



DEVELOPING FINANCIAL INTERMEDIATION MECHANISMS FOR ENERGY EFFICIENCY PROJECTS IN BRAZIL, CHINA AND INDIA

Brazil Country Report Executive Summary

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Introduction

Public policies to promote increases in energy efficiency (EE) are justified and important for several reasons: (a) the market alone does not lead to an economically efficient standard of energy use; (b) the benefits of EE go well beyond the economic gains to the consumers of energy – there are economic and environmental gains for the country as a whole; (c) the potential for EE gains is large.

Improving EE involves very diverse measures, depending on the sector or energy end-use being considered. Recognizing the big differences that exist between specific segments of the energy consuming market is a crucial first step to achieving success. This report is part of an international effort to address one segment of this potential – energy efficiency projects carried out as retrofits in existing industries and buildings.

The international effort, entitled “Developing Financial Intermediation Mechanisms for Energy Efficiency Projects in Brazil, China and India” (shortened to the “Three Country Project” or the “3CEE Project”) has been sponsored by the United Nations Foundation (UNF) and the World Bank’s Energy Sector Management Assistance Programme (ESMAP) and coordinated by the World Bank and the United Nations Environment Program (UNEP) through the Risø Center (URC).

The emphasis has been on how to increase local financing of EE projects. Finance has been the greatest barrier to investment in all three countries. In each country informal working groups of bankers and other financiers, the EE community and government participants were established to evaluate the issues, propose measures and provide outreach and dissemination of the results. In addition, a dialogue was maintained between stakeholders in these three large emerging economies on this theme.

Energy and Economic Context

The economy

Brazil has a population of 182 million inhabitants and a GDP of US\$ 604.9 billion (US\$ 1,492 billion in PPP - purchasing power parity – terms). The economy is dominated by the services sector which has increased its share in GDP to about 53%. The growth of the economy has been erratic since 1980 and relatively slow on average.

Reforms begun in 1994 brought inflation down from very high historic levels and also initiated a process of economic liberalization, including:

- Opening domestic markets to greater international competition;
- Privatizing state-owned assets, principally in the electricity and telecoms sectors;
- Creating regulatory frameworks and institutions for energy, water and telecoms.

Although these reforms brought low inflation, economic growth remained low on average (about 2.4% p.a. from 1994 through 2005).

Energy sector

Brazil's energy supply has several important distinguishing aspects.

- Electricity supply is dominated to an unusual extent by hydroelectric generation.
- There is substantial industrial transformation and consumption of bio-fuels.
- Coal use is small and is restricted to a few industries.
- Domestic crude oil production is almost in balance with consumption.
- Natural gas use is relatively small but is growing rapidly.

Final energy consumption by sector is summarized in Table 1. Especially noteworthy is the very small consumption of fuel in the commercial/public as well as in the residential sector, due basically to the lack of space heating.

Table 1: Final Consumption Matrix in 2004 (thousand toe)

Sector	Petroleum	Nat Gas	Coal	Wood *	Sugarcane**	Electricity	Total
Non-Energy Use	11548	737	174	0	516	0	12976
Total Final Energy	66547	8500	11497	15920	19257	29820	151540
Residential	5841	181	0	503	0	6758	13284
Commercial	528	216	0	137	0	4307	5188
Public	637	48	0	0	0	2588	3273
Agriculture/rural	4858	2	0	6	0	1281	6146
Transport	43508	1390	0	0	6445	89	51432
Industry	11174	6663	11497	15273	12812	14797	72217

* Wood includes charcoal, fuelwood & some non-wood residues. Excludes estimated fuelwood in agricultural & residential sectors.

