

ENERGY UPDATE

ISSUE 2

MAR 2004

Powering Economic and Social Development through Expanded Access to Modern Energy Services

Energy Team News

Kevin Warr traveled to Mozambique to meet with energy sector stakeholders and assist the mission in planning their energy program for the coming fiscal year. The mission will focus their energy efforts on reducing the hurdles to the legal establishment of the regulator, CNELEC, and to helping CNELEC increase its professional staff. Additionally, CNELEC will participate in upcoming regional regulatory capacity building activities funded by the Energy Team in Washington. The mission's assistance to CNELEC is especially crucial because the establishment of CNELEC as Mozambique's energy regulator is a conditionality for the World Bank Energy Reform and Access Project (ERAP).

Kevin Warr traveled to Accra, Ghana with a delegation from the University of Houston's Institute for Energy, Law and Enterprise, a new USAID cooperator. The objective of the trip was to make initial contact with key energy sector stakeholders as the UH team plans to expand its New Era in Oil, Gas & Power Value Creation program to West Africa. Additionally, as part of IELE's new Cooperative Agreement, a segment on stakeholder participation will be added to the New Era program. UH will partner with key institutions in Ghana to develop the program collaboratively. Ghana was chosen for this initial pilot because of its important role in the West Africa Gas Pipeline Project and because of the high quality of its energy sector and academic institutions.

Simone Lawaetz and Pam Baldinger met in February with the water utilities in Veracruz and Oaxaca, Mexico to review implementation of activities to improve the energy and water efficiency of utility operations. Through the Alliance to Save Energy, USAID provides technical assistance to catalyze and support these efforts. Simone and Pam also met with the Mexico Mission to discuss future directions for Watergy in Mexico and participated in a workshop on financing energy efficiency in the water sector.

Simone Lawaetz and Pam Baldinger shared their experience on energy efficiency in the public sector with about 30 participants from government -- primarily the National Energy Commission (CNE), other donor agencies, and the private sector. Participants then discussed and decided on directions and potential activities for an Energy Efficiency Strategy for the Dominican Republic, which is under development by CNE and a team of USAID consultants.

Ellen Dragotto attended a USEA/USAID Energy Partnership Program in February in coordination with the Association of Central American Energy Regulators (ACREA). She then traveled to Guatemala and Nicaragua to meet with the missions to identify opportunities on how the Energy Team can support their strategic objectives through the Energy II and People, Energy and Development IQCs.

Ellen Dragotto, Omar Hopkins, Mark Murray, Kevin Warr and Davida Wood were in Cape Town, South Africa between March 16-18 to attend a USAID Energy Team meeting of over 60 energy sector officials, NGOs and USAID mission staff from around the world to discuss how to more fully engage the public and stakeholders in energy policy and program development and implementation. Invited speakers from Africa, Asia, Central

Europe, and South America gathered in Cape Town for intensive discussion on the role and nature of public participation in the energy sector. Please see "Recent Events" for more details on the Symposium.

Omar Hopkins attended the Energy Team's Symposium on Public Participation in the Energy Sector in Cape Town South Africa and led several side bar discussions on slum electrification with utility representatives and other interested parties. The slum electrification side meetings were held with some of the attendees representing electric utilities active in slum electrification including COELBA; MERALCO; ESKOM/TSI; North Delhi Power), study members of the USAID slum electrification study, and AID representatives (Omar Hopkins, Davida Wood, and Noreene Janus). The goals of the meeting were (1) give the utility representatives an opportunity to describe their slum electrification programs (problems and success) to each other, and (2) to see if some common problems or themes could identified.

Jas Singh helped launch a public sector energy efficiency procurement program in nine municipalities in Mexico. The project will seek to develop policies and build capabilities within local procurement offices to purchase efficient equipment, thereby reducing future energy bills and freeing up funding for other critical development programs.

Recent Events

Symposium on Public Understanding and Participation in Energy

On March 15 – 17, 2004, the EGAT/EIT Energy Team hosted a three-day meeting in Cape Town, South Africa, for 64 energy sector officials and USAID mission staff from Africa, Asia, Central Europe, and South America to discuss how to more fully engage the public and stakeholders in energy policy and program development and implementation.

