

CLEAN ENERGY OPPORTUNITIES BULLETIN



Introduction

Winrock International prepared the following *Clean Energy Opportunities Bulletin* with funding from the US Agency for International Development (USAID) under the Leaders with Associates (LWA) Cooperative Agreement.



This is a revised and updated version of the *Renewable Energy State of the Industry Report* series of reports, which have been prepared and distributed on a quarterly basis to the RE industry and other stakeholders since 1999. The *Bulletin* provides information on recent developments in key countries in terms of market opportunities, policy, finance and projects for clean energy technologies.



Winrock International's Clean Energy Group (CEG) was established in 1989 to increase sustainable development in developing countries through the use of clean energy technologies, when and where they are the appropriate application. CEG provides technical and market-oriented assistance to public and private sector organizations to assist with deploying commercially viable renewable energy technologies and building local capacity.



US renewable energy companies have consistently identified market information as one of their most urgent needs. Considering the lack of a dedicated institution to play the market facilitation role and Winrock's network of well-established in-country offices and partners, CEG is in an excellent position to fill this gap by preparing and disseminating current renewable energy market information from key countries.



Contributors in this issue included:
Winrock International Brazil
AHPPER, Honduras
Winrock International India
REPSO Nepal
Preferred Energy Inc., Philippines
Solar Engineering Services, South Africa
YBUL, Indonesia



Brazil

Important Acronyms:

PROINFA Alternative Energy Incentive Program

SHP Small Hydro Plant

Macro Political and Macro Economic Environment

Government Regulates the PROINFA

President Luiz Inácio Lula da Silva signed a decree regulating the Alternative Energy Incentive Program (PROINFA). The PROINFA is an important instrument for the diversification of the national energy matrix, bringing higher reliability and security to the energy supply.

For further information, please see:

<http://www.mme.gov.br/noticias.asp?url=Noticias/2004/marco/30.03.2004.htm>

Minister Defines New Cornerstones of the Energy Sector

The minister of Mines and Energy, Dilma Rousseff, wants to stimulate new power generation creating partnerships between the state-owned generation companies Furnas, Eletronorte and Chesf and private companies for the construction of new hydropower plants, including Belo Monte project, and she intends to revive the thermoelectric program with the creation of an exclusively purchaser company for this source of energy.

For further information, please see:

<http://www.energynews.efei.br/anterior/EEN-030104.htm>

Ministry of Mines and Energy is Reorganized

The purpose of this reorganization, says Vice-Minister Tolmasquim, is to strengthen the Ministry's capacity in policy-making. " Now the Energy Ministry will reclaim the attribute of shaping the energy sector ," he adds. By the beginning of the rationing period (2001-2002), it was evident that the Ministry's leadership of the sector was losing steam. The electricity and oil regulatory agencies were, in many instances, replacing the Ministry in the restructured decision-making process.

For further information, please see:

<http://www.energynews.efei.br/anterior/EEN-030104.htm>

President Sanctions New Model of Energy Sector

President Luiz Inácio Lula da Silva sanctioned the new model for the energy sector. According to the Ministry of Mines and Energy, the new rules will allow, in the long run, energy tariffs reduction, while moving away from the risk from new blackouts, and yet attracting more investments.

For further information, please see:

<http://noticias.correioweb.com.br/ultima.htm?ultima=56083>

The Risks of New Energy Sector Framework

Despite their apparent resignation to the new energy sector regulatory framework, entrepreneurs in the energy sector are criticizing the rules recently approved by the Congress. The harsh criticisms site the new model as "mistaken and centralizing".

For further information, please see:

<http://www.abrace.org.br/clipping/noticia.asp?IdClip=8530>

Surplus of US\$ 4.2 Billion in January

The Brazilian economy shows a balance of US\$ 4.2 billion in January, half of the entire last year US\$ 8.5 billion accumulated performance and well above of the US\$ 713 million surplus in January of 2003. This performance may be the result of a recovery in the level of foreign investment, together with a lower level of overseas remittance of funds.

For further information, please see:

<http://www.gazeta.com.br/pt>

Clean Energy Financing

Companies Invest in Projects for PROINFA

Companies interested in participating in the Alternative Energy Incentive Program (PROINFA) are increasing investment in. The PROINFA anticipates, in its first stage, to provide incentives for 3.3 thousand megawatts (MW) of wind energy, small hydropower and biomass. Eletrobrás will buy the energy. In the second phase, the utilities would be obliged to buy 10% of their power demand from renewable sources. For more information, please visit: <http://www.nea.ufma.br/noticias/ler.php?id=17>

Clean Energy Equipment/Services Procurement Notices

No procurement notices were issued this quarter.

Partnering Opportunities

No partnering opportunities were identified this quarter.

Project and General News

Celesc Sets Up R\$ 500 Million Program for Construction of SHPs

Celesc, an energy utility that operates in Santa Catarina State, announced a program to finance the construction of Small Hydropower Plants (SHPs) with the objective to expand its own power generation from 3% to 12%. The project anticipates the construction of SHPs with total capacity of 200 MW, with foreseen investments of R\$ 500 million. The Celesc power generation fund aims to reduce the utility's exposure to problems, such as a possible lack of available energy in the marketplace. Besides guaranteeing the supply of a bigger portion of the energy that Celesc distributes, the project also reduces the exposure to price variations of the energy traded in the market.

Government launches Program to Diversify Power Plants and Guarantee Supplying

The PROINFA will be developed by means of a partnership between the Energy and the Environment Ministries. The program intends to diversify the Brazilian energy matrix through the production of wind energy, biomass energy and SHP energy. This would be complementary to the hydroelectric plants that form the base of Brazilian power supply. The program will create 150 thousand indirect and direct jobs. The PROINFA will

be supported by a special financing scheme from the National Economic and Social Development Bank (BNDES). BNDES may finance debts of up to 70% of the investment. Investors will be required to come up with equity capital of at least 30% of the project total investment.

Winrock International Brazil Activities

"Cascata Settlement" Celebrates First Phase of Biodigestion Project.

The Biodigestion Project was developed by the Winrock International Institute, together with grassroots organization, Jupará. Celebratory festivities (February 28 – 29) took place in the "Cascata Settlement", in the Cacao region, Southeastern Bahia, inaugurating the first phase of the Biodigestion. The first phase included the construction of a new 200-meter corral and the installation of the first of three biodigestors. The festivities brought together approximately 350 people. Winrock took this opportunity to market other renewable energy technologies and services. For further information, please visit the Winrock International Brazil Website: <http://www.winrock.org.br/>

Calendar of Events

7th Iberian-American Meeting of the Third Sector

May 16 - 19, 2004

São Paulo – São Paulo.

For further information, please visit the page of the event at: <http://www.iberio2004.org.br/site.htm>

IV Workshop Advances in Energy Studies: "Ecology-Energy Issues in Latin America"

June 16 - 19, 2004

São Paulo – São Paulo.

For further information, please visit the page of the event at: <http://www.fea.unicamp.br/energy/>



Honduras

Important Acronyms:

<i>AHPPER</i>	<i>Honduras Association of Small Scale Renewable Energy Producers</i>
<i>DGE</i>	<i>National Directorate of Energy</i>
<i>ENEE</i>	<i>National Electric Energy Company</i>
<i>CABEI</i>	<i>Central American Bank of Economic Integration</i>
<i>BGA</i>	<i>Banco Grupo el Ahorro Hondureño</i>

Macro Political and Macro Economic Environment

Government Awaiting World Bank Approval for \$55M Loan

The president of the Central Bank of Honduras, Maria Mondragon, said that in the next few days a mission from the World Bank will visit the country to evaluate the loan portfolio with the government. The Ms. Mondragon also stated that a \$55m loan is awaiting approval by the Director of the World Bank, which will be used to support public investment projects.

Also, in the middle of May, the country will also receive a mission from the IMF to review macroeconomic statistics such as inflation and economic growth. She indicated that the country "will try to have an annual evaluation that the IMF conducts on countries round the world, both those that do or don't have agreements [with the organization]."

Europe to Relieve Honduras of 90% of Debt by 2005

In a successful discussion with bilateral creditors, representatives of the Honduran government negotiated the immediate pardon of US\$147 million of the county's debt on Wednesday. This initial sum will be followed by the release of a cumulative total of US\$1.6 billion by the start of 2005 when Honduras reaches the Point of Completion in the Heavily Indebted Poor Countries (HIPC) Initiative. An additional relief of US\$210 million, which corresponds to the debt owed between 1 January 2004 and 30 June 2005, was also arranged.

President Ricardo Maduro said that this total of US\$357 million refers to resources that Honduras cannot pay. Among the countries that took part in the negotiations were Germany, Canada, Denmark, Spain, the United States, France, Japan, Holland and Switzerland. Marie Elena Mondragon, president of the Central Bank of Honduras, is confident that Honduras will be able to comply with the necessary regulations to qualify for the exemption due in 2005. Her job is to ensure that the

country is fulfilling the obligations laid down by the International Monetary Fund. The remaining 10% of bilateral debt will be negotiated with the respective countries directly with the aim of clearing all debts.

IMF Approves In Principle Three-Year Poverty Reduction and Growth Facility Arrangement for Honduras

In early February, The Executive Board of the International Monetary Fund (IMF) approved in principle a three-year, SDR 71.2 million (about US\$107.6 million) Poverty Reduction and Growth Facility (PRGF) arrangement for Honduras to support the government's economic program. The decision will become effective upon a further decision following the World Bank's Executive Board review of Honduras' Poverty Reduction Strategy Paper (PRSP), which is scheduled for February 26, 2004. At that time, Honduras will be entitled to the release of SDR 10.17 million (about US\$15.4 million). In addition, the Executive Board today approved SDR 4.3 million (about US\$6.5 million) for Honduras in additional interim assistance.

Following the Executive Board's discussion on Honduras, Agustín Carstens, Deputy Managing Director and Acting Chairman, said: "Honduras' new three-year PRGF-supported economic program has been developed through a process of social consultation and collaboration, in recognition that broad public support for the program is crucial to its success. In line with the PRSP, the overriding objectives of the program are to alleviate poverty and move the economy to a path of higher economic growth and lower inflation.

"To achieve these objectives, the authorities are committed to pursuing prudent macroeconomic policies and stepping up the implementation of structural reforms. Measures crucial to achieve the fiscal objectives of the program have already been taken. The program is based on private sector-led growth, with the public sector playing a supportive role by reallocating resources toward infrastructure and the social sectors and developing more transparent institutions. It envisages, among other things, a strengthening of the public

finances, a far-reaching financial system reform, and improvements in governance. Particularly important will be the reform of the public sector wage policy framework, which is essential to control the wage bill, and other measures to ensure that the fiscal targets for 2004 are achieved.