** Sugarcane products – alcohol in the transport sector and non-energy use; bagasse in industry.

(Source: based on the Balanço Energético Nacional, 2005)

The consumption of electricity per unit of GDP has steadily increased since 1980. Fossil fuel intensity fell in the early 1980s due to substitution of oil derivatives by bio-fuels and electricity, then increased again from the mid-1980s to the mid-1990s and has since remained relatively stable. Greenhouse gas emissions from fossil fuels are about 550 tons of CO₂ per million US\$ (2004) of GDP (perhaps the lowest coefficient among large economies) and have been stable or falling in relation to GDP since the late 1990s.

There are few major distortions in consumer prices relative to energy supply costs. There are some subsidies of fuel and electricity to reduce prices in remote regions. Electricity supplies to public services, rural electricity supply, low income residential consumers and large industrial consumers are subsidized to some extent. Perhaps the most significant distortion, from the perspective of energy efficiency projects, is the very high peak period electricity tariff as compared to off-peak tariff.

Reforms in the electricity sector started in the mid-1990s. Generation and retailing were opened to competition, while transmission and distribution remained regulated monopolies, with provisions for open access. Between 1995 and 2000, 21 distribution companies, representing about 60% of the market, were privatized. However, only 20% of the generation market was privatized. The national regulatory agency - ANEEL - was established at the end of 1996.

The reform process stalled in late 1999. Two years later Brazil was hit by a severe electricity shortage due to drought conditions and accumulated underinvestment in generation and transmission. Rationing was imposed from June 2001 through February 2002.

In January 2003 a new Federal administration took office, proposing to fundamentally change the existing model for the power sector. The new institutional model was approved by Congress on March 15, 2004. It considerably strengthened central planning, however, competition in generation was maintained, with auctions through a power pool.

EE Potential and Programs

The potential for EE retrofit projects is a part of the total potential for EE improvement in the economy. Energy service companies (ESCOs – see in more detail below) have developed in Brazil as in many other countries to provide a range of services targeted at this market. It has never been well analyzed, though it is clearly large – perhaps a total of about US\$ 5 billion in investments with paybacks up to 30 months, with annual savings of about US\$ 2 billion. The potential in the public sector may be a third of this total. These values only consider electricity savings; there is additional potential for fuel and water savings.

Unlike most developing countries, Brazil has long had government programs to promote energy efficiency, administered separately for electricity and fuels through the two parastatals, Eletrobrás and Petrobrás.

- PROCEL, for electricity, was established in late 1985. The program is managed by Eletrobrás, the federal holding company in the power sector.
- CONPET, for oil and gas, was established in 1991. The program is managed by Petrobrás, the national oil and gas company.

The electricity efficiency program is substantially larger than that for fuels – which is mostly focused on initiatives in the transport sector. Besides PROCEL, two other programs for electricity efficiency have been established since the late 1990s:

- The public benefit wire-charge on utility revenues for energy efficiency which is managed by the utilities with oversight by ANEEL, the regulator for the power sector.
- The RELUZ program for subsidized financing of improved efficiency of public lighting, using resources of Eletrobrás.

Both of these programs channel much larger resources than the basic PROCEL program and both are administered by the distribution utilities. The market segment of public lighting has been particularly privileged. Besides receiving financing from RELUZ (>\$230 million through 2004) it has received more than half of the grant resources from the EE wire-charge.

Government programs have achieved significant EE gains in some areas, for example with appliance labeling programs and in public lighting. However, little attention has been given to the market segment that is the focus of the 3CEE Project - energy efficiency projects in existing industries and buildings. The consolidation of this “EE services sector” requires overcoming historic barriers to implementing economically viable projects.

One relevant program has been the EE wire-charge – which has created an important source of income for some ESCOs. However, the operations are structured in such a way that they have so far done nothing to develop commercial financing of projects and little to consolidate a commercially sustainable EE services sector. An analysis of the wire-charge program, supported within the 3CEE project, further concluded that while total wire charge funds of almost R\$1.2 billion were spent between 1998 and 2004:

- The program is highly fragmented and lacks strategic orientation by public EE policies to maximize overall benefits. This has resulted in little leveraging of the resources spent.

