

**BRAZIL: NON-REIMBURSABLE TECHNICAL COOPERATION
SUPPORT FOR DEVELOPMENT OF RENEWABLE ENERGY MARKETS**

(TC-99-01-014-BR)

EXECUTIVE SUMMARY

REQUESTER: Republic of Brazil

EXECUTING AGENCY: Ministry of Mines and Energy of Brazil (MME), through the Programa de Desenvolvimento Energético de Estados e Municípios (PRODEEM).

FINANCING: IDB: (Japan Special Fund)-JSF US\$ 898,950
Local counterpart funding: US\$ 415,000
Total: US\$1,313,950

TERMS: Execution period: 18 months
Disbursement period: 24 months

OBJECTIVES: The project's overall objective is to increase the effectiveness of the Government of Brazil's PRODEEM program, to promote decentralized energy services based on renewable energy for the sustainable development of isolated communities, in order to improve their quality of life and their productive capacity.

DESCRIPTION: This TC would form a major and integral part of the implementation of an Action Plan adopted by the Government of Brazil and prepared in cooperation with the IDB Finance and Basic Infrastructure Division of the Region 1 Department and the IDB/Sustainable Markets for Sustainable Energy Program (SMSE). The proposed project would have the following four components:

Supporting the Transition to PRODEEM's New Management Model and Development of Mechanism for Measuring and Improving its Effectiveness (US\$288,300). This component would provide advisory and technical services to PRODEEM to help it adopt and refine a new management structure. The new structure would substantially improve the program's effectiveness in creating a fertile climate for renewable energy-based rural energy services. It would increasingly transfer PRODEEM's project execution activities to decentralized market agents, to the private sector, and additionally, create extended networks and

supporting mechanisms to measure, evaluate, and reintegrate experiences and lessons acquired.

Workshop Series to Build Capacity of Decentralized Delivery Agents (US\$393,150). Aimed at improving the capacity of PRODEEM's key decentralized delivery agents, this component provides training and related assistance in market fundamentals and working with local entities and organizations for the promotion of market-based activities.

Deployment of Regional Market Manager (RMM) Pilot Project (US\$258,750). Aimed at leveraging government activity with private sector initiatives, this component assists the deployment of a pilot project to test the Regional Market Manager concept that is the linchpin of the new PRODEEM management structure.

Renewable Energy Demand Development and Project Promotion for Small and Medium Enterprises (US\$220,000). The final component sets up a process for PRODEEM and its delivery agents to assist small and medium size enterprises to use renewable energy to improve their productive capacity.

**ENVIRONMENTAL
ASPECTS:**

The Committee on Social and Environmental Impacts reviewed this Plan of Operations and approved it with no objections.

BENEFITS:

The project would provide the framework within which investment would be attracted to renewable energy systems and renewable energy-based services that improve the quality of life and productivity of isolated populations that lack modern and clean sources of energy. The opportunities for social and economic development for the affected communities presented by these energy options include substantial improvements for basic educational, health, agricultural, commercial, and cultural activities. The project would also help to reduce deforestation and the destruction of important carbon sinks caused by traditional energy uses such as wood or charcoal. It would decrease emissions from poorly operating and maintained diesel generators and it would improve environmental and health standards by replacing the domestic use of kerosene, candles and car batteries.

RISKS:

The primary risk to the proposed TC is the innovative character of the Action Plan that relies on the decentralization and the increasing involvement of private sector entities in the provision of energy services to isolated communities. This risk has

already been mitigated with the commitment of the government to undertake the restructuring proposed in the Action Plan, and also by the elevation of the PRODEEM program to "Brasil em Ação" (GOB's group of priority programs). Further mitigation would come from the strong central management and coordination function already established in PRODEEM, as well as close cooperation with the SMSE program. Also, the expected implementation of the Stakeholders Council called for in the design for the new management structure would further ensure that major stakeholders in the rural energy services market are represented in the project to provide both general and specific guidance.

**THE BANK'S
COUNTRY STRATEGY:**

This project is consistent with the Bank's country strategy inasmuch as it seeks to improve the quality of life, income generating capacity and productive activities of isolated communities and peoples. It does so by extending energy services to non-served population and by replacing polluting and inferior sources of energy with modern, cleaner sources through market mechanisms. The populations in the isolated communities designed to benefit from the project are among the poorest in all of Brazil. It also supports Bank efforts to assist in the decentralization of government activities to levels where there is more community input and control, and it is a major contributor to the effort underway to restructure the energy sector.