"Notwithstanding its strengths, Honduras' program faces important challenges—in particular, the approaching presidential elections, the limited implementation capacity, the vulnerability to external shocks, and the fragility of the financial system. The medium-term program addresses these challenges by establishing a clear framework for the sustained implementation of prudent macroeconomic policies and structural reforms. It will be important for the success of the program to deepen the broad political and social consensus that has underpinned the poverty reduction strategy. This is most likely to be achieved by further strengthening transparency and governance in public sector operations and by extending the national consultation process," Mr. Carstens stated.

The main objectives of Honduras' 2004-2006 economic program are to reduce poverty by reactivating the poverty-reduction strategy, and to strengthen growth by reversing the financial deterioration, implementing important structural reforms, supporting investment, and fostering trade liberalization.

Under the program, annual growth is expected to rise gradually from an estimated 3.2 percent in 2003 to 4½ percent in 2006-2008. The main pillars of the authorities' growth strategy are: a revival of private investment as key sectors are opened to private participation; complementary public investment in infrastructure; participation in regional free trade agreements, notably CAFTA; regulatory and other reforms to meet the goals of the National Competitiveness Plan; and governance, judicial, and political reforms.

For further information, please see:

<http://www.imf.org/external/country/HND/index.htm>

Honduras, IDB Sign \$25 Million Loan for Financial Sector Program

Top officials of the Honduras government and the Inter-American Development Bank recently signed a contract for a **\$25 million** fast-disbursing soft loan for a program to maintain the stability and solvency of the Honduran banking sector. Honduran Finance Minister José Arturo Alvarado and IDB President Enrique V. Iglesias signed the document in a ceremony held during the annual meeting of the Bank's Board of Governors in Lima, March 29-31.

The program supported by the IDB will assist the Honduran government's efforts to bolster bank supervision, improve financial information systems and introduce prudential norms based on the Basle core principles for effective banking. A key goal of the

program is to avoid potential fiscal crises triggered by bank failures. It also seeks to ensure a sound and solvent financial system, build trust among depositors and offer borrowers a reliable source of financing. This program reflects the IDB's strategy of helping Honduras ensure fiscal and macroeconomic stability and foster growth to reduce poverty. The program has been closely coordinated with other projects to be supported by the World Bank and the International Monetary Fund to strengthen the Honduran financial system in a comprehensive manner.

For further information, please see:

<http://www.iadb.org/NEWS/Display/CountryPR.cfm?Country=honduras&Language=english>

IDB To Support Honduras In Initiative To Improve Business Climate

The Honduran government and the Inter-American Development Bank signed an aide-memoire to collaborate on an initiative to improve the business climate in Honduras. The document was signed by Honduran Finance Minister Jose Arturo Alvarado and IDB Executive Vice President Dennis Flannery in a ceremony held at the Bank's headquarters in Washington, DC.

The IDB launched this initiative last year to complement its competitiveness programs in Latin America and the Caribbean. According to studies, among the factors that can stifle growth and private sector investments in developing countries are macroeconomic instability, legal uncertainty, corruption, scarcity of credit and a burdensome bureaucracy. Under the initiative, the IDB will help the Honduran government diagnose obstacles to the development of appropriate conditions for long term investments. Based on those studies, which will be consulted with Honduran civil society groups, an action plan to eliminate barriers will be drafted. The plan will provide a framework to guide IDB programs, loans and technical assistance to foster private sector competitiveness. The Bank and the Honduran government will also choose indicators to gauge progress towards the initiative's goals.

Clean Energy Financing

United Kingdom, IDB To Establish Enlace Trust Fund

Resources to Promote Social Inclusion and Poverty Reduction, with Focus on Central America

The United Kingdom and the Inter-American Development Bank signed an agreement to establish a trust fund to support poverty reduction and social inclusion projects in the poorest countries of Central America.

The British government will contribute £900,000 (around \$1.5 million) to establish the DFID-IDB Enlace Trust Fund, which will be administered by the Bank. These untied grant resources will be used to finance technical cooperation activities linked to the implementation of sustainable, effective and participatory poverty reduction strategies, in particular in Nicaragua, Honduras, Guatemala and El Salvador.

Among other areas, the Enlace Trust Fund will focus on promoting full participation of socially excluded groups and their representative organizations in development plans, programs and projects aimed at benefiting traditionally marginalized people. The new trust fund will focus on activities supporting the design, implementation and evaluation of IDB-financed operations. Activities may include designing participatory monitoring and evaluation systems, stakeholder analysis and capacity building to help beneficiaries play an active role in projects. In addition, it may support national discussions on social inclusion and exclusion based on race, ethnicity, gender or disability.

Central American Renewable Energy and Cleaner Production Facility

The Central American Renewable Energy and Cleaner Production Facility (“the Facility”) is a mezzanine and debt financing facility being developed with financial and institutional support of the Multilateral Investment Fund (MIF) of the Inter-American Development Bank (IDB). The manager of the Facility will be E+Co Capital. The Facility will invest in proven renewable energy technologies, energy efficiency and cleaner production projects in the seven countries of the Central American region (Costa Rica, El Salvador, Belize, Guatemala, Honduras, Nicaragua and Panama). The Facility will not be a private equity fund, but rather intentionally structured to utilize mezzanine-financing mechanisms such as subordinated debt, convertible debt, preferred shares and other quasi-equity instruments. The main objective of the Facility is to promote the use of renewable energy technologies for power generation and to improve the use of energy and other inputs for companies’ operations in Central America. The Manager will seek to identify 25-30 small and medium-sized enterprises (SMEs), with annual revenues of up to US\$5 million and less than 100 employees in the Central American region with strong technical and management teams that can benefit from the financing to be provided by the Facility. Eligible sectors include grid-connected renewable energy that utilizes proven technologies such as hydro, biomass, wind, and geothermal and alternative cogeneration schemes. The Facility can also invest in companies employing energy efficiency measures and cleaner production improvements.

Investments will be made in fixed cost projects and enterprises with contracted revenues through either long-term power purchase agreements (PPAs), energy

efficiency and cleaner production service agreements and performance contracts. Return on investments will be generated from fixed interest rate payments, predefined preferred dividends, partial minority shareholding conversions and golden shares. Investments will be exited through contractually pre-established repayment schedules, thus enabling a controlled and predictable exit of the Facility for each deal. The Manager will invest resources from the Facility following a diversification strategy that will limit investments by country, business sector and technology. The investment period is five years after which the Facility commences with the distributions to investors until the end of the term of 10 years.

The Manager expects a first closing by the third quarter of 2004 at a minimum of US\$15 million and a second closing with an additional US\$5 million one-year later for a total capitalization of US\$20 million.

Clean Energy Equipment/ Services Procurement Notices

No procurement notices were issued this quarter.

Partnering Opportunities

No partnering opportunities were identified this quarter.

Project and General News

Honduras, Nordic Fund Sign 6 Million Euro Loan For “Pro-Bosque” Forestry Program

IDB-Cofinanced Project Underscores Commitment to Sustainable Development in Rural Areas

Honduras and the Nordic Development Fund (NDF) today signed a 6 million-euro loan to support Pro-Bosque, a multiphase sustainable development program aimed at increasing the economic, social and environmental benefits generated by the Honduran forestry sector.

Honduran Finance Minister Jose Arturo Alvarado signed the document with NDF President James Lund Sorensen and Regional Director Jesper Andersen in a ceremony held during the annual meeting of the Inter-American Development Bank’s Board of Governors, which is taking place in Lima March 29-31.

This program reflects the cooperation among international organizations and bilateral aid agencies that support the sustainable development of Honduras’ forestry. The IDB has approved a \$17.5 million soft loan for Pro-Bosque, while NDF and a Swedish fund financed studies used in preparing the program. The IDB project team also coordinated with World Bank teams working

on projects concerning land tenure regularization and forest management in Honduras.

The Pro-Bosque program will address the constraining factors to help Honduras develop its forest resources in a sustainable manner and to benefit small and medium-size forestry enterprises, timber and lumber producers' associations, municipalities, rural communities and individual producers in poor areas with high potential for forestry.

Pro-Bosque will also provide resources to finance productive projects capable of yielding high social and economic returns on investments. Proposed projects should also promote the use of environmentally sounder methods and foster vertical and horizontal integration in the forestry sector to ensure a more equitable distribution of the benefits generated by the forests.

CABEI Will Commercialize Central American Region's Carbon Emission Reductions

The Central American Bank for Economic Integration (CABEI) agreed to offer services that will allow the region to have access to the international market for carbon emission reductions. Through the mechanism approved by the CABEI Board of Directors, the Institution will act as an agent for the negotiation and transaction of carbon emission reductions generated by Central American environmental projects.

At present, the Clean Development Mechanism or CDM, allows the industrialized countries to purchase emission reductions produced by developing countries. Given the Central American region's enormous potential to generate energy with renewable sources, at the outset the program will commercialize emission reductions produced by renewable energy projects only. In subsequent stages projects involving clean technologies and forestry, among others, will also be considered. In order to promote the region's participation in the commercialization of carbon emission reductions, CABEI has been financing projects in the renewable energy sector in Central America and other projects that have led to a significant reduction of the region's carbon emissions.

CABEI will act as a facilitator for the project developers, and also for the owners of the projects already financed by the Institution, for the commercialization of carbon emission reductions. This will generate additional income for the projects and the harnessing of new resources by CABEI to finance environmental and poverty reduction initiatives in the region.

The program will permit the region to channel resources from the international community toward regional environmental projects that minimize the countries' vulnerability and promote the region's participation in the worldwide carbon emission reductions market. This service offered by the Bank falls under the framework of

its environmental policy and reaffirms its commitment to include the environmental component in all its credit operations and the Institution's internal practices in order to promote and strengthen the financing of environmental and sustainable development projects in the region.

CABEI's environmental policy has been strategically oriented toward projects that are economically, socially and environmentally sustainable with efficient prevention and mitigation measures in order to conserve Central America's natural patrimony.

For more information, please see: www.bcie.hn/org

AHPPER Activities

AHPPER staff and member participated in a recent workshop, Financing of Renewable Projects in Honduras, held January 21-22. The workshop's objective was: to encourage participation of different actors in the energy sector; to identify viable solutions to improve the conditions of financing of projects of renewable energy and, to strengthen the technical-financial capacity of private investors.

The workshop was sponsored by the Presidential Commission of Modernization of the State with the support of the Central American Bank of Economic Integration and the active participation of AHPPER.

Section 6.

Calendar of Events

No clean energy events planned for the next quarter.



India

Important Acronyms:

BJP *Bharatiya Janata Party*

CMIE *Center for Monitoring Indian Economy*

Macro Political and Macro Economic Environment

India Elections 2004

India's two main parties, the Bharatiya Janata Party (BJP) and Congress, are racing to strike alliances with regional political groups as the country prepares to hold parliamentary elections.

