

TERMS OF REFERENCE FOR ESIA

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1. Introduction

An essential output of the scoping phase is the definition of the Terms of Reference of the comprehensive ESIA study. The findings of the ESIA study will be presented in an ESIA report (or EIA report in line with Albanian Regulations) which will be prepared in compliance with National Albanian standards and regulations as well as international standards.

The ESIA 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 Directives¹, World Bank policies and Environmental, Health and Safety Guidelines; IFC performance standards and compliant with Albanian legislation and the official procedures.

The entire ESIA process will consider the Environmental, Health and Safety (EHS) Guidelines (IFC's general and specific guidelines), as technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). The Consultant will know these EHS guidelines (e.g. Environmental, Health, and Safety Guidelines for Thermal Power Plants, Occupational Health and Safety, etc), as useful tools to finalize better ESIA report, but also use as an instrument in the finalization of the industrial projects and/or related EIA; The applicability of the EHS Guidelines should be tailored to the hazards and risks established for each project based on the results of an environmental assessment in which site-specific variables, such as Albanian context, assimilative capacity of the environment, and other project factors, will be taken into account. The Assessment for ESIA study will be carried out consistent with Performance Standard 1, based on the professional opinion of qualified and experienced persons. However, when Albanian regulations differ from the levels and measures presented in the EHS Guidelines, the project is expected to achieve whichever is more stringent.

The following sections present the Terms of Reference of the detailed ESIA which will be performed for TAP. The section is structured as follows:

- Project Overview
- Objective of the ESIA
- Scope of Work for conduction of the ESIA
- Stakeholder Engagement;
- Outline structure for the final ESIA report;

¹ 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 emissions which will come into force on January 1, 2016

2. Project overview

This project is intended to present the Client an optimum technical and technological solution for the combine cycle cogeneration power plant CCCPP KORÇA 500 MWe/ 80 MWt/ 5 MWt planned for construction at the site nearby Korca city in Albania, based on the current level of knowledge and technology development and confirmed technical solutions used at reference CCCPP built worldwide. CCCPP will produce up to 500 MWe including up to 80 MWt steam extraction for district heating. Permanent extraction will be about 5 MW for hot sanitary water.

Fuel gas will be supplied from Trans Adriatic Pipeline (TAP) passing location two kilometers in north direction. Raw water for supplement of cooling towers demand and de-mi water production will be supplied from municipal waste water plant in the neighborhood and in emergency supplemented from two wells situated near power train. District heating of max 80 MWt will provide the city of Korča heating. Grid connection will be double 400 kV transmission line to SS Zemblak long about 11km.

Optimization of the process of production of electrical and heat energy will result in significant reduction of the environmental emissions, below the limit values, high efficiency factor will enable maximum fuel conversion, and the overall concept will ensure reliability and future availability of the plant.

3. Objective of the ESIA

The objective of the ESIA is to assess the potential impacts of the project and project-related activities on the environment (including biophysical and socio-economic resources) and, where applicable, to design mitigation or enhancement measures to avoid, remove or reduce negative impacts to the environment, in line IFC standards and compliance with Albanian legislation for the Developer's Project.

4. Scope of Work

The entire ESIA process will be carried out in the course of two phases:

1. Phase 1: Environmental and Social Scoping Study (ESSS);
2. Phase 2: Environmental and Social Impact Assessment (ESIA)

In the Phase 1 –“Environmental and Social Scoping Study (ESSS)” or ESIA Scoping, the Consultant will be focused on:

- a) Identifying the impacts to be assessed (and how) and which of these are significant and most important;
- b) Geographical area of influence to be considered for each of the different environmental and social parameters;
- c) Types of alternatives which ought to be considered, drawing on a number of analysis;
- d) Available baseline data and type of additional baseline studies to be required to characterize the existing environment, including salient social aspects;
- e) any special requirements for baseline studies regarding their geographical extent or timing e.g. because of seasonal changes in fauna and flora;
- f) Level of detail of investigations required;
- g) Types of emissions and impact modeling, in line with international accepted standards, to be used to estimate the magnitude of environmental effects;
- h) Types of mitigation measures to be considered and monitoring to be required following relevant EC Directives;
- i) Communication plan to inform the public through public consultations, including identification of the main stakeholders and their concerns.

The Phase 2 - Environmental and Social Impact Assessment will be customized and carried out based on the findings of 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, social and environmental parameters and determine and assess the identified impacts;
- (iii) prepare the Environmental Management Plan, identifying the required actions needed to mitigate environmental and social impacts of concern that will be integrated into the design, 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.

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- (v) Prepare a final ESIA study that will comply with national legislation as well as WB policies and Environmental, Health and Safety Guidelines; IFC performance standards and EU Directives.

