



USAID Europe and Eurasia Regional Energy Security Evaluation

FINAL REPORT

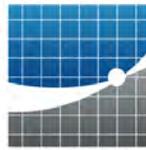
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UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT
LEARNING, EVALUATION, AND ANALYSIS PROJECT
(AID-OAA-C-11-00169)

USAID EUROPE AND EURASIA REGIONAL ENERGY SECURITY EVALUATION

FINAL REPORT

Prepared for United States Agency for International Development/Europe and Eurasia Bureau
Prepared by Optimal Solutions Group, LLC



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ACRONYMS

AEAI	Advanced Engineering Associates International, Inc.
BiH	Bosnia and Herzegovina
B&H	Bosnia and Herzegovina
COI	Conflict of Interest
COR	Contracting Officer's Representative
DEC	Development Experience Clearinghouse
E&E	Europe and Eurasia
EE	Europe and Eurasia
EBRD	European Bank for Reconstruction and Development
EC	Energy Community
ECS	Energy Community Secretariat
EEAP	Energy Efficiency Action Plan
EE/EG/EI	Bureau for Europe and Eurasia, Office of Economic Growth, Energy and Infrastructure Division
ELEM	Macedonian Power Plants
EMS	Serbian Transmission Operator
ENTSO-E	European Network of Transmission System Operators for Electricity
ERC	Energy Regulatory Commission
ERE	Albanian Electricity Regulator
ERO	Energy Regulatory Office
ERRA	Energy Regulators Regional Association
ESCO	Energy Service Company
EU	European Union
EVN	Energy Distribution Company
FB&H	Federation of B&H
FBIH	Federation of Bosnia and Herzegovina
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GWh	Gigawatt Hour
IFC	International Finance Corporation
IPP	Independent Power Producer
IRG	International Resources Group
ISO	Independent System Operator
KEDS	Kosovo Electricity Distribution and Supply
KEK	<i>Korporata Energjetikee Kosovës</i>
KESH	Albanian Power Corporation
KfW	<i>Kreditanstalt für Wiederaufbau</i>
KOSTT	Transmission System and Market Operator
kW	Kilowatt
LEAP	Learning, Evaluation, and Analysis Project
LEDS	Low Emissions Development Strategies
LNG	Liquefied Natural Gas

MARKAL/TIMES	The Integrated Markal-Efom System
MEPSO	Transmission System Operator
MOU	Memorandum of Understanding
MRV	Measurement, Reporting and Verification
MW	Megawatt
NARUC	National Association of Regulatory Utility Commissioners
NGO	Nongovernment Organization
NREAP	National Renewable Energy Action Plan
OST	National Transmission System and Market Operator
PPA	Power Purchase Agreement
PUC	Public Utility Commission
REAP	Regulatory and Energy Assistance Project
RE	Regional Energy
REFIT	Renewable-Energy Feed-in Tariffs
RESMD	Regional Energy Security and Market Development Project
RFP	Request for Proposal
SECI	South East Europe Cooperative Initiative on Transmission Planning Project
SEE	South East Europe
SME	Small- and Medium-Sized Enterprises
TAP	Trans Adriatic Pipeline
TOR	Terms of Reference
TRANSCO	Transmission Company
TSO	Transmission System Operator
UNDP	United Nations Development Programme
UNMIK	United Nations Interim Administration Mission in Kosovo
US	United States
USAID	United States Agency for International Development
USDI	United States Department of the Interior
USEA	United States Energy Association
WB	World Bank

EXECUTIVE SUMMARY

The United States Agency for International Development's (USAID's) Bureau for Europe and Eurasia, Office of Economic Growth, Energy and Infrastructure Division (EE/EG/EI) contracted Optimal Solutions Group, LLC (Optimal), to perform an independent evaluation of its regional programs in South East Europe in support of developing a regional electricity market and improving regional energy security.

The approach for this evaluation was guided by the five key evaluation questions posed by USAID:

1. To what extent have USAID regional programs contributed to the development of a viable regional electricity market?
2. Which activities have been the most successful in achieving stated objectives? What were the primary factors in their relative success?
3. For programs that did not contribute to market development, what were the primary factors in their lack of success? How much could these factors have been influenced by USAID? For factors within USAID's control, what should have been done differently?
4. Does evidence indicate that the creation of a regional energy market would increase energy security and stability in the region?
5. Make recommendations regarding the future direction of EE/EG/EI programming based on the findings from the above evaluation questions: What changes in USAID's approach in supporting the regional energy market (either in program implementation or program scope) should be undertaken?

The Optimal evaluation team utilized the USAID evaluation policy as a guide to design approaches to assess the performance of regional programs implemented in four South East European countries by a number of USAID implementing contractors over nearly 9 years. The key findings, conclusions, and recommendations are summarized below. This evaluation focuses primarily on findings from four countries—Albania, Bosnia and Herzegovina (BiH), Kosovo, and Macedonia—that were examined in this study.

Findings and Conclusions

A) Extent to which USAID regional programs have contributed to the development of a viable regional electricity market

The broad consensus among stakeholders is that USAID bilateral and regional programs have been invaluable in progressing electricity sector reform and in developing a regional electricity market. USAID's assistance was consistent with the countries' sector policies and with the mandates and directives of the Energy Community's (EC's) Treaty and European Commission energy package. Table 1 provides a summary of the major results achieved in each of the four countries and regionally as a result of USAID's support of the energy sector.

Results achieved by USAID energy projects, by country

Major Results Achieved	Albania	Kosovo	Macedonia	Bosnia and Herzegovina (BiH)	Regionally
	Primary and secondary legislation and bylaws consistent with the EU Treaty were developed.	A draft energy strategy to support the development of a regional energy market was developed.	USAID assisted with the development of market rules and a new energy law was assisted.	Assistance with energy audits for the public building sector was provided.	USAID helped each country meet its EU Treaty and Energy Secretariat requirements.
	An electricity market model, mechanisms, and codes were developed.	Restructuring and unbundling of the electricity sector and operational and management improvements for sector entities were supported.	Assistance on regional transmission planning was provided.	USAID helped improve cooperation among the three regulatory commissions and harmonized their rules and regulations.	USAID helped set up an independent regulatory commission, transmission company (TRANSCO), and independent system operator (ISO) in each country.
	The Regional Program helped develop transmission links with Macedonia and Montenegro to support power trade.	A study on issues related to security of supply and other issues to promote the development of domestic and regional markets was supported.	USAID worked with the distribution companies to develop a plan for electricity distribution.	Assistance in developing renewable-energy and energy-efficiency resources in public buildings, schools, and private homes was provided, and USAID helped improve cooperation among municipalities to support renewable-energy and energy-efficiency projects.	Capacity building of the regulatory commissions has been institutionalized by the development of the Energy Regulators Regional Association (ERRA), a regional association of all the regional regulatory commissions with its own staff and budget to provide ongoing training.
	USAID consultants assisted the regulator in developing licensing and tariff reforms and implementation.	USAID encouraged linkage of the Albania-Kosovo energy sectors to support increased trade in electricity.	The consultants performed technical studies to support reform efforts and communicated results to sector stakeholders.	The USAID program helped identify a target for the development of renewable-energy resources.	USAID is developing a sustainable, locally operated and financed entity with the Macedonia ISO acting as the secretariat with project staff to coordinate activities and manage the development of a regional transmission system model.

Major Results	Albania			Bosnia and Herzegovina	
	USAID consultants helped create action plans for the development of renewable-energy and energy-efficiency resources.	USAID helped government and political entities understand the benefits of regional markets and their role in supporting market development.	USAID supported development of energy-efficiency and renewable-energy resources to diversify domestic resource availability.	The consultants provided a working group to assist regional distribution system operators in meeting load and generation requirements.	Regional meetings and workshops provided good forums for sharing of information, best practices, and lessons learned.
	USAID consultants provided capacity building and training to sector stakeholders.	USAID consultants assisted in developing market models, rules, and procedures to support increased electricity trade and stronger interconnections with regional countries.	The consultants helped address options for incorporating renewable-energy and energy-efficiency resources into the domestic market.	The consultants helped develop incentives for private-sector participation in the development of renewable-energy and energy-efficiency resources.	
	USAID provided unbiased support and credibility to sector reform and projects.				

B) Key factors in the success of the regional program

Key factors in the success of USAID's regional programs include the following:

USAID program relevance

Program goals and objectives were identified in consultation with ministries and other stakeholders, and programs were implemented considering the local context and political realities of the region. Additionally, program objectives were consistent with national energy policies and strategies and with the mandates and directives of the EC Treaty and European Union (EU) energy package.

USAID program effectiveness

USAID programs have helped advance the development of a regional electricity market, which in turn has improved regional energy security. Regional and bilateral programs together have contributed to progress made in unbundling the electricity sector, improving sector operations, and strengthening sector institutions. USAID-funded programs have supported the establishment of functional electricity regulatory commissions and the development of primary and secondary legislation in all four countries examined in this evaluation. USAID has in general supported the development of tariffs, grid codes, market models, and transmission interconnections, and it has provided capacity building and training for sector institutions (see Table 1 for achievements in each of the four countries). Additionally, USAID programs have provided a forum for exchanging information and sharing experiences and have helped policymakers understand the benefits of regional electricity markets. Overall, program outcomes have improved market operations and supported private investment, although additional support is needed to achieve the broader goal of developing a regional electricity market and improving regional energy security.

USAID program management

USAID is responsive to stakeholder needs and is flexible in its approach to providing assistance, traits that are highly valued by stakeholders. Respondents noted that coordination between regional and bilateral programs has largely been effective, and USAID's consultants are generally capable of providing assistance and building capacity. USAID channels its technical assistance through experts from U.S. consulting firms, local and regional consultants, and U.S. utility experts and regulators, which is viewed as a strength of USAID programming. The agency is also credited with coordinating its activities with the Energy Community Secretariat (ECS), EU, and other major development partners.

C) Causes of program failures or shortcomings and recommendations for improving USAID regional programming for current and future activities

Factors not under USAID's control

The economic and political situation in the countries included in this evaluation generally can be characterized by a lack of political will, absence of a vision for the energy sector, slow decisionmaking, and the weak implementation capacity of policymakers and sector institutions hinder implementation of program recommendations. Additionally, revisions to laws, regulations, and market models necessitated by the EU energy package and regulatory commissions' lack of independence have hindered sector reforms and operations. The countries are focused on meeting energy demand through domestic resources and bilateral trades rather than through a regional market. The implementation of renewable energy and energy efficiency

is impeded by low tariffs, and private investors are cautious about investing because of perceived political and regional risks.

Factors under USAID's control and recommendations for improving implementation of current and future programs

While acclaiming USAID's support, stakeholders are critical of USAID's focus on the development of legislation and regulations and the agency's lack of emphasis on the implementation of recommendations. Sector institutions continue to need help with capacity building, and some agencies feel alienated from the donor-consultation process. USAID could strengthen capacity building and widen its consultations with sector institutions by garnering greater support for sector reforms. The benefits of developing and participating in a regional energy market need to be better communicated through regional workshops and joint efforts with other development partners, nongovernment organizations (NGOs), and the private sector. Regional regulators also need support to better understand their role in developing the regional energy market and could be more involved in program design and implementation.

Donor coordination takes place on an ad hoc basis, and although USAID has generally coordinated its efforts, sharing of information between development partners is still inconsistent. Sharing program reference terms and reports generated through technical assistance would improve coordination and enhance the complementarity of development partner efforts.

Stakeholders are concerned by some USAID consultants' lack of knowledge of the region and of EU energy laws and markets. Stakeholders also are critical of the same U.S. consulting firms' being repeatedly procured by USAID, perpetuating at times the continued use of consultants with inadequate expertise. Stakeholders opine that some long-term experts are needed to provide targeted and ongoing support to policymakers in countries where energy-sector needs are rapidly evolving. Besides long-term experts, a long-term commitment and continual presence in the region is needed to build and maintain support for the reform process. There is a perception among stakeholders of discord in USAID as it seeks to find a balance between supporting national and regional programs. Stakeholders widely believe that USAID is not leveraging its strength as a trusted partner to influence political leadership to implement recommendations; USAID could make its continued support contingent on countries' implementing recommendations for previous assistance projects. Stakeholders also believe that a regional USAID office may be better able to coordinate efforts than one in Washington, D.C.

D) Evidence that creation of a regional energy market increases security and stability in the region

USAID assistance for the development of regional energy markets and improved regional energy security is consistent with the affected countries' goals and with the requirements of the EC Treaty and EU directives. The countries have progressed in liberalizing their energy markets and have developed market rules consistent with the EU's Third Energy Package requirements. However, with the exception of BiH, countries do not have adequate generation resources and are importing electricity. Energy security could be improved through the regional development of such resources as renewable energy and through a larger market that would provide the scale necessary for the cost-effective development of resources. Although countries are unanimous in the view that regional energy markets will improve energy security for individual countries and for the region, they are not yet ready to create open access and choice in supply by

2015, as required by the present deadline for liberalized energy markets. The weak distribution system and absence of adequate metering makes it challenging to provide open access to all customers.

E) Recommendations for future EE/EG/EI programming

USAID could consider supporting the following activities to strengthen domestic energy markets and promote regional energy trade in the region. Given the criticality and diversity of needs in the region, it is difficult to prioritize support, but the suggestions below are ordered based on the priorities of stakeholders. The suggested programs are consistent with the countries' need to develop Low Emissions Development Strategies (LEDS), which USAID has championed in its current programming.

First, countries need continued support from USAID and other development partners to fully reform their energy markets and to prepare them to enter a liberalized regional market. Countries are at different levels of preparedness in reforming their energy markets, and ministries and policymakers need support to develop secondary legislation and regulations in support of revised or new energy laws consistent with EU directives. Ministries also need support to implement existing laws and regulations. Regulatory agencies need additional support to revise the regulatory framework and market rules to be fully consistent with the EU Third Energy Package and to implement the new market rules. Regulatory agencies also need help defining their role in regulating regional energy trade and coordinating with regional regulators. Transmission system operators and market operators need support to develop a competitive, open regional market, including monitoring and clearing mechanisms for energy trade; balancing and sharing energy reserves; harmonizing rules, procedures, tariffs, and licensing requirements among regional countries; and integrating renewable-energy generation into national and regional transmission grids. Transmission system operators also need support to undertake national and regional transmission planning to optimally utilize generation resources and to coordinate regional trading activities with the European Network of Transmission System Operators for Electricity (ENTSO-E). Support is also needed to further liberalize the generation markets to make them more competitive and to promote the participation of independent power producers (IPPs) in the market. USAID should consider partnering with relevant ministries, regulatory agencies and utility entities, and EC to provide support.

Second, countries in the region need support for implementing their National Renewable Energy Action Plans (NREAPs) and Energy Efficiency Action Plans (EEAPs). USAID could consider supporting updates and implementation of NREAPs and EEAPs and offer help with the planning, monitoring, and evaluating of programs; development of innovative financing mechanisms; streamlining of the procurement process for RE and EE projects; development of green and white certificates; and improvement of collection and analysis of data. USAID should coordinate support with ministries, utilities, regulators and private sector participants. Support for regional RE projects should be coordinated with EC, ENTSO-E, and the Energy Regulators Regional Association (ERRA).

Third, all four countries need support in developing a clear long-term vision and strategy for the energy sector and implementing existing laws and regulations. USAID could consider helping energy ministries and policymakers develop a coherent vision and strategy for the development of the energy sector that is consistent with existing and revised energy laws. The strategy document could be accompanied by a roadmap and defined timelines to meet the strategic goals and objectives. USAID could also consider supporting the development of a regional strategy and roadmap that would draw from national roadmaps to

ensure an integrated approach to planning energy resources in the region. USAID should coordinate activities with relevant ministries, utilities, and national regulatory commissions. A regional roadmap could be coordinated with EC in Vienna and ERRA.

Fourth, USAID could continue to support capacity building for energy-sector institutions and agencies in all countries. Capacity building is required for transmission system operators and market operators, regulators, policymakers, local financial institutions, and local municipalities. Support is also needed to develop awareness campaigns to strengthen political and public support for the development of regional electricity markets. Capacity-building programs should be sustainable and help develop standardized planning and implementation processes, procedures, and educational modules that can be periodically used within institutions to strengthen capacity. Institutions will need sustainable sources of funding to update training materials and to provide periodic training on an ongoing, as-needed basis. USAID could partner with ministries, utility entities, regulators, and NGOs active with civil society.

Fifth, USAID could consider programs to help regional sector institutions, such as ERRA, EC, and ENTSO-E, define their role in regulating regional energy trade and coordinate with national regulatory agencies.

Lastly, USAID could consider supporting countries in reforming their tariffs and phasing out subsidies by supporting regulatory agencies and utilities in developing cost-reflective tariffs. Support is also needed to prepare willingness-to-pay lifeline tariff studies and help develop social safety nets for the energy and income poor. Support could be coordinated with regulatory agencies, utilities, and ministry policymakers.

I. INTRODUCTION AND PURPOSE OF THE EVALUATION

Energy reform in South East Europe began in the 1990s during the transition from centralized government planning to multiple independent states, each responsible for developing its own energy sector. The result was independent countries with inadequate resources and capacity to meet their domestic energy needs and a lack of trade in energy with neighboring countries in the region. This situation in turn led to inefficient electricity generation, transmission, and distribution, with many countries lacking the incentive or expertise to improve and develop their energy sectors.¹

In 2005, the Energy Community (EC) was established, and a treaty was signed by multiple members of the European Union (EU) and eight contracting parties in South East Europe—Albania, Bosnia and Herzegovina (BiH), Macedonia, Moldova, Montenegro, Serbia, Ukraine, and Kosovo—to create a plan and set of initiatives to reform and develop a regional energy market that would allow a stable and continuous energy supply in all participating countries, with the goal of enhancing economic development and social stability across the region and within the EU market.² The treaty allows for a better market framework, energy-supply security, increased investment in energy, diversification of energy fuels, environmental improvements, and the creation of stable and competitive energy networks.

Recent studies of the region have indicated that as much as \$1.5 trillion in investment is needed in the region's power sector over the next 20 to 25 years to meet anticipated demand and to support economic growth.³ This amount of investment will require significant involvement by the private sector and further diversification of energy resources. Further, regional cooperation in the energy sector is needed to attract investment and to improve the electricity sector's operations in individual countries. Regional cooperation will reduce costs, enable individual power sectors to reach economies of scale and operation, diversify resource development, and share resources among countries in the region. Regional cooperation will also reduce resource and investment needs and ultimately lead to improved regional energy security.

The United States Agency for International Development's (USAID's) Bureau for Europe and Eurasia, Office of Economic Growth, Energy and Infrastructure Division (EE/EG/EI) developed its South East Europe regional program to help area countries meet their obligations under EC Treaty mandates and to improve the energy sector's operation and efficiency. USAID also works with European regulators and ministries to build necessary expertise within regional entities to achieve program goals. The EE/EG/EI regional project's primary goals are to increase cooperation among area countries to support the development of an effective regional electricity market that will lead to increased regional energy security. To implement the regional program, USAID has partnered with key organizations, such as the National Association of Regulatory Utility Commissioners (NARUC); the United States Energy Association (USEA); the International Resources Group (IRG); Tetra Tech; Advanced Engineering Associates International, Inc. (AEAI); Pierce Atwood; and regional consultants.

¹ http://siteresources.worldbank.org/ECAEXT/Resources/258598-1268240913359/Full_report.pdf

² http://www.energy-community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY/Legal/About_the_Treaty

³ Lights Out? The Outlook for Energy in Eastern Europe and the Former Soviet Union; World Bank, Washington, DC, 2010

USAID contracted Optimal to perform an independent evaluation of its regional program in South East Europe to assess its success in achieving program objectives and to review program accomplishments to identify ways to further improve the program’s effectiveness. Based on the evaluation, USAID sought recommendations for current and future activities that would support the development of a regional electricity market and improve regional energy security.

Specifically, USAID asked the Optimal team to evaluate three interconnected projects undertaken by its implementing partners:

- Assistance provided by USAID to national governments on electricity sector reform and the harmonization of regulations with EU standards, including drafting legislation, developing bid procedures, and advising on post-privatization processes (primary implementers: IRG, Tetra Tech, AEAI, Pierce Atwood, and others)
- The NARUC/USAID program that is designed to help create the foundation of regulatory bodies that have substantial autonomy, adequate authority and skill to establish efficient regulatory practices, clear accountability to ensure that regulatory systems are transparent (cross-border and for investors), and credibility in the governments of the Europe and Eurasia (E&E) region
- The USEA/USAID program designed to help plan reliable cross-border transmission interconnections, develop technical guidelines and network infrastructure to integrate clean and innovative energy technologies, support utility expansion for trade, and build capacity within regional transmission and distribution systems for environmental adaptation purposes



This final report presents the results of the independent evaluation, including findings, conclusions, and recommendations based primarily on data and information gained through interviews with regional stakeholders and USAID implementing partners, review of project documents provided by USAID, and review of other secondary information. It should be noted that although USAID’s EE/EG/EI provided assistance to all eight member countries under the EC Treaty, Optimal was contracted to perform an independent evaluation of USAID’s regional program in only four of these countries: Albania, BiH, Macedonia, and Kosovo (see Figure I.1).

The purpose of the assessment was to answer the five key evaluation questions posed by USAID, which form the basis of this independent evaluation. The key evaluation questions are as follows:

1. To what extent have USAID regional programs contributed to the development of a viable regional electricity market?

2. Which activities have been the most successful in achieving stated objectives? What were the primary factors in their relative success?
3. For programs that did not contribute to market development, what were the primary factors in their lack of success? How much could these factors have been influenced by USAID? For factors within USAID's control, what should have been done differently?
4. Does evidence indicate that the creation of a regional energy market would increase energy security and stability in the region?
5. Make recommendations regarding future direction of EE/EG/EI programming based on the findings from the above evaluation questions: What changes in USAID's approach in supporting the regional energy market (either in program implementation or program scope) should be undertaken?

II. EVALUATION METHODS AND LIMITATIONS

The framework for this evaluation was guided by the five key evaluation questions posed by the United States Agency for International Development (USAID). USAID evaluation guidelines were operationalized for assessing the performance of regional energy programs implemented in four countries by USAID and its implementing contractors over nearly 9 years of support.