In 1999, the BJP formed alliances with regional groups before the election, and contested the polls under the banner of the National Democratic Alliance—a group of about 22 parties. Those parties make up as much as 40% of the present government. The Congress party dominated Indian politics for nearly 45 years after the country became independent in 1947. It traditionally relied on support from minority groups and lower castes, and supported secular policies. However regional groups have now seized much of this power base.

Political analysts say regional parties have become strong because national groups cannot effectively address local aspirations in a country of a billion-plus people with vast religious, ethnic and caste diversities. Some say a fragmented Parliament has made deal making a primary focus of Indian politics. Others say coalition governments have worked better than expected for India, giving a greater voice to all parts of the country. They also point out that in the past five years, the BJP's allies were able to ensure that the party set aside some of its controversial Hindu-nationalist policies. Opinion polls indicate the BJP led coalition is likely to return to power.

For further information, please see:

<http://www.voanews.com/article.cfm?objectID=CCFEBDA9-4175-4544-85EDAA8CDC6428C5>

Economic Growth Expected to Slow to 6.3%

India's economic growth is expected to slow to 6.3% in the financial year to March 2005 as output in the country's huge farm sector is seen waning. India was expected to grow by more than 8% in the financial year to March 2004 on the basis of record farm output after the best monsoon rains in a decade. The growth projection by the Center for Monitoring Indian Economy (CMIE) is broadly in line with what most economists expect, as many are unsure if stellar performances by the farm sector and the monsoon last year would be repeated. India's \$560 billion economy – Asia's third largest – has been on a roll in the past year. Foreign funds have poured in huge amounts of money on expectations that higher economic growth will bolster corporate bottom lines. Consumers have splurged on cars, motorbikes and mobile phones, encouraged by a drop in interest rates to nearly three decade lows, which is fuelling a construction boom as well.

An economist at JP Morgan said that while headline GDP growth will moderate to 6.5% in 2004/05, industrial activity would be at a multi-year high of 9% due to rising consumer spending. Foreign funds invested nearly \$8.0 billion in local assets in 2003 and have poured in an additional \$4.5 billion so far this calendar year. Their investments pushed up the Bombay stock market index by more than 70% in 2003 and helped the rupee hit nearly 51-month highs against the dollar last week. The central bank has absorbed a bulk of the inflows, leading to a record \$112 billion in foreign exchange reserves.

Ahead of national elections in April and May, the government has tried to promote the economic feel-good factor with an "India Shining" advertising campaign. But analysts say India could lose some of its luster for investors if the monsoon fails to deliver this June.

For further information, please see:

http://www.reuters.com/locales/newsArticle.jsp;407a65e1:ee619aab85345175?type=businessNews&locale=en_IN&storyID=4801334

Clean Energy Financing

No clean energy financing opportunities were identified this quarter.

Clean Energy Equipment/Services Procurement Notices

Distribution Reform, Upgrades and Management (DRUM) Project

(An RFP issued by USAID/India and recently awarded)

Objective: The project aims to utilize the services of an institutional contractor to provide technical assistance and training support to the Indian Ministry of Power, lead financial institution(s) and power utilities (including Discoms) in promoting and implementing distribution reform

The UNEP Sustainable Energy Finance Initiative (SEFI)

Objective: To address the need for the finance community to include environmental and climate issues in their investment decisions for new/replacement energy infrastructure in both developed/developing countries
For more information, contact: sefi@unep.fr / sefi.unep.org

ADB Energy Efficiency Fund for Asia

The Asian Development Bank (ADB) is backing a fund to help small and medium sized firms in Asia invest in energy efficiency and renewable energy employing clean energy technologies through an equity investment of US\$20 million.

Objective: The fund aims to provide equity capital, financial engineering, technical and carbon monitoring - related skills, and training to energy services companies (ESCOs) on a project-by-project basis. It will also collaborate with Asian-based ESCOs to deliver energy-efficiency services and renewable energy to selected industrial, commercial, and public sector customers. The fund, together with its Asian ESCO partners, will be in a position to offer a complete energy efficiency solutions, i.e., technical expertise to develop an energy savings plan, the ability to source the best equipment and implement the plan, and provide financing to make the whole plan happen.

Initially, the fund will focus on India, Malaysia, Philippines, and Thailand, whose governments are encouraging energy efficiency. As it generates momentum, the fund will evaluate opportunities in Bangladesh, People's Republic of China, Indonesia, Sri Lanka, and Viet

Nam, where opportunities and incentives for energy efficiency are just starting to evolve.

Water-Energy-Nexus Activity (WENEXA) 2

(A Request for Task Order Proposals by USAID/India)

The WENEXA II project is expected to be closely coordinated with the Distribution Reform, Upgrades and Management (DRUM) project and will emphasize end-use efficiency of agricultural pump sets, on-farm water management, and the sustainable use of groundwater resources.

Eligibility: Organizations registered under their GSA Environmental Services Contract

America India Development Alliance (AIDA)

(An RFP issued by USAID/India)

Objective: To establish an institution designed to foster durable development partnerships between US and Indian organizations

Small Grants Program (SmGP) of the World Bank

Theme: Civic Engagement For Strengthening Governance

Eligibility: Non-profit, non-governmental local/Indian organizations

Amount: Approximately US\$ 10,000

Contact: S Thangaraj, Senior Social Development Specialist/NGO Coordinator, The World Bank, New Delhi/India office

Energy Efficiency Capacity Building Initiatives

(An RFP issued by the Indian Renewable Energy Development Agency with IBRD/IDA/GEF funds)

Objective: To conduct/organize specialized training for various stakeholders under their energy efficiency capacity building initiatives

Executing Agency: Northeast Frontier Railway - Assam

Due date: 21 May 2004

Scope: a) Supply of Solar Photovoltaic System for Charging the Maintenance Free Valve Regulated Battery 48 V/200 AH (b) Installation and Commissioning of Item (a) Quantity: 4 Systems

Contact: N.F.Railway H.Q., Maligaon, Guwahati 781011, Tel: +91(361) 2570557; Email: cpro@nfr.railnet.gov.in, Email: www.nfr.railnet.gov.in

Executing Agency: National Institute of Ocean Technology – Tamil Nadu

Due date: 21 May 2004

Scope: Supply of Solar Panels

Contact: National Institute of Ocean Technology,
Velacherry-Tambaram main road
Narayanapuram, Chennai, Tamil Nadu, INDIA - 601 302,
Tel : 91-44-22460063 / 22460064/ 22460066/ 22460067,
Fax : 91-44-22460645

Executing Agency: Rajasthan Renewable Energy
Corporation Ltd, Rajasthan

Due date: 30 June 2004

Scope: Design, Engineering, Procurement, Construction,
Erection, Testing, Commissioning and Initial five year
Operation and Maintenance (EPC cum O&M contracts)
for (1) the Solar Portion and / or (2) The Combined Cycle
Portion and / or (3) the turnkey ISCC (in this case the
bidders shall also hand in separate bids for the Solar
Portion and for the Combined Cycle Portion)

Contact: Rajasthan Renewable Energy Corporation Ltd.,
E-166, Yudhister Marg, 'C' Scheme, JAIPUR – 302004,
Tel: 0141- 2384055, 2384077, Fax:0141-2381528

Executing Agency: Tamil Nadu Cooperative Milk
Producers Federation Ltd

Due date: 21 May 2004

Scope: 1) Providing solar power fencing at NJF Complex
and Kakkathope Fodder Farm to avoid entry of wild
animals, 2) Providing solar lighting at the Kakkathope
Fodder Farm (20 nos.)

Contact: Tamil Nadu Cooperative Milk Producers'
Federation Ltd, Aavin Illam, Madhavaram Milk Colony,
Chennai 600051, Ph: (044) 5555531-5, Fax: 044-5555638
Email: mdaavin@satyam.net.in, Website:
<http://www.aavinmilk.com>

Partnering Opportunities

GAMESA Eolica, a Spanish firm, plans to set up a joint
venture company with the Pioneer Asia group of Sivakasi,
Tamil Nadu, to manufacture its wind turbines in India
before the end of 2004. Gamesa would have a majority
stake in the venture.

To begin with, Gamesa will sell seven turbines to a
company belonging to the Pioneer Asia group. The
turbines will be installed at Muppandal in Kanyakumari by
Ayyanar Spinning Mills Ltd, Virudhunagar, at Rs 26 crore.
The seven 850-kW capacity turbines will be imported
disassembled and will be assembled by Pioneer Asia Wind
Turbines, a division of the Pioneer Asia group, at its plant
in Pondicherry. The Pioneer Asia group has so far invested
Rs 6 crore on the wind turbine manufacturing facility and
more investments will be made in training its technicians.
Indian Banks would fund the installation of wind turbines.
These generators would meet about 60% of the company's
energy requirement. The Pioneer Asia group based in

Sivakasi has interests in textiles, safety matches, fireworks
and chemicals.

Gamesa Eolica is part of the Gamesa group, which has
interests in energy and aeronautics. The energy division,
apart from manufacturing wind electric generators, invests
in wind farms across the world. It has interests in solar
energy and biomass. The energy division contributes to
60% of the 1.5 billion Euro turnover of the Gamesa group,
with the aeronautics division contributing the balance.

For further information, please see:

<http://www.thehindubusinessline.com/2004/01/23/stories/2004012301980200.htm>

Project and General News

South Asia Energy Ring

The SAARC summit in January 2004 adopted a 43-point
Islamabad Declaration with a renewed pledge to intensify
economic cooperation and eradicate poverty in South Asia
(Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and
Sri Lanka). The seven-page Declaration also focused on
science and technology, social, cultural and environment
as well as on SAARC award, Information and Technology,
SAARC integrated program of Action, sub-regional and
inter-regional cooperation. A study on creating a South
Asian Energy Cooperation, including the concept of an
Energy Ring, should be undertaken by the Working Group
on Energy, the Declaration said.

nation.ittefaq.com/artman/publish/article_6844.shtml

India to Build Hundred Hydropower Projects

India has zeroed in on 100 hydropower projects that are
not only feasible but could be the source of cheap
electricity. "As part of the target set by Prime Minister
Atal Bihari Vajpayee in May 2003 to harness
hydropower to create 50,000 MW generation capacity,
we have completed the feasibility report for 100 projects
that will together account for 32,000 MW capacity," said
HL Bajaj of the Central Electricity Authority (CEA).

The state-owned National Hydroelectric Power
Corporation (NHPC), the National Thermal Power
Corporation (NTPC) and the North Eastern Electric Power
Corporation (NEEPCO) have offered to take up the task of
doing detailed project reports for some of the 100. The
detailed project reports will reduce the implementation
time by three to four years.