Key lessons learned in the Symposium include that (a) the public needs to understand the rationale for and fundamental substance of issues surrounding restructuring of the energy sector; (b) government needs to create transparent and accountable processes and systems in which civil society and the public can participate in a practical manner; and (c) participation of the public and civil society with government and industry on issues surrounding restructuring of the energy sector generates agreement among customers to pay their bills, thus generating the revenue to pay investors' return on their investments, and creating an attractive market for foreign investment.

The participating countries will be undergoing significant energy market reforms over the next five to ten years, transforming their operations, and struggling to deal with issues such as distribution reform, regulating electricity markets, improving energy reliability, and how to make those systems economically viable as formerly government-run utilities are privatized. Those countries that do not successful identify and engage key stakeholder groups will find the reform process difficult, if not impossible, to accomplish. With improved means for addressing stakeholder concerns, problems and needs, as well as processes for working together toward solutions through improved communications and interaction, better outcomes can be expected and realized. Central to these issues is the question of who, what, when and how to engage stakeholders – including the public – in the consideration of solutions to the challenges being faced regarding energy matters.

The Symposium featured interactive training sessions by internationally recognized experts, and presentations by case study representatives from Brazil, Egypt, Georgia, Indonesia, India, the United States, and Zambia on projects in which participatory techniques have been applied. For example, several examples underscored the importance of developing innovative methods of engaging poor households via NGOs in order to develop slum electrification projects that resulted in improved access for households and improved cost recovery by the utilities. Special features of the meeting included viewing of Power Trip, a recent high-impact documentary film on the privatization of the Tbilisi, Georgia electric power utility, and energy topic skits by TWC, a local theatre troupe, and meetings with utilities working on slum electrification leading to direct South-South assistance.

Outreach Products

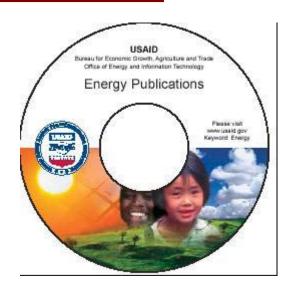
USEA is distributing *Energy Volunteers in Action* to those who are interested, & participate, in the USEA/USAID Energy Partnership Program (EPP) for Asia, Africa and Latin America/Caribbean. *Energy Volunteers in Action* highlights the numerous pro bono contributions made by the many energy executives - from utilities, regulatory commissions & other energy companies/organizations - who *volunteer* their own time & experience to assist their overseas counterparts. The 50 practitioner-to-practitioner energy partnerships of the United States Energy Association (USEA) in these regions have been made possible by funding from the United States Agency for International Development (USAID) EGAT & ANE Bureaus, as well as from overseas USAID Missions. Working in more than 27 states, the U.S. volunteers are from 25 U.S. private & public electric utilities, 20 state & federal regulatory commissions, & numerous other energy associations, organizations & companies. To receive a copy of *Energy Volunteers in Action* please contact John Hammond at JHammond@usea.org

Technical Reports

The Energy Team has compiled a CD-ROM of energy technical reports. To receive a copy of this of CD-ROM, please contact Jheri Jones at Jhjones@usaid.gov

This is a select compilation of technical reports co/sponsored by the Energy Team of the Office of Energy and Information Technology. Reports that are available on the CD-ROM are listed on the next page.

To download/order all energy technical reports funded by the Agency, please visit www.dec.ord