**SPECIAL
CONTRACTUAL
CONDITIONS:**

The Executing Agency is to submit prior to the first disbursement, to the Bank's satisfaction, evidence of the creation of the Unidade Gestora do Projeto (§4.1) and the final Plan of Execution of the Project (PE) based on the draft PE tentatively agreed upon (§ 4.3).

PTI:

Yes, based on geographic criteria. The populations in the isolated communities designed to benefit from the project are among the poorest in all of Brazil, and are located in the less developed regions of this country (§ 7.2).

**EXCEPTIONS TO
BANK POLICY:**

There are no exceptions to Bank policies and procedures foreseen in the execution of this operation.

I. BACKGROUND

A. PRODEEM and how IDB's SMSE Program is helping

- 1.1 Brazil is pursuing extensive efforts to utilize more of its renewable energy endowments to address the social and economic problems of more than 25 million of its citizens who do not have access to electricity. Doing so would increase the opportunities for social and economic development for the affected communities, by utilizing modern, clean, energy options to support efforts to introduce or improve basic educational, health, agricultural, commercial, and cultural activities. It would also help to reduce deforestation and the destruction of important carbon sinks caused by traditional energy uses such as wood or charcoal. It would decrease emissions from poorly operating and maintained diesel generators and improve environmental and health standards by replacing the domestic use of kerosene, candles and car batteries. Simultaneously, extensive reform, restructuring and privatization of the Brazilian power sector are improving the market conditions for all energy services, including alternative energy and rural electrification.
- 1.2 A focal point of these efforts, to reach non-electrified homes and businesses, has been the Programa de Desenvolvimento Energético de Estados e Municípios (PRODEEM), created by the Government of Brazil (GOB) in 1994 under the Ministério de Minas e Energia (MME). PRODEEM is responsible for providing basic energy services to isolated communities in order to promote their sustainable development. PRODEEM has achieved considerable results in its first three years of operations. Its current efforts have resulted in about 550 community projects launched in all regions of the country. The GOB's commitment to PRODEEM was underscored following the Kyoto Conference of the Parties in December 1997 by including it among the "Brasil em Ação" priority programs.
- 1.3 PRODEEM is currently preparing to serve a significantly increased number of projects and communities. This would be achieved through the evolution from the present pilot operation -- that is, demonstrating the efficacy of renewable technologies to provide electricity services -- to a full-scale operation that creates market demand, and leverages private sector initiatives to provide for such services. Realistically, to achieve this and to assure the long-term sustainability of the effort, PRODEEM recognizes the need to optimize and leverage the financing and other forms of support by local governments and private sector entities. It considers that the key to sustainability of the renewable energy services market is, therefore, the decentralization of PRODEEM activities to locally-based entities and actors. Indeed, PRODEEM has recently begun to branch out to add institutional partners (e.g., non-governmental organizations and other government agencies with similar development goals) and to strengthen the role of the

PRODEEM State Coordinators (hereafter referred to as Partners and Coordinators).

- 1.4 IDB's Sustainable Markets for Sustainable Energy Program (SMSE) is implementing new strategies and mechanisms for promoting the use of sustainable energy, (including support to rural renewable energy based services), applicable to the newly restructured markets of Latin American countries. In 1997, the Brazilian Ministério de Minas e Energia (MME) and SMSE began collaborating to assist PRODEEM to transform into a full-scale, market-driven initiative providing sustainable renewable energy services for rural development. The first step was a diagnostic of the Brazilian renewable energy market context. This diagnostic stressed the need for a more profound mobilization of private commercial agents and local government resources; adequate and accessible technical capacity; sufficient financing resources; reasonable equipment, installation, and operation and maintenance costs; effective market sensitization; and open exchange of market demand and supply information.