The emphasis of this evaluation framework was to develop an approach that could assess the incremental progress made by individual countries as they seek to reform their energy sectors and participate in regional energy markets. Creating and participating in a regional electricity market requires countries to act on a number of issues related to the development of legal, policy, and regulatory frameworks; secondary legislation and bylaws; new market models and rules; the unbundling of the utility sector and establishment of independent regulatory agencies; and consistency with national policies, European Union (EU) directives, and Energy Community (EC) Treaty requirements. Countries also need to optimally utilize conventional- and renewable-energy resources available indigenously and regionally, develop physical infrastructure, secure public and private financing for projects, strengthen their sector institutions, develop the capacity of their human resources, improve sector governance to introduce transparency and competition in energy markets, and ensure that energy needs are met in a secure and affordable manner. This vast undertaking requires a multitude of actions, many of which require not just technical skill and finances but also political will and a change in the socioeconomic framework of countries that, until a couple of decades ago, were under communist rule and are still slowly transitioning to market economies.

USAID's support for countries in South East Europe as they transform their inadequate and weak national energy markets into a well-developed regional energy market, while commendable, is challenging on many fronts. Reforming and fully liberalizing entrenched legacy systems in the "old-fashioned" energy sector takes a long time, usually decades. USAID has been committed to enabling this change and has supported the countries in the region for more than two decades. Given the scale of this undertaking, USAID has worked with multiple implementing contractors, donor and multilateral agencies, and the EU and its agencies to provide assistance.

Evaluating the performance of USAID programs to support this change required knowledge of the regional energy sector and an understanding of the area's political structure, which underpins the governance of the energy sector in the countries to be evaluated. Consistent with the above understanding of the challenge of evaluating the performance of USAID support to the region, the evaluation team developed a framework that was more qualitative than quantitative and sought to examine incremental contributions made by USAID in supporting countries in their long transition to a liberalized energy market.

Thus, the evaluation methodology was broadly based on the following approaches:

A qualitative approach focusing on in-depth interviews with:

- Key country stakeholders in ministries and sector agencies, such as utilities, system operators, and regulatory agencies; USAID mission offices; other major donor and multilateral agencies; and other relevant sector agencies and specialists. These interviews were conducted in each of the four countries targeted by this evaluation.
- Energy Community Secretariat (ECS) in Vienna, Austria, to obtain its views of the progress being made by countries and the support provided by USAID.
- USAID program implementers.

A quasi-quantitative approach focused on:

- Review of documents provided by USAID for the evaluation.
- Review of various documents relating to the governance, performance, and regulation of the energy sector in the target countries; reports prepared by other agencies; and reports and directives of the ECS and EU that underpin the creation of regional energy markets.
- Review of relevant energy-sector data.

At the onset of the project, the evaluation team reviewed the various documents provided by USAID and conducted a literature search of other relevant documents as described above. Based on these reviews, the team prepared a project evaluation design matrix, which was reviewed by the Europe and Eurasia (E&E) Bureau and revised based on USAID's feedback.

A project-briefing document was prepared to summarize the intent of the evaluation and circulated to country stakeholders prior to making country visits. Country visits followed, which were planned in consultation with USAID's Washington, D.C., and Mission offices. The in-country interview process was facilitated by local energy advisers contracted by Optimal. The information gathered was documented and validated through additional information obtained from the literature reviews and multiple interviews.

Limitations to the Study

Key limitations of this evaluation include the following:

- The team performed an evaluation of USAID programs implemented from 2005 to early 2014, which encompassed a large number of activities, tasks, and subtasks, and it was impractical to evaluate the effectiveness of all individual interventions.

- The energy sector and the political establishments in the countries targeted by this evaluation are still in transition and undergoing periodic changes. It was challenging to identify country stakeholders familiar with all the support provided by USAID. At times, stakeholders were aware only of part of the assistance provided or assistance provided in a narrower time frame than the evaluation period. Frequent personnel changes in the energy sector and the establishment of new sector agencies as the energy sector was reformed and unbundled also posed a challenge to the evaluation.
- As noted above, the reform of vertically integrated, state-owned energy-sector agencies to a liberalized, open, and regional market is a transition that takes a long time and has been supported by multiple national institutions and international agencies. Evaluating the progress made by countries that is only attributable to USAID programming was difficult, especially in view of the sometimes-limited institutional memory discussed above.
- The overall time frame of this study was six months, which made it challenging to evaluate long-term USAID assistance provided to multiple countries. Individual country visits were generally less than a week, which limited the number of stakeholders who could be interviewed.
- The evaluation was also limited by the reports and related information made available by USAID. Although a few final reports for some programs were made available, many of the documents provided consisted of progress reports and work plans prepared by project implementers. The scope of work for the programs to be evaluated, their budgets, and the final deliverables provided by the contractors were not available for this evaluation.

Despite the challenges and limitations discussed above, the evaluation team has gathered as much relevant information as possible and has conducted an independent and robust evaluation of USAID programs in support of the energy sector in South East Europe. The outcome of this performance evaluation is provided in the following sections of this report.

III. BACKGROUND INFORMATION ON THE ENERGY SECTOR IN SOUTH EAST EUROPE⁴

With the exception of Albania, the countries examined in this evaluation are successor states of the former Socialist Federal Republic of Yugoslavia, and this legacy has important implications for their energy sectors. Prior to their breaking up into independent states, the countries had an integrated energy system based on the collective energy resources of the entire region, as opposed to today's situation in which the countries are sub-optimally trying to meet energy demands principally from their own resources. The countries of the region are also strategically located between energy-rich Russia and other countries in Central Asia, the Middle East, and Western Europe. However, the evaluated countries have not benefited from this situation and instead suffer from perpetual energy shortages.⁵

The Energy Community (EC) Treaty of 2005 mandates the integration of the energy sector in these countries with that of the European Union (EU), with the intent to create a single market. Among other benefits, this mandate is expected to optimally use all available energy resources within the entire region, increase competition, enable private-sector investments, and provide reliable and affordable energy to consumers. The EC Treaty, which came into effect on July 1, 2006, requires member countries to create the legal framework necessary for an integrated energy market for both the electricity and gas sectors.⁶ The development of this Regional Electricity Market is coordinated by EC and the Energy Community Secretariat (ECS).

The EC's principal goals are to improve the balance between energy supply and demand and to create a regional energy market that can be integrated into a wider EU energy market. These goals are to be achieved through market reforms of the energy sectors in the individual countries, which include developing legislation and regulations that are consistent with EU norms and practices, strengthening the institutional sector, trading energy, and reducing energy intensity by adopting international standards and improving energy efficiency. Increased energy trading would enable the countries to efficiently utilize energy resources and make optimal investments in energy infrastructure. The EC Treaty requires the member countries to implement national legislation to establish electricity regulators and transmission system operators and to introduce open access to consumers by January 2015.⁷

Consistent with commitments under the EU *acquis*,⁸ some of the principal commitments under the EC Treaty are establishing common rules for generation, transmission, and distribution of electricity and gas; establishing independent regulators and transmission system operators; implementing grid codes and other technical and commercial codes necessary for the functioning of the market and the encouragement of trade; unbundling integrated utilities; reforming the tariff structure; and creating open energy markets.

⁴ Note that this background pertains principally to the four Balkan countries, which were examined in this evaluation. The focus also is more on electricity use since USAID assistance to these countries principally focused on the electricity sector.

⁵ Energy in the Western Balkans: A Strategic Overview, Stefan Ralchev, Institute for Regional and International Studies, August 2012.

⁶ European Commission, Energy in South East Europe (<http://ec.europa.eu/enlargement/archives/seerecon/infrastructure/sectors/energy/>)

⁷ The timetable for open access has been moved forward periodically and the present requirement is to introduce open access by 2015.

⁸ EU *acquis* refers to the Community *acquis* or *acquis communautaire*, which is the accumulated legislation, legal acts, and court decisions that constitute the body of European Union law.

The EC Treaty and the strategy are designed to encompass all aspects of a future common energy market. However, the Western Balkan countries have been slow in implementing the requirements, and the EU has not been insistent on enforcing the timelines. This lack of enforcement has led to inconsistent efforts and significant delays in meeting the EC Treaty's requirements.

The EU, various bilateral donor agencies, and multilateral banks have been actively supporting the countries in developing efficient and transparent energy sectors. The United States Agency for International Development (USAID) is acknowledged by stakeholders as one of the earliest donor agencies supporting the region, and its support for the countries has been fully consistent with the provisions of the EC Treaty, with a clear focus on helping countries establish the market mechanisms needed to create a regional energy market and thereby improve regional energy security.

The four countries examined in this evaluation are at different stages in their efforts to develop robust domestic energy markets and participate in a regional integrated market as required by the EC Treaty. Bosnia and Herzegovina (BiH) has significant coal deposits⁹ and generates about half of its electricity from coal- and lignite-based thermal power plants, while the remainder of its energy is generated by hydropower. BiH has more power-generation capacity than it needs and exports power to other countries in the region; in 2013, it exported 5,097 gigawatt hours (GWh) of power, which was more than 31 percent of the power generated by the country.¹⁰ With increased investments in its power sector, the country could become a major power exporter. A challenge for the country is the multiple energy sector agencies that serve the two semi-autonomous regions of the country—the Federation of Bosnia and Herzegovina (FB&H) and the Republika Srpska. The country has established an independent system operator and a transmission company, and it has three vertically integrated electric utilities that serve its different regions.

Macedonia relies on its thermal and hydropower resources but also imports power from Bulgaria and other countries to meet its electricity needs. Its electricity imports in 2013 amounted to 2,490 GWh, or about 36 percent of its market demand.¹¹ Gas from Russia is imported through pipelines in Bulgaria. The country has unbundled its utilities and created separate generation, transmission, and distribution companies and has established a regulator. The generation company and the transmission company (which also is the system and market operator) are still state-owned, but the distribution sector has been privatized, and some private independent power producers (IPPs) are also operational in the country. The country has prepared new energy laws to be fully compliant with the mandates of the EC Treaty and has developed market rules and mechanisms in support of increased open access and regional market integration. However, Macedonia is unlikely to fully liberalize its electricity market by 2015.

Albania has significant hydropower resources but is unable to indigenously meet its electricity needs and therefore is a net importer of electricity via power traders. Albania imported 2,322 GWh of electricity (about 30 percent of its annual requirements) and exported 1,425 GWh in 2013.¹² The country's electricity sector has been unbundled, and a regulator has been established. However, the generation, transmission, and distribution companies are state-owned at present. The distribution company had been

⁹ Estimated at around 6 billion tons (Foreign Investment Promotion Agency, BiH).

¹⁰ State Electricity Regulatory Commission, BiH, Annual Report, 2013.

¹¹ Energy Regulators Regional Association - <http://erranet.org>.

¹² Ibid.

privatized, but this privatization has been reversed, and the company is once again in state ownership. The country has introduced open access but is far from being able to fully liberalize its electricity market by 2015. However, the country has developed market rules and mechanisms in support of increased open access and regional market integration.

Kosovo has significant lignite reserves but has been unable to exploit this resource due to limited access to financing.¹³ Its existing power plants are in need of rehabilitation, and the country is a net importer of power—the country imported 445 GWh of power in 2013, which amounted to about 8 percent of its total demand.¹⁴ The country has unbundled its electricity sector and has a well-performing state-owned transmission company and a privatized distribution company. A regulator for the sector has been established, but, as in most countries in the region, it is not a fully independent entity. Likewise, Kosovo is far from being able to fully liberalize its electricity market by 2015, but, like the other countries, it has developed market rules and mechanisms in support of increased open access and regional market integration.

¹³ Kosovo is estimated to have the largest lignite reserves in Europe amounting to about 12.5 billion tons of which 10.9 billion are exploitable (MEM, Energy Strategy 2009-18).

¹⁴ Energy Regulators Regional Association - <http://erranet.org>.

IV. FINDINGS

Optimal conducted interviews with the major consultants (implementing partners) contracted by the United States Agency for International Development (USAID) to support its regional project in South East Europe. The assistance provided by each of the consulting firms is summarized in Annex 3.

Summary of Information Provided by Regional Stakeholders

To address the objectives of the key evaluation questions posed by USAID’s Bureau for Europe and Eurasia, Office of Economic Growth, Energy and Infrastructure Division (EE/EG/EI), the evaluation team conducted in-country interviews with key stakeholders in each of the four targeted countries and in Austria to obtain data and information on the activities and effectiveness of regional programs. The support provided by bilateral projects was also examined, because these projects support the regional initiatives. This section provides a summary of the response and input obtained during interviews with regional stakeholders. An overall regional assessment based on evaluation of programs in the four countries is provided first, followed by assessments of the individual countries. The regional assessment is based on the evaluation of relevant programs in four countries—Albania, Bosnia and Herzegovina (BiH), Kosovo, and Macedonia—and is not reflective of the overall achievements of USAID programs in the entire South East Europe region. An assessment is provided for each of the five principal evaluation questions posed by USAID for this assignment.

Regional Assessment

Question 1: To what extent have USAID regional programs contributed to the development of a viable regional electricity market?

Overall, U.S. assistance is highly valued in all the countries examined in this evaluation. USAID has provided well-coordinated technical assistance to meet the short- and long-term needs of the energy sector, defined sector needs and priorities, and provided assistance for progress toward the development of regional electricity markets. These efforts will help countries reform their electricity markets and improve energy security.

USAID has consulted stakeholders in identifying the countries’ needs and has provided targeted assistance. USAID’s focus on regional markets is also appreciated and is consistent with countries’ policies and their obligations under the Energy Community (EC) Treaty and European Union (EU) directives. Stakeholders report that USAID has generally been responsive and more supportive than other development partners, and its assistance is greatly appreciated and valued.

Support for laws, policies, and regulations: USAID has supported the development of primary and secondary legislation, bylaws, and regulatory frameworks for the energy sector consistent with the requirements of the EC Treaty and EU directives. In most countries, USAID has taken the lead among all developmental partners in supporting the development of energy-sector laws, policies, and regulations. USAID has assisted countries in the development of energy strategies and national energy laws in support of creating competitive electricity markets and a regional energy market. Laws requiring legislative changes take a long time to adopt, but countries are slowly making progress in reforming their energy

markets, and USAID's support has led to recognition and appreciation of the regional perspective of energy markets.

USAID's long-standing support of the energy sector in the region has assisted countries with reforming their electricity markets and making progress toward the broader objective of establishing liberalized domestic markets that can eventually be integrated into a regional market.

Establishment of electricity markets: Along with developmental partners, USAID has supported some countries' efforts to unbundle their electricity sectors and has helped establish separate generation and distribution companies and transmission system and market operators. The unbundling of the electricity sector is one of the principal requirements under the EC Treaty, and USAID's support has been valued and well regarded by stakeholders. Transmission system operators and independent market operators (TSOs and ISOs, respectively) have benefited from USAID assistance to regulatory commissions when developing market rules. In Kosovo and Albania, USAID supported the establishment of commercial and privatized distribution companies. USAID's South East Europe Cooperative Initiative on Transmission Planning (SECI) Project has supported the preparation of studies to assess the feasibility of transmission inter-linkages between countries and is credited with helping Albania develop transmission links with Macedonia and Montenegro.

USAID is supporting the development of a national energy balance and the creation of energy databases that support countries in developing suitable strategies and policies for the energy sector. Some support also has been provided for developing renewable-energy markets and increasing implementation of energy efficiency, which are obligations that the countries need to meet under the EC Treaty.

USAID's support for the development of new electricity market models will help countries strengthen national electricity markets, promote competition, improve sector governance, and attract private investment. The new market models are consistent with the requirements of the EU energy package and will assist countries in participating in regional electricity markets and progressively moving toward open access and increased competition.

Establishment of electricity regulatory commissions: USAID has taken the lead among its developmental partners in supporting the establishment and functioning of electricity regulators. USAID has supported the development of market models, rules and regulations, system interconnection rules, grid codes, licensing processes, and tariff models, and their periodic updating to meet the requirements of the EU energy package. The regulatory agencies supported by USAID are fully functional and have developed significant capacity in implementing their mandates, although most regulators are not independent and governments have oversight on sector operations, especially with regard to retail tariffs. USAID's support for the establishment of electricity regulators in the region has helped countries meet their obligations under the EC Treaty and EU directives and make progress toward reforming their electricity markets.

Institutional capacity building: USAID consultants have helped develop the capacity of energy-sector agencies and policymakers, with regulatory agencies in particular benefiting. Capacity building has been provided through a variety of mechanisms, including formal workshops, on-the-job training, and pairing with U.S. regulatory agencies. Capacity building and knowledge transfer have been important outcomes of USAID's support of these countries.

Cross-border trade: All the countries included in this evaluation, with the exception of BiH, are net importers of electricity. Countries either do not have adequate energy resources to meet their demand or lack finances to develop the necessary resources, such as renewable energy and lignite. With its large coal reserves, BiH is a major exporter of power in the region. Other countries in the region are presently meeting electricity demand through bilateral trades and purchases through electricity traders. USAID's support in the establishment of a regional electricity market will help countries optimally utilize generation resources, and a larger regional market will attract private investors.

Question 2: Which activities have been the most successful in achieving stated objectives? What were the primary factors in their relative success?

USAID's support for the establishment of regulatory agencies and its support for the development of laws, policies, regulations, and market rules have been the most important elements of USAID's programs. The principal factors for the relative success of USAID's programs include the assistance provided by USAID contractors, who are valued and viewed positively by stakeholders; USAID's flexibility in designing programs and revising program scope based on countries' dynamically evolving needs; and its coordination with other development partners and the Energy Community Secretariat (ECS) to ensure that its programs are consistent with the overall objective of creating liberalized energy markets.

Relevance of program support: USAID is credited for its consultations with stakeholders in designing programs, which ensures the programs' relevance to country needs and consistency with government policies. USAID's support has also been consistent with the countries' obligations under the EC Treaty and EU directives, which makes USAID's technical advice relevant to the countries and is one of the principal factors in the success of USAID's programming. Although countries have not fully liberalized their energy markets and entered into a regional market, they have made important progress toward these goals.

USAID is viewed as a partner that provides objective, professional, and unbiased advice for the development of the energy sector. USAID is also credited with being responsive to stakeholder requests for support, despite its budget limitations. USAID's support for the establishment of regulatory agencies and for the development of laws, policies, regulations, and market rules has been the most important element of the agency's programs. Along with its developmental partners, USAID has helped countries understand the benefits of regional integration and has persuaded policymakers, previously focused largely on the domestic energy market, to take a more balanced view to optimally develop their energy sectors with a broader regional vision.

USAID's regional programs have generally been designed to complement its bilateral support to the included countries, given that the regional perspective is also useful for providing bilateral support; country Mission offices have bought into the regional program and co-funded some of the regional activities. Further, USAID has been flexible with its design of regional programs, which has helped tailor the assistance to be complementary to the bilateral programs.

USAID consultants: Stakeholders in general commend the expertise and knowledge of most USAID consultants and the valuable contributions they have made. Stakeholders also acknowledge that although not all consultants have been uniformly good, overall, the support they have provided has been useful and

relevant. USAID's budget for its consultants has not always been adequate, yet consultants are credited with performing well. USAID consultants include utility representatives, regulators, and investors from the United States and other countries. The support provided by consultants has thus been an essential factor in the relative success that USAID has had in supporting the countries' energy sectors.

USAID has contracted only a few U.S. consulting firms to provide support to the region over a long period of time, and although this approach is credited with providing continuity, some stakeholders criticize it, saying they would prefer that additional firms with expertise be contracted. USAID has also generally supported short-term consultants, which is an approach that some stakeholders favor because it enables quick advice from specialized experts and ensures that stakeholders do not become dependent on consultants. However, some stakeholders would prefer that USAID provide long-term consultants who can be embedded in sector agencies to provide assistance and build capacity.

Coordination with other development partners: Stakeholders opine that coordination between development partners has taken place on an ad hoc basis and that governments have not generally led the task of coordinating donor activities. However, stakeholders also credit USAID for the effort it has made to consult with development partners, which has benefited the support it provides to the countries by avoiding duplication of efforts by multiple development partners. USAID has also closely coordinated its activities with ECS, which is leading the task of monitoring countries' progress toward meeting their EC Treaty obligations and developing liberalized and open energy markets.

Stakeholders express the view that as a provider of technical assistance, USAID has an edge because it does not provide financing and loans, which at times could create conflicts and influence the advice given to the government. USAID is also credited with being much more flexible than other development partners in providing responsive and dynamic assistance as circumstances in the energy sector change.

Question 3: For programs that did not contribute to market development, what were the primary factors in their lack of success? How much could these factors have been influenced by USAID? For factors within USAID's control, what should have been done differently?

The programs supported by USAID are all acknowledged to be effective and in support of developing robust domestic energy markets that can later transition to a regional energy market. However, a clear vision and strong political will are essential to reforming energy markets, factors over which USAID has no direct control. Stakeholders believe that USAID needs to leverage the tremendous goodwill it has in the region to persuade governments to implement reforms at a faster pace. USAID could make continued technical assistance contingent on the implementation of past advice to ensure that its support leads to the development of a robust energy sector.

Increased sharing of information with other development partners would also help USAID leverage the support provided by others and facilitate achieving greater success in programs. USAID could also focus more on building the capacity of institutions to ensure that its efforts are sustainable.

Political considerations and country limitations: The relatively weak capacity of the policymaking and political establishment, its poor and slow decision-making, and the frequent changes in political leadership in the energy sector are important factors influencing the effective functioning of the energy

sector and its institutions. Not all governments in the region have a long-term vision for the energy sector, which leads to uncoordinated efforts to develop the sector and focus on meeting energy demands with domestic energy resources. The political legacy of countries in the region also makes regional dialog and cooperation difficult. In some countries, such as BiH, internal political differences hinder market development. The perception of corruption in some countries is also constraining the growth of the energy sector, which impedes the implementation of programs supported by USAID and other developmental partners.

On the other hand, countries are slowly adopting change, and they view the creation of regional markets as beneficial to meeting energy security needs and providing reliable and affordable electricity. In addition, there is broad political support for regional integration of the energy sector, especially because it is a requirement under EC Treaty obligations.

A major hindrance to the effective functioning of the electricity sector is the lack of independence of energy regulatory agencies. USAID programs have helped establish regulatory agencies in all countries and have provided significant support to develop their capacity, but energy regulation is still a politically sensitive issue, and the political establishment is not yet ready to relinquish control to the regulator. The regulator thus has little independence in making decisions based on technical and economic merits of sector development options and rational tariffs. Thus, although the support of USAID and other development partners has helped develop policies, regulations, and market rules and mechanisms, the recommendations are not always followed.

