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FROM THE AMERICAN PEOPLE

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

In this issue:

New Director for Office and Energy and Information Technology.....	1
Project Spotlight: Uganda.....	2
Project Spotlight: India.....	3
Project Spotlight: India.....	5
Project Spotlight: Mali.....	6
Project Spotlight: Southern Africa.....	6
Methane to Markets.....	7
Southern Africa: Impact of HIV/AIDS on Energy Sector.....	8
The Presidential Clean Energy Initiative.....	11
Recent Events.....	14
New Reports.....	15
Energy Team News.....	17

New Director for Office and Energy and Information Technology



Juan A. B. Belt has been the Director of the Energy and Information Technology Office of the Bureau for Economic Growth and Trade of USAID since July 2004.

From 1998 to 2004 he was the Senior Economist of the Infrastructure and Finance Division that covered the Andean countries and English-speaking Caribbean at the Inter-American Development Bank (IDB). At the IDB he was the team leader for telecommunications projects in Suriname, Jamaica, Trinidad and Tobago and Guyana and for information and communications technology (ICT) projects in Guyana, Jamaica, Colombia and Trinidad and Tobago. The Jamaica ICT project was the first project of this nature funded by the IDB, and was designed with support from USAID/Jamaica. At the IDB he also worked on power sector projects in Ecuador and Colombia, a road project in Guyana, a

property rights project in Guyana, and competitiveness projects in Peru and Colombia. The Colombia competitiveness project established and funded a mechanism to finance "club goods" in clusters. He also coordinated a USAID funded study of lessons learned in electricity sector reforms in Latin America and was a co-author of a report of ICT in South America.

Before joining the IDB, he was the Chief Economist of the Global Bureau of USAID, and also served in USAID missions in Guatemala (Deputy Director for Regional Programs), El Salvador, Costa Rica and Panama (Chief Economist). While in El Salvador and Guatemala he was involved in the restructuring and privatization of the energy and telecommunications sectors in those countries.

Prior to his work at USAID, he worked for the World Bank and for the World Bank/FAO Program, in Latin America, Europe and Africa. He studied economics at Georgetown, American and Cornell, and has taught at universities in the US and Latin America.

Project Spotlight: Uganda

On this page, we feature a project that showcases USAID/EGAT/EIT/Energy Team's efforts to provide energy services for rural poor in Uganda.

EGAT/Energy Team Supports Solar Electrification of African Clinic where AIDS was Discovered

The EGAT Energy Team is providing funding for Solar Light for Africa, a faith-based NGO collaboration between U.S. and African churches, non-governmental organizations, and governments to provide light and energy sources for rural Africa using the natural power of the sun. Solar Light for Africa's primary project for 2004 is to electrify with solar photovoltaic panels the Kakuuto Hospital located in the Rakai District of Uganda where AIDS was first discovered. Pure water will also be provided, utilizing solar-powered water pumps, which includes the construction of two water storage tanks and piping over 3.2 kilometers to the hospital from a natural spring. Water spigots will be strategically placed along the way so that nearby villages can also have access to the pure water.

In addition to the Rakai hospital project, the goal for 2004 is to install 100 other solar systems in both Uganda and Tanzania. The installations will be in rural health clinics, community centers, and schools. As many solar installations as are possible will be installed by the combined American and East African youth teams. The SEU tech team will install remaining installations throughout the year. To date, SLA has installed 1,400 solar systems since its establishment in 1997.

This will be the sixth consecutive year that SLA has organized a mission. On the American side, the participants will include solar engineers, environmental experts to monitor and assess carbon offset emission reductions as solar energy replaces diesel, kerosene, and wood-burning fires, 4 doctors, 4 dentists, and 12 American senior high and college-aged youth from several regions of the U.S. who will team up with East African youth. On the East African side will be Bishop William Rukirande, Penina Kyembabazi of Uganda First Lady Janet Museveni's office, 12 Ugandan youth, and technicians from Solar Energy Uganda.



Founded by Retired Episcopal Bishop Alden Hathaway in 1997, some of SLA's accomplishments to date are:

- The provision of light and power to more than 1,000 facilities, such as medical clinics, orphanages, schools, churches, and private homes located in rural regions of East Africa.
- The decreasing of environmental and human degradation by providing a clean energy source, replacing the noxious fumes of kerosene lanterns that shorten people's life spans.

- The aiding in economic development by providing light after the sun goes down for increased productivity and the enabling of students to study at night.
- The facilitating of young people's access to the 21st century by providing solar power for computers and televisions, enabling global education and internet connection through satellites.
- The creating of goodwill ambassadors for "two-track diplomacy" through the organization of annual youth missions involving American and Ugandan high school and college-aged young people who live together for three weeks as they work in teams installing solar units.
- The generating of an optimistic vision for Africa in the future when all people will have access to a clean energy source provided by the natural rays of the sun.

Project Spotlight: India

On this page, we feature a project that showcases the USAID/India and the EGAT/EIT/Energy Team's efforts to provide energy services to poor urban households in India.

Electrifying 230,000 Households in Ahmedabad

Summary: The Energy Team worked in conjunction with the USAID/India Mission, the Ahmedabad Electric Company (AEC), and local NGOs to develop and promote an approach to provide safe, reliable, and legal electric service connections to approximately 1.2 million slum dwellers (233,000 households) in Ahmedabad, India. USAID provided matching seed funds to cover 1/3 of the costs for the pilot phase of this activity which reached approximately 3000 households. The pilot demonstrated that losses from theft could be reduced entirely and that poor households are able and willing to pay a connection fee and their utility bills when provided a quality electrical service. Because of the success of the pilot phase the AEC used its own funds to expand the slum electrification program to another 30,000 households and plans to provide service to 200,000 additional households by March of 2007.