The Consultant will identify available environmental baseline data which will include physical, biological, socio-economic and socio-cultural aspects of the environment. The data will be gathered from governmental organization, the existing project construction (e.g. TAP) and project in operation (Waste Water Treatment Plant) and other relevant infrastructures and facilities, NGOs and relevant research institutions. Desktop studies will include additional research to identify existing documentation that contains information relevant to key resources present in the project environment. Potential sources include publicly available literature with relevance to the project site and general area.

To develop a complete understanding of the existing environmental and social conditions of the project's area of influence and assess the impacts, further desktop and field studies will be carried out. 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. In support of the profound EIA, the following field surveys will include sampling and analyses of:

- soil samples,
- surface and groundwater,
- river sediments,
- Air quality and noise levels.

And survey of:

- Environmental (flora, fauna, habitats, vegetation),
- Socio-economic (stakeholder engagement, household surveys, etc.)
- Cultural heritage surveys.

For the project main sampling will be conducted between spring and summer. Within this timeframe, selection of the specific sampling period will consider:

- when sampling will be most representative of the existing conditions;
- when 'worst case' conditions exist;
- if seasonal variations would have significant effect on determination of potential impacts and significance;

The Consultant will identify and assess impact identification, prediction, and analysis - involves analyzing the impacts identified in the scoping and baseline work to determine their nature, temporal and spatial scale, reversibility, magnitude, likelihood, extent and effect.

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Then is necessary to judge the significance of each impact, to determine whether it is acceptable, requires mitigation or is unacceptable.

During the scoping phase the Consultant will identification 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.

The ESIA study will look at minimum at impacts associated with emissions to the atmosphere (SO₂, NO_x, PM, CO₂ (carbon footprint) etc.), residuals and waste management, waste heat, wastewater, wastewater from steam / cooling cycle, noise, etc. The Consultant will assess the quality of information and identify any possible gaps necessary to be filled for a full assessment of the impacts. The Consultant will identify requirements for emissions and impact modeling in line with acceptable international standards. 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 widely accepted for the required application under the proposed Project; and is suitable for the specific conditions in the project area. Consultants will model different scenarios related to the proposed Project, such as the current impacts of the power plants (and other sources) on the air quality, incremental impacts of the proposed with and without the project to the air quality standards as defined by the Ambient Air Quality Directive in which objectives are set for ambient air quality taking into account relevant World Health Organization standards, guidelines and programs.

Consultants will also prepare a preliminary water balance for the different uses of water from the Waste water treatment plant and other sources, including a global forecast for the next 20 years and assess whether an upgrade of the existing canals 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. If the upgrade of the canals and irrigation/drainage 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 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.

Consultation will be carried out with local community leaders and small groups of key

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stakeholders in the communities, the land of which is located within the 2 km study buffer area from the project location. These will be undertaken alongside the social baseline study that will be carried out to better understand these stakeholders.

A Social and Environmental Management Plan will be prepared to define resources, roles and responsibilities required to manage environmental and social impacts and implement mitigation measures. The SEMP forms a link between the S&EA and the Social and Environmental Management System.

The draft ESIA will be publicly disclosed and comments and suggestions will be collected from stakeholders and the public. The disclosure and consultation will be organized at national, regional and local level under the supervision of the Ministry of Tourism and Environment and the National and Regional Environmental Agency. All administrative levels from the region to the communes and village representatives will be invited to engage as well as the local communities, NGOs and other interested parties.

The ESSS will describe and consult on the alternatives which will be analyzed during the ESIA, taking into consideration the Options Study that evaluated the different power supply options available in the region and comparing the situation with and without the foreseen shut-down of project. Alternatives will include variations in layout on the project site, alternative engineering processes and construction practices, the selection of different sites or routing of linear facilities, and screening of suppliers to select those with appropriate environmental and social risk management systems.

5. Stakeholder Engagement

Consultation and engagement with stakeholders is an integral part of the Environmental and Social Impact Assessment (ESIA) process. Initially, the Consultant will prepare a Stakeholder Engagement Plan whose overall aim is to ensure that a consistent, comprehensive, coordinated and culturally appropriate approach is taken for consultation and project disclosure and to guide stakeholder consultations and communications during the period of the ESIA study and other aspects of the project analysis and design. To be updated toward the end of the ESIA study to provide a roadmap for engagement in monitoring the effectiveness of impact mitigation measures.

During the ESIA process, the Consultant will carry out:

- Public Consultation of Scoping Study
- Scoping Disclosure to stakeholders
- Ongoing Stakeholder Engagement (including Household Surveys)
- Public Consultation and Disclosure of Draft ESIA (including public hearing).