B. Objectives and Components of the Brazil/SMSE Action Plan

- 1.5 An Action Plan, "Promoting Self-sustaining Markets for Rural Renewable Energy Services", developed initially, identified two dozen activities that could address the deficiencies identified in the diagnostic and thus help PRODEEM achieve its goals in the short, medium, and long term. MME and PRODEEM formally launched this Action Plan in Brasilia in December 1998.
- 1.6 The Action Plan recommends a set of activities comprising direct assistance to PRODEEM, its Partners and Coordinators to carry out PRODEEM's objectives effectively. The activities are organized under five broad categories or tracks. Track I activities would improve PRODEEM's management, administrative and strategic planning capabilities to meet the program's expanded objectives. Track II activities would promote private sector projects and models for market development to expand the variety of available private sector delivery mechanisms for renewable energy services. Track III activities would build institutional capacity and develop a framework for market activities via training and technical assistance for regulatory and policy officials. Track IV activities would incorporate new or evolving technology into PRODEEM's efforts. Finally, Track V activities would evaluate, review and provide feedback to capture the experience and valuable lessons learned from individual and aggregate efforts to establish a viable renewable energy services market in Brazil.

C. The Cost and Funding of the Action Plan

- 1.7 The Action Plan's budget totals approximately US\$8.4 million over 3 years. The Brazilian Government is committed to support the implementation of this Plan with local, State, and Federal sources of funds that would finance a large portion (over one-third) of the

implementation of the Plan. However, much of the technical assistance required by the Action Plan cannot be undertaken with the resources of the GOB and its partners because of existing limitations on how budgeted funds can be used. Two main IDB sources of funds, the Japan Special Fund (JSF) and the Multilateral Investment Fund (MIF), would jointly fund a large portion, (somewhat more than one-third), of the initial activities of the Action Plan. The components proposed for the JSF funding are described in Section III. The MIF funding alternatively would support the Track II private sector activities designed to test business models for rural renewable-energy based services. The MIF has already issued the Memorandum of Eligibility for this project, which is in its final phase of preparation.

- 1.8 Other than the proposed technical assistance to be financed by the JSF and MIF, sizable additional funds are being requested from external donor organizations such as the U.S. Agency for International Development (USAID), the U.S. Department of Energy (USDOE), and the European Community SYNERGY Programme. All three of these have already played a role in supporting the development of the Action Plan and are likely to provide additional support. US AID is already disbursing roughly \$400,000 for 1998-1999 in funding for a key element, (a Resident Advisor), in Track I of the Action Plan. The IDB's European Community Trust Fund has awarded \$100,000 for Track II activities related to a business model involving non-governmental organizations such as service delivery intermediaries (i.e., part of the above-referenced MIF project). Other donors, including the United Nations Development Program (UNDP) and other bilateral development funds or organizations, have indicated potential sponsorship interest and are considering funding different elements.
- 1.9 The table below shows the required and expected funding for the Action Plan by donor and by the Government of Brazil and its in-country Partners.

Brazilian Action Plan: Overall Budget and Sources of Funds (in Thousands US\$)

	Track	JSF	MIF	External Donors*	Brazil**	Total
I.	Bolster PRODEEM ability to achieve its program objectives	294	—	430	185	909
II.	Promotion of private sector projects	177	2,250	181	2,322	4,930
III.	Institutional capacity building and framework for market activities	428	—	472	611	1,511
IV.	Incorporation of technology	—	—	500	325	825
V.	Evaluation, review, and feedback	—	—	150	75	225
	TOTAL	899	2,250	1,733	3,518	8,400

* U.S. DOE, U.S. AID, European Commission, United Nations Development Program

** Brazilian Government and Local Counterparts

*** Rounded. The actual amount approved by the Japanese Government was \$898,950.

D. The Japan Special Fund Technical Assistance

- 1.10 The Plan of Operations for the Japan Special Fund technical assistance comprises four components that are described in the next section and for which detailed budget numbers are provided in Annex I. This Plan of Operations covering the proposed JSF funding would apply to specific activities in Tracks I, II, and III as described in Section III.

