SUSTAINABLE MARKETS FOR ENERGY EFFICIENCY AND CLEAN ENERGY SOURCES

(TC-96-03-44-1-RG)

EXECUTIVE SUMMARY

REQUESTER: Bank initiative

EXECUTING AGENCY: The Bank through SDS/ENV

BENEFICIARIES: Five regional member countries to be selected after the approval of the technical cooperation.

FINANCING:

IDB foreign currency:	US$ 690,000(SF)
IDB local in Mexican currency	US$ 250,000(SF)
Other donors:	
EUROPEAN COMMISSION DGXVII	US$ 267,000
USDOE (USA)	US$ 164,000
USAID	US$ 82,400
Total:	US$1,453,400

TERMS:

Execution period:	24 months after the Regional Technical Cooperation has been approved
Disbursement period:	32 months after the Regional Technical Cooperation has been approve

ENVIRONMENTAL CLASSIFICATION: The Environmental Management Committee, at its meeting of June 25, 1996, classified this as a Category II operation.

OBJECTIVES: To finance the management and a share of the consultants of a pilot program for developing sustainable markets for sustainable energy in the region. The program seeks to test a strategy and action plan for the Bank to act as a catalyst in the mobilization of donors support for their borrowing countries efforts to establish sustainable markets for sustainable energy, which may result in an increase in the volume and effectiveness of lending in this field.

DESCRIPTION: This operation will finance a technical specialist and support staff for managing the program; consultants to support the countries in preparation

of proposals for donor support, and in the evaluation of the program; and the realization of meetings and workshops with participant countries for cross-fertilization and dissemination of experiences and results. The Program funds will be used to "pilot" or test implementation mechanisms for Energy Efficiency and Clean Energy Sources (EE/CES) activities that could be replicated and expanded, and to support development of local infrastructure and institutional changes required to carry them out. Donor-funded activities will focus on the development of projects to be eventually financed by the Bank. In carrying out the donor resources, the Program will look for synergy among donors, Bank and country interests, and it will be accountable for the proper disbursement of resources and the resulting successes and failures. At the outset, the program must be viewed as a process. A small number of countries, three or four, among those meeting requirements will be selected to participate in the testing of the strategy; next, program staff with consultants support will help host countries to do an in-depth review of the country existing programs and policies to detect the type of activities, background, market or other studies required, and TOR will be drafted; a country program profile will be prepared, based on which the program will match country programs with donor availability. Once funded, country activities will start to be carried out, including the design and implementation of pilot or demonstration projects, and eventual mechanism for credit delivery; after the mechanisms and activities tested in the pilots have been evaluated, barriers addressed, regulations amended, the program will continue to design of the expansion and replication in large numbers of the activities found economically attractive and feasible; finally, these studies will permit the preparation of new Bank loans or the access to existing resources including previous Bank loans.

BENEFITS: Participating host countries will benefit by supplementing their traditional energy sources with low-cost, environmentally sound alternatives. This is done through the creation of a market for these activities that can access future Bank Loans.

RISKS: (i) the identification of host countries with suitable local counterpart for project execution. This may be the major threat to a successful implementation of the program. Focussing the initial stages in countries who have already shown a strong interest for Bank assistance and/or in which we

already have loans is the best safeguard to this risk;

(ii)the level and timing of donor participation in the program will be a major contributor to its size and eventual success. There is a potential risk that the lack of donor support, in addition to the already committed $500000, may lead to a limited or incomplete program. Although commitment and constraints vary widely among donors, the general response has been favorable in particular for stage II of the program when country plans are implemented. Furthermore, the gradual approach, the access to Ctfunds resources, and the bank's own commitment, are elements that provide insurance against this risk;

(iii) the TC support for the management of the program is limited to two years. Because the programs may need a longer time to become self - sufficient it is essential that the Bank pledges to allocate the necessary administrative resources to follow up the actions arose by the program and assure its sustainability; and
(iv) another risk may be the lack of incentives for the regional departments to allocate the human resources required to implement the country programs. To address this risk the upper management of the Bank should establish clear priorities and provide the required incentives for the program.