The Energy Team worked in conjunction with the India Mission, the Ahmedabad Electric Company (AEC), and local NGOs to develop and promote an approach to provide safe, reliable, and legal electric service connections to approximately 1.2 million slum dwellers (233,000 households) in Ahmedabad, India. In Ahmedabad the term "slum" is taken to cover very poor households living in homesteads without formal tenure; the slums themselves are anywhere from a few years to one hundred years old.

The historical approach for electrifying households in slums required that the households provide legal documents proving tenure and to cover 100% of the cost of stringing feeder lines from the distribution system to a residence. Because very few households could prove legal tenure, and fewer still could raise the upfront costs of connecting to the grid, only a minority of households had legal access to the grid network (less than 40%) resulting in a very high average cost to connect.

Nonetheless the benefits of electricity to households are so great that an informal (read: illegal) system of electricity distribution developed in these neighborhoods. Households paid an illegal service provider to provide an electrical connection based on the number of points: the sum of outlets and energy consuming devices. These households (about 40% of the total) paid on average between US\$2-3/month to the illegal service providers. As a consequence the AEC had 40% unaccounted for energy losses in slum neighborhoods.

The Ahmedabad Municipal Corporation (AMC) has a slum upgrading project (the Parivartan scheme) which seeks to improve the lives of the approximately 25% of the city who live in slums. The Parivartan scheme provides improved water supply (private household connections), sanitation facilities, stormwater drainage, street lighting, and solid waste management. However, the scheme did not provide or seek to improve the condition of electrical distribution system in these neighborhoods. Nonetheless an important facet of the

Parivartan scheme was the issuance by the AMC of “No Objection Certificates” (NOCs) that was an intermediate form of tenure. Here the role of the NGOs was essential in helping to bridge the gap between the language that the AMC intended to use and the language that the AEC required to protect its investments in slum areas and to protect itself against liability.

One of the principal concerns of the AEC was would consumers pay to connect and would they pay their periodic utility bills or would infrastructure investments result in an increased capacity to steal electricity. Likewise, from the consumer perspective the question was would paying the connection fee actually result in the AEC delivering a quality (affordable and reliable) service. USAID worked with the AEC, the NGOs and the communities to address this dilemma by providing seed money to pilot a program that tapped into the preexisting trust and experience that the NGOs had with both the slum households and with the AEC to bridge the lack of trust and confidence that existed between the utility and their customers. USAID provided 2,000 INR (about USD\$40) subsidy per household to help mitigate the risk to both the AEC and the slum dwellers (each of whom also provided about 2,000 INR).

Several key lessons were learned from the pilot. (1) Within the pilot areas it was found that the typical month charge for electrical service for those households that had been previously relying on illegal service providers decreased by almost 50%; i.e. legal access is cheaper than illegal access and as a consequence theft in electrified areas was essentially completely eliminated. (2) Households are willing and able to pay connection and usage charges, although access to credit at reasonable rates via the NGOs appears to be an important element to the affordability of the connection charges. (3) Electrifying entire neighborhoods allowed the AEC to reap substantial economies of scale and to substantially reduce the average connection fee.



Household with new legal electric meter

In addition to reduced electrical costs, the benefiting households of the pilot project also identified additional benefits including: extending the ability to work or study in the evenings, the ability to use electric sewing and other machines to increase productivity, increased quality of electrical service (more hours and stable voltage) and the consequent reduced damage to appliances, and the increased ability to partake of leisure activities particularly TV viewing. In addition, community associations and NGOs earned income by engaging women to provide meter reading services and by loaning funds for the connection charges. These funds were recycled within the community to provide daycare, adult education, and other social services. Perhaps the most critical benefit of the pilot project was to develop an experience of trust between the utility and its staff and the slum dwellers that allows normal utility-customer interactions to occur with a minimum of friction and inefficiency. As a result of the success of the pilot project which reached nearly 3,000 households, the AEC used its own funds to provide safe, reliable, and legal electrical service to an additional 30,000 households and has plans to provide service to an additional 200,000 households by March 2007.

The Ahmedabad Slum Electrification project is part of the Energy Team's larger strategy for improving access to, and increasing the consumption of, safe and reliable modern energy to increase the health, welfare, and productivity of poor communities.

Project Spotlight: India

Public Understanding and Participation – Safe and Legal Connections for Consumers in Slum Communities in New Delhi

“It was a January afternoon and people were busy with their daily activities. Sanju was taking rest with her two children (a year old son and a daughter aged 5), when their illegal access to electricity was disconnected. Sanju went to the toilet leaving her two children inside the room. They had lived there for the past 20 years. Her husband had gone out to his clothing shop from which he earned only Rs. 2000 per month (about \$45) - the family’s only source of income. The children, who were alone in the room, started playing and came down from the cot. The younger one came near to the iron door which was also close to a live electric wire. The power came back on and the child was burned, particularly his upper body and face. By the time his mother and people from the surrounding houses heard the screams and ran to save him, the child was unconscious. He was immediately taken to the hospital but died soon after arrival. Most people in the slum saw his death as fate and bad luck rather than a result of unsafe and illegal practices to get access to power. Because slum residents remember this terrible accident, INDCARE provided counseling to them about electricity and motivated them to get legal connection with proper wiring to avoid such accidents in the future.”

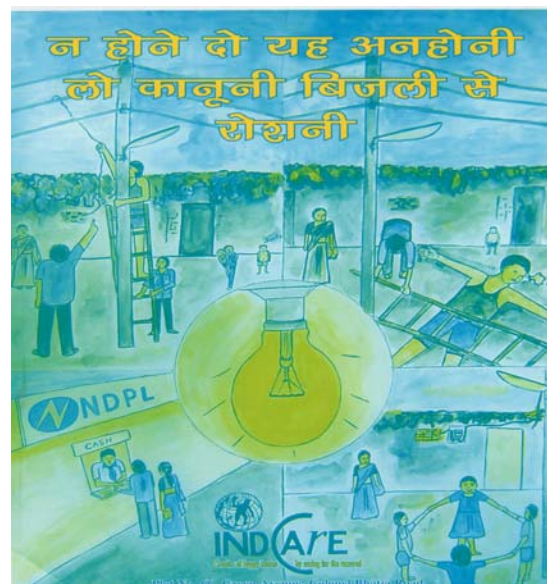
Priyanka Sharma Awasthi
Assistant Director, INDCARE

When USAID’s Energy Team and the Academy for Educational Development (AED) began working with North Delhi Power Limited (NDPL) in late 2003, NDPL indicated that slum areas presented its biggest challenge in terms of reaching out to consumers.