"We are looking for private investors to undertake some of these projects," said Bajaj. CEA hopes to implement these projects during the next two plans from 2007 to 2017.

In 2002, power-stressed India had set a target of doubling power generation capacity by 2012 with the creation of 100,000 MW of new capacity. Of this, around 41,000 MW is to be completed by 2007. So far 8,000 MW capacity projects have been completed.

Source: The Himalayan Times, 8 April 2004

Biofuels

Ethanol production in India may rise to 1 billion by 2004 to meet the demand for petrol-blending as the blend percentage is raised from 5% to 10% – most of it is expected to be met by the 118 distilleries attached to sugar mills. A capacity of over 700 million liters has already been added by about 70 plants to meet the 5% blending needs of the country. Another 300 million capacity is being installed.

Side by side, plans are moving ahead for biodiesel production. The Planning Commission has approved a Rs 800-crore project for establishing extensive plantations of jatropha the oil of which will be extracted for producing biodiesel. The project will be implemented by the National Oilseeds and Vegetable Oils Development Board (NOVOD), an autonomous body under the agriculture ministry.

Winrock International India (WII) Activities

Solar Photovoltaics Application Program in Eastern Uttar Pradesh

WII is implementing this program with a focus to improve access to clean energy and modern lighting to the remote villages of eastern Uttar Pradesh based on solar photovoltaic applications (mainly solar lanterns) through a market development initiative. Activities under this program include development of training modules, awareness generation campaigns for the local NGOs, self-help groups, and other stakeholders such as financial institutions, entrepreneurs, thereby developing a sustainable network. This is being funded by a Europe-based Foundation. For details, please contact Arvind Reddy at arvind@winrockindia.org

Renewable Energy in India: Business Opportunities Feb 2004 (funded by the Indian Ministry of Non-conventional Energy Sources) has been updated and published by WII. For copies, please contact Somon Paul at somon@winrockindia.org

WI, WII and the Institute for International Education are working together to implement the USAID-sponsored

South Asia Regional Initiative for Energy Cooperation and Development (SARI/Energy) Small Grants Program, and have awarded grants to several projects in the South Asian region that encourage regional cooperation in South Asia on issues of mutual regional concern in the energy sector. For details, please refer http://www.sari-energy.org/small_grants/index.html

The **Accelerated Renewable Energy Commercialization (ARECOMM)** is designed to help defray high up-front costs of developing small- and medium-sized renewable energy (RE) enterprises by providing long-term low-cost credit in the initial phase, strengthening entrepreneurial ability in developing business plans and linking entrepreneurs with financiers and financial services. The program funded a total of 8 projects across the RE sector with a major chunk to solar, followed by hydro and biomass energy plantations. WII has also helped these entrepreneurs access equity financing from a venture capital provider, while two other projects are awaiting approval of long-term commercial loans from a financial institution. The program facilitated induction of around Rs 20 million for the sector from 2001-04. Currently, the final report is under preparation. For details, please contact puja@winrockindia.org

As a result of the success of the pilot Solar Finance Capacity Building Initiative (SFCBI), the **Solar Finance Capacity Building Alliance (SFCBA)** was formed. Under a partnership-based approach of the Global Development Alliance Initiative of USAID, the main objective is to provide training to 5,000 branch managers with a view to increasing lending in the solar energy sector. Under this 3-tier training program, (i) four apex conferences have been organized with active participation from senior bankers to drive the program, (ii) 14 of the 20 proposed train-the-trainer programs have been completed where over 250 of the proposed 400 master trainers have been trained, and (iii) 12 of the 200 proposed branch manager training programs are underway, which would eventually train 5,000 branch managers, who are expected to lend an aggregate of Rs 750 million in consumer loans. This project has large potential for replication in the country and in other parts of the world. For details, please contact puja@winrockindia.org

Calendar of Events

Distribution India I: A Conference on Planning & Operations of Reliable Distribution Systems, 15-16 April 2004, New Delhi, India
Organized by: IndiaCore.com & Council of Power Utilities
Web: www.india-core.com

International Conference on Biofuels: Perspectives & Prospects 2004

September 2004, New Delhi, India

Organized by: Winrock International India

Contact: jai@winrockindia.org

First International Conference on Renewable Energy,

6-8 October 2004, New Delhi, India

Organized by: Central Board of Irrigation & Power

Web: <http://www.cbip.org/evntcbip.htm>

Power India 2004, 25-28 October 2004, Mumbai, India

Organized by: India-Tech Foundation

Contact: itf@india-tech.com

Web: www.india-tech.com

Energy Expo 2004, 3-5 of December 2004, Ahmedabad, India

Organized by: Confederation of Indian Industry (CII)

Contact: darryl.dasilva@ciionline.org or

abhijit.mukherjee@ciionline.org

FOR ALL OF THE ABOVE, PLEASE ALSO FEEL

FREE TO CONTACT ANITA KHULLER AT

akhuller@winrockindia.org or refer to our web site

www.winrockindia.org



Indonesia

Important Acronyms:

<i>DGEEU</i>	<i>Directorate General of Electricity and Energy Utilization</i>
<i>PLN</i>	<i>State Company Electricity Utilization</i>
<i>PLTD</i>	<i>Diesel Oil Power Plant</i>
<i>PLTG</i>	<i>Gas Power Plant</i>
<i>BI</i>	<i>Bank of Indonesia (The Central Bank)</i>
<i>GDP</i>	<i>Gross Domestic Product</i>
<i>CPI</i>	<i>Consumer Price Index</i>
<i>IMF</i>	<i>International Monetary Funds</i>
<i>SBI</i>	<i>BI promissory note</i>
<i>ADB</i>	<i>Asia Development Bank</i>
<i>YBUL</i>	<i>Yayasan Bina Usaha Lingkungan</i>
<i>Trn</i>	<i>Trilliun</i>
<i>Bn</i>	<i>Billiun</i>
<i>PLTP</i>	<i>Geothermal Power Plant</i>

Macro Political and Macro Economic Environment

The 2004 Elections

Despite the claims of economists and financial experts regarding impressive progress in economic reform over the last three years, the public mood in Indonesia remains one of deep distrust. People worry about jobs and not national income statistics. Unemployment matters. It is commonplace to hear that Indonesia is too poor to have an unemployment problem. This is splitting hairs. Open unemployment remains higher than many industrial countries and the wide prevalence of underemployment means that people cannot make ends meet even when willing to work long hours at low wages. For further information, please see:

(www.thejakartapost.com/outlook/pol04.asp).

Information of detail result of election link to :
www.presidentri.or.id

Good governance, or perish

Most Indonesians are undoubtedly grateful for the consolidation of macroeconomic stability they experienced in 2003. At a time when the growth rate accelerated slightly, inflation was tamed at an annualized rate of less than 6 percent. The rupiah gained strongly against the U.S. dollar, although it lost heftily against the Australian dollar and Euro. In spite of a diminishing current account, surplus foreign exchange reserves continued to increase thanks to the resumption of capital inflow, which in turn pushed stock prices substantially up. Notwithstanding the

planned exit from IMF's Extended Fund Facility (EFF), confidence in macroeconomic policy strengthened, partly because of the credibility of the policy package that the government adopted to replace the IMF-backed Letter of Intent (LOI).

For further information, please see:

(www.thejakartapost.com/outlook/eco01.asp)

Inflation: Prices down by 0.22 percent in February

The consumer price index (CPI) fell 0.02 percent in February from the previous month as the rice harvest and a stronger rupiah resulted in lower prices for foodstuffs and lower education and recreation costs. The Central Statistics Agency (BPS) also reported on Monday that year-on-year inflation during the month was 4.6 percent, the lowest in four years. The CPI is an index of the prices of consumer goods. "There is a possibility that deflation will occur again in March, especially if the quality of the rice harvest is not good because of the rain. This will result in lower prices," said BPS deputy chief Slamet Mukeno during a press conference.

The rice harvest started in the latter part of January. Standard Chartered Bank economist Fauzi Ichsan said that the lower prices were not surprising given the fact that the rupiah had been strengthening for quite some time. "The stronger rupiah has made imported goods cheaper," Fauzi told *The Jakarta Post*. The country's production system is heavily dependent on imported raw materials. He said that this situation should also provide room for the central bank to further cut its benchmark interest rate.

For further information, please see:
(www.thejakartapost.com/detailweekly.asp?fileid=20040302)

Clean Energy Financing

IMF Reviews Indonesia's Economic Progress.

For the first time since Indonesia's contract with the International Monetary Funds (IMF) came to an end, an IMF team has arrived in Jakarta to review economic progress in Indonesia. "This review is part of the post-program monitoring," said Minister of Finance Boediono in Jakarta on Monday. Indonesia stated in November 2003 that it did not want to continue to stop the IMF program and chose to have the post-program monitoring. Because of this, the IMF team will come twice a year to Indonesia to review the economy. "They come to give their evaluation on our economy," said Boediono.

For further information, please see:
(www.tempo.co.id/hg/ekbis/2004/03/05/brk.20040305-02.uk.html).

Energy investors come back to Indonesia.

Indonesia has started to regain the confidence of energy investors, largely due to the successful resolution of disputes with independent power producers (IPPs), a senior official said on Friday. Minister of Energy and Mineral Resources, Purnomo Yusgiantoro, told a discussion at *The Jakarta Post* that proposals from IPPs to set up new power projects had been on the rise.

The government, which until recently was gripped by worry over a possible power crisis, has become more optimistic that such a crisis will not materialize. "The investment climate (within the power sector) has been improving," Purnomo said. He did not elaborate on the number of power project proposals the government had received but said Sumatra, Kalimantan and Java were the regions that had attracted most investors.

Indonesia was embroiled in disputes with dozens of leading global power investors for years after the economic crisis, following the government's decision to suspend most of the power projects, and state electricity firm PT PLN's refusal to honor the contracts. After years of negotiation, the government managed last year to settle disputes with all 27 IPPs.

For more information, please contact:
Mr. Ali Herman Ibrahim, Director Power Plant of
PT. PLN (Persero) - Kantor Pusat
Jl. Trunojoyo Blok M I/135
Jakarta 12160. Indonesia
Tel: +62 21 7251234

For further information, please see:
(www.thejakartapost.com/detailweekly.asp?fileid=20040306)

Clean Energy Equipment/Services Procurement Notices

No procurement notices were issued this quarter.

Partnering Opportunities

620 units SHS Installed in Bengkulu Province

Ministry of Energy and Mineral Resources Bengkulu province office will install 620 units SHS (Solar PV) in remote villages in Bengkulu province. Installed SHS in remote are is to increase economic activities of the community (home industry).

For further information, please see::
(www.pln.co.id/Dari_Media.asp?id=2956).

