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EVALUATION OF THE REPOWER ACTIVITY AND ENERGY SECTOR ASSESSMENT FINAL REPORT

June 2018

This publication was produced at the request of the United States Agency for International Development. It was prepared independently by IMPAQ International, LLC.

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EXECUTIVE SUMMARY

USAID/Kosovo contracted with IMPAQ International to conduct an independent evaluation of USAID's REpower activity, as well as an assessment of the Kosovar energy sector. This evaluation and sector assessment identifies opportunities for USAID/Kosovo to adjust its programming and plan for future activities in the energy sector in Kosovo. It will serve as a key source of information for USAID/Kosovo as it considers continuing, scaling-up, or reorienting its energy portfolio.

The REpower activity generally aims to promote clean energy and to improve the enabling environment for private sector investment in the energy sector through support and assistance to state energy organizations, including the Ministry of Economic Development (MED), Energy Regulatory Office (ERO), Transmission System and Market Operator (KOSTT) and Kosovo Energy Corporation (KEK). This \$12 million five-year activity started in October 2014.

The IMPAQ team conducted primary and secondary research, collecting qualitative and quantitative data to address the evaluation and assessment questions in the Scope of Work (SoW), in a mission to Kosovo between March 26th and April 13th, 2018. The primary research applied 61 Key Informant Interviews (KIIs) and two Focus Group Discussions (FGDs), reaching a total of 73 persons from 40 stakeholder organizations. The research centered on eight key evaluation and assessment questions, the findings from which are summarized next:

1. To what extent is REpower on track to achieve its intended results?
2. To what extent is REpower's approach relative to the Statement of Work, including activity components, both necessary and sufficient to achieve intended results? What interventions are missing, if any?
3. What, if any, external obstacles are hindering REpower implementation?
4. To what extent did REpower integrate gender equality in energy policies and increase the representation of women in the decision-making processes?
5. To what extent has REpower coordinated with other donors on its activities?
6. What are the primary challenges and opportunities in Kosovo to achieve a more secure, affordable and environmentally sustainable energy supply?
7. Considering these opportunities and challenges, what should USAID support beyond REpower in the short and long term, taking into consideration USAID's comparative advantage in the sector, Kosovo / regional dynamics and any potential trade-offs between security of supply, affordability and environmental sustainability of the energy sector?
8. What constitutes an exit point for USAID in the Kosovo energy sector and feasible timing?

REPOWER PERFORMANCE AND RESULTS ACHIEVED

The REpower activity has five components:

1. Develop an enabling legislative and policy environment for clean energy projects.
2. Assist the Energy Regulatory Office with planning, preparing, and prioritizing clean energy projects.
3. Support to Kosovo and Albania's common electricity market.
4. Support the continued unbundling of the Kosovo energy sector.
5. Support development of a more secure and stable energy supply.

As of the date of this report, the REpower activity remains on schedule. The tasks are being completed to the beneficiaries' satisfaction, in a professional and timely fashion. There is no indication of any major issues with the REpower team's performance. Very often the REpower team went out of its way to deliver

work products under tight deadlines and changing environments. REpower is following the SoW in its original and subsequently modified version.

The most critical obstacles continuing to negatively affect the pace of REpower's implementation, which are outside of the REpower team's ability to remove, include:

1. **Unbundling of KEK** – the REpower team has been waiting for confirmation from the management board of KEK that they have decided to become unbundled, which was obtained very recently. Similar requests for confirmation have been repeated after each change in the government or management board. At the moment, REpower's work related to KEK's unbundling is still on hold.
2. **Rehabilitation of Kosovo B** – despite REpower's readiness to proceed with Component 5 and the presentation of reports on financing options and market study, MED delayed the decision on Kosovo B rehabilitation, as it was focused on negotiations on the New Kosovo Power Plant (NKPP) project. This caused the REpower team to scale down involvement in this component. Eventually, Component 5 was frozen.
3. **Kosovo-Serbia dispute** – Serbia controls all of Kosovo's cross-border electricity transmission capacities in non-compliance with its Energy Community Treaty (ECT) obligations. This restrains the establishment of the Kosovo-Albania common electricity market and also creates a large financial deficit in the electricity market from the unpaid electricity consumption from the northern Kosovo area controlled by Serbia.

REpower combined analysis, action, training programs, and relevant sector policy and regulation work to integrate gender equality into energy policies and increase the representation of women in decision-making processes. This was the first consideration of gender in the energy sector policy and decision-making process in Kosovo. A women's mentorship program (mCircle) was launched in all energy beneficiary institutions and organizations, and the Association of Women in Energy Sector (AWESK) was established.

ENERGY SECTOR ASSESSMENT AND FUTURE SUPPORT

The following are the most critical challenges facing the Kosovo energy sector in terms of achieving a more secure, affordable, and environmentally sustainable energy supply:

1. **Full cooperation with Serbia in the energy sector** – the challenge is to implement the Agreement on Network and System Operation Management signed by the Transmission System Operators (TSOs) of Serbia and Kosovo in 2014.
2. **Securing reserve generation capacity for the electricity system** – there is a lack of secondary and tertiary power reserves in Kosovo's system due to non-flexible generators, since around 97% of domestic generation is based on lignite. Currently, in the case of unplanned generation unit failures, load shedding is applied in Kosovo.
3. **Establishing the Kosovo-Albania common market as a first step toward full integration in a regional energy market** – in order to fully exploit the benefits of Albanian Power Exchange (APEX), Kosovo faces the challenge set by the high cost of electricity from the NKPP, which will restrain its ability to effectively compete.

Correspondingly, the following significant opportunities have been identified in the Kosovo energy sector:

1. **Gradual market liberalization and sector development with private capital** – a large number of investments are planned for the Kosovo energy sector over the next 5 years, mostly with private capital. These investments provide an opportunity for new stakeholders (in generation and supply) to enter and operate efficiently in the market, gradually leading toward full market liberalization.
2. **Financing and construction of new lignite-based generation capacities** – development of the new 500 MW lignite-based NKPP, contemplated since 2005, is now at its most advanced stage. NKPP is planned to replace Kosovo A by 2024, providing a more efficient and environmentally friendly operation.
3. **Financing, facilitation, and sustainable development of renewable energy projects** – feed-in-tariff quotas totaling 440 MW have been set for renewable energy projects in Kosovo and have mostly been pre-approved. There is a need to facilitate their speedy implementation, already hindered by delays of the initial licensees in securing finance and initiating construction.

A very significant area for USAID support beyond REpower is the continuous development and effective / transparent operation of the electricity market. Kosovo's legislative framework is now largely in line and harmonized with EU Directives for the energy sector, but the participating institutions have yet to fully adapt their operations and the electricity market is still not operating effectively.

On-the-job and other capacity building is also of great significance for future support in Kosovo. As the workforce in energy sector organizations ages, and operation of the energy system modernizes, a significant amount of on-the-job and other practical forms of training and capacity building is necessary in Kosovo.

Special on-demand technical / market studies and flexible support to energy organizations is also in need. The REpower activity's flexible support on new evolving issues over the past few years is very much appreciated by energy sector organizations in Kosovo. Several new studies and other issues require international support in the coming years.

RECOMMENDATIONS

The following tasks are recommended for USAID assistance beyond REpower (i.e. from 2020):

Develop an enabling legislative and policy environment in the energy sector

As electricity market requirements continue to evolve, further policy and legislative improvements will become necessary. International support will be necessary as the required legislative adjustments, policies, and technical regulations will be complex.

Support the effective operation of institutions in the energy market

Current issues requiring practical support to enable an effective and transparent electricity market operation in Kosovo include completing the wholesale deregulation, ensuring that the contractual framework adopted for the NKPP does not hamper the development of an efficient market, as well as the actual operation of two additional licensed suppliers and EU-based trader in the retail market.

Support development of a more secure and reliable energy supply in Kosovo

The commercial agreement for the new 500 MW lignite-based NKPP faces several milestones and challenges until its expected operation by 2024. USAID already provides support to MED on the

transaction aspects of the evolving NKPP development process through the KESS Programme, but MED will need additional independent technical support (in addition to the owner's engineer already in place).

Electric system expansion plan

A comprehensive electricity market analysis, over any length of planning horizon, would allow consideration of various load forecasts on the demand-side, energy conservation measures, a variety of generation technologies (including integration of renewable resources) on the supply side, and power transactions between Kosovo and its neighboring power systems.

Assist in planning, facilitating, and prioritizing renewable energy projects

International support is necessary in reviewing ERO's authorization procedures for feed-in-tariff renewable energy projects, to identify and correct the weak points, as well as in designing procedures for effectively monitoring their implementation. It is also necessary to plan the next evolutionary step in renewable energy development, i.e. replacing the feed-in-tariff system with renewable energy auctions.

Facilitate effective operation of the common electricity market with Albania

To fully exploit the benefits of the common electricity market with Albania, Kosovo still faces several challenges such as the high cost of electricity to be produced the NKPP. Systematic bilateral discussions are therefore still necessary between Kosovo and Albania until Kosovo can efficiently reap the full benefits of the common electricity market.

Capacity development of energy institutions and professionals, and awareness of the population

A significant amount of on-the-job training and other practical forms of knowledge transfer, training and capacity building is necessary for all energy sector stakeholders in Kosovo. Awareness raising of the general population is also necessary, on issues such as the cost of energy supply, operation of the market, benefits from renewable energy, etc.

Energy research institute

At present, there is a pronounced absence of an institute in Kosovo that in addition to conducting training and research would provide consulting services to energy sector stakeholders. Current assistance to the sector is accomplished through international donor support such as the REpower activity. Because such technical assistance may not continue forever, there is a need to start seriously building the local professional capacity that would take over, at least partially, the role of an independent research institute specializing in consulting in energy sector issues and analyses.

ACRONYMS AND ABBREVIATIONS

APEX	Albanian Power Exchange
AWESK	Association of Women in Energy Sector
CDCS	Country Development Cooperation Strategy
CFR	Code of Federal Regulations
DO	Development Objective
EBRD	European Bank for Reconstruction and Development
ECT	Energy Community Treaty
EMMP	Environmental Mitigation and Monitoring Plan
EnCS	Energy Community Secretariat
ENTSO-E	European Network of Transmission System Operators for Electricity
ERO	Energy Regulatory Office
ESBI	Electricity Supply Board of Ireland
ESIA	Environment and Social Impact Assessment
FGD	Focus Group Discussion
GAP	Gender Action Plan
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GoK	Government of Kosovo
HLF	High-Level Forum
IEA	International Energy Association
IEE	Initial Environmental Examination
IFC	International Finance Corporation
IPA	Instrument for Pre-Accession
IR	Intermediate Result
KEK	Kosovo Energy Corporation
KESS	Kosovo Energy Security of Supply

KII	Key Informant Interview
KEDS	Kosovo Electricity Distribution and Supply Company
KOSTT	Transmission System and Market Operator
MCC	Millennium Challenge Corporation
MED	Ministry of Economic Development
NARUC	National Association of Regulatory Utility Commissioners
NKPP	New Kosovo Power Plant
OSS	One-Stop-Shop
PIU	Project Implementation Unit
PPA	Power Purchase Agreement
RES	Renewable Energy Sources
SoW	Scope of Work
SSWG	Sub-Sector Working Group
SWG	Sector Working Group
TAP	Trans-Adriatic Pipeline
TSO	Transmission System Operator
USEA	United States Energy Association
USG	United States Government
WB	World Bank
WBIF	Western Balkans Investment Framework
WB6	Western Balkan 6

I. INTRODUCTION

I.1 DESCRIPTION OF ACTIVITY

A 5-year (2014-through 2019) Country Development Cooperation Strategy (CDCS) currently guides Kosovo's economic development. The Government of Kosovo (GoK), USAID, other international partners and a host of additional stakeholders have closely coordinated to develop the CDCS. The CDCS' stated goal is that "Kosovo Becomes an Increasingly Prosperous Country, Progressively Integrating into the Euro-Atlantic Community, with More Effective and Accountable Governance".