- There is little, if any, independent *ex-post* evaluation of costs and benefits of implemented projects, while there is excessive bureaucracy in the *ex-ante* process.
- Rigid criteria are used to determine expenditure shares in economic sectors independent of the size of the utility or the characteristics of the market in its franchise area.

These and other weaknesses may ultimately result in a lack of public support for such a program.

In the aftermath of the rationing there was a glut of electricity supply. This plus the focus of the government on creating a new supply model has meant that initiatives in EE – including the EE services sector – has been a low priority in recent years. Policies outlined during the rationing to promote the sustainable growth of market-oriented EE services were never implemented. However, there are encouraging signs that the Federal Government is once again beginning to attach a higher priority to promoting energy efficiency and that promoting increased investment (especially from the private sector) in EE projects may be an important part of this emerging policy.

Accessing Commercial Bank Credit for EE Projects

In Brazil, third party financing is mostly via debt. Capital markets are relatively small, though there has been some evolution of equity markets (both public and private). Brazilian banks operate in a sophisticated system, with strong regulation by the Central Bank. The commercial banking sector has a large participation of private banks, many of them foreign-owned. In addition, the banking system is quite concentrated.

A large part of the assets are used to finance the large internal debt of the Brazilian government. Another substantial block of assets is to finance “directed operations” for rural and housing credit. The balance of these assets, together with those in BNDES operations (see below) are roughly equivalent to those applied in “active” or “free” operations. The interest rates on credit for “active operations” (i.e. excluding directed operations for rural and housing finance and BNDES operations) are very high by international standards (see below), though there are large differences between categories of credit operation. Spreads are much higher for small and mid-size companies than larger companies.

The term of loans to businesses is very short - the average for all categories is 6 months. At the same time, the requirements for guarantees are generally very strict. The recent changes in Brazil’s bankruptcy laws and the requirements of the Basel II framework tend to increase the emphasis on collateral.

Given these factors, it is not surprising that the volume of credit compared to the GDP in Brazil is low when compared with other nations, though it is increasing somewhat. Credit to the private sector in Brazil amounted to less than 26% of GDP at the end of 2005, compared to about 62% in Chile and some 115% in the Euro-Area. The low level of credit, when compared to Brazil’s GDP, demonstrates the difficulty for most companies to obtain financing in the country.

The Brazilian development bank, BNDES (*Banco Nacional de Desenvolvimento Econômico e Social*), is the main vehicle of the federal government for financing development and is also the main source of financing for long term credit in the Brazilian financial market. The BNDES makes loans either directly or indirectly through accredited commercial banks. Most loans for EE projects would fit in the latter category.

The interest rate on indirect loans is composed of the TJLP (long term interest rate), the administrative spread of the BNDES and the spread of the intermediary bank (which varies within a range, depending on the borrower). The interest rate is currently 13% or less, after some years

near 15%. This is substantially lower than the interest rates for “active” or “free” operations of the commercial banks. The BNDES has had a credit line specifically for EE projects for some years. However, it has almost never been used, due in large part to the guarantees required.

In general, guarantee requirements have been the single greatest barrier to ESCOs’ accessing bank credit. A response to this problem which has long been advocated is the creation of a guarantee facility (Fundo de Aval) specifically for the credit risk of EE projects. For this reason the 3CEE Project supported an analysis of the issues involved in designing such a facility. This work led in turn to the preparation of an initiative within the BNDES – called PROESCO – which seeks to eliminate the requirement for collateral, though personal guarantees are still needed.

PROESCO is a credit line in which, unusually, the BNDES shares up to 80% of the risk, with the intermediary bank assuming the remainder. The program was approved by the BNDES in May 2006 and agreements are now being negotiated with some commercial banks in order to implement it.

PROESCO was designed in a way that permits rapid implementation. It avoids the complications of establishing a stand alone guarantee facility, as well as the uncertainties about adequately dimensioning the initial capital and the lifetime of the facility. It can test the level of demand and will develop experience with real projects. Based on this experience adaptations may be made to the strategy. These might be relatively minor adaptations, or distinct approaches might be developed to substitute or complement it. As such PROESCO can be viewed as a pilot initiative.

