



MVM Tisza Erőmű Kft.

TISZA COMBINED CYCLE GAS TURBINE PLANT

**Environmental and Social Impact Assessment -
Non Technical Summary**



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CONTENTS

1	INTRODUCTION	1
1.1	PROJECT DESCRIPTION	3
1.2	ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT	5
1.3	AIR QUALITY	5
1.4	CLIMATE RESILIENCE	5
1.5	GREENHOUSE GAS	6
1.6	NOISE AND VIBRATION	6
1.7	SOILS AND GEOLOGY	7
1.8	WATER ENVIRONMENT	7
1.9	LANDSCAPE AND VISUAL	8
1.10	BIODIVERSITY	8
1.11	SOCIAL	9
1.12	CULTURAL HERITAGE	10
1.13	TRAFFIC AND TRANSPORT	11
1.14	MATERIALS AND WASTE	12
1.15	MAJOR RISKS AND HAZARDS	13
1.16	CUMULATIVE EFFECTS	13
1.17	HEALTH, SAFETY, ENVIRONMENTAL AND SOCIAL MANAGEMENT	14
1.18	STAKEHOLDER ENGAGEMENT	15
2	ESIA DISCLOSURE	16

FIGURES

Figure 1-1 - Site Location	2
Figure 1-2 - Project Layout	4

1 Introduction

MVM Group is a fully state-owned company playing a leading role in implementing the Hungarian national energy strategic targets. MVM Tisza Erőmű Kft. (hereafter referred to as 'MVM' or the 'Company'), a subsidiary of MVM Group, is proposing to develop the Tisza Combined Cycle Gas Turbine (CCGT) Power Plant (hereafter referred to as the 'Project') which will comprise two units of maximum 499 megawatts (MW) capacity each. The Project is located in the county of Borsod-Abaúj-Zemplén in northern Hungary in the Tiszaújváros Region, on the right bank of the Tisza River. The site is located approximately 2 kilometres (km) east of the town of Tiszaújváros and 4 km north of the settlement of Tiszapalkonya (refer to Figure 1-1).

The CCGT units are designed to primarily operate on natural gas with the capability to switch to hydrogen blended fuel in the future. Through developing the Project MVM therefore intends to meet the requirements of the National Energy Strategy and the National Energy and Climate Plan (NECP) and has committed to significantly lower carbon dioxide emissions and to increase the capacity and resilience of the energy supply system within Hungary.

This Non-Technical Summary (NTS) presents the key findings of the ESIA in a non-technical manner so that it is accessible to those that may be interested. The ESIA is also accompanied by a Stakeholder Engagement Plan (SEP), a document that seeks to inform and guide the Project stakeholder engagement process, and an Environmental and Social Management Plan (ESMP) which sets out applicable management and mitigation measure to address Project impacts.