REPORT TITLE	DATE
Addressing the social dimensions of power sector reform in developing countries and economies in transition	Nov-02
Analysis of the relationship between improved energy sector governance and the attraction of foreign direct investment	Jan-02
Armenia energy training program: course on selling a local electric company	May-99
Best practices guide: application of ISO 14000 environmental management systems (EMS) for municipalities	Mar-01
Best practices guide: economic and financial evaluation of energy efficiency projects and programs	Jan-99
Best Practices Guide: Implementing Power Sector Reform	2000
CAR (Central Asian Republics) power market: issues and options	Nov-99
Corruption and the energy sector	Nov-02
Development-friendly greenhouse gas reduction: update	May-99
DSM [demand side management activities] at Tamil Nadu State Electricity Board [India]: DSM cell structure and training plan	Oct-99
Emissions trading: issues and options for domestic and international markets	Oct-00
Energy and water for sustainable living: a compendium of energy and water success stories	Jul-00
Energy for Life: A Case Study Compendium	Apr-01
Energy from sugarcane cogeneration in El Salvador	Nov-94
Energy roadmap for Ghana: from crisis to the fuel for 'economic freedom'	Feb-99
Funds for energy efficiency projects	Jan-02
Improved performance of the energy sector rural electrification: Bangladesh program assessment	2001
Indonesia-Awareness, Participation and Capacity Building for Energy Sector Reforms	Sep-02
International needs survey: information on energy efficiency standards and labeling	Oct-99
Issues and options for rural electrification in Zambia	Mar-02
Participant survey report: South Asia regional initiative for energy (SARI/ENERGY) rural energy services (RES) participants for the period May 2001 through April 2002	Jan-03
Power Sector Reform and Privatization in Countries with Small Systems: Experience Relevant to Mongolian Energy Sector (Presentation)	Mar-02
Promoting a sustainable trade agenda under the WTO (World Trade Organization): opening clean energy markets	Mar-00
Renewable energy for rural health clinics	Sep-98
Renewable energy for rural schools	Nov-00
Rural Electrification Analysis Debriefing (presentation)	Jun-01
Solar finance capacity building initiative (SFCBI): final report	Dec-02
South Asia Regional Initiative: Energy Training Needs Assessment (folder, consists of eight reports)	2003
Training Needs Assessment for the South Asia Regional Initiative for Energy; Final Report	Aug-03
USAID/USDOE Central American energy sector roadmap	Dec-99
Using renewable energy for rural connectivity and distance education in Latin America	2002
Watergy	2002

The Presidential Clean Energy Initiative

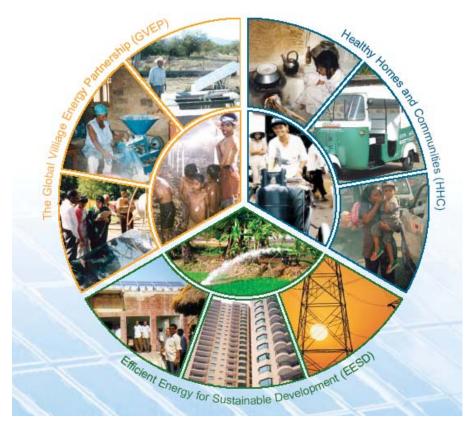
At the 2002 World Summit on Sustainable Development, the U.S. Government announced a new Signature Partnership for sustainable development – the Clean Energy Initiative: Powering Sustainable Development from Village to Metropolis. The Initiative seeks to provide millions of people with new access to energy services; increase the efficiency of energy, production, delivery and use; and significantly reduce readily preventable deaths and respiratory illnesses associated with motor vehicle and indoor air pollution. To achieve this aim, this U.S.-led, multi-year initiative has three parts:

The Global Village Energy Partnership (GVEP) will increase access to modern and affordable energy services in areas either not served or under-served by current energy delivery systems. (USG lead: USAID)

Efficient Energy for Sustainable Development (EESD) will improve the productivity and efficiency of energy systems, while reducing waste and pollution, saving money, improving reliability, and delaying the need for expensive new generating capacity. (USG lead: USDOE)

Healthy Homes and Communities (HHC) will promote clean transportation fuels (e.g. unleaded gasoline, low sulfur fuels), and healthier indoor cooking and heating practices to reduce the estimated 3 million annual and readily preventable deaths associated with air pollution and unhealthy patterns of energy use. (USG lead: USEPA)

Powering Sustainable Development from Village to Metropolis



The Energy Team has produced a brochure that provides more information on the Clean Energy Initiative. To receive a copy of the CEI brochure via e-mail, please contact Omar Hopkins at ohopkins@usaid.gov

Guidance for Reporting on the Clean Energy Initiative

The Energy Team has prepared a guidance document to assist Agency operating units in reporting activities that fall under the purview of the Clean Energy Initiative. This guidance requests results from activities achieved during FY 2004 (October 1, 2003 through September 30, 2004) that contribute towards the Clean Energy Initiative. The Energy Team and Senior USAID management draw heavily on this information to provide senior staff at the White House, the State Department, and the National Security Council with updates on the Clean Energy Initiative, to respond to Congressional, State Department, and other requests, and to highlight the achievements of the program as a whole.

