PPIAF Assistance in the Kingdom of Cambodia

Since 2000 PPIAF has funded 11 activities in the Kingdom of Cambodia (Cambodia) worth $2,365,260, which have assisted the Royal Government of Cambodia to reform its enabling environment for private sector investment, exploring policy options to strengthen the telecommunications regime, laying the foundation for an output-based aid program, and develop a private sector investment policy in the energy sector.

Technical Assistance for Enabling Environment Reform in Cambodia

In 2000 the PPIAF provided support to the Government of Cambodia to prepare a Country Framework Report (CFR) to fill the vacuum of information available on infrastructure and assist the country—including government and civil society— to reach a consensus on the role for private participation in infrastructure. The objective of the CFR was to facilitate private sector involvement in Cambodia’s infrastructure by providing: i) a comprehensive survey of Cambodia’s infrastructure endowment, performance, and investment plans; ii) a review of Cambodia’s policy, regulatory, and institutional environment relevant to private sector involvement in infrastructure, and identifying measures to improve the regulatory framework; and iii) a vehicle for the government to articulate a comprehensive action program for expanding private sector involvement in infrastructure, developed in consultation with relevant stakeholders and potential investors in infrastructure.

The CFR provided a general overview of the country’s socio-economic situation and role of private sector, and highlighted opportunities in key infrastructure sectors. The report also considered number of cross-cutting issues that were common across sectors, including: the legal environment; government organization and decision-making; investment approval and transaction processes; regulatory approaches; land acquisition and resettlement; financing environment; and subsidy schemes and output-based aid. Additionally, it drew on the experiences of other countries and offered valuable comments on the most appropriate solutions for Cambodia. Moreover, the report drew a realistic approach on dealing with the central issue of private sector participation and took into consideration the issue of institutional weaknesses, integrated lessons from previous experiences and adjusted the proposals to the situation in Cambodia. Whilst clearly recognizing the need to reform institutions, introduce pricing mechanisms, respect for transparency, and independence of regulators, the report suggested that where it was not possible to implement the state of the art solution, a simpler and robust solution could be promoted. The strategy for reform recommended by the report included changes in the legal structure and institutional framework, and increasing incentives for private sector participation. The CFR provided major input into the government’s Poverty Reduction Strategy, which was adopted in 2002.

In 2003, building upon the findings of the CFR, PPIAF provided support to the government to improve governance in the management of private participation in infrastructure in Cambodia. The main objective of the activity was to identify constraints to successful and sustainable private investment in infrastructure sector, and recommend a set of practical arrangements that would strengthen the regulatory, procedural, and institutional framework for managing transactions, thereby improving governance of the key infrastructure sectors.

The PPIAF-funded diagnostic study of the governance framework identified the following constraints to private sector investment: i) a general lack of transparency in communications between the public and private sectors, specifically relating to negotiation and management of specific contracts between the government and investors; ii) significant gaps in the legal framework in a number of sectors, with overarching sector laws still in draft for the telecommunications, water supply, and transport sectors; iii) a persistent bypassing of laws and administrative processes; iv) the failure to account for contingent and ongoing liabilities taken on by the public sector via contracts negotiated between the government and private parties; v) an unclear allocation of roles and responsibilities between agencies and departments; vi) an inadequate planning processes to address unsolicited offers; and vii) a lack of auditing of concessions prior to or after implementation. The consequences of these problems included non-bankable projects, higher prices for consumers, and a lack of information on the value-for-money
received by the public and the government from infrastructure projects, due to the inability to assess the full value set of risk and the distribution of revenues and profits in concessions.

To confront the more urgent areas of reform, PPIAF’s assistance focused on developing a set of practical proposals for strengthening the regulatory, procedural, and institutional framework. These proposals included a draft private participation in infrastructure policy, six policy guideline notes, a draft concession law, a draft sub-decree on implementing the concession law, and a preparing a three-year capacity building program.

The private participation in infrastructure policy sought to introduce a simple and clear set of rules and procedures. The key objective of this policy was to achieve fairness, transparency, and competitiveness in procurement, financial viability for the investors, and maximum value for the government and the consumers. The policy sought to meet this objective by defining clearly the responsibilities of various government entities involved in procuring projects, so that they could be held publicly accountable, thereby building confidence that private participation in infrastructure provision is undertaken in a manner consistent with the public interest. Additionally, the policy provided a framework for enhancing predictability in each stage of the procurement and implementation process, thereby reducing uncertainty in the outcome of each step.

