusAID Regional/National CDM Strategy Study (NSS) in the PICs. It was recommended that the NSS be aimed at:
- enhancing a broad awareness/understanding of CDM;
- assessing the opportunities, benefits/costs of a CDM participation;
- developing regional and/or national policy & strategies regarding the CDM;
- defining pre-requisites for a CDM cooperation; and
- devising implementation program.

Participants requested that this proposed study makes use of the existing regional and national structures and expertise and build on previous similar and/or related studies and experiences. Earlier in the workshop, the need for an update of the 1992 Pacific Regional Energy Assessment was raised. The Energy Unit considers this proposed NSS as an opportunity to partly or wholly update the PREA. The Energy Unit encourages member country Energy Offices to keep this in mind if provided with the opportunity to comment on the draft ToR for the NSS.

FSM Energy Summit and Sub-regional Database Workshop 30 August - 03 September

The Energy Summit and the Sub-regional Database Workshop was organized by SOPAC Energy Unit with the assistance of FSM Department of Economic Affairs. FSM College of Micronesia provided the venue for the energy summit and the database workshop which was held from 30 August - 03 September 1999 in Pohnpei.

The national energy policy summit was held in parallel with the first two days of the database workshop. The participating countries in the sub-regional database workshop were FSM (all four states), Marshall Islands and Nauru. Palau and Guam were invited but did not participate (sorry but you missed a good one).

The primary objective of the energy summit was to provide the opportunity for the relevant government, NGOs, trade and petroleum companies to comment on a draft national policy.

The database workshop was split into three sessions of presentations, practicals and discussions. Areas of focus were on Database and Energy Data Management, Data Modelling and Energy Planning, Role of Energy Data in National Planning and Policy Formulation, and Pacific Petroleum Products - Savings Potential.

Thanks to the participants and the presenters.

Alan Bartmanovich, Petroleum Adviser FORSEC participated in both the Energy Summit and the Energy Database Workshop. Thanks for your inputs with respect to the Petroleum Sector.
In April 1999, one of the largest PV projects in Fiji, the Naroi PV project on Moala Island in the Lau Group, was commissioned. Naroi is a large village by Fiji standards. As the administrative center of Moala Island, the village includes primary and secondary schools, a dispensary staffed by a full time doctor and nurses, a bank, post office and telephone exchange, police station, an airfield and wharf. The village has a metered water supply system installed and managed by Public Works Department. PWD technicians are based at a depot near the village. The village also has a diesel generator, which supplies power to the government offices. The households in the village are mostly using kerosene for lighting. Funded by the French government to a tune of approximately F$1 million and the Fiji government covering the local costs, the Naroi PV project is different from most similar projects in the region in that it is equipped with meters. As in the conventional power supply system, the standard meters are put in to record how much power a consumer has consumed. The meters in the Naroi PV project simply serves the same purpose but it also automatically cuts off the supply when the consumer does not pay for his power. It also automatically resumes supplying power when the consumer pays for his outstanding power bill.

Called Suncash prepayment meters, it is the solar version of the well known Cashpower prepayment meters installed by a few utilities in the region like the Fiji Electricity Authority, ELCOM in PNG, EEC and Enercal in New Caledonia and PUC in FSM.

Prepayment meters is a long standing solution to a institutional problem, the problem of the non-payment of power use. Most of the PV projects in the region have suffered from this institutional problem and it is the major threat to the sustainability of any rural electrification program. Prepayment meters have been tried in the island of Namorik in the Marshall Islands and have not fully served their purpose. The operating principle of prepayment meters is straightforward. Customers purchase a printed operating credit code from a vending station. In Naroi, the local post office sells the codes for a flat monthly rate of FS4.50. The credit code is entered by means of an integrated keypad on the meter. Customers receive one month of service. When operating credit expires, the meter automatically cuts off service without the need for intervention by a technician. The meters providing a warning to consumers and give a flashing warning light illuminates when the credit is close to running out.

