

Terms of Reference

Environmental and Social Impact Assessment (ESIA)

For

The Proposed Kosovo Power Project

comprising of (i) the development of a Lignite-Fired Power Plant (“Kosova e Re” Power Plant or KRPP) at Obiliq; (ii) the development of a new open cast lignite mine at Sibovc South; and (iii) associated infrastructure, such as electrical interconnections upgrades at Kosovo B substation, a potential water buffer reservoir and mine area where ash and gypsum will be disposed.

Abbreviations

BAT	Best Available Techniques
BREF	Best Available Techniques Reference Documents
CSR	Corporate Social Responsibility
ECSEE	Energy Community of South East Europe
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ESIA	Environment and Social Impact Assessment
ESSS	Environmental and Social Scoping Study
EU	European Union
GoK	Government of Kosovo
IFC	International Finance Cooperation
KEK	Kosovo Energy Cooperation
KPP	Kosovo Power Project
KRPP	Kosova e Re Power Plant
LCP	Large Combustion Plants
LPTAP	Lignite Power Technical Assistance Project
MIGA	Multilateral Investment Guarantee Agency
PoE	Panel of Experts
RAP	Resettlement Action Plan
RFP	Request for Proposals
RPF	Resettlement Policy Framework
SESA	Strategic Environmental and Social Assessment
SFDCC	Strategic Framework on Development and Climate Change
ToR	Terms of Reference

Background of the proposed Project

Kosovo’s energy and mining sectors were once the mainstays of its economy. However, a decade of ethnic conflict left this industry in a dire state, and in a great need for rehabilitation and new investments. Kosovo’s energy sector relies on two lignite-fired power plants, known as Kosovo A and Kosovo B, which generate 98% of its electricity, and a small hydroelectric plant generating the remaining 2%. The existing lignite mines, Bardh and Mirash, which supply the power plants with fuel, are exhausted. KEK

actually is mining the lignite for supplying the existing power plant from the Sibovc South-West mine and Sitnica Mine. Due to age, poor maintenance, and lack of investment, the existing generating capacities are not sufficient to meet the domestic demand for electricity, imposing the need for regular load-shedding and import.

Kosovo is also a participant of the Energy Community of South East Europe (ECSEE) treaty that establishes a regional electricity market governed according to European Union (EU) directives.¹ As a signatory to the treaty, Kosovo is committed to meet environmental standards of thermal power plants and mining, and mitigate social impacts, as outlined by various EU directives.

The World Bank previously assisted the Kosovo energy sector through the Lignite Power Technical Assistance Project (LPTAP), which supported the Government of Kosovo (hereinafter the Government) in the development of regulatory frameworks for energy sector investments and attracting qualified private investors to develop lignite mines and build new capacity for lignite thermal power generation guided by high standards of environmental and social sustainability. In addition, the World Bank has also financed the Energy Sector Cleanup and Land Reclamation Project (P096181) with the objectives, amongst others, to: address environmental legacy issues problems related to open dumping of ashes on land and enable the state owned mining company to free land for community development purposes currently taken by overburden material and enable the state-owned Kosovo Energy Cooperation (hereafter: KEK) to remediate Kosovo A ash dump and remove hazardous chemicals from its former gasification site within the Kosovo A complex. In addition, a considerable amount of analytical work has been carried out in the recent past, particularly the Strategic Environmental and Social Assessment², the European Agency for Reconstruction reports on Site Selection, and an Options Study (Development and Evaluation of Power Supply Options for Kosovo) that evaluated the different power supply options available to Kosovo (completed in December 2011) and disseminated in English and local language.

The Kosovo Energy Strategy for the period 2009-2018 included recommendations from series of studies that have been undertaken over the last decade by international, regional and local consultants focusing on mining, generation, power sector restructuring, legal, environmental and social issues in the power sector. The Government has successfully privatized the electricity distribution and supply business (KEDS) in Kosovo, and is in the process of engaging the private sector to construct new power generation capacity under the KPP project and eventually replace Kosovo A power plant

The proposed Kosovo Power Project (KPP) which is foreseen to consist of a:

- Build-own-operate a new lignite fired power plant (a range of up to 2x 280-320 MW net electrical called KRPP (Kosova e Re Power Plant);
- Development of an open-cast lignite mine (Sibovc South Lignite Mine) to supply the existing Kosovo A until closure and Kosovo B plant and new proposed KRPP once enters into operation and transport of lignite (through conveyors) to the plant and coal yards; and
- Other associated infrastructure, such as lignite conveyors, storage and handling; steam generator; steam turbine; electrical generator; balance of plant equipment; gas clean-up

¹ See *Treaty establishing the Energy Community*, October 25, 2005.

² A Strategic Environmental and Social Assessment (SESA) for a potential new power plant was prepared in 2008 under the FY07 Bank-financed Lignite Power Technical Assistance (LPTAP) Project which considered issues associated with the possible development of a new plant with a generation capacity of 2000 MW. In line with the government's thinking of 2008, such a plant was intended to serve the needs of Kosovo consumers as well as supply electricity to the regional electricity market, which faces large energy and capacity shortages. Since then, Government decided to reduce the size of the proposed power generation plant to one consistent only with domestic requirements.

equipment; water supply, water chemical treatment and cooling and storage (buffer reservoir); ash handling, transport and disposal in mine area; waste water treatment; Electrical equipment including step-up transformer, high voltage switchyard and transmission line to connect to the existing grid at 400 kV (closest location at the Kosovo B substation);

More detailed description of the scope will be made available to the Consultant at project commencement.

The commissioning of KRPP will allow and initiate the closure and decommissioning of Kosovo A. The closure and decommissioning of Kosovo A is planned to be undertaken with EU financing in accordance with EU environmental requirements, and will be subject to a separate environmental assessment process and Environmental Management Plan.

The World Bank Group's *Strategic Framework on Development and Climate Change* (SFDCC) is applicable to the proposed Bank Group participation in the proposed Kosovo Power Project. Under the Operational Guidance to World Bank Group Staff (March 2010), a SFDCC External Panel of Experts has reviewed compliance of the proposed Kosovo Power Project with the six criteria under the SFDCC for coal-based projects, which include the technology to be employed. Based on the positive conclusion of this External Panel of Experts, the World Bank's Board of Directors has approved Additional Financing to the Clean-up and Land Reclamation Project to support the Government of Kosovo with the management of environmental and social aspects for the proposed Kosovo Power Project as well as the continuation of the clean-up and land reclamation project activities. The Environmental and Social Impact Assessment under these Terms of Reference (TOR) is planned to be financed from this Additional Financing. This Environmental and Social Impact Assessment (ESIA) will be part of this Additional Finance and it will integrate the studies already carried out in the last years with the support of International Donors and KEK (see Annex 1).

Resettlement Plans and Compensation Framework

The Government has prepared and endorsed a Resettlement Policy Framework (RPF) and prepared a Resettlement Action Plan (RAP) for the Shala Neighborhood of Hade village (Shala RAP) and the Government of Kosovo and KEK have the responsibility for the Shala resettlement. The investor may also be required to enter into other RAPs as needs arise (e.g., future villages or infrastructure rights-of-way), all of which must be fully consistent with the RPF prepared for New Mining Field.

RAPs for future foreseen resettlement associated with the proposed Power Project will also accurately identify the lands required for the project. The numbers, locations, and socio-economic conditions of the affected people will be fully documented, to assist the Government of Kosovo (GoK) in meeting acceptable international standards for compensation, which will be equivalent to requirements of World Bank Policy OP 4.12, IFC performance Standard 5 and EBRD Performance Requirements 5; and the RPF of the Government of Kosovo. The investor will dialogue with key Government authorities, including the Ministry of Environment and Spatial Planning, as required.

Objective of the ESIA

Normally, it is the responsibility of the developer, in this case the winning private sector bidder to prepare the Environmental and Social Impact Assessment for each of the separate sub-projects subject to national legal requirements. For the proposed KPP, the Government and the World Bank agreed to make efficient use of time from now until the award of that specific concession in order for the Government to commence the preparation of an Environmental and Social Impact Assessment (hereinafter ESIA) for the proposed KPP. This ESIA, in line with this ToR, will be based upon environmental, social and other baseline data, specific site characteristics and project technical specifications and mitigation measures as applicable to power plants in line with EU Directives and Best Available Techniques Reference (BREF)

documents³; World Bank policies and Environmental, Health and Safety Guidelines; IFC/MIGA performance standards; EBRD Performance Requirements; Kosovo legislation and the specifications of the proposed KPP as presented in the Request for Proposals as submitted to the shortlisted bidders in April 2013. Once the winning bidder and proposed technology are known, the ESIA will be finalized based on the specific technological design and based on the requirements of the legislation of Kosovo. This ESIA will be based upon these Terms of Reference (TOR) designed to meet Government and EU legislation, EBRD Performance Requirements, and World Bank and IFC policies and standards, in particular the World Bank Policy on Environmental Assessment (OP/BP 4.01) as well as OP4.03 Performance Standards for Private Sector Activities. This will also include the EU EIA and Carbon Capture and Storage Directives. The World Bank is currently considering the preparation of a Partial Risk Guarantee (PRG) for the proposed Kosovo Power Project. The ESIA will serve to inform a decision by the World Bank's Board of Directors on the PRG. The proposed Kosovo Power Project has been classified as a Category A under OP/BP 4.01, requiring a comprehensive ESIA with at least two public consultations.⁴ The ESIA will be subject to public consultations the ESIA scoping report and the draft ESIA. The ESIA will be disclosed in-country in Albanian, English and Serbian and in the World Bank's Infoshop and the websites of other IFIs as relevant. An English Executive Summary will be prepared by the consultant for submission to the Board of Executive Directors of the World Bank as well as EBRD and other IFIs, as required prior to the Board presentation of the proposed Kosovo Power Project.

The objective of these TOR is to prepare the ESIA for the proposed Kosovo Power Project and associated infrastructure to meet the IFI's requirements for supporting the decision making on provision of financing and guarantees for the Proposed Kosovo Power Project. In addition, this ESIA will be prepared in compliance with national and EU legislation to commence environmental and social assessments that will be required for permitting and other authorization purposes of the proposed Project.

It is expected that the winning bidder of the KPP will be selected during the period of ESIA preparation. As a consequence and as noted above, the ESIA will start without the details of the design or technology choices etc. but instead will be based on the environmental data available and standards that have to be met, including applicable Best Available Techniques Reference Documents (BREFs). Being selected during ESIA preparation, the winning investor most probably will have the opportunity to inform ESIA preparation, and the consultants preparing the ESIA will be required thereafter to closely engage with the winning investor, especially in the preparation of the revised draft ESIA and Environmental and Social Management Plans for construction and operations. However, this ESIA as stated is **not** intended to serve as the document to inform national permitting and other authorization, e.g. under the Kosovo legislation on Environmental Impact Assessment. The assessment documents required for the latter purpose will be prepared under the responsibility of the investor as a Supplemental ESIA prepared under a separate TOR. Therefore, it is expected that the ESIA prepared under this TOR can be used by the investor and should save time and reduce efforts in the permitting/authorization process. In this TOR, when the terms 'ESIA' or 'ESSS' are used, they refer to the work to be completed under this TOR. Environmental and social impact statements to be prepared for permitting/authorization purposes under responsibility of the investor and after completed of the ESIA will be referred to as 'Supplemental ESIA'.