In the spring, INDCARE Trust, a Delhi-based NGO that specializes in working with women, worked with two clusters in northwest Delhi (Jaipur Golden and Bhalla Factory) to urge community residents to opt for legal connections for electricity. INDCARE took a two-pronged approach to the project. While NDPL had originally envisioned an outreach campaign around the issues of the legal and safety issues of electricity usage, INDCARE persuaded them to take a more proactive approach, by offering legal connections as an alternative to theft. At the same time, INDCARE worked with the communities to communicate both the safety risks of illegal connections and the economic benefits of a legal connection.

These efforts involved brokering a new relationship between the utility and the cluster residents. To do this, INDCARE worked carefully to change the perceptions the community and the utility had towards each other. For the residents, the lived experience of marginalization had meant that legal access was an alien concept. The practice of applying and paying for service was one that INDCARE could facilitate. At the same time NDPL was beginning to view the community as potential customers within their service area, INDCARE worked with the utility to respond to the needs of the extremely poor.

By being the bridge between the utility and residents, the project was able to show results on the ground. Within a few months of implementation over four hundred of the 850 households in one community requested legal connections for electricity. Toward the end of the project, consumers faced a final hurdle before they could have



legal connections: they had to come up with an additional \$10 each to pay for the cable that would connect them to the grid. USAID helped them overcome that hurdle by paying the cable costs.

NDPL has committed to continue to working with INDCARE and has asked INDCARE to begin work in three new areas in addition to continuing to work in the two original clusters.

Project Spotlight: Mali

Feasibility Study for Agricultural Waste-to-Energy Project

The EGAT/Energy Team recently joined the USAID/Mali Mission in co-funding a feasibility study in Mali for using rice hulls (a waste product from rice milling) to generate electricity.

If the study indicates that burning rice hulls to produce electricity is economically and technically feasible in Mali, the Schaffer Group intends to pursue financing for the project and initiate construction of a rice mill, whose waste will be recycled in order to produce low cost energy to run the plant. The plant would thus simultaneously produce rice and biowaste for its own fuel needs.

The opportunity for this type of waste-to-energy project was identified in an energy assessment that the Energy Team conducted for USAID/Mali in 2002, but at that time there was no private sector partner identified. But in early 2004 both USAID/Mali and the Energy Team were approached by the Schaffer International Group to explore USAID's interest in potential energy projects in the agricultural sector. The Schaffer Group is already working with USAID in Mali under a Global Development Alliance project to expand the production and processing of sugar cane. The Schaffer Group is based in Louisiana, where there is extensive experience with rice hull-to-energy projects, so Schaffer is very interested using their experience in Mali, as well as their relationships with the rice industry in Louisiana, to see if there could be an opportunity to transfer this technology to other countries.

The pre-feasibility study will focus on four areas: 1) the volume of waste rice hulls available, its distribution, and its transport to a waste-to-energy facility; 2) the size of the waste-to-energy facility and the customers that could utilize the electricity produced; 3) the possibility of using the hot water generated by the facility to raise fish; and 4) the export potential to the US steel industry for the silica produced by burning the rice hulls (the silica is used to keep molten steel warm). In addition, the government of Mali hopes that excess energy produced from the facility could be used to provide power to a new industrial park that would create new jobs in rural Mali. This waste-to-energy project is a good example of the key role that energy plays in both agriculture development and economic growth.

Project Spotlight: Southern Africa

Increasing Journalists' Understanding of Energy and Environmental Issues

Increasing Journalists' Understanding of Energy and Environmental Issues

The first step in engaging stakeholders and individuals in the energy sector is to increase public understanding of how the industry or sector operates, how it is regulated or governed, and the decision-making process regarding tariffs, electrification, new power plants and other matters important to communities and stakeholders.

A workshop, sponsored by USAID, set out to do this by enhancing the specialized knowledge in energy/environmental issues of journalists in this region. Already the participants responded with a number of articles written on energy, a much greater interest in the subject and understanding of the connections to other important social sectors of these economies. What follows, we hope, is a greater interest in the citizenry to educate themselves on the subject and a greater willingness and ability of consumers to participate in their nation's energy sector decision-making and thus take an active role in their future economic development and opportunities for an improved quality of life. Time will tell what the real impact on citizens will be, but for now,

only a few weeks after the workshop has ended, there has been tremendous communication between the participants and increased submission of energy related articles.

Thirty-four (34) media professionals from eleven of the Southern African Development Community (SADC) participated in this workshop. Judging by their evaluations and subsequent articles and discussion through the internet, we can safely say they gained a much greater understanding of and appreciation for, energy issues and how they impact society and economic development in the region.

To encourage a real life experience for the group, the workshop included a one-day trip in the field to interview villagers who had participated in a pilot solar project for agriculture, schools and water pumping. A variety of presenters shared their knowledge, experience and different viewpoints of energy development so that reporters could appreciate the complexities and the potential difficulties in judging too quickly policy and technology decisions in their countries. This was certainly revealed in the animated discussions that were a daily event in the course.