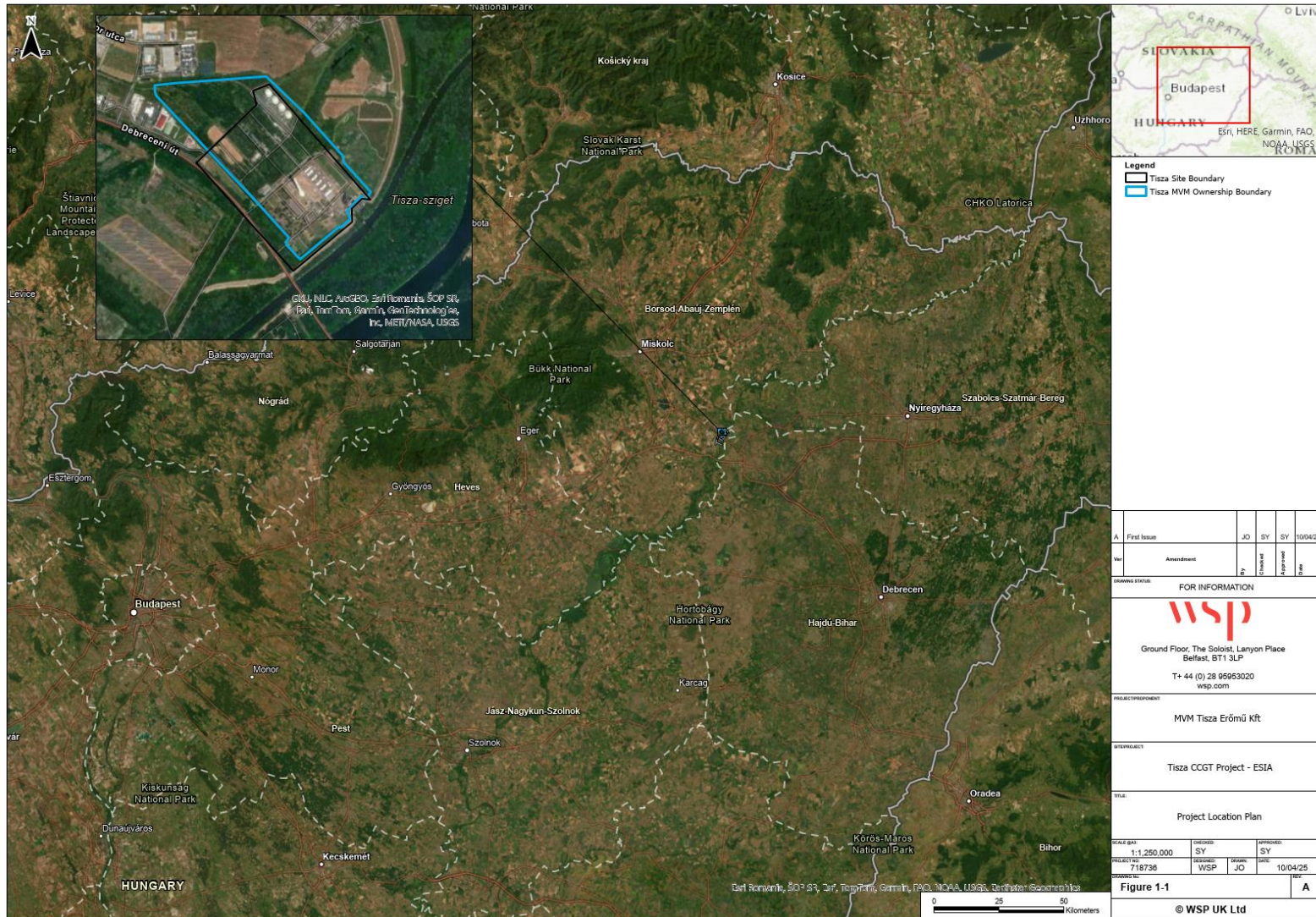


Figure 1-1 - Site Location

1.1 Project Description

The Project is an independent 998MW CCGT power plant that will replace the Tisza Power Plant (hereafter referred to as the 'Tisza PP') which was in operation between 1977 and 2012. The Project will be developed within the boundary of the Tisza PP and will utilise existing infrastructure on site, including grid connection and cooling water system. A CCGT plant is power plant which generates electricity via a gas turbine generator, additional electricity is also generated from waste heat via a steam turbine. The Project comprises two modern high efficiency CCGT units of 499MW that are designed to primarily operate on natural gas and hydrogen with diesel oil to be used only as a as emergency fuel.

Each unit will comprise a number of elements to include a gas turbine, heat recovery system generator (HRSG), a steam turbine and transformers. The HRSG will be connected to a 60 m tall stack. A by-pass stack of 52 m or 40 m height is being considered and will be installed between the gas turbine and the heat recovery boiler.

A new gas supply system will be developed for the Project, which will comprise of a gas transfer station and a new pipeline (4-5km in length) to connect to the Testvériség I backbone gas pipeline. The new pipeline is planned to follow the route of the existing pipelines. All pipelines will be underground pipelines and the new gas transfer station will be located within the Project site boundary. The electricity generated by the Project will be fed into the existing 400kV and 220kV transmission network.

The water demand for the Project will comprise of cooling water demand and process water demand. The cooling water for the Project will be sourced from the Tisza River through an existing service water channel that runs parallel to the river, and the cooling water will then be discharged back into Tisza River, whereas the process water will be sourced from twelve existing wells.