The CDCS has three Development Objectives (DOs), including DO2, the economic growth objective, which aims to achieve "Increased Investment and Private Sector Employment". DO2 contains three Intermediate Results (IR), one of which directly relates to the REpower activity and the energy sector of Kosovo. IR2.3 on the "Improved Natural Resources Management in Key Areas" squarely focuses on assuring a more secure energy supply within the context of developing Kosovo's considerable natural resource base in a sustainable manner while meeting its obligations under the Energy Community Treaty. The hypothesis is that only if effective policies, laws, and regulations are in place and enforced can Kosovo make the most of its considerable energy and non-energy mineral resources. DO2 was intended to promote the equitable growth of the economy and be supported by progress in DOI (Improved Rule of Law & Governance) and DO3 (Enhanced Human Capital), all of which are within the scope of the REpower activity.

Furthermore, within the United States Government's (USG) Integrated Country Strategy 2016-2018 for Kosovo, REpower contributes to Mission Goal 2: "Kosovo has sustainable and inclusive economic growth that supports its stability and integration with Europe". Within this goal, REpower supports Mission Objective 2.1 to "Increase investment and employment in Kosovo by improving the conditions required for economic growth, including energy security", particularly Mission Sub-Objective 2.1.3 stating that "Kosovo gains greater energy security and accelerates the diversification of supply with a focus on renewables".

This assignment is an independent evaluation (as evidenced from the conflict of interest forms presented in Annex D of this report) of the REpower activity and an assessment of the Kosovar energy sector. The evaluation identifies opportunities for USAID/Kosovo to adjust its programming and plan for future activities in the energy sector. Findings from this evaluation and sector assessment can be a prime information source used by USAID/Kosovo as it considers continuing, scaling-up or reorienting its energy portfolio as part of the new CDCS for Kosovo starting in 2018.

The REpower activity generally aims to promote clean energy and improve the enabling environment for private sector investment in the energy sector through support and assistance to state energy organizations, including the Ministry of Economic Development (MED), Energy Regulatory Office (ERO), Transmission System and Market Operator (KOSTT) and Kosovo Energy Corporation (KEK). This \$12 million, 5-year project started in October 2014.

I.2 EVALUATION PURPOSE AND METHODOLOGY

The evaluation team conducted primary and secondary research to collect qualitative and quantitative data to address the evaluation questions in the Scope of Work (SoW), in a mission to Kosovo between March 26 and April 13, 2018. The primary research applied 61 Key Informant Interviews (KIIs) and 2 Focus Group Discussions (FGDs), reaching 73 people from 40 stakeholders.

I.2.1 DOCUMENT REVIEW

Prior to arrival in Kosovo, the evaluation team conducted an initial review of relevant documents including activity deliverables from implementing partners, documents from USAID concerning the REpower activity, documents from the GoK focusing on energy sector activities, and other documents from the Energy Community Secretariat Western Balkan 6 (WB6) initiative, National Association of Regulatory Utility Commissioners (NARUC), and United States Energy Association (USEA). The team examined all documents thoroughly to gain a more in-depth understanding of the implementation of REpower activities and to assess the availability and quality of secondary data for answering evaluation and assessment questions.

More documents were obtained and examined while in Kosovo as well as during the subsequent home-based reporting phase. Annex E to this report presents the full list of 54 documents reviewed.

I.2.2 EVALUATION MATRIX AND DATA COLLECTION

Exhibit I presents the key evaluation questions listed in the SoW, presented as Annex A of this report, and the corresponding evaluation and assessment methods applied by the evaluation team.

Exhibit I. Key Evaluation and Assessment Questions

Evaluation / Assessment Goal	Key Question
Activity Performance and Results Achieved	1. To what extent is REpower on track to achieve its intended results?
	2. To what extent is REpower’s approach relative to the SoW, including activity components, both necessary and sufficient to achieve intended results? What interventions are missing, if any?
	3. What, if any, external obstacles are hindering REpower implementation?
Activity Coordination and Practices	4. To what extent did the activity integrate gender equality in energy policies and increase the representation of women in the decision-making processes?
	5. To what extent has REpower coordinated with other donors on its activities?
Looking Forward	6. What are the primary challenges and opportunities in Kosovo to achieve a more secure, affordable, and environmentally sustainable energy supply?
	7. Considering these opportunities and challenges, what should USAID support beyond REpower in the short and long term?
	8. Define what constitutes an exit point for USAID/Kosovo and feasible timing.

The evaluation team conducted KIIs and FGDs with stakeholders and primary actors, as presented in Exhibit 2, to assess the effectiveness of the REpower activity. The team also assessed the current state of the Kosovar energy sector as it relates to the REpower objectives.

Annex B of this report presents the detailed questionnaire, along with the template used for planning and recording minutes of KIIs and the participation and issues discussed at the FGDs (First with MED, KEK, and KOSTT; and second with participants of REpower’s internship program).

Exhibit 2. Conceptual Framework for REpower Evaluation and Energy Sector Assessment

Sample Size	Respondents
15	USAID/Kosovo; AECOM International Development; Optima Energy Consulting; Economic Consulting Associates (ECA); Energy Institute Hrvoje Pozar (HEP); EMPOWER; Transformational Leadership Program (TLP); National Association of Regulatory Utility Commissioners (NARUC); United States Energy Association (USEA)
5	European Union Office in Kosovo (EUOK); European Bank for Reconstruction and Development (EBRD); Millennium Foundation Kosovo (MFK); World Bank (WB)
21	Kosovo Assembly Committee for Economic Development, Infrastructure, Trade, Industry and Regional Development; Energy Regulatory Office (ERO); Agency on Gender Equality (AGE); Kosovo Agency for Statistics; Ministry of Labor and Social Welfare; Ministry of Economic Development (MED); Ministry of Environment and Spatial Planning; Ministry of Finance; Ministry of European Integration; Municipality of Prishtina; Municipality of Fushe Kosova
4	Energy Community Regulatory Board (ECRB); Energy Community Secretariat (EnCS); USAID/Albania; Nordpool
10, 1	Kosovo Energy Corporation (KEK); Kosovo System Transmission and Market Operator (KOSTT); Kosovo Electricity Distribution Services (KEDS); Kosovo Electricity Supply Company (KESCO); New Kosovo Power Plant (NKPP) PIU
6, 1	Association of Women in the Energy Sector (AWESK), Consumer Protection Association; Kosovo Chamber of Commerce; Java PV producer; University of Pristina; Centre for Energy and Sustainability

I.2.3 DATA ANALYSIS

Data analysis involved a combination of qualitative and quantitative techniques. Most of the data collected and analyzed was qualitative data gathered through KIIs and FGDs. Where appropriate, the evaluation team also collected available activity-level quantitative data from the prime contractor’s monitoring system and secondary data from government institutions and energy entities. Exhibit 3 briefly summarizes the analysis approach for each type of data. The evaluation team triangulated the qualitative and quantitative analyses as appropriate to address the evaluation questions. The team also used qualitative data, where appropriate, to provide contextual information for interpreting available quantitative data. The process of examining the qualitative and quantitative findings in relation to one another supported development of conclusions, recommendations, and lessons learned based on the overall evaluation and assessment findings.

Exhibit 3. Evaluation and Assessment Data Analysis

Data Collection Method	Data Analysis
Qualitative: Key Informant Interviews and Focus Group Discussions	The evaluation team relied on notes collected in the field using a semi-structured form template that maps to the Key Questions. Each member of the evaluation team developed themes based on data and information obtained from KIIs. These themes formed the basis for the debriefing presentation to USAID/Kosovo. The evaluation team analyzed recurrent patterns in the data that address each of the evaluation questions, both within the multiple activities under REpower and across the multiple stakeholders affected by the interventions. The analysis helped to determine how REpower activities contribute to achieving its related targets and results.
Quantitative: Assessment of REpower activity and energy sector data	The evaluation team reviewed data provided from the prime contractor’s monitoring system and assessed the data’s quality and relevance in answering the Key Questions. The evaluation team’s analysis of this data, through descriptive statistics and common trends and patterns, informed the triangulation and validation of findings from the qualitative data collection.

I.2.4 KNOWN LIMITATIONS

Some limitations should be noted; however, the limitations did not affect the robustness of the evaluation and sector assessment.

- *Subjectivity and semi-structured interviews:* The semi-structured approach to the interviews creates the opportunity to explore specific issues and themes in more depth. This approach increases flexibility but may also introduce interviewer subjectivity. The evaluation team mitigated this problem by carefully evaluating KII data through triangulation among members of the evaluation team that participated in the interviews, respondents, and secondary data.
- *Inconsistent accounts:* Responses to questions may differ among interviewees across and possibly within respondent layers, especially in cases where individuals may have a vested interest in reinforcing a narrative. The evaluation team addressed this issue by triangulating responses across multiple respondents and probing for additional information where appropriate. Indicative cases are KEK emphasizing the importance of thermal generation and private developers emphasizing the significance of speedily diversifying into renewable generation.

I.2.5 IMPLEMENTATION PHASES OF THE EVALUATION

The REpower evaluation and Kosovo energy sector assessment was implemented in three phases:

1. Inception
2. Data collection
3. Reporting

Inception Phase

After launching the evaluation, the research team finalized the workplan and reviewed secondary data shared by USAID/Kosovo. The team prioritized its review of these materials to further familiarize team members with the associated activities, elaborate the list of KII and FGD participants, and develop detailed evaluation questions tailored to the REpower evaluation and Kosovo energy sector assessment context. The evaluation team produced a final evaluation workplan, and delivered it to USAID/Kosovo for review.

Data Collection Phase

The research team began its data collection phase by briefing USAID/Kosovo. During this briefing, the team reviewed the workplan with USAID team members to ensure shared understanding of the evaluation methodology, schedule, and plan for implementation. After the briefing, the evaluation team conducted internal coordination meetings to ensure that all members shared a common understanding of the instruments and techniques for implementing the REpower evaluation and Kosovo energy sector assessment. The team then began the first series of KIIs in Pristina, conducting interviews in English or Albanian as required. A mid-point briefing with USAID/Kosovo was held after the first round of interviews and based on the information discussed, the KII and FGD instruments were updated.

The research team subsequently completed the remainder of KIIs and FGDs in Pristina and neighboring areas. The team delivered a final presentation at the USAID/Kosovo office on the final day of the data collection phase, focusing on the preliminary findings and recommendations. A discussion followed and initial comments were provided, which were taken into consideration in preparing the current report.

Reporting Phase

The research team allocated work and began the reporting phase of the REpower evaluation and Kosovo energy sector assessment in close cooperation at all times. During this period, additional information requests were sent to the REpower team to further analyze and validate the conclusions and recommendations presented in this report. With support from IMPAQ home office staff, the evaluation team reviewed their findings and recommendations and produced this evaluation report.

2. FINDINGS

2.1 REPOWER PERFORMANCE AND RESULTS ACHIEVED

2.1.1 QUESTION 1

To what extent is REpower on track to achieve its intended results?

The REpower activity has two main Objectives and five Components:

Objective 1: Promoting clean energy

- Component 1: Develop an enabling legislative and policy environment for clean energy projects.
- Component 2: Assist the Energy Regulatory Office with planning, preparing, and prioritizing clean energy projects.
- Component 3: Support to Kosovo and Albania's common electricity market.

Objective 2: Improve enabling environment for private investment in the energy sector

- Component 4: Support the continued unbundling of the Kosovo energy sector.
- Component 5: Support development of a more secure and stable energy supply.

