

## PPIAF Assistance in Macedonia

In 1991, when Macedonia peacefully attained independence from Yugoslavia, it was the least developed of Yugoslav states, producing barely 5% of total federal output. In the subsequent decade, economic growth was hampered by a substantial infrastructure deficit, the end of subsidies from Belgrade, a Greek economic embargo, and United Nations sanctions against downsized Yugoslavia.

At the start of the 21<sup>st</sup> century, economic reforms were enacted to attract foreign investment and promote domestic businesses. Results started becoming evident: GDP growth reached 3.1% by 2005, and inflation was down to 2% in 2007.

Within this context, PPIAF provided technical assistance to the Government of Macedonia between 2006 and 2009 to build capacity in the infrastructure regulatory sector; facilitate private investments in mini-hydropower plants; improve the investment climate in the electricity sector; draft a public-private partnership (PPP) framework for hydropower privatization; and draft a strategy and action plan for reform in communal services.

Today Macedonia has managed to maintain macroeconomic stability (partially attributed to pegging the currency to the Euro) with low inflation, yet foreign direct investment and job creation rates remain low. Six countries in Southeast Europe face a slowdown to 1.1% economic growth in 2012. The World Bank has recommended that those six governments, including that of Macedonia, should adopt more ambitious and urgent structural reforms.<sup>1</sup>

### Technical Assistance for Macedonia's Energy Sector

#### Framework for the Privatization of Hydropower

In 2006 Macedonia imported 44% of the electricity consumed by the country.<sup>2</sup> In order to remedy this shortfall in domestic production and fully develop Macedonia's hydropower potential, the government wished to open the sector to private participation. PPIAF assistance was thus requested in August 2005 to support the creation of a PPP framework; a review of a legal and institutional framework for water resource management, and the development of recommendations on draft concession agreements.

Two stakeholder consultation workshops were conducted in December 2006 and January 2007 to discuss the inception and interim reports. A detailed review of the legal framework was undertaken, including the statutes on concession, water, environment, energy, and regulations on pricing for hydropower. The review pointed out issues, gaps, and areas of conflict in the various laws that must be addressed in the context of dam safety. A framework of monitoring compliance of hydro operators with a water license was also delivered.

As a result of this activity, the tendering process for large hydropower projects has begun. In particular, advanced discussions are being conducted on tenders for two hydropower plants: 333 MW Cebren and 193.5 MW Galiste on the Crna River. More are expected to follow.

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<sup>1</sup> The World Bank (June 2012), *South East Europe Regular Economic Report*

<sup>2</sup> [http://www.seeurope.net/files2/pdf/rqn0107/2\\_MacedoniaSeeksToBridgeTheEnergyGap.pdf](http://www.seeurope.net/files2/pdf/rqn0107/2_MacedoniaSeeksToBridgeTheEnergyGap.pdf)

## Results of PPIAF's Activities for Macedonia's Framework for the Privatization of Hydropower

Category	Outputs
<b>Enabling environment reform</b>	
<i>Policies prepared or legal or regulatory changes recommended</i>	<ul style="list-style-type: none"> <li>• PPP Framework for Privatization of Hydropower in the Republic of Macedonia, September 6, 2006</li> <li>• Legal Framework for Hydropower in the Republic of Macedonia, March 15, 2007</li> <li>• Framework for Monitoring Compliance of Hydropower Operators with Water Licenses, August 2007</li> <li>• Dam Safety Issues and Investment Requirements in the Republic of Macedonia, August 2007</li> </ul>
<b>Project cycle-related assistance</b>	
<i>Transaction support</i>	<ul style="list-style-type: none"> <li>• Draft concession agreement for hydropower plants, March 30, 2007</li> </ul>
<b>Capacity and awareness building</b>	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> <li>• Two stakeholder workshops, December 2006 and January 2007</li> </ul>