An Engineering, Procurement and Construction (EPC) Contractor will be responsible for the final design, construction and commissioning of the Project. The construction for the Project is expected to commence in 2026, with operations expected to start in Q4 2029. The Project is planned to have an operational life of at least 20 years



Figure 1-2 - Project Layout

1.2 Environmental and Social Impact Assessment

MVM has engaged WSP UK Ltd. (hereafter referred to as WSP) to prepare Environmental and Social Impact Assessment (ESIA) report for the Project. The ESIA has been developed in accordance with relevant Hungarian environmental standards and the international lenders standards, i.e., Equator Principle 4 (EP 4), International Finance Corporation (IFC) Performance Standards (PSs), and the Organisation for Economic Co-operation and Development (OECD) Common Approaches (hereafter referred to as the Applicable Standards).

The purpose of the ESIA is to identify and assess the potential impacts of the Project on the physical, biological, social and cultural environment during the construction, operation and decommissioning phases of the Project. The ESIA report describes the Project, the environmental and social baseline, the potential impacts on environmental and social baseline conditions and explains how the Project has been designed and how it will be implemented alongside mitigation to minimize the adverse impacts and proposed enhancement measures.

A summary of key baseline conditions, predicted environmental and social impacts and associated mitigation measures that have been identified by the ESIA process are outlined below.

1.3 Air Quality

Information on current baseline ambient air quality and weather conditions in the vicinity of the Project was collected by a three month monitoring survey alongside information obtained from air quality monitoring stations managed by the Hungarian Air Quality Monitoring Network and weather data from nearby weather stations managed by the Hungarian Meteorological Service.

The closest ecological receptor to the site is the Tiszaújvárosi ártéri erdők Special Area of Conservation (SAC), to the west of the site. There are no residential receptors within 250m of the Project site. There is a commercial construction materials facility to the north-west of the site, in addition to working offices within the TPP site however these are not considered to have relevant human exposure (i.e. this would be classed as workplace exposure).

During the construction phase, additional traffic and use of plant and equipment is likely to give rise to combustion emissions such as Nitrogen Oxides, Sulfur dioxide and Carbon Monoxide. Combustion emissions during the construction phase are expected to be local in scale, short-term and reversible. The significance of the effect of construction activities on air quality, considering both human and ecological health from construction dust, is negligible.

An air dispersion modelling study was undertaken to measure potential operational impacts from the Project on human and ecological receptors. The predicted pollutant concentrations indicate that for all pollutant and averaging periods (i.e. annual, 1-hour) no standards are exceeded for all pollutants, and furthermore the emissions limits imposed by the Project have ensured that impacts are below 25% of each relevant standard. Operational impacts are therefore not considered significant.

No mitigation is required beyond the application of standard practices during construction through measures outlined within the construction Environmental and Social Management Plan (ESMP).

1.4 Climate Resilience

Current and future baseline conditions for the Project location indicate an increasing trend for heatwaves, wildfires, gusts and dust storms and extreme precipitation events, and a decreasing

trend for cold waves. Subsidence, soil erosion and lightning do not present clear trends in climate data.

At the time of undertaking the preliminary climate change risk assessment, the Project design was not sufficiently developed to identify measures which will build in resilience to climate change. It is therefore recommended that the design team for the Project review the future climate baseline and the climate change risk assessment to ensure the design incorporates sufficient adaptive measures to account for future climate. The design team should document the measures included in the design so that this information is available to inform future iterations of the climate change risk assessment.

1.5 Greenhouse Gas

The greenhouse gas (GHG) emissions arising from construction phase activities relate largely to diesel use in generator and plant equipment and the scale of emissions does not cause any significant impact on wider energy sector or national mitigation targets relating to delivery of Net Zero targets in Hungary. The potential impact of the Project construction phase and decommissioning phase on GHG emissions is assessed as negligible.

The potential impact of the Project operational phase on GHG emissions is assessed as minor adverse. During the operational phase, significant GHG emissions will result from the combustion of fuel. However, the operation of the new CCGT plant will facilitate a transition from more carbon intensive fossil fuel generation (coal) across the electricity generation sector. The operational phase is not considered to cause significant negative impacts on the wider energy sector or national mitigation targets relating to delivery of Net Zero targets in Hungary.

1.6 Noise and Vibration

The noise and vibration assessment focused on the sensitive receptors within 1400m of the Project site boundary. The collection of baseline data has been undertaken using desktop assessment and site noise survey.