II. PROJECT OBJECTIVES

- 2.1 The project's overall objective is to increase the effectiveness of the Government of Brazil's PRODEEM program, to promote decentralized energy services based on renewable energy for the sustainable development of isolated communities, in order to improve their quality of life and their productive capacity.
- 2.2 Each component has a more specific objective. Component 1 would make the transition to the new PRODEEM management model as smooth and effective as possible and would develop the mechanism for the assessment and the quick improvement of the effectiveness of the restructured and decentralized organization. Component 2 seeks to improve the usefulness of the ongoing and future activities of PRODEEM's Partners and Coordinators in support of the restructured and decentralized organization, and to establish a solid foundation for market development by key agents and a growing number of market participants. Component 3 would leverage government activity with private sector initiatives in order to achieve a rapid, near-term manifold increase in market activity. Component 4 aims to expand the use of renewable energy options by and for micro, small and medium enterprises.

III. PROJECT DESCRIPTION

A. Components to be financed

1. Supporting the Transition to PRODEEM's New Management Model and development of mechanism for measuring and improving its effectiveness (US \$288,300).
- 3.1 The design for PRODEEM's new management model, (developed to accelerate and expand the scope of locally-adapted rural renewable energy markets on an increasingly decentralized and sustainable basis), has been completed by GOB and the process for implementing the model is being elaborated. The next step would be to assist PRODEEM's management and operational staff to make a successful transition to the new model, while continuing to produce the results promised in annual planning documents and in agreements with PRODEEM partners. Simultaneously, PRODEEM urgently needs to design and set up a means of judging the new model's effectiveness in reaching defined goals. The complexity of the planned

activities and the ultimate size of the market which would be launched under the PRODEEM Action Plan, require the rapid development and implementation of a process to provide periodic project and program evaluation, review, and feedback for management purposes.

- 3.2 Technical assistance would be provided on both a strategic planning level and an operational level. This assistance would take the form of working sessions, attended by PRODEEM's operational personnel and management and key Partners and Coordinators. These sessions would be designed to assist the personnel by guiding them through the adaptation process, over the 18 month transition period, by working systematically through the organizational changes, new systems, roles and responsibilities. Corrective action would be taken as necessary. Major products delivered under this component would be written guidelines for implementation of the various components of the proposed alternative management model for the PRODEEM program, and documentation of the system of measurement, evaluation, and feedback to be used in the restructured and decentralized PRODEEM program. The JSF contribution would finance individual consultants to carry out the tasks assigned. GOB funds would pay for individual consultants and for administrative support.

2. Workshop series to build capacity of PRODEEM Coordinators and Partners (US \$393,150).

- 3.3 This component would provide a series of workshops for PRODEEM's key decentralized delivery agents, i.e., its present Partners and Coordinators, as well as possible new delivery agents including potential Regional Market Managers (see below). This series would teach sustainable market fundamentals and how to work effectively with local entities and organizations. It would be disbursed geographically in order to encourage focus on local issues and smaller group sessions. The instructors would be selected to form a combination of Brazilian and international experts with a growing number of market participants (practitioners). The product delivered in this component would be a series of twelve market orientation workshops. JSF contributions would finance individual consultants who would deliver the workshops. GOB funds would cover local individual consultants, carrying out workshops, administrative support, and logistical costs.

3. Deployment of Regional Market Manager (RMM) Pilot Project (US\$258,750).

- 3.4 This component would test the Regional Market Manager (RMM) concept at pilot level before it is applied on a full scale throughout the main regions containing Brazil's unserved communities. The RMM function would be twofold: stimulating private sector activity and linking that activity synergistically to government initiatives. The RMM's specific duties would include identifying and quantifying the demand for renewable energy services and formulating competitive bidding documents for renewable energy service delivery. The RMM would also channel incentives for private delivery and intermediaries and assist them to get organized and respond to market demand or to local calls for bids. The RMM would work with all interested parties (including state, municipal, and community leaders) to improve the capabilities of the private sector to succeed in market entry and performance.
- 3.5 The technical assistance provided under this component would work with PRODEEM to get the pilot running initially and would periodically evaluate and fine-tune the concept prior to scale-up. Implementing the pilot would involve identifying the specific market area in which to deploy the pilot; pre-selecting potential RMM operators; assisting in the development and implementation of a request for proposals and the selection of the final candidate; and monitoring the pilot during its initial phase. The assistance would also provide advisory assistance for the RMM, as needed for the success of the pilot, and extraction of "lessons learned" from the pilot to be used in scaling up the RMM operation to other regions of Brazil. A report detailing the steps taken in the RMM pilot deployment would be delivered, including necessary modifications, a set of evaluation tools, and also detailed instructions and tasks required to replicate the operation. A joint MME and local funding arrangement, (not the JSF funds), would compensate the actual operation of the RMM based on performance criteria to be developed with JSF assistance. JSF contributions would finance individual consultants to develop and implement the RMM model. GOB funds would pay for administrative and technical support to the model development, including training sessions.