The performance of unbundled utility sector entities has improved significantly. TSOs and market operators have developed good capacity and are managing domestic markets and electricity trade with regional countries. However, the system operator in Albania is not yet a member of the European Network of Transmission System Operators for Electricity (ENTSO-E), and its power flows are coordinated through the system operator in Macedonia; the system operator in Kosovo is still not recognized as an independent entity by Serbia. The generation companies are still largely state-owned and do not have the resources to make investments or, in some cases, rehabilitate existing infrastructure. The performance of distribution companies is mixed, and although some countries have successfully privatized the firms, others have been less successful, and distribution losses remain high. The weak operations and governance of sector entities also impede reformation of the energy sector.

The countries have developed renewable-energy and energy-efficiency laws and action plans, but implementation has been weak. The countries have untapped renewable-energy resources, but there appears to be no clear vision for developing these resources on a large scale. Implementation of renewable energy and energy efficiency is also hindered by the relatively low tariffs in the countries, which do not provide the right price signal for investments.

Public financing for developing the energy sector is scarce, and the countries need private investments in the energy sector. However, private investors are not too keen on investing because of perceived political and regional risks, so adequate mechanisms should be developed to mitigate these risks. Also, the private sector demands a return proportional to its investment, which could substantially increase the cost of energy and make it unaffordable to large segments of the population. All these factors hinder private investment in the energy markets.

The ministries and sector entities are unable to retain capable staff and undergo frequent changes in personnel, which makes it difficult to implement actions recommended by various donor-supported programs. USAID contractors also report facing difficulties in implementing projects due to the lack of focus and skill among government counterparts. On the other hand, the sector agencies have reportedly been able to retain capacity and absorb the capacity building provided through donor programs, and consequently are making progress in implementation.

Donor coordination: Stakeholders note that donor coordination takes place on an ad hoc basis, and although USAID has reportedly been successful at coordinating its efforts with development partners, information sharing is still inconsistent. It is reported that the terms of reference and reports generated through technical assistance are not shared by USAID (and equally by other development partners), which lessens the leverage it potentially could obtain from other development partners. Stakeholders also state that increased information sharing and project deliverables prepared by consultants would better serve the interests of all donors and of the countries.

USAID is well regarded by its development partners, but it could benefit from closer cooperation and information sharing with other agencies to ensure that its recommendations are implemented.

USAID management: Stakeholders are broadly appreciative of the support provided by USAID and its consultants, but stakeholders also believe that not all consultants have adequate knowledge of the region and of EU energy laws and markets, which reduces their effectiveness. Some stakeholders also are critical of the same U.S. consultancies and consultants being procured by USAID for several years, which perpetuates the continuation of consultants who do not possess the appropriate expertise. Opinion is also divided on short-term and long-term experts made available to the country: Some stakeholders believe that long-term experts, who fully understand the local energy markets and political thinking, are needed to provide meaningful advice to countries where the needs of the energy sector are rapidly evolving.

Although they acclaim USAID's support, stakeholders are also critical of the fact that USAID focuses too strongly on the development of legislation and regulations, which in their view could be undertaken by the countries with support from the EU, and does not focus enough on the implementation of recommendations. They also express some criticism of USAID's lack of support for renewable energy and energy efficiency, although these components are included in USAID program assistance.

There is some concern among stakeholders that there could be some discord in USAID as it seeks to find a balance between supporting national and regional programs. In this regard, they also share the opinion that a regional USAID office may be better able to coordinate regional efforts in a responsive manner than a far-off office in Washington, D.C.

The lack of capacity among stakeholders in general in the region's energy sector is a serious impediment to achieving program objectives. There is some criticism that although USAID consultants have helped develop capacity, more sustained efforts could be made to put in place a structured program that would build the capacity of institutions. A more focused capacity-building program for sector institutions is essential to ensure the sustainability of USAID's assistance.

Question 4: Does evidence indicate that the creation of a regional energy market would increase energy security and stability in the region?

USAID's assistance for the development of regional energy markets and improved regional energy security is consistent with the countries' goals and with the requirements of the EC Treaty and EU directives. The countries have progressed in liberalizing their energy markets and have developed market rules consistent with the EU Third Energy Package requirements. However, it is unlikely that the four countries examined in this evaluation will be fully ready to participate in a liberalized regional electricity market by 2015.

Stakeholders are unanimous in the view that a regional energy market would improve the energy security of individual countries and of the region, but the countries' political legacies and the energy sector's still-evolving policy and institutional structure are impeding the development of this regional energy market.

The energy situation: The countries examined in this evaluation are all net importers of electricity, with the exception of BiH, which is a major exporter in the region. The countries have transmission interconnections with neighboring countries and make bilateral trades and import power through electricity traders. Some countries, such as Albania and, to a lesser degree, Macedonia, are dependent on hydropower, which is seasonal and leads to power shortages. The countries are unable to fully exploit their energy resources (such as lignite in Kosovo or renewable energy in Albania and Macedonia).

Diversification in energy-generation sources is thus critical for all countries, and countries can improve their energy security through the increased use of domestic resources and greater regional cooperation in the development of these resources. The domestic markets are not large enough to support large-scale development of some resources, such as the lignite mines in Kosovo or other renewable-energy resources. A regional market would enable countries to develop these resources in a more optimal manner.

Open access and choice in supply are required by the present deadline for liberalized energy markets, but the region's countries will not be ready for an open market by 2015 (only large customers are generally eligible), and the weak distribution system and absence of adequate metering make it challenging to provide open access to all customers. Participating in a regional market will also require the countries to fully implement new market models and further revise some market rules to be in compliance with the requirements of the EU Third Energy Package, but stakeholders acknowledge that full liberalization of retail energy markets will be challenging and take more time. The countries' present focus is on increasing bilateral energy trade rather than participating in a regional electricity market.

Question 5: Based on the findings from the above evaluation questions, the evaluation team should make recommendations regarding the future direction of EE/EG/EI programming: What changes in USAID’s approach in supporting the regional energy market (either in program implementation or program scope) should be undertaken?

The continuing support required by countries in the development of a regional energy market varies. This question is better answered in the following sections of the report, which provide guidance based on individual country needs.

In general, countries need continued support from USAID and other development partners to fully reform their national energy markets and prepare them to enter a liberalized regional market. Countries also need to develop a clear long-term vision and strategy for the energy sector and implement the laws and regulations that have already been developed.

Regulatory agencies need additional support to revise the regulatory framework and the market rules to be fully consistent with the EU Third Energy Package and to implement the new market rules and auxiliary services. There is a need to further liberalize the generation markets to make them more competitive; a framework to incentivize independent power producers (IPPs) and integrate them in the new market structure is also needed. Countries also need support to implement renewable-energy and energy-efficiency action plans.

Cost-reflective tariffs are a key challenge to be addressed, but there is little political support for this effort, given the present economic condition in the countries. Willingness-to-pay lifeline tariff studies could be conducted to support policymakers. Improving sector governance and increasing transparency in planning and operations are also critical for countries’ participation in a regional energy market.

Implementation approach: Stakeholders are generally unanimous in their positive views of the support provided by USAID. Therefore, USAID could continue to provide the flexible and responsive support it currently provides. Going forward, USAID could focus on some of the areas of support highlighted above, particularly programs that help the countries participate in a common regional electricity market.

It would be beneficial to contract with consultants who are fully versed in the EC Treaty and EU requirements and to require clear deliverables and outputs that are dovetailed to specific outcomes. Although general advice and support to stakeholders is valued, it does not help the countries implement reform plans. It is also important that USAID focus on capacity building of sector agencies, with the key being the development of a strategy for long-term capacity building of institutions and not just training of individuals. Borrowing from the approach of multilateral banks, USAID could also consider developing phased technical assistance programs, with funding for each subsequent phase contingent on stakeholders’ implementing past suggestions or agreeing to firm time lines for implementation. This phased development is essential to ensure that USAID’s assistance is not just valued but implemented to benefit the countries.

Summary of Regional Assessment

Table 1 provides information on the five key evaluation questions obtained from regional stakeholders and the review of documents.

Table 1: Comments provided by regional stakeholders on the USAID regional energy program

Country	Question 1: To what extent have USAID regional programs contributed to the development of a viable regional electricity market?	Question 2: Which activities have been the most successful in achieving stated objectives? What were the primary factors in their relative success?	Question 3: For programs that did not contribute to market development, what were the primary factors in their lack of success? How much could these factors have been influenced by USAID? For factors within USAID's control, what should have been done differently?	Question 4: Does evidence indicate that the creation of a regional energy market would increase energy security and stability in the region?	Question 5: Based on findings from the previous questions, what changes in USAID's approach in supporting the regional energy market (either in program implementation or program scope) should be undertaken?
Macedonia	USAID has had the strongest presence in the region since 1989 and 1990.	Assistance has been long-term and consistent.	Lack of understanding by sector entities and lack of support from government institutions have been an issue.	The price of electricity is expected to decrease as a result of the development of a regional market.	The region needs assistance on market balancing and transmission congestion management.
	USAID consultants provided expert technical assistance and training on market reform and development.	The bilateral and regional programs work well together.	Political and social issues inhibit the development of open markets.	A regional market will reduce the "problem" of small local markets.	The region needs assistance in meeting EU energy-sector directives.
	USAID helped establish the ERC and TSO and developed the energy law.	The regional program is effective in dealing with regional governments and sector counterparts.	Ministries are weak, and power is concentrated within the central government.	A regional market will reduce costs and attract private-sector investment.	The region needs help on market rules, tariffs, and the grid code.
	USAID strengthened institutions and supported development of a regional electricity market.	USAID provides better assistance and is more flexible than other donors.	Lack of political commitment to a regional market and lack of political support for reforms have been a problem.	The country needs 4,000 MW of balancing reserves without regional cooperation but only 2,000 MW with regional cooperation.	The region needs assistance with developing a regional balancing market and identifying problems and possible solutions.
	USAID helped develop a software model for the national and regional transmission systems.	USAID used an effective combination of U.S.-based and regional consultants.	Sector stakeholders need a better understanding of the regional market and their role in it.		The region needs studies on how to develop and operate the regional market and how to set up a regional power exchange.
	USAID worked with local distribution companies on market development.	USAID supported the development of energy-efficiency and renewable-energy resources and their participation in the regional market.	Some USAID consultants are not familiar enough with regional issues/policies.		The region needs a study on how to integrate energy efficiency and renewable energy into the regional market.

Country	Question 1: To what extent have USAID regional programs contributed to the development of a viable regional electricity market?	Question 2: Which activities have been the most successful in achieving stated objectives? What were the primary factors in their relative success?	Question 3: For programs that did not contribute to market development, what were the primary factors in their lack of success? How much could these factors have been influenced by USAID? For factors within USAID's control, what should	Question 4: Does evidence indicate that the creation of a regional energy market would increase energy security and stability in the region?	Question 5: Based on findings from the previous questions, what changes in USAID's approach in supporting the regional energy market (either in program implementation or program scope) should be
	USAID focuses on results and has provided good transfer of information and capacity.	USAID is considered to be independent with expertise to support credible projects.	USAID needs increased involvement from sector institutions to support and lead projects.		The region needs a streamlined and standardized process for the development of renewable-energy and energy-efficiency resources.
Bosnia & Herzegovina (BiH)	Without USAID assistance, there would have been little progress in reforming the electricity market.	USAID helped set up the three regulators and the TRANSCO to support domestic and cross-border sales.	It takes time to achieve regional goals, which need continuous support over time.	Exports of power from BiH have increased partly due to USAID's assistance with supporting regional cooperation.	Coordination among donors could be improved.
	USAID helped reform and strengthen the distribution and transmission systems.	The bilateral and regional programs cooperated on regional seminars and workshops on market design and market rules.	It is difficult politically to raise tariffs; affordability is an issue.	There are good incentives for private-sector investment in energy efficiency and renewable energy.	The USAID regional program could focus more on reducing the disparity among countries in market development.
	USAID consultants helped establish and make operational the regulatory commission.	USAID has supported the development of renewable energy and energy efficiency to diversify energy resources.	There is a lack of capacity at ministries, particularly at higher management levels.	A major thermal plant is being developed to serve the domestic and regional markets.	Help is needed to facilitate BiH's meeting its EU directive requirements.
	USAID's technical assistance helped develop and harmonize market rules within BiH.	There is good cooperation among USAID and other donors in support of market development.	Development of energy efficiency and renewable energy will raise tariffs along with political and affordability issues.		USAID could support technical assistance on energy efficiency and renewable energy and develop pilot projects with municipalities.
	Due to strengthening the sector, new generation is being developed to serve domestic and regional markets.	USAID supports the sharing of information and experiences among regional entities to promote cooperation on regional market development.	Differing levels of reform among countries make progress toward the development of a regional market difficult.		Support is needed for energy-efficiency projects, including setting up a revolving fund, licensing, data collection, and issuing energy certificates.
	Renewable-energy and energy-efficiency projects are moving forward with private investment and feed-in tariffs.	USAID consultants have a "10" rating, and USAID is more flexible in providing technical assistance than other donors.	Donor cooperation at times is uneven; coordination could be improved.		The region needs technical assistance on how renewable-energy resources can be integrated into the regional grid.
	USAID has provided technical assistance and software to support regional energy planning and cooperation.		There is a lack of consensus within the government on market development and reform priorities.		More regional meetings are needed to support cooperation and progress on regional market development.
	Regional meetings have helped stakeholders share information and lessons learned on regional market development.		Regulators could be more involved in the regional program.		The region needs to develop regional investment projects and increase involvement by the private sector.

Country	Question 1: To what extent have USAID regional programs contributed to the development of a viable regional electricity market?	Question 2: Which activities have been the most successful in achieving stated objectives? What were the primary factors in their relative success?	Question 3: For programs that did not contribute to market development, what were the primary factors in their lack of success? How much could these factors have been influenced by USAID? For factors within USAID's control, what should	Question 4: Does evidence indicate that the creation of a regional energy market would increase energy security and stability in the region?	Question 5: Based on findings from the previous questions, what changes in USAID's approach in supporting the regional energy market (either in program implementation or program scope) should be
Albania	USAID helped develop a framework for the sector and developed primary and secondary legislation.	USAID has worked closely with other donors and with stakeholders to ensure the relevance and success of its activities.	The weak capacity of policymaking and the political establishment adversely affect decisionmaking and implementation of sector reforms.	Success in reforming Albania's electricity sector has been achieved and will support the development of a regional market.	Albania needs continued support to reform its electricity market and to develop a clear long-term vision and strategy for the sector.
	USAID supported the development of the electricity market model, market mechanisms, and codes.	USAID has sustained a long-term commitment to sector reform, and its consultants have provided expert assistance and training.	Implementation of renewable-energy and energy-efficiency reforms needs financing and support of development partners and is hindered by low tariffs.		The regulator needs additional capacity building and support to meet EU directives for an open regional market.
	USAID helped develop the capacity of sector agencies.	USAID provided unbiased advice and assistance in achieving market development and reform.	The regulator lacks independence, and the ministry lacks capacity and adequate staffing.		The system operator needs support to undertake market operations and training to use the new software and to make it independent of the market operator.
	USAID is supporting the linkage of the Albania-Kosovo electricity sectors to benefit both countries.		USAID is well regarded by other development partners, but donor cooperation could be improved.		USAID could focus on capacity building of sector agencies and consider developing a phased approach to technical assistance, with funding for each phase contingent on the implementation of previous reform projects.
			Not all USAID consultants have good knowledge of the region; the same consultants are used over a long period of time; USAID programs do not always build on past efforts.		
Kosovo	USAID has had the strongest presence in the region to support reforms, regional cooperation, and the development of a regional market.	USAID has made a long-term commitment to support market reform and development and has exhibited good cooperation with the bilateral programs.	There is a lack of understanding and support for reforms by government and sector stakeholders, which generally is beyond USAID's control.	The region would need about 4,000 MW of balancing reserves without regional cooperation but only 2,000 MW with the cooperation and development of a regional market.	The region needs USAID support for studies on how to develop and operate an open regional market.

Country	Question 1: To what extent have USAID regional programs contributed to the development of a viable regional electricity market?	Question 2: Which activities have been the most successful in achieving stated objectives? What were the primary factors in their relative success?	Question 3: For programs that did not contribute to market development, what were the primary factors in their lack of success? How much could these factors have been influenced by USAID? For factors within USAID's control, what should	Question 4: Does evidence indicate that the creation of a regional energy market would increase energy security and stability in the region?	Question 5: Based on findings from the previous questions, what changes in USAID's approach in supporting the regional energy market (either in program implementation or program scope) should be
	USAID consultants are highly regarded and work closely with stakeholders to achieve reforms.	Early interventions and support from USAID have helped develop primary energy laws and set up independent institutions.	Many regional institutions are weak, and politicians and ministries need capacity building and training.	Development of a regional market would relieve the "problem" of small internal markets by reducing costs and attracting private investment.	The region needs assistance on market balancing, congestion management, market rules, transmission tariff reform, and implementation of the grid code.
	Regional meetings with utilities and regulators are a good forum at which to share information and successes.	USAID has provided effective capacity building and training to sector entities to gain support for market development and regional cooperation.	USAID needs to work more with stakeholders to increase involvement of the private sector, NGOs, and other sector participants.		The region needs a regional dispatch center and model to assess the availability of supplies and where to build new generating capacity.
		USAID is considered to be independent and has the needed expertise to provide credibility to sector projects.	Short-term reforms will lead to tariff increases, and affordability is an issue.		The region needs a study on how to integrate renewable energy into the grid and discussions on how to develop and operate a regional balancing market.
			USAID needs to ensure the proper mix of U.S.-based and regional consultants.		

Findings by Country

Albania

Question 1: To what extent have USAID regional programs contributed to the development of a viable regional electricity market?

Regulatory reform: USAID is one of the major donors supporting the energy sector in Albania, and it has supported the development of primary and secondary legislation and bylaws consistent with the requirements of the EC Treaty. USAID supported the development of a power-sector law in the early 2000s. USAID later supported revisions to the law to enable the privatization of the utility sector. USAID continues to support the drafting of amendments to the law and regulatory framework in support of the EU Third Energy Package. The revised law is still under discussion and may be adopted by the end of 2014.

USAID has supported the development of the electricity market model, market mechanisms, and codes. The national transmission system and market operator (OST) is undertaking operations based on market rules for interconnection developed with USAID support. USAID supports the electricity market coupling with Kosovo and has assisted the country with the development of the domestic electricity market and has prepared it to participate in regional energy markets.

An independent and strong regulator is critical, and USAID has helped establish the Albanian Electricity Regulator (ERE) and provided years of support for its functioning. The regulator is now funded through a regulatory fee on licensed utilities and has the capacity to undertake its mandate, although it is not entirely independent, and the government exercises control over tariffs. USAID's long-standing support of the creation of an electricity market is widely acknowledged and appreciated. It has helped develop a framework for the sector, supported the unbundling of the energy sector, and created separate generation, transmission, and distribution utilities. Private IPPs have invested in generation, and traders are participating in the electricity markets. USAID also supported the privatization of the distribution company, which unfortunately failed through no fault of USAID or its consultants.

USAID's support for the SECI Project is credited with having helped Albania develop transmission links with Macedonia and Montenegro. The studies conducted by the SECI working group have reportedly helped leverage investments in these transmission projects.

Market creation and stability: USAID has assisted the regulator with the preparation of secondary legislation for internal procedures, regional market models, unification of the licensing process, and the development of tariff methodologies and associated tariff models. The regulatory agency continues to use the tariff models developed with USAID support. USAID also helped with the purchase of software for the operations of OST and supported training for personnel. The software system is still in use by the system operator for market operations.¹⁵

¹⁵ Software from Power Technologies International, Siemens, was procured by OST with USAID support.

USAID has supported the development of an energy balance for the country and energy action plans. USAID continues to support this activity and is presently assisting with the use of the Learning, Evaluation, and Analysis Project (LEAP) model for energy planning. This effort builds on previous assistance, which supported the development of the MARKAL model.

A key concern presently is the poor operational performance of the distribution utility, which has recently been brought back into the public sector after a failed privatization effort. USAID is supporting a task force that has been established to identify, prioritize, and reform the distribution utility.

Assistance has also been provided for the development of action plans for renewable energy and energy efficiency, consistent with the requirements of the EC Treaty.

Institutional capacity building: USAID consultants have helped develop the capacity of energy-sector agencies in the country, especially the regulatory agency and the distribution utility. Capacity building has been provided through training and pairing with U.S. regulatory agencies, and this support is deeply appreciated.

Cross-border trade: Albania is a net importer of electricity, given its reliance on seasonal hydropower. Albania has transmission interconnections with the neighboring countries of Kosovo, Greece, and Montenegro. The country imports about 30 percent of its electricity needs at spot market prices.

Albania is keen to develop a stronger connection with Kosovo and benefit from the synergies between its hydro-dominated system and Kosovo's thermal power plants. USAID has supported the linkage of the Albania-Kosovo energy sectors to benefit both countries.

Summary: Overall, USAID assistance is highly valued in Albania, and its focus on the development of a regional market is appreciated and consistent with the ministry's policy. USAID has provided well-coordinated technical assistance to meet the short- and long-term needs of the energy sector and support toward the development of regional electricity markets. USAID consults the ministry in identifying the country's needs and accordingly provides assistance.

Country stakeholders are satisfied with the cooperation and support provided by USAID, and they acknowledge that USAID has been instrumental in helping the country's energy sector define its needs and priorities. Stakeholders report that USAID has been responsive and more supportive than other development partners.

Question 2: Which activities have been the most successful in achieving stated objectives? What were the primary factors in their relative success?

Relevance of program support: USAID is credited for its consultations with stakeholders in designing programs, which ensures both their relevance to the country's needs and to consistency with government policy. USAID is also viewed as a partner that provides objective and professional advice for the development of the energy sector and is credited for being very responsive to stakeholder requests for support, despite its somewhat limited budget compared to other development partners. USAID has supported the energy sector in Albania for a long time, and its support is credited with having assisted the country in establishing a functioning electricity sector, as described in the response to question 1.

USAID's contribution to the energy sector is valued, and stakeholders believe that it needs to continue supporting the country in revising legislation and market rules to help it meet its obligations under the EC Treaty and the EU acquis.

USAID management: USAID's consultants are credited with performing well despite a relatively modest budget. Stakeholders in general commend the expertise and knowledge of most USAID consultants and the valuable contribution they have made to the energy sector in Albania. USAID has procured the same U.S. consulting firms to assist the country over a long period of time, which is credited with providing continuity. USAID consultants have brought utility representatives, regulators, and investors from the United States and elsewhere to build the capacity of sector agencies, especially the regulator, and this is highly valued by stakeholders.