Impacts during construction and decommissioning activities are considered to be not significant following implementation of Best Practicable Means.

For the operational phase, when the proposed noise source levels are considered, including embedded mitigation that is built into the design, there is a predicted exceedance of the nighttime (LAeq,8hr) ambient sound level limit stipulated in local guidance of between 2 and 3 dB at multiple receptors, the significance of the effect is major.

During the detailed design stage, additional mitigation will be included through choice of plant location and design. The existing noise model will be refined, and additional acoustic assessment will be undertaken in consultation with the designers to further optimise the noise emissions from the Project. The findings of the further assessment will inform the design to ensure that both construction and operational noise levels are met with an overall target of a minor adverse effect at a worst case.

As the distance to the nearest sensitive receptors is greater than 100m from the Project based on the current design, the effect of vibration from construction, operation and decommissioning activities is not anticipated to be perceptible at the receptors.

1.7 Soils and Geology

The Project is located on the former TPP site which is considered a brownfield site as it has previously been used for development. Baseline data collection was undertaken by a desktop review of existing data and soil sampling. There are no nationally or locally significant geological features in the area.

During construction the assessment found that there is the potential for the following impacts:

- Contamination of soils from leaks and spills;
- Exposing soils to erosion and degradation from vegetation clearance and topsoil stripping;
- Soils being compacted from vehicle movements which can lead to erosion and poor drainage;
- Soil extraction can alter the structure of soils.

With the implementation of mitigation measures outlined within the ESMP, Spill Response Plan and Hazardous Materials Management Plan no residual significant effects are predicted during construction.

During the operational phase impacts no excavations or activities that will cause compaction or vegetation / topsoil stripping are anticipated. There is the potential for contamination of soils during maintenance events or through delivery / worker vehicles. No significant effects are predicted with the implementation of mitigation measures outlined within the ESMP, Spill Response Plan and Hazardous Materials Management Plan for operation.

1.8 Water Environment

The Project lies adjacent to the Tisza River, the longest tributary of the Danube (966 km), and second largest in terms of flow. A service water channel is adjacent to the Project which will be used to abstract and discharge cooling water required for the Project. The ecological status of River Tisza is described as good. The Project area is considered as a low flood risk area. The drinking water source zone of Tiszaújváros City is located adjacent northwest of the Tisza Power Plant.

Baseline data collection was undertaken by a desktop review of existing data and through surface water and ground water sampling.

This assessment considers the following impacts associated with the Project activities on the hydrological and hydrogeological resources within the Study Area:

Construction phase:

- Impacts associated with Pollution / Accidental spills.
- Impacts from Increased sediment mobilisation during construction.
- Impacts from dewatering and wastewater discharges.

Operation Phase:

- Impacts associated with consumption of water on competing users.
- Impacts associated with thermal discharge into Tisza River.
- Impacts associated with discharge of wastewater streams / spills.
- Impacts in relation to water availability.

With the implementation of mitigation measures outlined within the ESMP, Spill Response Plan, Hazardous Materials Management Plan and a Water /Wastewater Management / Monitoring Plan no residual significant effects are predicted during construction or operation.

1.9 Landscape and Visual

The Project is located within the existing TPP, which already includes large-scale elements of energy infrastructure such as a chimney stack 250m in height that will be retained alongside four oil storage tanks. The surrounding area includes other industrial sites and the area is crossed by high-voltage power lines and pylons.

The potential landscape impacts of the Project during construction and operation primarily relate to the visibility of the proposed structures (temporary and permanent) within the wider landscape, along with physical impacts on the Project site itself. Impacts will affect the existing physical elements of the landscape character of the Project site, along with the qualities of landscape character and are predicted to be significant.

In terms of visual impacts, significant effects have been identified for settlements, recreational receptors and users of local roads during construction and operation. Although settlements will not be directly affected by the addition of the Project, skyline views will be altered through the addition of Project infrastructure, including stacks, reinforcing the industrial perception of otherwise rural settlements. Similarly, tall elements associated with the Project will result in a major change to the qualities of the landscape along the section of the Tisza River Corridor.

A large number of visual receptors within nearby settlements, recreational receptors and users of local roads will only experience a partial change in views, whilst, for some, the views will be blocked by landform and intervening vegetation.