To inspire a greater willingness to focus and write on the issues they have been learning about, the workshop included a writing contest in which six winners were selected, five of which were sponsored by USAID to participate in a conference on Southern African Trade, Low Cost Power and HIV/AIDs, held in Gaborone in early June (please see related article under recent events). The stories were judged by local and international media experts using reporting thoroughness, accuracy, interesting and readable style and effective use of sources and facts, as criteria for selection. In addition, the winner's articles were provided to one of South Africa's most prominent and outspoken newspaper and on-line news source, the Mail & Guardian. The M&G has indicated its interest in publishing a special energy section and stories were submitted to them following the completion of the workshop for this purpose. Since the end of the workshop, the reporters have set up their own distribution list and have been sending many emails to each other about the stories they are writing and the energy concerns of their country. They are very interested in keeping the momentum going and developing their specialized expertise in energy reporting.

Methane to Markets

International Methane to Markets Partnership: New Bush Administration Initiative

On July 28, U.S. EPA Administrator Mike Leavitt announced that the United States will join efforts with Australia, India, Italy, Japan, Mexico, United Kingdom, and Ukraine to develop and promote cooperation on the recovery and use of methane. Methane is a clean-burning fuel that is the main component of natural gas and is also the second most prevalent greenhouse gas from human sources. The Methane to Markets Partnership will deliver significant energy, safety, and environmental benefits through the recovery and use of methane, while reducing global greenhouse gas emissions. The Partnership will focus on deploying cost-effective technologies in landfill gas-to-energy projects, methane recovery projects at coal mines, and improvements in natural gas systems.

"The Bush Administration welcomes this global partnership, a partnership that has the double benefit of capturing the second most abundant greenhouse gas and turning it to productive use as a clean-burning fuel," said Administrator Leavitt. "Together we will harness the power of collaboration, technology and markets to achieve verifiable reductions of global methane emissions."

Spencer Abraham, Secretary of Energy added, "I am pleased to join my colleagues from EPA, the State Department, and US AID in launching this important international climate change initiative. The Methane to Markets partnership follows our successful establishment of the International Partnership for a Hydrogen Economy and the Carbon Sequestration Leadership Forum. In addition to very substantial near-term greenhouse gas reductions, this new partnership will benefit the economies of developing nations across the world."

Significantly reducing methane emissions is one of the most cost-effective ways to realize immediate environmental benefits due to methane's potency as a greenhouse gas and short atmospheric lifetime. In addition, capturing and using recovered methane provides a valuable, clean-burning energy source that improves quality of life in local communities. This Partnership has the potential to reduce net methane

emissions by up to 50 million metric tons of carbon equivalent annually by 2015 and continue at that level or higher in the future. To give a sense of scale of the level of reductions, this would be the carbon equivalent of removing 33 million cars from roadways for one year or eliminating emissions from fifty 500 MW coal-fired power plants.

The U.S. will commit up to \$53 million over the next five years to facilitate the development and implementation of methane projects in developing countries and countries with economies in transition. EPA will play a central role in the Partnership by building on the success of the Agency's voluntary domestic methane partnership programs. Since 1993, EPA and other U.S. Agencies have been working collaboratively with industry to identify and implement cost-effective methane emission reduction technologies and management practices. These programs have helped bring total U.S. methane emissions in 2001 to more than 5% lower than emissions in 1990, in spite of significant economic growth over that time period. Other Departments will also play a central role in the Partnership. These include the Department of State, which leads on international climate change policy and activities; the Department of Energy, which has valuable expertise in natural gas and coal mine methane technologies; and the U.S. Agency for International Development, which provides important technical expertise in the economic reform of energy sectors to create markets that support private sector projects in developing countries and those with economies in transition.

Countries participating in the Methane to Markets Partnership are expected to undertake activities aimed at reducing and capturing methane emissions at landfills, coal mines, and oil and gas systems. It is anticipated that developed countries will work with developing countries in undertaking these efforts. The specific details of the Partnership will be established and formalized through further discussion between participating member countries.

The success of the Partnership will rely on cooperation between the public and private sectors as Paula Dobriansky, Undersecretary of State for Global Affairs, noted, "This new Partnership among developed and developing countries -- with its emphasis on practical solutions and strong participation from the private sector -- will produce energy efficiency, increase safety, and provide significant, near-term economic and environmental benefits for addressing global climate change."

The Methane to Markets Partnership will be officially launched by developed countries, developing countries and countries with economies in transition with large methane emission sources or special expertise at a Ministerial Conference in November 2004 in Washington, D.C.

For more information visit: <http://www.epa.gov/methane/international.html>

Further information on this new initiative will be sent to Missions and Bureaus shortly. USAID's role is still being clarified, but will probably draw on the Agency's extensive experience creating effective markets - a key factor in encouraging methane capture, private sector investment, and productive use of the methane to further economic development.

Southern Africa: Impact of HIV/AIDS on Energy Sector

Southern African Trade: The Economic Development Benefits of Low Cost Electric Power and Electric Utility Strategies to Combat HIV/AIDS

In recent years, the Africa electric utilities participating in the USEA/USAID Energy Partnership Program have been expressing increasing concern about the impact of HIV/AIDS on their workforces and operations. In response to this concern, on June 21-22, 2003 in Gaborone, Botswana, USEA organized a workshop on the competitive benefits of low cost power for Southern Africa trade and the impact of HIV/AIDS on utilities and industries. USAID funded the Workshop and Nexant and Chemonics were co-sponsors.