According to the current rural electrification policy in Fiji, money collected at the Post Office by the sale of the operating credit code is deposited into a joint account of the Naroi community and the Fiji Department of Energy (DoE). The DoE will cover the maintenance in the first three years of the project as per the rural electrification policy guidelines. After the three years, the balance of the money collected would be returned to the community. From that point forward they are supposed to meet the on-going maintenance and management costs of the project. The monthly fee will also need to continue to be deposited in the account.

The project is a stand alone one providing for the basic household lighting only. An important advantage of individual PV systems, aside from minimal maintenance requirements, is that a breakdown in one household does not mean the entire village goes without light until repairs can be made. Each of the 170 systems on Naroi includes two Photowatt PWX 500 50 watt solar modules, with an expected life of 20 years, mounted on standard treated pine poles with utility grade galvanized, aluminum and stainless steel fittings. All connections are contained in sealed, weatherproof junction boxes. Wiring from PV system to each house is by buried conduit. The solar modules charge an Oldham 6MLTS 12 volt, 140 amp, open cell, deep discharge, lead acid storage battery with an expected life of 8 years. Batteries are fitted with gas recombination vent caps to reduce electrolyte evaporation. Charge regulation is provided by a Total Energie RMP 15 amp...
microprocessor charge/discharge controller with circuit breaker protection. Connected to each regulator is the Suncash prepayment credit code power meter. Lighting in each home is supplied by three high efficiency Solagen 11-watt PL fluorescent light fixtures and a 2-watt night-light. Wiring is to European standards and all lights are equipped with wall mount switches. Both the regulation unit and prepayment meter is sealed with steel wire and lead security seals to discourage tampering.

In addition to the above, an Oldham Demini 200 water deminerlalizer was installed at the PWD workshop to allow the PWD technicians to check the electrolyte levels and top up batteries with deminerlalized water as required.

Total Energie, a leading European assembler of PV systems, supplied the equipment for this project. The French consulting firm Transenergie was responsible for overseeing the smooth implementation of this project together with Fiji DoE’s Rural Electrification Unit. The Public Works Department will carry out the continuing maintenance of the project and is to be performed every three months to coincide with the water meter readings, another responsibility of the PWD.

Further details on the Naroi project can be obtained from Messers Alexander Abbass, Transenergie Ph: (687) 27 23 27, Fax: (687) 24 11 27, e-mail: transenergie@canl.nc and Rakesh Singh of the DoE at Ph: (679) 386 355, Fax: (679)386 301, e-mail: DOE@itc.gov.fj

Electricity for Nubuyanitu Village in Navosa, Sigatoka

On June 28th relatives and friends of Nubuyanitu villagers gathered to witness the opening of its rural electrification scheme. Nubuyanitu, which is not accessible by road, is about 70 kilometers from Sigatoka.

For two years the women villagers raised funds collecting FJD4700.00 as their share of meeting the total costs of a diesel generator, which had to be airlifted to the village. The 52 families now have better light for their children to study. [Fiji Times, June 30]

FEA Rates and FEA Restructure

The FEA has dropped its rates by 1.5 cents per unit. A further reduction by 1.5 cents per unit would be effective from August 2000. This has been possible because of the continuing decrease in FEA’s debts. [Fiji Times 5 July]

The Prime Minister, Hon. Mahendra Chaudary, in Fiji has directed that the three companies formed to take over operations from the Fiji Electricity Authority (FEA) be disbanded. The PM directed the three companies boards to meet and wind up their operations. A government spokesman said that the directive was inline with an earlier decision to reverse the the restructure of the authority. The three companies - Powergen Fiji Ltd, Powerlines Fiji Ltd and Megapower Fiji Ltd were formed by the former administration last year. [Fiji Times 11 August]

FSM

More PV in Pohnpei State

The installation of 105 PV systems on Sapuwauhik Sea Atoll is just about to be completed. Funded by the Pohnpei State government, each system uses a 75 Wp solar module, 105 Ah 12 V battery and 2x15W Corporation is managing this project and is collecting a monthly fee of USD5 from the users. The project is a turnkey one, installed and managed by the Independent Energy Solution of San Marcos, California can be obtained from Tony Actouka of the Energy Office, Pohnpei at Tel: (691) 320 2646 and Fax: (691) 320 5854 or Troy Strand of Independent Power Solution at energy@indenergysolution.com, fax: (760) 752 9758.