The policy guideline notes were a set of short papers providing further detail and explanation of key aspects of the draft policy, which included financial management, dealing with unsolicited bids, contract design, contract publication, decentralization of transaction governance and contract management. They were intended to improve clarity of the process and provide an agreed interpretation for both government agencies and investors.

The draft concession law and sub-decree on implementation of the law embedded the key policy recommendations underlying the draft policy in the legal framework. The purpose of the law was to provide the general framework to regulate, promote, and facilitate the implementation of privately financed infrastructure in Cambodia in a fair, transparent, and equitable manner. The sub-decree provided more detail on the rules and procedures for implementing the law, particularly in terms of defining roles in the concession procedure and the rules and approaches for tendering concessions. The draft capacity building program set out a number of options for a three-year capacity building program to assist various government agencies fulfill their roles in the process more effectively.

The draft outputs were translated into Khmer and widely disseminated to stakeholder groups in Cambodia and to donor groups, and key findings were discussed at a series of workshops. Three national workshops were held at various stages of the activity. The first two targeted relevant government officials in infrastructure sectors, as well as potential private investors, and were focused on obtaining consensus on key aspects of the proposed governance framework for private participation in infrastructure. The third workshop focused more broadly on the Private Sector Development Strategy that the World Bank was developing at that time with the government. Approximately 35–40 participants were present at the first two workshops and 45–55 key stakeholders, including government, private-sector, and NGOs participated in the final workshop.

In September 2007 the Cambodian National Council approved the Law on Concessions.

**Results of PPIAF’s Enabling Environment Reform Activities in Cambodia**

<table>
<thead>
<tr>
<th>Category</th>
<th>Outputs</th>
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<tbody>
<tr>
<td>Enabling environment reform</td>
<td>• Private Solutions for Infrastructure in Cambodia, 2002</td>
</tr>
<tr>
<td></td>
<td>• Overview of PPI Governance Documents, 2004</td>
</tr>
<tr>
<td>Analyses/assessments prepared</td>
<td>• Private Participation in Infrastructure Policy Paper, 2004</td>
</tr>
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<td></td>
<td>• Private Participation in Infrastructure Policy Guideline Notes, 2004</td>
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| Policies prepared or legal or regulatory changes recommended | • Draft Law of Concessions, 2004  
• Draft Sub-Decree on Implementation, 2004  
• Draft Private Participation in Infrastructure Policy, 2004 |
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<tbody>
<tr>
<td>Plans/strategies prepared</td>
<td>• Three-year capacity building program prepared, 2004</td>
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<tr>
<td>Capacity and awareness building</td>
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</table>
| Workshops/seminars | • Two stakeholder workshops to obtain consensus on key aspects of the proposed governance framework  
• Stakeholder workshop to discuss Private Sector Development Strategy |

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<tr>
<th>Category</th>
<th>Outcomes</th>
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<tbody>
<tr>
<td>Enabling environment reform</td>
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<tr>
<td>Institutions created or strengthened</td>
<td>• Council for the Development of Cambodia, 2004</td>
</tr>
<tr>
<td>Policies adopted, legislation passed/amended, or regulations issued or revised</td>
<td>• Law of Concessions approved by Cambodia National Council, 2007</td>
</tr>
<tr>
<td>Plans/strategies adopted or implemented</td>
<td>• Government of Cambodia’s Poverty Reduction Strategy adopted, 2002</td>
</tr>
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### Technical Assistance for Cambodia’s Water Supply and Sanitation Sector

In 1999, PPIAF provided support to the Royal Government of Cambodia to conduct a study to analyze both private and public sector provision of water supply to assist in finalizing sectoral policies. The objective of the study was to analyze the level and quality of water services provided by the private water supply companies as compared to public services, consumer satisfaction with these services, gather information, and build consensus on private sector participation in the water supply sector.