A key element of PROESCO is that the technical and economic viability of the project must be evaluated by an entity authorized by the BNDES. So far there is no established process for this appraisal. Guidelines are urgently needed as well as a process to consolidate the credibility of the agents responsible for the evaluation. In addition, Brazilian ESCOs have almost no experience in presenting projects to banks. Most ESCOs will need training and other “handholding” to present the initial proposals.

From a somewhat longer term perspective, attention must be given to the capacity of banks to organize the technical appraisal of projects within the context of their retail operations.

Attracting Equity to the EE Service Sector

Access to bank financing could be improved by attracting more equity or “risk” capital. Emphasis until now has been almost entirely on access to credit for investments. However, both broad types of capital are needed for the EE services market to grow. For this reason, a report was prepared for the 3CEE Project, examining the possibility of venture capital (VC) and private equity (PE) investments in ESCOs and SPCs – Special Purpose Companies.

The Brazilian capital market is still at an initial stage and is quite small. Investments in PE and VC in Brazil peaked in 1998, totaling US\$ 1.56 billion. Since then, the trend has been to decrease.

The VC funds, in general, focus their investments in companies with potential for rapid growth as well as sound profit generation. The PE funds, besides seeking companies with a sound profit potential, may specialize in strategies such as investments in companies with financial difficulties. They also tend to invest in somewhat larger companies. As a rule, the managers of funds seek companies with sustainable competitive advantages in the medium term, which allow them to consolidate their market position and generate economies of scale. .

As a result of their pre-determined terms of duration, the funds need to liquidate their investments in five to ten years. Thus, funds seek to invest in companies which can issue shares in the stock market within this term, or for which there is a mergers and acquisitions market, especially of strategic buyers. In the Brazilian capital market the opportunities for dis-investment by means of IPOs are restricted to large companies. Therefore, investors in small and medium-sized companies seek always to invest in sectors where there are prospects for dis-investment via the sale of the company to strategic investors.

Although one Brazilian ESCO has been invested in by a regional VC fund, this cannot be considered the beginning of an investment wave, since there are many challenges facing VC/PE investment in this sector. Among the difficulties are:

- ESCOs are seen as services companies. Fund managers, especially of VC funds, are predisposed against investments in services companies. There is a perception that growth potential is lower and that there is greater pressure on profit margins.
- The great majority of ESCOs are still too small to be of interest to VC/PE funds, especially considering the considerable costs of due diligence
- Funds seek to diversify their portfolio - thus it is very unlikely that any fund would develop a specific expertise in the EE sector.
- Funds need a plausible exit strategy for dis-investment, which probably means a strategic buyer. At present there are few, if any, prospective buyers for ESCOs.
- The difficulty in accessing debt for projects is another strong impediment to VC investment in ESCOs. Without leveraging the invested capital via debt to reduce the average cost of the capital employed, equity investors are reluctant to enter the sector.
- Most ESCO owners are reluctant to lose control of their firm. ESCOs would usually prefer the option of investment in SPCs. However, SPCs appear to be of limited interest for most EE projects, because the projects are usually too small. In addition, investments via SPCs are generally not compatible with the philosophy of VC investments. The regulations of most VC funds prohibit or discourage this type of investment, in part because there is no scope to intervene in the governance of the ESCO.

These difficulties should not be interpreted as meaning that third party equity is not an option for the EE services sector. However, creativity will be needed.

One example is to try to structure investments via SPCs which also allow the investor to take part in the corporate governance of the ESCOs. Another is to seek hybrid debt/equity structures. In any case, the vehicle must work as a pre-approved line of credit which may be “withdrawn” rapidly by the ESCO – since speed is crucial in the context of ESCO marketing. This emphasizes the importance of investment structures with previously established parameters, which is the opposite of the *modus operandi* of VC, strictly speaking.