4. Renewable energy development and project promotion for small and medium enterprises (US \$220,000).

- 3.6 This component would foster implementation of several representative renewable energy-based projects (wind, sustainably-produced biomass, micro-hydro and solar energy resources) in the Northeast of Brazil. It would help PRODEEM to identify and implement ways to improve the enabling environment for significantly expanded use of renewable energy options by and for micro, small, and medium enterprises in the Northeast region, and to establish requisite supporting mechanisms for continuing market development. This would be accomplished through technical

assistance to small and medium size enterprises and service providers with potential projects to develop targeted proposals for capacity-building and technical assistance deemed necessary to the success of the projects, e.g., for technical training, policy making, financial engineering, environmental protection, and consumer orientation.

- 3.7 This component would provide technical assistance to promote sustainable renewable energy applications for productive uses under PRODEEM via several market-building steps. These include: performing project development processes based on previous studies that match typical micro, small, and medium enterprise activities with renewable energy applications, and establishing coordinated channels to get the information on renewable energy options to these types of enterprises. Assistance would also be provided to support enterprises to develop all aspects (technical, operational, financial and environmental) of potentially viable projects, initially, on a generic basis per type of application, and on a project-specific basis when ready. To ensure the effectiveness of this assistance, a first step would be to designate one or more local entities to monitor the development and launching of projects, to be ready to identify major project/market impediments as they arise, and to suggest solutions for problems applicable to the larger market. The results of this component would be: the completion of application-specific project development processes, and pre-feasibility or feasibility studies for 3-5 project applications, and at least 2-3 initiated projects. JSF contributions would pay for individual consultants to carry out the Terms of Reference (TORs) included in the Plan of Execution. GOB would finance training sessions and administrative support for this component.

5. Funds Management (US\$ 27,000).

- 3.8 This separate component would finance the administration of the Technical Cooperation funds, according to IDB procedures, and its costs would be assumed by GOB (§ 4.2).

IV. PROJECT EXECUTION

- 4.1 The Executing Agency would be the MME through PRODEEM. The MME would set up a management unit called the Unidade Gestora do Projeto (UGP), located in the Departamento Nacional de Desenvolvimento Energético (DNDE), which is the MME's department that oversees PRODEEM. The General Coordinator of the DNDE would head the UGP, and would be assisted by PRODEEM's Resident Advisor. The Executing Agency is to submit, to the Bank's satisfaction, prior to the first disbursement, evidence of the creation of the UGP.
- 4.2 The UGP would also be assisted by the United Nations Development Program (UNDP) in the administrative and financial management of

the Project. UNDP's support, which would be funded by the local counterpart, has been instrumental in ensuring adequate execution of other MME projects. This mechanism has already been used in the execution of other Bank projects in Brazil.

- 4.3 A preliminary Plan of Execution (PE) of the TC is already available. The PE includes goals to be achieved, planned activities and their timetable, and TOR's for all activities. The Executing Agency is to submit prior to the first disbursement, to the Bank's satisfaction, the final PE based on the draft tentatively agreed upon.
- 4.4 The four components would be executed over a one and one-half year period. A revolving fund of 5% of the total IDB financing would be established to facilitate the disbursements related to this Project.

V. BENEFITS AND RISKS

A. Benefits

- 5.1 This Technical Cooperation (TC) would form a major and integral part of implementation of the Action Plan, which is a multifaceted effort to foment private sector participation in building a sustainable market for renewable energy services in remote areas. The project would provide the framework within which investment would be attracted to renewable energy systems and renewable energy-based services that improve the quality of life and productivity of isolated populations that lack modern and clean sources of energy. The opportunities for social and economic development for the affected communities presented by these energy options include substantial improvements for basic educational, health, agricultural, commercial, and cultural activities. The project would also help to reduce deforestation and the destruction of important carbon sinks caused by traditional energy uses such as wood or charcoal. It would decrease emissions from poorly operating and maintained diesel generators and it would improve environmental and health standards by replacing the domestic use of kerosene, candles and car batteries.
- 5.2 A major benefit would be a more effective decentralization of PRODEEM's project development activities. Ultimately, the results from the pilot projects would be transferable to other regions of Brazil. An additional benefit of the activity fostered by the JSF support for small and medium sized renewable energy enterprises, would be improved channels of communication and support for the renewable energy industry.