PT.Pertamina (Indonesia oil company)

Philippine National Oil Company (PNOC) and Marubeni Corporation agree to create the consortium to develop geothermal power plant (PLTP) in the three locations in Indonesia with total investment of US\$ 750 million. The locations is Ulu Belu PLTP (2 x 55 MW) at Lampung-South Sumatera, Lumut Balai PLTP (330 MW) at South Sumatera and Tompase Lahendong PLTP (60 MW) at North Sulawesi. The power plant will be in operation in 2007 connected to PLN grid system.

For further information, please see::
(www.pln.co.id/Dari_Media.asp?id=2901).
Contacts can be established with Mr.Lolo Panggabean at lolo@ybul.or.id or Mr. Suroso at rosso@ybul.or.id.

Project and General News

No Blackouts during General Election: PLN

Basuki Prajitno, PLN's general manager for power plant and load management said the firm has taken measures to ensure there would be sufficient power during the elections despite the fact there is no fresh supply from new power plants. "PLN would be able to supply 14,766 Megawatts (MW) for Java-Bali with a peak load expected to stand at 13,500 MW from March 4 to April 12," Basuki told reporters during a visit by Minister of Energy and Mineral Resources, Purnomo Yusgiantoro, at PLN's Jakarta office.

Operation reserves during the period would reach 1,200 MW or double the required minimum reserve of 615 MW to avoid disruption, Basuki said. On the ballot day, Basuki said peak load would stand at 10,700 MW or lower than normal working days. "PLN would maximize the performance of existing power plants," Basuki explained. Herman Darnel Ibrahim, PLN's director of transmission and distribution, said although power supply has been improving compared to previous years, it was still vulnerable to disruption. To prevent blackouts during the election, particularly during the vote counting using

For further information, please see::

(www.thejakartapost.com/detailbusiness.asp?fileid=20040309.L01).

or For more information, please contact: Mr.Lolo Panggabean at lolo@ybul.or.id or Mr. Suroso at rosso@ybul.or.id.

71 villages in Central Java Not Yet Electrified

Central Java will carry out a community-based electricity program, in addition to hastening the establishment of several power plants, to meet the increasing demand for power in the province, says governor Mardiyanto. "The provincial administration will encourage villages that are not yet electrified to partly finance the program so that they could enjoy electricity immediately,".

He said that the 71 villages had not been electrified because they were located in remote areas that could not be connected with the power networks belonging to the state-owned PT PLN. Mardiyanto explained that several villages could develop a village cooperative to represent them to work with the local administration to construct a power generator. He said the village cooperative would manage the power plant and distribute the power to the villages.

He also said that the demand for power has increased to 7,000 megawatts in line with the increasing number of factories and households in the province. With the existing power plants, the province can produce only 1,700 Megawatts. To meet the increasing power needs, he said, the provincial government has encouraged the central government and PLN to speed up several power plant projects in the north and south of the province.

"We are working hard to increase the province's production capacity to around 5,500 megawatts with the new power projects in the province," he said. "We are seeking foreign investors to invest in the power sector because it would give benefits to the local administration." The power plants in the province have also given a significant contribution to the Java-Bali distribution networks, he added.

For further information, please see:

(www.thejakartapost.com/yesterdaydetail.asp?fileid=20040315.D02)

Contacts can be established with Mr.Lolo Panggabean at lolo@ybul.or.id or Mr. Suroso at rosso@ybul.or.id.

Calendar of Events

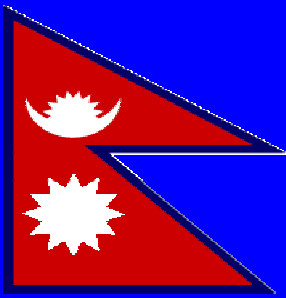
November 23 - 24 2004 Energy Sustainability under Global Economy Congress
Jakarta, Indonesia

Organiser: WEC Indonesia

Tel: (+6221) 790 0908 Fax: (+6221) 790 0908

sekretaris@kni-wec.org

<http://www.kni-wec.org/>



Nepal

Important Acronyms:

<i>CADEC</i>	<i>Community Awareness Development Centre</i>
<i>CICO</i>	<i>Canadian International Consultancy Organization</i>
<i>DAO</i>	<i>District Administration Offices</i>
<i>DE</i>	<i>Department of Electricity</i>
<i>EDB</i>	<i>Energy Development Board</i>
<i>FNCCI</i>	<i>Federation of Nepal Chambers of Commerce and Industry</i>
<i>JBIC</i>	<i>Japan Bank for International Cooperation</i>
<i>JICA</i>	<i>Japan International Cooperation Assistance</i>
<i>KEVA</i>	<i>Kathmandu Electric Vehicle Alliance</i>
<i>LBL</i>	<i>Lumbini Bank Limited</i>
<i>NEA</i>	<i>Nepal Electricity Authority</i>
<i>NEAS</i>	<i>Nepal Electrical Association</i>
<i>NBB</i>	<i>Nepal Bangladesh Bank</i>
<i>NDF</i>	<i>Nepal Development Forum</i>
<i>NRB</i>	<i>Nepal Rastra Bank (The Central Bank)</i>

Macro Political and Macro Economic Environment

Kathmandu, Lalitpur Declared ‘Riot Area’, Curfew in Kirtipur

Certain areas of Kathmandu and Lalitpur districts within the Ring Road area have been declared riot areas. Issuing separate statements this evening, the District Administration Offices (DAOs) of Kathmandu and Lalitpur districts said rallies, demonstrations and other group activities, except religious processions, have been banned in areas inside the Ring Road. It also stated that security officials will not require arrest warrants to arrest anyone involved in suspicious activities. The Home Ministry said it has beefed up security in the Kathmandu valley in view of Maoist infiltration in the ongoing five-party protests. “The ministry has come across credible information that the Maoists are planning to turn the five-party protests violent,” said the statement.

For further details logon:
<http://www.nepalnews.com> 8 April 2004

ADB grants NRs.2.55 billion to Nepal

The Asian Development Bank (ADB) has agreed to provide a grant assistance of US\$36 million to Nepal for the implementation of three different projects, RSS reported Thursday. Bhanu Prasad Achrya, secretary of the

Ministry of Finance and ADB’s regional director S Hafiz Rahman signed the agreement today. The grant assistance will be spent on the implementation of Kathmandu Valley Water Services Development Project, Community Livestock Development Program and on assisting consumer groups of water supply projects in different parts of the country.

For further details logon:
<http://www.nepalnews.com> 8 April 2004

Government to Welcome Foreign Investment in Secondary Market

In a major change in the Foreign Investment Policy (FIP) the government is preparing to open up the secondary market for foreign investors. So far, the Foreign Direct Investment (FDI) was welcomed only as equity investment. Kathmandu Post reports on March 30 that the change, which is included in a new government FIP, has been adopted as an instrument to lure more FDI by opening up new investment avenues in the country, a government source told the paper.

According to the source, the government will formulate procedures for foreigners to invest in the secondary market within a year of the policy coming into effect and that the policy would be adopted soon. Among others, the new policy has opened outward investment, whereby Nepali

firms and companies would be allowed to invest abroad for merchandise productions and business promotion.

This is also a major departure as only inward investment for foreign investment was allowed up till now. Outward investment has been opened up to enhance the competitiveness of the domestic industries in the international market, the source added. The policy cites that investor identity cards would be issued to foreign investors to ensure their unrestricted movement across the country except in the prohibited areas.

The government has curtailed the negative list of foreign investment to 11 out of 23 industries. Traditional cottage and micro industries, arms and ammunitions, explosives, radioactive, real estate business, film industry, currency and mint, cigarette, alcohol, inland postal service and atomic energy are included among others in the negative list.

For further details logon/ contact:

The Kathmandu Post English daily 30 March 2004

<http://www.nepalnews.com>

kanti@kantipur.com.np

Clean Energy Financing

Energy Fund in Crisis

Lack of consensus among Energy Development Bank (EDB) members over the appointment of a manager has pushed the World Bank aided Energy Development Fund into crisis. A recent report in the Kantipur Daily said some members opposed the move to appoint NBB manager of the Fund. The Bank's financial and technical proposal has, however, received World Bank's endorsement. The indecision places two hydropower projects – 27 MW Kabeli and 30 MW Rahughat – in a dilemma. The former has already been dropped. The World Bank had approved a loan of US\$ 70 million for medium size projects as compensation for halting the Arun III hydropower project some years ago, and the fund had been created for the purpose.

For further details:

The Kathmandu Post English daily 10 March 2004

<http://www.nepalnews.com>

kanti@kantipur.com.np

Clean Energy Equipment/Services Procurement Notices

No procurement notices were identified this quarter.

Partnering Opportunities

No partnering opportunities were identified this quarter.

Project and General News

Preparatory Talks for NDF Open

The preparatory consultation meetings for Nepal Development Forum (NDF) commenced in Kathmandu on March 31. The meetings aim to discuss the national status with leading donors and are to continue through April 15. Intensive consultations on core areas of national development where the government is implementing donor assisted reform programs as well as sectors where donor community support is being sought are expected. According to the plan, the final policy papers developed through these preparatory meetings will be presented in the main NDF event, from May 5 to 7.

For further details logon/ contact:

The Kathmandu Post English daily 1 April 2004

<http://www.nepalnews.com>

kanti@kantipur.com.np

Condition for Kulekhani Three: Augment Price by Six Percent

NEA has proposed raising the electricity rate by 6 percent to the Government in order to construct the reservoir based power plant – the so called Kulekhani 3 or K3. The NEA proposed the price rise to initiate its own commitment to the plant after the government expressed unwillingness to invest in the 45 MW K3. Kulekhani 3 is understood to be quite useful in the peak hours of electricity consumption. Its power, according to a JICA study, costs just 15 cent or eleven rupees per unit. This cheaper than diesel power. The estimated cost for constructing K3 is reported to be US\$ 77 million. K3 uses water discharged from its predecessors 32 MW Kulekhani 2 and 60 MW Kulekhani 1. Its location is estimated to be some three kilometers and a half downhill from the Kulekhani 2 site. The Japanese government had provided both financial and technical support to undertake the K3 feasibility study but did not show interest in investing, reportedly for security reasons, causing Nepal to remove K3 out of the power plant construction list. Media reports suggest that NEA executive director Dr. Janaklall Karmacharya wrote a six point letter to Water Resources secretary Dr. Kishor Babu Aryal in this regard proposing conditions, one of which is provision for five percent rate of interest for capital doled out by government for investment in the project. The government currently charges 10 percent rate of interest for investment, which it funds from donor grants. Another condition is: relief from loan processing fee, corporate income tax, VAT and series of custom duties. The

government currently charges NEA income tax, royalty and interest resulting in the financial weakness of the Authority. The government should not charge NEA for expenses incurred during negotiation for bilateral and multilateral loan for power project.