Category	Outcomes
<b>Enabling environment reform</b>	
<i>Policies adopted, legislation passed/amended, or regulations issued/revised</i>	<ul style="list-style-type: none"> <li>• Draft papers were used to negotiate tenders for Macedonia's first hydropower PPPs</li> </ul>
<b>Project cycle-related assistance</b>	
<i>Transactions facilitated</i>	<ul style="list-style-type: none"> <li>• The tendering process for two large hydropower plants has begun: 333 MW Cebren and 193.5 MW Galiste on the Crna River</li> </ul>

### **Facilitating Private Investments in Mini-Hydropower Plants**

Macedonia is a mountainous country with sizeable hydropower potential, most of which cannot be realized without significant private sector investments. In 2006 there was a partial framework in place to attract private investments in large hydropower plants, and a separate World Bank project was devoted to refining the process, but there was no official process for the development of small hydropower plants. The Government of Macedonia wished to encourage the private sector to invest in mini-hydropower plants in order to diversify energy supply and increase the use of indigenous energy sources. A 1982 study identified 406 sites for small hydropower plants in Macedonia adding up to 258 MW.

PPIAF assistance was requested in 2006 to assist the Ministry of Economy and the Energy Regulatory Commission to: i) review the existing legal and institutional framework for mini-hydros; ii) establish procedures and a methodology for the Energy Regulator to agree on the pricing of mini-hydros based on a thorough economic cost-benefit analysis; iii) recommend a framework for licensing and regulation of mini-hydros; iv) select projects for a pilot bid package; and v) tender the pilot bid package.

The broader objectives of this project were to advise the Ministry of the Economy and the Energy Regulatory Commission on establishing a regulatory framework for small hydropower plants, to help bundle some potential small hydropower plants into a pilot tender. Also listed as an objective was to specify how the Global Environment Facility Sustainable Energy Project can best assist developers technically and financially. (Since December 2006, The World Bank's Global Environment Facility had an ongoing project in Macedonia, titled "Sustainable Energy Global Environment Facility Project" to develop a sustainable market for energy efficiency and renewable energy by supporting the development of an enabling framework, institutional capacity, and necessary financing mechanisms).

The outputs of this project were two studies: "Feed-in Tariffs for Small Hydropower Plants in Macedonia" and "Model of the tender documents for the public tender of Concessions for the use of water for electricity generation with small hydropower plants in the Republic of Macedonia." The financial analysis was carried out within the context of potential Global Environment Facility grants, and on this basis the summary data shown in the output report were presented with the costs and likely returns, with and without the Global Environment Facility grants.

The outcomes were positive. Macedonia's Energy Regulatory Commission implemented the key recommendations of the study on feed-in tariff methodology for the facilitation of private investments in mini-hydropower plants.

The original application had proposed initial impact to be the tendering of 5–10 small hydropower plants, but the actual impact of this activity went far beyond what was originally proposed. Public tenders were announced inviting bids: Phase I in February 2007 for 60 small hydropower plants; Phase II in July 2007 for 28 small hydropower plants; and Phase III in February 2011 for 44 small hydropower plants. Concessions were to be awarded on a design, build, operate, and transfer model. In April 2011 the European Bank for Reconstruction and Development announced that it will lend €6 million to Macedonia for small hydropower plants. In March 2012, the Macedonian Ministry of the Economy signed concession agreements for 21 small hydropower plants, bringing the total number of approved small hydropower plant concessions in the country to 68.

### **Results of PPIAF's Activities for Facilitating Private Investments in Mini-Hydropower Plants**

<b>Category</b>	<b>Outputs</b>
<b>Enabling environment reform</b>	
<i>Policies prepared or legal or regulatory changes recommended</i>	<ul style="list-style-type: none"> <li>• <a href="#">Feed-in Tariffs for Small Hydropower Plants in Macedonia</a>, December 29, 2006</li> </ul>
<b>Project cycle-related assistance</b>	
<i>Transaction support</i>	<ul style="list-style-type: none"> <li>• Model of the tender documents for the public tender of concessions for the use of water for electricity generation with small hydropower plants in the Republic of Macedonia, January 30, 2007</li> </ul>