B. Risks

- 5.3 The risks associated with this technical assistance are threefold: organizational, technical and financial. The organizational risk

is the innovative character of the Action Plan that relies on decentralization and increasing involvement of private sector entities in the provision of energy services to isolated communities. This risk has already been mitigated with the commitment of the government to undertake the restructuring proposed in the Action Plan, and also by the elevation of the PRODEEM program to "Brasil em Ação" (GOB's group of priority programs). Further mitigation would come from the strong central management and coordination function already established in PRODEEM, as well as close cooperation with the SMSE program. Also, the expected implementation of the Stakeholders Council, called for in the design for the new management structure, would further ensure that major stakeholders in the rural energy services market be represented in the project to provide both general and specific guidance.

- 5.4 The technical risk is that projects being developed under the fourth component might not materialize or might take a long time to develop. This risk has already been mitigated through the IDB SMSE's preliminary diagnosis that provides an assessment of the renewable energy applications in Northeast Brazil, and finds ample opportunity for eligible projects.
- 5.5 The financial risk is that other sources of funding do not materialize. This risk is somewhat mitigated by the manner in which the Action Plan has been constructed, that is, with independent (though linked) elements of technical assistance. As long as the funding of each element is limited to one source of funding, the lack of funding for any one element will not significantly affect the effectiveness of the assistance provided by other elements. As noted in Section I, other funding sources have in fact begun to make funding commitments for other elements of the Action Plan.

VI. EVALUATION

- 6.1 A major piece of the first component to be funded by the JSF is expected to produce a project and program evaluation, measurement and feedback system for the use of PRODEEM. This system will be used to develop the data and information required for the evaluation of the entire Action Plan. The evaluation of the JSF portion of the implementation of the Action Plan would be an integral part of the Action Plan evaluation.

**VII. RELATIONSHIP OF PROJECT TO BANK'S COUNTRY
AND SECTOR STRATEGY**

- 7.1 This project is consistent with the Bank's country strategy because it supports Bank efforts to assist in the decentralization of government activities to levels where there is more community input and control, and it is a major contributor to the effort underway to restructure the energy sector. The project would contribute to facilitate access to energy services to isolated communities and rural population in the less developed regions of Brazil; inasmuch, it seeks to improve the quality of life and income generating capacity of isolated communities and peoples and their productive activities. It does so by extending energy services to non-served population and by replacing polluting and inferior sources of energy with modern, cleaner sources through market mechanisms.
- 7.2 This operation qualifies as a PTI, based on geographic criteria. The populations in the isolated communities designed to benefit from the project are among the poorest in all of Brazil and are located in the less developed regions of this country.

**BRAZIL: NON-REIMBURSABLE TECHNICAL COOPERATION SUPPORT
FOR DEVELOPMENT OF RENEWABLE ENERGY MARKETS
(TC-99-01-014-BR)**

PLAN OF OPERATIONS

Annex I

Overall Budget by Component (US\$)				
Budget Category	JSF	GOB	TOTAL	%
1. PRODEEM Management Transition and Evaluation	245,300	43,000	288,300	21.9
1. Consulting Services	245,300	22,000	267,300	
2. General Support and Services		21,000	21,000	
2. Workshop Series for Coordinators and Partners	305,150	88,000	393,150	29.9
1. Training	213,150	61,000	274,150	
2. General Support and Services	92,000	27,000	119,000	
3. Regional Market Manager Pilot	101,750	157,000	258,750	19.7
1. Consulting Services	101,750	24,000	125,750	
2. Training		76,000	76,000	
3. General Support and Services		57,000	57,000	
4. Renewable Energy Projects for Small and Medium Enterprises	160,000	60,000	220,000	16.7
1. Consulting Services	160,000		160,000	
2. Training		50,000	50,000	
3. General Support and Services		10,000	10,000	
5. Fund Management		27,000	27,000	2.1
SUB-TOTAL	812,200	375,000	1,187,200	90.4
1. External Audit		20,000	20,000	1.5
2. Contingencies	86,750	20,000	106,750	8.1
TOTAL	898,950	415,000	1,313,950	100.0