THE BANK'S COUNTRY STRATEGY: The Program complements and is consistent with the macro priorities of IDB lending. The Program will cover the following critical areas of the eighth replenishment: (i) the reduction of poverty; (ii) modernization and integration; (iii) environmental protection and management; and (iv) assisting borrowing member countries in adopting energy development strategies that would include measures to foster energy efficient energy use and nonconventional renewable energy options.

RESPONSIBILITY IN THE BANK: SDS/ENV will have the technical responsibility and will manage the funds of the program.

I. BACKGROUND

1.1 Considered by many as the cheapest and environmentally cleanest means to meet growing energy demands, energy efficiency (EE) and new and small scale clean energy sources(CES) have not yet seen widespread adoption because of many barriers of different kind. These barriers, and other internal problems of the Bank, resulted in a low level of lending for these activities, in spite of its support to countries' requests for assistance, and its promotion of the use of Energy Efficiency and clean energy sources (EE/CES) (see ANNEX I for details). Nevertheless, near 96% of the Bank's lending in power generation has been in mid and large hydroelectric developments an geothermal power, which accounts for more than two thirds of all the power generated today in the region. Furthermore, the potential for energy efficiency in transportation remains untapped even though its level of emissions surpass by far those found in power generation in the region. Concerned with this limited penetration, member countries have requested the Bank in several occasions to intensify its efforts. In particular, IDB8 (par. 2.44 d) and the Action Plan of the Summit of the Americas (items 12 and 21) requested a substantial increase in the Bank lending effort. However, this difficulty to lend for EE/CES projects is hardly unique to the Bank and it is common to all other multilaterals and assistance agencies because their intrinsic causes are also common.

1.2 Many reasons, both internal and external, can explain this difficulty. Relative prices and costs of energy; inadequacy of institutional and regulatory frameworks; absence of private sector participation; relative newness, risks involved and other entrance barriers to the technologies; absence of successful models in either developing or develop countries; absence of a comprehensive Bank approach; and the very atomized nature of this type of projects may explain the "low" level of lending. Fortunately, recent developments in the region's power sector open new opportunities for Bank action. Among them, power sector restructuring, efficient pricing, opening of markets to private sector participation, improvements in existing and commercial and deployment of new technologies that increases the availability of economic and financially feasible alternatives, and a more realistic and commercial approach from donors and advocates.

1.3 However, the most common complaint has been that the lack of affordable capital is the main barrier to the adoption of EE/CES projects, and therefore the emphasis in increasing Bank finance. While credit availability certainly is a key element to market development, to consider it as the major barrier assumes the existence of a ready market for EE/CES, and downplays the complexity of many other barriers: size of initial investment, lack of information, differences in reliability and in quality, higher implicit discount rates for consumers, subsidize prices and others that may result in more formidable difficulties, not always

possible or easy to overcome. Experience has shown that while piecemeal lending could provide some assistance to individual projects, only a comprehensive action to identify and to address all barriers, including institutional, trade, regulatory and market reforms, can assure the economic and financial sustainability of the markets for EE/CES. The recent consideration of a wind energy project by the Bank private sector facility (P R I) and the active work of IIC in financing small hydro projects in Central America are examples of Bank support that has been possible because of the opening of the power grid to independent power producers. Ironically, opportunities for EE/CES may increase even more when financing EE/CES projects is not a goal, but a means to reach the broader goal of reforming the power sector and to bring private sector participation and market oriented discipline.

1.4 The small number of such operations presented to the Bank, however, suggests borrowing countries have seldom considered the Bank as a source of support for these activities; it also points to the need to discover mechanisms to help in project identification and development in this area. This support for pre-investment activities has always been a concern not only in the Bank policies and strategies but in its actual practices. During the 80's the Bank kept a special nonconventional unit for this purposes within the energy division, but because of the above-mentioned barriers and in spite of its efforts success was limited to the promotion of geothermal energy. Furthermore, because promotion activities are time consuming and project preparation for EE/CES is expensive compared with traditional lending, the heavy burden that it puts on staff discourages the realization of this kind of activities.