³ In particular EU Directive 2001/80/EC on limitation of emissions of certain pollutants into the air from large combustion plants, EU Directive 2008/1/EC concerning integrated pollution prevention and control and EU Directive 2010/75/EC on industrial emissions which came into force in 2012 and the associated sector specific Best Available Techniques Reference (BREF) documents (current BREF applicable to Large Scale Power Plants has been published 2006)

⁴ If the IFC or MIGA should be engaged in the project by either financing the successful bidder for the concession or offering a MIGA guarantee, then it should be noted that the IFC/MIGA Performance Standards require an ongoing stakeholder engagement and consultation process beginning as early as possible in the project cycle and continuing for the life of the project.

The ESIA will include all ancillary and off-site facilities and structures necessary for the development, operation, and future closure and decommissioning of the power stations and mine involved (KRPP). Associated infrastructure includes, amongst others, the electrical interconnection upgrades at Kosovo B substation, a potential water buffer reservoir and the mine area where the ash, bottom ash and gypsum will be disposed as well as the access roads, connections to the grid and other utility connections, wastewater discharge treatment, storage areas etc, i.e. all structures necessary for the full functioning of the new lignite power plant. Decommissioning of the Kosovo A power plant is outside the scope of these TOR. However, the ESIA will include an assessment of cumulative impacts from all key power generating assets in Kosovo.

Consultants will also prepare a water balance and different water use scenarios for the different uses of water from the Iber-Lepenc canal including forecast for the power plant time operation and assess whether an upgrade of the canal would be required to ensure sufficient water for the power plant needs and other consumers of this water. If the upgrade of the canal would be required, the impact of the upgrade as well as mitigation and monitoring measures will be covered under this ESIA.

In addition to the impacts of the proposed Project activities in the project area and Kosovo, the ESIA will also investigate possible trans-boundary impacts and cumulative impacts through the combination of project impacts and background concentrations and impacts from other economic activities ('domino' impacts).

The ESIA will assure the stakeholders that all potentially significant environmental and social impacts are taken into consideration, that the public and particularly the directly affected communities have been properly consulted and mitigation measures and monitoring identified and agreed.

Scope of Work

The ESIA and the scope of work under these TOR also will be carried out through two phases and will have two main deliverables: **(i) Phase 1: Environmental and Social Scoping Study (ESSS); (ii) Phase 2: Environmental and Social Impact Assessment (ESIA)**

The tasks under the Phase 1 Scoping Study, in line with Kosovo and EU regulation on EIA, are primarily focused on identifying the impacts to be assessed, how these impacts will be assessed, which of these impacts are significant and most important as well as the geographical area of influence to be considered for each of the different environmental and social parameters. In addition, the ESSS will address the following: (i) the types of alternatives which ought to be considered, drawing and expanding on a number of analysis conducted to date (see below the section on alternatives); (ii) the available baseline data and which further baseline studies are required to characterize the existing environment, including salient social aspects; (iii) any special requirements for baseline studies regarding their geographical extent or timing e.g. because of seasonal changes in fauna and flora; (iv) the level of detail of investigations required; (v) types of emissions and impact modeling, in line with international accepted standards, to be used to estimate the magnitude of environmental effects; (vi) the types of mitigation measures to be considered and monitoring to be required following relevant EU Directives and lender's applicable standards; (vii) the stakeholder engagement and communication plan to inform the stakeholders and public through public consultations about the scope and preparation of the ESIA, the results of the scoping study, including identification of the main stakeholders and their concerns; (viii) agreement on the detailed scope and structure of the ESIA with the main stakeholders under the proposed Project, including further consultations to be carried out during the environmental and social studies.

The detailed **tasks of the Phase 2 Environmental and Social Impact Assessment** will be tailored and concluded based on the findings in the scoping study, but will include in any case: (i) determine and further collect where needed the baseline data according to the ESSS findings and guidance; (ii) for the proposed project and its alternative scenarios, discuss the technical, economic, social and environmental parameters and determine and assess the identified impacts; (iii) prepare the Environmental and Social

Management Plan, identifying the required actions needed to avoid or mitigate environmental and social impacts of concern that will be integrated into the design (the proposed Mitigation Measures) as well as the required Monitoring measures; (iv) identify the responsibilities for implementation as well as oversight for the identified mitigation and monitoring measures including an estimate of investment and/or operating budget required (iv) prepare a final ESIA study that will comply with national legislation and EU Directives as well as WB policies and Environmental, Health and Safety Guidelines; IFC/MIGA performance standards and EBRD Performance Requirements.

Previously prepared social and environmental studies, particularly the Scoping Statement for Environmental Assessment for Rehabilitation of Thermal Power Plant Kosovo B prepared by USAID in 2010, the Strategic Environmental and Social Assessment, Final EIA Handbook and Final Draft New Mining Field Development Plan all prepared by the ERM in 2008 as well as the ESIA for the refurbishment of an excavator in Sibovc SW lignite mines prepared by ENGTEAM in 2010 should all be used as background information for the ESSS and ESIA. Useful information is also provided as part of the European Agency for Reconstruction reports on Site Selection (see Annex 1 to these TOR). The ESSS and ESIA will be reviewed by an independent Panel of Experts hired by the Government. This Panel of Experts will be an advisory panel consisting of independent, internationally recognized environmental and social scientists with the task to advise on all aspects of the proposed Kosovo Power Project relevant to the ESIA⁵.

Phase 1 - Environmental and Social Scoping Study (ESSS)

Under Phase 1, the consultant will: (a) gather available data on the existing operations in and emissions from Kosovo A and B power plants and available information on planned sub-projects (opening of the new lignite mine in Sibovc, rehabilitation and operation of Kosovo B power plant in line with LCP BREF, construction and operation of KRPP, other possibly planned projects possibly influencing the Project Area), including assessed alternatives and further viable alternatives which ought to be considered, drawing and expanding on existing studies conducted, (b) establish availability of baseline data and gather available baseline information on state of the environment on all the sub-projects and including any special requirements for baseline studies related to their geographical extent or timing (e.g. because of seasonal changes in fauna and flora), (c) consult the stakeholders, and particularly the directly affected communities, on their concerns related to the sub-projects, (d) identify environmental and social issues and impacts of importance related to construction, operation and closure / decommissioning and land reclamation of KRPP and the new lignite mine and define development alternatives for these sub-projects and identify the geographical zone of influence of the Project for the different environmental and social parameters and the specific environmental ecosystems on which the cumulative impact assessment should focus (in any case air and water impacts); (d) define the missing baseline information which should be included and properly assess the environmental and social impacts as well as the mitigation and monitoring measures which are to be considered as far as already possible at this early stage (e) prepare the ESSS, (f) identify the main stakeholders and their concerns, prepare a Stakeholder Engagement and Communication plan and consult the scope (Terms of Reference) for the ESIA and the results of the scoping study with the public and stakeholders in Albanian, Serbian and English; (g) agree on the scope and structure of the ESIA and communication plan with the main stakeholders under the proposed Project, including further consultations to be carried out.

The Consultant will visit the sites of Kosovo A and Kosovo B thermal power stations, the proposed site(s) for KRPP power plant, the depleted Bardh and Mirash mining sites, and the new opened site of the

⁵ The Panel will advise the Government specifically on the following aspects: (a) the scope of the ESIA and key issues and models for preparing the ESIA, (b) recommendations and findings of the ESIA, (c) implementation of the ESIA's recommendations, (d) content of the Supplemental ESIA to be developed by the Sponsor/successful bidder that would allow EIA permitting according to Kosovo legislation and be in line with World Bank/EBRD/IFC (IFI's) policies and EU Directives.

Sibovc south west mine, Sitnica mine site, municipality dump site at the mining area to gather available data on the existing practices and identify the range of impacts from the existing facilities and the likely scope of environmental and social impacts to be realized with the proposed project. Information on the proposed project will be gathered from relevant government officials and other stakeholders, as well as be extracted from extensive documentation prepared for the proposed project listed in the Annex 1. In addition, considerable amount of analytical work has been carried out in the recent past, particularly the Strategic Environmental and Social Assessment, the European Agency for Reconstruction reports on Site Selection, and an Options Study (Development and Evaluation of Power Supply Options for Kosovo) that evaluated the different power supply options available to Kosovo (completed in December 2011) which will also needs to be taken into account.

The scoping report will also assess whether the World Bank Policy on Natural Habitats (OP/BP 4.04) or Physical Cultural Resources (OP/BP 4.11) and other World Bank policies (OP4.03) or IFC's Performance Standards or EBRD Performance Requirements should be applied as well as determine the implications of using water from the Iber River Basin, which drains into the Black Sea, via Serbia, Bulgaria and Romania and Kosovo with regard to the World Bank Policy on International Waterways (OP/BP 7.50) and subsequent requirements for notification of riparian states. The Consultant will also verify with the Ministry of Environment and Spatial Planning which International Conventions apply. If Kosovo will need to inform riparian states about the proposed Project, the consultant will assist the Ministry in such notifications. The scoping phase will also look at alternatives for Carbon Capture and Storage both from technical/technology alternatives and review storage options at a more strategic level.

For the purpose of stakeholder consultations in the scoping phase, the consultant should prepare a list of organizations and individuals who are connected / interested in the proposed project and update this list as the preparation of ESIA develops. All the issues raised by the public should be analyzed and taken into account in the further planning of the both phases for ESSS and the ESIA preparation. The consultant will prepare a detailed **communication/consultation and stakeholder engagement plan, which will include all materials required for the Public Information Center and a Grievance Redress Mechanism. This Center will be the primary location for interested parties to seek up-to-date information about the proposed project and the assessment process. The center will be established in the Municipality of Obiliq and staffing for the office will be financed separately, however the information flow about the project and activities under the ESIA to the Center for public information is part of this Terms of Reference.** Materials foreseen to be part of the communication/consultation and stakeholder engagement plan are: monthly information brochures, a website with information about the ESIA process and a series of public debates in all the different villages close to the Project Area and are to be approved by the Government and the World Bank before disclosure and will cover the separate phases for ESSS and ESIA preparation. The center will be managed in the spirit of promoting inclusiveness and strengthening participation in the ESSS and ESIA processes. This transparency will allow for greater monitoring of the process by the public and enable a better process. All publicly available documents related to the project will be made available in the Center. If space permits, specific events may be held in the center in order to encourage public dialogue and facilitate public oversight of the processes. All materials available in the center will be published in English, Albanian, and Serbian. Complex documents may be summarized into easily accessible Fact Sheets, posters, infographics, or powerpoints but the full documents will always be made available. Materials to consider can also be short videos about the ESSS and ESIA processes to raise awareness among Kosovars who are unable to travel to Obiliq to visit the center. A minimum of 10 copies of each document should be available in the center at all times. Specific written or telephone requests for access to information may be submitted to the center by the public. The center will respond in accordance with the Government of Kosovo's and World Bank's policies for access to information.

The draft ESSS and detailed proposed scope of the ESIA will be sent to the Ministry of Environment and Spatial Planning, Panel of Experts (PoE) and WB for approval prior to disclosure and consultation. The

approval from the Ministry of Environment and Spatial Planning will be after consultation relevant Ministries, such as Ministry of Economic Development and Ministry of Work and Social Welfare. Upon approval, the consultant will work with the Government on disclosing the draft ESSS. After addressing all comments arising from the public consultations, the ESSS and final detailed proposed scope for ESIA will be sent to the Government, PoE and WB.