Capacity building and knowledge transfer have been important outcomes of USAID support to the country. The regulatory agency has perhaps benefited the most from USAID support, for the agency is now capable of undertaking work independently.

Coordination with other development partners: Coordination between development partners is reported to be ad hoc. USAID has helped the government coordinate support provided by development partners and reportedly works with other major development partners in the energy sector. *Kreditanstalt für Wiederaufbau* (KfW), along with the World Bank (WB), is one of the largest supporters of the energy sector in Albania and has funded many projects related to transmission interconnections and energy-efficiency and renewable-energy projects.

Stakeholders also believe that USAID is in a better position to provide unbiased advice, because it does not provide loans to the country, which at times could create conflicts and influence the advice given to the government.

Summary: The assistance provided by USAID and its contractors has been very successful, and their contributions are valued and viewed positively by stakeholders. USAID's flexibility in designing and revising its terms of reference based on the country's dynamically evolving needs is valued greatly; other developmental partners are considered to be less flexible in their technical assistance projects. USAID's support for the regulatory agency and the leading role it took in developing the legal and regulatory framework is especially valued, because it has led to the establishment of a functional regulator with trained staff who can independently undertake regulatory functions for the domestic energy market.

Question 3: For programs that did not contribute to market development, what were the primary factors in their lack of success? How much could these factors have been influenced by USAID? For factors within USAID's control, what should have been done differently?

Political considerations and country limitations: The relatively weak capacity of the policymaking and political establishment, its poor and slow decision-making, and the frequent changes in political leadership in the energy sector are all considered to be major factors influencing the effective functioning of the energy sector and its institutions. The government reportedly has no long-term vision for the energy sector, which leads to uncoordinated efforts to develop it. Stakeholders also point to the fact that recommendations made by USAID and other development partners are not always followed. For instance, a new draft law on energy has been developed but has not yet been adopted.

There is political support for regional integration of the energy sector, because it is a requirement under Albania's treaty obligations, but the government appears to be focused on meeting its energy needs through its own energy resources. The country reportedly does have significant untapped resources, especially renewable-energy resources, but there appears to be no clear vision to develop these on a large scale. Albania is presently dependent on hydropower, which is susceptible to climate change in the long run; reduced water flows have already led to increased imports of power at a high cost. In response, the country is now seeking to develop thermal power plants. Albania has also developed transmission inter-linkages with Montenegro and is now seeking to develop a connection with Kosovo, but these countries do not have much excess power either.

The performance of the distribution company has declined after initial gains made post-privatization. Retail tariffs are not cost-reflective, which, when coupled with the high losses and poor collections rate, makes the system financially unsustainable. The annual financial loss in the electricity sector is estimated at about \$215–\$270 million.¹⁶ The utility needs significant investments to improve its functioning, and WB has recently approved a \$150-million loan for the power sector.¹⁷ Some stakeholders have questioned the sector's ability to absorb this level of support and implement the planned reform program in a timely manner.

Renewable-energy and energy-efficiency laws have been drafted, but their implementation requires significant financing and the support of development partners. Implementation of renewable energy and energy efficiency is also hindered by the low tariffs in the country, which the political establishment is reluctant to revise.

Another major hindrance to the sector's effective functioning is the lack of independence at the ERE. USAID programs have helped establish the agency and provided significant support, and the agency has built good capacity, retained staff, and implemented a reasonable budget. However, the agency has little power to enforce changes without the approval of the political establishment.

The Ministry of Energy is unable to retain capacity and undergoes frequent changes in personnel, which makes it difficult to implement actions recommended by various donor-supported programs.¹⁸ USAID contractors report facing difficulties in implementing projects due to the lack of focus and skill among government counterparts.

Overall, it appears unlikely that Albania will be ready to participate in a regional electricity market by 2015, despite the concerted efforts of USAID and other development partners.

Donor coordination: WB, KfW, USAID, and the International Finance Corporation (IFC) are the major development partners in the energy sector. Donor coordination takes place on an ad hoc basis, although stakeholders admit that USAID is good at coordinating its efforts with development partners. However, stakeholders express frustration that USAID does not share the terms of reference and reports generated through its technical assistance programs, which lessens the leverage the agency could potentially obtain from other development partners.

¹⁶ Albania: World Bank Group Partnership Program Snapshot, World Bank, April 2014

¹⁷ <http://www.worldbank.org/en/news/press-release/2014/08/08/world-bank-negotiates-usd-150-million-energy-sector-recovery-program-for-albania>

¹⁸ Reportedly, there have been six Ministers of Energy in the past 4 years.

The country has benefited from the loans made to the sector by WB and KfW and private-sector financing from IFC, but it is slow to act on recommendations made by donor-supported studies. For instance, findings from studies on energy efficiency and renewable energy have not been considered for implementation.

USAID management: Stakeholders believe that not all consultants have good knowledge of the region, and of EU energy laws and markets, which reduces their effectiveness. Some also criticize the procurement of the same U.S. consulting firms and consultants by USAID for several years. While acclaiming USAID's support, stakeholders are also critical of the fact that USAID programs do not always build on past efforts. For instance, USAID is now supporting LEAP development for energy planning in the country, although technical assistance was earlier provided on MARKAL. Although this change admittedly was made at the instance of the country, which prefers to use LEAP, it is not clear whether the current task is able to build on past work. Stakeholders also express that the selection of the MARKAL model was perhaps not appropriate in the first place, because it is data-intensive and not easy to implement in transitioning countries. Stakeholders also believe that energy planning requires sustained efforts, and building good expertise in the country requires more concerted efforts at capacity building of local institutions and personnel.

USAID's lack of or inadequate support for renewable energy and energy efficiency draws some criticism, although these components are now included in the Low Emissions Development Strategies (LEDS) Program support being provided by USAID.

Summary: The programs supported by USAID are acknowledged to be good and useful in the development of a robust domestic energy market that can later transition into a regional energy market. However, the constraints imposed by the political establishment and the regulator's lack of independence have hampered implementation. Changes in key personnel have also affected the implementation of program recommendations. USAID could make continued technical assistance contingent on the implementation of past suggestions to ensure that its support leads to the development of a robust energy sector.

Question 4: Does evidence indicate that the creation of a regional energy market would increase energy security and stability in the region?

The energy situation: The total installed generation capacity in Albania is about 1,726 MW (2012), which includes IPP capacity,¹⁹ and the country generated about 7,446 GWh of electricity and imported 3,230 GWh in 2012.²⁰ As noted earlier, Albania obtains about 30 percent of its annual electricity requirements from neighboring countries. Power imports are procured through private electricity traders and is expensive.

The Albanian TSO (OST) manages power flow in the country, but the system operator in Macedonia controls the data flow and the system because OST is not a member of ENTSO-E. Albania has transmission interconnections with Greece, Macedonia, Montenegro, Serbia, and BiH, and a submarine cable is planned with Montenegro and Italy.

¹⁹ ERE Annual Report, Albania, 2012.

²⁰ Ibid.

Albania is presently highly dependent on hydropower, and changing river flows have led to severe shortfall in power generation, necessitating power imports at high prices that have been a drain on the treasury. Diversification in energy-generation sources is thus critical for Albania, and the country is examining options for increased thermal-based (oil and coal) generation and renewable energy. Gas-based generation is also being considered, but the Trans Adriatic Pipeline (TAP) project is unlikely to deliver gas earlier than 2025. Albania is thus keen to improve its energy security through increased domestic generation and regional cooperation.

Albania is a member of the ECS and needs to comply with the treaty's mandate, which includes liberalization of energy markets. Albania is not yet a member of ENTSO-E, and participating in regional markets will require the country to become a member. Stakeholders believe that although the government is supportive of regional markets and has unbundled the utility, there is no competition in generation, and the regulator is not independent.

Albania is keen to develop a transmission link with Italy, but this vision is driven by a plan to develop large-scale wind-energy projects in Albania and to export renewable energy to Italy to help it meet renewable-energy targets.

Open access and choice in supply are required by the present deadline for liberalized energy markets, but Albania is not yet ready for the 2015 open market. Only large customers are now eligible for the open market, and medium consumers will also become eligible in 2015. However, the weak distribution system and absence of adequate metering will make it challenging to provide open access to all customers. Participating in a regional market will also require Albania to adopt the draft energy law, which has provisions to further revise market rules to be fully consistent with the requirements of the EU Third Energy Package.

Another key issue in creating regional markets is rationalizing tariffs. The present tariff in Albania is low and not sustainable, but it has been politically difficult to raise tariffs.

Summary: USAID assistance for the development of regional energy markets and improved regional energy security is consistent with the country's goals. The country has made progress in liberalizing its market and has developed market rules consistent with the EU Third Energy Package requirements. However, it is highly unlikely that Albania will be ready to participate in a fully liberalized regional electricity market by 2015.

ECS monitors progress but does not pressure the government to act. Development partners cannot achieve their objectives in the absence of political support and action, and even USAID, which is a trusted partner of the government, has not persuaded the government to act on all its recommendations.

Question 5: Based on the findings from the above questions, the evaluation team should make recommendations regarding the future direction of EE/EG/EI programming: What changes in USAID's approach in supporting the regional energy market (either in program implementation or program scope) should be undertaken?

Areas for continued support: Albania needs continued support from developmental partners to reform its energy market and to prepare it to enter a fully liberalized regional market. However, the country

needs to develop a clear long-term vision and strategy for the energy sector and to adopt the new (draft) energy law. The government will need support to develop this strategy.

ERE has developed good capacity with past USAID support but may need additional help revising the regulatory framework and the market rules to be fully compliant with the EU Third Energy Package. ERE also needs support to implement the new market rules and auxiliary services. As Albania adopts the new energy law, which presently is in draft form, it will need support to adapt the market model to the new law. A new market model will also require secondary legislation to be revised. Also needed is a framework to integrate IPPs in the new market structure.

Improving the performance of the distribution company is critical to stem losses and prepare the market for liberalization. A task force has been set up to examine options, which USAID is supporting, and the country may need assistance to implement recommended actions. This assistance would need to be coordinated with WB, which has approved a \$200-million loan for improving distribution operations. Donor support is also needed to restructure the distribution sector and to separate retail functions from distribution.

Increasing tariffs is a key challenge to be addressed by the country. There is little political support for the initiative considering that Albania is a relatively poor country; the country needs assistance to address this issue. For instance, willingness-to-pay studies have not been conducted and could be supported.

OST needs support to undertake market operations under a revised market model. Market balancing and auxiliary functions were previously conducted by Albanian Power Corporation (KESH), the generation utility, but this function will have to be undertaken by OST. OST also needs more operators to be trained in the use of software, which was previously purchased with USAID support. OST is presently using Excel for market clearance operations and needs support to purchase and train its personnel in standardized software for auction clearance and settlement; OST is considering software from Unicorn, Siemens, and ABB. WB is considering supporting the procurement of the software, and any supplemental support to be provided by USAID would need to be coordinated with WB. The country also needs support to make the market operator independent of the system operator.

Development of renewable energy and implementation of energy efficiency are also critical for the country, and although development partners support this activity, the country will need additional help to develop a robust policy framework and integrate increasing amounts of renewable energy into the grid.

Implementation approach: Stakeholders are generally unanimous in their positive views of the support provided by USAID. USAID could thus continue to provide the flexible and responsive support it currently provides. Going forward, USAID could focus on some of the areas of support highlighted above, with a clear focus on programs that assist the country in participating in a common electricity market. It would be beneficial to contract with consultants who are fully versed in the EC Treaty and EU acquis requirements to provide continued support. Long-term capacity building of sector agencies is also critical. USAID could also consider taking a firm position with the government on making continued support contingent on implementation of previous recommendations.

Kosovo

Question 1: To what extent have USAID regional programs contributed to the development of a viable regional electricity market?

Regulatory reform: USAID is the most important donor partner that provides support to the energy sector in Kosovo. Early on, USAID decided to support Kosovo in developing primary energy legislation and amendments to laws to make them consistent with the requirements of the EU and the EC Treaty.

USAID has also supported the development of the draft energy strategy for the country in support of transitioning into a regional energy market. Although regional integration and the development of a regional energy market will likely take a long time due to political differences, USAID's support for the organization of high-level public forums and workshops has led to recognition and appreciation of the regional perspective of energy markets.

Market creation and stability: USAID spearheaded the support for the restructuring and unbundling of the utility sector in Kosovo, and it later supported operational and management improvements for the distribution utility, Kosovo Electricity Distribution and Supply (KEDS),²¹ for 6 years until the utility was successfully privatized.

USAID helped establish the energy regulatory office (ERO) and supported the development of draft primary legislation and secondary legislation to support private investment that is also consistent with the requirements of the EC Treaty. With USAID's assistance, ERO has developed significant capacity and continues to adapt and use the products and tariff models initially developed by USAID consultants.

USAID supported KOSTT, the regulated transmission system and market operator for Kosovo, in resolving a dispute with EMS, the Serbian transmission operator, which was critical to get KOSTT recognized as an independent system operator with the ability to enter into contracts for regional power transfers and to participate in a regional electricity market. Although a political agreement is yet to be reached, the system operator is a participant in regional working groups and programs.

Institutional capacity building: USAID consultants helped develop the capacity of energy-sector agencies in the country. Over several years of assistance, USAID supported multiple initiatives in the energy sector, including a study on issues relating to the security of supply, transaction advisory support for the development of a new power plant, and options to revitalize the Kosovo B plant.

Cross-border trade: Kosovo remains a net importer of electricity, given its inability to develop its lignite resources. Albania is an important partner for its electricity sector, because it exports excess hydropower during the high-flow season. USAID is supporting the linkage of the Albania-Kosovo energy sectors to benefit from the complementarity of Kosovo's thermal system and Albania's hydro-dominant power system.

Summary: Overall, USAID assistance is highly valued in Kosovo, and USAID has provided well-coordinated technical assistance to meet the short- and long-term needs of the energy sector and to help with the development of regional electricity markets.

²¹ At the time of support, the distribution utility was known as KEK. USAID's assistance included support for improving the accounting and billing systems of the utility, provision of broad-based training, and study tours.

Country stakeholders are satisfied with the cooperation and support provided by USAID and acknowledge that USAID has been instrumental in helping the country's energy sector define its needs and priorities. USAID also supported sector agencies' taking over functions from the United Nations Mission in Kosovo after Kosovo declared independence. Stakeholders also report that despite some limitations, USAID has been responsive and more supportive than other development partners.

Question 2: Which activities have been the most successful in achieving stated objectives? What were the primary factors in their relative success?

Relevance of program support: USAID is credited with extensively consulting country stakeholders in identifying and developing programs and studies, which has led to programs that are relevant and consistent with government policy for the development of the energy sector.

Along with other development partners, USAID has helped the country understand the benefits of regional integration and has persuaded the government, which previously was focused largely on the domestic energy market, to take a more balanced view to optimally develop the energy sector. USAID's support to the country in meeting the EC Treaty requirements and in its coordination with the ECS is acknowledged to have benefited the country. For instance, USAID's support for the development of an energy market model and support for implementing requirements under the EU Third Energy Package have helped sector agencies meet their obligations under the EC Treaty and attract private-sector interest and investment.

USAID's regional programs were designed to complement its bilateral support to the country, and the country Mission office has bought into the regional program and co-funded some of the regional activities. Moreover, USAID's regional programs are flexible and can be tailored to complement the bilateral programs.

USAID management: USAID consultants have brought utility representatives, regulators, and investors from the United States and elsewhere to build the capacity of sector agencies—especially of the regulator—which has been highly valued by stakeholders.

USAID consultants have reportedly been responsive to the needs of the energy-sector agencies. According to stakeholders, most USAID consultants have provided valuable support to the energy sector, and U.S. experts have brought relevant experience and expertise. Stakeholders also acknowledge that in instances where U.S. consultants have not brought the appropriate expertise and knowledge of the region, USAID has been responsive to feedback and made changes.

USAID consultants have also been largely successful in transferring capacity to the counterpart agencies, even in projects where capacity building was not a main component of the program.

Coordination with other development partners: Stakeholders have observed cooperation and coordination between development partners and believe that USAID's consultations with other development partners has enhanced the support it provides.²² For instance, USAID is examining barriers to renewable energy, and WB is coordinating with USAID to ensure that it complements WB's support

²² USAID, WB, EC, and KfW are reportedly the principal partners supporting the energy sector in Kosovo.

for developing renewable energy in the country. A WB tariff study is also building on support provided earlier by USAID.

Overall assessment: Overall, assistance from USAID contractors has been successful. USAID is a trusted and valued development partner for Kosovo that provides honest and independent views in the country's best interests.

Question 3: For programs that did not contribute to market development, what were the primary factors in their lack of success? How much could these factors have been influenced by USAID? For factors within USAID's control, what should have been done differently?

Political considerations and country limitations: There is a lack of decision-making capacity in the political establishment, which, when coupled with the perception that corruption is constraining the growth of the energy sector, impedes the implementation of programs supported by USAID and other development partners.

Public financing for developing the energy sector is scarce, and the country needs increased private investments in the energy sector. However, private investors are not too keen on investing because of perceived political and area risks, so adequate mechanisms must be developed to mitigate these risks. The low tariffs in the country also hinder private investments.

The regulator has little independence in making decisions based on the technical and economic merits of options for developing the electricity sector in the development of rational tariffs. The regulator has no independent source of financing and is dependent on the government for funding, which also lessens its independence. Further, the lack of adequate funding impairs its ability to attract and retain talented individuals, which hinders its functioning.

Kosovo is still at an early stage of its political, economic, and social development, and its sector agencies are weak and continue to be dependent on consultants. The absorptive capacity of institutions is also low, and transferring capacity is a difficult challenge because of the weakness of the institutions rather than any lack of support from consultants. Some stakeholders believe that effective transfer of capacity for developing the energy market may require consultants to be embedded in the institutions they support. They also stress the importance of using local consultants to strengthen capacity building.

The TSO is not recognized as an independent entity by Serbia, which hinders Kosovo's ability to enter into regional contracts²³ and prevents the country from being a member of ENTSO-E. Integrating Kosovo into the regional market requires this issue to be resolved.

Kosovo is keen to exploit its significant lignite reserves and to develop power plants that can export power to the entire region and support the regional market. The country, however, does not have the resources to develop this resource and will require support to attract private financing. There is some criticism that the U.S. position on developing lignite has hindered its development, and a long-planned project has been substantially scaled down and will barely meet the needs of the country, let alone allow export of power.

²³ Serbia also stands to lose revenues from wheeling charges when the TSO in Kosovo becomes an independent entity.

In view of the above limitations and constraints, it appears unlikely that Kosovo will be ready to participate in a regional electricity market by 2015, despite the concerted efforts of USAID and other development partners.

Donor coordination: The Kosovo government is responsible for donor coordination, but reportedly only one meeting has taken place in the past year or two. The meeting's broad agenda reportedly did not help donors coordinate their activities, with participants making presentations on support provided to all sectors, including energy, transportation, water, and other infrastructure.

Donor coordination is thus more informal and takes place at the initiative of the donors rather than the government, which sometimes leads to poor coordination. For instance, WB is supporting a regional gas-distribution pipeline project, but it is not involved with a USAID program that is supporting the development of regional gas frameworks. There also is some hesitancy among donors to share detailed information on project design, and even project TORs are not shared. Stakeholders opine that increased sharing of information and of project deliverables prepared by consultants would better serve the interests of all donors and of the country.

It is also the view of stakeholders that some cooperation is driven in part by the individuals heading the donor effort in the country, which could lead to friction in the approaches to developing the sector. A case in point is the development of the lignite mines, where development partners reportedly have different views on the path that Kosovo needs to take.

USAID management: The needs and expectations of the country are large, and although USAID's support is widely acknowledged to be positive, its process for approving projects and providing support draws some criticism. The situation in Kosovo is dynamic, making it difficult for development partners to respond at a pace demanded by the market. Also, some stakeholders believe that USAID programs appear to be driven more by individuals leading the effort rather than by teams, and they suggest that a more broad-based, team-focused approach would be more beneficial to the country.

There is some concern among stakeholders regarding potential discord in USAID as it seeks to find a balance between supporting national and regional programs. In this regard, they also suggest that a regional USAID office may be better able to coordinate local efforts in a more responsive manner than an office located in Washington, D.C.

Some stakeholders state that although U.S. consultants, regulators, and other experts have been good, they do not always understand the EU situation and face a steep learning curve to understand the principles and requirements of the EU Third Energy Market; the use of EU contractors and consultants would perhaps provide more pertinent support in developing appropriate market mechanisms and market rules for the energy sector.

There is some criticism of USAID's bringing in the same contractors over the past several years, as stakeholders are dissatisfied with some consultants' expertise levels. Stakeholders are also critical of the lack of clear outputs or deliverables from many of the visits made to the country by consultants.

The lack of capacity among stakeholders in the energy sector in Kosovo is a serious impediment to achieving program objectives. There is some criticism that although USAID consultants have helped develop capacity, more sustained efforts could be made to put in place a structured program that would

build the capacity of institutions. A more focused capacity-building program for sector institutions is essential for the sustainability of USAID's assistance.

Question 4: Does evidence indicate that the creation of a regional energy market would increase energy security and stability in the region?

The energy situation: The annual energy demand in the country is 5,700 GWh, and the winter peak load is about 1,200 MW. Given the generation shortfall, the country imports about 8 percent of its electricity requirements at a cost estimated to be about twice that of its generation.

Security of supply and the optimal utilization of regional resources are critical for Kosovo, and it is keen to develop its lignite resources to meet its demand and to export power to the region. It has been estimated that the country needs to develop generation capacity of about 1,700 to 2,000 MW by 2030 to achieve energy security and meet a projected energy demand of about 10,500 GWh.²⁴

The Kosovo power system is integrated with that of the neighboring countries of Serbia, Montenegro, Macedonia, and Albania through high-voltage transmission interconnections, and an automated system is in place to control and monitor the grid and maintain reliability. Although the country is interconnected with its neighbors, a regional market has yet to be developed; presently, power trade is based on bilateral contracts. Market rules and operational procedures are being prepared for KOSTT to participate in a common regional market. KOSTT recognizes that full liberalization of retail energy markets will be challenging and will take time. The present focus is on integrating Kosovo's system with Albania's system to benefit from the synergies of thermal- and hydro-dominated generation, and the government has signed a memorandum of understanding (MOU) for creating a common market. The plan is to develop 1,000 MW of transmission capacity between the two countries. It is hoped that the establishment of a functional market will create the right economic conditions for building new capacity and attract investments by the private sector. This process has been slow; it was initiated 12 years ago and is still evolving. It is clear that common markets will take a long time to establish, but the country is committed to eventually participating in a regional electricity market. After integration with Albania's power system, the plan is to expand the common market to Macedonia and Montenegro.