Omar Hopkins is sending a copy of the guidance via e-mail to all operating units reporting activities that fall under the Clean Energy Initiative. If you should have any questions regarding the guidance please contact Omar at ohopkins@usaid.gov

Capacity Building Assistance for Zambia's Participation In the Global Village Energy Partnership

One of the developmental challenges facing Zambia is access to modern forms of energy by the country's rural population. Only about 2% (124,000 people out of the 6.2 million rural population) of the rural population has access to electricity and this is despite the fact that the country is a net producer and exporter of hydroelectricity. Development in rural areas is also constrained by the lack of reliable modern energy to support large and small-scale business as well as agricultural activities, which could assist in reducing poverty. With USAID assistance, Zambia is taking an integrated approach to rural electrification, marrying rural energy supply with achieving sustainable rural development and poverty alleviation goals. Zambia is seeking to adopt best practices from other countries and regions, and to create an integrated market based approach towards providing energy to all of Zambia.

The capacity building and technical assistance support provided by USAID through CORE International, Inc., has created a Rural Energy Working Group (REWG) to develop a preliminary action plan for increasing rural energy services across the country. REWG has been mobilized to design and develop related policy, regulatory, institutional, and funding recommendations for the Government of Zambia. Specifically, the REWG has made specific recommendations to the Government of Zambia for (i) the development of a national rural energy policy, (ii) establishment of a Rural Electrification Authority (REA) to manage rural energy services, and (iii) formalization and fortification of the National Rural Electrification Fund with a transparent and accountable management and governance. Currently through the support provided by USAID, the Government is closely working with the World Bank in finalizing a \$100 million project -- Increased Access to Energy Services (IAES) Project, with a primary focus on rural electrification and communications. This program is scheduled to start by September 2005. A preliminary optimistic estimation indicates that up to half a million households may receive access to electricity by the end of this program implementation. The recommendations made by the REWG have been adopted by the World Bank in its project appraisal.

With USAID's further assistance, the REWG is expanding to become a national Global Village Energy Partnership (GVEP) Working Group and an important partner in the design, development, and implementation monitoring of actionable plans and investment programs for extending access of modern energy services to the rural population. Through its partnership with the GVEP Working Group, the Government aims to increase consumer confidence, improve governance, reform rural energy service delivery modalities, and increase private participation in energy service financing and delivery to its rural population. The GVEP Working Group is taking its intervention further to develop a multi-year GVEP Action Plan that will facilitate the process for the donors, industry, and private investors to participate in implementing best practices for proven institutional and business models to achieve accelerated rural electrification and poverty alleviation.



USAID, through its technical assistance and training, has been very instrumental in moving Zambia's rural electrification program forward. USAID has been a consistent and reliable partner in aiding Zambia to reach its goal of 50% electrification by 2010.