Indicative Table of Content for final ESSS

1. Introduction
2. Project description and applicable standards to be adhered to
3. Alternatives to be considered in the ESIA
4. Identification and presentation of available environmental and social baseline data and information gaps
5. Identification of potential significant issues and impacts (environmental and social assessment)
6. Results of Public Consultations on the draft ESSS and the proposed ESIA scope and identification of stakeholders' and public concerns
7. ESIA scope with description of required environmental and social topics to be investigated, methodologies and modeling to be used and further data collection requirements
8. Mitigation measures to be investigated in the ESIA
9. Detailed work plan for the ESIA, including timeline of activities and other necessary studies and data collection as required from the gap analysis
10. Consultation/communication and stakeholder engagement plan

Further details on content of the ESSS are provided below.

Project description

In the section of project description, the location of the proposed project is to be described, describing the site and surrounding area and communities. The following basic technical information shall be included for all parts of the proposed Project (construction of KRPP opening of the mine and associated infrastructure): the area, size and capacity of the proposed Project; basic lignite characteristics and anticipated extraction techniques and transport, envisaged associated and off-site infrastructure: wastewater treatment, cooling systems, ash and gypsum disposal, connection to the grid, the potential water buffer reservoir etc, i.e. all structures necessary for the full functioning of the new lignite power plant. The Project description will also include the link-up between the existing Kosovo B power plant and the new location proposed for the KRPP. The project description should also include all international and Kosovo standards that the proposed Kosovo Power Project should adhere to, including all applicable BREFs, in particular the BREF on Large Combustion Plants and Industrial Cooling Systems.

Decommissioning of Kosovo A power plant is outside the scope of this TOR. For KRPP, consultants will describe the envisaged operations and decommissioning activities.

The project description should include maps which are to include topographic contours as well as locations of relevant surface waters, roads, railways, villages and communities, administrative boundaries and existing land use.

Available environmental and social baseline data

This section will identify available environmental baseline data which will include physical, biological, socio-economic and socio-cultural aspects of the environment. For full listing of the environmental components in lignite sector, the consultant can, amongst others, refer to Annex C of the Handbook on EIA. The data will be gathered from governmental organization, the existing plants management and

mines in operation, NGOs and relevant research institutions. Substantial amounts of environmental data and details on existing environmental problems have been specified in numerous studies undertaken in the past; these identified issues will be catalogued as part of this section. Some of the environmental baseline data is already planned to be collected separately, such as the air monitoring program and the soil and water monitoring program. However, in addition, the ESSS will, in particular, identify the quality of available data and missing baseline information, i.e. perform information gap analysis that will be required for the full impact assessment under the ESIA. The ESSS will define how this data will be acquired (field survey, monitoring, interviews, etc.) as well as time required for the acquisition of data.

For the preparation of the ESSS and ESIA and for the purpose of this assignment the baseline data of air quality and pollution of surface water, groundwater and soil will be made available to the Consultant. Three online air quality monitoring stations have been installed in the Project area, which are operated by the Hydrometeorological Institute to measure peak and average air quality data and a sampling and laboratory assessment regarding baseline pollution of soil, surface and groundwater will be contracted separately by the Ministry of Environment and Spatial Planning. Hydrometeorological Institute is also operating the online air quality monitoring stations which have been financed by the European Commission last year.

Regarding Air monitoring and modeling, consultants will collect emission and operational data⁶ from current operations of Kosovo A and B. Consultants will also prepare an overview and quantification of relevant emission sources in the valley contributing to the air pollutants concentrations. In case some limited additional mobile sampling would be required for model calibration purposes, particularly with respect to the heterogeneous background concentrations and the emission impact of other substantial but diffuse sources such as decentralized (residential) heating sources, the Consultants will specify technical specifications and AC/QQ requirements in order for this sampling program to be undertaken by the Hydrometeorological Institute under a separate contract.

Also, consultants will obtain the other data required for dispersion model input, such as additional meteorological data (if required), geographical and elevation data, possible obstructions influencing the paths of the emitted plumes from energy production, stack heights, velocities and exit temperatures and other.

In addition, a complementary air quality monitoring program, based on non-continuous sampling with mobile equipment is undertaken by USAID where six sites gathered ambient air quality samples for analysis and operational data was obtained from KEK. In addition, The European Commission has also financed the recent installation of online automatic air monitoring stations throughout Kosovo.

Further primary data collection will be required by the Consultant for other types of air pollution baseline data the key current air emission sources (Kosovo A, B, household heating sources, etc) and meteorological data, data on eco-systems, flora and fauna, land-use, water use and available water resources and projections thereof, cultural heritage, household surveys etc.

Simultaneously, under a different contract, an elaborate soil and water sampling and laboratory analysis program will be undertaken to collect and analyze the baseline environmental data in the soil, groundwater and surface water and river sediments. The monitoring program will analyze pollution impacts of the existing mining activities in depleted Bardh and Mirash mines, Sibovc south west and Sitnica open cast mines as well as already abandoned open cast mining activities; the current disposal of ash and wastewater from existing plants Kosovo A and B and land reclamation activities. These data will be made available and be used by the ESIA-consultants to integrate in the environmental baseline for the ESIA for the KPP,

Alternatives to be considered

⁶ Such as fuel type and composition, rate of use, hours of operation and efficiency of abatement equipment.

The ESSS will describe and consult on the alternatives which will be analyzed during the ESIA, taking into consideration and expanding on the Options Study (Development and Evaluation of Power Supply Options for Kosovo) that evaluated the different power supply options available to Kosovo and comparing the situation with and without the foreseen shut-down of Kosovo A. The ESSS should take into account also the Feasibility Study about Security of Electricity Supply in Kosovo. These Project alternatives will include at least:

1. No-project ('zero') scenario - comparison of the proposed Project with a scenario evaluating foreseeable developments without implementation of the proposed Project;
2. Alternative energy strategy scenario - which will summarize the potential to use alternative energy sources to (partly) replace the foreseen thermal power production, taking into account the potential for improving energy efficiency (see below)
3. Alternative technology scenario comparing different combustion types and operations (for instance pulverized combustion, pressurized fluidized bed combustion, atmospheric fluidized bed combustion, integrated gasification combined cycle), plant unit sizes of the installation, different efficiencies achievable with Best Available Techniques (in accordance with 2006 EU LCP BREF), fuel options including technologies for co-firing of biomass and Refuse-Derived Fuels (RDF), etc., different flue gas air treatment, different cooling systems, cooling water abstraction and discharge, type of mining and transportation of coal etc.;
4. Alternative carbon price scenarios and their implications on the economic viability of alternative technologies; and
5. Alternative siting options for the location of the power plant, including plant unit sizes.

Kosovo's energy options and the economics of each have been subject of a number of studies. These studies concluded that there is considerable potential for energy efficiency and limited potential for renewable energy and these should be developed in addition to providing the firm baseload capacity Kosovo needs. The analysis finds that the lowest-cost reliable energy supply that would meet Kosovo's baseload and peak demand is a mix of thermal and renewable energy sources (750 MW of renewable energy, replacement of Kosovo A with 600 MW of new power generation, and the rehabilitation of Kosovo B and cogeneration component). The mix of thermal and renewable energy sources, including projections for improvements of energy efficiency is already the basis of the proposed Project scenario. The alternative energy strategy scenario should therefore examine the alternative of further alternative energy sources and energy efficiency measures to (partly) replace the foreseen thermal power plant capacity in addition to what is already part of the baseline scenario. The precise content of the alternative energy strategy scenario will be defined and agreed on during the scoping phase.

Identification of significant issues and impacts (environmental and social)

This section will identify common impacts generally associated with lignite fired power plants and open cast lignite mining. For the power plant, the study will look at minimum at impacts associated with emissions to the atmosphere: (i) SO₂, NO_x, (including N₂O); (ii) PM, divided by size fraction, speciated (including black carbon, speciation also for mining emissions) and considering filterable and condensable fractions; (iii) CO₂ and CO (carbon footprint); (iv) HCl and HF; (v) mercury, lead and other heavy metals; (vi) dioxins and furans and PAH; and (vii) TOCs and VOCs etc.). Consultants will analyze all relevant pollutants associated with lignite emissions and associated combustion by-products to ensure that all significant pollutants have been identified for the assessment. The results of the exercise will be reported in the ESSS so that agreement can be reached on the pollutants list prior to the ESIA.

Analysis should also include residuals and waste management (bottom ash, fly ash, sludge, gypsum), waste heat, wastewater, wastewater from steam / cooling cycle, cooling water, noise, etc. as well as climate change and adaptation. These impacts will be looked at in the process of lignite handling (delivery, hauling, storage, and milling), different types of coal fired generators (discussed in the

alternatives section), type of air particulate treatment (ESP, bag houses); type of SO₂ treatment (limestone injection vs. wet scrubbers), primary and secondary control of NO_x emissions, heat and cooling systems, etc. The lignite mining impacts will be discussed based on the different possible coal seam extraction methods and means of transporting coal to the power plant. The section will look into air emissions from mining, coal storage, land use, water regimes, nature and ecology, slope stability, coal seam fires, etc.

The section will assess the quality of information and identify any possible gaps necessary to be filled for a full assessment of the impacts. The required methods for covering these gaps should be described in detail.

The Consultant will identify requirements for emissions and impact (computer) modeling in line with acceptable international standards for all relevant environmental impacts and present with the justification as part of the draft Scoping Report. For instance, for air emissions and air quality impacts, models such as AEROMOD or CALPUFF could be used, but the Consultant will need to justify that the proposed model meets international standards; is acceptable for future Kosovar and an EU compliant regulatory regime; and is suitable for the specific geographic and meteorological conditions in the project area⁷. The meteorological and geophysical data must be appropriate for the model chosen but also make appropriate use of currently available, local meteorological, land use and terrain data. Meteorological datasets should be of sufficient length to provide statistically valid estimates of worst-case impacts.

The model domain should extend beyond the boundaries of Kosovo in order to assess transboundary impacts. In addition, high resolution modeling results close to the relevant sources will also be required. The chosen models will need to be verified by comparison to available air quality measurements in the area.

Consultants will model different scenarios related to the proposed Project, such as the current impacts of the power plants on the air quality, incremental impacts of the proposed KPP with and without Kosovo A, with and without rehabilitation of Kosovo B; using different possible technologies as specified in the LCP BREF and include the mines and related activities under the KPP. Model results will be compared to the appropriate air quality standards specified in the Kosovar legislation and the air quality standards as defined by the EU Ambient Air Quality Directive in which objectives are set for ambient air quality taking into account relevant World Health Organization standards, guidelines and programs. Background concentrations of all relevant pollutants must be quantified at appropriate resolution (temporally and spatially) to account for distributed non-project sources and changing patterns of background over time. Estimation of background may be based on measurements or modeling as appropriate, appropriate background levels should be specified for all assessment scenarios. Consultants will also include other substantial but more diffuse sources, such as decentralized heating sources. Some analysis how diffuse sources (heating and traffic) are likely to contribute to the background concentrations will be required.

Consultants will present key model scenario's to be executed during the ESIA phase as part of the draft Scoping report.

Consultants will also prepare a preliminary water balance for the different uses of water from the Iber-Lepenc canal including a forecast for the existing and new power plants water needs for their lifetime operation, including modeling of three development scenarios in order to assess whether an upgrade of the canal would be required to ensure sufficient water for the power plant needs as well as other water users in the area and their expected water demand increases based on the approved Kosovar policies for different water users and whether water resources are expected to be sufficient or whether conflicts with other water users could be expected Consultants will gather statistical data regarding population growth and distribution, water connections, different water uses, approved sector development strategies and projected forecasts (in particular projected demand for agricultural purposes and increased population demand. Consultants will identify during the scoping phase potential information gaps and propose the

⁷ The Kosovo A and B power plants are located in a valley prone to inversions

work plan for data collection Based on the collected water use baseline data, Consultants will propose three water use development scenarios in the draft Scoping report in order to model the range of potential water balance scenarios for the Iber-Lepenc water area, taking into account a low, medium and high scenario, including possible impacts of extreme dry weather years. The water scenarios will take into account all water needs of the KRPP, including water use of the expanded open pit mine coal mining operations and transport and storage of coal.