The PPIAF-funded study analyzed eight water facilities (four public and four private) by comparing consumer satisfaction and technical performance of the utilities using quantitative and qualitative data from a range of surveys and technical assessments. The general conclusion was that while private operators seemed to be more efficient and had a better image in comparison to public utilities, in low-income areas there had been no network expansion due to high connection fees charged by private operators. Overall, the report found that although the efforts to introduce private sector involvement in the water sector had been encouraging, the full gains had yet to be realized. The study concluded that the commercial incentive for improved performance would be stronger if the privatization option used a lease or concession arrangement rather than a service or a management contract, as the operator would have access to the revenue stream over a number of years. This would provide a great incentive to improve and expand services than the fixed fee that is normal in service and management contracts. Other recommendations included encouraging further competition and establishing a regulatory structure that encouraged commercial incentives to be more demand responsive and cost conscious in the sector.

While the study was well-received, the government is still discussing its policy options.

In 2003, in continuation of the work done for the Country Framework Report, PPIAF provided support to the Ministry of Industry, Mines and Energy to explore the feasibility of an output-based aid (OBA) scheme in the water supply sector. The general nature of an OBA scheme, relative to a more traditional
framework, is for the provision of subsidy funds to be provided on the basis of measurable deliverables (outputs) rather than upfront as part of the financing package supporting project development. The basic tradeoff inherent in this approach is that the prospects of financing (and therefore project initiation) may be reduced, but overall financial incentives are improved with respect to both careful project evaluation and effective delivery of service. The objective of this activity was to facilitate and develop private sector participation in the financing, construction, and operation of water systems for provincial towns and peri-urban communities, including the design and development of specific instruments ensuring the inclusion of low-income portions of the population within an OBA framework.

Several outputs were developed as part of the activity, including: i) a report on OBA arrangements for private sector participation in rural water supply systems; ii) a financial model to analyze capital and operating costs, as well as subsidy options; iii) a draft OBA agreement for the construction, maintenance, management and operation of a water supply system; and iv) a draft water supply license issued to the operator by a regulatory authority. A stakeholder workshop was held in late 2002 to discuss the policy implications and principles of the OBA program and was attended by approximately 20 participants, including government officials. A second workshop held in early 2003 to disseminate the findings of the report, training potential investors on understanding the legal documents and subsidy payments under the OBA scheme was attended by 20 participants, included private investors.

The draft documents produced under this activity were used in the bidding process for four pilot OBA projects. However these projects were delayed, as noted below.

In 2003 the World Bank provided a loan to the Government of Cambodia for the Provincial and Peri-Urban Water and Sanitation Project. The project aimed to build partnerships with the private sector and user groups by piloting design, build, and lease (DBL) and OBA contracts. As Cambodia did not have a water sector regulatory authority to implement these contracts, the Ministry of Industry, Mining, and Energy requested PPIAF support in 2003 to establish a Contract Administration Unit (CAU). The objectives of this activity were to establish the CAU, clarify its roles and responsibilities, draft operating policies and guidelines, and build the unit’s capacity on contract management and project implementation.

Several activities were carried out during the course of the PPIAF’s technical assistance, including: i) developing an operational structure; ii) formulating operating policies, guidelines and procedures; and iii) identifying training needs and building capacity on contract management, project implementation, financial modeling, and evaluation. A training workshop on financial modeling for tariff setting and financial regulation was held on October 4–6, 2004 and attended by 15 participants from the CAU, the Ministry, Project Management Units of three provinces, the Ministry of Water Resources, Environment and Rural Development, and the Center for Development.

The final report summarized the financial regulatory capacity building assistance provided to the CAU; reviewed and commented on the financial models prepared by CAU members for the Kampong Chhnang water system; provided final financial projections for two other OBA projects; and made recommendations to address capacity building needs. The report recommended future capacity building efforts be aimed at: i) developing and implementing a more proactive tariff regulation by the CAU; ii) formulating guidelines for the regulation of the utilities cost structure and tariffs; and iii) supporting the CAU in the design and implementation of a basic utilities database.

The CAU was established in January 2004 and its operating guidelines were adopted. Six initial OBA projects were finalized to pilot the structure, policies, and procedures. Four pilot OBA towns used the draft bidding documents prepared under the earlier PPIAF activity.

