

Data Sheet

USAID Mission:	Brazil
Program Title:	Energy Program
Pillar:	Economic Growth, Agriculture and Trade
Strategic Objective:	512-009
Status:	Continuing
Planned FY 2006 Obligation:	\$990,000 DA
Prior Year Unobligated:	\$30,000 DA
Proposed FY 2007 Obligation:	\$900,000 DA
Year of Initial Obligation:	2003
Estimated Year of Final Obligation:	2008

Summary: The USAID/Brazil energy program seeks to stimulate economic growth, reduce poverty and address global climate change and other adverse environmental impacts through the delivery of renewable energy and energy efficiency services. The program includes technical assistance, training and pilot activities designed to promote public policies and regulations supportive of renewable energy and energy efficiency; demonstrate the feasibility and effectiveness of renewable (alternative) energy technologies; increase awareness of renewable energy and energy efficiency options; develop income-generating renewable energy-based activities; and promote technological cooperation utilizing renewable energy technologies between the United States and Brazil.

Inputs, Outputs, Activities:

FY 2006 Program:

Expand and Improve Access To Economic and Social Infrastructure (\$580,000 DA; \$30,000 FY 2005 Carryover DA). USAID is helping the Government of Brazil (GOB) to provide an estimated 12 million Brazilians, who currently lack access to the national power grid, reliable power sources which provides quality-of-life improvements and economic opportunities. The FY 2006 energy program activities include the development of distributed generation demonstration projects (mini-grid systems) which extend affordable energy to remote communities. Also included are community-based energy management models that facilitate the construction and maintenance of mini-power grids. USAID is training approximately 50 technicians in system's operation, maintenance and management of mini-power grids. These grids hold the potential for extending the benefits of electricity to an estimated 400,000 people, the majority of which are living in relative poverty.

Reduce, Prevent and Mitigate Pollution (\$410,000 DA). USAID is helping address the needs of local residents in the communities where the energy program is operating by designing and implementing income-generating activities that draw upon alternative and renewable energy technologies. Working in partnership with the Ministry of Mines and Energy (MME) and the United Nations Development Program (UNDP), USAID's energy activities will be implemented in rural and peri-urban areas where five community-based income generation projects are being implemented. This activity will directly impact an estimated 4,000 people by increasing family income and quality-of-life standards. These activities are being carried out in accordance with the USAID Global Village Partnership Action Plan (GVP) for Brazil. USAID is expanding an existing program that provides renewable energy vocational training to disadvantaged youth in Brazil's poor northeastern region. Youth from families with income levels of less than \$100 per month are being trained as electricians, with a specialty in alternative energy technologies. It is anticipated that after training, 50% of these trainees will secure jobs in the private sector. Principal implementers: Social Development and Renewable Energy Institute - IDER, UNDP, and local and U.S.-based NGO sub-recipients.

FY 2007 Program:

Expand and Improve Access to Economic and Social Infrastructure (\$500,000 DA). USAID plans to continue developing and implementing pilot distributed generation models and income-generating activities based on alternative energy technologies, thereby consolidating GVP principles within the

Brazilian national program, Light for All. The MME is committed to replicating these rural electrification solutions and passing regulatory reforms to make them official national policy.

USAID plans to design and install mini-distribution grids and alternative generation systems in partnership with local utilities. As the MME adopts these models under the Light for All program, the benefits are expected to reach an additional two million people. In order to maintain a pool of capable local technicians, an additional 50 people will be trained in mini-power grid operation, maintenance and management. USAID expects that income-generating activities, based on alternative energy, will directly benefit more than 50,000 people in 2007, and hundreds of thousand more in conjunction with the Light for All program. The renewable energy-based vocational training initiative will train disadvantaged youth and assist them in securing viable employment in three Brazilian states. Principal implementers: IDER and local and U.S.-based NGO sub-recipients.

Reduce, Prevent and Mitigate Pollution (\$400,000 DA). USAID will continue to provide technical assistance and training to improve renewable energy policies and the corresponding regulatory environment. Partnerships formed with Eletrobras, Petrobras, national programs and electrical utility companies are expected to lead to broader replication and use of energy efficiency concepts and methods, helping the GOB to achieve its goal of saving 130 (Tera Watt hour) by 2015, which is equivalent to the output of a new power plant. USAID will continue to support the Brazilian Renewable Energy NGO Network (RENOVE) and the Ministry of Mines and Energy in its efforts to modify regulations so that the necessary changes and improvements in policy in the areas of fossil fuels substitution, energy efficiency standards and advanced use of alternative sources of energy (wind, solar, biofuels and small hydro) are put in place. USAID will also continue to host roundtables and workshops that promote cooperation between U.S. and Brazilian firms working in the areas of renewable and alternative energy, and energy efficiency. Principal implementers: IDER, ICF Consulting, and local and United States-based NGO sub-recipients.

Additionally, in 2007 the Mission will be studying the possibility of merging energy-related Global Climate Change (GCC) activities and efforts to develop environmentally-sustainable economic opportunities for poor rural and forest dwellers into the Environment program. This would result in closer alignment of resources and maximization of impact.

Performance and Results: USAID has made important contributions to the success of the GOB in extending access to modern, clean and reliable energy services to previously excluded populations. In FY 2004, an additional 1,375,000 people were connected to the national power grid under the Brazilian program, Light for All. Of this total, 65,000 people gained access to modern renewable energy-based services as a direct result of USAID interventions. Another 70,000 Brazilians benefited from information dissemination, capacity building and energy service projects. USAID-developed income generation activities utilizing clean, renewable alternative energy sources increased the incomes of 7,800 people. Additionally, the GOB has committed to replicating distributed generation renewable energy-based models developed by USAID in order to extend electricity to remote communities through the Light for All Program. USAID assistance has also resulted in the construction of the "Apertadinho" small hydro power plant (30 mega watt) and two other similar facilities (20 mega watt each) in the Amazon Region; these facilities can supply energy to roughly 55,000 people. When completed, they will generate 7,750 short and long-term jobs, and avoid 1,500,000 tCO₂ carbon emissions over a ten year period. Finally, the energy program increased technological cooperation between Brazil and the United States by sponsoring a ten-person hydrogen delegation visit from the MME to the United States, and by

facilitating a successful joint venture between a major American wind turbine manufacturer and private Brazilian investors. These results confirm that the program is reaching its goal of reducing the number of Brazilians without access to adequate energy by 30%. By the end of the program, USAID will also have helped leverage \$55 million for the development of renewable energy and energy efficiency projects, resulting in a 50% increase in Brazil's installed renewable energy generation capacity.

US Financing in Thousands of Dollars

Brazil

512-009 Energy Program	DA
Through September 30, 2004	
Obligations	2,693
Expenditures	895
Unliquidated	1,798
Fiscal Year 2005	
Obligations	1,510
Expenditures	1,828
Through September 30, 2005	
Obligations	4,203
Expenditures	2,723
Unliquidated	1,480
Prior Year Unobligated Funds	
Obligations	30
Planned Fiscal Year 2006 NOA	
Obligations	990
Total Planned Fiscal Year 2006	
Obligations	1,020
Proposed Fiscal Year 2007 NOA	
Obligations	900
Future Obligations	2,317
Est. Total Cost	8,440