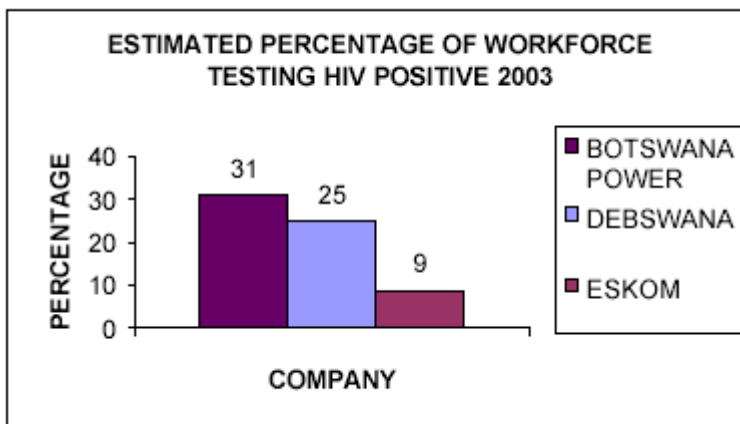
This was the first time that the Energy Partnership Program confronted the issue of HIV/AIDS. The article below summarizes the problems experienced at the electric utilities in Botswana and South Africa, and a major

diamond mine in Botswana. Each company is commended for its aggressive and compassionate corporate response to assisting their employees who suffer from HIV/AIDS and pursuing strategies to reduce the incidence of this deadly disease.

On June 21-22, 2004 in Gaborone, Botswana, USEA conducted a USAID-supported “Workshop on Low Cost Power and HIV/AIDS in Southern Africa.” Senior executives from the region’s electric utilities, regulatory commissions and industrial companies discussed how low cost power makes Southern Africa more competitive in international trade and how utilities and industries are confronting the HIV/AIDS problem in their work forces. This article addresses the second issue – the impact of HIV/AIDS on the region’s utilities and industries. The participants shared their specific strategies and actions to confront this debilitating and life threatening disease that is having as much of a deleterious impact on electric utilities and major industries as on the wider African society.

Senior executives from South Africa’s utility Eskom, and Botswana’s diamond mine company Debswana and electric utility Botswana Power Company laid out the details of how their companies deal with the substantial problem of HIV/AIDS. The percentage of the work force testing positive for HIV is 30% at Botswana Power, just under 10% at Eskom, at over 25% at Debswana. For all of the companies, the highest incidence of HIV is in the 25 to 39 years old age group, as shown in the chart below for Debswana.

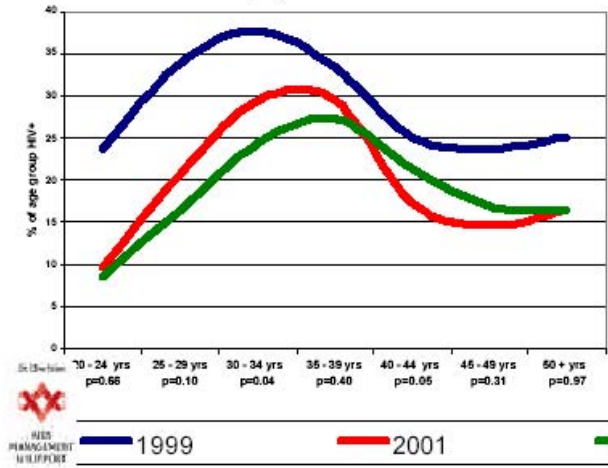
ESTIMATED PERCENTAGE OF WORKFORCE TESTING HIV POSITIVE 2003



DEBSWANA HIV PREVALENCE SURVEY - 2003

Trends in age band specific HIV prevalence in permanent employees 1999-2003

DEBSWANA HIV Prevalence Survey - 2003
Trends in age band specific HIV prevalence in permanent employees 1999-2003



Regarding the impact of HIV/AIDS on lost productivity, Eskom surveys have revealed that days absent or on leave in the year prior to death by AIDS is about 1 month (21 working days). Those forced to leave employment and go on disability retirement due to AIDS lost about 2 months (46 days) of work time in the year before retiring. At Debswana, one-third of all worker deaths in 2003 were AIDS-related and the percentage of productive time lost due to HIV/AIDS infection was about 2 percent.

Yet, by taking concrete actions, these companies have experienced declines in deaths, disabilities and new HIV/AIDS infections between 2000 and 2003. Each company has instituted strong corporate strategies and definitive measures to assist the employees and their families. Their strategies state a firm commitment to retain and help their employees, including nondiscrimination in hiring and promotions for HIV/AIDS infected workers, free testing and comprehensive education and medical assistance programs. Each of the companies pays the costs of medical treatment, including providing antiretroviral treatment. Botswana Power allows HIV/AIDS positive employees working in remote rural areas two paid days of leave to travel to medical treatment sites. Debswana provides medicine and treatment at its mine sites, while Eskom pays for its employees to receive treatment at hospitals and medical centers throughout South Africa.

DAYS OF WORKER LEAVE AND ABSENTEEISM DUE TO HIV/AIDS ESKOM, SOUTH AFRICA

Survey Year	Death in Service		Disability	Retirement
	1st Year Before	2 nd Year Before	1 st Year Before	2 nd Year Before
1999	28	9	89	26
2003	21	6	46	19

All the companies engage in intensive training to enable managers to understand and compassionately deal with HIV/AIDS positive employees. Additionally, each company conducts education programs to promote safe sexual relations, educate traditional doctors and commercial sex workers. Both Eskom and Debswana have instituted strong programs to monitor the progress of their efforts, including confidential surveys to assess progress. While HIV/AIDS has had a devastating impact on the power companies and consumers of power in Southern Africa, the response to this crisis by ESKOM, DEBSWANA and BPC show that the disease does not have to cripple the economy. The creative and practical approaches to prevention and treatment of HIV/AIDS as demonstrated by this panel discussion can be replicated by other power companies and critical industries in Southern Africa to maintain high standards of the most critical element to the Southern African economy: its people.

The Presidential Clean Energy Initiative

Many thanks to all the USAID Missions/Offices/Teams that reported on their Clean Energy Initiative (CEI) activities and results in the first and second quarters of FY04. As a result of these collective activities, in the first half of FY04, approximately US\$21 million was used to leverage over US\$279 million and benefited over 14 million individuals. Obligations counted towards the *Global Village Energy Partnership* component of the CEI amounted to over \$11.6 million with over half a million people receiving access to clean, efficient and healthy forms of energy in areas either not served or under-served by current energy delivery systems. Obligations counted towards the *Efficient Energy for Sustainable Development* component of the CEI amounted to over \$3.7 million for improving the productivity, reliability, and efficiency of energy systems. Obligations counted towards the *Healthy Homes and Communities* component of the CEI amounted to over \$6.1 million for promoting clean transportation fuels (e.g. unleaded gasoline, low sulfur fuels), and healthier indoor cooking and heating practices to reduce air pollution and unhealthy patterns of energy use.