As of the date of this report, the REpower activity remains on schedule with the exception of certain areas discussed under the questions that follow. The tasks are being completed to the beneficiaries' satisfaction, in a professional and timely fashion. Based on the information provided during the interviews with the direct beneficiaries, there was no indication of any major issues with the REpower team's performance. Very often, the REpower team went out of its way to deliver work products on tight deadlines and under changing environments.

The analysis of the indicators submitted by the REpower team shows that many indicators exceed (some substantially) the cumulative target values for Year 3 (October 2016 through September 2017). Moreover, some of the indicators exceeded the set targets for the overall activity. Examples follow:

- **Component 1 and 2:** Number of megawatts (MW) authorized by ERO (237.623 vs. Year 3 cumulative target of 106, overall activity target of 201).
- **Component 1:** Number of policy reforms/laws/regulations/administrative procedures drafted and presented for public/stakeholder consultation to enhance sector governance or facilitate private sector participation and competitive markets that have been adopted as a result of USG assistance (33 vs. Year 3 cumulative target of 6, overall activity target of 12).
- **Component 2:** Number of procedures for application for licensing of energy projects simplified or reduced that have been adopted (9 vs. Year 3 cumulative target of 6, overall activity target of 6).
- **Cross-cutting indicators for all Components:**
 - Person hours of training completed in technical energy fields supported by USG assistance (2,399.3 vs. Year 3 cumulative target of 1,630, overall activity target of 2,910).
 - Number of institutions with improved capacity to address climate change issues (clean energy) as a result of USG assistance (36 vs. Year 3 cumulative target of 6, overall activity target of 7).
- **Environmental indicator:** Number of times the Environmental Mitigation and Monitoring Plan (EMMP) is reviewed on a quarterly basis for compliance with all recommended environmental

mitigation measures and progress on compliance as well as any issues reported to USAID (8 vs. Year 3 cumulative target of 8, overall activity target of 16).

Some indicators, however, lag behind and may not be fully reached by the end of the REpower activity unless the situation in the respective components improves. The indicators in question are listed below:

- **Component 3:** Number of improved cooperative energy policies, laws, plans, agreements or model actions strengthened, developed, adopted and/or implemented (2 vs. Year 3 cumulative target of 5, overall activity target of 14).

The indicator for Component 3 has been established at USAID's request to show the extent to which beneficiaries implemented adopted legislation. In many cases, the beneficiaries are slow to implement. Furthermore, after adoption of a document, many issues surface during the actual implementation process, which further affect the timing of implementation. Such defined indicators differentiate responsibility for achieving targets and divert the blame from the REpower activity to the recipients of the prepared documents.

In the case of Component 3, the slowdown in the common electricity market can be attributed to the political stand-off between the Albanian and Kosovar governments, and the lengthy election processes in both countries.

- **Component 4:** Number of policy reforms/laws/regulations/administrative procedures drafted and presented for public/stakeholder consultation to enhance sector governance and/or facilitate private sector participation and competitive markets that have been adopted as a result of USG assistance (0 vs. Year 3 cumulative target of 4, overall activity target of 10).

Similarly to the indicator for Component 3, the indicator for Components 4 shows the extent to which the beneficiaries implement the adopted legislation. The main reason for not reaching the target was the stalled unbundling process of KEK. After the government instructs the Board of KEK to proceed with unbundling (into mining and generation), the documents prepared in advance by the REpower team can be easily and readily applied. The implemented documents will count towards the indicators and the established targets. However, if the government continues to stall the process, the timely implementation of this component may be in jeopardy. If the decision as to which option of unbundling to follow (deciding against unbundling is not considered here) is not made by mid-2018, a serious risk exists that the REpower team will not be able to finalize unbundling process documents and procedures before the end of the activity.

- **Cross-cutting indicator for all Components**
 - Total public and private funds leveraged by USG for energy projects (in millions of US\$) (162.34 vs. Year 3 cumulative activity of 60, overall activity target of 580).

Component 5 and the target for the indicator were originally associated with leveraging financing for rehabilitation of the Kosovo B power plant. The Component was later expanded to include the New Kosovo Power Plant (NKPP). For 2018, additional money has been secured and officially confirmed for rehabilitation of Kosovo B:

- \$45 million from the European Union (EU) Instrument for Pre-Accession (IPA) 2018.
- \$42.5 million from the Government of Kosovo 2019-2020 budget (see Annex C).

The amount of \$368 million to finalize the rehabilitation of Kosovo B is still missing. To avoid the risk of a shortage of funds, the project needs a financial strategy to find additional money. If successful, REpower

will reach the level of \$617.84 million in total funds, exceeding the original target of \$580 million, as shown in Exhibit 4. However, the amount of money to be leveraged is out of the REpower activity’s control.

Exhibit 4. Total Public/Private Funds Leveraged by USG for Energy Projects

Year	Public/Private Funds (\$ MM)	USG Leveraged Funds (\$ MM)	Total USG Leveraged Funds (\$ MM)	Target for USG Leveraged Funds (\$ MM)	Total USG Leveraged Funds cumulative (\$ MM)	Target for USG Leveraged Funds cumulative (\$ MM)
2015	0.87	0.87	0.87	10.00	0.87	10.00
2016	115.78	115.78	115.78	40.00	116.65	50.00
2017	45.69	45.69	45.69	10.00	162.34	60.00
2018	87.50	87.50	455.50	20.00	617.84	80.00
	368.00	368.00				
2019	1,580.00		-	500.00	617.84	580.00

Values in red are estimated.

In conclusion, the REpower activity is staying on course with the exception of the components that are dependent on either the pace of inter-governmental agreements or decisions made by the Kosovar government. The obstacles that are marring progress, in various tasks, are further described in detail in Section 2.1.3.

2.1.2 QUESTION 2

To what extent is REpower’s approach relative to the SoW, including activity components, both necessary and sufficient to achieve intended results?

As discussed in the previous section, not all components/tasks are advancing at the same pace due to unexpected obstacles (detailed in Section 2.1.3 following) which must be removed to move forward. The immediate question is whether the obstacles to implementation are the fault of the REpower team’s approach. The analysis in the following sections shows the obstacles are primarily political, either domestic, Kosovo governmental, or international in nature (which can affect domestic issues). The very nature of international relations makes it difficult to estimate when such obstacles may be alleviated. There is nothing that the REpower team can do to change that.

With regard to achieving the intended results in the majority of tasks, the activity is following the SoW in its original version as well as the subsequent version modified by the USAID in the fourth quarter of the second fiscal year.

What interventions are missing, if any?

At this point, the only intervention that could facilitate faster implementation of the delinquent components lies outside of REpower’s competence and abilities. Eliminating obstacles in international relations could be achieved at the government level, but without any guarantee of success.

A case in point is the long-standing efforts of the EU and the European Network of Transmission System Operators for Electricity (ENTSO-E), which have not resulted in any progress, to mediate with Serbia to resolve control of transmission capacities on Kosovo's borders. Currently, the German government is attempting to resolve the issue, as it has invested heavily in the new 400 kV transmission line between Albania and Kosovo, which cannot go into operation because of the Kosovo-Serbia feud.

Another example of an international obstacle are snags in opening a common market between Kosovo and Albania. While advancing with REpower's assistance on the technical side, progress lags on the political side as it heavily depends on agreements between the Kosovar and Albanian governments.

2.1.3 QUESTION 3

What, if any, external obstacles are hindering REpower implementation?

Obstacles are part of any technical assistance activity; whether they have been effectively overcome and whether they have had a lasting effect on the implementation of the activity is most important. Any technical assistance activity of the scope and magnitude of REpower's may face a variety of obstacles. In REpower's case, the obstacles could be grouped in several categories, depending on their nature and their impact on the activity implementation. We must stress at the outset of this analysis that none of the critical obstacles have been the REpower team's fault. Also, for completeness of the analysis, this document presents all significant obstacles that happened in the past because they all had an impact on activity implementation.

Obstacles that have been resolved by the time of publication of this report:

Administrative obstacles

Based on interviews with the REpower team and reviews of the REpower quarterly reports, most administrative obstacles happened at the early phase of the activity and were caused by:

- REpower underwent a prolonged process for receiving nationality waivers for subcontractors, thus creating temporary delays of work and the need for an adjustment to the implementation timeline. The impact was temporary and was eliminated relatively quickly after completing all necessary subcontracts.
- Inability to conclude the agreement between AECOM, REpower's prime contractor, and the International Energy Association (IEA), AECOM's international partner in its technical proposal. AECOM had to start a search to identify a proper replacement for IEA whose role was to interact with the EU bodies. AECOM finally eliminated this obstacle by finding a replacement.
- Replacement of certain REpower staff, dictated by the need to better match the consultant's skills and experience to the demands of the respective positions and beneficiaries' expectations. These obstacles were resolved relatively quickly while REpower continued with implementation, despite the temporary setback while the search for replacement continued.
- Administrative obstacles at the University of Pristina and the American University of Kosovo affected REpower's placement of the first interns at the beneficiary institutions. After finding the resolution, the task moved forward allowing the REpower team to launch the first round of internships. The internships later became a success story: the fourth round of interns has recently started, with a total of 63 students now participating in the program.

Delays in delivery of the study of barriers hindering the deployment of renewable energy

REpower's review of the then current relevant energy laws and renewable energy legislation was hampered by MED awaiting the publishing of the Fichtner Management Consulting study on barriers hindering deployment of renewable energy, funded by the Government of Kosovo through a World Bank (WB) loan. The study, originally expected in the first quarter of 2016, was finally released in September 2016 and the review could continue.

Key institutional obstacle

REpower introduced The One-Stop-Shop (OSS) in October 2015, as an original idea for simplifying procedures for obtaining the necessary permits for renewable projects. REpower helped MED in drafting and revising the related Administrative Instruction, which was subject to review and approval by the Ministry of Finance and Ministry of Public Administration. REpower also organized a study tour to Belgium and Denmark to expose the decision makers to foreign experience in this area. The delay was caused by MED identifying the funding for staffing the OSS; it wasn't until April 2018 that MED finally announced that the government adopted the regulation for establishing OSS and that specific operational details will be prepared within the following 90 days.

Critical obstacles that continue to negatively affect the pace of activity implementation:

Unbundling of KEK (institutional)

Institutional obstacles associated with frequent changes of the Kosovo government (three changes in 3 years) have had a detrimental effect on the REpower team's implementation of Objective 4. The REpower team has been waiting for confirmation from the management board of KEK that they have decided to become unbundled (i.e. separating electricity generation and mining), which was obtained on April 6, 2008. Similar requests for confirmation have been repeated after each change in the government or management board. All REpower work related to KEK's unbundling is still on hold. The REpower team, in anticipation of such unbundling eventually taking place, has taken a proactive approach and advanced all of the unbundling-related work to the point that it can resume on short notice. All necessary documents will already be in place. The REpower team provided training on power sector unbundling to the government representatives and other energy sector stakeholders. REpower prepared a report on unbundling options and a high-level action plan of activities required to implement the unbundling process, and delivered the documents to the KEK Board. In parallel, the REpower team has worked on human resource related issues and developed a SoW for the unbundling Project Implementation Unit, which will facilitate the unbundling process from the government side.

Rehabilitation of Kosovo B (institutional)

- Despite REpower's readiness to proceed with Component 5 and the presentation of reports on financing options and market study, MED was delaying the decision on Kosovo B rehabilitation as it was focusing on negotiations on the NKPP project. This focus caused the REpower team to scale down involvement in this component. Eventually, Component 5 was frozen in the third quarter of the second fiscal year.
- In the fourth quarter of the second fiscal year, USAID made changes to several parts of REpower's SoW. Component 5 was renamed to "Support the Development of a More Secure, Stable Energy Supply" (formerly and more specifically "Develop a Financing Strategy for the Rehabilitation of Kosovo B"). Under the redefined Component 5, the REpower activity started getting more involved in the NKPP. However, the slow progress and uncertainties over the NKPP project affected REpower in reviewing or preparing some studies, especially updating the Environment and Social Impact Assessment (ESIA) as requested by MED. Also, the delays in reaching an

agreement between MED and USAID on the structure of REpower support, after the change of the component's objective, contributed to delays in the REpower team's engagement.