One possibly attractive approach along this line is a firm or vehicle that specializes in the financial and contractual aspects of the business and works with ESCOs to finance their projects. Sometimes called a “Super ESCO”, a more accurate name would be “ESCO Finance Company” or EFCO. It would have at its disposal capital as well as a team with enough expertise to rapidly appraise both the technical and financial aspects of projects.

A different approach would be to create an investment fund to acquire receivables originating from EE projects. Since their inception in 2001, trade receivables funds (in Portuguese, “Fundo de Direitos Creditórios”, or “FIDCs”) have grown steadily, both in terms of number of funds and total capital, reaching a volume of more than R\$8 billion in 2005.

FIDCs could be structured to purchase future flows from energy performance contract receivables (see below). The legal framework is fully in place for such a fund to be structured. However, under present market realities it would be difficult to sell such a fund to institutional investors in Brazil. In order to create an FIDC for EE projects in the near future it would be necessary to have public sector capital requiring a lower return.

An FIDC would not solve the problem of the initial financing of projects – it buys the receivables of an existing project. However, it would permit the ESCO to take the loan off its balance sheet and move on to new projects. The risk of the bank (or of a guarantee facility) would also be reduced. This could augment the flow of projects which can be financed.

The Development of the Energy Efficiency Services Sector in Brazil

Energy service companies, or ESCOs, can make important contributions to transforming the market for energy efficiency (EE) products and services on a sustainable basis.

In Brazil, some firms started providing specialized energy rationalization and efficiency services in the early 1980s, but a specific ESCO sector only emerged in the mid-1990s. This period saw the beginning of the definition of EE services as a sector and the public discussion of energy performance contracts (EPC). An (EPC) may be broadly defined as a contract between the ESCO and its client, involving an energy efficiency investment in the client’s facilities, the performance of which is somehow guaranteed by the ESCO, with financial consequences for the ESCO if the promised results are not achieved. The first EPC seminar was held in 1995. ABESCO, the association of ESCOs, was founded in 1997. Soon after, internationally funded training programs began to be offered, especially by USAID, to strengthen ESCOs’ capabilities.

There have been periods of growth in the market for EE services, followed by periods of stagnation or even retraction. Over time the market has shown growth. It is estimated that the annual revenue of the sector for efficiency projects grew from roughly US\$ 16 million in 1996 to about US\$25-30 million on the eve of the energy crisis of 2001-2002 and may have reached a level of US\$30-35 million in 2004. It must be emphasized that the estimates are quite rough (especially the more recent ones). Probably they underestimate the growth, since not all EE services companies are included – especially in the area of co-generation.

There have been diverse “drivers”, summarized in the box, which have opened the market at different times for EE services.

When	Driver	Effects
1980-1985	CONSERVE program	Many energy audits; few projects
1985-1990	PROCEL program	Many energy audits; few projects
1990-1993	None	EE almost disappears as a business
1994-2000	Electricity price increase & stability Decreasing costs of key inputs Power factor rules PROCEL program (1994-1998)	Improves project viability; consumers can plan Improves relative costs – eg building automation Opens doors – continuous effect since 1993 Consumer awareness & demonstration projects
2001-2002	Electricity rationing	Brief demand for services, especially gen sets
2002-2005	ANEEL wire-charge Entry of natural gas General increase in energy prices	Becomes important source of ESCO projects Creates new business opportunities Improves project viability

The ESCO sector is diverse and the information concerning its characteristics is fragmented. In order to mitigate this problem, in January 2005 ABESCO organized a survey with associated

companies as a part of the 3CEE Project. The effort to create new financial instruments will require improving the amount and quality of information available about this sector.