Undate on Zambia's Participation In the Global Village Energy Partnership

- The Technical Consultation (TC) on Establishing the Global Village Energy Partnership (GVEP) Working Group in Zambia and Planning for the National GVEP Action Plan took place in Zambia on March 24, 2004. The consultation was conducted under the leadership of the Zambian Department of Energy (DOE) at the Ministry of Energy and Water Development (MEWD) and facilitated by USAID contractor CORE International. DOE organized a meeting of various stakeholders including various government ministries/agencies, private sector representatives, consumer groups, NGOs and academia, energy sector regulator, and representatives of UNDP, SIDA, and the German Embassy. A total of forty-one (41) representatives participated in this TC.
- The Permanent Secretary of the MEWD opened the technical consultation meeting and stressed the commitment of the Government of Zambia to the GVEP. Mr. Oscar Kalumiana, Deputy Director, DOE started the technical consultation process by making a detailed presentation on the objectives, priorities, and approach to GVEP and stressed the need for formally establishing a GVEP Working Group. Specifically, the following activities were achieved during the day-long meeting:
- Discussion on the role of the Zambia GVEP Secretariat at the Department of Energy (DOE). The
 participants offered many suggestions on how to formalize the work of the Zambia GVEP Secretariat and
 strengthen its coordinating functions across the government and the wider stakeholder community.
- Paper on the status of the energy delivery systems and opportunities for enhancement in Zambia by CORE International's local consultants. This paper provided further basis for accelerating the GVEP process given the government's commitment to increasing rural energy access from the current 2% level to 15% by 2012. Furthermore, the possible areas of focus for the GVEP in Zambia and the potential benefits that may arise from the partnership were defined. With this background the Zambia Technical Consultation proceeded with discussions regarding the formalization of the GVEP Working Group in Zambia.
- Discussion on the formal establishment of a GVEP Working Group. This involved a rather lengthy session on the composition of the membership in the GVEP Working Group. Specific number of slots were discussed for representation from the public sector, consumer groups, energy service providers, NGOs and other stakeholders. The discussions ended with the DOE and the participants agreeing on a maximum number of members in the Working Group (16 or so) and on a process by which the participants will send nominations for membership to the DOE. The DOE will compile a list of potential GVEP Working Group members and make a final recommendation to the GRZ (Minister of MEWD) for formally establishing the Working Group.
- Discussion on the Elements to be Included in the GVEP Action Plan. DOE officials discussed the GVEP Action Plan Guidelines posted on the web site of the GVEP Technical Secretariat. Based on these discussions, the participants offered specific comments on key Zambian issues related to enhancing rural energy service delivery by creating a participatory environment in which all stakeholders can benefit from meaningful roles in the GVEP process. A considerable amount of discussion was focused on the cross-sectoral aspects of rural energy service delivery. These included (i) enhanced education services, (ii) better health care delivery, (iii) water use particularly in the agricultural and farming sectors, and (iv) infrastructure, rural-urban integration, and trade enhancement.

Project Spotlight: EGAT/EIT/Energy Team

Each issue of "Energy Update" will spotlight recent projects that USAID supports. On this page, we feature a project that showcase the Energy Team's efforts to increase access to energy in Nicaragua.

EGAT/EIT/ Energy Team Assists the Private Sector in Nicaragua to Increase Energy Access

In a country where almost 45% of the inhabitants lack access to electricity and, where it is estimated that more than 75% of the rural areas are still unelectrified, TECNOSOLUCION, S.A. (Tecnosol), a Nicaraguan-based energy company is dedicated to the promotion of solar, wind and hydroelectric energy. Tecnosol provides energy access to satisfy the lighting, refrigeration, water pumping and irrigation needs of farmers, landowners and livestock farmers in the rural areas of northern and central Nicaragua where there is no access to the main grid.

USAID supports Tecnosol through an agreement with E+Co, a New Jersey based energy services company. E+Co through the FENERCA program, provided enterprise development services to Tecnosol in an effort to help the





company develop and complete its business plan and strengthen its expansion program. Through FENERCA the company also received technical assistance and funding for the completion of a market study. The market study was completed in July 2002 and formed the basis on which the company completed its business plan and gained access to a US\$100,000 loan from E+Co. The loan was disbursed in March 2003 and facilitated the purchase of additional inventory in order to begin an expansion model that entails giving short-term credit (3-6 months) to its customers.