- The GoK keeps postponing the decision to establish the Project Implementation Unit (PIU) under Component 5, causing the draft package of governance documents prepared by the REpower team for the establishment, operation, and management of the PIU to be put on hold.

Kosovo-Serbia dispute (political)

The obstacles that have had the most severe impact on implementation of some of REpower's activities had their origin in the ongoing political dispute between Serbia and Kosovo. Examples of the activities affected by this obstacle, based on personal interviews with ERO and KOSTT staff as well as a review of REpower's quarterly reports, include:

- Delay in presenting changes in the laws (transposition of the Third Legislative Package into Kosovo primary legislation) to the Parliament in the first fiscal year of the activity until Kosovo-Serbia Energy Agreement of 2014 is implemented. According to that Agreement, a potential operator of the four Northern Municipalities should apply to ERO for a license to provide electricity service. Such application is supposed to be made in the name of the Kosovo-registered business. ERO even prepared a draft license in the event that such application for supply services is filed, and the REpower team started evaluation of technical codes and system configurations to identify modifications possibly needed to the legal and regulatory framework should such application be filed. However, as of the date of this report, no application has been filed with ERO.
- The unresolved issues with Serbia have prevented KOSTT from becoming a full ENTSO-E member and controlling cross-border capacities on Kosovo borders. Despite all countries that are signatories to the Energy Community Treaty voting to recognize Serbia's non-compliance with the Treaty's obligations about regional integration efforts and imposing a deadline for Serbia's compliance by the end of 2016, no improvement in the situation, as of the date of this report, has occurred. Because of KOSTT's inability to control the capacities assigned for cross-border transactions, all related monetary proceeds go to Serbia.
- Consequently, REpower Task 4.3 on Monitoring the Process of Negotiation with Serbia has been dormant for several months.
- The next obstacle created by a dispute with Serbia is the issue of using, per Serbian initiative, the ERO/UNMIK designation when referring to ERO as a member of the Energy Regulators Regional Association (ERRA).¹ Since the ERRA Board continues to use the ERO/UNMIK designation, which ERO opposes, ERO decided to suspend its membership in the Association. This has a negative impact on ERO's ability to participate in regulatory trainings organized by ERRA as well as access to ERRA-maintained databases.

Establishing common electricity market with Albania (political)

- Despite early agreements signed in 2014 between the Albanian Ministry of Energy and Industry and MED on establishing the Kosovo-Albania common electricity market, a year later the Government of Albania unilaterally shifted its focus and decided to establish a power exchange only in Albania. The REpower activity had to adjust documents that were already prepared.
- The pace of developments continued to depend on the political coordination between the two governments. In the second quarter of the third fiscal year, the lack of commitment from the Albanian government affected progress of REpower activities in Component 3. The pace of the interaction between the two ministries and the relevant stakeholders towards the Albanian Power

¹ United Nations Mission in Kosovo (UNMIK) is a name used by the United Nations for the Republic of Kosovo. Kosovo declared independence from Serbia on February, 17 2008; however, it is not a member of the United Nations.

Exchange (APEX) started to pick up at the meetings in Tirana in November 2017, after which a new Memorandum of Understanding was drafted and signed. During the subsequent meetings of the Joint Working Group (legal, technical, and commercial), in February 2018 in Pristina, the milestones for the APEX establishment were discussed and the roadmap for market coupling was updated.

Quorum at ERO (institutional)

- The absence of a quorum at the ERO Board twice formed another critical obstacle for extended periods of time, the last one extending through March 2018. These absences had immediate impact on the timely approvals of secondary legislation by ERO and other documents advanced by REpower and the ERO staff and requiring Board decisions. Nomination of Board members finally took place in March 2018. The appointments of the ERO Board members does not happen in a staggered way, which is a regulatory “rule of thumb” internationally, thus contributing to long periods of vacancies in the Board, causing debilitating halts in the consideration of critical regulatory issues.
- The lack of a quorum at the ERO board prevented ERO from making decisions or approving various rules and regulations. That was the situation with KOSTT’s application for certification as a Transmission System Operator (TSO). In addition to the absence of a quorum, the approval of KOSTT’s application faced obstacles related to the standoff with Serbia. Because the ownership status of certain land assets (which existed at the time of incorporation) is unclear due to the absence of cadastral certifications in Kosovo, ERO refuses to conclude the certification process, despite the REpower team’s efforts, without examining the physical cadastral certificates which, according to Kosovo institutions, are not currently in Kosovo (as they were moved by the Serbs to Belgrade, after the war).
- An ERO Board decision is needed on all issues subject to primary laws and individual acts related to licenses, authorizations, tariffs, and dispute settlement.² Decisions can be impossible to reach at times when the Board does not have a quorum, directly affecting the approval of any REpower work deliverables to ERO that needed adoption later by the Board.

The REpower team’s performance did not create the obstacles cited above nor were these obstacles within the REpower team’s ability to remove.

2.1.4 QUESTION 4

To what extent did REpower integrate gender equality in energy policies and increase the representation of women in the decision-making processes?

To help gender equality in the sector, the activity has carried out a gender assessment analysis and has identified and designed adaptive actions based on helping impact the gender balance in the sector. Although women are still under represented, REpower has initiated, for the first time in Kosovo, a gender perspective to the energy policy and decision-making process. Through their Mentoring Circles (mCircle) program launched in sector institutions, REpower developed women’s skills to provide opportunities for them to play a distinctive role as policymakers in the future. Furthermore, the REpower internship program was a success for women students, as they comprised more than half of the selected interns in all internship rounds.

² Article 26.1 of Law on the Energy Regulator, July 14, 2016.

Further to the recognized USAID support to the energy sector, the USAID through REpower is seen in a leading position towards attaining gender balance in the energy sector in Kosovo.

Concerning gender in the energy sector, the following are REpower's key identified achievements:

1. Gender analysis and action plan for energy sector in place with actions.
2. Women's mentorship program, mCircle, launched and running in all energy beneficiary institutions and organizations.
3. Establishment of the Association of Women in Energy Sector (AWESK).
4. Participation of women students in the internship programs.

1. Gender analysis and action plan for energy sector in place with actions

The energy sector of Kosovo has received very limited or no gender perspective review on national level laws and policies. There is also no knowledge of any gender analysis initiated prior to REpower's gender analysis in the energy sector. REpower's analysis was followed by a Gender Action Plan (GAP) that embodied the recommendations of the analysis and included a gender section in all five REpower components. REpower, through this crosscutting component, has carried out initiatives reducing gender gaps and improving women's participation and representation in the energy sector. These initiatives involved key energy sector participants and project beneficiaries (KEK, KOSTT, ERO, and MED). The action plan provides a detailed set of activities, whose implementation is reported in the quarterly and annual reports with sex-disaggregated data included. REpower's deliverables, when applicable, have been presented or reviewed from a gender perspective.

REpower's gender analysis points out the large gap in research on the topic of gender and energy or projects that tackle gender equality in the sector. REpower has pioneered efforts to foster gender balance in Kosovo's energy sector, notably through AWESK and its internship programs.

2. Women's mentorship program, mCircle, launched in all energy beneficiary institutions and organizations

To address the missing link between gender balancing and the energy sector, the mCircle program developed by AECOM has been launched in Kosovo's energy institutions. The program aimed at KEK, KOSTT, MED, and ERO's female workforce promotes skills development, career self-management, and networking. The initiative was met with interest and support from all beneficiary organizations, seeing it as a means for women to affect the energy sector. Each of the institutions provided focal points for the program.

Upon establishment of the mCircle, annual workshops were held during which each focal point and relevant women participants expressed ideas and initiatives and identified challenges and other matters of interest, which were then (if applicable) included in the roadmap for implementing the GAP. The mCircle helped energy companies to recognize that it is not merely a question of recruiting women for the sake of balance, but also to help appropriately fill professional vacancies as women bring particular benefits to the workplace.

Furthermore, since establishment of the mCircle in 2016, five workshops have resulted in establishing the AWESK and consequently developing its strategy. Apart from the gender promotion workshops, energy related trainings and workshops were held as planned for each of REpower's five components. Since 2015, 27 professional trainings and workshops were held, combined with 18 study tours. These comprised 938 hours of women training (36 percent of the total), and a further 1,677 hours of men training.

3. Establishment of the Association of Women in Energy Sector (AWESK)

As stated earlier, the AWESK was established through the work and initiatives of mCircle, a pioneering initiative for the energy sector and gender. AWESK is the first of its kind in Kosovo and the region. In its initial phase in 2017, AWESK comprised 15 members (mainly the mCircle focal points). Today AWESK has more than 100 members, including university professors, local energy experts, consultants, and students. AWESK is currently in its final phase of registration. Its main goal is to affect the energy political agenda and gender equality, empower the role of women, and promote role models for the younger generation. AWESK plans to continue with workshops and training, especially on energy efficiency and energy saving.

An important element that needs mentioning is that most of the professional women running AWESK already have fulltime jobs, which impacts the effective operation of the organization. Although AWESK has its strategy in place, it requires further support to become self-sustainable, and therefore continues relying on REpower's support or other follow-up USAID activities.

4. Participation of women students in the internship programs

One of the reasons for low female participation in Kosovo's energy sector may be that the population does not understand what "energy sector" means and what kinds of job opportunities (other than in mining or power plants) may be available.³ REpower, through their internship program, ensured that all appropriate selection criteria were respected, providing full opportunity for women engineers. Through the internship program, 47 students were selected in 3 rounds of 6 months and 55 percent were women. The trend of women in the energy and infrastructure fields seems to be changing in Kosovo, though very slowly.

In conclusion, for the first time in Kosovo REpower has combined analysis, action, training programs, and relevant sector policy and regulation work, through which the gender integration perspective was included in the policy and decision-making process. If such approaches and activities continue in Kosovo, the research suggests that women will attain greater influence in the energy sector and will play a more active role in setting the sectoral agenda.

2.1.5 QUESTION 5

To what extent has REpower coordinated with other donors on its activities?

In analyzing the extent to which REpower and donors coordinated, we must look from different perspectives:

1. Overall coordination at national level, by national institutions.
2. Coordination at donor (USAID) level.
3. Coordination at activity (REpower) level.

Overall coordination at the national level is regulated by GRK no. 09/2015 on the Coordination of Foreign Donor Assistance in the Republic of Kosovo. This regulation establishes a High-Level Forum (HLF), Sector Working Groups (SWGs), and Sub-Sector Working Groups (SSWGs).

According to the regulation, the HLF is the highest structure of foreign donor assistance coordination in Kosovo that discusses the national priorities to be funded from foreign donor assistance and the key

³ Gender Analysis and Gender Action Plan 2015, p. 11

monitoring indicators. The HLF also initiates high-level discussions on development policies and strategies with foreign donors. Chaired by the Prime Minister, members include the deputy prime ministers, ministers, independent institutions, and ambassadors of donor countries or heads of agencies representing foreign donors operating in Kosovo.⁴

Since 2015, REpower and MED systematically organized annual HLF conferences on issues of importance to the energy sector, attended by high-ranking officials in the Kosovo energy sector and many of Kosovo's international partners, including:

- USAID
- US Embassy
- European Union
- World Bank (WB)
- International Finance Corporation (IFC)
- European Bank for Reconstruction and Development (EBRD)
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
- Energy Community Secretariat (EnCS)
- ENTSO-E
- Government of Albania
- Albanian regulator, TSO and electricity supply company

These conferences provide an opportunity to highlight the Kosovar government's strategic priorities for the energy sector.