A 2008 GPOBA assessment of OBA water projects in Cambodia found that projects did not leverage the private sector as efficiently as expected, due to the lack of capacity of the operators and deficiencies in the bidding process and contractual arrangements. The World Bank’s activities were temporarily placed on hold, which also delayed the implementation of some contracts. As of June 2011 eleven OBA/DBL facilities have been established through the Provincial and Peri-Urban Water and Sanitation Project.
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<th>Category</th>
<th>Outputs</th>
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<tbody>
<tr>
<td>Enabling environment reform</td>
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<tr>
<td>Analyses/assessments prepared</td>
<td>• Should We Bet on Private or Public Water Utilities in Cambodia? Evidence on Incentives and Performance from Seven Provincial Towns, 2000</td>
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<td></td>
<td>• Output-Based Aid Arrangements for Private Sector Participation in Peri–Urban and Provincial Water Supply Systems, 2003</td>
</tr>
<tr>
<td>Policies prepared or legal or regulatory changes</td>
<td>• Proposed Structure for Contract Administration Unit and Operating Policies, Guidelines and Procedures, 2005</td>
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<td>recommended</td>
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<td>Project cycle-related assistance</td>
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<td>Transaction support</td>
<td>• Draft Financial Model, 2003</td>
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<td>• Draft OBA Contact for Construction, Maintenance, Management and Operation of a Water Supply System, 2003</td>
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<td>• Draft Water Supply License, 2003</td>
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<td>Capacity and awareness building</td>
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<td>Workshops/seminars</td>
<td>• Stakeholder workshop to discuss policy implications and principles of the OBA program, 2002</td>
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<td>• Stakeholder workshop to disseminate findings of the OBA report, training potential investors on comprehending legal documents and subsidy payments under the OBA scheme, 2003</td>
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<td>• Training workshop on financial modeling for tariff setting and financial regulation, October 4-6, 2004</td>
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<tr>
<td>Enabling environment reform</td>
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<tr>
<td>Institutions created or strengthened</td>
<td>• CAU established 2004</td>
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<td>Capacity and awareness building</td>
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<tr>
<td>Technical capacity enhanced</td>
<td>• CAU’s financial modeling capacity enhanced, 2004</td>
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<td>• Ministry of Industry, Mining and Energy, 2003</td>
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**Technical Assistance for Cambodia’s Telecommunications Sector**

In 2000 PPIAF provided support to the Government of Cambodia to strengthen its regulatory framework in the telecommunications sector. The objective of this activity was to assist the Ministry of Posts and Telecommunications to develop a new regulatory telecommunications framework that would enable the development of a cost-effective, world-class telecommunications network. This activity was completed in two phases; phase one involved a survey of the telecommunication providers and suppliers, a review of background material including the sector master plan, laws and legal documents, and meetings with
various stakeholders. In the second phase the focus of the activity was to identify constraints to implementing models of international best practice within Cambodia.

Several activities were undertaken as part of phase two, including: i) an analysis of fair competition provisions, interconnection regime, and tariff rebalancing; ii) a customer appreciation survey; iii) a review of the draft telecommunications law prepared by the Ministry and Teleplanning; iv) assistance for establishing Telecom Cambodia and the Telecommunications Regulatory Authority; v) a two week study tour to Malaysia, Singapore, Thailand, and Hong Kong; vi) seminars and presentations; and vii) two strategic planning sessions with Ministry officials.

The PPIAF-funded final report summarized the work conducted in both phases to provide an analysis of the existing Cambodian telecommunications regulations. The report proposed the separation of postal services from telecommunications services, and recommended the enactment of fair competition, interconnection, and rate rebalancing laws. The report’s main recommendations to the government included: i) passing the draft telecommunications law with minor changes; ii) maintaining momentum and direction of political support for mobile telephony and improving implementation of a competitive environment; iii) maintaining reliance on competition as the primary means of regulation; iv) sustaining support for the entry of private operators; v) continued support for consultative approach to development of regulatory policy for interconnection; vi) establishing a central policymaking body; vii) institutional unbundling of Ministry of Posts and Telecommunications and increased specialization of officials; viii) adoption of a program to increase the size of the Ministry’s fixed line business; ix) conducting procurement on a commercial basis with international competitive bidding for major contracts and local bidding for local contracts; x) corporatization of Ministry operations; and x) passage of laws on negotiated interconnection and rate balancing laws.

In September 2003 Cambodia’s accession to the World Trade Organization (WTO) was approved, which necessitated the need for reforms in the telecommunications sector. Against this background PPIAF provided technical assistance in 2004 to advise the government on policy options for regulatory compliance with WTO obligations. Several important steps in the direction of a fair, transparent, and independent sector regulation were required from Cambodia to be consistent with its WTO commitments.