KIRIBATI

SEC Renamed to REU

The Kiribati Cabinet has approved that the name of the Solar Energy Company (SEC) be changed to Rural Electrification Utility (REU).

This change of name is a reflection of Kiribati’s government’s vision on the electrification of its outer islands. Whereas SEC was only focussing on solar PV, the Kiribati government would now like it to extend it areas of operation to other renewable energy sources and including diesel generation. With this expanded responsibility the REU would be looking at identifying the most cost-effective energy source for the major group of consumers in the outer islands. The REU is currently doing this exercise for the REU. The REU has also begun exporting solar energy controllers to Bhutan, the first time a Kiribati assembled electronics component has been exported to an Asian country. REU’s General Manager, Terubentau Akura said that 100 controllers were ordered from Bhutan, the largest order the company has received from outside the region. The REU has earlier exported solar PV parts to Fiji and Tonga.

The Butaritari Island Energy Survey

The Energy Planning Unit in Kiribati has just completed an energy survey on the island of Butaritari which has a population of 4000 people. The survey looked at the energy supply and consumption of the households, the business sector and the communal and public institutions. Mau Tenang is taking the leading role for this survey and is currently preparing an analysis of the survey results. The result of the survey will be used by the EPU for its energy planning purposes.

NIUE

Gloria on the Climb

The Energy contact in Niue (Miss Gloria Talagi) has been promoted to the position of Head of the Niue Planning Office. Gloria’s promotion was effective in April.
FEATURE ARTICLE

THE AOSIS WORKSHOP ON CLEAN DEVELOPMENT MECHANISM (CDM)

This article has been taken from the AOSIS Workshop on Clean Development Mechanism (CDM) held on 14 – 16 July 1999 at the Republic of the Marshall Islands. This is a reprint of the opening statement by His Excellency The Honorable Imata Kabua, President of the Republic of the Marshall Islands and followed by the Majuro Statement on Climate Change.

Statement by His Excellency
The Honourable Imata Kabua,
President of the Republic of the
Marshall Islands

“For some of you this is perhaps your first visit to an atoll country such as ours. By now you will be getting a better understanding of our vulnerability to climate change and sea level rise, and why my Government has been taking an active role in the negotiations on this issue. To my mind the situation is very clear. Although economic growth and high standards of living are being enjoyed by some, others are having their livelihoods and dignity endangered. If no action is taken at an early stage, then we will all soon see the results in the destruction of many Small Island Developing States and low lying coastal areas. It may seem to be a simple question, but we have found that there are no easy answers. This CDM may have great potential, but it must be devised in such a way that it will function effectively. The way forward is for all to cooperate fully and constructively.

I would be very happy to see this workshop come out with a clear statement in which such cooperation can be directed for all of us, so that we can act firmly and decisively on the question of climate change. Part of this action must be to ensure that the CDM becomes a credible tool for the fight against climate change. We set out to save the planet from destructive and irreversible climate change. Let us take that as our focus. Let us not be side tracked by discussions on how costly the necessary measures will be. But let it be said, that if we are to talk about costs, can we really afford the loss of land and cultures, can we really afford to make this planet uninhabitable?

The climatic changes of this century have greatly influenced the global environment. Here in the Marshall Islands we have witnessed our seashores being eroded day by day, reducing our very limited land area. The rising sea level has washed away some of our burial grounds, a very sad situation for our people, and also an environmental concern. Situations like this could be avoided in the near future and beyond if only we, as the global community, could manage our resources and our environment in a prudent manner.