1.5 Moreover, helping countries to create enabling conditions for developing these markets for EE/CES require efficient and timely support during the initial stages. This support, besides providing help in carrying out institutional and regulatory reforms, includes also the market research required to identify barriers and formulate solutions; the elaboration of action plans; and the test of instruments to deliver the EE/CES. No wonder that it is intensive in manpower requirements. While the Bank has several financial mechanisms to help prepare individual projects , including CTfunds, it has found difficulties in providing the type of support described above. Two key obstacles are its limited ability to respond to countries' request quickly and timely, and the lack of flexibility, which prevents it to address the whole set of tasks, from promotion to implementation, as one continuous, complex, and evolving process.

1.6 Donors had found that previous technical assistance support to countries has often failed to translate into adequately financed and implemented projects. This result has motivated them to seek cooperation with multilateral banks. In 1994 the US Department of Energy DOE and the Netherlands Directorate General for Development Cooperation DGIS, approached the Bank with a proposal to work jointly in the LAC FINESSE program aimed at addressing some above-

mentioned problems. The Bank sought to complement donor contributions for the LAC FINESSE Project, through a regional technical cooperation; however, by June of last year, for specific reasons, DOE and DGIS support for the program had failed to take form. Management decided that in spite of this failure, the aims of the program were worth pursuing and requested staff to identify an alternative program to attract the support of the donor community. Furthermore, the new program should incorporate Bank experiences, its organizational realities, the lessons learned with similar programs like the ASTAE program at the World Bank, but most importantly the need to articulate it as an element within an integrated approach to power sector reform in the region.

1.7 In response to this request staff began to work in the formulation of a strategy seeking to organize and leverage three converging interests: donors need to maximize the impact of their grant funds in developing sound energy projects with potential for investment and growth; many LAC countries increasing commitment to energy efficiency in the context of institutional reform and restructuring; and the Bank interest in integrating energy efficiency and clean energy sources into a coherent approach to support power sector modernization, increase competition and promote private sector participation. Key elements of the strategy (see ANNEX II for more details) will include: working with countries that can show real commitment; adopting a process, as opposed to a project view, and redefining accordingly the project cycle approach to incorporate pilot and demonstration stages to maximize effectiveness; securing commitment of donor grant funds for the early stages of project development and other as required in the new process cycle; the incorporation of a gradual approach to implementation, which will have as a first stage the design and test of a small scale program, the **EE/CES Strategy Test**, to help selected countries in overcoming barriers to the adoption of otherwise economically feasible projects. This pilot program will be housed and managed in SDS/ENV and financed by this technical cooperation operation and donors.

1.8 The proposed activities not only are in full agreement with the existent Bank Energy Policy but are the backbone of the Banks response to IDB8 and other periodic calls for action in this field. Its initiation will coincide, and will be done by the same team in charge of drafting the Bank Energy Strategy, assuring therefore coherence and coordination.

II. OBJECTIVES

2.1 The objective of this technical cooperation operation is to finance the management and a share of the consultant costs of a pilot program for developing sustainable markets for sustainable energy in the region. The program seeks to test a strategy and action plan for the Bank to act as a catalyst in the mobilization

of donors support for their borrowing countries efforts to establish sustainable markets for EE/CES, which may result in an increase in the volume and effectiveness of lending in this field.