This second PPIAF-funded activity was also completed in two phases. The key components of the first phase of assistance was to advise the government on the appropriate changes to the regulatory policy framework, conduct a training needs assessment, and design a training program for the Ministry. The second phase of this activity included advice to the government on implementation of reforms and execution of the training program. Several outputs were developed during the course of the activity, including: i) draft communications law establishing an independent communications regulatory authority; ii) draft sub-decree on the establishment of an independent communications regulatory authority; iii) draft Communications Policy Statement; iv) working paper on the design and functions of a new telecommunications regulatory department in the Ministry; v) comments on draft sub-decree for the creation of Telecom Cambodia, as a separate entity from the Ministry of Posts and Telecommunications; and vi) advanced regulatory training sessions involving between 25–30 senior staff. A workshop on telecom regulatory responsibilities was also held in April 2005, with approximately 27 people participating.

The resulting PPIAF-funded final report summarized the work completed during the course of the activity and discussed the design and implementation of the advanced regulatory training sessions. An introductory guide to Cambodia’s telecommunications licensing process, interconnection-commercial and technical issues, and WTO obligations for telecommunication services was also produced, as was an assessment of Cambodia’s compliance with WTO telecommunications obligations and a list of reforms accomplished by the government. The telecommunications regulatory department was established within the Ministry. The implementation of the laws examined in this activity is still pending.

As part of the government’s initiative to improve broadband access in Cambodia, PPIAF provided funding in 2011 to assist the Ministry of Posts and Telecommunications to finalize the draft Universal Telecommunications Program and further develop its universal access strategy (UAS). The UAS included options for the establishment of a universal service fund (USF), which would encourage the private sector
to provide telecommunications services to the remote rural areas where 80% of Cambodia’s population resides. A typical USF is funded out of a portion of the telecommunications industry’s earnings and the funds are used to finance universal access service projects. The main objective of the PPIAF activity was to review the 2006 draft UAS policy and develop a credible universal access implementation strategy.

A number of outputs were prepared during the review of the draft UAS policy including: i) a draft UAS policy and USF policy report; ii) a report on the operational aspects of a USF; and iii) a report on retail pricing and interconnection. An overview memorandum, which provides a summary UAS conceptual overview and puts the other three reports into context, was also produced.

The initial results of the PPIAF-funded work revealed that the main constraint for broadband adoption was not internet infrastructure but affordability. The affordability constraint applied to public institutions as well as households—many schools and universities did not have a sufficient budget to pay for monthly broadband services. Affordability constraints were identified as a key concern to consider when developing Cambodia’s UAS, especially for the potential set up of a USF, which is normally used for funding the supply of infrastructure. As a result, the scope of the PPIAF-funded work was narrowed to focus on the feasibility of including telecenters as part of the UAS strategy, identifying initiatives that would reduce the service price paid by the consumers (including public institutions), and reviewing elements of the existing regulatory regime that impact affordability and usage.

The objective of the policy report was to assist Ministry in finalizing the draft UAS policy. The report summarized the main principles of the draft policy and the legal framework, reviewed the principles relating to the selection of providers, and discussed ways to fund the UAS. The main conclusions and recommendations of the report included: i) adopting a new national comprehensive telecommunications sector law to introduce a degree of legal certainty and consistency with international commitments to the WTO; ii) establishing a full-scale USF through a new law; iii) in the absence of a telecommunication law, a second-best scenario would be to adopt an interim instrument “Interim Funding Mechanism” that would incorporate the same principles and procedures that a USF ultimately include; iv) amending the draft sub-decree to favor competitive processes in all instances and eliminate references to monopoly concessions; v) establish a National Regulatory Authority; vi) establishing a requirement that the funding mechanism be bound by a strategic plan; vii) clarifying and amending the proposed governance and advisory functions relating to the interim funding mechanisms; and vii) using existing forms of non-tax revenue collected from the telecommunications sector as the basis of USF financing.

The report on retail pricing and interconnection summarized the relevant legal and regulatory framework in Cambodia, as well as the corresponding international framework, and provided a comparative analysis of how Cambodia’s mobile termination rates and retail prices impact on UAS objectives, focusing on affordability of service.