If the upgrade of the canal would be required, the impact of the upgrade as well as mitigation and monitoring measures will be covered under the ESIA. Noise modeling under the ESIA is also required of the current noise levels in the project area for different periods during the day and for future expected noise levels.

The identification of the possible significant issues and impacts will be based taking into account that the plant will be built according to the applicable EU Directives and EU Best Available Techniques Reference Documents. The impact evaluation under the ESSS and later in more detail under the ESIA will also calculate the carbon footprint and current other air emissions of Kosovo A in comparison to carbon footprint and air emissions with the proposed Kosovo Power Project and the shut-down of Kosovo A estimated for different efficiency scenarios.

The scoping exercise will include the identification of the “Zone of Influence” of the proposed Project, i.e. the different geographic areas which need to be taken into account during the ESIA for each of the different environmental and social parameters, e.g. air, water, social impacts.

A list of possible impacts related to the sector can be found in Annex B (and sections 3.4.1 and 3.4.2) of the Handbook on EIA and table 2 of the Scoping statement for Assessment for Rehabilitation of TPP Kosovo B.

The Social issues under this ToR will cover the salient impacts on people living in the area of influence of the project. This will need to cover the whole area to be affected during the lifetime of plant operations. These impacts include possible impacts on land use and land-based livelihoods; land acquisition and resettlement associated with the proposed project and its associated facilities; employment and gender-related issues; public health and social services, labor and working conditions; and community health and safety. The social assessment will describe the current social and economic situation and possible impacts of the proposed project on directly- and indirectly-affected communities. This socio-economic information will develop a robust sampling base of at least 20% of affected population and entities in order to provide a contemporary baseline needed for evaluation of impacts and, if required, measures to be carried out to mitigate negative impacts and to enhance positive impacts and opportunities. The detailed methodology for the social assessment will be presented in the draft Scoping Report. It is foreseen that the Consultant will liaise with the (social) research firm to undertake the social assessment and interviews as part of the ToR.

It is important to note that the World Bank is undertaking to conduct a detailed analysis of the impact of the proposed KPP on the current employees of KEK in order to recommend to the Government appropriate actions to mitigate adverse impacts through active employment and social assistance measures. The employment issues as mentioned under the social issues under this Terms of Reference therefore only refer to employment as part of the socio-economic survey as well as labor and working conditions as per IFC PS2 and EBRD PR2. The land acquisition for future expansion of the lignite mine and associated power plant development is governed by a Resettlement Policy Framework (RPF), which was developed under the previous LPTAP activity, and has been adopted by Government. A Resettlement Action Plan (RAP), based on the RPF, has been prepared for the people to be affected by lignite mining in the Shala area of Hade village to facilitate immediate and pressing lignite fuel requirements; this RAP will also serve as practical guidance for future implementation of the mining plan as well as any land acquisition needed for future for power plant and associated facilities’ development. The ESSS and ESIA should study the mining plan scenarios in terms of scale, locations and phasing of the new mine and

inform the mine concessionaire scenarios for mine development plans and phasing (the contours of the mine area in topographic maps) and liaise with the Ministry of Environment and Spatial Planning to establish a management plan for the mine zoning and identify possible impacts dependent on the different zoning and with different amounts of capacity.

Stakeholders' and public concerns

This section will include the identification of the relevant stakeholders, identifying the range of community, public and (international) stakeholders concerns about the proposed project as recorded in consultations on the previous studies, the draft ESSS and the draft EISA scope and identified through other channels.

Mitigation measures to be investigate

Key applicable mitigation measures based on good international practice for the lignite sector and in line with EU Best Available Techniques Reference Documents designed to demonstrate best available techniques for the sector and Kosovo legislation and applicable lenders performance standards will be presented in this section and further detailed in the ESIA.

With regard to the Socio-economic Assessment, the ESSS will also specify the detailed scope and methodology of obtaining a statistically representative sample of household and economic entities surveys that will be executed as part of the ESIA and provide clarification on acceptable methodologies.

Draft Environmental and Social Scoping Study results, Consultations and Communication and Stakeholder Engagement Plan

The Consultant will prepare the draft ESSS in English with translations into Albanian and Serbian for consultations in Kosovo after approval and integration of comments from the Government of Kosovo, the World Bank and the Panel of Experts. The draft ESSS will be accompanied by the proposed Communication and Consultation and Stakeholder Engagement Plan to be approved by the Government of Kosovo and World Bank.

The consultant is also advised to refer to the Aarhus Convention in terms of the Communication and Consultation and Stakeholder Engagement Plan. The Consultant will be in charge to organize and document public consultations on the draft results of the ESSS and the proposed scope of the ESIA, including all impact modeling to be done in line with international acceptable standards and taking into account the EU compliant regulatory regime and focusing on documenting how public concerns have been considered and addressed.

Public Consultations will be organized in line with the World Bank Policy on Environmental Assessment (OP/BP 4.01), IFC's PS1, EBRD PR10 and Kosovo's legal requirements under the EIA law. The ESSS and the detailed scope and workplan for the ESIA will be disclosed in-country in Albanian and Serbian and in the World Bank's Infoshop in English. The consultation process will include standard record keeping for each meeting: a formal record should be made including the agenda, signed lists of participants, a summary of the issues discussed and copies of materials provided to the participants. The consultant will be responsible for the translations necessary during the public consultations.

Based on the comments received from the public consultations, the final ESSS and the detailed scope and work plan of the ESIA will be prepared and approved by Government of Kosovo, World Bank and the PoE. The ESIA scope includes a detailed description of required environmental and social topics to be investigated, methodologies and modeling to be used and further data collection requirements.

Phase 2: Environmental and Social Impact Assessment (ESIA)

- Detailed impact assessment
- Development of detailed mitigation measures
- Drafting of the ESIA, ESAP, SEP and NTS

After the approval of the ESSS and agreement on the detailed scope and structure of the ESIA, the consultant will start preparing the ESIA document. The consultant will acquire in the manner defined in ESSS all missing data on baseline and those necessary for evaluation of impacts. The ESIA document will address all the issues identified in the ESSS. After preparation of the draft document, and the review of the same by the Bank and the Government and the Panel of Experts, the document will be disclosed in Albanian, Serbian and English and publically discussed. All comments received from the public will be recorded and addressed in the final version of the study.

Indicative Table of Content and Scope of issues to be covered by ESIA

Below is the indicative table of content for the ESIA, which is to be completed and confirmed, based on the outcomes of the ESSS:

1. Non-technical Executive Summary
2. Legal, Regulatory and Policy Framework
3. Description of the Project and Project Components
4. Analysis of alternatives as identified and agreed in the ESSS
5. EU BAT assessment
6. Baseline Environmental Information and Data
7. Socio-economic Assessment
- 8a Environmental and Social Impacts
- 8b Cumulative Effects
9. Environmental and Social Management Plan, including mine reclamation and closure plan for KRPP decommissioning, dismantling and land reclamation for the mine.
- 10a. Mine Reclamation and Closure Plan
- 10b Community Development Fund
11. Public Consultation and Communication and Stakeholder Engagement Plan and Records

Overview of ESIA Report Contents

The following sections are a first indication of the deliverables under the ESIA. The detailed contents of the ESIA will be fully informed by the results of the ESSS.

1. Non Technical Executive Summary

This section will provide a summary of: (i) the project objectives, (ii) the project components of the proposed project; (iii) a summary of the anticipated environmental and social benefits of the proposed project; (iv) a summary of the overall findings from the ESSS and ESIA, including potentially significant adverse environmental and social impacts related to the project's operations that require mitigation/monitoring etc; (v) a summary of relevant corrective action plans, environmental investments and the Environmental and Social Action Plan..

2. Legal, Regulatory and Policy Framework

This section will describe applicable environmental and social legal, regulatory and policy requirements and associated regulations and standards of the Government of Kosovo, the EU and World Bank Group and should also provide a gap analysis of the key differences between Kosovo legislation, the applicable EU Directives, and relevant World Bank Group Environmental, Health, and Safety Guidelines, including the General Guidelines and those for Thermal Power Plants and Mining. This section will also include a review of the laws and administrative instructions related to the Spatial Plan for the NMF. In addition, the Law on Integrated Prevention Pollution Control (IPPC) of Kosovo (03/L-043) will be applicable. This regulation follows the general scheme and technical annexes of the EC IPPC Directive and associated EU Best Available Techniques Reference (BREF) documents requiring an IPPC permit for this power generation plant, hazardous waste disposal activities and large-scale open-cast extraction of mineral resources. Equally, the thresholds for discharge and emissions for which all proposed project components must comply to meet MESP permitting requirements are included. Consultant shall follow applicable EU Directives in particular the EU Directive 2010/75/EC on Industrial Emissions (integrated pollution prevention and control) (Industrial Emissions Directive) and associated EU Best Available Techniques Reference (BREF) documents and applicable World Bank policies, specifically OP4.01, OP 4.12, on Involuntary Resettlement and OP7.50 International Waterways and IFC and EBRD Performance Standards.

The section should also provide procedures to be followed for obtaining all relevant permits for start of construction works by the final investor/successful bidder. Future steps should be defined, emphasizing the responsibilities for individual steps, documentation and content of documentation as well as the timeline for permitting process.

3. Description of the Project and Project Components

The section will provide a brief overview of the Energy Sector in Kosovo (including introductory parts from Energy Strategy 2009-2018), the Project background and specific description of the Project components.

The ESIA will cover the construction and operation and final decommissioning the lignite-fired power stations of KRPP and the development, operation and closure plan of an open-cast lignite mine Sibovc South and the associated infrastructure. If from the water balance analysis it appears to be necessary to also upgrade the Iber-Lepenc canal to ensure sufficient water supply for the KRPP units, the ESIA will also cover the upgrade of the canal. The connection of the new power plant to the Kosovo B substation is part of the proposed project and will be covered by this ESIA, but no upgrade or expansion work is anticipated for the high-voltage transmission line leading away from the Kosovo B substation, and so it will not be covered under the ESIA.

The following technical information shall be included: size, technologies and capacity of the proposed project, including mining and power plant operations, all associated infrastructure (construction and operation workforce, housing, water supply, power generation lines, treatment facilities, roads, etc.), description of the construction, operation, mine closure and power plant decommissioning activities (phased construction activities, associated manpower, opportunities for local labor), lignite characteristics, lignite extraction and transport (extraction techniques, transport of coal to plants, separation and mixing, drying process), power cycles boiler systems, cooling cycles including an overview of the water supply and water balance (showing flow calculations, indicating discharge, recycling, evaporation, surface water use, treatment etc.), pollution treatment and abatement equipment (precipitators for fly ash and fly ash storage, bottom ash collection, transport and storage, gypsum etc.), hazardous waste use, handling, and storage (diesel, fuel gasoline, lubricants), worker health and safety, emergency preparation and response (including community response and notification) temporary construction areas; site location alternatives considered; clean-up activities; implementation schedule; staffing and support, and worker facilities and services. Some of this information may not be known at the beginning of the ESIA, as some of the

technical specs of the facility have not yet been fully defined by potential investors; for the first draft ESIA they will be based on the EU legislation, BREFs and Lenders Performance Standards. As soon as the winning bidder is known the draft ESIA will be revised to incorporate the technical specifications and technologies proposed by the winning bidder.