Many thanks to Omar Hopkins for his contribution to the Energy Team for this past year. We wish Omar all the best in his future endeavors. A new AAAS Fellow, Jeff Haeni, joins the Energy Team in September and will be the point of contact for reporting on the Clean Energy Initiative.

A select list of CEI-related activities, reported by USAID Missions/Offices/Teams is provided below:

Name of Partnership	Project title	Project description	Target country	Sectors (1=Renewables, 2=Energy Efficiency, 3=Policy, 4=Clean Fuels, 5=Access to Energy, 6=Electrification)	Phase (1=Under planning, 2=Under implementation, 3=Completed)	Available Funding (in US \$000) Funds Obligated Q1 & Q2 FY04	Comments Selected provisional results first half of FY04
Clean Energy Initiative/Efficient Energy for Sustainable Development	Watergy	Assist water utilities to increase operational (including energy) efficiency	Brazil, Mexico, India, Sri Lanka, South Africa	2 - Energy Efficiency	Under Implementation	125	2,163,140 beneficiaries
Clean Energy Initiative/Global Village Energy Partnership	Rural Power for Poverty Reduction-II	Grid extension to provide electricity to rural communities	Bangladesh	6 - Electrification	Under Implementation	3,760	1,675,926 beneficiaries
Clean Energy Initiative/Healthy Homes & Communities	Vehicle Emissions Program	Reduce vehicle emissions	Philippines	4 - Clean Fuels	Under Implementation	1,750	25,000 beneficiaries
Clean Energy Initiative/Global Village Energy Partnership	Bank Training for Energy Financing Improvements	Training of customer relationship officers, branch directors and loan officers of United Bulgarian Bank (UBB)	Bulgaria	5 - Access to Energy	Under Implementation	0	52 branches trained
Clean Energy Initiative/Global Village Energy Partnership	Electricity Restructuring Assistance	Energy Analysis & Policy Assistance and Electricity Restructuring Assistance	Indonesia	3 - Policy	Under Implementation	850	\$224,000 leveraged; 9 policies; 60 institutions trained
Clean Energy Initiative/Efficient Energy for Sustainable Development	Energy Efficiency Pilots	Improve energy efficiency of participating institutions and enterprises	Armenia	2 - Energy Efficiency	Under Implementation	0	\$241,000 in energy savings
Clean Energy Initiative/Healthy Homes & Communities	Lead Phase Out	Widening phase-out of leaded gasoline for clean air & better public health	Indonesia	4 - Clean Fuels	Under Implementation	399	10,000,000 beneficiaries

Name of Partnership	Project title	Project description	Target country	Sectors (1=Renewables, 2=Energy Efficiency, 3=Policy, 4=Clean Fuels, 5=Access to Energy, 6=Electrification)	Phase (1=Under planning, 2=Under implementation, 3=Completed)	Available Funding (in US \$000) Funds Obligated Q1 & Q2 FY04	Comments Selected provisional results first half of FY04
Clean Energy Initiative/Efficient Energy for Sustainable Development	Cook Stove Improvement	Develops & promotes energy efficient stoves for households and small food processing businesses and other small business energy sources.	Haiti	2 - Energy Efficiency	Under Implementation	4	30,000 beneficiaries
Clean Energy Initiative/Global Village Energy Partnership	Partnership Development & Training	Assist the Mexican Secretariat of Energy (SENER) to define the GVEP National Action Plan, including state programs.	Mexico	3 - Policy	Under Implementation	350	30 institutions trained; 10,000 beneficiaries
Clean Energy Initiative/Global Village Energy Partnership	Community Revitalization through Democratic Action	Rehabilitating and upgrading electrical supply and distribution systems	Montenegro & Serbia	5 - Access to Energy	Under Implementation	790	\$732,000 leveraged; 92,000 beneficiaries

Recent Events

Global Village Energy Partnership Announces New Host and Manager

"USAID/Brazil is pleased to learn of the selection of a GVEP Program Manager and ITDG's representation on the Board. GVEP has played a major role in bringing the Brazilian Government, the international donor community and USAID together in a concerted effort to combat poverty through the provision of reliable energy services. Moreover, it has proved to be an excellent vehicle for promoting an integrated approach to addressing key health, education, and agricultural issues affecting Brazil's rural poor. We are extremely pleased to be a part of this innovative program." -- Dick Goughnour, USAID/Brazil Mission Director

"Fundacion Solar has just received the exciting press release on the selection of a new host institution for the GVEP Technical Secretariat and Program Manager, and welcomes ITDG involvement in the GVEP process. In Guatemala, we would not be as far advanced in designing our long term rural development and poverty alleviation program without the GVEP, and in particular USAID's strong support. We look forward to our continued membership in GVEP and collaboration with USAID."-- Ivan Azurdia Ph.D., local NGO GVEP partner in Guatemala; and an Advisor to the GVEP-Guatemala Delegation

Paul Hassing, Chair of the Global Village Energy Partnership Board, announced the selection of ITDG - Intermediate Technology Development Group - as the new host for the GVEP Technical Secretariat.

Dr. Abeeku Brew Hammond, former director of Ghana based NGO KITE and Associate Professor at the country's Kwame Nkrumah University of Science and Technology, has been chosen as GVEP Manager. He will begin on September 1, 2004, and work together with a small team from ITDG's UK based head office in Rugby, United Kingdom.