The report on operational aspects of the USF included an overview of the conceptual framework, market analysis, and economic analysis that form the basis for the preparation of the strategic and operational plans and programs. It also included a description of the relationship between the strategic and operational plans; a practical methodology for the preparation of these elements; indicative high-level descriptions of the plans and corresponding programs; and a detailed description of the technical and other requirements of an Internet Access Centre project for the consideration of the Ministry. The objective of this report was to provide practical implementation-related assistance to the Ministry in the preparation of USF strategic and operational plans, projects, and programs, taking into account international experience, and also included some key Cambodia-specific operational elements required for the successful administration of the USF. The government is currently considering the options in the PPIAF-funded reports.
## Results of PPIAF’s Activities in Cambodia’s Telecommunications Sector

<table>
<thead>
<tr>
<th>Category</th>
<th>Outputs</th>
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</table>
| Enabling environment reform             | **Analyses/assessments prepared**  | • Strengthening the Telecommunications Regulatory Regime, 2001  
• Improving Cambodia’s Telecommunications Regulatory Structure to Comply with WTO Commitments: Providing Needs Assessment and Elaboration of Training Requirements, 2005  
• Design of Telecommunications Regulation Department, 2005  
• Assistance to the Government of Cambodia for Review of Policy Options on WTO Telecommunications Commitments, 2006  
• UAS Conceptual Overview Memorandum, 2011  
• Report on Draft Universal Access and Service Policy and Universal Service Fund, 2011  
• USF Operational Aspects Report, 2011  
• Retail Pricing and Interconnection, 2011 |
| **Policies prepared or legal or regulatory changes recommended** |                                                                                              | • Draft Communications Sector Policy Statement, 2005  
• Draft Communications Law, 2005  
• Draft Sub-Decree on the establishment of independent Communications Regulatory Authority, 2005  
• Draft Sub-Decree on the Creation of Telecom Cambodia as a Public Enterprise, 2005 |
| Capacity and awareness building         | **Workshops/seminars**                                                                                                           | • Two week study tour to Malaysia, Singapore, Thailand and Hong-Kong, 2001  
• Workshop to discuss Ministry of Posts and Telecommunication’s new policy, April 23, 2001  
• Stakeholder Meeting to discuss conclusions and recommendations for strengthening regulatory regime in Cambodia, February 18, 2002  
• Workshop on Policy Regulatory Framework for Cambodia’s Implementation of WTO Telecom Compliance, December 2004  
• Workshop on Telecom Regulatory Responsibilities, April 26, 2005  
• Advancing Regulatory Training Program, 2005 |

### Category | Outcomes
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**Enabling environment reform** | **Institutions created or strengthened** | • Telecommunications regulatory unit established within the Ministry of Posts and Telecommunications, 2006 |
**Capacity and awareness building** | **Technical capacity enhanced**  | • Ministry of Posts and Telecommunications technical capacity enhanced, 2001, 2005–2006 |
Technical Assistance for Cambodia’s Energy Sector

In 2001 the Royal Government of Cambodia passed the Electricity Act, which provides a policy framework for the development of a largely unbundled sector with substantial private participation in generation and distribution on a competitive basis. In 2002 PPIAF provided funding to assist the Ministry of Industry, Mines, and Energy to develop a private power policy, sub-decree, guidelines, and model documents for large scale independent power projects (IPPs), small-scale IPP projects on standardized power purchase agreements (PPAs), and rural electrification schemes. The objectives of the activity were to: create a transparent and efficient procurement process for large- and small-scale power projects; clarify the public sector roles and responsibilities for the benefit of both public and the private sector; and attract the private sector investment using documentation that fairly allocated risk to the parties best able to manage the risks involved.

An initial round of consultative meetings with key stakeholders, including the Ministry, Electricité du Cambodge, and the Electricity Authority of Cambodia (EAC), were held from April 22–May 2, 2003 in Phnom Penh. A best practice workshop was also conducted during these meetings.

Several documents were developed as part of the assistance: i) a policy paper on private participation in the power sector; ii) a sub-decree on private sector participation in the power sector; iii) a report on private sector policy in Cambodia; and iv) discussion papers on incentive and performance-based regulation, incentives for efficiency, quality of service for rural consumers, formalizing rural electricity enterprises, and encouraging a level playing field for private investors in Cambodia’s rural electrification.