The government of Kosovo is keen to promote a regional energy market given its multiple benefits, although its present focus is on the domestic market and meeting domestic needs.²⁵ The requirements of the EC Treaty and the EU *acquis* are an impetus for engaging in regional cooperation and encourage the country to take initiatives consistent with the broader objective of integration in regional and EU energy markets.

It is reported that Kosovo is ahead of other countries in the region in implementing the EU Second and Third Energy Package, and its legislation is supportive of private-sector investment in the energy sector. Legislation is also supportive of developing the mining sector, although land ownership is a major issue that needs to be resolved to attract private-sector investment.

²⁴ "Study about Security of Electricity Supply in Kosovo," prepared by Vattenfall Europe Power Consult GmbH for KOSTT, March 2013.

²⁵ It was noted that a previous minister was keen on the transmission interconnection with Albania and on regional electricity markets, but the present focus is more on domestic markets.

Summary: USAID assistance for the development of regional energy markets and improved regional energy security is consistent with the goals of the country. The country has made progress in liberalizing its market and has developed market rules consistent with the EU Third Energy Package requirements. However, it is unlikely that Kosovo will be ready to participate in a fully liberalized regional electricity market by 2015.

Question 5: Based on the findings from the above questions, the evaluation team should make recommendations regarding the future direction of EE/EG/EI programming: What changes in USAID’s approach in supporting the regional energy market (either in program implementation or program scope) should be undertaken?

Areas for continued support: A competent regulator is essential to a functional electricity market that supports all market players. Stakeholders comment that although ERO has benefited from significant support, it may need continued support and capacity building to implement the new market model and rules as a regional electricity market evolves. The generation company *Korporata Energjetikee Kosovës* (KEK) and KOSTT would also need assistance with capacity building to develop market rules and to establish a common electricity market with Albania. In fact, stakeholders believe that of all the sector institutions, KEK may need the most support from USAID to unbundle the energy-generation sector from the mining sector, develop lignite-based power plants, and improve its capacity to operate in the new market environment.

Additional support is also needed for negotiating specific agreements with other market players, which is critical for regional market operations. KOSTT is in discussions with various development partners to obtain this support. Kosovo also needs support to implement the Second and Third EU Energy Package.

Stakeholders suggest that USAID take a more active role in supporting the development of renewable energy and energy efficiency to complement the support provided by WB and the European Bank for Reconstruction and Development (EBRD). Kosovo is keen to develop its renewable-energy resources and wishes to introduce renewable-energy feed-in tariffs (REFIT) for solar photovoltaic energy systems based on a return-on-investment approach and a 10-year power-purchase agreement.

USAID could also provide additional support to the Energy Ministry in developing strategies to attract private investments in generation and to implement renewable-energy and energy-efficiency initiatives; in this regard, a key challenge is that Kosovo does not have an overall development strategy from which sectorial strategies could emanate. Secondary legislation is needed to support increased renewable energy and to develop a licensing strategy.

The legislation in Kosovo is supportive of private-sector investment in the energy sector, but issues relating to land ownership and payment risks remain. The country thus needs support in developing risk-mitigation strategies and mechanisms to attract private investment. Moreover, implementing a large-scale mine-development and power-plant project will require significant support from development partners.

In summary, the future of the energy sector depends on investments, so USAID needs to focus its efforts on programs that encourage investors. There also is a perception of corruption in the country, which hinders private investment, but stakeholders suggest that USAID could serve as a bridge between the government and the private sector to help mitigate the risk.

Implementation approach: Stakeholders are generally unanimous in their praise for the flexible and responsive support USAID provides. Going forward, USAID could focus on potential areas of support highlighted above, with a clear focus on programs that help the country participate in a common electricity market. It would be beneficial to contract with consultants who are fully versed in the EC Treaty and EU *acquis* requirements and to require clear deliverables and outputs that are dovetailed to specific outcomes. It is also important that USAID focus on long-term capacity building of sector agencies. USAID could consider making its support contingent on stakeholders' implementing recommendations made during past assistance projects.

Macedonia

Question 1: To what extent have USAID regional programs contributed to the development of a viable regional electricity market?

Market creation and stability: Stakeholders in Macedonia generally give high marks to USAID's regional programs and their implementing partners. They state that USAID has had the strongest presence in the region regarding support for reform of the energy sector, promotion of regional cooperation, and development of a regional electricity market. Stakeholders indicate that USAID is the most objective and cooperative among donors and that the importance of its assistance to the Macedonia energy sector cannot be overstated.

With regard to specific activities, stakeholders note that Pierce Atwood, Tetra Tech, and the International Resources Group (IRG) have provided good consultants and recommendations for the development of market rules and the new energy law, and they have also provided assistance in helping Macedonian electricity-sector entities meet EU requirements for the sector. They note that USAID has used local consultants and experts to augment the technical expertise provided by its U.S.-based experts, which stakeholders consider to be a strength of USAID's technical assistance to the country.

Stakeholders note that USAID worked with the Macedonian government to establish the independent ERC and the independent TSO and was then involved with institutional strengthening and capacity building of these institutions. In particular, USAID consultants helped develop the electricity law for Macedonia, which facilitated ERC's establishment.

Since 2001, USAID has successfully provided assistance on regional transmission planning. For example, USEA provided technical support and used regional consultants for analytical support and data collection to develop a software model of the regional transmission system. Other models also were developed for specific needs. Stakeholders believe this software model to be the best model in Europe. In addition, USAID worked with Macedonian distribution companies for 12 years to develop a plan for improving electricity distribution.

Donor coordination: Stakeholders note excellent coordination between ERC, ISO, and USAID, especially with Pierce Atwood and the National Association of Regulatory Utility Commissioners (NARUC) regarding the exchange of information and institutional strengthening. Stakeholders are of the opinion that assistance provided by the EU is not as flexible as that provided by USAID and that the EU takes much longer to provide support.

Stakeholders believe that regional meetings with utilities and regulators as part of USAID's regional programs are good forums to share information and experiences among regional electricity-sector entities. They state that USAID has provided good assistance to regional ISOs on the use of a dynamic model developed by its consultants. Finally, stakeholders note that USAID also has supported several technical studies and is good at communicating results to a wider regional audience, including ministries, potential investors, and regulators.

Question 2: Which activities have been the most successful in achieving stated objectives? What were the primary factors in their relative success?

Relevance of program support: Stakeholders note that USAID has provided long-term support to the Macedonian energy sector and state that the bilateral and regional projects work well together and successfully coordinate their activities. The regional program often provides assistance to the bilateral program on a short-term basis to address immediate needs and is generally flexible in meeting the needs of Macedonia as they relate to development of, and its participation in, the broader regional market.

USAID has helped strengthen the Macedonian electricity sector and supported its participation in the developing regional electricity market. USAID's support had included helping Macedonia develop its primary energy laws, setting up independent institutions, providing support to generation and distribution companies, and providing technical assistance and capacity building to sector and government entities. USAID has also provided support for development of energy-efficiency and renewable-energy resources to diversify the use of domestic-energy resources.

Stakeholders state that USAID provides independent views and brings credibility to electricity-sector projects, which facilitates their development and supports participation by the private sector.

Question 3: For programs that did not contribute to market development, what were the primary factors in their lack of success? How much could these factors have been influenced by USAID? For factors within USAID's control, what should have been done differently?

Stakeholders discuss the lack of success of some USAID-sponsored activities. Their comments may be sub-grouped as follows:

- Lack of understanding or support from government and energy-sector stakeholders (which generally is beyond USAID's control)
- Better use of consultants and improved coordination and involvement by energy-sector stakeholders

A. Lack of understanding or support from government entities and stakeholders:

Stakeholders note that reforming the electricity sector and developing a regional market require long-term commitment and continuous support. They give high marks to USAID for its long-term involvement in the region and express the importance of continued USAID involvement. For example, they note that it is difficult to develop renewable-energy resources due to a lack of understanding from energy-sector institutions and lack of support from government entities. Stakeholders state that political and social issues will make achieving an open market by 2015 difficult.

Stakeholders also state that in the short term, market reforms, including the development of renewable-energy and energy-efficiency resources, will likely lead to price shock by households and will make

implementation of the regional market more difficult. Yet they also express the view that the development of a regional market will result in lower prices in the long term, improve efficiencies, and reduce cross-subsidies. However, stakeholders believe that these developments are too difficult to undertake all at once due to political considerations, so a phasing-in of pricing reform is needed.

Stakeholders note that many regional institutions are weak and that politicians and ministries need capacity building and training. They believe that USAID needs to convince them to be a champion for development of a regional electricity market and that currently there is little political commitment to such a development.

Another element contributing to the lack of progress in developing a regional market is that each country works individually and focuses on its internal needs. Countries in the region need to focus more on developing the regional market and the long-term benefits that it will provide.

Specifically, with regard to Macedonia, stakeholders state that the government is centralized and that politicians control the energy sector. The ministry thus does not always take the advice provided or act consistently. Stakeholders believe that the ministry needs to develop a better understanding of the merits of a regional energy market and knowledge of energy markets in other countries in the region.

B. Better use of consultants and improved coordination and involvement by energy-sector stakeholders:

While giving high marks to USAID assistance and to its implementing partners, stakeholders stated that USAID needs to ensure selection of proper consultants with a mix of regional and U.S.-based consultants. They believe that in some instances USAID consultants were not familiar enough with the South East European region.

Stakeholders also noted that, at times, USAID needs a more pragmatic approach to its assistance efforts and could increase the involvement of energy sector institutions to support and lead on specific projects. They also expressed the view that USAID needs to consult more closely with stakeholders to identify sector needs, and consult more broadly with the private sector, NGOs, utility associations, and other sector participants.

Question 4: Does evidence indicate that the creation of a regional energy market would increase energy security and stability in the region?

Benefits of regional trade: Stakeholders believe that the price of electricity will decrease in the region as regional cooperation increases. They note that about 30 to 40 percent of electricity in Macedonia is imported, mainly from Serbia, Romania, and Bulgaria. Imports are based on the market price with coordinated trading, but there is no single market operator and no open market.

They note that the region needs 4,000 MW of balancing reserves without regional cooperation but only 2,000 MW with regional cooperation and the development of an open regional market.

Stakeholders state that developing a regional market will help alleviate some of the inefficiencies of the country's small internal market by reducing costs and attracting private investment to Macedonia and other countries in the region. They note that USAID's efforts to reform the Macedonian electricity market have been consistent with and support the development of a regional market within the context of addressing Macedonia's needs.

Question 5: Based on the findings from the above questions, the evaluation team should make recommendations regarding the future direction of EE/EG/EI programming: What changes in USAID's approach in supporting the regional energy market (either in program implementation or program scope) should be undertaken?

Areas for continued support: Stakeholders stress the need for USAID to provide additional support for the development of domestic and regional electricity markets, to help convince government entities of the benefits of regional cooperation, and to work to overcome barriers to further reform the sector.

With regard to specific activities, stakeholders suggest that USAID support studies for the development and operation of national and regional open markets, such as market balancing and transmission congestion management, market rules, transmission tariff reform, and implementation of the grid code.

Stakeholders are concerned about setting up a national dispatch center and stress the need for a regional model to assess the availability of supply, which would include bilateral agreements for available transmission capacity. A regional model could also help sites develop new capacity.

Regional integration: Stakeholders note that a study is needed on integrating wind power and other renewables into the grid. REFIT are paid by the TSOs, but they do not have balancing capability; balancing and sharing of reserves could be done on a regional basis. The country needs support in developing and operating a regional balancing market, with operational and market experts providing assistance to identify problems and possible solutions. Support is also needed to implement market interventions on a regional basis.

Bosnia and Herzegovina (BiH)

Question 1: To what extent have USAID regional programs contributed to the development of a viable regional electricity market?

Market creation and stability: Without USAID assistance, there would have been little progress in reforming the electricity sector. USAID helped rehabilitate the distribution and transmission systems. The distribution company was created in 2006, and USAID helped create one transmission company out of three. Reorganization of the sector continues under the U.S. utility model.

The United States Energy Association (USEA) supported the development of the transmission company and NARUC assisted the state regulatory commission, which included supporting a regulatory partnership financed through the bilateral program. The regulatory commission has set electricity prices through an open, transparent process. Tetra Tech has helped with energy audits for the public building sector.

As a result of strengthening the electricity sector, a private group led by Chinese companies is building and financing a 350 MW lignite plant with some local company participation; part of the power generated by this plant would be available for export. The three government utilities also have plans to build new thermal- and hydro-power plants.

There are plans in the private sector to build a new thermal station of 600 MW, with some capacity sold for export. Development of the plant is in the final stages and could begin production by January 2015. Additionally, two wind parks totaling 120 MW are under development. There are also two private wind parks and requests to build more. Hydro plants are planned and under the federation's care, and there are

plans to develop 180 renewable-energy projects, including one that would generate 120 MW of wind power. There are good incentives for private-sector participation in energy efficiency and renewable energy provided through REFIT, which is in place for 150 kW for renewables at the distribution level and some small solar installations.

Regulatory reform. Advanced Engineering Associates International, Inc. (AEAI) and Pierce Atwood helped establish the regulatory agency. The Regulatory and Energy Assistance Project (REAP) improved coordination among BiH utilities and helped them meet EU requirements. USAID supported conferences to share knowledge and followed up with pertinent technical assistance.

NARUC continues to provide support to the BiH state regulator through the regulatory partnership program. NARUC also partnered with the Public Utilities Commission of Ohio, which will share information and its experience in improving sector regulation. All the new regulatory commissions in BiH visited Ohio in September 2014.

With USAID assistance, the three public utility commissions managed to cooperate and harmonize rules and regulations within BiH. USAID also provided capacity building and educated stakeholders on the operation of the electricity sector, including the regulators. In addition, USAID provided assistance and support to the public utility companies through its consultants.

Renewable-energy and energy-efficiency resources: Since 2008, nongovernment organizations (NGOs) have promoted energy efficiency in buildings. Seventeen projects have been implemented with support from the USAID Mission's 3E project, which helped develop a model to support private homes in improving their energy efficiency and procure financing. Improvement of household energy efficiency has offered the additional environmental benefit of reducing emissions, because houses are heated with coal. NGOs have had good cooperation with and support from USAID.

USAID helped with a WB project to set up a revolving fund for financing energy-efficiency projects. The private sector is now interested in participating in funding of energy-efficiency projects. The government is in the final phases of developing primary and secondary legislation to adopt an energy-efficiency law for buildings. Also under the 3E project, USAID is providing assistance to BiH to promote energy-efficiency technologies by developing demonstration projects in buildings that are co-funded by public and private counterparts. This promotion helps improve the capabilities of municipal public-sector counterparts and small- and medium-sized enterprises (SMEs) and increases public awareness about the benefits of energy efficiency.

However, cooperation among cities and municipalities and the ministry to develop energy-efficiency projects is not the norm, so continued support is needed to implement them. The government is also starting to develop an action plan for energy efficiency. All 10 cantons within BiH will need help with implementing the action plan.

Summary: There has been good cooperation between the government and USAID in developing energy projects and laws, but the political situation in BiH makes it difficult to reach agreement and hinders implementation. The legal and institutional frameworks need to be further strengthened. Capacity building has been an integral part of USAID projects. USAID helped develop a target for renewable energy and supported a renewable-energy implementation plan to meet EU requirements. USAID has

provided technical assistance and software to support regional energy planning and cooperation from 2007 to 2010. USAID is also helping BiH meet EC Treaty requirements.

USAID has provided good support, has focused on regional energy security, and has been helpful and cooperative regarding bilateral projects in the electricity and gas sectors. USAID provided a working group for regional distribution system operators and held regular meetings for the exchange of information and experiences. USAID also helped with research on the future role of the system operator.

The regional meetings set up by the USAID regional project have facilitated the sharing of views, information, and lessons learned, which supports the development of a regional electricity market. It is important to follow up on the outcomes of these meetings to ensure that objectives are met and that participants receive the support needed to achieve their specific goals.

Question 2: Which activities have been the most successful in achieving stated objectives? What were the primary factors in their relative success?

Relevance of program support: Without USAID, there would have been little progress in developing BiH's electricity market. USAID assistance helped the three regional utilities function in one market. USAID and EU support for the three regulators and the transmission company assisted the country in energy sales throughout BiH and encouraged participation in cross-border electricity trade.

Donor and stakeholder cooperation: USAID's significant assistance has improved the operations of the electricity market. Through REAP, USAID provided technical assistance to the regulator via NARUC and AEAI. The bilateral program participated jointly with the regional program in regional seminars and workshops on market design and rules. BiH is required to have an open electricity market by 2015 to comply with the EU directive, so USAID is providing assistance in meeting EU requirements. In addition to USAID, EBRD is helping the country meet this requirement.

Energy security is a prime issue for USAID and the EU. However, USAID programs in BiH are driven by local context and conditions and the ethnic situation. BiH is a major exporter of electricity to the region and is very interested in the development of a competitive regional electricity market. There has been close cooperation between the USAID bilateral and regional programs since 2004 that has helped coordinate activities between the two programs to reach common goals.

The USAID regional project coordinates with the ECS to make progress in the energy sector. There has been good cooperation between USAID, the EU, EBRD, and the United Nations Development Programme (UNDP), which has helped BiH reform, strengthen, and develop its electricity sector and participate in the regional market.

Energy-sector stakeholders in BiH note that USAID is helpful in getting institutions to share information and experiences, which in turn helps strengthen the sector and supports development of the domestic and regional markets. Stakeholders give a high rating to the consultants provided by USAID and credit USAID with being much more flexible in providing assistance than other donors.

Question 3: For programs that did not contribute to market development, what were the primary factors in their lack of success? How much could these factors have been influenced by USAID? For factors within USAID’s control, what should have been done differently?

Political considerations and country limitations: It takes time to reach the goals of regional cooperation in the electricity market and improved regional energy security, and these goals need continuous support over time.

There have been revisions to the electricity laws and tariffs, but it is difficult to raise the tariffs. Affordability of electricity is an issue that complicates implementation of sector reform policies and initiatives.

The capacity of the Ministry of Foreign Trade is weak, and although there has been some progress in capacity building at the ministry, more action toward this goal needs to be taken. The ministry is also understaffed, and much of the lack of capacity within energy-sector entities resides at the higher management levels within the organizations. Upcoming elections may further complicate matters because key personnel may change, which may make progress in sector reform and market development difficult.

There has been little progress in regional cooperation among the countries due to difficulties with the political process. There is a lack of consensus and implementation in BiH on how to proceed and develop priorities, which is a major weakness of the government that hinders implementation of donor support. In addition, countries in the region are at different stages of reforming their electricity markets, which complicates the development of a regional electricity market.

Participation by regulatory commissions: The regulators are presently in a secondary role in the regional program, but they could be more involved. Mostly, they are observers, but they still need to follow EU directives, rules, and regulations.

Donor cooperation: Although USAID has established regular meetings with donors to promote cooperation and coordination among programs and projects, stakeholders are of the view that coordination among donors could be improved to avoid overlap. They believe that EU, GIZ, USAID, EBRD, and other donors need more discussions with beneficiaries to identify priorities and gaps in assistance and to increase their involvement in assistance efforts. Stakeholders indicate that donor cooperation is inconsistent.

Question 4: Does evidence indicate that the creation of a regional energy market would increase energy security and stability in the region?

Overall assessment: Promoting energy security is a prime focus of USAID assistance. Exports of power from BiH increased twice in 2014 versus 2013. USAID assistance supported regional cooperation and reform of the energy sector.

There are incentives for private-sector participation in energy efficiency and renewable energy, and REFIT is provided to eligible projects. Hydropower projects are being developed by the existing utilities, and one thermal plant is under development by Chinese entities to be operational by 2016 and to sell into the open market.

Question 5: Based on the findings from the above questions, the evaluation team should make recommendations regarding the future direction of EE/EG/EI programming: What changes in USAID's approach in supporting the regional energy market (either in program implementation or program scope) should be undertaken?

Areas of continued support: Cooperation among donors is getting more difficult but could be improved as divergence among the electricity sectors in regional countries becomes greater. Therefore, the regional program could focus more on individual countries so that progress levels among countries in the region remain more even. Capacity building also could be a priority.

There is need for more involvement by the USAID regional program in BiH, because the country is a major exporter of power to the region. BiH needs help meeting its EU directive requirements. Greater transparency and access to good information and data are also necessary. Issues to be addressed include support for the state regulatory commission, tariff reform, policy development, and capacity building for the ministry. Sector laws are good, but support is needed for their implementation.

Support is also needed for setting up a revolving fund to support energy-efficiency projects, license energy service companies (ESCOs) to undertake energy audits, issue energy certificates, and collect and analyze data on consumption and energy savings.

USAID could provide assistance on energy efficiency and renewable energy and help develop pilot projects in primary schools and public buildings that work with the municipalities. Assistance is also needed to integrate renewable energy into the grid, establish connection rules, and establish one state operator in BiH for the renewable-energy sector. Capacity building and training for state entities and ministries is required to provide assistance in defining their role in the new electricity market and in operating the market.

ISO needs significant capacity building and knowledge on developing and operating in a regional open market. It is also necessary to educate other stakeholders on ISO's role in the new electricity market.

USAID could help strengthen the political independence of regulatory commissions throughout the region, because presently some are more independent than others. The regional program could also help define new responsibilities for the regulators following increased regional cooperation and trade. Greater cooperation among the regulators in the region is required along with increased exchange of information and sharing of experiences. Harmonization of legislation and laws among the countries in the region is needed, as regulators need to draft rules based on these laws. Additionally, help is needed with harmonization of regulations, tariffs, and rules across the region.

There is a lack of political will in BiH to implement EU requirements, and USAID could consider supporting the country in adopting and approving laws and regulations.

Regional activities: The regional program is sponsoring regional meetings and workshops. There is a need for constant involvement regionally to implement projects and achieve results.

Help is needed to develop regional investment projects, involve the private sector, and improve regional cooperation. Assistance also could be provided on obtaining expressions of interest from private-sector entities and helping establish private consortiums to support electricity and gas projects. USAID could

help mobilize the private sector to participate in energy-efficiency and renewable-energy projects being supported by UNDP.