<b>Category</b>	<b>Outcomes</b>
<b>Enabling environment reform</b>	
<i>Policies adopted, legislation passed/amended, or regulations issued/revised</i>	<ul style="list-style-type: none"> <li>• The Energy Regulatory Commission implemented the recommendations from the tariff study</li> </ul>

Project cycle-related assistance	
<i>Transactions facilitated</i>	<ul style="list-style-type: none"> <li>68 small hydropower plant concessions signed between the Macedonian Ministry of the Economy and private developers, as of March 2012</li> </ul>

### **Assisting the Transmission System Operator and Energy Regulatory to Operate in the Competitive Electricity Market**

As part of its efforts to reform the electricity sector, in July 2006 Macedonia ratified the Energy Community Treaty, by which it became committed to transitioning to a competitive regional electricity market integrated with the European Union Internal Electricity Market and a fully open market by 2015. The national electricity distribution company was privatized in 2006, yet the sector needed to attract more private investment.

Uncertainty of tariffs was a major concern to potential private participants. A bilateral contracts market was important to delivering power in a competitive manner. Clear rules for participation in the market and clarity on use of the balancing and settlements process were important aspects of introducing more competition, primarily from the private sector. Improvements in the regulator's capacity to independently regulate the sector were expected to lead to considerable improvements in investment certainty and a healthy functioning of the bilateral electricity contracts market.

The Macedonian government requested PPIAF technical assistance in 2008 to: i) support the Transmission System Operator and ii) support the Energy Regulatory Commission to update its tariff rule book.

Support to the Transmission System Operator did not occur as the Government of Macedonia decided to use USAID grants instead. PPIAF provided technical assistance to the Regulator to update the tariff rule book and capacity building support to enable it to perform its duties to facilitate the implementation of wider sector reforms. Specifically capacity building support was provided in the areas of cost of supply estimation, regulatory accounts, market assessment, monitoring, and oversight.

This PPIAF activity was carried out in parallel with the construction of Macedonia's first Independent Power Producer, and its biggest foreign investment to date, the TE-TO Skopje Co-Generation Power Plant. The 230 MW facility reached financial close in 2007 and became operational in May 2011.

Privatized electricity distributor EVN Macedonia has been unbundling its distribution, supply, and generation businesses. In 2008, to finance the company's investment program, the International Finance Corporation (IFC) and European Bank for Reconstruction and Development provided long-term loans of €35 million each. In March 2012, to finance working capital and capital expenditure needs, the IFC has proposed a long-term loan up to €7 million.

**Results of PPIAF's Activities in Assisting the Transmission System Operator and Energy Regulatory to Operate in the Competitive Electricity Market**

<b>Category</b>	<b>Outputs</b>
<b>Enabling environment reform</b>	
<i>Analyses/assessments prepared</i>	<p>Technical assistance to the Energy Regulatory Commission to improve its regulatory processes and capacity:</p> <ul style="list-style-type: none"> <li>• Average Price Model</li> <li>• Distribution Company Data, February 2009</li> <li>• Regulatory Accounting (outline of regulatory guidelines for the preparation of accounts that can be used to translate data in the audited financial accounts into a form suitable for assessing the compliance of the licensees with the price controls and informing future price setting), February 2009</li> <li>• Transition to a Bilateral Contract Model (identification of the key role and activities that ERC will need to undertake in the transition towards a bilateral market in the new legal context; analysis of the change in roles of the regulated entities and their regulation, and outline the consultation process that ERC may need to consider during the transition process), March 2009</li> </ul>
<i>Policies prepared or legal or regulatory changes recommended</i>	<p>Support in revising the Tariff Rule Book, to enable the Energy Regulatory Commission to effectively set new tariffs for the electricity sector—required to provide certainty to investors:</p> <ul style="list-style-type: none"> <li>• Review of Rulebook in Context of Current Policy Framework, January 2009</li> <li>• Proposed Price Regulation: i) for Distribution, ii) of Regulated Generation, iii) of Retail Supply for Tariff Customers, and iv) for Transmission, October 3, 2008</li> <li>• Update of Rule Book, November 2008</li> </ul>
<b>Capacity and awareness building</b>	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> <li>• Capacity building workshop for the Energy Regulatory Commission to strengthen its ability to offer required contractual relationships and processes, October 3, 2008</li> <li>• Five members of the Energy Regulatory Commission trained through ongoing discussions and structured week-long training sessions</li> </ul>