Maps (in a common GIS format) are required at appropriate scales to show project-related development sites, pre-construction and construction activities as well as surrounding areas likely to be impacted (areas of influence-direct and indirect). These maps should include topographic contours as well as locations of major surface waters, roads, railways, villages and communities, administrative boundaries and existing land use.

4. Analysis of Alternatives

The section will, for the alternative development scenarios identified under the ESSS, present a comprehensive description of the alternatives as identified and agreed under the ESSS and EU BAT Assessment and their technical, economic, environmental and social features. This section will then further describe how the Project impacts compare to those of the identified alternatives and will be concluded with an assessment whether findings from this comparison could improve or in any other manner could inform the development of the Project.

5. Best Available Techniques (BAT) Assessment

The consultant will undertake a BAT Assessment of the Project and assess the plant based on the EU BAT philosophy, thereby define operational performance benchmarks for the plant, based on the available geographic location, fuel and socio-economic conditions. This will also include the Carbon Capture and Storage aspects in accordance with the EU CCs and EIA Directives. The BAT Assessment will be undertaken in accordance to EU IPPC/IED requirements and associated EU Best Available Techniques Reference (BREF) documents and IFC/EBRD's performance standards.

6. Baseline Environmental and Social Information and Data

Based on the approved ESSS for the proposed Project, which provides definition of the scope and significance of direct and indirect impacts of the proposed Project, including the area of influence and the alternatives under study, the Consultant shall assemble, evaluate and present the environmental baseline data as it relates to the proposed Project. Based on the ESSS, missing data will be acquired as suggested (field surveys, interviews, and consultations to fill any information gaps critical to the potential impacts and for development of mitigation measures; see related ESSS section under this TOR for what types of data are expected to be made available to the Consultant and which further data collection and survey work is expected). The environmental description should be concise and focused on those environmental sectors where potential impacts of the proposed project can be expected. The information should be presented in illustrative maps at an appropriate detailed scale.

The consultants will need to present environmental baseline data on the following items, amongst others:

Physical environment: geology; topography; soils; climate and meteorology; ambient air quality; surface and groundwater hydrology; existing sources of noise and air emissions; existing water extraction and water users and water pollution discharges; and receiving water quality; all existing operational and past mining and associated processing facilities. Three online air quality monitoring stations have been installed which will provide the baseline air quality data. Consultants will need to identify through air model calibration whether the three stations provide sufficient data to model the air quality impacts of KRPP or whether some additional mobile monitoring would be required, in particular related to the

heterogeneous background ambient air quality concentrations in view of diffuse residential heating sources, particularly in winter time. Also water and soil quality data will be collected under a separate contract and made available to the Consultant.

Biological environment: flora; fauna; rare or endangered species; sensitive habitats, including parks or preserves, significant natural sites, etc.; species of commercial importance; and species with potential to become nuisances, vectors or dangerous, nature and sensitivity of important ecological functions.

Socio-economic-cultural environment (see below): (include both present and projected where appropriate): population; land use, particularly agricultural land use in the area; planned development activities; settlement and community structures; employment⁸; distribution of income, goods, and services; recreation; health; and cultural properties. This section should provide information regarding those community members more likely to be directly affected by project activities.

The consultants will provide general information about the type of health implications which are typically connected with lignite-fired coal plants, but will not undertake a specific health surveys other than the health issues which will be integrated in the social-economic-cultural assessment.

7. Socio-economic-cultural Assessment

A strategic social assessment was completed as part of the ERM SESA and the initial findings and baseline could be used by the consultant to update the social assessment. The updated social assessment will describe the current social and economic situation and possible impacts of the proposed project on directly- and indirectly-affected communities. This socio-economic information will develop a robust sampling base of at least 20% of affected population and entities in order to provide a contemporary baseline needed for evaluation of impacts and, if required, measures to be carried out to mitigate negative impacts and to enhance positive impacts and opportunities. This social assessment will be fully gender informed as the household surveys will be based on roughly equal numbers of man and women, separate woman focus groups will be organized and specific questions related to development problems and priorities for women will be integrated into the questionnaire.

The Consultant will gather data for the report using a combination of secondary (existing reports and statistics) and primary household survey data based on a statistically reliable and representative sample to describe the salient demographic and socio-economic characteristics of the population in the project's area of influence. This assessment should: verify and update as needed: (i) anticipated social and economic impacts; (ii) current social and economic baseline characteristics; (iii) assess social and economic impacts; (iv) describe measures for mitigation of adverse impacts and enhancement of positive impacts ; and (v) identify community development opportunities and priorities.

The Consultant will engage specialized social science (anthropological / sociological) expertise throughout the Social Assessment, and seek advice from World Bank social experts to resolve any difficult issues in interpretation of this directive. Since the socio-economic survey is also inclusive of other proposed project-affected communities, the consultant may choose to conduct updated community profiles by using the Community Consultation Guidelines and recent Community Development Forums that were established for the majority of affected communities to identify community concerns other than those related to the RAP.

It is important to identify, in the area of influence how all communities are currently collecting water from the aquifer, including collection techniques, storage facilities and practices, quantities of water

⁸ As stated before, the World Bank plans to conduct a detailed analysis of the impact of the proposed KPP on the current employees of KEK in order to recommend to the Government appropriate actions to mitigate adverse impacts through active employment and social assistance measures. The employment issues as mentioned under the social issues under this Terms of Reference therefore only refer to employment as part of the socio-economic survey

extracted by each community and/or water use group. This effort will also summarize the end use of this water, specifically how much is used on a monthly basis for drinking, livestock and agriculture. Based on this analysis and consultation with affected parties the consultant will provide several water use scenarios for the proposed project and its effects on local water users in the area of influence. These scenarios shall predict how each water use scenario would affect the economic life of each community, impacts related to human health and livestock, farming and grazing practices, land capability, property rights, and water access, etc.

8a Environmental and Social Impacts

Based on the approved ESSS, the Consultant shall list, model and describe all relevant potential environmental and social impacts. The environmental impacts and social influences will be categorized under pre-construction, construction, operations, and finally decommissioning of the KRPP plant and the mine.

Based on the identified requirements and the justification and approval of the proposed impact modeling for the different environmental impacts, the Consultants will present the outcomes of the modeling and scenarios in a format easy to understand for all stakeholders and public and clearly explaining the baseline data which were used, the assumptions applied and the differences and impacts of the scenarios. This will include ecosystem impacts of the KPP.

Consultants will also undertake a specific cooling water study evaluating Best Available Techniques and international standards and its implications for boiler and cooling technologies and mitigation measures.

Consultants will also indicate health effects typically associated with pollutants related to coal fired power plants and other sources of air pollution. Incremental impacts of the proposed Project will be analyzed (with and without Kosovo A) according to the air quality standards as defined by the Ambient Air Quality Directive that take into account World Health Organization standards. These analyses will help determine the reduction of short- and long- term mortality risks that Kosovo can achieve by reducing concentration levels of ambient air pollutants.

The Consultant will make efforts and pay great attention to the graphical presentations of the results in graphs, on maps etc to present the impact results in a manner that will make them accessible and minimizes effort to interpret the results and assess the main impacts of the proposed project.

8b Cumulative Effects

The ESIA will as well include a specific section of the report that provides a discussion on cumulative effects (as they affect air, groundwater and surface water, land use and social issues) and investigate potential trans-boundary impacts of the proposed Project, specifically for air quality and water uses impact. This will also include possible impacts from future increased demand stemming from the Badovc and Batllava reservoirs which could shift to the Gazivoda/Iber-Lepenc canal. This section should include a review of the current and potential impacts from existing investments, the proposed Project and other potential projects, including other potential mining projects which could be under consideration). This analysis should be supported by figures, tables and maps as appropriate.

9. Environmental and Social Management Plan (Mitigation and Monitoring & Capacity Development Plan)

The consultant will prepare an Environmental and Social Management Plan (EMP) for both construction, operational and decommissioning phases to identify: (a) the set of mitigation responses to potentially adverse impacts; (b) the institutional structure and strengthening required to ensure that mitigation

measures are taken; and (c) the monitoring program to implement to verify compliance with the recommended mitigation, and measure the level of impacts produced by the proposed project. Specific details concerning each of these EMP components are discussed below. The Environmental and Social Management Plan will be in line with Bank's OP 4.01; Environmental and Social Management Plan (EMP) and include a clear Mitigation Plan and Monitoring Plan according to the Bank requirements of the OP 4.01 (Annex IV). The EMP should clearly present estimated costs affiliated with proposed mitigation and monitoring actions, based on Best Available Techniques as specified in the applicable BREF documents, as well as the parties/institutions responsible for each item of the EMP implementation. By the time the consultant is prepared to develop the EMP for construction and begin preliminary work on the EMP for operations, the winning design for the concession should have been selected which will be included in the EMP. Further site specific EMPs will be prepared by the investor for permitting purposes under the Kosovo legislation.

Mitigation Measures Plan - The consultant will present a table of all impacts for the pre-construction, construction, operations and decommissioning phase for all key project components. The preconstruction/design section of the matrix will include recommendation for the design phase to avoid certain impacts. The matrix will include (i) significant impacts to be expected, (ii) proposed mitigation measures and their proposed timing, (iii) which party will be responsible for incorporating the mitigating measure into the proposed project during construction and operation and which authority will be responsible for providing oversight that the mitigation measures are taken correctly; and (iv) estimated budget of the proposed mitigation measures and allocation of financing responsibilities. The consultant shall also show relevant mitigation measures in a spatial representation, such as map or diagram, with precise location of such mitigation measures.

Environmental and Social Monitoring Plan - The consultant will prepare a short-term and long-term environmental and social monitoring program during power plant and mine design, construction, operation and decommissioning as well as for mine closure. This will include: (a) a specific description, and technical details, of monitoring measures required, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions in line with the standards which are applicable; and (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation. The EMP will also consist of proposed institutional arrangements for the grievance mechanism for the population surrounding the proposed KPP.

The monitoring plan will also consist of costs estimates of the proposed monitoring measures, the key parties/institutions that are proposed to be responsible to undertake the monitoring as well as the oversight responsibilities for correct implementation of the monitoring function and implementation of the mitigation measures. The monitoring plan will be based on applicable EU requirements, WB, IFC and EBRD policies and Kosovar legislation related to monitoring of coal fired power plants, mines and associated investments and activities.

Capacity Development - The Consultant will review the skills and capacity with the concerned regulators, in particular the Ministry of Environment and Spatial Planning, the Kosovo Environmental Protection Agency and its inspectorates, responsible for review of ESSS and ESIA documents, permitting and monitoring and enforcement. This review will also be done in view of the required future frequency and type of inspections to monitor compliance with the permit conditions, such as emission monitoring obligations and (annual) environmental reporting. Based on this review, the Consultant will prepare recommendations and propose a plan for capacity building will focus on providing expertise related to the typical type of mitigation measures which concessionaire/investor would be expected to integrate in the designs and the construction of the power plant and mine opening Sibovc South in order for the plant and the permit approval procedure for the concessionaire in line Kosovo legislation and EC Directives.