USAID could provide capacity building and technical assistance to address ancillary services issues for the regional market, improve operational efficiency and stability, and improve energy security. USAID could also provide help on market organization and development of a regional operator for the region. There is also a need to establish a regional power exchange and to harmonize the rules, procedures, and license requirements among regional countries.

V. CONCLUSIONS

The Optimal team performed an independent evaluation and assessment of the impact and effectiveness of the USAID regional program in South East Europe based on data and information Optimal gathered through interviews with regional stakeholders and the USAID implementing partners, and through research and review of papers, reports, and other documents provided by USAID and obtained from other sources. The results of the evaluation are discussed in the above sections of the report. The key findings and conclusions are summarized below.

The consensus among stakeholders is that little progress toward electricity sector reform and regional cooperation would have taken place without the assistance provided by the USAID bilateral and regional programs. USAID's regional programs were found to be successful in providing technical assistance, and building capacity to promote electricity sector reform in individual countries and within the region. USAID's assistance has been consistent with the sector policies of the countries, and with the mandates and directives of the EC Treaty and EC energy package, and has led to significant improvements in the market structure and operation of the electricity sector in individual countries. USAID's assistance has thus materially progressed the broader objectives of developing a regional electricity market and improving regional energy security. Making further progress in establishing a fully functional regional electricity market will require ongoing commitment and continued support from the EU, USAID, and other development partners. Political willingness to implement recommendations and stronger enforcement of deadlines to implement EC Treaty and EU directives is also required to ensure that the goal of establishing a regional electricity market with improved energy security is attained, and that gains in sector reforms and institutions are institutionalized and sustainable.

Based on the evaluation of USAID's regional programs in South East Europe, the key factors that contributed to the success, failure or shortcoming of the program, and recommendations for future activities are summarized below.

Results achieved by country and on a regional basis

Table 2: Summary of achievements by USAID programs

Major Results Achieved	Albania	Kosovo	Macedonia	Bosnia and Herzegovina (BiH)	Regionally
	Development of primary and secondary legislation and by-laws consistent with the EU Treaty	Development of a draft energy strategy to support developing a regional energy market.	Assisted in development of market rules and a new energy law	Provided assistance with energy audits for the public building sector.	Helped each country meet their EU Treaty and Energy Secretariat requirements.
	Development of an electricity market model, mechanisms and codes.	Supported restructuring and unbundling of the electricity sector and operational and management improvements for sector entities.	Provided assistance on regional transmission planning.	Helped improve cooperation among the three regulatory commissions and harmonize their rules and regulations.	Helped set up an independent regulatory commission, TRANSCO, and ISO in each country.
	Helped developed transmission links with Macedonia and Montenegro to support power trade.	Supported a study on issues related to security of supply and other issues to promote development of domestic and regional markets.	Worked with the distribution companies to develop a plan for electricity distribution.	Provided assistance in developing renewable energy and energy efficiency resources in public buildings, schools, and private homes, and helped improved cooperation among municipalities to support renewable energy and energy efficiency projects.	Capacity building of the regulatory commissions has been institutionalized by the development of the Energy Regulators Regional Association (ERRA); a regional association of all the regional regulatory commissions with its own staff and budget to provide ongoing training.
	Assisted the regulator in developing licensing and tariff reforms and implementation.	Supporting linkage of the Albania-Kosovo energy sectors to support increased trade in electricity.	Performed technical studies to support reform efforts and communicated results to sector stakeholders.	Helped developed a target for development of renewable energy resources.	USAID is developing a sustainable, locally operated, and financed entity with the Macedonia ISO acting as the secretariat with project staff to coordinate activities and manage development, update, and implement a regional transmission system model.
	Development of actions plans for development of renewable energy and energy efficiency resources.	Helped government and political entities understand the benefits of regional markets and their role in supporting market development.	Supported development of energy efficiency and renewable energy resources to diversify domestic resource availability.	Provided a working group to assist regional distribution system operators in metering load and generation requirements.	Regional meetings and workshops provided good forums for sharing of information, best practices, and lessons learned.
	Provided capacity building and training to sector stakeholders.	Assisted in developing market models, rules, and procedures to support increased electricity trade and stronger interconnections with regional countries.	Helped address options for incorporating renewable energy and energy efficiency resources into the domestic market.	Helped developed incentives for private sector participation in renewable energy and energy efficiency resource development.	
	Provided unbiased support and credibility to sector reform and projects.				

Key factors for success of USAID's regional programs

USAID program relevance

- Program goals and objectives were identified in consultation with ministries and other stakeholders.
- Program objectives were consistent with national energy policies and strategies.
- Program objectives were consistent with the mandates and directives of the EC Treaty and EU energy package.
- Program activities were driven by the local context and conditions, and considered the political realities of the countries and the region.

USAID program effectiveness

- Regional and bilateral programs together have significantly contributed to progress made in restructuring the electricity sector and strengthening sector institutions in individual countries.
- Programs have supported sector unbundling, which is mandated by EU directives and has contributed to improved sector operations.
- Programs supported the establishment of functional electricity regulatory commissions, which is consistent with EU directives, assisted in improving sector governance, and increased transparency.
- Programs supported the development of primary and secondary legislation in support of sector policies.
- Programs supported the development of tariffs, grid codes, market models, and transmission interconnections consistent with policy objectives and EC Treaty requirements for the creation of a regional electricity market.
- Capacity building and training has generally been effective in developing the capabilities of sector institutions and training personnel.
- The regional meetings coordinated by USAID served as a forum for exchange of information and sharing of experiences and lessons learned, which were important to improve coordination between countries, and build capacity and support for developing regional electricity markets.
- USAID's interactions with stakeholders have helped policymakers better understand the benefits of regional electricity markets to meet domestic needs and improve energy security.
- Program outcomes have improved market operations and progressed the objective of attracting private investment, though further improvements are needed.

- USAID is a trusted partner, which provides objective, professional, and unbiased advice for the development of the energy sector, and its opinions and recommendations are viewed with credibility and have helped improve the market environment.
- Overall, USAID programs have helped progress the overarching objectives of developing a regional electricity market that also improves regional energy security

USAID program management

- USAID is viewed as being responsive to stakeholder needs and being flexible in its approach to providing assistance in a changing energy market environment compared to other major development partners in the region.
- Coordination and cooperation between regional and bilateral programs have been largely good, which has increased the impact of specific program activities.
- USAID implementing partners (consultants) are generally considered to be effective in providing assistance and building capacity of stakeholders.
- USAID's use of U.S. and regional consultants supplemented by support from U.S. utility experts and regulators is considered a major strength of its programming, which provided needed expertise, increased the flexibility of response, and improved the effectiveness of its activities.
- USAID has generally consulted and coordinated its activities with the ECS, EU, and other major development partners active in the countries and in the region, which has resulted in the development of programs that generally were complementary to other efforts and avoided duplication.

Causes of program failures or shortcomings, and recommendations for improving USAID regional programs for current and future activities

Factors not under the control of USAID

- The economic and political situations in the countries and in the region impact the effectiveness of specific activities and of program planning and scheduling.
- Lack of political will, slow decision-making, and weak absorptive and implementation capacity of policymakers and sector institutions makes it challenging for consultants to undertake activities and for countries to implement recommendations. The political establishment in the countries also lacks a clear long-term vision for developing their energy sectors.
- The Ministries and sector entities undergo frequent changes in personnel and are unable to retain capable staff, which makes it difficult to implement recommendations.
- The requirements under subsequent EU energy packages have necessitated revisions to laws, regulations, and market models.
- Lack of independence of regulatory commissions hinders improved sector operations, governance, and transparency.

- Affordability of electricity is an issue in the countries examined in this evaluation and weakens political will to undertake tariff reforms and cede independence to regulatory commissions.
- Countries have developed renewable energy and energy efficiency plans, but implementation has been weak, and countries do not have a clear vision for their implementation. The low tariffs are also an obstacle to the development of these resources.
- Countries are still largely focused on meeting domestic demand through domestic resources and bilateral trades rather than through participation in a regional market. The strained political legacy of the countries of the region has led to a lack of trust in regional cooperation and exacerbates the situation.
- The generation companies are still largely state-owned and do not have the resources to make investments or, in some cases, rehabilitate existing infrastructure. The performance of distribution companies is mixed, and while some countries having successfully privatized the firms, others have been less successful and distribution losses remain high.
- Public financing for developing the energy sector is scarce, and the countries need private investments in the energy sector. Private investors are, however, not keen to invest because of the perceived high political and country risks.

Factors under control of USAID & Recommendations for Improvements in Program Implementation for current and future Programs

- Stakeholders, while acclaiming USAID’s support, are also critical of the fact that USAID focuses too strongly on development of legislation and regulations, and focuses less on the implementation of recommendations. Some criticism is also expressed at USAID’s lack of strong support for renewable energy and EE, though USAID programs have provided some support to these initiatives.
- Many regional institutions are weak and in need of additional technical assistance and capacity building and some agencies feel alienated from the donor consultation process. USAID could strengthen capacity building and widen its consultations and involvement of sector institutions by garnering support for sector reforms and improved market operations. USAID could work with stakeholders, the private sector, and NGOs to seek “champions” to support and promote specific activities and improve regional cooperation.
- Capacity building and training for electricity sector entities could be increased to strengthen their ability to implement reforms and increase regional cooperation. The focus could be sustainable capacity building of sector institutions rather than training of personnel who may retire or be moved from institutions.
- USAID could work with political institutions and local communities to better communicate the benefits of regional energy markets. This increased communication could be accomplished through regional workshops or symposiums or through targeted actions by USAID consultants and joint efforts with other development partners, NGOs, and the private sector to improve communication.

- Regional regulators often play a secondary role in the regional program, and could be involved more in discussions about USAID-sponsored projects and their implementation. Regulators also need to better understand their role in reforming the regional energy sector and in promoting regional trade, as they are responsible for regulating these activities and ultimately setting tariffs for cost recovery.
- Donor coordination takes place on an ad-hoc basis, and while USAID has generally coordinated its efforts with other development partners, information sharing is still weak. It is reported that the terms of reference and reports generated through technical assistance are not shared by USAID (and equally by other development partners), which lessens the leverage it potentially could obtain from other development partners. Improved coordination would serve to further improve complementarity of development partner efforts.
- There is some criticism that not all USAID consultants have good knowledge of the region and of EU energy laws and markets, which reduces their effectiveness. Stakeholders also are critical of the same U.S. consulting firms and consultants being procured by USAID for several years, which perpetuates the continuation of consultants who did not bring the appropriate expertise. The perception is that some long-term experts are needed to provide focused and ongoing support to policymakers in countries where the needs of the energy sector are rapidly evolving.
- There is a perception among stakeholders of discord in USAID as it seeks to find a balance between supporting national and regional programs. Regional Stakeholders indicated that a regional USAID office may be better able to coordinate regional efforts in a more responsive manner than coordinating efforts from Washington, D.C.
- A long-term commitment and continual presence in the region is needed to build and maintain support for the reform process, and to prevent “backsliding” by regional stakeholders and government entities
- USAID is a trusted partner, which is highly regarded in the region, but there is a perception that it is not leveraging its strength to influence political leadership. USAID could make its support contingent on countries implementing recommendations of past assistance projects.

Evidence that creation of a regional energy market increases security and stability in the region

- USAID assistance for the development of regional energy markets and improved regional energy security is consistent with the goals of the countries, and with the requirements of the EC Treaty and EU Directives. The countries have progressed in liberalizing their energy markets and have developed market rules consistent with the EU Third Energy Package requirements.
- The countries examined in this evaluation are net importers of electricity, with the exception of BiH, which is a major exporter in the region. The countries have transmission interconnections with neighboring countries and make bilateral trades and import power through electricity traders.
- Diversification in energy generation resources is critical for all countries, and countries can improve their energy security through increased regional development of all available resources,

including renewable energy resources. The domestic markets are not large enough to support large-scale development of some resources (such as the lignite mines in Kosovo or other renewable energy resources), and a regional market would enable countries to develop these resources in a more optimal manner.

- Open access and choice in supply is required by the present deadline for liberalized energy markets, but the countries in the region are not yet ready for the 2015 open market (only large customers are generally eligible), and the weak distribution system and absence of adequate metering makes it challenging to provide open access to all customers.
- While there is agreement that regional energy markets will improve energy security, the present focus of countries is on increasing bilateral energy trade rather than on participating in a regional electricity markets.

VI. RECOMMENDATIONS FOR FUTURE EE/EG/EI PROGRAMMING

Based on the findings of this evaluation and the country specific needs discussed above, USAID could consider supporting the following activities in support of strengthening domestic energy markets and promoting regional energy trade. Given the criticality and diversity of needs in the region, it is difficult to prioritize support, but the suggestions below are ordered based on the priorities of stakeholders. Recommendations for future programming and provide broadly for all four countries in region examined in this evaluation, with some specific examples for each country, where applicable. The suggested programs are also consistent with the needs for the countries to develop Low Emissions Development Strategies (LEDS), which USAID has rightly championed in its current programming.

Liberalized National and Regional Energy Markets

- **Support Required:** Countries need support to fully liberalize their energy markets through full unbundling, open access, independent regulation, and participation in a regional energy market consistent with requirements under the EU Third Energy Package.
- **Suggested USAID Action:** A range of support activities could be considered to support energy ministries, utility entities and regulatory commissions to meet requirements under the EU Third Energy Package.

Ministries and policymakers need support to develop secondary legislation and regulations in support of revised or new energy laws being adopted to liberalize domestic energy markets and participate in regional energy markets consistent with EU Directives. Ministries also need support to implement the laws and regulations that have already been developed.

Regulatory agencies need additional support to revise the regulatory framework and the market rules to be fully consistent with the EU Third Energy Package, and support to implement the new market rules and auxiliary services. Regulatory agencies also need support to define their role in regulating regional energy trade and coordination with the regional regulators.

Transmission system operators and market operators need support for developing a competitive, open regional market, including monitoring and clearing mechanisms for energy trade, balancing and sharing of reserves, harmonization of rules, procedures, tariffs and licensing requirements among regional countries, and integration of renewable energy generation into the national and regional transmission grid. Transmission system operators also need support to undertake national and regional transmission planning to optimally utilize generation resources, and coordinate regional trading activities with the ENTSO-E.

Support is needed to further liberalize the generation markets to make them more competitive. A framework to incentivize IPPs and integrate them in the new electricity market structure could be supported.

Support is needed for improved sector governance and increased transparency in national energy planning and operations is needed to enable countries to participate in regional energy markets and to promote increased private sector investments. USAID could also consider supporting the

development of regional investment projects and for the development of a framework for public private partnerships in energy generation.

- Sample Country Specific Actions: **Albania** needs support to adopt a new power sector law consistent with EU Directives and the new market structure, which supports development of new generation capacity and allows third party access. The transmission operator needs support to develop mechanisms for spot trading and market based balancing mechanisms.

BiH needs support to develop state-level legislation for implementing the EU Third Energy Package. The country needs support for devolving operational powers to the national regulator from state-level regulators. EPBiH and EPHZHB and the national transmission entity need support for full unbundling and independent operations. The country also needs support for providing full third party access and needs support for developing market based balancing mechanisms.

Kosovo needs support to fully unbundle KEDS, the distribution entity and provide open access to third-party suppliers of power. The country needs continued support to reach agreement with EMS/Serbia to gain independence for its system operators.

Macedonia needs support to unbundle the distribution system operator and improve third-party access.. The country also needs support to develop market based balancing mechanisms and ancillary services.

- Partnering Agencies: Support for the above activities should be coordinated with relevant ministries, regulatory agencies and utility entities, and the Energy Community.

Support for Renewable Energy and Energy Efficiency

- Support Required: Countries in the region need support for implementing their National Renewable Energy Action Plan (NREAP) and Energy Efficiency Action Plans (EEAP).
- Suggested USAID Action: USAID could support both the updating and the implementation of NREAPs and EEAPs. Support is required for planning programs, monitoring and evaluation of programs, financing programs (mechanisms such as Funds, Credit Lines, DCA, etc), streamlining the procurement process for RE and EE projects, issuance of green and white certificates, collection and analysis of data, and improving coordination among municipalities and other government entities involved in implementation.
- Sample Country Specific Actions: **Albania** needs support to develop an RE law and prepare a NREAP. The country also needs support to develop secondary legislation to integrate RE into the grid and provide RE priority grid access. The country needs support to adopt an EE Law on building (presently in draft form), and develop legislation for appliance labeling. The country also needs support to develop a EEAP.

BiH needs support to develop a national level NREAP integrating entity level plans, and develop national legislation in support of integrating RE into the grid. The country also needs support to develop EE legislation and secondary legislation to implement the EEAP, national level institutional framework for EE, and labeling directives for EE.

Kosovo needs support to develop a new market design to integrate RE into the grid and strengthen the policy framework for RE. The country has adopted a NREAP but has not developed any investment plans for new RE generation, and needs support to develop monitoring mechanisms for guaranteeing of origin of RE on the grid. The country also needs support to strengthen grid capacity to integrate RE. The country needs support to develop secondary legislation for the EE law and implement the 2nd NEEAP, which it has adopted.

Macedonia needs support to integrate RE into the grid through development of primary legislation in support of RE (only grid codes exist). The country needs support to adopt the 2nd NEEAP, and develop energy databases for EE planning.

- Partnering Agencies: Support for the above activities should be coordinated with the ministries, utilities, regulators and private sector participants. Regional RE projects should be coordinated with the Energy Community, ENTSO-E and EERA.

Long-Term Vision for the Energy Sector

- Support Required: Countries in the region need continued support from USAID, as well as other development partners to develop a clear long-term vision and strategy for the energy sector.
- Suggested USAID Action: USAID could consider supporting energy ministries and policymakers develop a coherent vision and strategy document for the development of energy sector, consistent with existing and revised laws developed for the governance of the energy sector. The strategy document should describe the energy resources to be utilized to meet future energy demand including regional exchange of energy consistent with the requirements of EC directives that require countered to develop liberalized and open energy markets. The strategy document should be accompanied by a roadmap and defined timelines to meet the strategic goals and objectives. USAID could also consider supporting the development of a regional strategy and roadmap that would draw from national roadmaps and ensure an integrated approach to planning energy resources in the region.
- Sample Country Specific Actions: All four countries examined in this evaluation would benefit from the development of robust national energy strategies and roadmap that are consistent with EU Directives and promote regional energy trade.
- Partnering Agencies: Support for the development of national energy strategies and roadmaps should be developed in coordination with key stakeholders including relevant ministries utility, utilities and national regulatory commissions to ensure that goals and timelines are realistic and achievable. Development of the regional roadmap should be coordinated with the Energy Community in Vienna and the Energy Regulators Regional Association (ERRA) in Budapest.

Support for Capacity Building of Sector Institutions

- Support Required: Capacity building for energy sector institutions and agencies.
- Suggested USAID Action: USAID could increase support for sustainable capacity building of sector institutions and policymakers. Capacity building is required for transmission system operators and market operators for ancillary services, market balancing and settlement, regional

resource planning, and increased integration of intermittent RE into national grid systems. Regulators need continued support for the implementation of regulations consistent with the EU Third Energy Package and for promoting tariff reform. Policymakers need capacity building for developing strategic energy plans and development roadmaps. Local financial institutions need capacity building for financing RE and EE projects. And local municipalities need capacity building to undertake EE projects. Support is also needed to develop awareness campaigns to strengthen political and public support for the development of regional electricity markets.

The focus of capacity building programs should be to put in place mechanisms for long-term and sustained strengthening of institutions and training of personnel, which will require the development of standardized planning and implementation processes, procedures, and training and education modules that can repeatedly be used within institutions. To ensure sustainability of capacity building activities, programs should ensure sustainable sources of funding within institutions (or nationally) to update training modules and provide periodic training.

- Partnering Agencies: Support for the above activities should be coordinated with ministries, utility entities, regulators, and NGOs active with civil society.

Strengthening Regional Sector Entities

- Support Required: Regional sector institutions need support to define their role and coordination with national agencies in promoting regional trade in energy
- Suggested USAID Action: USAID could consider supporting the regional regulatory association, ERRA, in defining a clear role in regulating regional energy trade, and its coordination with national regulatory agencies. Regional regulators need assistance to provide and price ancillary services in transmission systems and need support for developing a competitive, open regional market.
- Partnering Agencies: Support for the above activities should be coordinated with the ERRA, the Energy Community, and the ENTSO-E

Tariff Reform

- Support Required: Countries need support in reforming their tariffs and phasing out subsidies.
- Suggested USAID Action: USAID could consider supporting regulatory agencies and utilities in developing cost of service studies in support of reforming tariffs and developing cost-reflective tariffs. Support is also needed to prepare willingness-to-pay lifeline tariff studies and help develop social safety nets for the energy and income poor.
- Sample Country Specific Actions: **Albania** needs support for reforming transmission tariffs and reform retail energy prices.
Kosovo needs support for deregulating retail prices, which are presently heavily regulated with KEDS as the only purchaser of all power at regulated prices.
- Partnering Agencies: Support should be coordinated with regulatory agencies, utilities and policymakers in ministries.

VII. ANNEXES

Annex 1: Statement of Work

SCOPE OF WORK: *Europe & Eurasia Regional Energy Security Activity Evaluation*

BACKGROUND

For the former Communist countries of Eastern Europe, a key process in the transition to a market-based democracy has been the reform of the energy sector. During Communist rule, governments operated highly centralized energy systems to achieve political and social goals with little regard for economic viability. For example, governments set low electricity tariffs that did not cover the costs of operations, which created a drain on public finances (through subsidies) and minimized investment in maintenance. The low tariffs also contributed to inefficient generation, transmission, and use of energy throughout the economy, and countries had little incentive or institutional capacity to improve. As a result, by the early 1990s, electricity systems throughout the region consisted of aging and inefficient infrastructure with high technical and non-technical losses, as well as opaque financing and governance that made the sector vulnerable to corruption.

The creation of newly independent states further challenged the region's energy sector by breaking up politically and economically interconnected blocks into a patchwork of small markets with unequally distributed resources. Furthermore, the war in the former Yugoslavia significantly damaged infrastructure in many Balkan countries.

Although the recent economic downturn has masked the potential energy supply shortfall, a recent World Bank analysis ("Lights Out?") projects widespread regional electricity shortages of over 10 percent within 7 years and over 30 percent by 2030. To avoid these shortages, the World Bank estimates that investment from 2012 to 2020 must increase by a factor of 2.5, from the currently projected 6 billion to 15 billion Euros.