A few miles from here there stands a memorial to the victims of the typhoon of 1918. This was regarded as a hundred year storm, which we are to a large extent spared here in the Marshall Islands. In our history these islands are the gift from God, the safe haven away from the storms of other areas. We have been safe here for almost two thousand years. That storm was repeated many times in the 1980’s and 1990’s to varying degrees. There have been many other extreme weather events like storm surges. We can not remain silent against the danger of climate change, and we rely to a great extent on the Alliance of Small Island States to help us. We also count on the cooperation of our friends in the industrialized countries to take the necessary actions as required by the principles of the Climate Change Convention. It is for these reasons that I hope for a successful outcome to your deliberations as the first steps in a new process towards clean development and climate protection.”

The Majuro Statement on Climate Change

The Participants in the Alliance of Small Island States (AOSIS) Workshop on the CDM of the Kyoto Protocol to the United Nations Framework Convention on Climate Change:

Having met in Majuro, Republic of the Marshall Islands, from 14 to 16 July 1999;

Expressed their gratitude to His Excellency the President, the Government and the People of the Republic of the Marshall Islands for their timely invitation and generosity in hosting the workshop;

Recognized the importance of this first AOSIS workshop, and the significance of holding it in a low-lying small island State, noting that the Marshall Islands is acknowledged in studies by the Intergovernmental Panel on Climate Change (IPCC) to be especially vulnerable to the impacts and consequences of climate change. They also recognized that the situation and vulnerability of the Marshall Islands reflected the condition of other small island States, and underlined the urgency and seriousness of the concerns of the AOSIS countries;

Welcomed the presence at the workshop of important developed country partners, the United Nations and regional organizations. AOSIS expressed deep appreciation for their generosity and support for the
PAPUA NEW GUINEA

National Energy Policy ready for adoption

The PNG Department of Energy has just completed the drafting and the consultations on its national energy policy based on earlier initiatives and drafts provided from the former Regional Energy Unit. This process has taken three years to complete. The draft policy is now submitted to the PNG Cabinet for adoption.

TONGA

PV Systems on the Increase

Two new PV projects have been commissioned in Tonga this year. The islands of ‘Eueiki and Tafahi have been blessed with PV lighting systems. The NZ government generously donated T$55455 for 33 PV systems on the island of Tafahi. Each system has two Solarex/Golden Genesis 50 watt peak panels, 1 Stecco 3000 105 AHs 12V Lead Acid battery, 1 SEC 03/93 20Amp 12V charge/discharge controller, 2x10 watt lights and a radio adaptor.

On the island of ‘Eueiki, the Australian government generously donated T$52088 for 26 PV systems. Each system has two Solarex/Solar Jack 50 watt peak panels, 1 Stecco 3000 105 AHs 12V Lead Acid battery, 1 SEC 03/93 20Amp 12V charge/discharge controller and 3x10 watt lights. Both projects were installed and will be managed by the Tonga Energy Planning Unit. With these two projects, the total number of PV installations that are managed by the Tonga EPU now stand at 579.

Tonga continues to look at wind

The Tonga EPU has reached an agreement with a Japanese company to install 2 anemometers possibly in Vava’u and ‘Eua to further investigate the feasibility of wind power generation in the Kingdom. The EPU plans to continue to use the equipment [the anemometers, data logger, lap top computer and tower] provided under the FSED wind-monitoring program in this new initiative and expand on value of longer wind records for analysis.

TUVALU

Workshop on Diesel Generators and Engines

The Energy Planning Unit in Tuvalu conducted a two weeks national workshop on Small Diesel Generator and Engines. The aim of this in-country workshop was to improve the knowledge and technical skills of operators who are currently employed by outer islands Kaupule on their rural electrification program. The workshop was fully funded by the AusAID under the Hawthorn Consulting Group’s training program. The workshop was conducted by Mr Malcolm Hodgkinson from the Trade and Industry faculty of the Southern Polytechnic in New Zealand.