III. PROJECT DESCRIPTION

3.1 This operation will finance a two-year pilot program to test strategies to help countries to mainstream energy efficiency and clean energy sources as part of their energy strategies. Bank's contribution will finance a high level technical specialist and support staff for managing the program; consultants to support the countries in preparation of proposals for donor support, and in the evaluation of the program; and the realization of meetings and workshops with participant countries for cross-fertilization and dissemination of experiences and results. To a large extent, the program funds will be used to "pilot" or test implementation mechanisms for economically feasible EE/CES activities that could be replicated in large-numbers, and to support development of local infrastructure and institutional changes required to carry them out. Donors will complement Bank's action and donor-funded activities will focus on the development of projects to be eventually financed by the Bank and/or other sources. In carrying out the donor resources, the Program will look for synergy among donors, Bank and country interests, and it will be accountable for the proper disbursement of resources and the resulting successes and failures.

A. Activities

3.2 At the outset, the program must be viewed as a process (see ANNEX II). After program mobilization, which includes drafting a more detailed work plan, a small number of countries, three or four, among those meeting requirements will be selected to participate in the testing of the strategy; next, program staff with consultants support will help host countries to do an in depth review of the country existing programs and policies to detect the type of activities, background, market or other studies required, and terms of reference (TOR) will be drafted; a country program profile will be prepared, based on which the program will match country programs with donor availability. Once funded, country activities will start to be carried out, including the design and implementation of pilot or demonstration projects, and eventual mechanism for credit delivery; after the mechanisms and activities tested in the pilots have been evaluated, barriers addressed, regulations amended, the program will continue to design of the expansion and replication in large numbers of the activities found economically attractive and feasible. Finally these studies will help in the preparation of new Bank loans or in accessing existing or new resources including previous Bank loans.

3.3 The type of activity to be advanced in a particular country will depend on the specific conditions and requirements. Usually they will include the following:

a. Review and propose amendments to sector structure, regulations, taxation, subsidies and others that prevent or otherwise discriminate against the introduction of EE/CES.

b. Market studies that will identify the most efficient interventions to foster the use of EE/CES, either upstream, by issuing standards or direct incentives to manufactors and/or other trade allies, or downstream by working with consumers through utilities or Energy Service Companies (ESCOS), or both.

c. Identification of opportunities for investment and delivery mechanisms, and to test them by formulating, designing and implementing small scale demonstrations and pilot studies that, once evaluated, will help design replications of the successful projects.

d. Preparation of required documentation for financing economic and financially attractive projects.

e. Design of information dissemination campaigns and training programs.

f. Evaluation and monitoring of the program activities.

3.4 The program will focus on the measures and technologies that offer the best possibility for a cost-effective penetration in the market resulting in the maximization of net economic benefits. Depending on the conditions of the chosen countries the program will include energy efficiency and conservation, renewable energy, electricity or fuels use, fuel substitution and/or cleaner and cheaper use of conventional sources of energy. Although a theoretical ex- ante ranking could be made among the different technologies with potential for application in the region, shown on Annex I, the potential for each country will depend on local conditions. This is because the critical issue is to find the delivery mechanisms with the largest potential for efficiently overcoming the barriers to commercialization. Therefore, the program will focus on testing alternative delivery mechanisms adequate to the particular conditions of the country. Thus, helping to identify the key elements for a succesful replication of the program. These country conditions will also define the emphasis on a particular class of consumers. The distribution of effort among countries and activities should be proportional to the commitment, needs, and comparative advantages of the countries selected, and to the potentials of each activity for obtaining the largest leverage from Bank's and donors efforts. This may result in a small share for activities with high advocacy but offering limited or restricted economic opportunities, like small scale renewable energy. However, activities with greater economic potential, but less advocacy, like

cleaner forms of conventional sources or urban transport, may have a larger share than expected. Because it is believed that there is a large potential for clean economic and financially viable sources, the program will focus on these technologies, and will not include controversial economic valuations of externalities.

3.5 Finally the program will support the exchange of experiences between participants and dissemination of information to other borrowing countries that could benefit from them and/or participate in a future stage of the program.