An important objective of the ESIA Scoping disclosure process is to allow stakeholders to provide feedback on the Project. In this regard, the Developer and Consultant have envisaged a process that allows stakeholders to address their comments and suggestions in writing to (for Scoping Report) after the scoping meetings have taken place. The ESIA will assure the stakeholders that all environmental impacts are taken into consideration, that the public has been properly consulted and mitigation measures and monitoring identified and agreed.

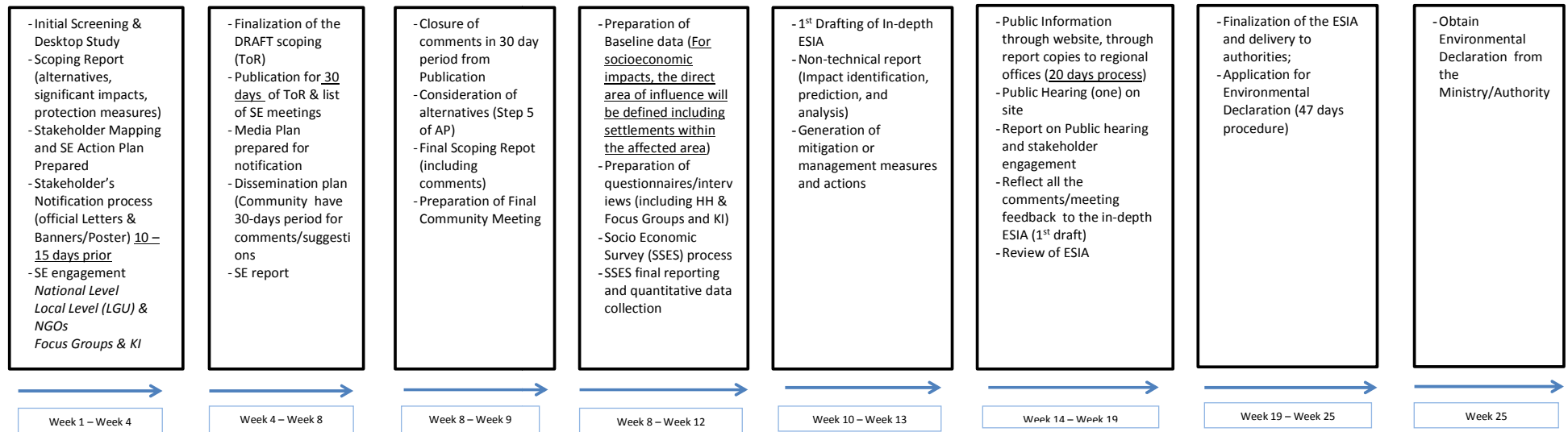
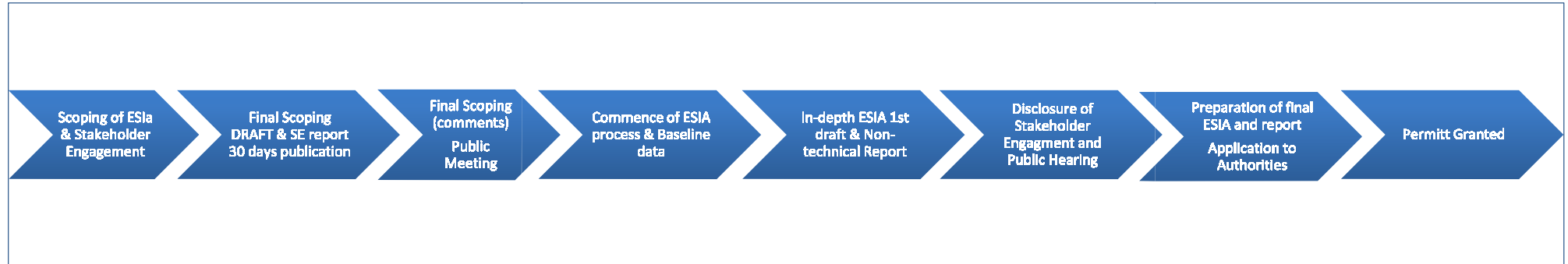
The draft ESIA will be publicly disclosed and comments and suggestions will be collected from stakeholders and the public. The disclosure and consultation will be organized at national, regional and local level under the supervision of the Ministry of Tourism and Environment and the National and Regional Environmental Agency of Korca. All administrative levels from the region to the municipalities and administrative units and village representatives will be invited to engage as well as the local communities, NGOs and other interested parties.

6. Outline structure for the final ESIA report

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. Baseline Environmental Information and Data
5. Socio-economic Assessment
6. Environmental and Social Impacts
7. Analysis of alternatives as identified and agreed in the ESSS.
8. Environmental Management Plan, including decommissioning.
9. Public Consultation and Communication Plan and Records.

HH – Households
SSES – Sample Socio Economic Survey
KI – Key Informant
SE – Stakeholder Report





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