VANUATU

More PV in Vanuatu

The Vanuatu Energy Planning Unit is presently working on a 50 million Vatu PV project funded by JICA. It is estimated that under the project, 200 PV systems will be installed. Each system comprises a 100 Wp module, a battery, four lights and a radio adaptor.

The French government is also funding PV systems for 48 sites in Vanuatu. These systems are being installed at schools and public institutions and provide for lights, refrigeration and VCRs. A possible second phase will focus on water pumping.

For systems in schools, the Department of Education is paying the EPU a monthly maintenance fee of 65,000 Vatu (100 vatu = US$1.00) for its 17 schools with PV systems. EPU is currently continuing work on its solar electrification policy.

Visitors

Mr Dinesh Chand, Senior Project Advisor-South Pacific with Meridian Energy of New Zealand visited the Energy Unit on 22 June to discuss opportunities for investments in the energy sectors of Pacific Islands.

Miss Antoinette Wickham, Engineer Environment from the Solomon Islands Water Authority visited the Energy Unit on Tuesday 29th June. She attended a workshop in Nadi and dropped by the office to discuss matters relating to solar and wind water pumps. Relevant materials were reproduced and provided to Miss Wickham.

Mr Noa Seru, Scientific Officer from the Fiji Department of Energy, but now studying at the University of Melbourne, visited the Energy Unit on 20th July and 6th August. Noa is currently doing an evaluation of the Fiji Nabouwalu Hybrid power project as part of the requirements for the completion of his MSc. Noa’s field study was financially supported by the SOPAC Energy Program.

Messers Ropate Suveinakama and Timoa Cokanasiga, both Fijian B.Tech students from USP visited the Unit on August 12 to talk and to collect resource materials on solar cooker and solar dryer designs.

Mr Tony Marjoram, Program Specialist, Engineering and Technology Division of UNESCO in Paris visited SOPAC on August 22, 25 and 26. Tony was working together with Solomone of SOPAC on reviewing a PNG proposal to establish a regional training centre on renewable energy in PNG.
workshop.

Reaffirmed the ultimate objective as laid down in Article 2 of the Convention, and recognized the commitments of Parties included in Annex I under Article 3 of the Kyoto Protocol as an important first step in reaching this objective;

Noted the high importance of domestic action in achieving these commitments and that the CDM (CDM) can be an important tool for complying with part of these commitments through projects in countries not included in Annex I of the Convention to assist them achieve sustainable development and contribute to the ultimate objective of the Convention;

Noted further that the CDM must become a credible and viable mechanism of the Kyoto Protocol and that the certified emission reductions generated by the CDM must be additional to that which would have otherwise occurred and should have real, measurable and long-term benefits related to the mitigation of climate change;

Stressed that the developing countries, in particular the least-developed and small island developing States among them, because of their vulnerability to the adverse effects of climate change and exposure to natural disasters, require special capacity-building initiatives;

Stressed further that vulnerability assessment and adaptation are of the highest priority to members of AOSIS and that the implementation of adaptation activities require, as essential components, capacity building and the transfer of technology, and noted also the importance of renewable energy to small Island States;

Resolved to work together constructively to make substantial progress on the decisions contained in the Buenos Aires Plan of Action, within the timeframes set out therein, and for a timely entry into force of the Kyoto Protocol, while accommodating the needs and reasonable expectations of all Parties;

Resolved also to work together to coordinate donor activities and domestic priorities to more effectively address capacity building and adaptation needs of small island developing States, and recognized the Norway SIDS workshop, Australia’s South Pacific workshop and the SPREP Climate Change conference and roundtable in the Cook Islands as key opportunities for addressing these;

Called for further work to be done on the issue of adaptation technology especially for coastal zone management and protection; and

Requested AOSIS and the delegation of the Republic of the Marshall Islands to bring this Statement to the attention of the international community, in particular through the 22nd special session of the United Nations General Assembly to review the Barbados Program of Action on the sustainable development of small island developing States, the Conference of the Parties to the Climate Change Convention at its 5th session and to the relevant regional workshops and meetings.