B. Expected results

3.6 It is expected that the following results could be verified at the completion of this project:

a. Bank staff will become familiar with the specific problems confronting the adoption and financing of sustainable energy measures and will be motivated to work in their solution.
b. Key barriers to investment in energy efficiency and cleaner energy will be identified, and specific measures for improving their sustainability in the participant countries will be proposed and tested.
c. Between two and four country action plans will be elaborated for submittal to donors finance and at least two of then will be funded.
d. A solid and stable relationship will be established between the countries, donors and the Bank that will permit the replication of the experience to a much larger scale in the whole region.

C. Organization and execution

3.7 The Bank, working through SDS/ENV will be the executing agency of the program. SDS/ENV will assign a senior staff member as Program Coordinator who will work together with the regional departments and the private sector department. This Program Coordinator will be responsible for leading the Program, its relations within the Bank, and its interactions with outside institutions, especially the donor community. To better incorporate the interest of other Bank departments and outside stakeholders, the coordinator will meet periodically with a special advisory committee. The execution and the administration of the Program will be the responsibility of a Management Unit, headed by a Program Manager, that together with appropriate consultant(s) and administrative support staff that will give him technical analysis and management support will be established within the Bank premises for the duration of the Program.SDS/ENV will house the management unit and will provide it logistical support the program. In addition to SDS/ENV other responsibilities are as follows:

3.8 **Regional Departments**. The major responsibility for establishing the country dialogue, preparing lending operations, and loan management

will rest with the Infrastructure Division of each region in which the project will be executed. The division will assign a team leader for each country program as in any other project in the Bank.

3.9 **Management Unit.** The program will provide support to Team Leaders during the initial stages in the technical aspects of the operation, and in matching program needs with interested donors. Equally important, the Management Unit will serve as the interface with donors, helping ensure that donor funds are channeled and assigned to likely projects in countries whose commitments to efficiency and market reform offer a better possibility of success. This Unit will provide a base of technical EE/CES expertise within the Bank, and work with Team Leaders to develop potential country programs. It will support Team Leaders in working with the field offices and in-country institutions to assess needs and provide training and technical support. Finally, the Unit will provide supervision of consultant work, and its technical staff will participate in projects as needed.

3.10 The EE/CES Management Unit will have a staff of four persons; a Program Manager, who brings EE/CES project design and implementation experience, and will provide technical supervision and leadership; a Technical Specialist, a Technical Assistant and an Administrative Assistant who will support the Unit. It is expected that the program can be fully in place within three months of the Bank's approval. Key interfaces within the Bank will be with the Team Leaders, and through them, the Field Offices.

3.11 **Donors.** Donors will participate in the process at several levels: Previous to program initiation, they will sign a general Memorandum of Understanding, or will send the Bank a commitment letter, in which basic guiding principles and areas, levels and timing of funding and an indicative work program may be addressed; during program execution they will verify that specific use of the resources, once particular activities in particular countries have been identified, conform to the agreed disbursement procedures, and will participate in periodical review meetings with the Unit to understand progress, update work program and provide process input. While both the general Memoranda and the project agreements will necessarily be donor-specific, respecting donor priorities, constraints and types of resources available, the guiding principle would be to seek delegation with accountability. With this regard the Bank and core donors would agree on a schedule and procedure for independent evaluation.

3.12 **Participating Host Countries Selection Criteria:**

a. Country commitment. Key to the program success is working with countries that can show a real commitment, explicitly manifested in the assignment of priorities within the programming exercises and country dialogue process with the

Bank, to undertake a comprehensive country program and to support the implementation of the resulting projects.This commitment is not limited to the central government contribution, but also a minimum number of key institutions private and public should be willing to show it by contributing with a fair share of the needed resources, including those required for project preparation.

b. Also, given the emphasis the program puts in the working of markets, candidate countries must also be in the process of reforming their energy sectors.

c. Since the Project will initially focus on developing show cases with a potential to be transferred and disseminated, the candidate countries must show conditions and programs that assure this replicability.

d. To facilitate the initial success of the project a special consideration will be given to those countries that already have shown the above commitments in their dialogue with the Bank, have requested loans, and/or have taking significant steps on their own. By focussing initially in these countries, the program will maximize the odds for success and will deliver results in the shortest time. Costa Rica, Mexico, Jamaica, Bahamas, Brazil, Peru and El Salvador meet those requirements but other candidates may also qualify.