The capacity building plan will include at least one study tour with 15 estimated participants to a well established permitting and monitoring and enforcement agency in charge of monitoring compliance and inspection of a recently built coal-fired power plant in line with LCP BREF and preferably Industrial Emissions Directive. The organization and travel costs for this study for the participants are to be covered as part of this Terms of Reference

The Environmental and Social Management Plan will also indicate whether there would be a need for an independent Environmental Supervision Engineer during the construction of the plant and opening of the mine. The ESIA consultants will prepare the TOR for this work in case this is required.

10a. Mine Reclamation and Closure Plan (MRCP)

The preparation of the Mine Reclamation and Closure Plan (MRCP) is a responsibility of the investor. However, the Consultant under the ESIA will prepare a set of conditions, requirements and recommendations for the MRCP for the Bardh and Mirash mine based on the already existing Complementary Mining Plan for Sibovc SW (CMP) developed by the STEAG Consortium in 2006 and the EU legislation and BREF requirements. For this task the Consultant should further consider that: (i) future public health and safety are not compromised; (ii) the after-use of the site is beneficial and sustainable to the affected communities in the long term; and (iii) adverse socio-economic impacts are minimized and socioeconomic benefits are maximized.

10b. Community Development Fund

It is commonplace for extractive industries to invest in community development initiatives, beyond the requirements of compensation and resettlement. In many cases, the investor provides for set aside funds to support these actions as part of their overall Corporate Social Responsibility (CSR) program. Also for the proposed KPP it is foreseen that a Community Development Fund of US\$10 million will be established. The consultant under the ToR for this ESIA will review relevant Corporate Social Responsibility (CSR) practices associated with similar extractive industry projects with specific focus on generating employment opportunities to suggest to the government practical CSR investments by the project investor which may be considered for inclusion in the legal agreement. The socio-economic data and household and entity survey data will help the consultants to identify community issues, priorities and possible investments as well as suitable institutional delivery mechanisms how to structure the community development fund in line with good CSR practices and to advice the government how such Community Development Fund could best be set up and operated (consistent with the terms of the KPP project already issued to bidders). The Consultant should use internationally recognized guidance for this task such as IFC's Strategic Community Engagement Handbook and WB/ICMM Community Development Toolkit <http://www.commdev.org/strategic-community-investment-sci>

11. Public Consultations and Communication and Stakeholder Engagement Plan

The Consultant shall prepare a plan in compliance with the EBRD's PR1 and PR10, taking consideration relevant national regulations, and using guidance contained in the IFC handbook "Stakeholder Engagement" (2007), including:

- A description of regulatory, World Bank/ IFC /EBRD and other requirements for consultation and disclosure;
- Local legal framework of consultation activities and Project disclosure requirements, particularly in respect of those public consultation activities that are directly required under the local

- permitting process;
- Identification of all stakeholders and potentially affected groups;
 - Record of any consultation activities undertaken to date/ prior to the Consultant's involvement;
 - Action plan for further consultation during preparation, construction and operations phases of the Project, including details on appropriate formats for effective and culturally meaningful interaction with all relevant stakeholders;
 - The development of a grievance mechanism;
 - A disclosure plan with timetable of events and activities (what is to be disclosed, how, when and for how long), including identification of any locations where relevant Project documentation will be available locally and elsewhere.

The scope and level of detail of the plan should be scaled to fit the needs of the Project. It will be the key to avoid duplication of efforts and ensure consistency between the consultation and disclosure exercises required by national law and by IFIs.

Once the draft ESIA, including EMP, has been prepared, the Consultant will have it translated into Albanian and Serbian after approval and integration of comments from the Government, the World Bank, EBRD and the PoE and considered fit for purpose for public disclosure by other IFIs and potential financiers. The Consultant will be responsible for organization of public consultations of the ESIA. Public consultation and communication will be undertaken on the basis of the World Bank Policy on Environmental Assessment (OP/BP 4.01), Kosovo legislation, Aarhus Convention, good international practices and based on the approved Consultation and Communication plan as developed during the Scoping phase and the Stakeholder Engagement Plan as above. The consultation process will include standard record keeping for each meeting: a formal record should be made including the agenda, signed lists of participants, a summary of the issues discussed and copies of materials provided to the participants. The Consultant will be responsible for the translation requirements for the public hearing. The consultation process will also foresee for a continuous communication place where interested citizens and stakeholders can obtain information about the proposed Project.

The Consultant, will finalize the ESIA based upon the outcomes from the Public Consultations and then support the Government in the public disclosure of the Final ESIA document. The consultant will also prepare a summary of all public comments received and responses to them explaining how the comments have been taken into consideration in the project.

Qualifications and team composition

The consultant should mobilize a team of key and non key experts as follows:

Key expert 1: Team Leader

Team Leader, with a strong background in mining and energy and proven experience in preparation of Environmental and Social Impact Assessments for coal or lignite fired power plants and mining operations which led to successfully obtaining the relevant permits, preferably based on EU standards. Must hold a university degree in civil engineering, geology, chemistry or other related fields; Must have at least 15 years of general professional experience in related fields; must have at least 10 years of professional experience in coal fired power generation, including references for EIA preparation for coal fired power plants, preferably under EU regulatory regime.

Key expert 2: Air modeling and monitoring specialist

Environmental expert with experience in air dispersion modeling and collection of relevant air monitoring data. Must hold university degree (preferably graduate degree) in relevant environmental disciplines (meteorology, atmospheric chemistry or atmospheric physics); must have at least 10 years of professional

experience with particular experience air modeling using advanced internationally well accepted impact (computer) models such as AEROMOD or CALPUFF and experience with dispersion modeling of (coal fired) power plants, transportation emissions and open-cast mining.

Key expert 3: Water Resource Management Specialist

Water Resource Management Specialist with experience in collection of water resources and water use baseline data, preparation of water balances and modeling of realistic water use scenarios and preferably as well with impact analysis of water extraction of coal fired power plants and open pit mining activities. Must hold a university degree in relevant engineering disciplines or environmental engineering; Have at least 15 years of professional experience and at least 10 years experience in the fields as mentioned above.

Key expert 4: Social Specialist

Social Specialist with a post-graduate degree and at least 10 years of professional experience in social impact assessments, development of social management plans, land acquisition and involuntary resettlement, stakeholder engagement and community development projects, preferably with private sector projects. The specialist will have substantial international experience with socio-economic assessments, preferably in the context of social assessments in mining and energy projects and related to establishment of Community Development Funds. She/he should be experienced in the collection and analysis of socio-economic data and preferably have experience with Corporate Social Responsibility (CSR) programs. Practical experience with the implementation of recognized international standards (e.g. IFC PSs, EBRD PRs, etc) is also preferred.

Key expert 5: Environmental Engineer

With a strong background in mining and energy and proven experience in EU standards and Best Available Techniques and accompanying BREF documents applicable to mining and coal fired/lignite fired power plants and requirements under the Integrated Pollution Prevention and Control permits. Must hold a university degree in civil engineering, geology, chemistry or other related fields. Must have at least 15 years of general professional experience; must have at least 10 years of professional experience in the fields as described above.

Key expert 6: Lignite Mine Development Specialist

With a strong background in mining, specifically open pit lignite mining. Must hold a university degree in mining engineering, geology, civil engineering or other related fields, with at least 10 years of general professional experience and at least 8 years of experience in mining plan and development scenarios in terms of scale, locations and phasing (mine contours and topographic mapping of mining area development scenarios) and management plans for mines.

Non Key experts

Biologist/biodiversity specialist

A biologist/biodiversity specialist with at least 7 years of experience and a biology or related university degree. Extensive knowledge of local species of fauna and flora and previous work experience in the region and country would be an advantage.

Liaison Officer for baseline data gathering, organization and facilitation of public consultations.

Liaison Officer will have at least 5 years of professional experience and engineering/environmental or social related university degree. Experience in energy and mining or environmental and social impact assessments are preferable. Albanian language skills are required.

Other experts will be needed to support the work of the key experts, in particular a social research team to undertake the socio-economic assessment, experts in the field of cooling water studies, noise modeling etc. The consultants are free to develop a complete staffing for their proposal and working plan.

Deliverables and reporting schedule

Inception Report - An inception report shall be submitted within 1 month from contract signature. The Inception Report shall include the review of the available reference documents and baseline environmental and social data and provide an overview of applicable standards for lignite fired power plants in line with EU Directives. The Inception Report will also outline the detailed work plan.

Draft Environmental and Social Scoping Study (ESSS) - The draft ESSS and communication and consultation plan will be submitted within three months after contract signature. This will be accompanied by the proposed draft detailed work plan for the ESIA and will also present the overview of all environmental and social baseline data. This will include an overview of all the environmental baseline data available and, based on the data gap analysis, the baseline data which are still required to be collected during the ESIA phase including the work-plan how to collect these data .

It will also present the requirements for emissions and impact (computer) modeling in line with acceptable international standards and EC regulatory requirements and the justification that the proposed model is widely accepted for the required application under the proposed project and is suitable for the specific conditions in the project area. The draft scoping report will also contain the full detailed methodology for the social assessment (based on robust sampling base of at least 20% of affected population and entities).

The Draft ESSS will be submitted within 3 (three) months of contract signature and will be the basis of the organization of the first public hearings after the draft ESSS has been approved by the Client and the World Bank and after review of the Panel of Experts.

Final ESSS -After the organization of the first round of public hearings, taking into account the comments received the Consultant will submit the final ESSS and detailed scope of work including workplan for the ESIA within 4 (four) months after contract signature.

Draft Environmental and Social Impact Assessment (ESIA) - The draft ESIA will be submitted after approval of the Final ESSS and the detailed scope of work and work plan for the EISA. The draft ESIA will have to be submitted no later than (7) seven months after contract signature and will include the draft Environmental Management Plan, which will include the key mitigation measures based on the BREFs. If the bids for the KPP have been submitted in the interim, then the draft ESIA will be based on the technology of the winning bidder. This will also include the different topographic maps reflecting the scenarios for mine development plans and phasing.

The draft ESIA will also include a separate report about the results of the Social Assessment based on a statistically reliable and representative primary household survey data of at least 20% of the affected population and with the recommendations for the community development priorities and community investments and proposed implementation mechanisms.

Revised Draft Environmental and Social Impact Assessment The revised draft ESIA, including the Environmental Management Plan will be based on the technologies proposed by the winning bidder, in case this winning bidder was not yet known at the time of the first draft ESIA and submitted after approval from the Client, the World Bank and the review of the Panel of Experts and after the organization of the second round of public hearings, taking into account the comments received. . The Consultant will submit the revised draft ESIA 8 (eight) months after contract signature and after the winning bidder is known.

Final ESIA - The final ESIA including Environmental Management Plan will be submitted after approval

from the Client, the World Bank and the review of the Panel of Experts, taking into account the final comments received and the organization of a third public hearing in case the ESIA changed substantially based on the technology of the winning bidder. The Consultant will submit the final ESIA no later than 10 (ten) months after contract signature.

All reports will have to be submitted in English, Albanian and Serbian. Reports will be submitted in electronic reports as well as 10 hard copies in each language. The Consultant should allow for at least two weeks review period before consolidated comments will be received for each reporting.

Reporting and contact information

The beneficiary country for this assignment is Kosovo. The envisaged contract authority is the Ministry of Environment and Spatial Planning. The Consultant will formally report to the Ministry of Environment and Spatial Planning, and will closely coordinate with the Ministry of Economic Development; the World Bank and the Panel of Experts.

Annex 1 - Available Documents

Key Existing Environmental and Social Studies. The environmental and social aspects of the proposed power project have been the subject of studies presented in the documents below.