---

Report from the International Workshop on Sustainable Development in the Small Island Development States
Lofoten, Norway 18 – 20 August 1999

The following article has been prepared from the official report circulated following the International Workshop on Sustainable Development in the Small Island Developing States held in Lofoten, Norway from 18 – 20 August 1999. The workshop was hosted by the Government of Norway ans forty-five experts from 22 countries, including 14 from small island developing states (SIDS) attended, including various UN agencies, the EU, regional organisations and private sector firms.

The objective of the workshop was to build on the AOSIS workshop held in Majuro, Marshall Islands in July 1999 that has been reported on above.

In particular the workshop addressed the major and priority issues confronting SIDS, namely climate change, sustainable management of the marine environment, and energy. This was in preparation for the UN General Assembly Special Session (UNGASS) on Small Island Developing States and aimed to extend and deepen the dialogue on challenges and opportunities for small island developing states (SIDS).

The workshop was reported in six sessions and we have provided a summary of the first five sessions and reprinted the full text of session six for your information.

The main message from the meeting was focus on issues that to unite rather than those that are likely to cause confrontation.
Session One: Sustainable Development & SIDS, Brighter Horizons for SIDS

Small island developing states face unique opportunities and challenges in confronting sustainable development issues. This session focused on those issues, and how they might be dealt with. The Barbados Programme of Action (BPoA) was presented as a road map that spells out the challenges faced by these countries and gives directions for solutions. Two priorities were mentioned in how to strengthen the BPoA, implementation at the international level and the strengthening of partnerships through increased capacity building and institutional strengthening of infrastructures is needed. The need for co-ordination was, therefore, stressed by all participants.

The need for a vulnerability index on socio-economic and environmental parameters, which takes fully into account the special circumstances and vulnerabilities of SIDS, was highlighted.

Co-operation, co-ordination and collaboration were key words used throughout this session. This included co-operation among governments, UN agencies, and domestic and international non-governmental organisations. Technical co-operation and assessment and follow-up will be important in furthering the implementation of the BPoA.

Session Two: SIDS and the Climate Change Negotiations

This session reported on the AOSIS workshop in Majuro, Marshall Islands and recognised that SIDS continue to play an important role in the climate change negotiations. The Kyoto Protocol was seen as a compromise instrument that will require further technical elaboration to enter into force. The operationalisation of the Kyoto mechanisms (international emissions trading, joint implementation and the clean development mechanism) are seen as vital elements to the ratification process. However, disappointment was expressed on the lack of progress since Kyoto. In particular, progress with implementation of the FCCC Articles 4.8 and 4.9 where two distinctly separate issues - the environmental and physical effects of climate change and the perceived economic impacts of response measures.

Session Three: Sustainable Energy Opportunities and Obstacles in the SIDS

Focussed on the supply and use of energy that has significant social and economic implications for SIDS, including implication through local as well as global environmental issues. SIDS often pay very high prices for energy services, and suffer significant environmental consequences from the use of certain energy fuels.

It was, therefore, strongly underlined that the focus on energy in the BPoA and the preparation for the UNGASS are crucial for SIDS. It was also noted that the ninth Commission for Sustainable Development (CSD 9) and the preparations for CSD 9 provide a much-needed opportunity to move forward on these issues.

Sustainable energy refers to those energy activities that support economic, social, environment and security challenges that all countries face. This session looked at why and how SIDS should focus on sustainable energy maximising the existing renewable energy sources of sun, wind and ocean. The introduction of demonstration projects was considered to be one way to influence how utilities conduct business in the future.

Session Four: Sustainable Management of Marine Living Resources

Discussed the situation faced by SIDS in the area of sustainable management of marine living resources. Although this session focused primarily on the fishing industry other areas of importance were raised which included institutional strengthening and capacity building, enhancing conservation and management, improving post-harvest management and marketing, safety at sea, strengthening the role of national fisheries industries and the privatisation of fisheries investment.