D. Program Costs and Financing

3.13 The Program cost is estimated to be US$1.45 millions covering two years of operation for Stage I, Mobilization, and Stage II, development of country programs (see Annex II). However, this estimation does not include important donor contributions that will finance the implementation of the action plans during phase B of Stage II. The total amount will depend on the type of action plans that will be elaborated during Phase A and in donors availability. During the preparation of this Plan of Operations preliminary discussions were held with the European Commission DG I for the creation of a special fund for the second phase of Stage II totaling several million ECUS. Similar contacts were made with the Japanese special Fund, the UNDP, and other CTfunds and bilateral donors. However, the activity level will start small, learn by doing and through careful evaluation, and build up its activities in concert with perceived needs. Actual quantities of funds coordinated, and the possible growth and expansion of the program, depend on initial successes country demand, and donor interest. Eventually, however, the success of the program will be in its ability to have its functions absorbed into the mainstream operations of the Bank. Although it is difficult to break down the budget by stages and phases it is estimated that Stage I will take 3 months and will cost around US$100,000 75% of which will be charged to the Bank's contribution. Phase A of Stage II will last 7 months but it is not possible to discriminate the budget between

phases because its length is different for each country, and then will no necessarily coincide at a given time.

SUSTAINABLE MARKETS FOR SUSTAINABLE ENERGY PROGRAM						
Cost Estimate and Financing for the two years (US$1000)						
	DESCRIPTION	**TOTAL COST**	**EC**	**USDOE**	**USAID**	**IDB-SF**
2.	**INDIVIDUAL CONSULTANTS (technical support)**					
2.1	Compensation					
	.Program Manager Honoraria (100 wks @ 2950)	295				295
	.Technical Specialist- Honoraria (100 wks @ 800)	160				160
	.Technical Assistant	76				76
	.International Indv.Consultants (156 wks @ 2500)	364	120	120	60	64
2.2	Regional/Local Indv. Consultants (127 wks @ 1500)	190	72			118
2.5	**TRAVEL ON OFFICIAL BUSINESS**					
2.5.1	**International**					
2.5.1.1	Tickets (77 trips @ 1200)	93	23	18.4	9.6	42
2.5.1.2	Per Diem (672 dys @ 160)	107.4	37	25.6	12.8	32
3.	**WORKSHOP PARTICIPANTS**					
3.3.1	International					
3.3.1.1	Tickets (15 trips @ 1200)	18				18
3.3.1.2	Per Diem (75 dys @ 160)	12				12
6.	**GENERAL SUPPORT**					
6.6.4	Administrative Assistant- Honoraria (100 weeks @ 600)	60				60
7	Publications	8				8
8.2	Emoluments, consultants for program evaluation	30	15			15
98	**CONTINGENCIES**	40				40
	TOTALS	1453.4	267	164	82.4	940

Notes:

a. the costs of the annual meeting with donors are not included.

b. travel costs estimate is based on equivalent reference international travel.

c. the tickets and perdiem for travel of the Bank Staff, and logistics and bank overhead are not included. These costs are estimated in $500000

d. the resources that eventually will be obtained from the new contribution from EU DG1 and Tcfunds for Stage II (see Annex II) are not included because they will be determined based on specific action plans. Also, participant countries contribution are not included. They may be of the same order of magnitude of the program presented here.

3.14 **IDB contribution.** Special Operations Funds SF foreign exchange component of this operation will finance the program management unit, a share of the consultant services required to prepare the country assessments, country profiles and program evaluation for a sum up to $690000. SF funds in Mexican pesos for the equivalent of US$ 250000 will be used to finance the workshops, Mexican consultants and other cost. SDS/ENV administrative budget will finance the program coordinator and his travel, and will provide office facilities and equipment.