With FENERCA's continued assistance, the company has been able to grow despite the fact that the Nicaraguan economy has been severely affected in the last few years. After the receipt of E+Co's loan Tecnosol has sold and installed 149 solar home systems (SHS) (31 SHS were sold on credit and 118 in cash) and 2 refrigeration and water pumping systems have also been

installed and sold on credit. Subsequent visits to Tecnosol's clients clearly demonstrate that all of them have displaced the use of kerosene lamps, candles and the use of diesel. At the time the loan was approved, Tecnosol had access to a revolving credit line with one of its suppliers (Solisto) for \$20,000 and from Bancentro, a local bank, for another \$20,000. The FENERCA team helped increase these credit lines to \$30,000 and \$50,000 respectively. According to Tecnosol's March 2003 financial statement, monthly average sales in 2003 increased 15.46% over 2002 which is a 139% increase over 2001. Since, the implementation of the expansion strategy the company has hired an additional technician for a total of 6 and contracted 4 additional representatives in the municipalities of Rivas, Río Blanco, Matiguas and el Almendro.

Most of the projects implemented by Tecnosol are located in extremely poor regions, where despite the communities efforts to organize themselves to have access to electricity, the high cost has made it impossible for them to achieve this goal. Improvement of quality of life and positive social impacts have also been possible for wealthier rural families, who despite their higher income levels, did not have access to electricity.

Due to Tecnosol's experience in rural electrification in September 2003, it was awarded a bid by the Nicaraguan Government, to install 1,500 SHS in a rural community.

Tecnosol's future looks promising and E+Co, through the FENERCA program, is now helping the company identify new growth capital to expand.

Project Spotlight: USAID/Russia

On this page, we feature a project that illustrates USAID/Russia's efforts to help develop a biomass energy technology as alternative fuel resource for off-grid communities.

Forest Resources and Technology Project

Promoting the use of biomass energy in the Russian Far East and Eastern Siberia

The Forest Resources and Technology Project (FOREST) (2000-2005), funded by USAID/Russia, and implemented by Winrock International, addresses specific issues threatening the boreal forest ecosystem in Siberia and the Russia Far East. Based on the participation of government, non-government, private and public organizations, the principle objectives of this program are: to preserve Russia's valuable forests through more effective fire and pest management; to encourage more effective and innovative use of timber and non-timber forest resources in the RFE and Siberia; to raise public awareness and reduce forest fires; to introduce renewable energy sources as alternatives to fossil fuels; to strengthen regional forest policy and legislation that promotes sustainable forestry management. The project works primarily in Khabarovsk, Sakhalin, Primorski, Irkutsk and Krasnoyarsk.



Wood waste has the potential of being a source of energy. It can be cheaper, more dependable and better for the environment than diesel or coal. FOREST Project is exploring and promoting the use of wood waste as a source of energy for wood processing facilities and for communities off the electrical grid. The FOREST project began by assessing if, and under what conditions, biomass energy makes economic sense. The high cost of transportation, and subsidized energy prices of coal and diesel were important factors to consider. The Biomass Feasibility Study in Siberia and Russia Far East showed that wood processors and off grid communities with high levels of wood waste could benefit from biomass energy technology.

As a result of FOREST, twelve timber companies are in process of adopting biomass energy technology, including 4 already operational. About 17 MW of biomass energy is available on line for businesses and municipalities resulting in environmental and social improvements from clean energy technologies.

As a result of (FOREST) assistance, Primorskiy Krai Timber Company Terneyles is looking to now begin construction of a cogeneration plant (30 MW thermal energy), and is in the process of negotiating for the purchase of a Wellons cell to improve the efficiency and resolve technical issues regarding the use of sawdust and bark in its Russian boilers. The cogeneration plant will result in savings of over \$200,000 USD from the cost of disposing wood wastes, and over \$500,000 USD from the cost of purchasing power from the grid.

The FOREST program plans to launch several new biomass energy facilities and increase Russian biomass energy engineering expertise.

For more information on the FOREST project, visit http://www.forestproject.ru/web2/main.htm or contact Carol Pierstorff at cpierstorff@usaid.gov at the USAID/Russia Mission



Project Spotlight: USAID/Guatemala

USAID/Guatemala and EGAT/EIT Collaborate on Using Renewable Energy to Support Economic Growth in Rural Areas of Guatemala

USAID/Guatemala is utilizing EIT/Energy's Interagency Agreement with U.S. DOE's Sandia National Laboratories to allocate \$187,000 toward using renewable energy technologies to foment economic growth in rural Guatemala. These funds will be added to funding from both EGAT/EIT and Sandia, to make a dramatic impact on the ground. Sandia will work with the Guatemalan NGO Fundación Solar to develop and implement economic development projects with renewable energy components in four communities currently without access to electricity.