For further information, please see:
The Kathmandu Post English daily 25 March 2004
<http://www.nepalnews.com>
kanti@kantipur.com.np

Interaction Meeting on RE Data

CADEC organized a half-day interaction program to discuss the draft report on renewable energy data of Nepal 2003 data book on 10 February 2004.

For further information, please see:
<http://www.cadecnet.org>

Winrock Nepal Activities

Rewarding Upland Poor of Kulekhani for Environmental Services (RUPES Kulekhani)

Winrock International, Nepal, with support from the International Fund for Agricultural Development (IFAD) and the World Agroforestry Centre (ICRAF), has developed a new program for rewarding the upland poor of the Kulekhani watershed for environmental services they have been providing to the hydroelectricity plants located downstream. This is an innovative program that extends the concept of benefit sharing from hydropower projects to the upland watersheds of these projects. This new project proposes to identify and value environmental services provided by the upland communities in the Kulekhani watershed and develop a mechanism for transferring part of the benefits from those services from the beneficiary, NEA, to the providers of these services (upland communities).

Winrock Nepal organized an interactive half-day workshop on March 1, 2004 in Kathmandu to review the philosophy and progress of this project and to chart its future course of action.

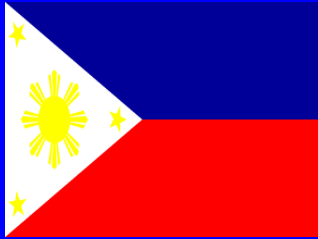
Winrock Nepal is committed to facilitating the financing of renewable energy technologies (RETs) through micro finance institutions (MFIs) and has conducted trainings in various parts of the country in order to create an awareness of RETs in the MFI community.

Various orientation trainings for MFIs, dairy cooperatives, etc. on financing biogas technologies were conducted:

Kapilbastu – January 7 2004
Chitwan - January 8 2004
Kathmandu – January 22 2004
Pokhara - February 10 2004
Baglung - February 11 2004
Kathmandu - February 20 2004
Dang - February 22 2004
Lalitpur March 5
Ithahari March 23-24

Calendar of Events

No clean energy events planned for the next quarter.



Philippines

Important Acronyms:

NPC *National Power Corporation*
CME *Coconut Methyl Ester*

Macro Political and Macro Economic Environment

Business Remains Optimistic on Economic Outlook

The local business sector remains optimistic about the economic outlook for the first two quarters of the year, driven by upbeat business sentiments in areas outside of the National Capital Region, despite persistent concerns of political uncertainty and peso-dollar volatility ahead of the May 10 election. Date of article: Feb. 21, 2004

For further information, please see:

<http://www.mb.com.ph/issues/2004/02/21/BSNS200402212940.html>

ADB Forecast 4.5% Growth for RP Economy in 2004

The Philippine economy will grow by 4.5% this year despite political uncertainty linked to May's presidential election, the ADB country director said. Economic Planning Secretary Romulo Neri, meanwhile, was more optimistic, saying that GDP growth would at least hit 4.9%. Date of article: Jan. 23, 2004

For further information, please see:

<http://www.mb.com.ph/issues/2004/01/23/BSNS20040123505.html>

Full-year Inflation Tamer at 3.1%

Consumer prices in the country rose by a slower 3.1% in December, bringing the calendar 2003 average inflation rate to well below government ceiling, the National Statistics Office said. The NSO reported that except for housing and repairs, the slowdown in the inflation rates of all the commodity groups led to the downtrend. Date of article: Feb. 7, 2004

For further information, please see:

<http://www.mb.com.ph/issues/2004/02/07/BSNS200402071506.html>

2003 Remittances Hit \$7.6 B, Portfolio Inflow Yields \$47.8-M

Inflow of portfolio investment for the first month of the year yielded a net of \$47.8-M, more than a 100%

improvement, against the net inflow of \$19.8-M recorded in the same month of past year. BSP Governor Buenaventura reported that dollar remittances from overseas Filipino workers for the whole year of 2003 reach an all time high of \$7.6-B, posting an annual growth rate of 6.3%. Date of article:

For further information, please see:

<http://www.mb.com.ph/issues/2004/02/13/BSNS200402132109.html>

PEZA Tallies 515.6% Growth in Investments.

Investments registered with the Philippine Economic Zone Authority (PEZA) in the first quarter this year soared 515.66% to P21.868-B against P3.552-B in the same period last year. There were a total of 78 projects that were registered with PEZA in the first quarter or 39% higher than the 56 enterprises registered in the same period last year. Date of Article: March 22, 2004

For further information, please see:

<http://www.mb.com.ph/BSNS200404126933.html>

National Power Corp Allots PhP15B to Provide Power in Rural Areas

National Power Corporation (NPC) has allocated PhP15B to provide electricity to remote areas and islands nationwide not yet connected with any of the main electricity grids. The funding will be sourced from the universal charge that will be collected from consumers under the missionary electrification component of power rates. Date of article: January 12, 2004.

For further information, please see:

<http://www.bworld.com.ph/current/CorporateWorld/corpsy1.html>

Pres. GMA Promulgates 2004 Investment Priorities Plan

Pres. GMA has approved the 2004 Investment Priorities Plan (IPP) granting juicy tax and fiscal incentives to economic activities that pursue globally competitive industries as well as encourage micro-entrepreneurial

activities that would generate jobs and provide basic services. Date of article: March 22, 2004

For further information, please see:

<http://www.bworld.com.ph/current/CorporateWorld/corpsy1.html>

Ecozone Power Providers to Lower Electricity cost

The government is set to grant incentives to the Manila Electric Co. (MERALCO) and other power providers to economic zones in an effort to reduce the electricity cost of locators, whose industrial power expenses is the third highest in the world. Date of article: March 19, 2004.

Clean Energy Financing

ABN-Amro Grants \$29-M Loan for Wind-power Project.

Northwind Power Development Corp. (NPDC) will up a 25 megawatt wind farm facility in Bangui Bay, Ilocos Norte to be funded by a \$29-M, 10 year loan from ABN-Amro. The project is part of the 415 MW committed capacity that will be added to the Luzon grid in 2004. Date of article: March 19, 2004.

For further information, please see:

<http://www.philstar.com/philstar/index.htm>

UK firm invests \$2-M for biodiesel production in the Philippines

The UK-based D1 Oils Ltd. (DOL), one of the world's leader in biodiesel production, signed a memorandum of agreement with the Philippine Coconut Authority (PCA) as it puts up by the third quarter a 10,000 hectare plant-based oil plantation and biodiesel refinery in Bondoc Peninsula, Quezon. Mark ML Quinn, DOL Managing Director, said world demand for biodiesel has been increasing brought about by the Kyoto Protocol that promoted green fuel use and consumer awareness on the need for environmental sustainability. Date of article: March 22, 2004

For further information, please see:

<http://www.mb.com.ph/BSNS200404227872.html>

Clean Energy Equipment/Services Procurement Notices

Contracting of Consulting Services for PHI/00/G33—Capacity Building to Remove Barriers to Renewable Energy in the Philippines (CBRED) Project.

The Development Support Services Center (DSSC) of the United Nations Development Programme (UNDP) invites locals consultants to apply for eligibility and to bid for the

various subcontract of the project “UNDP-DOE PHI/01/G33 – Capacity Building to Remove Barriers to Renewable Energy in the Philippines Project. The project requires the services of subcontractors who shall undertake each of the following components:

Contract 1 – RE Green Energy Rating Program

Contract 2 – Technical Assistance to Manufacturers of RE Equipment

Contract 3 – RE Engineering Service Industry Development

Date of Article: Feb. 23, 2004, Philippine Daily Inquirer

Contact: Mr. Francis Benito, Asst. Secretary, DOE

Partnering Opportunities

Power Firm Cammon Looks for Buyers of Wind Energy

A company planning to put up a wind farm in Cebu is looking for buyers of the power to be generated from the project. Mr. Peter Stoeckmann, spokesman for Cammon Windsolar Energy, Inc., wants the “partners” that have a power demand of more than two megawatt. Date of article: February 20, 2004

For further information, please see:

<http://www.bworld.com.ph/current/CorporateWorld/corpsy1.html>

Project and General News

Spanish Government Keen on Local Power Sector

Spanish Embassy Economic and Commercial Counselor Jose Miguel Cortez said the Spanish Government is keen in helping the Philippines develop its renewable energy sources, particularly wind and solar power. Date of article: February 4, 2004

For further information, please see:

<http://www.manilatimes.net/national/2004/feb/04/yehey/business/20040204bus4.html>

DOE Unveils \$300-M Solar Wafer Factory in Laguna

The DOE inaugurated the \$300-M solar wafer manufacturing plant of SunPower Philippines Manufacturing Ltd. in the Laguna Technopark in Binan, Laguna. It is expected to supply 6% of the world's total available market for photovoltaic (PV) industry. Date of Article: March 18, 2004

For further information, please see:

<http://www.manilatimes.net/national/2004/mar/18/yehey/business/20040318bus8.html>

Renewable Energy Bill to be Refiled in Congress

A legislative measure establishing a framework for the implementation of renewable energy programs will be refiled by Department of Energy (DOE) when Congress reopens later this year. Under the new and renewable energy bill, the government wants to put in place pricing mechanism that would promote consumer choice of supply and also allocate a minimum amount of generation capacity from renewable energy and promote hybrid systems and applications. Date of article:

For further information, please see:

<http://www.bworld.com.ph/current/TheEconomy/ecostory1.html>

Investments in Natural Gas Use Sought

The government hopes to attract more investors to the downstream natural gas market via an executive order that streamlines government processes and provides incentives. Executive Order No 290 signed on Feb. 24, 2004 lays down government policies to encourage active private sector participation and create a competitive environment. Date of article:

For further information, please see:

<http://www.bworld.com.ph/current/TheEconomy/ecostory1.html>

Mirant Global to Put P600-M in New Power Project in Aklan

Mirant Global Philippines Corp (MGPC), a joint venture between US firm Mirant Corporation and Global Business Holdings, Inc of the Metrobank Group, will sink in fresh investment of around P600-M to meet unserved energy in Aklan province, particularly in tourist haven Boracay island. Date of article: March 22, 2004.