3.15 **Host countries** will contribute with local teams, studies and other support that could add up to an amount similar to the program contribution. However their contribution is not estimated in this document.

3.16 **Donors contributions** will be a key element in program's finances. By August 1996 three commitment letters had been received. The European Commission through its Synergy program contributes with $267 thousand to be used during Stage I and phase A of Stage II (see Annex II), and the text of a contract has been agreed upon. The US Department of Energy (DOE) contributes with twelve consultant- months and their travel, estimated to cost $164 thousand; and US AID with another six consultant-months and their travel estimated in US$82.4. However, the committed shares shown on table 1 do not include donors which have not yet provided a commitment letter. These includes additional donor contributions or Ctfunds for phase B of Stage II of the program, development of country programs, because they can not be budgeted in detail until the action plans are formulated in phase A. Nevertheless, this test program can be expected to mobilize about $3-4 million in donor funds over its two-year period.

IV. PROGRAM BENEFITS AND RISKS

A. Benefits.

4.1 Participating host countries will benefit by supplementing their traditional energy sources with low-cost, environmentally sound alternatives. This is done through the creation of a market for these activities that can access future Loans. This program will permit the Bank to test and refine a strategy of cooperation with donors that will result in an overall improvement in the effectiveness of their isolate efforts. It will highly leverage the Banks contribution by obtaining timely support for

preparation of projects and will contribute to improve relations between donors and the Bank.

B. Risk

4.2 The main risks identified are:

(i) the identification of suitable and committed host countries with significant potential programs. This may be the major threat to a successful implementation of the program. Focussing the initial stages in countries who have already shown a strong interest for Bank assistance and/or in which we already have loans is the best safeguard to this risk;

(ii) the level and timing of donor participation in the program will be a major contributor to its size and eventual success. There is a potential risk that the lack of donor support, in addition to the already committed $500000, may lead to a limited or incomplete program. Although commitment and constraints vary widely among donors, the general response has been favorable in particular for stage II of the program when country plans are implemented. Furthermore, the gradual approach, the access to Ctfunds resources, and the bank's own commitment, are elements that provide insurance against this risk;

(iii) Sustainability of the program. The technical cooperation support for the management of the program is limited to two years. Because, even when successfully tested, continuation of the country programs may need a longer time to become self -sufficient it is essential that the Bank pledges to allocate the necessary administrative resources to follow up the actions arose by the program and assure its sustainability. The process approach involves some departures from the usual project cycle of the Bank. The ability to start small, but to be ready to respond quickly to a potential winner activity, is key to the conception of this project. The very nature of the program is based on the ability to experiment with, evaluate, and them replicate a pilot or small-scale programs. Therefore, the program should enjoy the flexibility of any other pilot program in addition to be carefully coordinated with bank lending operations; and

(iv) the lack of incentives for the regional departments to allocate the human resources required to implement the country programs. To address this risk upper management of the Bank should establish clear priorities and provide the required incentives for the program.

(v) Potential duplication with other efforts of the Bank Group. Two recently approved MIF operations are not competitors but rather complements to this program. They seek the financing of specific projects but do not seek a comprehensive country treatment. In any case, the operations should be carefully coordinated, particularly in

the evaluation stage, to assure the cross-fertilization and sharing of experiences.

V. MONITORING AND EVALUATION OF THE PROGRAM

5.1 The monitoring, ongoing and Ex-Post evaluation of individual projects and execution of action plans are a key element in the success of the program. They will provide important information for making decisions on the modifications, expansion and replication of successful projects. They are integral part of the project and will be designed simultaneous with the action plans. Its cost will be dependent on the individual countries and will be included in the Budget presented to donors for the second phase of Stage II.

5.2 The overall evaluation of the program at the end of the two year period is of great interest for the Bank and donors because it will provide the information required to make their decision on whether to extent or cut their support for the program. This exercise will include program management and execution, strategies, delivery mechanisms and available results at the time of the evaluation. The cost of the overall evaluation, estimated in US$30,000, will be financed by donors and the Bank. The Budget table in paragraph 3.13 includes US$15,000 for this purposes in the consultant and travel items. Terms of reference for this evaluation will be drafted jointly by Bank and donors.