Session Five: Sustainable Development Tools

Focussed on three areas, namely technology, a vulnerability index, and data collection. The Internet bridges the SIDS, providing a logical means to co-ordinate the global agenda on SIDS, noting that providing accurate and current information is important not only for the public but also for policy makers.

In addition and of relevance to SIDS is a software application for environmental reporting enabling comparable reports on the state of the environment. The South Pacific Applied Geoscience Commission (SOPAC) has been developing an environmental vulnerability index (VI) with the objective of replicability of the index to non-Pacific SIDS. The process of collecting data under the VI was also seen as a valuable activity for SIDS, especially in assessing the vulnerability of areas to climate change. Co-ordination between international organisations was stressed as a necessary component in gauging how international agreements are being implemented.

It was suggested that the SIDSnet and UNEPnet with relevant organisations could explore the possibilities of a pilot project to develop a SIDS environmental reporting system. The VI should be recognised as a diagnostic tool, but SIDS should seek to implement solutions at a national level as well as to seek support from international partners.
Session Six: The Way Forward

This session focused on the themes that emerged during the course of the Workshop. These discussions centred on the need for co-operation, collaboration and co-ordination.

Regional co-operation is vital in the sustainable development efforts of SIDS. It is one of the essential elements of the BPoA. Regional institutions and their role in the implementation of the BPoA, including creation of institutions where they do not exist, need to be strengthened. Consultations and co-operation should be encouraged among countries of each region, and among AOSIS regions. The functioning of regionalism should allow for relative efficiency and cost-effectiveness. It is, for SIDS, a measure of self-reliance.

The role and support of the UN system and other donors in the implementation of the BPoA is essential. There is a need for a full consultative process and a more co-ordinated approach by all donors. The strengthening of the existing UN SIDS Unit and the creation of similar dedicated units within the relevant UN agencies could be part of the co-ordination process.

There is urgent need to develop and strengthen communication systems and information links within SIDS and among SIDS regions. SIDSnet is vital in this connection, and generally in the implementation of the BPoA. Though still in its infancy, SIDSnet holds real potential for outreach to and among SIDS in respect of sharing information among SIDS, providing relevant and needed information to decision makers in other countries, and contributing to the integrity of data collection.

In SIDS, there are significant and important sustainable development needs linked to energy. There is need for policy change and political support for new energy initiatives, and more focus needs to be placed on questions like new and renewable sources, new and relevant energy technologies, and energy efficiency and sufficiency.

There is also a high-priority need for capacity building and for the use and sharing of relevant technology. It will be crucial to build on the capacity and knowledge that currently exists in universities and other organisations in the region.

Steps should be taken to strengthen partnerships, within SIDS, and with donor countries and their institutions. New and creative partnership arrangements should be explored, including those with private and business interests, non-governmental organisations and civil society communities. The outcomes of the Donor/SIDS meeting in February 1999 should be examined, and a clear response on how to proceed on project proposals should be encouraged.

In line with the spirit of the AOSIS workshop, participants felt that we should concentrate on issues that hold out the promise of agreement and co-operation, and not those likely to produce confrontation and division. The results of this workshop should be carried to other places and fora.

Ultimately, the sustainable development of SIDS and the success of the BPoA will depend on SIDS’s own efforts and their primary responsibility and ownership of the BPoA. Many are already engaging in considerable implementation activities and in structural and modernising systems and policy reform. SIDS needs every encouragement and support in their endeavours towards self-sufficiency and sustainable development.