In the Village of Unión 31 de Mayo, Uspantan, el Quiché USAID support will result in the construction of a 55kW micro-hydroelectric power plant. This is a "run of the river" plant that will provide access to electricity for over 400 families.

In the community of Santa Clara, in the department of Quiche, USAID support will fund a Solar Photo Voltaic (P.V.) water-pumping system that will provide a basic water supply for the community. This project will be designed and installed to provide one water collection point, thus protecting the reservoir and improving water quality by avoiding direct intake from the natural spring.

In the community of Guaxabajá, USAID will support an area greatly affected by the civil war in the 1970's and 1980's. Guaxabajá is an all-Mayan community in the Sierra de las Minas Biosphere Reserve. USAID will collaborate with The Nature Conservancy to promote community development and protect the Biosphere Reserve by implementing strategies that combine both conservation and energy for productive uses. USAID funds will be used to install a mini-hydroelectric plant to provide electricity to support small businesses that add value to local agricultural crops, and to implement sustainable forestry activities. Potential examples of value-added business include crop drying and packaging, ecotourism and the sustainable harvest of forest resources.

In the Village of Sepalau in the Department of Alta Verapaz, USAID support will fund a water pumping and purification system to protect a water reservoir, which in turn will improve water quality and public health. The project consists of a P.V. system that will pump water from a natural well-head and then into a discharge/filtration system. The P.V. pumps will feed the water into a community washing array that will discharge the used water into a filtration tank. The water will be cleaned and filtered using an array of tanks filled with plants that will clean and filter the used water without harmful chemicals. The project will benefit 250 families.

In The News: USAID/Brazil featured in Frontlines Magazine



Brazilian Villages Go Online With Solar Power

SURUACA, Brazil-Suruaca, an isolated puters that have put its 400 residents in concommunity on the Tapajós River, has just built a telecenter with solar-powered com-

tact with the outside world through satellites and the internet.



In a USAID-funded telecenter, Mr. Neres and other residents of a remote Amazon village gets their first look at a computer, one that runs on solar power and has a satellite internet connection.

It is a big step for a community that is a six-hour boat ride from the closest city,

Suruacá has a diesel generator that runs only on weekends, providing two hours of electricity on Saturdays and Sundays.

Building the telecenter took four months. The community association designed the structure, contributed labor, and used wood from the Amazon forest to build it. In return, the association owns the telecenter

and is responsible for its upkeep.

USAID contributed a photovoltaic system that can provide eight hours of solar ower daily for four computers, and four hours for power for the operation of a radio

The Agency also outfitted the telecenter with printers, scanners, and digital carneras. The Brazilian government provided a satellite internet connection.

The telecenter aims at educating the community, linking it to the rest of Brazil and the world, and getting the village some business.
"Brazil has hundreds of communities like

Suruacă, which pretty much live like we lived hundreds of years ago," said Eduardo Freitas, energy program development specialist for USAID/Brazil.

"People here have all sorts of problems,

such as lack of information about AIDS

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Villagers will be able to gain access to

world markets directly with products such as women's wallets and purses of "ecoleather," made by environmentally friendly, small businesses that USAID

helped develop locally. USAID/Brazil is a small mission. Its energy program includes activities aimed at reducing greenhouse gases through use of renewable resources—such as biomass fuels, solar and wind power, and small-scale hydropower plants.

A secondary goal is to reduce poverty and improve the quality of life of Brazilians lacking access to electricity.

"Most of our work is based on technical

assistance at the policy level, and imple-menting demonstration projects—like the telecenter—which we hope will be repli-cated by the government," said Freitas. He also said the centers will be used to distribute information from other mission

programs, such as HIV/AIDS prevention and forest management initiatives. Over three years, USAID gave \$200,000 to U.S. and Brazilian NGOs to develop telecenters in eight communities. These were chosen on the basis of need, commitment,

and the presence of representative local associations.