LOGICAL FRAMEWORK

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
GOAL Minimize the economic costs and adverse environmental impact of power production	As of 2001, lower economic costs and less pollution associated with power system expansion in the region	Reports and statistical yearbooks published by agencies concerned in participating countries	
PURPOSE Develop and test in four or five countries a strategy and action plan to mobilize resources from donors in support of efforts to establish sustainable markets for sustainable energy	— A significant volume of donor resources will be obtained during the program in addition to initial resources — The participating countries will have abundant resources to finance activities throughout the project cycle — Once the programs are set up, they can continue without further assistance from donors or governments	Program reports for 1997 and 1998 Ex post evaluation	There are at least a similar number of countries prepared to develop a complete and consistent program of measures to develop sustainable markets for sustainable energy under a program to modernize the energy sector
OUTPUTS 1. Greater awareness by professionals at the Bank and in the countries of problems specific to adopting and funding sustainable energy measures, and motivation to work towards solving them	Following program completion the number of sustainable energy initiatives submitted to the Bank with support from professionals in the regional departments will increase substantially — Findings of studies, pilot projects and demonstration projects carried out — Implementation of self-sustaining programs	Bank operating statistics	The countries make progress on energy sector reform commitments and meet the requirements of new commitments to develop sustainable markets for sustainable energy. The Bank's senior management offers the right incentives for the regional departments to assign priority to participation in the program

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
2. (a) Identification of key barriers to adopting and funding energy efficiency measures and clean energy projects; (b) proposal and testing of specific measures to improve sustainability in participating countries		Project files, ad hoc evaluations, and ex post evaluations	
3. Two to four action plans for participating countries will be prepared and submitted to donors for financing; at least two of them will be financed and implemented	Number of action plans prepared, and number and amount of technical-cooperation operations by donors for participating countries	Project and donor files	
4. A solid and stable relationship will be established among donors, countries and the Bank to allow replication and dissemination of program activities to other countries in the region	Number and amount of similar technical-cooperation operations carried out in all countries in the region during the five years following the operation's completion	Country, donor and Bank files	
ACTIVITIES			
1. Selection of participant countries	Agreements with at least four countries	Text of agreements	Collaboration of regional departments and Country Offices
2. Detailed analysis of the situation of each participating country and preparation of terms of reference for activities to be included in each action plan	Detailed action plans for at least two countries	Text of action plans and approval by authorities	
3. Discussion with countries and donor agencies concerning financing of activities identified in each action plan	Financing agreements for action plans	Text of contracts	
4. Implementation of activities identified in action plan	Special indicators for each activity to be included in action plans	Monitoring and ex post evaluation reports	

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
5. Assistance to countries in obtaining investment financing	Projects financed and project amounts	Evaluation and monitoring reports and respective approvals	
6. Project monitoring and evaluation	Evaluation and monitoring performed by consultants and approved by countries, donors and the Bank		

PROPOSED RESOLUTION

REGIONAL. NONREIMBURSABLE TECHNICAL COOPERATION FOR A PROJECT ON SUSTAINABLE MARKETS FOR ENERGY EFFICIENCY AND CLEAN ENERGY SOURCES

The Board of Executive Directors

RESOLVES:

1. That the President of the Inter-American Development Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank to take such additional measures as may be pertinent for the execution of the plan of operations referred to in Document AT- with respect to a project on Sustainable Markets for Energy Efficiency and Clean Energy Sources.

2. That up to the sum of US$940,000 or its equivalent, is authorized for the purpose of this resolution, of which up to the sum of US$690,000 may be disbursed in foreign exchange and the rest in pesos mexicanos, chargeable to the net income of the Fund for Special Operations.

3. That the above-mentioned sum is to be provided on a nonreimbursable basis.