There are dozens of engineering companies providing EE services; however, at most a dozen are capable of executing the several activities expected from an ESCO. The majority are small companies, with annual revenues below R\$ 2 million. However, some are medium-sized companies, with revenues exceeding R\$ 10 million. Very few ESCOs are subsidiaries of larger companies – including utilities. There are ESCOs operating in all five major regions of the country. The great majority operate solely in one or two regions.

ESCOs treat energy rationalization in the broad sense, rather than EE strictly defined. Many projects incorporate other rationalization measures which add value to the project. They implement projects with diverse characteristics, such as the technologies used, size and payback time. There is not a “typical project”, there is a spectrum of distinct segments of types of projects. At the same time, it is clear that a sizeable share of projects are small (less than US\$ 100,000), with short payback times, say, of 12-15 months or less. The profile of projects implemented today is partly the result of the lack of access to bank financing.

The EE services sector has evolved in diverse ways since the mid-1990s. It has grown substantially since then in terms of the volume of projects, as well as in other ways. Firms have developed capabilities, and instruments such as performance contracts, once rare, are now quite common. However, the market is still very much smaller than the potential for economically viable projects would allow.

The ABESCO survey asked ESCOs about the relative importance of factors that impede the implementation of proposals made to clients. Unsurprisingly, financing was considered the most serious barrier, by a wide margin. However, it is clear that other aspects of marketing also present major difficulties. Basically, potential clients tend to underestimate what is involved in implementing EE measures, attribute low importance to them and are slow to take decisions (in part because the O&M staff of the client often feel threatened). Overcoming these barriers requires that ESCOs improve their marketing skills, but it also implies a wider effort to educate consumers involving diverse federations and associations of consumers. Government programs could help as well.

It is also interesting to note the factors considered to be less important as impediments. The least important, by a wide margin, was that “service providers have low credibility”. The factor “low energy prices” also ranked rather low as an impediment. This is consistent with the fact that most projects have relatively short “payback” times.

Conclusions and Next Steps

While the 3CEE Project has not resulted in the financing of specific projects in Brazil, it has had other important, if less tangible results. When the 3CEE Project began in 2002 the key agents in the EE services market had little understanding of each others’ characteristics, needs and opportunities. The project allowed a sustained dialogue between the agents and supported diverse analyses and surveys (see box) that have done much to close this gap. This process has also produced diverse proposals that can be built from and a clearer idea of what measures are needed, as well as what is likely to work and not work.

Studies and Surveys for the 3CEE Project in 2005

- ABESCO: “Análise dos Resultados da Pesquisa das Empresas de Serviços de Eficiência Energética no Brasil”; February, 2005
- Jannuzzi, G.M.: “Energy Efficiency and R&D Activities in Brazil: Experiences from the Wirecharge Mechanism (1998-2004)”; July, 2005
- Lima, L.E.A.; Ayres, C.M.; Poole, A.D.; Hackerott, C.F.; Campos, M.: “Analysis of the Viability and Design of a Guarantee Facility for Energy Efficiency Projects”; August, 2005
- Marçal, M.E. & Magalhães, P.C.: “Opportunities and Challenges in the Development of Financial Intermediation Mechanisms for Energy Efficiency Projects in Brazil”; April, 2005
- Marçal, M.E.: “Considerations for Structuring a Trade Receivables Fund (“FIDC”) to Finance Energy Efficiency Projects in Brazil”; November 2005

An important initiative stimulated directly by the 3CEE Project is the PROESCO credit line approved by the BNDES – which is designed to mitigate the problem of guarantees for credit. At the same time, there have recently been advances, largely independent of the 3CEE Project, which nevertheless move in the same direction.

- The successful procurement of an EE performance contract by the Sao Paulo public sector water utility (SABESP). If basic legal uncertainties can be resolved and procedural guidelines established, the crucial public sector market can begin to be opened for EE projects.
- Some commercial banks have been developing new products, loan appraisal practices and more flexible guarantee requirements. Though still not sufficient to open the market, such changes are consistent with the needs for EE project financing.
- There are signs of greater government priority for EE in general and specifically for policies to effectively support development of the EE projects market.