1. ***The Strategic Environmental and Social Assessment (SESA)*** was a systematic and comprehensive evaluation of the then proposed Kosovo C project and its components following the European Commission's Directive on Strategic Environmental Assessment of Plans and Programs and the World Bank's Safeguards Policies and Procedures. The SESA included: ***Final SESA Report***, December 2008, ERM Italia; ***Final EIA Handbook***, December 2008, ERM Italia and ***Final Draft New Mining Field Development Plan (NMFDP)***, December 2008. ERM Italia. In addition SESA included: An environmental and socio-economic baseline in a lignite deposit area located northwest of Obiliq town, including Hade, Hamidi, Lajthishte, Sibovc villages and the area of villages Grabovc i Poshtëm, Shipitullë,, Palaj/Cerkvena Vodica and Dardhishtë. A synopsis of potential development scenarios including three proposed locations, associated technologies (pulverized fired 'PF' or circulating fluidized bed 'CFB'), variable power units (300 or 500 MW), and different phasing of development scenarios (rapid or phased). A "zero" or no action alternative was also evaluated. The environmental and socio-economic impacts of projected development alternatives. Recommendations on the preferred development scenario, and documented public consultation process.
2. ***Lignite-sector-specific Environmental Impact Assessment (EIA) Handbook***. This handbook provides guidance to all actors in the assessment process and explains in a step-by-step process, the required actions for the EA process and roles for government agencies, consultants and/or NGOs.
3. ***Final Draft New Mining Field Development Plan (NMFDP)***. This Draft NMFDP was developed under the LPTAP as a planning document which sets out the future spatial development scenarios of the new about 11 square kilometer sized lignite mine that will be opened in the *New Mining Field (NMF)*, previously known as —Sibovc Minel to serve the new high efficiency *Kosovo New Power Plant*.
4. ***Sibovc Southwest Lignite Mine Environmental and Social Impact Assessment Study. December 2009***. This ESIA was financed by KEK and implemented by ENGTEAM Srl Italy. It analyses the main alternatives, the environmental and socio-economic baseline data, the environmental and social impacts, the mitigation measures and the environmental management and monitoring plan for the refurbishment of an excavator in the Sibovc South West lignite field. This study includes also the Annexes with a copy of the integral text in English and Albanian languages of all relevant legislation, guidelines, directives and studies already implemented with the support of International Donors.

Other Relevant Studies: The consultants should also review the following power sector studies and policies that contain pertinent information:

5. ***Studies to Support the Development of New Generation Capacities and Related Transmission – Kosovo*** UNMIK – Task 4: Site Selectionl, Poyry/CESI/Terna/Decon of behalf of EAR, June 2007. Collection of several volumes that provides some useful environmental and social background material. Overview on the status of past pollution and review of new power technologies and technical specifications regarding emissions, discharges and overall insight into thresholds based on EU standards.
6. ***Energy Sector Technical Assistance Project (ESTAP I, II, III)***, The World Bank, Various Consultants, 2002, 2006, 2007.
7. ***Energy Sector Technical Assistance Project (ESTAP III)***, RIINVEST Institute, ***Guidelines for Community Consultation inn Relation to mining in Kosovo, Guidelines for MEM and Other Government Ministries on Legal Framework for Community Consultation and Development, Community Development Framework for Mining in Kosovo***, April 2007.
8. ***REBIS: GIS - SEE Region Demand Forecast*** – Appendix 6 of Volume 4 (Electricity Demand

- Forecast), PCW/MWH/Atkins, on behalf of EU CARDS Program, December 2004.
9. *Environmental Impact Assessment and Action Plan for Kosovo A and B Power Plants and Coal Mines*, CarlBro for KEK, June 2003
 10. *Energy Sector Technical Assistance Project (ESTAP) – Kosovo*, CESI/EIMV/Ramboll/RE, on behalf of UNMIK, May 2002
 11. *Pre-feasibility studies for the new lignite fired power plant and for pollution mitigation measures at Kosovo B power plant: Draft report on evaluation of site*, European Agency for Reconstruction, 2005.
 12. *Energy Demand Forecast in Kosovo for 2007*, MEM, December 2006¹ —Energy Demand Forecast in Kosovo for 2007, MEM, December 2006
 13. *Development of Power Generation in South East Europe – Implications for Investments in Environmental Protection*, S.E.E.C. on behalf of the World Bank, April 2005
 14. Development and Evaluation of Power Supply Options for Kosovo (Options Study), 2011
 15. *Energy Strategy of Kosova, 2005-2015*, Ministry of Energy and Mining (MEM), July 2005
 16. *Energy Strategy of Kosova, 2009-2018, Ministry of Energy and Mining (MEM), April 2010*
 17. *Project Appraisal Document on a Proposed International Development Association Grant in the Amount of SDR 5.8 million (US\$ 8.5 million equivalent) to the United Nations Interim Administration Mission in Kosovo for the Benefit of Kosovo for a Lignite Power Technical Assistance Project*, the World Bank, September 2006
 18. *Prefeasibility Study for Identification of Water Resources and their Utilization through Small Hydro Power Plants on Kosovo*, Albanian Association of Energy and Environment for Sustainable Development, on behalf of MEM, May 2006
 19. *Programme for the Implementation of the Kosovo Energy Strategy for the Period 2006-2008*, Strategy Ltd., on behalf of EAR, December 2005
 20. *Main Mining Plan for New Sibovc Mine*, Vattenfall/DMT on behalf of EAR, July 2005.
 21. *Complementary Mining Plan for Sibovc SW*, STEAG Consortium on behalf of EAR, April 2006
 22. *Project Appraisal Document on a Proposed International Development Association Grant in the Amount of SDR 3.8 million (US\$ 5.5 million equivalent) to the United Nations Interim Administration Mission in Kosovo for the Benefit of Kosovo for an Energy Sector Clean-up and Land Reclamation Project*, the World Bank, May 2006
 23. *Pre-feasibility Study for Pollution Mitigation Measures at Kosovo B Power Plant – Lot 2*, Electrowatt/Ekono, on behalf of EAR, February 2006
 24. *Water Security for Central Kosovo, Kosovo-Iber River Basin and Iber Lepenc water system*, International office for Water, January 2011
 25. *Water Supply from the Iber Lepenc hydro system for the proposed Kosovo C Power Plant, Evaluation of the hydro system and water availability assessment at the entrance of Pridvorice-Obiliq Canal*, November 2007
 26. *Kosovo Combined Heat and Power (CHP) Feasibility Study 2005*, IBE-Slovenia
 27. *“Improvement of District Heating, Phase 2 CHP” – Feasibility Study Report*, COWI-IPF Consortium, July 2011
 28. *Pre-Feasibility Study for Pollution Mitigation Measures at Kosovo B Power Plant*, European Agency for Reconstruction, February 2006
 29. *Environmental Assessment for the Kosovo B Investment Requirements and Rehabilitation Feasibility Study*, prepared for USAID, AEAI, In preparation
 30. *USAID KOSOVA “B” Investment Requirements and Rehabilitation Feasibility Study*, prepared for

USAID, Tetra Tech Inc., August 2010

31. *Ambient Air Quality Management Plan for the Development of New Generation Capacity, Rehabilitation of Thermal Power Plant (TPP) Kosovo B, and the Decommissioning of the TPP Kosovo A, prepared for USAID, Advanced Engineering Associates International, Inc., The Cadmus Group, Inc., January 2011*
32. *Capacity Building Plan to Enhance the Governance of Ambient Air Monitoring Activities Related to the Development of New Generation Capacity, Rehabilitation of Thermal Power Plant (TTP) Kosovo B, and the Decommissioning of TPP Kosovo A, prepared for USAID, Advanced Engineering Associates International, Inc., The Cadmus Group, Inc., January 2011*
33. *Spatial Plan “New Mining Field” for the Area of Special Interest, Ministry of Environment and Spatial Planning, October 6th, 2011.*
34. *Study about Security of Electricity Supply in Kosovo, prepared for KOSTT, Wattenfall Europe, March, 2013;*
35. *Study for Decommissioning of Kosovo-A Power Plant, EC, EVONIK 2010;*
36. *Workforce Redevelopment Study for the Kosovo A Power Plant, EC, Eptisa & Corporate Solutions, 2010;*
37. *Further support on Kosovo A TPP decommissioning process, EC, Europe Union Ral and Italtrend 2012.*

Kosovo Legislations on Environment

1. Law n.2003/14 of 03.07.2003 “on spatial planning” and Law No. 03/L-106 of 25.11.2008 amending the law on Spatial Planning No. 2003/14;
2. Law n.2003/19 of 09.10.2003 “on occupational safety, health and the working environment”;
3. Law n. Law No. 04/-L-013 of 01.09.2011 “on cadastre”;
4. Law n. 04/L-110 of 03.07.2012 “on construction”.
5. Law n.2004/24 of 08.07.2004 “Water Law”. A new Water Law should be approved by the Assembly of Kosovo (AoK) on 2012 and therefore the Consultant should take into consideration this new law;
6. Law n. 03/L-160 of 29.03.2010 “on air protection from pollution”;
7. Regulation n.2004/49 of 26.11.2004 “on the activities of water, wastewater and waste services providers”; and law no. 03/L-086 of 15.06.2008 on amending the regulation 2004/49;
8. Law no. 03/L-163 of 27.08.2010 “on Mines and Minerals The law. no. 04/L-158 amending the law on mines and minerals;;
9. Order n.41 Prot.02/05 of the Ministry of Environment and Spatial Planning of 04.03.2005 “for implementing the spatial planning law on essential elements of regulation urban plan”;
10. Law n. 03/L-233 of 09.11.2010 “on nature protection”;
11. Law n. 04/L-040 of 22.02.2012 “on Land Regulation”;
12. Law n. 04/L-060 of 19.06.2012 “Waste Law”. Law n.02/L-38 of 19.01.2006 “on health inspectorate”;
13. Law n. . 03/L -230 of 29.10.2010 “on Strategic Environmental Assessment”;
14. Law n.03/L-214 of 23.09.2010 “on Environmental Impact Assessment”;
15. Law n.03/L-025 of 26.02.2009 “on Environmental Protection”;
16. Law n.03/L-043 of 23.03.2009 “on Integrated Prevention Pollution Control”;
17. Law n.03/L-139 of 26.03.2009 “on expropriation of immovable property” and the Law n. No.03/L - 205 on amending and supplementing law n. 03/L-139 on expropriation of immovable property and law n. 04/L-115 on amending and supplementing the laws related to the ending of international supervision of independence of Kosovo;
18. Law n. 04/L-14 of 17.12.2012 “on Allocation for use and Exchange of Immovable Property of Municipality”;
19. Law n.04/L-040 of 23.01.2012 “on land regulation”;

The Consultant during the execution of this ESIA should regularly consult the Official Gazete of the Republic of Kosovo regarding the laws in force⁹.

Additional Kosovan secondary legislation (Administrative Instructions, etc.) will be made available by the Ministry of Environment and Spatial Planning.