ITDG will be represented on the GVEP Board by its Policy and Programmes Director Andrew Scott. Financial support for the hosting is provided by The World Bank/Energy Sector Management Assistance Program (ESMAP).

Dr. Griffin Thompson, GVEP Board member and lead of the transition search committee, called the announcement an "historic time for GVEP", having selected a strong host organization and superb Program Manager. He also thanked Judy Siegel, who has served as the interim Program Manager, for her "excellent" work and support to the Board through the transitional period, and added that Ms. Siegel will continue to assist GVEP as lead of the Financing Facilitation Service Line. Dr. Thompson thanked the World Bank - and in particular ESMAP, lead by Ms. Dominique Lallement - for hosting GVEP through the start up phase and stressed that ESMAP and the Bank had been instrumental in the launch of GVEP and a major contributor to the Partnership's substantial progress to date.

Jamal Saghir, Director Energy and Water at the World Bank, and GVEP Board member said the Bank had been pleased to host the GVEP Secretariat until a more permanent home was identified by the Board. He also repeated the Bank's continued support to the Partnership.

GVEP aims to reduce poverty and enhance economic and social development for millions around the world by bringing together developing and industrialized country governments, public and private organizations, multilateral institutions, consumers and others in an effort to ensure access to modern energy services by the poor. In 16 months of operation GVEP has initiated the following:

- National action plan development and implementation in 18 countries in Africa, Latin America and Asia.
- Programs linked to the delivery of energy services to more than 20 million people.
- Training programs for entrepreneurs, microfinance organizations and financial institution officers.
- Shifting of host country government, private sector, NGO, and donor funding from electrification alone to broader energy-poverty and modern energy service delivery issues.

For further information, please contact Guy Whitmore, ITDG media relations officer, on 01926 634510 or 07973 421770. Alternatively email on guyw@itdg.org.uk <mailto:guyw@itdg.org.uk>

For more information about GVEP: <http://www.gvep.org>

For more information about ITDG: <http://www.itdg.org>

USEA, California, and Washington Distribution Companies Share Best Practices with Dhaka Electricity Supply Company of Bangladesh

BANGLADESH ENERGY SECTOR BRIEFING

The United States Energy Association (USEA) conducted a partnership program activity for the Dhaka Electric Supply Company (DESCO) of Bangladesh, June 25 to July 2 in Sacramento, California; Vancouver, Washington and Washington, DC. Mohammad Shahjahan Mia, the Manager of System Operations of DESCO was accompanied by Mohammed Kamaruzzaman, Engineer (General) from the USAID/Bangladesh Mission. This activity was part of the Energy Partnership Program, a program funded by the United States Agency for International Development (USAID)/Bangladesh Mission.

Mr. Mia and Mr. Kamaruzzaman met with the Sacramento Municipal Utilities District (SMUD) in Sacramento, California and Clark Public Utilities in Vancouver, Washington. They discussed the responsibilities and relationships between utilities and consumers. In Washington DC, DESCO conducted a public briefing on the current status of the energy sector in Bangladesh. Both SMUD and Clark Public Utilities discussed the day-to-day functions of a distribution company, focusing on the importance of the metering, billing and collections process. The DESCO delegation was able to see the meter testing facilities of both U.S. distribution companies and also met with customer service representatives from both utilities. At Clark Public Utilities, the delegation visited the automated billing/receiving department, which generates all of the bills of the utility as well as processes the payments for those customers who return their payments to the utility. The DESCO delegation was impressed by how efficiently Clark Public Utilities runs its billing department with a small staff. Clark Public Utilities not only processes its own billing and receiving but also provide this service to other companies for a fee.

SACRAMENTO MUNICIPAL UTILITIES DISTRICT SHOWCASES ITS GIS SYSTEM FOR DESCO

Meetings with SMUD included a tour of the Geographic Information System (GIS) department. The GIS department is in the process of replacing SMUD's maps and system schematics with electronic versions. This process would eliminate the cumbersome paper schematics and would allow SMUD to make updates as well as integrate their entire system map electronically so that users could zoom into the smallest detail of the system. DESCO is also trying to integrate GIS planning into its system. Mr. Mia asked SMUD if it would be possible to incorporate GIS programming as a topic of a future program. DESCO asks SMUD for assistance with GIS.

CLARK PUBLIC UTILITIES DEMONSTRATES REMOTE METER READING FOR DESCO

At Clark Public Utilities the delegation was impressed by the fact that 100% of Clark's residential customers use Radio Frequency meters. This allows the meter reading staff, (of which there are only nine) to read the entire service area simply by driving specially equipped vehicles through predetermined routes. The meter reader's vehicle picks up the signal from the customer's home and stores it on a handheld device that the meter reader returns to the central office to upload the information into the main billing computer. Clark Public Utilities also arranged site visits for DESCO at the Bonneville Dam on the Columbia River and a combined-cycle gas/steam generation facility in Vancouver City, Washington owned by Clark Public Utilities.

CREATING A SUSTAINABLE, PROFITABLE DISTRIBUTION COMPANY IN BANGLADESH

Through the continued cooperation of USAID, SMUD and Clark Public Utilities, DESCO hopes to continue to develop an environment where reliable electricity is provided at cost effective rates for its consumers while improving and upgrading its distribution infrastructure at a sustainable rate. In order to facilitate these changes DESCO has requested that future activities focus on the following four key issue areas: distribution utilities

management; distribution system operations and management; metering, billing and collections; and project financing.

New Reports

Energy and Environment Training Program (EETP) Indefinite Quantity Contract (IQC) Report

The Final Report of the EETP IQC, which concluded on June 4, 2004, provides an overview of the IQC Task Orders for which Missions, Regional Bureaus, and EGAT/EIT had contracted through the IQC, as well as a statistical snapshot of the IQC as a whole. The IQC Task Orders section of the report also includes a description of key deliverables that are illustrative of the wider body of work of the EETP IQC. Inside the back cover is a companion CD-ROM which includes the full text of the Final Report, as well as the full text of all of the deliverables described in the illustrative deliverables section of the report itself. The deliverables can be accessed by clicking on the deliverable title in the report.