The Ministry of European Integration and line ministries respectively chair and coordinate SWGs and SSWGs. For the energy sector, MED is the main body to coordinate donor activities. Given that MED was one of main beneficiaries of REpower, frequent meetings were organized over the course of REpower implementation.

Another level of REpower coordination is with USAID, and included:

- REpower attended meetings and conference calls with USAID, EU, and WB to exchange information about activities and to coordinate and avoid duplication of efforts. REpower has a particularly close cooperation with the RES component of the WB energy efficiency and renewable energy sources (EE & RES) project. It is indicatively noted that that WB did not accept the study it funded on barriers hindering the deployment of renewable energy (Fichtner Management Consulting) before REpower provided its clearance.
- REpower attended a meeting with EBRD at USAID's offices to exchange information about EBRD's activities within Kosovo and about REpower's activities and the scope of US involvement in the NKPP project.
- REpower attended a joint meeting with USAID and the EnCS. The two EnCS experts received a written brief highlighting the tasks carried out by REpower in the field of the EU's 3rd Energy Package during 2015, together with a description of the anticipated future tasks for 2016.
- Because of a request passed from USAID, REpower contacted the Millennium Challenge Corporation (MCC) in March 2017 to share information about REpower's past and future gender activities to promote coordination between the two US donors.
- At USAID's request, REpower joined a meeting in January 2017 between the US Embassy, USAID, and the MCC to discuss matters of joint interest with the objective of coordinating the introductory ceremony for the third round of REpower's internship program.

⁴ Regulation GRK No. 09/2015 on coordination of foreign donor assistance in the Republic of Kosovo

Coordination at the activity level may be directly attributed to the extent REpower has cooperated with other donors and activities. According to interviews with REpower staff, in the process of developing each of its annual plans, REpower has discussed its plan with the beneficiaries to prevent any potential action overlapping with other donor support.

Furthermore, coordination meetings were organized almost on a monthly basis by REpower with other international donors involved in the energy sector in Kosovo. REpower has played a significant role in establishing a working group to develop the scheme for contracting for renewable energy (with IFC, ERO, and MED). The working group engaged in this dialogue for more than a year, revising drafts of the resulting Power Purchase Agreement (PPA).

REpower also organized bilateral coordination meetings with the EU, IFC, and EBRD. In coordination with the WB, REpower and USAID agreed to support ERO on feed-in tariffs for hydro and wind, and leave biogas and biomass for the WB.

Another type of cooperation at very technical report reviewing level was based on comments submitted by EBRD to ERO on the draft PPA prepared by REpower. REpower and USAID met the EBRD representatives to discuss, and REpower also attended another meeting between ERO and EBRD to discuss comments on the PPA and the overall structure for renewable energy financing.

The review of available documentation, interviews with the REpower, beneficiaries, and representatives of the international donors in Kosovo, concluded the following:

- REpower has appropriately coordinated with other donor and activities in the energy sector.
- Coordination was made in the timely manner, through bilateral, group, or informal meetings.
- No overlapping of REpower actions with other international donors was identified.

2.1.6 ENVIRONMENTAL SUSTAINABILITY

Environmental sustainability is an important crosscutting issue. Although not specifically set as an evaluation question, the REpower Activity's consideration to addressing environmental concerns and ensuring environmental sustainability are summarized next.

The USAID's prepared Initial Environmental Examination (IEE) for the REpower activity (*DCN: 2014-KOS-060*), pursuant to environmental procedure 22 Code of Federal Regulations (CFR), has determined the REpower actions as Negative Determination with Conditions.

To mitigate the impacts, and to ensure environmental compliance during implementation of REpower actions in a way that minimizes or eliminates environmental risks, REpower developed an Environmental Monitoring and Mitigation Plan (EMMP), approved by USAID (*DCN: 2016-KOS-069*).

An environmental indicator set by REpower tracks the Activity's progress on environmental compliance. The indicator, defined as the number of times the EMMP is reviewed for compliance with all recommended environmental mitigation measures, presents progress on compliance as well as any issues reported to USAID (target of four times per year, included in quarterly reporting). Reviewing the EMMP resulted in no need for changes or amendments. So far, all REpower actions were found to be low to moderate risk, and compliant with all recommended environmental mitigation measures. To ensure indirect impacts, sustainability, and integration of environmental considerations, all key REpower deliverables were subject to environmental screening.

Furthermore, REpower participated in specific environmental related actions, including:

- *One-Stop-Shop (OSS)*: REpower supported MED to develop an OSS concept for renewable energy projects. Appropriate considerations involving the relevant stakeholders and addressing their environmental concerns are considered through the action, such as multi-stakeholders workshops, study tours, and developing the concept paper.
- *Environmental Permitting*: REpower conducted three workshops with Kosovo municipalities about developing renewable energy projects and the harmonization of municipal environmental permits. REpower launched efforts to work with municipalities on harmonizing the procedures for granting the permits for renewable energy projects with an installed capacity less than 100 kilowatts (kW). Municipal environmental authorities attended these workshops.
- *NKPP Environmental and Social Impact Assessment (ESIA)*: REpower was tasked to work on reasonable amendments to the existing ESIA for NKPP to reflect the impact of a 450 MW rather than a 600MW net generation plant. In addition, as requested by MED, REpower developed two additional studies on meteorological and flood risks. The study process also involved a consultation, ensuring the environmental sustainability of the specific action (NKPP).

In conclusion:

- REpower has reviewed the EMMP according to the set environmental indicator. Reviews concluded that all REpower actions were adequately covered by the EMMP, with no need to change or amend the EMMP.
- REpower is on track to implement mitigation measures as set in the EMMP. Adequate human resources (one international and one local expert) are engaged to address the environmental concerns. All the REpower deliverables received screening from the environmental perspective.
- REpower must ensure that records of environmental compliance, referred to in the EMMP as “verification records”, are developed using forms available at: <http://www.usaidgems.org/compliance.htm>.

2.2 ENERGY SECTOR ASSESSMENT AND FUTURE SUPPORT

2.2.1 QUESTION 6

What are the primary challenges in Kosovo to achieve a more secure, affordable, and environmentally sustainable energy supply?

Kosovo’s economic and geopolitical situation has historically forced Kosovar leaders to prioritize stable energy generation in the short term, rather than energy efficiency and environmental sustainability. The WB’s Doing Business 2018 Ranking placed Kosovo 106th in ease of getting a permanent electricity connection, with the reliability of supply and transparency of tariffs index ranking of 2:8 compared to 5.3:8 for Europe and Central Asia. This energy provision capacity is also under increasing stress. The REpower team estimates an annual electricity consumption growth rate of 2.74 percent from 2015 to 2035. Meanwhile, the energy sector accounts for more than 85 percent of greenhouse gas emissions. To respond to this stress, the GoK must improve efficiency and sustainability of its energy-generating infrastructure and successfully address the cross-border energy exchange issues.

Kosovo’s extensive reserves of lignite, also known as brown coal, fuel the Kosovo A and Kosovo B thermal power plants (TPP), which produce 97 percent of Kosovo’s energy. Although lignite is relatively cheap in Kosovo, which holds the world’s fifth largest reserves of this kind of coal, it is also an extremely emission-heavy and inefficient fuel source. The two power plants are reaching the end of their technical lifespans

and are highly inefficient. Kosovo A, long described as the largest single source of pollution in Europe, is scheduled to be replaced by the new and more efficient NKPP. Kosovo B will be rehabilitated. Kosovo's renewable energy production is currently limited to 3 percent produced by small hydropower plants.

The following primary challenges, in order of significance, have been identified in the Kosovo energy sector:

1. Agreement and full cooperation with Serbia in the energy sector.
2. Secure reserve generation capacity for the electricity system.
3. Establishment of the Kosovo-Albania common market as a first step toward full integration in a regional energy market.
4. Restructuring and full harmonization of the energy sector with EU Directives.
5. Gradual move to cost-reflective electricity tariffs, retaining affordability for vulnerable populations.
6. Encouragement in developing new engineering professionals to enter the energy sector.

C1. Agreement and full cooperation with Serbia in the energy sector

This is the most significant obstacle to Kosovo achieving a more secure, affordable, and environmentally sustainable energy supply. Since Kosovo declared independence from Serbia in 2008, the relationship between the two states has prevented effective collaboration on cross-border energy agreements. Particularly damaging to Kosovo's regional energy integration, Serbia controls all of Kosovo's cross-border electricity transmission capacities in non-compliance with its Energy Community Treaty (ECT) obligations. This control causes two major problems to the effective and sustainable operation of Kosovo's electricity sector:

1. Restrains the establishment of the Kosovo-Albania common electricity market (analyzed further under C3). This market would allow Kosovo to improve its energy security by accessing reserve power from Albania, which relies almost entirely on renewable hydropower.
2. Creates a large financial deficit in the electricity market. Until December 2017, the unpaid electricity consumption from the northern Kosovo area controlled by Serbia was recovered via the consumer tariff. A court decision led to termination of this practice, creating a direct financial deficit of around 1 million Euro per month. This deficit was covered for March 2018 by the GoK, which is currently considering a similar request for April 2018, but this cannot continue for long.

The challenge is to implement the Agreement on Network and System Operation Management signed by the TSOs of Serbia and Kosovo in 2014. The Government of Germany has requested the Energy Community Dispute Resolution and Negotiation Centre to facilitate negotiations between Serbia and Kosovo on this long-standing dispute.

C2. Secure reserve generation capacity for the electricity system

Kosovo's electricity system lacks secondary and tertiary power reserves due to non-flexible generators because around 97 percent of domestic generation is based on lignite. Currently, in the case of unplanned generation unit failures, load shedding is applied in Kosovo (costing businesses around 335 million Euro annually according to a recent USAID study). This challenge can be addressed effectively through operation of the Kosovo-Albania common electricity market (analyzed next).

C3. Establishment of the Kosovo-Albania common market as a first step toward full integration in a regional energy market

KOSTT is planned to be co-owner of the APEX, scheduled to start operating in January 2019. Macedonia and Montenegro may also subsequently join APEX, leading to further regional integration. The EnCS acknowledges that lack of progress with respect to the entry into force of the Connection Agreement between KOSTT and ENTSO-E, part of the agreement on network and system operation management between Serbia and Kosovo, constitutes as the single largest obstacle to regional cooperation in the Western Balkan (WB6) region.⁵

To fully exploit the benefits of APEX, (i.e. access to reserve capacity and overall complementary operation of the two electricity systems), Kosovo faces the challenge set by the high cost of electricity from the NKPP, which will restrain its ability to effectively compete in APEX, especially after the anticipated future establishment of a gas-fired power plant in Albania.

C4. Restructuring and full harmonization of the energy sector with EU Directives

Kosovo's legislative framework is now largely in line and harmonized with EU directives for the energy sector, but the participating institutions have yet to fully adapt their operations and the electricity market is still not operating effectively. According to the EnCS, Kosovo has a good record in legislative transposition under difficult external circumstances but must do more to get its market structure and environmental performance right.⁶

Challenging tasks that must be undertaken toward an effective and transparent electricity market operation in Kosovo include:

1. Complete wholesale deregulation (including unbundling of KEK mining and generation functions, despite no legal requirement under EU directives for GoK to unbundle).
2. Ensure that the contractual framework adopted for the NKPP does not hamper development of an efficient market.
3. Operate a national balancing services market.
4. Actual operation of two additional licensed suppliers and EU-based trader in the retail market.

C5. Gradual move to cost-reflective electricity tariffs, retaining affordability for vulnerable populations

Residential consumer tariffs for electricity in Kosovo are currently heavily subsidized by commercial and industrial consumers (by around 70 percent). Commercial and industrial consumers are also charged with a high capacity element in the electricity tariff. GoK further subsidizes a large number (around 35,000) of "social case" consumers' electricity bills.