---

Visit our web site www.sopac.org.fj and visit our Energy Unit web page: www.sopac.org.fj/eng/

The PEN is available in our web page: www.sopac.org.fj/publications/default.htm; SOPAC, SOPAC DATA ACCESS, THE VIRTUAL LIBRARY

Please note that this issue will also be send by e-mail to those for whom we have e-mail addresses. For those who have received this issue by regular post, but have an e-mail address and would prefer to receive your next issue by e-mail please e-mail us letting us know.
MEETINGS / WORKSHOPS / STUDIES / VACANCIES

Meetings/Workshops/Energy Studies


Special lectures on the current status and the prospects of 100 kW OTEC demonstration plant in India and many reports of new projects of Deep Ocean Water Application and OTEC in Japan and other countries. Contact Mr Haruo Euhara

Ph: +81 952 28 8624
Fax: +41 952 28 8595
E-mail: ikegami@cc.saga-u.ac.jp


With the recent rapid growth in China’s GDP, energy demand creates an unbearable pressure on the environment, resources, capital and transportation. China has now confirmed the exploitation of new and renewable energy as well as the promotion of energy saving technology as an official energy policy. New Energy 2000 is assured to be an ideal platform for worldwide exhibitors to display their latest equipment and technology, and a most effective channel to promote international cooperation with the Chinese counterparts. Contact CoastalInt’lExhibition Ltd Ph: (852) 28276766 Fax: (852) 28276870 E-mail general@coastal.com.hk

Vacancies

Executive Director

The Foundation of the Peoples of the South Pacific International (FSPSI) is a Regional non-governmental organization with a focus on integrated community development in the Pacific Island States. The FSPSI headquarters is based in Port Vila, Vanuatu, with independent affiliated network agencies in Papua New Guinea, Solomon Islands, Vanuatu, Fiji, Kiribati, Tonga, Tuvalu, Samoa, Australia, UK and USA.

The FSPSI Board of Management, composed of representatives from the Boards of its eleven member agencies, is seeking to appoint a qualified Executive Director to carry out its work. The Executive Director is responsible directly to the Chairman of the FSPSI Board for the day to day operations of the Secretariat, including the supervision of Secretariat staff. Candidates are sought who have 10+ years of experience and a proven track record of successful development management and fundraising. Contact FSP International, ATT: EXECUTIVE DIRECTOR POSITION, Email: fspl@wantok.org.vu. Postal: PO Box 951, Port Vila, Vanuatu for further details. Applications for this position close on 15 November 1999 for recruitment April 2000.


Ph +41-1-4630226
Fax +41-1-4630252

Millennium International Conference on Renewable Energy Technologies: Indian Institute of Technology Madras, India; 9 – 11 February 2000

The broad scope of the conference will be to:

- Take stock of the technological options for improving efficiency and minimizing the cost of renewable energy systems;
- Discussions of policy options for implementation with minimized cost in agricultural and other industrial sectors; and
- Linking international issues associated with the exploitation of renewable energy resources for sustainable development including environmental safety.

Contact Dr C Palaniappan, Organizing Secretary at Ph +91 452 858607, Fax +91 452 858607 and e-mail: pcn@vsnl.com

Educational Courses in Energy Studies

Murdoch University, Perth, Western Australia

Courses:
- Single Units for Professional Development
- Bachelor Degrees
- Post-Graduate Certificates/ Diplomas
- Masters Degrees
- Doctorate

These courses are offered by the Distance Learning Mode via Internet or printed material. Contact Dr Chris Lund by Tel: 61 8 9360 2102; Fax: 61 8 9310 1711; email: clund@acre.murdoch.edu.au ; web site: http://acre.murdoch.edu.au/ for further information.

Loughborough University, UK

MSc course in Renewable Energy Systems Technology. Fax:01509610031 email: L.L.Freres@lboro.ac.uk

European Photovoltaic Solar Energy

16th EU - PSEC Conference & Exhibition
Glasgow, May 1 - 5, 2000

28th IEEE - PVSC
Anchorage USA Sep 17 - 23, 2000

PV SEC 12 Cheju Korea
June 11 - 15, 2001

World Conference on PV Energy Conversion (WCPEC-3)
Osaka, Japan, May 12 - 16, 2003

Loughborough University, UK

MSc course in Renewable Energy Systems Technology. Fax:01509610031 email: L.L.Freres@lboro.ac.uk