The EETP IQC has trained approximately 17,000 participants from all USAID regions in nearly 700 events in topics such as energy sector regulation and restructuring, environmental management and policy, climate change, energy sector privatization and commercialization. The Task Order Activity Sheets, beginning on page 51, include descriptions of programs implemented under the IQC, as well as the resulting development outcomes that we have been able to record as of the publication of the report.

The strength of the program is highlighted by its ability to marry governance, policy, and hardware needs. For example, in the last week of the contract the EETP was instrumental in enabling slum residents in New Delhi to be legally connected to the power grid. We had been working with local NGOs and North Delhi Power and Light on public participation processes for establishing legal power connections paid for by slum residents when it was discovered that the price to the residents was only for the service of connecting the residents, but no one had included the cost of the actual wires. Although the pricing policy was corrected, a number of residents who had paid for connections were not being connected due to this oversight, thus endangering the perceived fairness and legitimacy of the program of legal connections. The EETP contract allowed for small amounts of hardware procurement and we used this provision to acquire \$5,700 in power cabling, thus reinforcing with hard goods the legitimacy of the connection policy for both the utility and the slum residents.

The report also contains a series of three short papers on themes that are critical for both the energy community and the development community to address if the energy sector is to contribute to economic growth, poverty reduction, and social development, in developing countries: Access to Modern Energy; Public Participation in the Energy Sector; and Energy Regulation as a Basis for Good Governance.

For a copy of this report, please contact:

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Energy Team News

New Energy Pages on Agency's Website

The EGAT/EIT/Energy Team has added new web pages on the USAID web site that highlight some of its programs and activities. Please visit http://www.usaid.gov/our_work/economic_growth_and_trade/energy/ and let us know what you think. The web pages are a first cut at providing the general public with an overview of the Agency's work in energy and are intended to test the Agency's procedures for posting information on the public website. The Energy Team will be soliciting Bureau and Mission input for future web pages, including links to Mission web pages in countries where energy activities are being supported.

USAID Funds Eritrean Participants to Attend Geothermal Resources Council Annual Meeting

USAID has funded two Eritrean participants to attend the Geothermal Resources Council Annual Meeting, to be held August 29-September 1, in California. Attending the meeting will give the Eritrean participants a chance to discuss Eritrean investment climate and geothermal resources with private sector developers. Mr. Alem Kibreab, Director General, and Mr. Tesfalidet Ghirmai, Head, Mineral Exploration and Geophysical Survey, Department of Mines (Ministry of Energy and Mines) will stop in Washington and meet with the World Bank, GEF, and various USG agencies prior to the meeting. East Africa is an area of high geothermal potential and Kenya is already producing significant geothermal power. The GEF is currently involved in putting together a multi-donor effort to develop East African geothermal resources, and the EGAT/Energy Team participates in interagency USG and multi-lateral donor meetings on East Africa geothermal development.

Development Credit Authority (DCA) Review Board Approves Two Energy Activities

In July the credit review board approved two energy DCA's in the NIS region. A \$15 million loan portfolio guarantee facility, at a cost of \$754,500, was approved for Kazakhstan. This DCA will focus on various energy programs, including energy efficiency, electrical distribution, energy service companies, and renewables. Creditworthy municipalities, regional electric distribution companies, energy service companies, municipal enterprises, and industrial concerns will be able to borrow under the facility. A \$3 million corporate bond guarantee program was also approved for Georgia and this facility will focus on energy efficiency. The Energy Team assisted the Mission and the DCA bureau in meeting with banks and potential lenders, deciding on the scope of work the DCA facilities would cover, and answering questions in the credit review board meeting. DCA energy programs, if combined with appropriate technical assistance, are an excellent public private partnership vehicle for Missions to consider, particularly with the recent increases in world energy prices.

The Development Credit Authority (DCA) provides USAID Missions the authority to issue loan guarantees to private lenders, particularly for local currency loans. These guarantees cover up to 50% of the risk in lending to projects that advance USAID's development objectives. For more information on the DCA, please visit http://www.usaid.gov/our_work/economic_growth_and_trade/development_credit/index.html

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 services. 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

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Energy Team Programs

Energy Sector Governance Program

- Work with governments to educate and assist them in understanding the commercial nature of energy, the range of options for governmental administration of the sector, and to help them develop appropriate levels of intervention, given their national circumstances, to promote private sector-led economic growth.
- Work with developing country enterprises to educate and assist them in changing from politically based operations to commercial operations based on market economics and democratic political institutions.
- Work with consumers, media, and the general public to increase their knowledge of and participation in the social, legal, financial, and commercial conditions required for provision of energy services.

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Rural Energy Services Program

- Address development challenges faced by populations living in rural areas through the improved provision of energy services.
- Focus on the energy dimension of rural services, such as health, water supply and purification, food production and processing, microenterprise, gender equity, education and information.
- Design energy interventions to expand economic and social opportunities within the socio-cultural context of the intended beneficiaries' environment and their community institutions, thereby ensuring their sustainability.

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Urban Energy Services Program

- Address a broad range of complex development challenges in urban and peri-urban areas through the improved provision of energy services.

- Focus on sustainable energy solutions for municipal services including electricity, cooking/heating, water, housing, transportation and waste management, including promoting and piloting new approaches and activities that encourage cost-effective efficiency improvements in the use of energy, water and natural resources.
- Encourage the adoption of integrated policy, technology and social approaches to reduce air pollution, both for indoor and outdoor urban air quality.

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Energy Team

Office of Energy and Information Technology

Bureau for Economic Growth, Agriculture, and Trade

To learn more about USAID's energy program, visit

http://www.usaid.gov/our_work/economic_growth_and_trade/energy/