For further information, please see:

<http://www.mb.com.ph/BSNS200404227874.html>

Downstream Natural Gas Industry to Need P330-B Investments

The DOE has estimated that the magnitude of investments needed to fully develop the country's downstream natural gas infrastructure would reach P330-B. The natural gas facilities would range from new power plants, high pressure pipelines, liquefied natural gas (LNG) terminals and compressed natural gas (CNG) refiling stations. Date of article: February 8, 2004

For further information, please see:

<http://www.mb.com.ph/issues/2004/02/08/BSNS200402081561.html>

Cebu-Negros-Panay Power Project gets JBIC Funding

A loan for a project doubling the capacity of existing transmission lines connecting Cebu, Negros and Panay has been approved in principle by the Japan Bank for International Cooperation (JBIC). The loan for the project,

which is expected to cost \$41.50 million, will be funded via the Miyazawa fund. Date of article: Feb. 25, 2004

For further information, please see:

<http://www.bworld.com.ph/current/TheEconomy/ecostory1.html>

DOE Issues Implementing Guidelines on Blending Coconut Methyl ester (CME) with diesel oil

After consultations nationwide, the DOE has promulgated Dept. Circular No. 2004-04-003 prescribing guidelines for the mandated blend of coconut methyl ester (CME) with diesel oil products, specifically at initial implementation for government vehicles. Date of Article: March 22, 2004

For further information, please see:

<http://www.mb.com.ph/BSNS200404126960.html>

Calendar of Events

Workshop on Consumer Lending and Microfinance to Expand Access to Energy Services

An international Workshop on Consumer Lending and Microfinance to Expand Access to Energy Services will be held in Manila, Philippines this coming May 19-21, 2004. The workshop is being sponsored/organized by Global Village Energy Partnership (GVEP) in cooperation with the Development Bank of the Philippines. International speakers from Asia, Africa, Latin and Central America are invited to give lectures and participate in the workshop. PEI is one of the local participants invited to attend the workshop.

Contact: GVEP webpage at <http://www.gvep.org>

ASEAN Energy Business Forum 2004 International Exhibition and Conference June 8-10, 2004, World Trade Center Metro Manila, Philippines

The Department of Energy of the Philippines will play host to the following 5 major events:

- *The 22nd ASEAN Ministers of Energy Meeting*
- *The 1st ASEAN +3 Ministers of Energy (China, Japan, Korea) Meeting*
- *The 6th APEC Energy Ministers Meeting*
- *The ASEAN Energy Business Forum Trade Exhibition*
- *The ASEAN Energy Business Forum Conference*

Companies are invited to participate in the ASEAN Energy Business Forum Trade Exhibition and Conference. This will give the opportunity to present products, technologies and projects to the growing energy market of the 10 ASEAN member countries.

AEBF Exhibition and Conference 2004 will bring together under one-roof regional energy officials from the government and high-level private executives.

For more information, please contact:

AEBF Secretariat:

8/F Legaspi Suites, 178 Salcedo St., Legaspi Village,
Makati City 1229

Tel: (632) 810 1389; 818 6828 Fax: (632) 810 1594

Email: <mailto:lvrge@netasia.net>>lvrge@netasia.net



South Africa

Important Acronyms:

- ANC: African National Congress
- DAEC: Durban Alternative Energies Company
- DME: Department of Minerals and Energy's
- NER: National Electricity Regulator
- SHS: Solar Home systems
- NEPA: New Partnership for Africa Development
- KZN: KwaZulu/Natal

Macro Political and Macro Economic Environment

Political Arena

Incumbent President Thabo Mbeki's African National Congress (ANC) garnered 70 per cent of votes cast in the election on April 12, the third since the end of apartheid. President Mbeki praised the peaceful conduct of the election as final results gave his African National Congress a dominant 279 seats in the 400-member parliament. There had been fears that the ANC's rivalry with the Zulu-dominated Inkatha Freedom Party would turn bloody in the KwaZulu Natal province. In the run-up to the first democratic elections in 1994, violence between the two parties resulted in almost 20,000 deaths.

Mbeki thanked voters for "their refusal to be provoked or incited to engage in acts of violence and intimidation." The final tally gave the ANC 69.68 percent of the vote, its biggest win since taking power 10 years ago. The figure is up from 66.35 percent in the last general election in 1999. The main opposition party, the Democratic Alliance, won 50 parliamentary seats and boosted its share of the vote to 12.37 percent from 9.56 percent in 1994.

Mr Mbeki faces stiff challenges in his last term and has promised to deliver on ambitious election pledges to fight poverty, unemployment, the HIV-AIDS scourge and crime. Unemployment hovers between 40 and 50 per cent, according to various estimates, while many say poverty has deepened in the last decade.

The governing ANC had made steep promises in its manifesto: creating 1 million new jobs in five years; spending 100 billion rand (\$A20 billion) to improve

infrastructure and halving poverty and unemployment by 2014.

For further information, please see: <http://www.anc.org.za>
http://news.yahoo.com/news?tmpl=story&u=/nm/20040427/wl_nm/safrica_dc_5

Economic Situation

The South African Rand has continued to strengthen as indicated in the table below, and is harbouring around the 6 to 6.5 mark. Interesting to note the volatility index which is higher now than when the Rand (SA currency) shot to an all time high of almost 14R: US \$. The petrol price is scheduled to rise again in early April to around R4.36/litre or \$2.5/USgal



Source: Reuters

www.thefinancials.com

Clean Energy Financing

South Africa's First Green Energy Power Pool

RAPS Finance, through ETEF, has financed Southern Africa's and the Southern African region's first green energy power pool. Companies, government departments and private individuals will now be able to purchase green energy thus significantly reducing S. Africa's carbon oxide emissions into the atmosphere and dependence on coal-based electricity. For further information, please see: info@raps.co.za

Green Power pamphlet introduced– DME

In this pamphlet, which outlines business opportunities for renewable energy independent power producers in SA, the DME lists the Development Bank of Southern Africa, the Industrial Development Corporation, the Central Energy Fund and the Department of Trade & Industry as potential funding agencies or co-investors in renewable energy initiatives. International agencies, such as the Global Environment Facility, the World Bank – through its Prototype Carbon fund and Community Development Carbon Fund – and other investment agencies linked to the Clean Development Mechanism, are also listed.

For more information on Renewable Energy IPP opportunities, contact:

Tony Golding, Telephone (+27 12) 317 9213

André Otto: Telephone (+27 12) 317 9225

For further information, please see: www.dme.gov.za

Clean Energy Equipment/ Services Procurement Notices

SESSA (Sustainable Energy Society of South Africa) takes Government to task

SESSA has stated that the Government has made purchases from various companies for the supply of solar equipment without any official tender procedure. The equipment is destined for use in schools that will be used as polling stations during the upcoming elections. SESSA voiced its discontent on behalf of its members, as well as South African Taxpayers because no consideration was given to transparency or local manufacture.

For further information, please see: www.sessa.org.za

<mailto:info@sessa.org.za>

Partnering Opportunities

Sasol to decide on 'bio-diesel' at end of June

South African energy firm Sasol announced in early March that it would make another announcement at the end of June as to whether it would develop a 'bio-diesel' fuel pressed from soybeans, tripling the country's output of the grain. Sasol, which specializes in extracting liquid fuel from the country's vast coal reserves, said it was identifying partners to develop the product along the lines of a new generation of cleaner fuels developed in Europe and the US. Soybeans, refined with methanol and other chemicals, would constitute only 5% of the new fuel, but would improve engine lubrication, decrease emissions, and create human or animal feed as a by-product of the process. Sasol's two and a half year feasibility study had found production was economically viable, even without subsidies – cheering farming delegates, many of whom are seeking to diversify from the often-oversupplied maize market. Finding suitable partners for the project, possibly firms belonging to South Africa's previously-disadvantaged black community, would be crucial if Sasol executives are to give the project the green light. For further information, please see:

<http://www.engineeringnews.co.za>

Improved paraffin burner

An improved paraffin burner with the efficient, fast and clean burning characteristics of the 'primus', but at a much lower cost and without pressurised components, has been developed in Europe for the mass market in developing countries. A business partner, for the manufacture, distribution and/or marketing of the improved burner is being sought in South Africa.

Contact: Grant Ballard-Tremeer, Eco Ltd

Email: <mailto:grant@ecoharmony.com>

Project and General News

Nuclear Energy summit called off

Environmental organizations and trade unions have attacked the parliament's decision to call off a nuclear energy summit and have stated that the move is linked to sensitive talks currently taking place between South Africa and a French nuclear company. The summit, organized by the parliamentary portfolio committee on Environmental Affairs and Tourism and scheduled for the 16th and 17th of February was called off only days before it was due to take place. It was being held to focus on the future of nuclear energy in SA, and had been designed to give both the pro- and anti-nuclear lobby a chance to voice their opinions. The reason parliament gave for its sudden decision to postpone the summit indefinitely was

so that parliamentarians could "engage their constituencies with regard to the upcoming election". However, representatives of the Environmental Justice Networking Forum (EJNF), an organisation of over 400 non-government groups, said they suspected there was a connection between the cancellation of the nuclear summit and a "desperate last attempt" on the part of S. Africa to find a foreign investor to help fund Eskom's proposed Pebble Bed Modular Reactor (PBMR) for Koeberg.

Source: Articles in *Business Day* and *Cape Times*, February 19, 2004.

Reneging on renewables

Concessionaires in the solar off-grid electrification program of the Department of Minerals and Energy (DME) paint a bleak picture of delays, bad faith and broken promises by government as they try to implement off-grid renewable energy projects to bring electricity to the "poorest-of-the-poor" in remote and inaccessible rural South Africa. The program, announced with fanfare some years ago, received widespread acclaim for its ambition, vision and scope, and attracted significant local and international interest. However, the program may now be proving unsustainable, as government reneges on capital and operating subsidies.

The concessionaires will clearly suffer significant financial damages, as well as serious damages to their reputation and credibility with suppliers and customers. It also appears that Eskom is withdrawing from the solar off-grid electrification program, pulling out of the Eskom/Shell joint venture in the Eastern Cape concession area, and instead providing universal grid access.

All of this adds up to a massive threat to the solar off-grid renewable energy program, and the risk of imminent failure. If this happens, the major losers will be the poor people in rural areas excluded from grid electricity, the long-term jobs created by the concessionaires, and the reputation of South Africa as a sound investment.

Government's view:

According to the Business Day (February 13, 2004) the Government is reviewing its off-grid renewable energy program after finding that it does not meet targets. This means that the provision of electricity to remote areas, especially using solar energy technology, will be halted while government seeks other sources of power.

The DME says the failure of the contractors to meet their targets and the failure of the technology to meet the needs of rural people "gives doubts about its sustainability". Nelisiwe Magubane, the deputy director-general responsible for electricity and nuclear energy, says the 6 companies contracted to install the solar systems managed

to deliver only 8 000 units in 18 months. The target was 60 000 units – 10 000 per company.

Magubane says that of the R105m allocated to the project, the contractors spent only R20m by August last year. The remaining R85m has been taken back by the treasury, which demands that all unspent funds be returned so that they can be allocated to better-performing projects. According to Magubane, "There is no legal mandate that government is obliged to continue spending taxpayers' money on projects that do not deliver".