During the construction phase, localised lighting will be needed at night for the compound areas outside the Project footprint, but compounds and material lay-down areas will be surrounded by woodland or industrial sites, minimising the effects during construction. Implementing a sensitively designed lighting scheme in the context of surrounding woodlands or industrial sites is expected to minimise the addition of nighttime lighting during the operational phase.

1.10 Biodiversity

There are four designated sites within 10km of the Project site, the closest being Tiszaújvárosi ártéri erdők approximately 80m east of the Project site. The site is qualified as a SAC for its alluvial forests.

Baseline data was collected via desktop review and field survey. habitat and flora of the construction area is a degraded habitat of low nature conservation value. No protected mammal species were observed during the site survey. Fourteen bat species were observed and recorded during the bat activity survey in the Project area. Levels of activity varied from very low to high in the northeast of the Project site and comprised of commuting and foraging bats considered to be strongly associated with the River Tisza riparian corridor. Thirty - four avian species were identified during the site walkover however no breeding activity was observed during site survey.

No herptile surveys or surveys for invertebrates were undertaken, but incidental sightings of lizards were recorded. No surveys for fish were undertaken and there is no suitable habitat for fish within

the red line boundary, however the Tisza river sits directly to the east of the Site which provides suitable habitat for fish.

The Project site contains habitat that is of negligible to very low nature conservation value and has very high replaceability. It is dominated by mown grassland and areas of hardstanding and equipment storage. The habitat present on the Project site will be partially cleared for construction works. Permanent habitat loss by direct impacts reduces botanical and habitat diversity and removes foraging and breeding habitat from fauna in the area, however the effect is considered minor and not significant.

In relation to designated sites, the Project is not expected to generate any risks to ecological receptors that would be experienced at a population level and impacts are likely to be restricted to local adjustments to activity patterns by mobile fauna. The effect is considered minor during construction and negligible during operation and not significant.

The construction activity is likely to result in some displacement of mobile fauna, either commuting, transiting or foraging over the site during the construction phase. Disturbance resulting from visual changes, noise sources and light-spill during construction is expected to degrade the utilisation of immediate surrounding areas for nesting, breeding, refuge, foraging and transit of local fauna. However, the extent of the projection of these disturbance events is very limited with the existing plant to the north and east and the railways to the south and west. The scale of the impact on protected species is assessed to be minor and not significant.

In relation to direct impacts on protected flora and fauna during operation the Project site contains birds and likely supports some breeding. Foraging and commuting bats utilise the site and these include three vulnerable or endangered bat species. No protected plant species were observed on Site. No bird species receiving the "Strictly Protected" species status have been recorded in the construction and storage areas. The scale of the impact on protected species is assessed to be moderate and significant. Following implementation of mitigation the effect is predicted to be minor and not significant.

Critical Habitat

A Phase I Critical Habitat Assessment (CHA) was undertaken to assess the potential for areas of high biodiversity value as the Project is located within an area that has 51 designated sites within 50km of the Project site. The ESIA assessed the implications of the Critical Habitat for the Project and provided appropriate mitigation measures.

A Phase II CHA will be undertaken during the construction phase. Mitigation measures for the construction and/or operational phases that are additional to those identified in the ESIA may be developed in Phase II. These measures will be implemented via a Biodiversity Management Plan (BMP) and, for Critical Habitat, a Biodiversity Action Plan (BAP) that has the specific aim to achieve a net gain for Critical Habitats if impacts are identified.

1.11 Social

Primary data was gathered through 146 household surveys across eight settlements. Additionally, stakeholder engagement included focus group discussions, interviews with neighbouring businesses, supply chain companies from the construction phase, local NGOs, trade unions, local authorities, officials like mayors, and women, to identify key community concerns. This was supplemented by secondary data from literature and national statistics.

Household surveys revealed most respondents felt financially secure, with many retired individuals and modern conveniences common. Among female respondents, 45.5% held skilled or professional roles, 24% were in unskilled roles, and 10% were unemployed. Male respondents reported a fairly even split between manual and professional work at 29% and 21%, respectively. The sole Romany household had a husband working as a social worker and an unemployed wife. Disabilities and diseases were prevalent, with 34% of respondents reporting at least one condition.