The challenge is to gradually make consumer tariffs cost-reflective, but at the same time retain affordability for vulnerable populations. This challenge becomes difficult, as the overall level of tariffs must considerably increase in the next years, due to the large amount of new investments in the electricity sector. NARUC is currently initiating a new USAID assignment on methods to support the vulnerable population in Kosovo.

C6. Encouragement in developing new engineering professionals to enter the energy sector

⁵ Energy Community Secretariat, WB6 Electricity Monitoring Report, March 2018, p. 3.

⁶ Energy Community Secretariat, Integration of Western Balkans into the Pan-European Energy Market, February 2018, p. 1.

As repeatedly reported in interviews, the trend in recent years is for less students in Kosovo to prefer the power engineering stream at university. Furthermore, the Master's program on Energy at the Technical University of Pristina was recently temporarily suspended due to the lack of adequate staff.

As the workforce at the energy sector organizations ages (e.g. at the average age of 57 currently at KEK), maintaining an appropriate supply of new engineering professionals each year, and absorbing and developing these professionals in Kosovo's energy sector, is an important challenge for the GoK and REpower.

What are the primary opportunities in Kosovo to achieve a more secure, affordable, and environmentally sustainable energy supply?

The following primary opportunities have been identified and presented in order of significance:

1. Gradual market liberalization and sector development with private capital.
2. Financing and construction of new lignite-based generation capacities.
3. Financing, facilitation, and sustainable development of renewable energy projects.
4. Reduction of commercial losses and increased investments in distribution.
5. Efficient use of energy by end consumers.
6. Construction of district heating systems in larger cities.
7. Pre-feasibility study of gas availability.

O1. Gradual market liberalization and sector development with private capital

A large number of investments (totaling around 2.5 billion Euro, analyzed in the next paragraphs) are planned to take place in the Kosovo energy sector over the next 5 years, mostly with private capital. These investments provide the opportunity for new stakeholders (in generation and supply) to enter and operate efficiently in the market, leading gradually toward full liberalization.

O2. Financing and construction of new lignite-based generation capacities

Development of the new 500 MW lignite-based NKPP, contemplated since 2005, is now at its most advanced stage. An agreement on its construction has been recently signed with the US energy group ContourGlobal. The project is expected to require an investment of 1.3 billion Euro, but its financing has not yet been secured. NKPP plans to replace Kosovo A by 2024, providing a more efficient and environmentally friendly operation.

O3. Financing, facilitation, and sustainable development of renewable energy projects

Feed-in-tariff quotas totaling 440 MW have been set for renewable energy projects in Kosovo, and most have already received pre-approval. These projects will amount to almost 0.5 billion Euro in further private sector investments. The country needs to facilitate speedy implementation, already hindered by delays of the initial licensees in securing financing and initiating construction.

Contracts for future renewable energy projects in Kosovo must necessarily be awarded at a lower price, or awarded through auctions, to ensure their sustainable development without over-burdening the consumer tariff. Net metering distributed generation opportunities (i.e. generation of energy by consumers to cover their own needs and sell excess to the distribution system) are also emerging, although still hindered in Kosovo by technical and connection arrangement issues.

O4. Reduction of commercial losses and increased investments in distribution

Commercial electricity distribution system losses (electricity theft through bypassing the meters, the largest part of the 24 percent total) result in very high monetary deficits in the electricity sector, around 2.2 million Euro for each 1 percent of electricity revenue losses. The adoption of improved legal and enforcement procedures offers a great opportunity to reduce these losses.

Parallel investments in the distribution network will reduce technical losses. The private Kosovo Electricity Distribution and Supply Company (KEDS) has the obligation to undertake investments totaling at least 20 million Euro annually.

O5. Efficient use of energy by end-consumers

There is a large potential opportunity for energy efficiency measures by electricity consumers in Kosovo. Around 65 percent of electricity consumption is due to non-efficient household buildings. This potential reduction is estimated to reach up to 40 percent in households and 35 percent from industrial and commercial consumers.

O6. Construction of district heating systems in larger cities

There are significant opportunities to improve and expand district heating systems in Kosovo. Currently, systems operating only in Pristina, Gjakova, Mitrovica, and Zvecan meet up to 5 percent of the total heating demand. Introducing district heating systems has already been studied for Peja, Prizren, Gjilan, and Ferizah.

O7. Pre-feasibility study of gas availability

Kosovo has already adopted the legislative framework in line with EU directives for the gas sector. The Western Balkans Investment Framework (WBIF) platform has already provided a grant for a joint pre-feasibility study with Albania as a connection to the Trans-Adriatic Pipeline (TAP). Therefore, an opportunity exists for introducing a cheaper and cleaner energy supply.

2.2.2 QUESTION 7

Considering these opportunities and challenges, what should USAID support beyond REpower in the short and long term, taking into consideration USAID’s comparative advantage in the sector, Kosovo / regional dynamics, and any potential trade-offs between security of supply, affordability and environmental sustainability of the energy sector?

Considering the challenges and opportunities identified above for Kosovo to achieve a more secure, affordable, and environmentally sustainable energy supply, the areas analyzed next are proposed for USAID support beyond REpower. In determining these areas, USAID’s recent experience and comparative advantages to other donors in Kosovo and the region have also been taken into consideration.

New areas of primary support:

1. Continuous development and effective, transparent operation of the electricity market.
2. On-the-job training and other capacity building.
3. Special on-demand technical and market studies and flexible support to energy organizations.

Areas of continued primary support:

4. Practical and efficient operation of the Kosovo-Albania common market.
5. Evaluation of tenders and market development for NKPP.

6. Understanding and introduction of new technologies.
7. Sustainable operation of AWESK.

Areas of supplementary support:

8. Assist study of sustainable long-term generation, resource sufficiency, diversification, and security and quality of supply.
9. Awareness of population and local institutions on issues and costs in the energy sector.
10. Assist development of de-carbonization strategy and National Integrated Energy and Climate Action Plan.

S1. Continuous development and effective, transparent operation of the electricity market

As recognized earlier in C4, Kosovo's legislative framework is now largely in line and harmonized with EU directives for the energy sector, but the participating institutions have yet to fully adapt their operations, and the electricity market is still not operating effectively. The EnCS identifies the following areas where the operation and transparency of Kosovo's electricity needs significant improvement⁷:

- Ensure liquidity of the domestic electricity market by appropriate regulatory measures such as contract reviews, capacity releases, virtual power plants (aggregating the capacity of a number of smaller generators) etc.
- Adopt a market-based balancing model allowing for the non-discriminatory cross-border exchange of balancing services.
- Introduce a coordinated capacity calculation process for allocating day ahead capacities based on a regionally coordinated congestion forecast.

Each of these issues is complex and requires international support. USAID is already engaged and better placed than other active donors in the Kosovo energy sector to provide this support.

S2. On-the-job training and other capacity building

As the workforce at energy sector organizations ages, and operation of the energy system is modernized, a significant amount of on-the-job training and other practical forms of capacity building is necessary in Kosovo. Indicative areas identified by stakeholders as needing capacity building are:

- Energy planning.
- Market operation and trading.
- Implementation monitoring for public institutions.
- Evaluation of renewable energy project plans for financial institutions.

S3. Special on-demand technical and market studies and flexible support to energy organizations

The operation mode of the USAID REpower activities in the past years, providing support in a flexible manner on new evolving issues, is very well appreciated by energy sector organizations in Kosovo. Several new studies and other issues (some not yet identified) which, due to their complicated nature, will require international consultancy support in coming years, as Kosovo progresses towards an effective and transparent operation of the electricity market in a sustainable and affordable manner. Undertaking new, on-demand, technical and market studies will be required in a flexible and speedy manner.

S4. Practical and efficient operation of the Kosovo-Albania common market

⁷ Energy Community Secretariat, WB6 Electricity Monitoring Report, March 2018, pp. 12-15

To fully exploit the benefits of APEX, i.e. access to reserve capacity and overall complementary operation of the electricity systems of Kosovo and Albania, Kosovo faces several challenges such as the high cost of electricity from the NKPP, which will restrain its ability to effectively compete. Further step-by-step support in the manner already provided by REpower is necessary until Kosovo is in the position to efficiently reap the full benefits of APEX.

S5. Evaluation of tenders and market development for NKPP

The commercial agreement with ContourGlobal concluded in December 2017 will require technical assistance and support from USAID procurement personnel. The next significant milestone, the procurement and assignment of an engineering procurement contractor (EPC), will also require support by USAID.

S6. Understanding and introduction of new technologies

As recognized earlier in O3, facilitation for development of renewable energy and other emerging technology projects (smart grids etc.) in the energy sector is still necessary in Kosovo. USAID is already engaged and better placed than other active donors in the Kosovo energy sector to provide this facilitation, as well as capacity building on the advantages, development, and operation of new technologies. USEA is currently implementing a regional project on technical challenges (including smart grids) for electricity distribution utilities, which includes participation from Kosovo through KEDS.

S7. Sustainable operation of AWESK

1. AWESK was established through the work and initiatives of REpower contractor's proprietary mCircles program. Significant follow-up support on multiple issues is needed from Repower in AWESK's initial years of operation, before it becomes self-sustainable, including: Fund raising.
2. Professional training.
3. Developing a detailed action plan.

S8. Assist study of sustainable long-term generation, resource sufficiency, diversification, and security and quality of supply

The MED in Kosovo identified the need for a sustainable long-term (20-year) generation and resource study. This study should include mining as well as renewable energy, and cover all EU energy obligations, such as sufficiency, diversification, security and quality of supply. The lead supporter will most probably be the EU, but USAID could alternatively undertake or provide supplemental support. Through REpower, USAID has supported MED in finalizing its current 10-year energy strategy 2017 through 2026 document, and may further support MED in developing an associated 3-year action plan.

S9. Awareness of population and local institutions on issues and costs in the energy sector

The general population awareness of energy sector issues in Kosovo is not always complete or accurate, and includes knowledge of the level and distribution of costs in the energy supply chain (mining, generation, transmission, and distribution). MED has prime responsibility to increase awareness, but USAID or other international donors may also support this very important need.

S10. Assist development of de-carbonization strategy and National Integrated Energy & Climate Action Plan

Kosovo also needs a specific integrated de-carbonization strategy. Kosovo's National Integrated Energy & Climate Action Plan may largely cover this need. This is a new EU requirement, also covering transport, agriculture, trade and services, energy efficiency, and innovation. The EnCS will provide initial support, but other international donors such as the EU and USAID may also contribute.

2.2.3 QUESTION 8

What constitutes an exit point for USAID in the Kosovo energy sector and feasible timing?

USAID involvement in Kosovo began shortly after the Kosovo war ended in 1999. Practical involvement in the energy sector started in 2003 on the development of a billing and collection module for the integrated electric utility's central accounting system. In the 15 years of USAID's support to Kosovo's energy sector to date, key achievements have been:

- Introduction of turn around management in the integrated electric utility, resulting in the appointment of the Electricity Supply Board of Ireland (ESBI) in 2004 to take over its management and operation.
- Establishment of ERO and development of energy legislation.
- Legal and regulatory pre-feasibility review for a "greenfield" coal generating plant.
- Provision of advice to the Ministry on using lignite resources and developing generation capacity.
- First call for expressions of interest to build, own, and operate a 2,000 MW coal plant (initial sizing of NKPP).
- Advisory (succeeding ESBI) to the integrated electric utility by PA Consulting (later Tetra Tech).
- Advisory services to MED concerning the privatization of the electricity sector.
- Environmental Scoping Study for rehabilitating Kosovo B.
- Technical assistance and training through the REpower activity.
- New support to MED on transaction aspects during the NKPP development process through the Kosovo Energy Security of Supply (KESS) Programme.