Magubane says government will explore other technologies since the photovoltaic Solar Home System does not cover the energy needs of rural areas.

For further information, please see:

<http://www.ee.co.za/news>
chris.yelland@ee.co.za

Parallax Case Study

The project being addressed by the case study was supported by USAID/DEAT and managed by Parallax. The project commenced in April 2002 and the end of the grant term was January 2004. The overall goal of the project was to show the extent to which energization of rural communities can limit the contribution of energy use to climate change whilst offering a means for sustainable development. It aimed to determine whether a user-owner model of energization was effective in the rural South African context, and whether it could be implemented on a commercial basis. A fundamental aspect of the project is that it allows users of the energy system to be owners. The project scope entailed: 2 demonstration sites with a total of 88 customers. The 'Switch On' energy package consisted of a 55W Solar Home System, 4 lights, an alarm, a 2-plate gas stove, 6kg LPG cylinder with 36 monthly refills, as well as access to a loan. In the absence of the DME subsidy of \$540 (R3500). Customers were required to pay \$23/m (R150) instead of the \$9/m (R58). This is the third pilot study, which has successfully demonstrated the importance of ownership, and the need for a thermal energy package. Hopefully this message will be heard as the government re upraises its non-grid electrification program. A detailed report has been published and is available on request from:

<mailto:info@parallaxonline.net>

Good News for Workers, and Good News for the Environment

Using renewable energy means more jobs -- so finds a study commissioned by SECCP (Sustainable Energy and Climate Change Partnership) into the employment potential of renewable energy in South Africa. With government's current plans to provide electricity there's no basis to expect more jobs, but if the government generates just 15% of total electricity in 2020 using renewable

energy technology, it will create 36,400 new jobs without taking any jobs away from coal-based electricity. According to Richard Worthington, the project co-ordinator of SECCP, the current trend of decreasing jobs while increasing electricity output can be reversed through investing in renewable energy technology. Renewable energy technologies considered in the research include energy from solar thermal, photovoltaic, wind and biomass (such as wood and agricultural waste). For further information, please see:

www.agama.co.za; seccp@earthlife.org.za

SA Civil Society Energy Caucus

“The future is renewable” is the message from delegates who attended the Second Energy Caucus meeting (February 23 - 24) as they endorsed the CURES Declaration. The Caucus consists of a wide range of groups and organisations including labour and faith groups and community based organisations. The Citizens United for Renewable Energy and Sustainability (CURES) Declaration is a starting point for NGOs across the world as they lobby their governments in preparation for a definitive International Conference on Renewable Energies to be held in Bonn, Germany later this year.

In addition to endorsing the CURES Declaration, three working groups were formed at the 2004 Energy Caucus meeting.

- The Industrial Pollution and CDM (Clean Development Mechanism) Group will look at how communities in South Africa and Mozambique can benefit from the gas now being imported by Sasol from Mozambique
- The Gender and Energy Group will promote women’s participation in energy issues, both in project implementation and decision-making.
- The Energy Policy Group aims at increasing civil society participation in policies, including the Renewable Energy Strategy, Integrated Energy Planning process and the Radioactive Waste Management Policy.

Participants committed to continuing to build and broaden the Caucus as a common platform and mandate for positive social, developmental and environmental change in the energy sector. For further information, please see:

<http://www.cures-network.org/>

DME/ SAD-ELEC Workshop

Recognising that getting green energy into the power market needs special rules and regulations, the DME appointed an electricity consultant, SAD-ELEC, to examine ways in which to integrate and promote renewables.

Various stakeholders were invited to a DME/ SAD-ELEC workshop on March 2, 2004 “to present and discuss the market rules and governance for the formulation of

Renewable Energy Market Rules.” Over two of the three-hour workshop was spent going through the document that had been circulated before. While the DME must be commended for recognising that special rules will need to be developed to introduce green energy into the power market, the process of developing these rules is under discussion. While there was much presenting of information at the workshop, there was very little discussion. When SAD-ELEC very proudly displayed its timeline plotted activities it seemed that the workshop was nothing more than an output required of them – something that can be ticked off as having taken place, with no analysis of the quality of interaction and discussion. For further information, please see:

www.dme.gov.za

SA Energy Bills

Electricity Supply Industry Regulation Draft Bill has been abandoned, but its content has been incorporated into the overarching Energy Supply Industry Regulatory Bill. The broad scope of this bill will regulate and restructure the Energy Supply Industry (covering both energy generators and suppliers). The Department is currently drawing up a blueprint for restructuring the industry. Once the revisions are completed, the Bill will proceed to cabinet for approval and release for public comment.

For more information contact Tony Surridge at (012) 317 9204 or email: surridge@mepta.pwv.gov.za

The Integrated Energy Plan has been released and is available at: www.contacttrust.org.za

The Single Energy Regulator Bill will be tabled in Parliament when it reconvenes after the elections. For more information contact Theunis Burger at (012) 317 9114 or email:

burger@mepta.pwv.gov.za

Also visit :

<http://www.dme.gov.za/>

New Cahora Bassa deal

South Africa has agreed on a new tariff deal for power generated at Cahora Bassa hydroelectric plant after talks with its majority owner Portugal and the government in Maputo, strengthening the long-term relationship between Cahora Bassa and Eskom. For further information, please see:

<http://www.engineeringnews.co.za/>

www.enerweb.co.za

Mozambique and S. Africa in natural gas deal

The February arrival in S. Africa of Mozambican natural gas is a signal that SA is intent in joining the international dash for gas. The \$1.2bn project, financed by Sasol up to now, brings natural gas into SA from the Temane and Pande gas fields in Mozambique through a newly

constructed 865km pipeline. For further information, please see:

<http://www.engineeringnews.co.za/>
www.enerweb.co.za

Rebuilding rural communities in Angola

The British mission to Angola, the Angolan Government and BP Solar are working together on a \$250 000 pilot project to show the role solar energy can play in rebuilding rural communities in Angola. For further information, please see:

<http://www.engineeringnews.co.za/>

Retirement home saves R8000 a month

The Rosendal home in Pretoria has cut its electricity bill drastically by using solar water heating. By replacing its conventional geyser with 72 solar hot water panels, the Rosendal retirement home in Arcadia, Pretoria, was able to reduce the electricity consumed for hot water production by nearly 80%. While saving money the home is also contributing to the environment. For further information, please see:

<mailto:crm@suntank.com>

African Directory

Sustainable Energy Africa (SEA) has developed a directory of African organisations working in the urban sector on issues of energy and its related components of planning, housing, environment, transport and sustainability. The directory lists 201 organisations by country and then alphabetically. In addition to contact details of the organisations, it also gives a brief description of the organisations and their activities. For further information, please see:

<http://www.sustainable.org.za/Africandirectory.htm>.

Calendar of Events

May 10 –12 Renewable Energy Summit 2004-03-28

Sandton Convention Centre

Johannesburg

South Africa.

Details available from IQPC

Telephone: +27 11 707 9200

Website: <http://www.iqpc.co.za/>

May 10 – 11 Industrial and commercial Use of Energy (ICUE)

Cape Town

Prof Nico Beute

Telephone: +27 21 460 3701

E-Mail: <mailto:icue@ctech.ac.za>

Website: <http://www.saeec.co.za>

May 12 – 14 Domestic Use of Energy (DUE)

Cape Town

Prof Nico Beute

Telephone: +27 21 460 3701

E-Mail: due@ctech.ac.za

Website: <http://www.saeec.co.za>

June 7 – 9 Power Africa Summit 2004

Vodaworld, Midrand

(Between Jo-burg and Pretoria in Gauteng)

Tel: +27 11 880 6000

Fax: +27 11 880 6789

Website: <http://www.powerafrica.co.za/>

September 13 – 18

Sustainable Building for Africa

Stellenbosch, South Africa

Hosted by the Council for Scientific and Industrial Research (CSIR)

E-Mail: cdupless@csir.co

Website:

<http://www.sustainablesettlement.co.za/event/SBE2004>

CONTACT INFORMATION



WINROCK
INTERNATIONAL

Putting Ideas to Work

Winrock International Brazil

Mr. Claudio Ribeiro
Mr. Joseph Newman (Phone: 55-71 2736106)
REPSO Brazil
Rua Dr. José Peroba, 349,
Edf. Empresarial Costa Azul,
12o. andar - Costa Azul
41760-320 Salvador - Bahia - Brazil
Tel: 55 71 2736100
Fax: 55 71 2736101
E-mail: webmaster@winrock.org.br

YBUL - RENI Indonesia

Ms. Helanti Hilman
Dr. Lolo Panggabean
YBUL
Jl. Hang Lekir VI / No. 1
Kebayoran Baru
Jakarta Selatan 12120
Indonesia
Phone: +62-21-720-6125
Phone/Fax: + 62-21-722-0905
E-mail: helianti@ybul.or.id
lolo@ybul.or.id
Web: <http://www.ybul.or.id>

Winrock International Nepal

Mr. Suman Basnet
Mr. Bikash Pandey
Winrock International Nepal
1103/68 Devkota Marga
Baneshwar
Kathmandu, Nepal
Tel: + 977 1 446 17087
Fax + 977-1-4476109
E-mail: sbasnet@winrock.org.np
bpandey@winrock.org.np

Winrock International India

Dr. Kinsuk Mitra
President
1 Navjeevan Vihar
New Delhi, India 110 017
Phone: + 91-11-2669-3868
Fax: + 91-11-2669-3881
E-mail: kinsuk@winrockindia.org

Preferred Energy, Inc. - Philippines

Ms. Grace Yeneza
Managing Director
Preferred Energy, Inc. (PEI)
Unit 1703 Centerpoint Building
Garnet Road
cor. Julia Vargas Avenue, Ortigas Center
Pasig City 1605, Philippines
Tel. Nos.: (632) 631-2745; (632) 635-9688
Fax No. : (632) 635-9686
Email: pei@pei.net.ph
Web: <http://www.pei.net.ph>

REPSO Southern Africa

Mr. Will Cawood
Solar Engineering Services
P.O. Box 628
KLOOF 3640
South Africa
Tel: + 27 31 764 6292
Fax: + 27 31 764 1266
E-mail: soleng@solarengineering.co.za
(home) 80-A Buckingham Rd.
Kloof, SA 3610

Honduras Association of Small Scale Renewable Energy Producers (AHPPER) - Honduras

Diana Solís
Executive Director
AHPPER (Honduran Association of Small Renewable Energy Producers)
4to piso, Edificio Millenium, Col. Tepeyac.
Una cuadra arriba de McDonalds Tepeyac.
Tegucigalpa, Honduras
Tel/Fax: (504) 235-8533
ahpper@multivisionhn.net