Construction phase impacts on land acquisition may involve short-term disruptions during the development of facilities such as a new gas pipeline. Once detailed of the exact alignment of the pipeline is known the land acquisition impacts will be assessed. FGSZ (the owner and operator of the Hungarian high-pressure natural gas pipeline system) will prioritise willing buyer willing seller approach. Generally, the Project is expected to have a positive economic impact on the local area. Human rights concerns, such as child labor, forced labor, and employment relations, will be managed under Hungarian and EU law alongside strict HR policies at MVM. Labor intermediaries involved with foreign workers will be audited to ensure compliance with licensing and registration requirements. Mitigation measures addressing human rights issues are outlined in the ESIA. The EPC contractor will transparently disclose labor conditions to employees before contracts are signed.

Around 1,000 workers will be directly hired for the construction phase, lasting 3.5–4 years. A worker camp will be developed due to insufficient local accommodations, reducing labor influx impacts on nearby villages. Occupational health and safety will be managed according to regulatory standards. Community health and safety will involve consultation with local authorities and communities to determine worker accommodation locations. All facilities will comply with national regulations and align with IFC/EBRD guidelines, ensuring a Code of Conduct is followed.

Security measures, including fencing and security personnel, will mitigate risks such as gender-based violence and safeguard the mobility of vulnerable groups like the elderly and young women.

During the operational phase, the project will create direct and indirect employment opportunities in the Hajdú-Bihar and Borsod-Abaúj-Zemplén counties. Approximately 90 people will be employed at the CCGT plant for 40–45 years, with additional indirect jobs arising from local service sector demands. MVM will follow national and EU laws on working conditions, including minimum wage, equal opportunities, paid leave, and other employee protections. Supply chain audits will ensure compliance with human rights standards, particularly for contractors outside the EU.

All health and safety mitigation measures identified in the outline ESMP will be implemented by MVM, with assistance from third-party consultants as needed.

1.12 Cultural Heritage

The baseline survey confirmed that there are ten archaeological and historical resources identified within the study area, including the historical industrial sites, historical apartment blocks, a country house museum, and archaeological burial sites. There is one historical industrial site located within the Project site; the former Tisza Power Plant chimney stack. There are no cultural or sacred sites located within the Project site but there are three cultural and sacred sites identified within the study area, including a cemetery, a church and a thermal pool and public bath.

The development of Project related infrastructure during the construction phase may directly and indirectly disturb, damage, or destroy cultural heritage resources. The implementation of mitigation

measures will reduce the severity of potential impacts to not significant, this will primarily be achieved through avoidance of known cultural heritage resources and/or the implementation of a Chance Find Procedure to address any resources accidentally discovered during Construction phase activities.

Direct impacts to the archaeological and historical resources may occur during the construction phase due to site clearance and construction activities; however, no direct impacts are anticipated during the operational phase.

Permanent indirect impacts to archaeological and historical resources within the study area as a result of changes in the wider environmental setting during the Project operational phase could include alterations to noise and vibration levels, visual changes to setting or increased pollution or dust. Visual settings, such as the introduction of permanent large-scale buildings and structures (e.g. the new CCGT stacks) and site lighting are anticipated to have minimal indirect impacts on the setting of archaeological and historical resources within the study area. These will be managed in terms of the mitigation measures within the ESMP.

There are no predicted direct impacts to cultural and sacred resources during the Project operational phase, as there are presently no identified cultural and sacred resources located within areas of predicted ground disturbance within the Project site or within the 25m zone extending from the Project site boundary. Indirect impacts to cultural and sacred resources and their associated intangible heritage practices may occur as a result of environmental changes due to operational phase activities, such as increased pollution, noise and vibration levels, or the visual impact of the new CCGT gas turbines. The presence of these Project components may cause visual or noise impacts to the cultural and sacred sites located within close proximity to the Project site.

1.13 Traffic and Transport

The site is surrounded by a motorway, a primary road and two secondary roads that provide access to the site. In addition, the site is served by several bus routes connecting to the nearest towns. The nearest station to the site is approximately 30 minutes by car and there is an industrial branch line connecting the site to the industrial area of the nearest town. The rail network is dilapidated and cannot be used as a supply route without renewal.

The assessment has considered the baseline situation and the likely traffic and transportation effects of the Project construction traffic on that baseline including severance; driver delay; pedestrian delay; pedestrian delay and amenity; fear and intimidation; and accident and safety.