Despite Kosovo is not yet a Member State of the European Union, its Government is strongly committed to achieve the status of pre-candidate country and therefore to transpose the EU Directives into Kosovan legislative framework. Within this perspective, the study should take into consideration the following EU Directives and Regulations that are relevant for this project, in order to fulfil as much as possible the EU standards and procedures from an early stage:

1. Council Directive n.76/464/EEC of 04.05.1976 “on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community”;
2. Council Directive n.79/409/EEC of 02.04.1979 “on the conservation of wild birds”;
3. Council Directive n.80/68/EEC of 17.12.1979 “on the protection of groundwater against pollution caused by certain dangerous substances”;
4. Council Directive n.82/501/EEC of 24.06.1982 “on the major-accident hazards of certain industrial activities”;
5. Council Directive n.85/337/EEC of 27 June 1985 “on the assessment of the effects of certain public and private projects on the environment”;
6. Council Directive n.88/609/EEC of 24.11.1988 “on the limitation of emissions of certain pollutants into the air from large combustion plants”;
7. Council Directive n.91/271/EEC of 21.05.1991 “on urban waste water treatment”;
8. Council Directive n.91/676/EEC of 12.12.1991 “on the protection of waters against pollution caused by nitrates from agricultural sources”;
9. Council Directive n.91/689/EEC of 12.12.1991 “on hazardous waste”;
10. Council Directive n.92/43/EEC of 21.05.1992 “on the conservation of natural habitats and of wild fauna and flora”
11. Council Regulation (EEC) n.259/93 of 01.02.1993 “on the supervision and control of shipments of waste within, into and out of the European Community”;
12. Council Decision n.93/98/EEC of 01.02.1993 “on the conclusion, on behalf of the Community, of the Convention on the control of transboundary movements of hazardous wastes and their disposal (Basel Convention)”;
13. Council Directive n.94/66/EC of 15.12.1994 amending Directive n.88/609/EEC “on the limitation of emissions of certain pollutants into the air from large combustion plants”;
14. Council Directive n.96/61/EC of 24.09.1996 “on integrated pollution prevention and control”;
15. Council Directive n.96/62/EC of 27.09.1996 “on ambient air quality assessment and management”;
16. Council Directive n.96/82/EC of 09.12.1996 “on the control of major-accident hazards involving dangerous substances”;
17. Council Directive n.97/11/EC of 03.03.1997 amending Directive n.85/337/EEC of 27.06.1985 “on the assessment of the effects of certain public and private projects on the environment”;
18. Council Directive n.1999/30/EC of 22.04.1999 “on limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air”;
19. Council Directive n.1999/31/EC of 26.04.1999 “on the landfill of waste”;
20. Communication from the Commission COM (2000) 265 final of 03.05.2000 “promoting sustainable development in the EU non-energy extractive industry”;
21. Communication from the Commission COM (2000) 664 final of 23.10.2000 “on safe operation of mining activities: a follow-up to recent mining accidents”;
22. Directive n.2000/60/EC of the European Parliament and of the Council of 23.10.2000 “establishing a framework for Community action in the field of water policy”;
23. Directive n.2000/69/EC of the European Parliament and of the Council of 16.11.2000 “on limit values for benzene and carbon monoxide in ambient air”;

⁹ <http://gazetazyrtare.rks-gov.net/Documents/Lista%20e%20Ligjeve%20ne%20Fuqi%20%28anglisht%29-1.pdf>

24. Directive n.2001/42/EC of the European Parliament and of the Council of 27.06.2001 “on the assessment of the effects of certain plans and programs on the environment”;
25. Directive n.2001/80/EC of the European Parliament and of the Council of 23.10.2001 “on the limitation of emissions of certain pollutants into the air from large combustion plants”
26. Decision n.2455/2001/EC of the European Parliament and of the Council of 20.11.2001 “establishing the list of priority substances in the field of water policy and amending Directive n.2000/60/EC”;
27. Directive n.2002/3/EC of the European Parliament and of the Council of 12.02.2002 “on the ozone in ambient air”;
28. Directive n.2003/35/EC of the European Parliament and of the Council of 26.05.2003 “providing for public participation in respect of the drawing up of certain plans and programs relating to the environment and amending with regard to public participation and access to justice of Council Directives n.85/337/EEC and n.96/61/EC”;
29. Directive n.2003/87/EC of the European Parliament and of the Council of 13.10.2003 “establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive n.96/61/EC”;
30. Directive n.2004/107/EC of the European Parliament and of the Council of 15.12.2004 “relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air”;
31. Directive n.2006/11/EC of the European Parliament and of the Council of 15.02.2006 “on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community”;
32. Directive 2006/12/EC of the European Parliament and of the Council of 05.04.2006 “on waste”;
33. Directive 2006/21/EC of the European Parliament and of the Council of 15.03.2006 “on the management of waste from extractive industries and amending Directive n.2004/35/EC”;
34. Directive 2006/118/EC of the European Parliament and of the Council of 12.12.2006 “on the protection of groundwater against pollution and deterioration”;
35. Regulation (EC) n.166/2006 of the European Parliament and of the Council of 18.01.2006 “concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives n.91/689/EEC and n.96/61/EC”;
36. Directive n.2008/1/EC of the European Parliament and of the Council of 15.01.2008 “concerning integrated pollution prevention and control”;
37. EU IPPC Best Available Techniques Reference Document for Large Scale Power Plants, 2006

Additional Recommended Reports

1. World Bank Environmental, Health and Safety Guidelines, General
2. **World Bank Environmental, Health, and Safety Guidelines- THERMAL POWER PLANTS**
[http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/gui_EHSGuidelines2007_ThermalPower/\\$FILE/FINAL_Thermal+Power.pdf](http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/gui_EHSGuidelines2007_ThermalPower/$FILE/FINAL_Thermal+Power.pdf)
3. **World Bank Environmental, Health, and Safety Guidelines- MINING**
[http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/gui_EHSGuidelines2007_Mining/\\$FILE/Final+-+Mining.pdf](http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/gui_EHSGuidelines2007_Mining/$FILE/Final+-+Mining.pdf)
4. **Preparation of Scoping Statement for Environmental Assessment for Rehabilitation of Thermal Power Plant Kosovo B, prepared for USAID, Advanced Engineering Associates International, Inc., The Cadmus Group, Inc., Eurasia Environmental Associates, LLC, April 2010. * Note that many references for this project review are on the web at <https://drop.io/EAScopeKosovoTPP/login>, password Kosovo**
5. **KEK Yearly Environmental Reports**
6. **INKOS Yearly Environmental Reports**
7. **Ministry of Environment and Spatial Planning reports**
8. **Ministry of Environment and Spatial Planning reports**
9. **JFC Stakeholder Engagement Handbook**

http://www1.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/publications/publications_handbook_stakeholderengagement_wci_1319577185063

10. IFC Strategic Community Investment and WB/ICMM Community Development Handbook: <http://www.commddev.org/strategic-community-investment-sci>

Annex 2 - Illustrative list of key potential environmental and socio-economic impacts

PHASE	ASPECT
Pre-construction	Presentation of environmental baseline data
Construction	Air quality Soil and groundwater Solid waste including hazardous waste Spoil management and disposal Involuntary Resettlement / land acquisition (for mining). Traffic disruption Noise, dust and vibration Archaeology, Cultural Sites Natural Habitats Transport
Operations	Air quality Noise Re-vegetation for Natural Habitats greenhouse gases Impacts on surface water /groundwater, water consumption Soil contamination Coal Mine fires Flora, fauna, habitats Traffic, including transportation related to mining operations Electromagnetic fields Ash and spoil deposits Retention ponds Work force safety records Emergency Preparedness/Response Plan
Mine Closure	Remediation requirements and associated reclamation
KRPP Decommissioning	Removing equipment, cleaning, decontamination, soil cleanup

Annex 3 – Guidance on Mitigation Measures of Environmental Management Plan

For each potential impact identified as significant in the section above, a mitigating measure is required. The mitigation measures will be based on Best Available Techniques, which are to be used to avoid adverse effects on the environment or to reduce these at reasonable costs. The ESIA would also specify mitigations measures as applicable to power plants in line with the EU Directive 2010/75EC on industrial emissions (Industrial Emissions Directive) , notably Annex V of the Directive on Emission Value Levels, and Best Available Techniques (NBTA) as defined by the Large Combustion Plant BREF.

Information on BATs, characteristic features, and environmental aspects are provided in the BREFs. The reference documents, amongst others, are as follows: Integrated Pollution Prevention and Control, Reference Document on Best Available Techniques for Large Combustion Plants, European Commission, July 2006 (BREF on LCPs) and additionally BREF on Industrial Cooling Systems, 2001, BREF on Emissions from Storages, 2006; BREF on General Principles of Monitoring, 2003; and BREF on Management of Tailings and waste rock in mining, July 2004. In addition, mitigation measures should achieve compliance with the IFC Industry Sector Guidance Note on Thermal Power Plants (new revised draft March 2008) as well as other relevant EU, World Bank and Government of Kosovo standards.

These measures also need to address emergency response requirements for accidental events. Throughout the document, there should be clear distinction for measures associated with the design, construction, and operational phases and closure/decommissioning of the project components. Each mitigation measure should be described in as much technical detail as possible and include costs estimates of the proposed mitigation measures. At a minimum, the consultant should prepare the following:

Construction Phase Mitigation

Construction Spoils Management Mitigation Plan to manage the disposal of construction spoils generated in an environmentally friendly manner;

Erosion and Sediment Control Mitigation Plan to describe the measures during construction to minimize sediment carried by runoff from entering downstream surface water drainage systems;

Fugitive Dust Control Mitigation Plan to control fugitive dust control emissions during construction activities;

*Noise Control Mitigation Plan*¹⁰ to control noise impacts on the surrounding communities during blasting and construction activities;

Re-vegetation and Natural/Wildlife Habitat Management Mitigation Plan to ensure proper re-vegetation of areas disturbed by construction activities;

Traffic Control Mitigation, Public Safety and Public Communications Plan to minimize the disruption of daytime traffic flows along important access roads in the area;

Archaeology/Cultural Resources Mitigation Plan to manage any archeological or cultural impacts that may be encountered during construction

Worker Safety Plan to identify standards for protection of workers including on-site training and proper safety equipment

Updated Public Consultation and Community Communications Plan for Construction Activities that takes into account all the impacts and mitigation identified during preparation of the Final EIA

¹⁰ Cross reference any noise mitigation measures with actions planned by the Company to meet the Health and Safety Requirements, Appendix 4 in the Implementation Agreement

Operations Phase Mitigation

Mining Operations Mitigation Plan This Plan should cover all of the following topics: a) Water use and quality; b) Wastes; c) Hazardous materials; d) Land use and biodiversity; e) Air quality; f) Coal fire prevention; g) Lignite dust control –extraction, transport, separation and disposal; h) Noise and vibrations; i) Energy Use and j) Visual Impacts

New and Rehabilitated Power Plant Mitigation Plan. This Plan should cover all of the following topics: a) Air emissions; b) Energy efficiency and Greenhouse Gas emissions, c) Water consumption and aquatic habitat alteration; d) Effluents; e) Solid wastes; f) Hazardous materials and oil; and g) Noise

Environmental Safety and Health Management Plan for all construction and operations across each project component that will conform to international best practice (e.g., IFC Performance Standards, EMS and ISO). The consultant shall ensure that all such practices are managed by an in house EHS Manager with demonstrated experience in similar projects.

Emergency Preparedness and Response Plan to develop a response strategy to mitigate the damage caused by potential emergency events around chemical leaks, fire and other life threatening risks leaks at both the mines and power plants: and

Power Plant Decommissioning Mitigation Plan (for KRPP) will be developed to assure that all potential negative impacts are controlled in this phase out process so that no contaminants pose any continued risk to human health or the environment.

Mine Reclamation and Closure Mitigation Plan, the specific details of reclamation and closure will require monitoring to assure compliance with agreed practices and provisions.