<b>Category</b>	<b>Outcomes</b>
<b>Enabling environment reform</b>	
<i>Policies adopted, legislation passed/amended, or regulations issues/revised</i>	<ul style="list-style-type: none"> <li>• Electricity Tariff rule book revised by the Energy Regulatory Commission following an extensive process of shareholder consultations</li> </ul>

<i>Institutions created or strengthened</i>	<ul style="list-style-type: none"> <li>Macedonia's Energy Regulatory Commission better equipped to appraise new projects</li> </ul>
<b>Capacity and awareness building</b>	
<i>Technical capacity enhanced</i>	<ul style="list-style-type: none"> <li>Energy Regulatory Commission is now better equipped to negotiate the privatization/PPP process as Macedonia's electricity sector develops</li> </ul>

### Policy Changes to Improve the Investment Climate in the Energy Sector

In an effort to attract private financing in generation, PPIAF assistance was requested in 2009 to develop substantive recommendations for policy changes and wider government action to improve the investment climate in the energy sector.

The resulting report indicated what investments are required, where they are likely to come from, and focused on specific institutional and market design measures that the government could put in place. The report found that the potential for PPPs in the energy sector included: i) large-scale generation and, in some cases, associated mining projects developed to serve the Macedonian and regional power markets; ii) smaller-scale renewable energy projects, developed under Macedonia's feed-in tariff regime; and iii) new gas distribution networks and possibly the operation of the existing district heating network in Skopje. The report culminated in a list of substantive recommendations to feed into the World Bank's 2009 policy note to the Government of Macedonia.

The report was expected to specifically address private sector investment, as USAID was providing support to the Government of Macedonia to reform the electricity sector in general, including support to the design of the bilateral contracts market.

The Government of Macedonia identified 400 locations suitable for hydropower generation plants in Macedonia. Partial privatization of the state-owned power utility is also under consideration. This PPIAF-funded policy note will help the government appraise and negotiate these privatization and tendering initiatives.

### Results of PPIAF's Activities in Macedonia's Electricity Sector

Category	Outputs
<b>Enabling environment reform</b>	
<i>Plans/strategies prepared</i>	<ul style="list-style-type: none"> <li>Policy Note on PPP Models in the Energy Sector, October 2009</li> </ul>

Category	Outcomes
<b>Enabling environment reform</b>	
<i>Plans/strategies adopted</i>	<ul style="list-style-type: none"> <li>The Government of Macedonia is proceeding with tendering PPPs in the energy sector, with two large hydropower projects with private equity stakes in advanced discussion phase</li> </ul>

## **Technical Assistance for Macedonia's Communal Service Sector**

PPIAF support was requested in 2007 to help design an appropriate strategy and action plan to accelerate structural and policy reforms in Macedonia's communal service sector to improve the performance of communal service enterprises, and create an enabling environment for and guidance on PPP options that could reasonably be implemented to improve services to consumers. Although most of the communal service enterprises are responsible for both revenue-earning and nonrevenue-earning activities, the focus of the study was on the former, specifically water supply and sanitation and solid waste management.

PPIAF funding was for the first phase of the plan: to recommend a general strategy by taking stock of the existing state of sector information, gathering and analyzing data, assessing alternate options, and getting a greater understanding of stakeholder issues, while focusing on a subset of municipalities.