At this stage the final route for construction traffic from the motorway network to the Site has not been determined. The following three likely potential construction traffic routes have been identified for the Project

- Route 1 – from the Site onto the 35 road (routing west) to the M30 junction at 14km;
- Route 2 – from the Site onto the 35 road (routing west) to the 351 road to the M3 junction at 164km; and
- Route 3– from the Site onto the 35 road (routing east) to the 3315 road to the M3 junction at 175km.

Based on assumptions regarding the peak daily construction traffic, the impact of construction traffic on all roads was assessed. A 'worst-case' assessment has been undertaken which has considered

the effect of the full construction traffic volume on each highway link in the study area. The impact of construction traffic on road safety is identified as moderate and significant and this will require mitigation in the form of measures set out within a Construction Traffic Management Plan (CTMP) to address any potential road safety issues. This plan will outline the routes that construction traffic can use to access the Site and the times that this traffic can use those routes (such as Project construction traffic not using some routes during peak travel to/from school journey times) and how the CTMP measures will be enforced and monitored. With the implementation of a CTMP to ensure that the impacts of construction traffic are minimised, safe and efficient, the likely traffic and transportation impacts of the Project construction traffic are negligible and not significant.

Traffic generation in the operational phase will be minimal, impacts are negligible compared to peak construction traffic and therefore have not been included within the assessment.

1.14 Materials and Waste

The main impacts from the use of material resources during construction are the consumption of natural resources, (for example timber, aggregate, stone). Primary materials required for the Project are a finite resource. As Hungary has an existing industrial base, it is anticipated that most materials will be sourced within the study area or regionally or nationally, if necessary.

All efforts will be made to maximise the specification and use of materials with known sustainability credentials; however, it is anticipated that impacts from consuming primary resources would still arise. Until the material quantities are finalised, the potential exists that sufficient local or regional natural resources will not be available in sufficient volume to meet Project requirements.

Waste materials will be managed according to regulatory requirements and in alignment with international lender requirements. When managed according to Good International Industry Practice, no significant impacts are anticipated.

A licensed waste management contractor will be appointed to collect and dispose of general construction waste. A licenced contractor with a valid permit issued by the environmental protection authority will be appointed for final disposal of hazardous waste materials.

All runoff generated during the construction of the Project will be discharged to the gravity-based closed rainwater drainage network, which discharges the rainwater to the Tisza water channel through a pumping station built outside the power plant area. The runoff water within the plant will be collected in existing rainwater channels within the site, filtered through an oil/water separator system and then discharged via the existing channel into the Tisza River. The wastewater will be discharged to the municipal sewerage system.

During the operational phase, it is anticipated that approximately 300m³ of municipal waste will be generated pr annum, including biodegradable waste, paper, metal, plastic, which will be collected by a licensed waste management company for recycling or disposal. It is estimated that about 60-80 tonnes/block/year of non-hazardous waste will be generated, including cardboard, metal, paper, glass and cloths, which will be collected a contractor.

Hazardous waste generated will largely comprise of waste oil (Hazard class II). Oil changes are required after regular operating intervals and the waste oil will be managed and disposed in accordance with the provisions of Decree 145/2012 (XII.27.)VM.

All waste water generated during the operation of the Project will be discharged to the municipal sewerage system. The operational waste water (e.g. feed water, condensate water, hot water run-off, drains, etc) is anticipated to contain oil and suspended matter and will be treated in a new wastewater collection and treatment system prior to discharge of the treated water into the rainwater drainage network.

Decommissioning of the facility will generate demolition debris, dismantled insulation materials and municipal waste, all of which will be treated as general waste. Only a small amount of hazardous waste generated from dismantled equipment and oil contaminated materials, batteries and other electronic waste is expected.

The mitigation measures will be implemented via a Waste Management Plan, including a Hazardous Waste Management Plan and Hazardous Materials Management Plan:

1.15 Major Risks and Hazards

This Major Risks and Hazards assessment provides a high-level assessment of likely significant effects of the Project on environmental and social receptors from the vulnerability of the Project to risks of relevant major accidents and/or disasters related to natural hazards or manmade hazards (hereafter referred to as Major Events).