LOGICAL FRAMEWORK
Non-Reimbursable Technical Cooperation
Support for Development Renewable Energy Markets
(TC-99-01-014-BR)

OBJECTIVE	QUANTIFIABLE INDICATORS	MEANS OF VERIFICATION	MAJOR ASSUMPTION
<p>ute towards improving the quality the income generating capacity of activities targeted to benefit isolated areas, by means of increasing the use of market ms to extend sustainable renewable rvices to non-served population, ce inadequate or unclear sources</p>			
<p>EXPECTED</p> <p>erated, more market integrated and ntralized PRODEEM Program. ased capacity and activity of ntralized PRODEEM market agents other market actors.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> PRODEEM obtains approval to become quasi-independent entity and initiates necessary steps to accomplish goal. <input type="checkbox"/> Significant increase in number of renewable energy projects leveraging private sector activity in targeted areas. <input type="checkbox"/> Significant change in market activity and operations of market agents. <p>(These indicators only partially verifiable within 18 months from initial project execution).</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Government decree or other form of authorization for change in PRODEEM legal status. <input type="checkbox"/> Output of PRODEEM monitoring and evaluation system. <input type="checkbox"/> Survey of amount of activity by workshop participants at end of project. <input type="checkbox"/> Preliminary results from local monitoring systems of increased market activity and requests to replicate projects in new areas. 	<ul style="list-style-type: none"> <input type="checkbox"/> Diffuse market activity and sp... be measured with accuracy. <input type="checkbox"/> Targeted small and medium e... (SME) for energy remain econ... viable.

LOGICAL FRAMEWORK
Non-Reimbursable Technical Cooperation
Support for Development Renewable Energy Markets
(TC-99-01-014-BR)

OBJECTIVE	QUANTIFIABLE INDICATORS	MEANS OF VERIFICATION	MAJOR ASSUMPTION
OBJECTIVE 1: Establish the PRODEEM management system. Complete implementation of new PRODEEM management system. Complete framework, set up, and begin operating the PRODEEM monitoring and evaluation system. Successful conduct and evaluation of the 12 market fundamentals. Establishment of RMM framework and pilot operation of RMM pilot. Identification, selection of SME project participants and initiation of 4 projects.	<ul style="list-style-type: none">□ PRODEEM restructuring guidelines (Business Plan) completed and accepted, and implementation of the first year of the Business Plan well underway.□ Partners and agents are actively assuming the responsibilities assigned to them in the PRODEEM business plan.□ Number of workshops held.□ RMM framework completed and accepted by funding sources and supporting entities and pilot initiated.□ Number of SME projects initiated.	<ul style="list-style-type: none">□ Semester status reports and final report on covered activities and products, e.g., revised TORs for critical consultant contracts.□ Written guidelines (three-part business plan) for implementation of new PRODEEM management system.□ Report on evaluation of workshops and final manual.□ Report to Bank on RMM framework and pilot deployment.□ Report evaluating SME project process and results.	<ul style="list-style-type: none">□ Training for RMM pool of consultants undertaken prior to making RMM becoming operational.

PROPOSED RESOLUTION

BRAZIL. NONREIMBURSABLE TECHNICAL COOPERATION FOR THE SUPPORT FOR
DEVELOPMENT OF RENEWABLE ENERGY MARKETS

The Board of Executive Directors

RESOLVES:

1. That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, as administrator of the Japan Special Fund established by the Japanese Government, to enter into such agreements as may be necessary with the Federative Republic of Brazil and to adopt such measures as may be pertinent for the execution of the plan of operations referred to in Document AT-____, with respect to a nonreimbursable technical cooperation for the support for the development of renewable energy markets.
2. That up to the sum of US\$898.950, is authorized for the purposes of this resolution, chargeable to the resources of the Japan Special Fund.
3. That the above-mentioned sum is to be provided on a nonreimbursable basis.