The final diagnostic report was submitted in October 2008. The report presented levels of service provision and gaps in water supply and sanitation and solid waste management services, assessed constraints and readiness for sector reform, evaluated alternate institutional options including PPPs to improve services, and facilitated an increased understanding of these issues among key stakeholders. The report also included a diagnosis of problems plaguing the water, wastewater, sewerage, and solid waste management sectors, financing plan for communal service enterprises, and cost recovery and sector reform strategies. In particular, the strategy paper proposed three levels of measures, whereby the Municipality—as communal service regulator, tariff setter, and implementer—could act on the first level, while the government defines the framework at the central level. A survey of about 750 households and 200 business enterprises was undertaken to get feedback on their perception, satisfaction, and perceived challenges with water supply and sanitation and solid waste management services being provided by Municipal Services Enterprises. An affordability and willingness to pay analysis was also carried out based on the survey.

A workshop was organized in October 2007 during the City and Communal Fair in Skopje. During this workshop, the promotion of future activities for strategy preparation was organized, and an initial outline of issues was discussed. Participants in the workshop were mostly Communal Enterprise Directors, Finance Officers, Mayors, and international organization representatives that have operations in the communal sector. A second workshop was organized in March 2008 and was mostly attended by representatives from local self-governments (municipalities), communal enterprises, and international development organizations. A final workshop was organized in September 2009 with broad participation of municipalities, communal enterprises, central government representatives, non-governmental organizations, and international development organizations.

This PPIAF-funded study on the reform of communal service enterprises was commissioned as a trust-funded complement to the World Bank's preparation of the Municipal Services Investment Project, which was approved in March 2009 with a total funding of \$25 million, and given additional financing of \$50 million in May 2012.

In terms of favorable outcomes—i.e., the potential for PPPs in communal services—the legal framework was put in place. Some small municipalities are outsourcing some solid waste management services. However, the biggest impediment for PPPs in water supply and sanitation and solid waste management presently is the low capacity at a municipal level to regulate, define, and manage PPP contracts.

However, these outcomes could be achieved in the future, due to the emergence of favorable precursors: a new Minister of Finance continues to support communal reforms, the Ministry of Finance has proposed to take draft strategy to all municipality mayors, the Government of Macedonia has launched a media strategy to gain stakeholder support, and the World Bank's Municipal Services Investment Project should provide on-loan funding for the public component of future PPPs.

### Results of PPIAF's Activities for Macedonia's Communal Service Sector

Category	Outputs
<b>Enabling environment reform</b>	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> <li>Affordability, Willingness to Pay, and Support Mechanisms in Water, Sewerage, and Solid Waste Management in Macedonia, December 2008</li> <li>Financial Issues and Institutional Aspects of Decentralization in the Communal Sector—Working Paper, October 15, 2008</li> <li>Survey Report (Quantitative and Qualitative Findings), October 2008</li> </ul>
<i>Plans/strategies prepared</i>	<ul style="list-style-type: none"> <li>Republic of Macedonia: Strategy and Action Plan for Reform of Communal Services Enterprises with focus on Water, Sewerage, and Solid Waste Management—Diagnostic and Strategy Final Report, October 2008</li> <li>Republic of Macedonia: Strategy and Action Plan for Reform of Communal Services Enterprises—Working Paper —Legal and Institutional Framework for Communal Activities in Macedonia, October 2008</li> </ul>
<b>Capacity and awareness building</b>	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> <li>Three stakeholder consultation workshops, October 2007-September 2009</li> </ul>
<i>Knowledge products disseminated</i>	<ul style="list-style-type: none"> <li>Brochures for municipalities and consumers highlighting key elements of the strategy and action plan</li> </ul>

Category	Outcomes
<b>Enabling environment reform</b>	
<i>Plans/strategies adopted</i>	<ul style="list-style-type: none"> <li>Given the active participation of communal service enterprises in Municipal Services Investment Project on-loan program, it is evident that the PPIAF-funded strategy was adopted to a large extent<sup>3</sup></li> </ul>

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<sup>3</sup> <http://www.worldbank.org.mk/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/MACEDONIAEXTN/0,,contentMDK:23192929~menuPK:64282138~pagePK:41367~piPK:279616~theSitePK:304473.00.html>