In recent years, the high import dependency and lack of resource diversity characteristic of the region has led to acute energy shortages with significant social impacts, notably in Ukraine in 2008 (due to the cutoff of Russian natural gas supplies) and Albania in 2012 (due to the combination of a failed electric distribution company privatization and dependence on variable hydropower resources during a drought year).

ACTIVITY OBJECTIVES AND PURPOSE

To address the challenges posed by the energy sector, USAID's Bureau for Europe and Eurasia, Office of Economic Growth, Energy and Infrastructure Division (EE/EG/EI) strives to increase energy security in the region – and in turn political stability and economic growth – through supporting the creation of a regional electricity market. EE/EG/EI expects that such a market would:

- Allow the Europe and Eurasia region (E&E) to achieve a large enough market size to attract needed private investment and exploit economies of scale;
- Optimize energy investment by encouraging transparent allocation of cross-border electric transmission capacity and consequent sharing of electric generation reserves;
- Ease the incorporation of intermittent renewable energy (e.g., wind, solar) sources by providing a greater resource base with which to balance fluctuating supply;
- Lead to economically sustainable, cost-reflective tariffs;

- Incentivize infrastructure upgrades and service improvements; and
- Increase transparency, independence, and financial viability of electric utilities.

These impacts would improve energy security by:

- Providing E&E countries with more diverse energy options (in terms of both fuels [e.g., natural gas, wind, solar] and geographic origin of energy);
- Increasing the financial viability of electric utilities and other energy companies and service providers; and
- Improving economy-wide energy efficiency (incentivized by higher, cost-reflective energy prices).

In its support for the creation of a regional electricity market, EE/EG/EI has worked largely through the Energy Community process. The Energy Community Treaty seeks to harmonize energy and environmental practices and regulations of the Contracting Parties in the Balkans and Eastern Europe with those of the European Union. Accomplishing this goal will modernize energy governance in the E&E region and link E&E countries to the EU internal energy market, which would enhance energy security and encourage investment. USAID supports the Energy Community through direct technical assistance to the Contracting Parties in the development of supporting energy sector legislation and regulations, as well as through assistance in building the capacity of energy sector regulators and ministries in the region to carry out their responsibilities in sector governance and implementation of the Energy Community Treaty.

Specifically, within the framework of its overall objective to advance the integration of the E&E region within the European Union, EE/EG/EI has supported the following projects towards creating a sustainable electricity market:

- Assistance to national governments on electric sector reform and harmonization of regulations with European Union standards, including drafting legislation, developing bid procedures, and advising on post-privatization processes (Primary implementers: International Resources Group, Tetra Tech, AEAI, Pierce Atwood, and others).
- Strengthening of regulatory capacity and expansion of cross-border regulatory cooperation to improve utility performance, customer service, and trade and promote investment in renewable energy and energy efficiency (Primary Implementer: National Association of Regulatory Utility Commissioners).
- Supporting collaborative working groups of national transmission system operators to develop long-term plans for identifying priority investments in regional transmission infrastructure (Primary implementer: United States Energy Association)

DEVELOPMENT CHALLENGE

EE/EG/EI seeks an external evaluation to answer the question: has USAID programming contributed to the creation of a viable regional electricity market that, in turn, contributes to regional energy security? EE/EG/EI would like for the evaluation team to review and analyze the impact of USAID programming specifically related to market development of the energy sector (market creation and stability, regulatory reform, pathways for cross-border trade, etc.) in the region since 2005, when the Energy Community was first established. This work will involve measuring the impact of multiple regional programs in multiple

countries (e.g., Albania, BiH, Kosovo, Macedonia, Moldova, Serbia, and Ukraine). Bilateral programs will not be evaluated in detail, but instead the evaluation will consider the complementarity or regional and bilateral programs.

EVALUATION PURPOSE

The outcome of the evaluation will allow EE/EG/EI to make critical decisions regarding the direction for their future programming. In particular, EE/EG/EI seeks to identify 1) which interventions have contributed to the development of a regional electricity market and expanded energy sector investment, 2) which of these can be scaled up in follow-up activities, and 3) the reason that activities not included in (1) were unsuccessful.

EI is developing a new activity that will address the complexity and difficulty of implementing prior reforms and addressing those reforms that remain serious impediments to electricity investment and trade, including renewable energy. It will address the need for development of larger regional markets needed for the smaller countries and seek to “scale up” pilots, and lessons learned into significantly expanded investment.

a) Evaluation scope

The Evaluation will review USAID programming related to regional energy security in the Europe and Eurasia region, focusing on the projects listed in Section II.

b) Audience and intended users

The primary audience for this evaluation is EE/EG/EI, who will use the results to design its future programming. In addition, though, this evaluation will likely be provided to EE/EG/EI’s implementers, donors, and collaborators who will partner with EE/EG/EI in the execution of its future programming.

EVALUATION QUESTIONS

EG/EI has developed the following questions for this evaluation. They are presented in order of priority:

1. To what extent have USAID regional programs contributed to the development of a viable regional electricity market (market creation and stability, regulatory reform, pathways for cross-border trade, etc.)? (estimated 30 percent level of effort).
2. Which activities have been the most successful in achieving stated objectives? What were the primary factors for relative success? (estimated 20 percent level of effort).
3. For programs that did not contribute to market development, what were the primary factors for lack of success? How much could these factors have been influenced by USAID? For factors within USAID control, what should USAID have done differently? (estimated 20 percent level of effort).
4. Does evidence support that creation of a regional energy market would increase energy security and stability in the region? (Note that EE/EG/EI defines critical components of energy security in Section II, although the evaluator is welcome to suggest alternatives.)(estimated 15 percent level of effort).

5. Based on the findings from the above questions, the evaluation team should make recommendations regarding future direction of EE/EG/EI Programing: what changes in USAID’s approach to supporting the regional energy market (either in program implementation or program scope) should be undertaken? (estimated 15 percent level of effort).

RECOMMENDED EVALUATION DESIGN AND DATA COLLECTION METHODOLOGY

a) Evaluation design

The evaluator will provide a detailed data collection method for each evaluation question in the Evaluation Design. It is expected that these methods will include, but not be limited to, the following

1. Pre-Fieldwork – Prior to fieldwork, the evaluator shall collect and review: previously conducted assessments, evaluations, research, and other performance reports on U.S. government economic assistance directly relevant to identified priorities for each focus country; EU-produced assessments, evaluations, research, and other performance or monitoring reports relevant to identified priorities for each focus country; implementer and implementing partner reporting documents; and any other relevant materials. EE/EG/EI will consult with the Energy Community Secretariat to identify the appropriate points of contact that the contractor could work with throughout the course of the evaluation.

The contractor will also work with EE/EG/EI to refine the specific evaluation questions, develop the evaluation methodologies and instruments, and arrange for local personnel and data collection logistics in the focus countries. Time could be allotted for meetings with relevant offices, agencies, and organizations in Washington, D.C. to gain a greater understanding of their respective economic assistance activities relevant to the evaluation.

2. Fieldwork – Design and conduct detailed interviews with select USAID officials, implementers, and key stakeholders in focus countries (such as Ministry of Energy officials).
3. Survey of datasets regarding the energy situation in E&E, from, e.g., World Bank, United Nations Agencies, International Energy Agency, etc.

When applicable, the data collected must be disaggregated by gender (e.g. percentage of trainees that were female).

b) Data analysis

The Contractor will provide a detailed data analysis plan in the Evaluation Design. The plan must directly address each evaluation question with specific methods for collecting and for analyzing the data that will be used to answer it. The Contractor could utilize appropriate primary and secondary sources to support the evaluation:

c) Methodological strengths and limitations

The contractor will disclose all methodological strengths and limitations in the Evaluation Design.

STAFFING

a) Team size and qualifications

The Evaluation team shall demonstrate an understanding of the E&E energy sector and show familiarity with USAID’s Evaluation Policy. The evaluation team will consist of three people: a monitoring and evaluation expert, an energy sector technical expert, and one local advisor (who may change depending

on the country). The team will work under the guidance of the Technical Officer/Contracting Officer Representative of EE/EG/EI or his/her designee.

USAID will work with the Contractor to identify appropriate team members, and will have final authority to approve the composition of the team. All team members will be required to provide a signed statement attesting to a lack of conflict of interest, or describing an existing conflict of interest. The Evaluation Team shall demonstrate familiarity with USAID's Evaluation Policy.

All modifications to the scope of work, whether in technical requirements, evaluation questions, evaluation team composition, methodology or timeline, need to be agreed upon in writing by the technical officer.

DELIVERABLES AND PRODUCTS

1. Draft and Final Work Plan and Evaluation Design (hard and electronic copies): A draft Work Plan and Evaluation Design document for the evaluation shall be completed by the lead evaluator within 1 month of the Contracting Officer's Representative (COR)'s approval of the task and presented to the COR or his/her designee, who will share it with EE/EG/EI. EE/EG/EI will then evaluate the draft work plan and approve it after any necessary revisions. The evaluation design will include a detailed evaluation design matrix (including the key questions, methods, and data sources used to address each question and the data analysis plan for each question), draft questionnaires and other data collection instruments or their main features, known limitations to the evaluation design, and a dissemination plan. The final design requires COR approval. At the discretion of EE/EG/EI, the design will be shared with country-level stakeholders as well as with the implementing partners for comment before being finalized. The work plan will include the anticipated schedule and logistical arrangements and delineate the roles and responsibilities of members of the evaluation team.
2. Draft Report (hard and electronic copies): Subject to EE/EG/EI review. Due 1 month after the field work completion.
3. Final Evaluation Report (hard and electronic copies): The evaluation final report should include an executive summary, introduction, background of the local context and the activity being evaluated, the main evaluation questions, the methodology or methodologies, the limitations to the evaluation, findings, conclusions, and recommendations and lessons learned (if applicable). The executive summary should be 3 to 5 pages in length and summarize the purpose, background of the activity being evaluated, main evaluation questions, methods, findings, conclusions, and recommendations and lessons learned (if applicable). The evaluation methodology shall be explained in the report in detail. Limitations to the evaluation shall be disclosed in the report, with particular attention to the limitations associated with the evaluation methodology (e.g., selection bias, recall bias, unobservable differences between comparator groups, etc.). The annexes to the report shall include:
 - The Evaluation Scope of Work
 - A three-columned table that present the findings, conclusions, and recommendations and clearly demonstrates the linkages between them (e.g., annex O in http://pdf.usaid.gov/pdf_docs/PDACU729.pdf).

- Any “statements of differences” regarding significant unresolved difference of opinion by funders, implementers, or members of the evaluation team
- All tools used in conducting the evaluation, such as questionnaires, checklists, and discussion guides
- Sources of information properly identified and listed.
- Disclosure of conflicts of interest forms for all evaluation team members, either attesting to a lack of conflict of interest or describing existing conflict of interest.

The Contractor will make the final evaluation reports publicly available through the Development Experience Clearinghouse (DEC) within 30 calendar days of final approval of the formatted report.

In accordance with USAID evaluation policy, draft and final evaluation reports will be evaluated against the following criteria to ensure the quality of the evaluation report:

- The evaluation report should represent a thoughtful, well-researched and well-organized effort to objectively evaluate what worked in the activity, what did not, and why.
 - Evaluation reports shall address all evaluation questions included in the scope of work.
 - The evaluation report should include the scope of work as an annex. All modifications to the scope of work, whether in technical requirements, evaluation questions, evaluation team composition, methodology, or timeline need to be agreed upon in writing by the technical officer.
 - Evaluation methodology shall be explained in detail and all tools used in conducting the evaluation such as questionnaires, checklists and discussion guides will be included in an annex in the final report.
 - Evaluation findings will assess outcomes and impact on males and females (when applicable).
 - Limitations to the evaluation shall be disclosed in the report, with particular attention to the limitations associated with the evaluation methodology (selection bias, recall bias, unobservable differences between comparator groups, etc.).
 - Evaluation findings should be presented as analyzed facts, evidence and data and not based on anecdotes, hearsay or the compilation of people’s opinions. Findings should be specific, concise, and supported by strong quantitative or qualitative evidence.
 - Sources of information need to be properly identified and listed in an annex.
 - Recommendations need to be supported by a specific set of findings.
 - Recommendations should be action-oriented, practical and specific, with defined responsibility for the action.
4. A CD in three copies including all instruments and data in formats suitable for re-analysis: All records from the evaluation (e.g., interview transcripts or summaries) must be provided to the COR. All quantitative data collected by the evaluation team must be provided in an electronic file in easily readable format agreed upon with the COR. The data should be organized and fully documented for use by those not fully familiar with the activity or the evaluation. USAID will retain ownership of the survey and all datasets developed.

5. **Briefings:** The Evaluation Team will conduct an exit briefing with EE/EG/EI personnel (to be open to other parties at the discretion of the COR).

EVALUATION MANAGEMENT

a) Logistics

All logistics (e.g., obtaining translators, transportation, lodging, and arranging meetings) will be the responsibility of the Contractor, although EE/EG/EI and the relevant USAID field missions will advise and assist as much as feasible.

b) Budget

The Contractor and EE/EG/EI will discuss and agree upon the projects and countries that will be involved in the evaluation, as well as the time level of effort for the evaluation, to fit this budget and EE/EG/EI priorities.

RELATIONSHIPS AND RESPONSIBILITIES (USAID)

Before In-Country Work

1. **Consultant Conflict of Interest (COI).** To avoid conflicts of interest or the appearance of a COI, review previous employers listed on the CV's for proposed consultants and provide additional information regarding potential COI with the project contractors or NGOs evaluated/assessed and information regarding their affiliates.
2. **Documents.** Identify and prioritize background materials for the consultants and provide them, preferably in electronic form.
3. **Local Consultants.** Assist with identification of potential local consultants and provide contact information.
4. **Site Visit Preparations.** Provide a list of site visit locations, key contacts, and suggested length of visit for use in planning in-country travel and accurate estimation of country travel line items costs. Missions can protect scarce budgets by using their in-country knowledge to suggest the travel calendar (i.e. number of in-country travel days required to reach each destination, and number of days allocated to interviews at each site).
5. **Lodging and Travel.** Provide guidance on recommended secure hotels and methods of in-country travel (i.e., car rental companies and other means of transportation) and identify a person to assist with logistics (i.e., visa letters of invitation, etc.). EE/EG/EI staff will submit E CC travel clearance requests for the consultants; approval will be facilitated by USAID/W.
6. **USAID-Supplied Participants.** Provide guidance regarding participation in the assignment by Mission and USAID/W staff (i.e., who will participate, how long, source of funding for their participation).
7. **Locally-Established Ceilings and Rates.** Provide information as early as possible on ceilings for pay to in-country hires, allowable lodging and per diem rates for government officials, stakeholders and staff that will travel/participate in activities with the team (i.e. what is per diem amount? is TL responsible to pay this? length of time? etc.).

During In-Country Work

8. **Mission Point of Contact.** Throughout the in-country work, ensure constant availability of the Mission Point of Contact person(s) and provide technical leadership and direction for the team's work.

9. Meeting Space. Provide guidance on the team’s selection of a meeting space for interviews or focus group discussions (i.e. USAID space if available, or other known office/hotel meeting space).
10. Meeting Arrangements. While local consultants typically will arrange meetings for contacts outside the Mission, support local consultant(s) in coordinating meetings with stakeholders.
11. Formal and Official Meetings. Arrange key appointments with national and local government officials and accompany the team on these introductory interviews (especially important in high-level meetings).
12. Other Meetings. If appropriate, assist in identifying and helping to set up meetings with local professionals relevant to the assignment.
13. Facilitate Contacts with Partners. Introduce the team to project partners, local government officials and other stakeholders, and where applicable and appropriate, prepare and send out an introduction letter for team’s arrival and/or anticipated meetings.

After In-Country Work

14. Timely Reviews. Provide timely review of draft/final reports and approval of the deliverables.

USAID/W CONTACT PERSONS

Steven S. Burns, PE

Chief, Energy and Infrastructure Bureau for Europe and Eurasia

U.S. Agency for International Development Tel: [202-567-4044](tel:202-567-4044)

REFERENCES (PROJECT DOCUMENTS)

Background documents for this assignment will include, but not be limited to the following:

- EE/EG/EI Regional Energy Security Activity Approval Document
- Contracts (or grant or cooperative agreements) of relevant project implementers
- Project Annual and Final Reports
- Trip Reports
- Key deliverables, e.g., (analyses published by USEA-led regional transmission working groups)

Annex 2: Full Description of Evaluation Methods

The framework for this independent evaluation of the USAID Regional Project for South Eastern Europe was guided by the USAID evaluation policy and focused on the five on key evaluation questions posed by USAID to review the effectiveness of its Regional Program. To perform the evaluation tasks as required by the RFP, the Evaluation team adapted standard evaluation approaches to assess the performance of regional energy programs implemented in several countries by the USAID implementing contractors over nearly 9 years. An important element of the team's evaluation framework was to develop an approach that could systematically assess incremental progress made by individual countries as they seek to reform their own energy sectors, diversify their energy resources, and participate in the development of an open regional energy market that would contribute to improved regional energy security.

The evaluation method utilized to conduct this independent assessment employed a systematic collection and review of data and information relating to the methods, characteristics, details and outcomes of particular programs and activities undertaken through the USAID Regional Project. Emphasis was placed on assessing the progress achieved in reaching the Regional Project's goals of promoting regional cooperation and trade in electricity and increasing regional energy security.

The objective of this systematic independent review is to improve the effectiveness of the Regional Project going forward and to measure the impact that particular activities had on the development of domestic and regional electricity markets and on improving prospects for expanded trade and increased regional energy security.

Our evaluation methodology was based along the following approach:

Qualitative review and analysis of project activities and programs based on in-depth interviews with:

- Key country stakeholders in ministries and sector agencies, such as utilities, system operators, transmission companies, regulatory agencies, USAID mission offices, other major donor and multilateral agencies, and other relevant sector agencies and specialists.
- Interviews with the Energy Community Secretariat in Vienna.
- USAID program implementers.

A quasi-quantitative approach focused on:

- Review of documents provided by USAID for the independent evaluation.
- Review of various documents relating to the governance, performance and regulation of the energy sector in the target countries, reports prepared by other agencies, and reports and directives of the ECS and EU.
- Relevant energy sector data.

Based on data and information gained by the Optimal team, Findings, conclusions and recommendations for the USAID Regional Program were developed and are included in the relevant sections of this report.

Annex 3: Summaries of Work of Implementing Partners

Pierce Atwood

Pierce Atwood was involved as a prime contractor in legal and regulatory reform in the South East Europe region from 2005 to 2007, and then was involved as a subcontractor to AEAI and Tetra Tech. Their work was mostly in BiH, Kosovo, Albania, and Macedonia. Pierce Atwood provided technical assistance and capacity building to the country's electricity sector stakeholders, primarily with regard to developing energy sector laws and regulations, and market rules to support sector reforms and restructuring within the domestic electricity sector and to support development of a regional electricity market. Pierce Atwood also helped establish the independent regulatory commissions and helped them develop operating rules and procedures.

NARUC

NARUC has worked on USAID programs in the South East Europe region since 1998, and is currently involved in the energy regulatory partnership program and the regional regulatory association known as the Energy Regulators Regional Association (ERRA). NARUC also has a regulatory partnership program with BiH that began in 2014 that provides technical assistance and training to the three regulatory commissions in BiH. Most of the assistance by NARUC was provided in BiH and Kosovo. NARUC was mostly involved in market monitoring activities early on in its participation in the region and worked with Potomac Economics, a U.S. firm. This activity provided assistance with the interaction between the market monitor, ISO, and the regulator. NARUC and its member U.S. regulators provided capacity building for regulatory commissions and ERRA, which now undertakes ongoing training for regional regulators incorporating and updating the training originally provided by NARUC.

USEA

USEA has a cooperative agreement with USAID rather than a consulting agreement, and started working on the projects in 2001. There are two elements to this cooperative agreement, one of which is the bilateral programs with Kosovo and Albania, and with Macedonia to a lesser extent. Activities undertaken included promoting regional cooperation and trade in electricity; improving regional energy security; and introducing clean energy resources into the sector. The second element to the agreement is the regional transmission planning through the South East Europe Cooperative Initiative on Transmission Planning Project (known as SECI). Much of USEA's work was under this second component, was regional in nature, and brought together the ISOs from the region (BiH, Kosovo, Macedonia, Albania, Serbia, Croatia, Romania, Bulgaria, and Turkey). USEA helped identify the planning capacity and software needs of ISOs and the capacity of regional engineers to participate in the project. ISOs were provided with licensed world class software and trained in its use, and now the countries of the region use a consistent systems operations model.

The SECI project, which was coordinated and managed by USEA, helped each country develop a load-flow model that was then integrated into a regional load-flow model. The models, first developed in 2005, have been updated periodically and are used to forecast seasonal load flows, estimate congestion, and determine investments for the reconstruction of the transmission system and upgrades. USEA has supported updates to the models that assisted ISOs in conducting analyses, and has provided capacity

building and training to the ISOs. SECI also helped assess the potential to integrate clean energy resources into the domestic and regional grids, and determined that a regionally integrated transmission system and market could incorporate two times as much as much renewable energy into the system than if countries acted on their own. USEA has also examined the means to increase interconnection capacity in order to increase regional trade.

AEAI

AEAI has supported USAID programs in Albania, BiH, and Kosovo. In Albania, AEAI implemented the Distribution Privatization Support Program. AEAI prepared the legal framework for market reform and distribution privatization. AEAI also supported the development of the Albanian electricity market, preparation of market rules, pro-forma contracts, licenses and codes, and provided training. In Albania, AEAI prepared tariff methodologies and models, and supported greater transparency in reporting progress in sector and regulatory reforms. While the support to the two countries was provided under bilateral programs, the broader objectives and achievements of the programs are consistent with EC Treaty mandates.

In BiH, AEAI implemented the Regulatory and Energy Assistance Project (REAP), which was designed to support multiple objectives, but was essentially a policy support and market development project. REAP started when the regulatory agency had already been established and the project was designed to support implementation of market development. Due to political issues in BiH, which impeded implementation of the project, the terms of reference for the project were revised to support regulators, utilities, and traders. AEAI also supported the development of a new energy law, which helped with the unbundling of the sector. The project also included support for renewable energy and energy efficiency projects, and capacity building for municipalities and other stakeholders under the Enterprise Energy Efficiency (3E) project. AEAI's support for the country ended in December 2013. Again, while the projects were designed to provide bilateral support, the programs also helped sector entities comply with EU directives and EC Treaty mandates, and supported USAID's effort to develop a regional electricity market.