The Agency leveraged \$400,000 from other groups, including the Brazilian gov-

www.usaid.gov Keyword: Brazil

SURUACÁ, Brazil—Suruacá, an isolated community on the Tapajós River, has just built a telecenter with solar-powered computers that have put its 400 residents in con-tact with the outside world through satellites and the internet. In a USAID-funded telecenter, Mr. Neres and other residents of a remote Amazon village gets their first look at a computer, one that runs on solar power and has a satellite internet connection. Alexandre Mancuso, USAID/Brazil It is a big step for a community that is a six-hour boat ride from the closest city, Santarém. Suruacá has a diesel generator that runs only on weekends, providing two hours of electricity on Saturdays and Sundays. Building the telecenter took four months. The community association designed the structure, contributed labor, and used wood from the Amazon forest to build it. In return, the association owns the telecenter and is responsible for its upkeep. USAID contributed a photovoltaic system that can provide eight hours of solar power daily for four computers, and four hours for power for the operation of a radio station. The Agency also outfitted the telecenter with printers, scanners, and digital cameras. The Brazilian government provided a satellite internet connection. The telecenter aims at educating the community, linking it to the rest of Brazil and the world, and getting the village some business.

"Brazil has hundreds of communities like Suruacá, which pretty much live like we lived hundreds of years ago," said Eduardo Freitas, energy program development specialist for USAID/Brazil. "People here have all sorts of problems, such as lack of information about AIDS prevention." Villagers will be able to gain access to world markets directly with products such as women's wallets and purses of "ecoleather," made by environmentally friendly, small businesses that USAID helped develop locally.

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The Energy Team

The Energy Team within the EGAT Bureau's Office of Energy and Information Technology provides technical leadership and field support to USAID Missions and Regional Bureaus for the design and implementation of activities to improve the quality of life, increase economic growth, and promote sustainable communities by increasing access to environmentally sound energy and improved environmental practices. The Energy Team focuses on:

- Improving policy, legal, and regulatory frameworks to establish necessary market conditions for the private sector delivery of energy services and environmental management services;
- Increasing institutional (public, private, and NGO) ability to provide or deliver energy and environmental management services in the new and enhanced markets; and
- Increasing public understanding of, and participation in, decisions regarding delivery of energy and environmental management services.

Contact The Energy Team

Energy Team Leader

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Energy Technical Assistance Indefinite Quantity Contract (IQC) II

Todd Harding at tharding@usaid.gov

People, Energy and Development IQC

Ellen Dragotto at edragotto@usaid.gov

Energy Sector Governance Program

The Energy Sector Governance program identifies successful legal, regulatory, and institutional interventions that help bring about stable, transparent, and predictable marketplace rules, and facilitates the exchange of these interventions among development partners. For more information contact: Mark Murray at mmurray@usaid.gov; Kevin Warr at kwarr@usaid.gov; Davida Wood at dwood@usaid.gov; Walter Hall at whall@usaid.gov; Mark Schlagenhauf at mschlagenhauf@usaid.gov.

Urban Energy Services Program

The Urban Energy Services Program addresses a broad complex of development challenges in urban and peri-urban areas. Activities encourage energy, water, and resource use efficiency, as well as the use of appropriate tools, such as environmental management systems to reduce urban pollution. For more information contact: Jas Singh at jsingh@usaid.gov; Omar Hopkins at johngen@usaid.gov; Pamela Baldinger jbaldinger@usaid.gov; Simone Lawaetz at slawaetz@usaid.gov.

Rural Energy Services Program

The Rural Energy Services Program's principal activity focus is to identify key energy interventions that contribute to the multiple goals of rural social and economic development. Energy interventions are designed within the socio-cultural and economic context of the intended beneficiaries' environment, thereby ensuring their sustainability. For more information contact: Patricia Flanagan at pflanagan@usaid.gov; Erik Streed at estreed@usaid.gov.

Energy Team

Office of Energy and Information Technology Bureau for Economic Growth, Agriculture, and Trade To learn more about USAID's energy program, visit <u>www.usaid.gov</u> Type in keyword: Energy