A suite of model documents was also developed during this activity, including: i) guidelines on power procurement for large-scale and small-scale generation projects; ii) a model implementation agreement for IPP projects; iii) a model fuel supply agreement; iv) model requests for qualifications for large-scale generation projects; v) model requests for proposals for both large-scale generation projects, including instructions to bidders and response packages; vi) a model PPA for thermal and hydro projects; vii) a model standardized PPA for small-scale generation projects; viii) a model land lease agreement; and ix) a model consolidated license for rural electrification enterprises.

The PPIAF-funded final report provided a general description of the services provided and final documents developed during the course of the activity, and included a discussion of the way forward and key issues that the government should consider when implementing the changes in policy. The report recommended that the government initially focus on the policy paper and sub-decree, and then focus its efforts on implementing the model documents. It further recommended that the model documents could be adapted based on the final policy and sub-decree and with regard to each particular circumstance or project.

A final stakeholder workshop to discuss the model documents during the course of the activity was held in Phnom Penh on August 21–22, 2003. The government is discussing the recommendations of this activity.

Since the passage of the Electricity Act, Cambodia’s power sector has undergone significant institutional development and, as part of the ongoing reforms, the government established an independent regulatory authority (EAC) in 2002. The EAC was established to take charge of licensing operating entities, reviewing and approving tariffs, setting and enforcing performance standards, and settling disputes. Although the EAC was able to issue licenses to small-scale operators and set and enforce laws and standards, the government recognized the need to bolster EAC’s technical capacity and identified skill training for EAC staff as one of its top priorities. Toward that end the EAC sought technical assistance from PPIAF in 2006 to conduct onsite training courses. The objective of the activity was to enhance the technical capacity of EAC for power sector regulation, and of EAC, the Ministry of Industry, Mines, and Energy, and Electricité du Cambodge to review and negotiate PPAs.
A specially designed seven-day course was delivered from March 26 to April 3, 2007 in Phnom Penh. Thirty-five participants from the EAC, the Ministry, Electricité du Cambodge and the Rural Electrification Fund attended the course. The first five days of the course concentrated on regulatory fundamentals and covered the following topics: i) global trends in electricity sector reform; ii) political, social, and institutional dynamics of regulation; iii) customer relations; iv) understanding financial statements and the cost of capital; v) regulatory mechanisms, including rate-of-return, price caps, revenue caps, benchmarking, cost allocation, and rate design; and vi) evaluation of regulatory systems. The final two days of the course focused on IPPs and PPAs and used country studies to emphasize lessons to be learned. The topics covered included: i) IPP tendering processes, examining negotiations and competitive bidding; ii) complexity of contracting environments; iii) example PPAs and common provisions in a PPA; iv) case studies of IPPs and PPAs, including contracting experiences from South Asia, Southeast Asia, Latin America, and Africa.

In 2008, PPIAF provided further support to the EAC to formulate a regulatory strategy for the development of an electricity distribution market in Cambodia. The electricity supply system consisted of a large number of independent, dispersed, and isolated systems supplying small areas. In its efforts to expand electrification, the Government of Cambodia wanted to move towards a grid system with large generating plants connected through transmission and sub-transmission networks. The overall objective of this activity was to support the EAC to develop an electrification distribution strategy that set out the future policy for grid extensions in rural Cambodia. The electricity distribution strategy was a component of the Ministry of Industry, Mines, and Energy’s overall Rural Electrification Strategy and Implementation Plan.

Several outputs were developed as part of PPIAF support, including a report on regulatory strategies to develop an electricity distribution market and issue papers covering the proposed overall electricity distribution strategy, planning and licensing arrangements, the future relationship between Electricité du Cambodge and the Rural Electrification Fund, tariff regulatory arrangements, and a review of the legal framework and EAC’s ability to implement the proposed strategy. An inception workshop was held in February 2009 to outline alternative distribution strategies, and a second workshop was help on June 16, 2009 to discuss the initial findings of the report. A final workshop and roundtable was held with key stakeholders in December 2009 to discuss the findings of the final report.

The PPIAF-funded final report provided an overview of the proposed rural electrification strategy; summarized the proposed electricity distribution strategy; described the proposed future planning framework; explained the proposed future licensing framework; described the contractual arrangements necessary to implement the proposed strategy; and illustrated the proposed regulatory framework for tariffs.