The 3CEE Project has also helped consolidate and strengthen the ability of the Brazilian ESCO Association – ABESCO – to represent the EE services sector. Such an entity is important for developing this fragmented market. There is a range of policy, training and marketing needs which transcend the capability of any one company. Associations were established in China and India in recognition of this need and there were exchanges with ABESCO.

While the 3CEE Project has ended in mid 2006 (though some activities of divulgation and exchanges been extended for a year), it is important to build on the results so far achieved and the momentum which has been created. Now would be an appropriate time for the government to consider undertaking, possibly together with support from the World Bank and other donors, a strategic review of energy efficiency programs in Brazil, and the means to spur investment in EE, particularly from the private sector, over the next half dozen years. So far there is no policy framework to support the sustainable increase of investment. The strategic review would be able to benefit from the results of diverse lines of work (including the 3CEE Project and of other donors).

Energy efficiency project investments are an important aspect of improving productivity and competitiveness, of reducing operational expenses of public sector facilities, as well as addressing long-term strategic energy supply security issues. In addition, as promotion of EE has become one of the highest priorities in the renewed international focus on clean energy development and addressing global climate change concerns, a strategic review and associated planning could strengthen Brazil's position as a leader. Brazilian enterprises could benefit more substantially in global carbon emission reduction efforts if responses are well organized and strategically focused.

In undertaking such a review and considering strategies for the future, it is important to address energy as a whole, as it is viewed by consumers, even though electricity and fuel efficiency programs have been managed separately in Brazil for historic institutional reasons. Ideally, the efficiency of water use should also be included. Not only is water a major vector in the delivery of energy services, it is a natural fit in terms of business development, marketing and financing.

Examples of subjects which should be addressed in the strategic review include:

- Bring together existing and new information about the potential for EE savings in different market segments.
- Evaluate key needs for mobilizing energy efficiency investments and tools to facilitate this such as: credit guarantee mechanisms (building from the initial phase of PROESCO), a receivables fund and project performance insurance.
- Evaluate ways to increase the future impact of the electricity wire charge on energy efficiency: identify priority objectives and review alternative institutional mechanisms. Some preliminary recommendations were suggested as part of the 3CEE Project.
- Evaluate distortions of energy prices which hamper EE investment, such as the very high ratio of peak to off-peak electricity prices, and provide recommendations.
- How to accelerate EE investment in the public sector, particularly in public buildings and water utilities. Review progress towards resolving the legal issues in the procurement of EE services. To the extent that the legal difficulties are resolved, emphasis will shift to how to manage the implementation of an EE program within the public sector.

The strategic review can provide a basis for defining and prioritizing international collaborations and funding as well as orienting domestic policy.

At the same time, it is important to provide follow-up support for some advances already made, without awaiting the results of broader studies. An urgent example is the implementation of PROESCO, which requires attention to the preparation of projects for financing and the development of an adequate technical appraisal process. Support for the ESCO sector is also warranted, including activities such as:

- Training initiatives for ESCOs, consumers, financial agents and government.
- Review of performance contracts currently being used in Brazil.
- Support the systematic accompaniment of projects being implemented in order to provide improved information for financial agents on results being obtained.

Diverse international donors have played an important role in supporting the development of the EE services sector. They could continue to play a significant role complementing and reinforcing domestic programs. Some examples are:

- Assistance for a program to improve the energy efficiency of public facilities. There is vast international experience in structuring and implementing such programs.
- Support the organization and divulgation of international information on various topics.
- Support a review of PROESCO's progress. Provide assistance for the design and creation of possible follow-up mechanisms.
- Assistance in continuing training in diverse areas.

The strategic review for EE policy would doubtless modify and enrich the preliminary proposals summarized here. In any case, there now seems to be an opportunity for a new and larger round of domestic and international cooperation to achieve a common objective: much greater investment in economically viable energy efficiency projects.