Major Events are occurrences or scenarios that have the potential to affect the Project causing immediate or delayed serious damage to one or more of the following:

- Human health;
- Property; and
- Environment.

Major events to which the Project may be vulnerable during the construction and operational phase relates to fluvial flooding potentially harming people and assets. The assessment concluded there it is deemed that the risks are anticipated to be as low as reasonably practicable with the implementation of mitigation measures proposed within the ESIA.

1.16 Cumulative Effects

Cumulative effects are *'those that result from the incremental impact of the project when added to other existing, planned and reasonably predictable future projects and developments'* as stated in IFC Performance Standard 1.

The CIA considers effects arising from the combined action of a number of different projects ('planned developments'), in combination with the Project, on a single receptor.

Planned development identified within the CIA includes a proposed waste recycling facility and solar PV plan located within the grounds of the existing MOL petrochemical site located approximately 1.5 km west of the Project site at its closest point.

The identification and appraisal of cumulative effects within the ESIA is restricted to a high-level qualitative assessment. Limited information is available with regard to future development and accordingly, a preliminary Cumulative Impact Assessment (CIA) has been undertaken.

The preliminary assessment has identified potential for cumulative effects in relation to:

- Landscape and visual;
- Noise and vibration;
- Social (community health, safety and security risks);
- Traffic and transport; and
- Air quality.

It is recommended that a detailed CIA is carried out when the Project detailed design is available alongside full data in relation to planned development (e.g. the planned development ESIA, project programme and detailed design). Mitigation measures will also be determined as necessary.

1.17 Health, Safety, Environmental and Social Management

The Project Environmental and Social Management Plan (ESMP) contain specifications for the implementation of procedures and to ensure that health, safety, environmental and social risks and aspects are managed to comply with national regulatory requirements and Lender standards.

Detailed management plans (MPs) are required for the successful implementation of mitigation measures and it is the responsibility of the EPC contractor to prepare the detailed MPs for the Project construction phase. The detailed MPs for the operational phase and decommissioning and closure will be prepared by the Project operator. MPs must align with the Project policy and Lender and Developer E&S standards and requirements. The MPs should be appropriate to the nature and scale of the Project and commensurate with the level of environmental and social risks and impacts.

The objectives of the MPs are to:

- Detail how compliance with the relevant national and international standards will be achieved.
- Set out measures to reduce adverse effects to the lowest achievable levels and enhance any environmental and social benefits.
- Guide the development of detailed topic-specific management plans (to be prepared by the Contractor).
- Allocate appropriate resources and responsibilities for the implementation of key environmental and social measures.
- Demonstrate to stakeholders how mitigation measures identified through the ESIA will be implemented and monitored.
- Mitigation and management measures identified in the ESIA are fully incorporated into the ESMP and will form the basis for the supporting management plans to be developed prior to construction.

An ESMP for the Project has been prepared and accompanies the ESIA, SEP and this NTS as part of the ESIA disclosure package.

1.18 Stakeholder Engagement

The Project is required to establish and maintain a constructive relationship with a variety of external stakeholders throughout the Project lifetime. The stakeholders will include regulatory authorities, Interested and Affected Parties (I&APs) and the general public.

The SEP prepared by MVM details the approach that the Project will follow to maintain a consistent process of engagement to facilitate information dissemination and opportunities for stakeholders to provide feedback during all Project phases.

The implementation of the SEP will be delegated to contractors and/or suppliers, as relevant and outlined within the document, and processes and procedures will be incorporated into the topic-specific management plans as necessary.

The grievance mechanism (GM) is a specific element of the SEP. The GM provides detailed procedures that are available to both employees and the community to submit grievance, concerns and comments to the Project for formal consideration and response.

2 ESIA DISCLOSURE

Disclosure is a process that seeks to obtain stakeholder feedback on the Project ESIA and associated documentation. The ESIA, SEP, ESMP and this NTS are included within the overall Project ESIA disclosure package. The ESIA disclosure package will be available for public review for a period of 30 days. Further details of the Project disclosure process can be found within the SEP.

Following completion of the disclosure period, the feedback will inform the continued development of the Project through updating the ESIA and relevant mitigation measures and management plans. The disclosure documentation (such as the ESIA and SEP) will be updated to capture the feedback gained throughout the disclosure period.



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