The distribution strategy proposed by the PPIAF-funded final report envisaged a gradual consolidation of rural electricity enterprises (REEs) into much larger licensees and, potentially, into Electricité du Cambodge. In the short to medium-term the report proposed that REEs be allowed to continue to invest in new rural distribution networks. Since REEs would provide a means to rapidly mobilize investment funds in rural areas attractive to the private sector, this would allow Electricité du Cambodge to concentrate its resources on the expansion of the sub-transmission grid areas less likely to attract private sector investment. It further suggested that the development of the sub-transmission grid should be consolidated under Electricité du Cambodge from the start, given the greater need for coordination of its planning, funding, and use. The report also proposed some changes to current arrangements for licensing of new REEs, namely to cease issuing new sub-transmission licenses to REEs and to require REEs to apply for licenses in new areas within a given time frame, otherwise they would be allocated to EDC to develop distribution networks. The report further proposed that the Ministry issue a public policy statement on the future institutional and market structure for rural electrification, which would give EAC broad powers to amend licenses to implement this policy if needed.

Following the recommendation of the final report to avoid the situation where multiple sub-transmission owners exist, the EAC decided not issue new special purpose transmission licenses for rural lines.
## Results of PPIAF’s Activities in Cambodia’s Energy Sector

<table>
<thead>
<tr>
<th>Category</th>
<th>Outputs</th>
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<tbody>
<tr>
<td><strong>Enabling environment reform</strong></td>
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• Incentive or Performance-Based Regulation for Cambodia: Alternative Regulatory Approaches, 2003  
• Cambodia Rural Electric Enterprises: Incentives for Efficiency, 2003  
• Quality of Service for Rural Consumers in Cambodia, 2003  
• Formalizing Rural Electricity Enterprises, 2003  
• Encouraging a Level Playing Field for Private Investors in Cambodia’s Rural Electrification, 2003  
• Issue Paper: Planning and Licensing Arrangements, 2009  
• Issue Paper: Relationship between Electricité du Cambodge and the Rural Electricity Enterprises, 2009  
• Issue Paper: Tariff Regulatory Arrangements, 2009  
• Issue Paper: Legal Framework and EAC’s Implementing Powers, 2009 |
| Policies prepared or legal or regulatory changes recommended | • Policy Paper on Private Participation in the Power Sector in Cambodia, 2003  
• Sub-Decree on Private Participation In the Power Sector, 2003 |
| Plans/strategies prepared                     | • Regulatory Strategies for the Development of the Electricity Distribution Market, 2010                                                                                                |
| **Project cycle-related assistance**          |                                                                                                                                                                                                        |
| Transaction support                           | • Guidelines on Power Procurement for Large-Scale Generation Projects, 2003  
• Guidelines on Power Procurement for Small-Scale Generation Projects, 2003  
• Model Implementation Agreement for IPP projects, 2003  
• Model Fuel Supply Agreement, 2003  
• Model Request for Qualifications for Large-Scale Generation Projects, 2003  
• Model Request for Proposals for Large-Scale Generation Projects (Instructions to Bidders), 2003  
• Model Request for Proposals for Large-Scale Generation Projects (Response Package), 2003  
• Model Power Purchase Agreement, 2003  
• Model Standardized Power Purchase Agreement for Small Scale Generation Projects, 2003  
• Model Land Lease Agreement, 2003  
• Model Consolidated License for Rural Electrification Enterprises, 2003 |
### Capacity and awareness building

**Workshops/seminars**

- Consultative meetings with key stakeholders held on April 22–May 2, 2003 in Phnom Penh
- Stakeholder workshop to discuss the draft documents in Phnom Penh on August 21–22, 2003
- A seven-day training program held in Phnom Penh from March 26–April 3, 2007 on regulatory fundamentals and global trends in electricity sector reform
- Inception workshop outlining and discussing alternate strategies for future electrification held in Phnom Penh, February 2009
- Workshop on developing the overall regulatory strategy for the rural electricity distribution market held on June 16, 2009
- Workshop on Cambodia's rural electrification strategy and implementation plan held on December 4, 2009 in Phnom Penh

### Category | Outcomes
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**Enabling environment reform**

**Institutions created or strengthened**


**Plans/strategies adopted**

- Regulatory Strategies for the Development of the Electricity Distribution Market adopted by EAC’s decision not to issue any additional licenses for transmission lines, 2010

### Capacity and awareness building

**Technical capacity enhanced**