After 15 years of uninterrupted support to the Kosovo energy sector, the question of what constitutes an exit point for USAID is extremely valid. The answer can be given in the form of milestones; following their achievement, consideration can be given to scaling down USAID support to the Kosovo energy sector. In order of significance, the milestones include:

1. Adequate lignite-based and renewable generation capacities in operation.
2. Operational Kosovo-Albania coupling and steps toward regional integration.
3. Effective, transparent, and sustainable operation of the electricity market.
4. Energy efficiency awareness and gradual penetration.
5. Newly skilled and knowledgeable professionals in the energy sector and market.

M1. Adequate lignite-based and renewable generation capacities in operation

Even after Kosovo B is rehabilitated (680 MW capacity, with 600 MW net generation), NKPP becomes operational (500 MW capacity, with 450 MW net generation) and renewable energy generation covering the currently set feed-in-tariff quotas (440 MW total capacity, of which 180 MW intermittent) is constructed, Kosovo will still exhibit a domestic generation capacity shortage. The firm (excluding intermittent) domestic net generation will be around 1,300 MW (in 2024), whereas the 2017 peak system demand is already around 1,200 MW.

A need still exists for further generation capacity in Kosovo, as well as the effective Kosovo-Albania coupling. The necessary sustainable long-term generation and resource study (S8 identified in Section 2.2.2) will provide more insight into the evolution of domestic generation capacity in Kosovo.

M2. Operational Kosovo-Albania coupling and steps towards regional integration

The Kosovo-Albania energy market coupling will allow Kosovo to improve its generation sufficiency at peak system demand, as well as its energy security by accessing hydropower reserves. This improvement will reduce the very high (335 million Euro) annual cost of electricity shedding for businesses in Kosovo. The Kosovo-Albania coupling may also lead to further regional integration with Macedonia and Montenegro.

Until the practical operation of the Kosovo-Albania coupling (agreement and full cooperation with Serbia in the energy sector is a prerequisite), Kosovo's energy system will remain strained and the country will continue to rely on international technical support to effectively manage its energy sector.

M3. Effective, transparent, and sustainable operation of the electricity market

Although Kosovo's legislative framework is already largely in line with EU directives for the energy sector, the key stakeholders (KEK, KOSTT) have yet to fully adapt their operations and the electricity market is still not operating effectively. A number of areas that EnCS identifies as still in need of significant improvement in Kosovo, with the support of international donors, have been listed earlier in Section 2.2.2 (S1). As the electricity market requirements continue to evolve (e.g. outcomes from the 2017 EU winter package), further areas of improvement will arise, leading to the need for even more international support.

Improving the effective and transparent operation of the electricity market will be a continuous process for at least the next 10 years in Kosovo. Nevertheless, reliance on international donors should still gradually diminish, replaced by the increasing expertise of local institutions.

M4. Energy efficiency awareness and gradual penetration

As analyzed earlier in this Section (M1), the sufficiency of domestic energy supply will remain a challenge for at least the next 10 years in Kosovo. An energy efficiency demand-side culture, currently very limited in Kosovo, must contribute to creating a sustainable energy supply and demand balance. The large potential and opportunity for energy efficiency measures by electricity consumers in Kosovo can reach up to 40 percent in households and 35 percent from industrial and commercial consumers.

International donor support is necessary for initiating energy efficiency awareness campaigns in Kosovo, until demand-side management is clearly seen to have a measurable effect in the energy supply and demand balance.

M5. Newly skilled and knowledgeable professionals in the energy sector and market

As the workforce at the energy sector organizations ages, it is important to have an appropriate pipeline of new engineering professionals each year and systems to absorb and develop these professionals in Kosovo's energy sector. The trend observed in recent years for less students in Kosovo to prefer the power engineering stream at university must be reversed.

Until a new stream of engineering students is established, and other mechanisms for the sustainable knowledge development of local professionals are developed, the Kosovo energy sector will continue to rely on international support.

Feasible timing

It is difficult to provide timing for each of the milestones. Two key assumptions must also be met before considering scaling down USAID support to the Kosovo energy sector:

1. Full cooperation with Serbia in the energy sector is a political problem that must be resolved. It also constitutes the single largest obstacle to regional cooperation in the entire WB6 region.
2. Advanced construction stage of the NKPP power plant. Full financing of NKPP has not yet been secured. If this delay continues, the heavily polluting Kosovo A plant must remain in operation, presenting an additional risk due to its age (already around 45 years).

If both of these assumptions are met, the evaluation team anticipates that the identified milestones will not be able to be achieved before:

- 2030 for achieving a reasonably effective, transparent, and sustainable operation of the electricity market (M3) as well as for developing a steady stream of newly skilled and knowledgeable professionals in the energy sector and market (M5).
- 2025 for achieving adequate lignite-based and renewable generation capacities in operation (M1), an operational Kosovo-Albania coupling and steps toward regional integration (M2), and energy efficiency awareness and gradual penetration (M4).

This document recommends that USAID not start to consider scaling down support to the Kosovo energy sector before 2025 to 2030, according to the accomplishment of the above assumptions and milestones.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 CONCLUSIONS ON REPOWER PERFORMANCE AND RESULTS ACHIEVED

The main achievements of the REpower activity, from its inception to date, are:

1. *Reinforcement of the legal and regulatory regime:* Because of the REpower team's legal and regulatory support, the Third Energy Package has been transposed into Kosovo's primary legislation and secondary acts were established to facilitate the opening of the electricity market. ERO has advanced to become one of the leading regulatory authority in the region.
2. *Promotion of renewable energy development in Kosovo:* The REpower team, through drafting and launching a small RES authorization process as well as introduction of the OSS concept, has brought to the spotlight the importance of renewable energy in the overall country energy balance and the need for its further development.
3. *Fostering gender balance in the energy sector:* Through its activities, like establishing the mCircle at major energy sector stakeholders and supporting the creation of AWESK, the REpower activity has supported wider representation of women and reduction of the gender gap in the sector. Such pioneering activities are not only unique to Kosovo but also to the region.
4. *Establishment of internship programs:* In order to increase interest and revitalize the workforce of the energy sector, the REpower activity initiated the internship program among university-level students. In what has already become a regular fixture, Kosovo's university students participate in six-month long internships with the energy sector stakeholders and some of them later become employed there.

The work done by the REpower team has been met with overall high remarks and appreciation from the parties that were interviewed in the course of this assignment, and which interacted with the REpower team either as the direct beneficiaries or participants of common events. The REpower team's quality of work has been ranked as high, performed by the right people, and delivered on time. The face-to-face interactions of REpower with the beneficiaries were especially appreciated.

The REpower team's work was performed based on the annual workplans agreed to by the beneficiaries and approved by USAID. Any modifications to the tasks were communicated to the USAID and proceeded based on the approval received. However, when feasible, the team did not refuse to provide additional assistance beyond that which was already agreed. This included support to MED in addressing donors' comments on the 10-year energy strategy⁸, as well as conducting qualitative analysis necessary to address those comments. Other examples are assistance to ERO in tariff development and work on load profiling, performed on short notice and with short deadlines.

As discussed in Section 2.1.3 dealing with the obstacles, the timing of accomplishing several tasks was highly dependent on the pace of progress on the beneficiaries' side. The delays were not the fault of the REpower Activity. On the contrary, even during the periods of the beneficiary inactivity, the REpower team kept advancing the preparatory works to the point that, when the beneficiaries resumed their activities, the REpower team would be ready to move forward almost immediately.

Any activity of this length and magnitude would expect to encounter issues that were caused by several factors, not only beneficiaries. However, those were eliminated relatively quickly and if the corrective

⁸ The finalized strategy was later endorsed by the World Bank and approved by the Government of Kosovo and Kosovo Parliament.

actions were taking longer than anticipated, the REpower team used its own resources to minimize the negative effects of the delays.

There are two obstacles that, if eliminated, would practically resolve all of the issues inhibiting the implementation of the technical assistance by the REpower team:

1. The first obstacle is the ongoing dispute with Serbia and its lack of willingness to comply with the terms of the 2014 agreement. However, judging from past experience, anything short of intervention at the highest international level may not be very effective in eliminating this obstacle. The comments provided to the evaluation team by some of the interviewees indicated a positive feeling that the problem will eventually be resolved within the next couple of years. Unfortunately, the REpower activity does not have time to wait for this to happen, due to the contract ending in September 2019.
2. The second obstacle is the unfinished task of the unbundling of KEK, which is of equally pressing importance. Unless the GoK issues the decision in the next 3 to 4 months, the REpower team will not be able to conclude its Component 4 tasks before the REpower term ends. Again, exerting pressure on the GoK to make KEK's unbundling of its utmost priority would go a long way.

3.2 RECOMMENDATIONS ON REPOWER IMPLEMENTATION UP TO SEPTEMBER 2019

In addition to the continuation of tasks already in the scope of the REpower team, the team recommends modifying and/or adding the following tasks:

1. Component 1: Review and modify, where necessary, the authorization process for small renewable energy sources (RES) to eliminate the perception of its abuse by unscrupulous applicants and improve its enforcement.
2. Component 2: Expand the annual staff evaluation study to include assessing the current and prospective regulatory workload versus the number and capacity of ERO staff. Recommend changes in the organizational scheme and workflow and allocation between the departments, where and if applicable.
3. Component 2: Modify the capacity building approach in ERO to create intradepartmental information and experience sharing and functional backup. Establish procedures on using local consulting services.
4. Component 2: Whenever possible, involve the licensees and other energy sector stakeholders in trainings organized for the ERO staff.

RI. Authorization process for small RES

Through the end of 2017, ERO has issued authorization for 168.41 MW of renewable energy capacity. The applications for authorization for solar PV installations under the generous feed-in tariffs scheme have amounted to 46 MW, while only the limit of the first applications for 30 MW could be authorized. After 3 years, little effect has been noted on the ground in terms of the installations actually being in operation. There is a growing suspicion that the holders of the authorization certificates for this and other technologies are still arranging financing, or even that they are waiting for the highest bidder to purchase into a share of their business(es).

Therefore, we highly recommend reviewing the authorization procedures to identify and correct the weak points, eliminate the speculative element, and substantially strengthen enforcement rules to weed out unscrupulous future applicants or current authorization permit holders. Furthermore, to avoid a perception that the RES capacity authorized is equal to the capacity actually in operation, we recommend

that the REpower indicator “Number of megawatts (MW) authorized by ERO” should have an additional entry for each category specifying the actual MW placed in operation.

R2. Organization of ERO

The REpower team periodically performs the Organizational Capacity Assessment (OCA) of ERO staff. The assessment is a very valuable tool, but not performed more frequently due to reasons not dependent on the REpower team.

We recommend that this task expand to include an assessment of the current and projected workload of ERO staff, to enable a realistic estimate of the number of staff and its placement in the organization. Expanding this task serves a dual purpose:

1. The ongoing argument of whether or not more staff is needed (and in what areas) will be put to rest.
2. A corresponding budget can be put together and an argument to Kosovo’s Budget Committee prepared and submitted with REpower’s help during the next round of budgetary approvals.

In addition, an assessment can be initiated to determine whether a five-member Board contributes to the efficiency of the decision-making process and enriches the exchange of opinions, including public and media participation in the process, or whether it exacerbates the operational problems and instability of ERO by exposing it to long periods of inactivity resulting from the flawed board member appointment process. Should the findings of such an assessment indicate that modifications are warranted, including lowering the number of Board members to three, then proper amendments to the primary laws may be proposed.

Finally, REpower should deliver the OCA to the ERO management and periodically monitor the status of ERO’s actual follow-up on the recommendations presented in the OCA and by other organizations supporting ERO.