In Kosovo, AEAI provided advisory services to assist in the privatization of the electricity development of the distribution company. Under this project, AEAI supported the Kosovo Energy Regulatory Office in order to strengthen and develop key regulatory and legislation-related documents in support of the privatization of *Korporata Energjetikee Kosovës* (KEK), the distribution company. AEAI also supported the Transmission System and Market Operator (KOSTT) to prepare implementation arrangements related to market design, market rules, grid and other technical codes, and related financial settlement mechanisms between and among market participants in order to support privatization of KEK. AEAI also conducted an independent study of the distribution company's commercial and technical losses. Program outcomes supported the development of a new model for the domestic electricity market, which was consistent with the requirements for integrating the country into a regional electricity market.

Tetra Tech

Tetra Tech has supported many countries in the South East Europe region, including BiH, Kosovo, and Macedonia. Under a Regional Energy Strategy study, Tetra Tech assisted in the preparation of policy, legal, and regulatory frameworks. It developed energy scenarios and a regional energy strategy, and

supported energy task forces. Tetra Tech also supported investment planning in support of a regional energy market. The RES is primarily a regional program, but also provides bilateral support to meet specific needs of individual countries.

Presently, Tetra Tech is implementing the Low Emissions Development Strategies (LEDS) program, which supports country-specific programs and provides support consistent with the development of regional electricity markets. Under this program, Tetra Tech is supporting the development of policy, legal, and regulatory frameworks, scoping studies, capacity building, regional energy strategies, MRV support, and energy audit support for energy efficiency projects. Tetra Tech is supporting the development of frameworks for regional electricity and gas transmission lines, and supporting institutional reforms and investments for the system operators in Albania and Kosovo. Tetra Tech is also supporting countries to implement the TIMES model for the energy sector and is supporting them in the preparation of an energy balance.

IRG

IRG implemented the Regional Energy Security and Market Development (RESMD) project in the region. The principal tasks supported under this project include energy supply and investment planning, which supported countries in modeling the energy sector through MARKAL/TIMES modeling. The RESMD project built the capacity to develop the modeling framework in support of policy formulation. IRG also supported the development of energy efficiency action plans and provided implementation support for projects in BiH. IRG prepared an energy benchmarking study in support of developing clean energy technologies and biofuels, and supported the preparation of energy strategies, conducted workshops, and provided training to stakeholders. RESMD also supported the preparation of regulatory frameworks for natural gas in support of promoting investments in new pipelines, liquefied natural gas facilities, and gas storage capacities. The project also supported the development of regional electricity markets and prepared market monitoring guidelines. In Macedonia, IRG supported the preparation of energy efficiency action plans.

Annex 4: Organizations Interviewed

Vienna, Austria

Energy Community Secretariat

Pristina, Kosovo

KOSTT

Energy Regulatory Office

World Bank Kosovo

USAID Kosovo

Ministry of Economic Development

Kosovo Power Plant

Skopje, Macedonia

Energy Regulatory Commission

Energy Distribution Company (EVN)

Independent consultant

Ministry of Economy

GIZ

Macedonian Power Plants (ELEM)

USAID Macedonia

IFC

Association of Municipalities

Transmission System Operator (MEPSO)

European Union Macedonia

World Bank Macedonia

Sarajevo, Bosnia and Herzegovina

UNDP

Ministry of Spatial Planning FBIH

Tirana, Albania

USAID Albania

Various independent energy consultants

World Bank

Ministry of Energy

Transmission System Operator/OST

National Agency for Natural Resources, Department of Energy Efficiency

KfW

TetraTech

ERE

energy efficiency Centre

Washington, D.C., USA

USEA

NARUC

Pierce Atwood

AEAI

IRG

TetraTech

Annex 5: Documentation Reviewed for the Evaluation

Organization-Related Documents Reviewed:

AEAI

Monthly Report (2007)
Monthly Report (2008)
Monthly Report (2009)
Monthly Report (2010)
Monthly Report (2011)
Albania Final Report (October 2011)

IRG

RESMD Final Report (2009)
RESMD Final Report (2010)
RESMD Final Report (2011)
RESMD Final Report (2012)
RESMD Task 1 Final Report
RESMD Task 5 Final Report
RESMD Status by Task (June 2011)
RESMD Status by Task (August 2011)
Task 3 Summary
IRG RESMD Work Plan Years 4 and 5
IRG RESMD Work Plan FY2012

NARUC

Annual Report (FY 2011)
Annual Report (FY 2012)
Annual Report (FY 2013)
NARUC USAID Quarterly Progress Report (January 3, 2011)
NARUC USAID Quarterly Progress Report (January 3, 2012)
NARUC USAID Quarterly Progress Report (April 6, 2011)
NARUC USAID Quarterly Progress Report (April 6, 2012)
NARUC USAID Quarterly Progress Report (July 9, 2011)
NARUC USAID Quarterly Progress Report (July 9, 2012)
NARUC USAID Quarterly Progress Report (October 12, 2011)
NARUC USAID Quarterly Progress Report (October 12, 2012)
NARUC USAID Quarterly Progress Report (January 3, 2013)
NARUC USAID Quarterly Progress Report (April 6, 2013)
NARUC USAID Quarterly Progress Report (July 9, 2013)
NARUC BiH Work Plan Draft (October 2, 2013)
NARUC Annual Progress Report (FY 2011)
NARUC Annual Progress Report (FY 2012)
NARUC Annual Progress Report (FY 2013)
NARUC USAID Program Summary (FY 2012 – 2013)
NARUC USAID Work Plan (FY 2011)
NARUC USAID Work Plan (FY 2012)
NARUC USAID Work Plan (FY 2013)
NARUC Kosovo Regulatory Results (January 17, 2014)
NARUC M&E Practitioner's Guide (November 27, 2012)
NARUC USAID Work Plan (FY 2014)

Overviews, Cross-Cutting Reports, and Thought Pieces

Approval Memo Regional Energy Security (2007)
Approval Memo Regional Energy Security Amendment 1 (2010)
Approval Memo Regional Energy Security Amendment 2 (2011)
Balkans Energy Strategy and Programming Draft
EE Regional EC-LEDS Internal Status Report (FY 2013)
EE Year Review
Regional EE LEDS Strategy Approach

Pierce Atwood

SEE 1st Quarterly Report
SEE 2nd Quarterly Report
SEE 3rd Quarterly Report
SEE 4th Quarterly Report
SEE 5th Quarterly Report
SEE 6th Quarterly Report
SEE 7th Quarterly Report
SEE 8th Quarterly Report
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SEE 10th Quarterly Report
SEE 11th Quarterly Report
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2nd Semiannual Report
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9th Semiannual Report
10th Semiannual Report
11th Semiannual Report
12th Semiannual Report

13th Semiannual Report
14th Semiannual Report
Albania Work Plan (December 26, 2000)
Albania Work Plan Phase 2 (April 10, 2001)
Albania Tentative Work Plan (July 19, 2001)
Albania Work Plan (July 11, 2001)
Albania Work Plan (May 10, 2002)
Albania Work Plan Outline 2003-2004 (July 22, 2002)
Albania Work Plan (October 11, 2002)
Albania Work Plan (January 28, 2003)
Work Plan (April 26, 2003)
Work Plan (May 26, 2004)
Work Plan (November 4, 2004)
Proposed Work Plan (November 29, 2004)
Work Plan 2005-2006 (February 1, 2005)
Tariff Work Plan (March 4, 2005)
Work Plan (September 29, 2005)
Croatia Work Plan (February 15, 2002)
Croatia Transmission Fee Work Plan July 2002 (June 28, 2002)
Croatia Transmission Fee Work Plan (September 10, 2002)
USAID Croatia Distribution Work Plan (January 23, 2003)
USAID Croatia ISMO Work Plan (April 18, 2003)
USAID Croatia Distribution Work Plan (May 19, 2003)
Croatia General Pricing Work Scope (September 2004)
Kosovo Draft Work plan (March 15, 2004)
Kosovo Work Plan (January 7, 2005)
Kosovo Draft Work Plan (September 21, 2005)
Kosovo Work Plan (December 30, 2005)
USAID Kosovo Work Plan Data Access (November 30, 2006)
Macedonia Draft Regulatory Work Plan (December 19, 2001)
Macedonia Scope or Work Memo (April 2, 2004)
Serbia – Proposed Work Plan (June 2001)
Romania – Memo re Draft Work Plan (July 17, 2002)
SEE Regional Work Plan Draft (September 4, 2002)
SEE Request for Extension Work Plans Version 2 (December 3, 2002)
SEE Draft Work Plan Regional Benchmarking (December 9, 2003)
SEE Proposal for Extension (September 2, 2004)

TetraTech

LEDS Clean Energy Work Plan (2011)
LEDS Clean Energy Work Plan (2012)
LEDS Clean Energy Work Plan (2013)
LEDS Clean Energy Work Plan (2014)
TetraTech LEDS CED Quarterly Report (2011)
TetraTech LEDS IV Quarterly Report (October-December 2013)
TetraTech LEDS IV Quarterly Report Annexes (2013)
TetraTech LEDS III Quarterly Report (July-September 2013)
TetraTech LEDS III Quarterly Annexes (2013)
TetraTech LEDS III Quarterly Report (2012)
TetraTech LEDS III Quarterly Report Annexes (2012)

TetraTech LEDS I Quarterly Report (2012)
TetraTech LEDS Quarterly Report (April-June 2013)
TetraTech LEDS Annexes (April-June 2013)
TetraTech LEDS I Quarterly Report Annexes (January-March 2013)
TetraTech LEDS I Quarterly Report (January-March 2013)
TetraTech LEDS II Quarterly Report (April-June 2012)
TetraTech LEDS II Quarterly Report Annexes (April-June 2012)

USEA

Action Memo USAID and USEA Success Story (May 11, 2012)
BSTP OPF Report Success Story
Final AGT Success Story
Routing Slip Steve Burns
Work Plan (FY 2006)
Work Plan (FY 2007)
Work Plan (FY 2008)
Work Plan (FY 2009)
Work Plan (FY 2010)
Work Plan (FY 2011)
Work Plan (FY 2012)
SECI TSP WPP Integration (2011)
Overview of USEA Programs (FY 2011)
SECI Accomplishments
Annual Report (2011)

USEA

Concept Paper – USAID Distribution Security of Supply Working Group
SECI WPP Integration Report Success Story
SECI WPP Integration
SOS MOU
USEA Concept Paper
USEA Q2 Summary Report
ETAG Quarterly Report (January-February 2013)
Quarterly Report (July-September 2013)
Quarterly Report (October-December 2013)
SECI Meeting (October 2012)
SECI WPP Integration Report Success Story
SECI Meeting Agenda Budapest
SECI Participant List Budapest (October 2012)
EIHP Reliability Assessment of SEE TN Budapest
EKC RTSM Budapest
SECI Budapest – SEE Coordination Auction Office
Albanian OST Presentation (2012)
Bosnia and Herzegovina (BiH) Presentation (2012)
Bulgaria Presentation (2012)
Croatia Presentation (2012)
Kosovo Presentation (2012)
Romania Presentation (2012)
Turkey Presentation (2012)
Wind Romania

Quarterly Report (August 2013)
Work Plan (2006)
SECI TSP WPP Integration (2011)
Annual Work Plan (2011)
Work Plan (FY 2005)
Work Plan (FY 2007)
Work Plan (FY 2008)
Work Plan (FY 2010)
Work Plan (FY 2011)
Work Plan (FY 2012)
Work Plan (FY 2009)
Overview of USEA Programs (FY 2011)
SECI Accomplishments
Annual Report (2005)
Quarterly Report (October 1-December 31, 2004)
Quarterly Report (January 1-March 31, 2005)
Quarterly Report (April 1-June 30, 2005)
Quarterly Report (July 1-September 31, 2005)
Annual Report (2006)
Quarterly Report (October 1-December 30, 2005)
Quarterly Report (January 1-March 31, 2006)
Quarterly Report (April 1-June 30, 2006)
Quarterly Report (July 1-September 30, 2006)
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Quarterly Report (October-December 2006)
Quarterly Report (January-March 2007)
Quarterly Report (April-June 2007)
Quarterly Report (July-September 2007)
Annual Report (2008)
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Quarterly Report (January – March 2008)
Quarterly Report (April – June 2008)
Quarterly Report (July – September 2008)
Annual Report (2009)
Quarterly Report (October-December 2008)
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Quarterly Report (April-June 2009)
Quarterly Report (July-September 2009)
Annual Report (2010)
Quarterly Report (October-December 2009)
Quarterly Report (January-March 2010)
Quarterly Report (April-June 2010)
Quarterly Report (July-September 2010)
Annual Report (2011)
Quarterly Report (October-December 2010)
Quarterly Report (January-March 2011)
Quarterly Report (April-June 2011)
Quarterly Report (July-September 2011)
Annual Report (2012)
Quarterly Report (October-December 2011)

Quarterly Report (January-March 2012)
Quarterly Report (April-June 2012)
Quarterly Report (July-September 2012)

Annex 6: Detailed documentation of activities conducted by each consultant by country and on a regional basis with results achieved

Program Name/Title	Organization	Country	Period of Performance	Objectives	Activities	Participants	Outcomes / Benchmarks	Types of Reports				
								Evaluation	Annual	Semi Annual	Quarterly	Monthly
Balkan Regional Electricity Market Project	Pierce Atwood	Albania; Bulgaria; Croatia; Macedonia; Romania; Serbia	09/06/00 - 09/06/03	Tariff; Licensing methodologies; Market methodologies	Issue briefs; Meetings; Oral advice; Written advice	Regulators; Ministry officials	Facilitate development of USAID tariff technical assistance to ERE			6		
				Regulatory issues in development of regional trading and market system	Review existing national legislation; Change to facilitate trade; Pricing issues; Tariff issues; Open access to transmission systems; Market protection; Export promotion	E&E Regions	Created the Energy Law					
				Transparency in regional transactions	Model electricity purchase/exchange contracts	E&E Regions	Development of TSO and MO					
				International and regional electricity	Workshops; Study visits	E&E Regions	Submission of <i>Electricity Cost of Service Study</i> to USAID. "Regional Energy Markets in South East Europe" conference in Rome					
				National grid code development	Analysis of issues facing progress	Countries in the region	Develop market rules and grid and metering codes					
				Electricity law	Draft law; Technical support; Review existing national legislation	Albania	Released a study (Albanian National Energy Strategy) - highlighted importance of demand side measures in enabling Albanian electricity					

Regulatory Assistance for Southeast European Regional Electricity Market Development	Pierce Atwood	Croatia; Albania	09/06/00 - 08/31/07	Tariff; Licensing methodologies; Market methodologies	Oral advice; Written advice	Regulators; Ministry officials	Assisted with tariff redesign and the licensing process				8	
				Regulatory issues in development of regional trading and market system	Review existing national legislation; Change to facilitate trade; Pricing issues; Tariff issues; Open access to transmission systems; Market protection; Export promotion	E&E Regions	Privatization discussions with International Finance Corporate (IFC), Amendments to Public Procurement Law					
				Transparency in regional transactions	Model electricity purchase/exchange contracts	E&E Regions	Albanian Market Model					
				International and regional electricity	Workshops; Study visits	E&E Regions	Uniform System of Accounts Workshop					
				National grid code development	Analysis of issues facing progress	Countries in the region	Licensing of bulk-power traders, instituting regulatory reporting and accounting					
				KEK operational turnaround and reconstructing	Provide assistance	Kosovo	ECRB Gas Working Group, ECRB Development					
Technical Assistance on Distribution Privatization of the Albanian Utility KESH (Albania Electricity Corporation)	AEAI	Albania	2007 - 2011	Improve Albania's electric power sector performance; Privatization of electric distribution operations from state-owned Albania Electricity	Independent privatization advice; Public information	Albania	GoA sold 76% of OSSH for 102 million Euros to CEZ group, small polluting generators no longer chained to parking meters, no country-wide black-outs	1				60
					Legal framework; Market reform; Distribution privatization	E&E Regions	Power Sector Law - second revision, reviewed/drafted Energy Efficiency and Renewables laws					
					Albanian Market Model implementation	E&E Regions	Market model updated and revised to reflect framework, existing AMM was revised					

					Tariff issues	E&E Regions	Development of tariff models and documentation, training of ERE staff in tariff design principles, support for ERE during 4-rate setting proceedings, finding a resolution of dispute between CEZ/OSSH and ERE, development of policy and filing requirements as well as template for OST					
					Transparency; Regulatory reporting	E&E Regions	Drafting "Regulatory Statement," advice regarding tariffs, CEZ/OSSH, ERE, Vlora TPP, bad debts, assistance drafting alternative dispute resolution principles					
Regional Energy Security Market Development Project	IRG	Macedonia; Serbia; Albania; BiH; Moldova	2009 - 2012	Secure energy market	Energy supply; Investment planning	E&E Regions	SSP/RESMD Strategic Planning Policy Briefs (PBs), Regional Overview and Summary report, work in Macedonia done to produce 5-year moving energy balances per the new Energy law, list of model improvements, drafting regulation for energy balances and statistics		4			
					Regulatory framework for investments in new pipelines and natural gas	E&E Regions	Experts mobilized for initial environmental evaluation of exploration for shale gas in Ukraine, discussions with government ministries, legislators, and agencies to discuss environmental issues					
					Regional electricity market development	E&E Regions	8th Regional Market Monitoring Guidelines drafted by Potomac Economics					
					Regional energy efficiency action	E&E Regions	Drafted implementation plan for Macedonia Energy Efficiency Strategy, created workshops for kids to introduce Greens Schools program, Municipal Energy Forum, submission of NEEAP-Bs report					
					Biofuels; clean energy technologies	SYNERGY	Final Report for Macedonia Benchmark Study, Serbia Biomass Prefeasibility Study, Simplified Renewable Energy Action Plan					

Energy Regulatory and Security Program and Europe and Eurasia	NARUC	Georgia; Kosovo; Moldova; Serbia; Armenia; Ukraine; Albania	2010 - 2014	Energy regulatory authorities	Regulatory capacity; Association institutional development	E&E Regions	ERRA training, courses provided (Principles of Natural Gas Regulation), ERRA's 11th Energy Investment and Regulation Conference, Joint Tariff/Pricing and Licensing/Competition Meetings, working groups, general assembly meetings									3			11
				Networking opportunities	Monitoring; Regulatory reporting; Transparency	E&E Regions	Podcasts												
				Efficient energy industry	Regional regulatory cooperation	Regulators	Black Sea Regulatory Initiative (BSRI)												
					Energy security	E&E Regions	Regulatory partnerships												
Low Emission Strategies and Clean Energy Development (LEDS)	TetraTech	Ukraine; Armenia; Macedonia; Georgia; Kosovo; BiH; Russia		Regulatory framework; Legal framework; Policy framework	Regulatory reform	E&E Regions	Regional Energy Strategy study												9
					Regional policy studies	E&E Regions	Regional task force meetings of EC, presenting and discussing scenario analysis and implications on regional energy strategy												
					Investment planning	E&E Regions	Build on Macedonian study (completed by IRG) by creating road map for reforms												
					EC Meetings	E&E Regions	Regional Energy Strategy task force meetings, analysis of energy outlook, support EC Secretariat												
				Low emissions development strategies	Pre-scoping reports	E&E Regions	Pre-scoping reports for four EC-LEDS countries												
					National energy policy workshops	E&E Regions	Workshops held in Ukraine+H50, Moldova, Georgia												
					Regional energy strategy	E&E Regions	Full Model Design final report on Development of a Regional Energy Systems Model												
					Regional MVR Support	E&E Regions	Provide technical assistance to NBS, mission trips to Chisinau and Serbia												

					ERE regulatory support	E&E Regions	Power Sector Law, Regulation on Standards for Handling Customer Complaints by Licensees and a Regulation on Setting Fines and Their Relief, monitoring privatization-related developments					
					AMM implementation support	E&E Regions	PSL - change rules of the AMM and support technical codes and regulations, AMM support for compliance					
					AKBN support	E&E Regions	Technical assistance and national inventories and LEDS support					
					Energy planning	Georgia; Armenia	Interconnection Construction agreement, technical meetings, Joint Working Group created, reports with recommendations for revising regulatory environment, training workshops					
Balkans and Regional Energy Market Partnership Program	USEA	Albania; BiH; Bulgaria; Croatia; Kosovo; Macedonia; Romania; Serbia	Sep-02	Transition of power sector to private	Market development	E&E Regions	Facilitation of market-based analysis and stimulation of potential future regional markets		8		32	
				Operational requirements; Regulator requirements; Institutional reform	Build capacity	Utilities; Transmission System Operators (TSOs)	Training of TSO engineers on the use of OPF and updating of the load flow and dynamic models to include current projections					
				Development; Technical capacity	Regional transmission planning model	Transmission System Operators (TSOs)	Data collection for OPF analysis and participation of OPF national models and cost curves, regional models					
SECI Transmission System Planning Project	USEA	Albania; BiH; Bulgaria; Croatia; Kosovo; Macedonia; Romania; Serbia		Transmission planning; Regional cooperation	Methodologies; Transmission planning tools	Transmission System Operators (TSOs)	Regional Transmission System Model (RTSM), USA study tour program, investment in SEE and grouping clusters				5	

Black Sea Regional Transmission System Planning Project	USEA	Armenia; Bulgaria; Georgia; Moldova; Russia; Ukraine		Transmission planning model	Institutional capacity	Transmission System Operators (TSOs)	Working group meetings, analysis and report of the 2014 and 2020 unconstrained transmission and constrained transmission runs of Black Sea Optimal Power Flow Model, report of the sudden loss of wind power studies, priority regional and sub-regional analysis, terms of reference for development of BSTP paper on grid code guidelines					5	
Southeast Europe Security of Supply Distribution System Operator Working Group	USEA			Mutual assistance working group; Secure energy market	Emergency response programs; Disaster preparedness	South East Europe Distribution company representatives	Security of Supplied and Mutual Assistance working group, assist utilities in regional, develop Disaster Preparedness and Emergency Response program					5	
Utility Commercialization, Privatization and Market Transformation Bilateral Partnerships with US utilities for Georgia and Kosovo	USEA	Georgia; Kosovo		Bilateral assistance	Utility partnerships	US Volunteers; Kosovo; Georgia	Employ volunteers from US electric and gas utilities, improve participation in national and regional clean energy markets, advisory missions overseas					5	