R3. Capacity building in ERO

The REpower team has offered a tremendous amount of presentations and trainings to their counterparts and ERO staff, including study tours. The results of interviews and the OCA indicate that the knowledge passed to the ERO staff may not be used to the fullest. To improve retention of information the following measures may be instituted by REpower and encouraged to be followed by the ERO staff:

1. Develop a manual outlining training policy and addressing mandatory participation of the staff directly involved in the subject of the training and inclusion of staff from other departments that may be working on a given issue in the future.
2. Create manuals of procedures/methodologies for areas that are within the scope of activities of individual departments.
3. In addition to written reports, enforce obligatory presentations to the ERO staff by those participating in outside trainings, including study tours.

To avoid creating a void upon departure of key specialist(s), either due to retirement or pursuit of other opportunities, it may be beneficial for ERO to identify the positions vulnerable to such departures and, with REpower’s assistance, establish and enforce a cross-training information sharing and personnel backup system.

ERO has benefitted for more than a decade from donor-financed consultancy services and has not yet attempted to contract outside services on its own. The Law on Regulator⁹ allows ERO to procure such services; however, the Ministry of Finance and the Parliament did not allow any funds for such activities in the ERO's annual budget. In the possibility of technical assistance being scaled down, a proper contracting mechanism and procedures have to be established and, when the need becomes evident, followed. The REpower team may assist the ERO in preparing and implementing such mechanisms and procedures, as well as estimating financial resources needed for such purposes. The financial resources should not come from REpower's budget.

R4. Capacity building to energy sector stakeholders

It may be beneficial to both ERO staff and other energy sector stakeholders, including licensees, to participate in REpower training activities, especially those that involve reporting or development of calculation methodologies. This approach may have a two-fold benefit:

1. All parties involved will understand how and why certain things are done, avoiding the need for future explanations and trainings (when it comes to responding to those issues).
2. Stakeholders may provide valuable comments and inputs that may be considered in enhancing the process in question.

The rules addressing participation of energy sector stakeholders should be included in the training manual described in R3.

3.3 RECOMMENDATIONS FOR USAID ASSISTANCE BEYOND REPOWER

The following key tasks are recommended for USAID assistance beyond Repower (i.e. from 2020):

1. Develop an enabling legislative and policy environment in the energy sector.
2. Support effective operation of institutions in the energy market.
3. Support development of a more secure and reliable energy supply in Kosovo.
4. Develop a long-term, least-cost electricity generation and transmission expansion plan for the Kosovo electric system.
5. Assist in planning, facilitating, and prioritizing renewable energy projects.
6. Facilitate effective operation of the common electricity market with Albania.
7. Capacity development of energy institutions and professionals and awareness of the population.
8. Initiate creation and support of an independent energy research/consulting institute using the local professional capacity.

U1. Develop an enabling legislative and policy environment in the energy sector

Although Kosovo's legislative framework is already largely in line with EU directives for the energy sector, the key stakeholders have not yet fully adapted their operations, and the electricity market is still not operating effectively. As electricity market requirements continue to evolve, further policy and legislative improvements will become necessary. International support will be necessary as the required legislative adjustments, policies, and technical regulations will be complex.

USAID, through Repower, already supports ERO and other stakeholders on similar issues. USAID is better placed than other active donors in the Kosovo energy sector to undertake this follow-up task.

⁹ Article 11 of Law on the Energy Regulator, July 14, 2016.

U2. Support the effective operation of institutions in the energy market

Kosovo's legislative framework is largely in line and harmonized with EU directives for the energy sector, but the participating institutions have not yet fully adapted their operations, and the electricity market is still not operating effectively. Current issues requiring practical support to enable an effective and transparent electricity market operation in Kosovo include:

1. Complete wholesale deregulation (including unbundling of the mining and generation functions).
2. Ensure that the contractual framework adopted for the NKPP does not hamper development of an efficient market.
3. Actual operation of two additional licensed suppliers and EU-based trader in the retail market.

USAID, through Repower, has already supported ERO development of the associated primary and secondary legislation. USAID is better placed than other active donors in the Kosovo energy sector to provide the further support to ERO and other stakeholders in developing the necessary guidance and technical regulations to effectively and efficiently adapt their operations for the new electricity market environment.

U3. Support development of a more secure and reliable energy supply in Kosovo

The commercial agreement for the new 500 MW lignite-based NKPP was concluded in December 2017, but still faces several milestones and challenges until its expected operation by 2024. USAID already provides support to MED on the transaction aspects of the evolving NKPP development process through the KESS Programme, but MED will need additional independent technical support (in addition to the owner's engineer already in place), e.g. during the EPC assignment. USAID is well placed to provide this additional support.

Furthermore, USAID may also contribute to supporting MED in developing a sustainable long-term generation and resource study (up to 2030) as well as a de-carbonization strategy and National Integrated Energy & Climate Action Plan. The EU will probably support these elements, but USAID could be an alternative or even complementary supporter on specific elements not already covered.

U4. Electric system expansion plan

With the exception of a specified single-year simulation of market conditions, the REpower activity has not performed a comprehensive multi-year simulation of the Kosovo electric system. A comprehensive electricity market analysis, over any length of planning horizon, would allow consideration of various load forecasts on the demand-side, energy conservation measures modifying such demand¹⁰, a variety of generation technologies (including integration of renewable resources) on the supply side, and power transactions between Kosovo and its neighboring power systems.

Specialized software that can be used for such electricity market modeling, and the results of the analyses, would be interesting to system planners and operators, investors, and the regulator. If acquired and set up, the software would be used to perform simulations of various generation and transmission expansion options and produce least-cost electricity system plans for Kosovo according to assumed economic parameters and forecasts. Modeling would allow users to take a forward-looking approach in planning generation and associated transmission beyond Kosovo B and NKPP.

¹⁰ Demand-side management and energy conservation was not in the REpower's scope of work.

The acquisition of the software and the modeling may be performed by either the existing energy research institutes or a newly created one as discussed in the following recommendation. The contributors to acquiring the software and supporting the plan development may involve USAID, the World Bank, and the European Commission and the task may be conducted by a research institute discussed later in Task U8.

U5. Assist in planning, facilitating, and prioritizing renewable energy projects

Although significant feed-in-tariff quotas totaling 440 MW have been set for renewable energy projects in Kosovo, and most of these are already pre-approved, their implementation is delayed primarily by difficulties securing financing (despite a multitude of international donors) and initiating construction. International support is necessary in reviewing ERO's authorization procedures to identify and correct the weak points, as well as in designing procedures for effectively monitoring their implementation. It is also necessary to plan the next evolutionary step in renewable energy development, i.e. replacing the feed-in-tariff system with renewable energy auctions. Such auctions will develop competition and significantly reduce the cost and tariff impact of renewable energy in Kosovo. Furthermore, international support is also necessary for the development of other emerging technology projects (smart grids etc.) in the energy sector, which will additionally support the expansion of renewable energy in Kosovo.

USAID, through REpower, is already engaged and better placed than other active donors in the Kosovo energy sector to provide this support.

U6. Facilitate effective operation of the common electricity market with Albania

To fully exploit the benefits of the common electricity market with Albania (i.e. access to reserve capacity and overall complementary operation of the two electricity systems), Kosovo still faces several challenges such as the high cost of electricity to be produced the NKPP. Systematic bilateral discussions are still necessary between Kosovo and Albania (Ministries, TSOs, supply companies, regulators), in the manner already supported by REpower, until Kosovo can efficiently reap the full benefits of the common electricity market.

USAID, through REpower, is already heavily engaged in this process and better placed than other active donors in the Kosovo energy sector to provide further support.

U7. Capacity development of energy institutions and professionals, and awareness of the population

As the workforce at energy sector organizations ages, and operation of the energy system is modernized, a significant amount of on-the-job training and other practical forms of knowledge transfer, training, and capacity building is necessary for all energy sector stakeholders in Kosovo. Furthermore, awareness raising of the general population is also necessary, on issues such as the cost of energy supply, operation of the market, benefits from renewable energy, etc.

USAID is already engaged in these issues and well placed to support the capacity building and awareness needs. Other international donors can cover related needs for other issues, e.g. energy efficiency and district heating.

U8. Energy research institute

At present, there is a pronounced absence of an institute in Kosovo that in addition to conducting training and research would provide consulting services to energy sector stakeholders. Current assistance to the sector is accomplished through international donor support such as the REpower activity. Because such

technical assistance may not continue forever, there is a need to start seriously building the local professional capacity that would take over, at least partially, the role of an independent research institute specializing in consulting in energy sector issues and analyses. The institute will boost local professional capacity building in the energy sector. As the establishment of such an institute takes time, implementation of this idea, if accepted, should begin as soon as feasible.

Currently, there are two active institutes at the Technical University of Pristina (UoP), which perform research and provide services in technical areas:

1. The Center for Energy and Sustainability¹¹ operating under the Rectorate of the UoP.
2. The Institute of Mechanical Engineering associated with the Faculty of Mechanical Engineering of the UoP.

Both of these institutes employ professors and students of the UoP, as well as external consultants. The institutes' programs vary, but neither of them targets their services to the needs of the stakeholders of the Kosovo energy sector. The results of our interviews indicated that an institute providing targeted consulting services to the energy sector would be a welcomed addition.

The first necessary tasks, possibly in coordination with the Transformational Leadership Program (TLP) are to:

1. Assess whether creation of the institute would be best suited within the UoP structure based on either or both of the existing institutes, or whether a new institute should be created outside of the UoP structure.
2. Assist in developing the proper structure for the institute, developing its business plan, defining the initial financing sources, and defining the staff that will be critical to its operation. At that point, transfer of knowledge, reports, and tools can then take place. Emphasis should be placed on hiring local, seasoned and young professionals, retired university professors and energy sector professionals, and newly graduated students, including Master's program graduates returning from the USA.¹²

¹¹ The center is an initiative of USAID's Transformational Leadership Program – Scholarships and Partnerships, administered by World Learning via a sub-grant to Arizona State University.

¹² The aim of the USAID Transformational Leadership Program - Citizens Corps is to leave behind a cadre of transformational leaders coordinated and working as agents of positive change across the public, private, and civil society sectors in Kosovo.

4. LESSONS LEARNED

This report includes lessons from the REpower evaluation and Kosovo energy sector assessment, mainly in Section 3 (conclusions and recommendations). However, given that this assignment is one of the first under a new requirement for such evaluations, this section summarizes some key lessons learned by the evaluation team while undertaking the REpower evaluation and Kosovo energy sector assessment.

Evaluation team composition: The evaluation team members should be complementary and cover multiple disciplines; but, at the same time, each member should be flexible in their ability to undertake interviews outside their main disciplines and experience. The relatively short time planned in-country (data collection phase) would necessitate last minute changes and requests for meetings within a very short time. A significant advantage, which the REpower evaluation team fully exploited, was the presence of local experts in the evaluation team, as these can more easily plan meetings, support their efficient implementation, and follow-up (even in the subsequent home-based reporting phase) if required.

Assignment duration: The REpower evaluation and Kosovo energy sector assessment is not an in-depth evaluation of several activities; rather, it focused on how all activities come together to meet the targets of the REpower activity and how the activities affect the future of Kosovo's energy sector. However, the evaluation should be longer than the evaluation of a single activity, to enable a clear strategic overview and understanding of the interactions of USAID activities and their beneficiaries and stakeholders, as well as to look at their relationship with development initiatives undertaken or planned by other international donors.

Timely reporting: In the relatively short time planned for the data collection phase, it becomes very important to undertake timely intermediate reporting (i.e., minutes of meetings, in no case more than 2 days after each meeting). Timely intermediate reporting would allow other non-present evaluation team members to speedily get up-to-date with all the information received, and add their contributions to the initial reporting (preferably in a dynamic Web environment). The team leader should constantly monitor the intermediate reporting backlog to ensure that new reporting is appropriately re-assigned to the evaluation team members with less burden.