

Luxembourg, 25.03.2025

Environmental and Social Data Sheet

Overview

Project Name:	POTPEC HPP RECONSTRUCTION AND CAPACITY EXPANSION
Project Number:	2024-0006
Country:	Serbia
Project Description:	The Project consists of the reconstruction of three power units and the construction of a new 13 MW unit at Potpec HPP

EIA required: yes

Project included in Carbon Footprint Exercise¹: yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

Environmental and Social Assessment

Background

The Promoter is JSC Elektroprivreda Srbije ("EPS"), the state-owned electricity utility. The Project is part of the framework loan to finance the promoter's key green investments for the period 2024-2030 with a view to increase ultimately the national share of renewables to the target set by 2030. It consists of the reconstruction of three existing power units (54 MW) with the construction of new additional 13 MW unit at Potpec HPP. The additional power unit will increase the electricity generation during the reconstruction of the existing units and will manage the minimum flow more efficiently than the existing units. The hydropower plant is located on Lim River which is part of Drina and Sava River basins.

Environmental Assessment

In Serbia the EIA procedure is regulated by the Law on Environmental Impact Assessment. The national competent authority for the issuance of Decisions regarding environmental impact assessment is Ministry of Environmental Protection (the Ministry).

The EIA and public consultation of the Potpec HPP reconstruction and capacity expansion programme was carried out successfully and the corresponding environmental consent was issued by the Ministry in 2018. As project implementation did not start within two years (2020) the validity of the consent expired. The Promoter inquired with the Ministry whether a new or updated EIA is required. In July 2024 the Ministry re-issued the related environmental consent, stating that no new or updated EIA is required as the Project scope remained unchanged, that the existing EIA is still valid and all defined mitigation measures should be applied.

The negative impacts of the project identified in the EIA study are only during the construction stage. They may include increased dust level, noise, vibrations and pollutants from machines and vehicles on site. Increased waste generation from the construction workers is also possible.

¹ Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO₂e/year absolute (gross) or 20,000 tonnes CO₂e/year relative (net) – both increases and savings.



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These impacts will be mitigated via good construction management as per the EIA recommendations.

The EIA has recognized the risk of the appearance of the landslides and jeopardizing the existing fish stock during the emptying of the reservoir. According to the EIA, if the proposed mitigation measures are followed in terms of the emptying speed as prescribed in the existing internal Programme of emptying and filling the reservoir, it is unlikely that the landslides will be activated. This procedure has been repeated several times from the HPP's start of operation. It is also unlikely that fish will be endangered because the process of emptying and filling the reservoir is time limited to 30 days according to the EIA and during that period, the natural flow of Lim River will be maintained in the reservoir. An expert commission, appointed by the Promoter, will be closely monitoring the entire process. In addition, an ichthyologist will be engaged to monitor the influence on the fish stock and propose additional measures if deemed necessary to protect the fish species.

The Promoter will ensure that a certified institution is engaged for performing periodic measurements of air quality, water quality and noise level are performed.

The potential impact on the dam structure during the drilling of the existing dam for the construction of the additional unit's penstock is present. The mitigation measure includes close monitoring and attention during this process as well as using the small amounts of explosive. The Contractor will deliver the calculations and proposed methodology for conducting this activity.

According to the EIA, the HPP location is not inside the protected area and the national competent authority for the biodiversity protection (Institute for Nature Protection) stated that no negative impact on biodiversity from the project is expected.

One of the positive impacts (on aquatic species, especially fish) of the project during the exploitation, is additional aeration downstream of the HPP, i.e. enrichment of water with oxygen due to the water passing through the new turbine.

Dam safety: EPS has a legal obligation to conduct comprehensive safety measurements on the dam. These measurements are done on a daily, weekly, monthly, yearly, or three-year period. Detailed reports are issued yearly and on three-year period as an obligation under the Law of the Republic of Serbia. The Water Directorate within the Ministry of Agriculture, Forestry and Water Management checks the safety reports and conducts periodical inspection on all activities regarding dams' safety.

River basin management: The Potpec HPP is recognized in the Report "*Phase II Nexus Assessment for the Drina River Basin*", which is prepared within the framework of the project "*Promoting the Sustainable Management of Natural Resources in South-Eastern Europe*". The latter is financed by the Austrian Development Agency (ADA) and implemented by the Global Water Partnership- Mediterranean (GWP-Med) in cooperation with the United Nations Economic Commission for Europe (UNECE). The project is included in the Drina River and Second Sava River Basin management plans, prepared according to the Water Law (Official Gazette of RoS, No 30/10, 93/12) as reflecting the Water Framework Directive 2000/60 .

EIB Carbon Footprint Exercise

The absolute emissions from the Potpec HPP reservoir are negligible because no new reservoirs are built.

The estimated relative emissions savings are around 160,500 tonnes of CO₂ equivalent per year and are calculated based on zero absolute emissions. Baseline emissions are calculated using combined margin for firm electricity generation for Serbia (678 tCO₂/GWh) and estimated annual electricity generation of 236.7 GWh after the reconstruction.



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For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

Social Assessment

Since the aim of the project financed by the Bank is the reconstruction of three units and the construction of a new additional in the existing hydro power plant, no resettlement is envisaged. Social impacts on nearby residents will be low and could mainly be due to increase inflow of workforce during the construction. This will be mitigated through proper education and information sharing with workers and communication with local community.

During the construction period on the water intake for the additional unit, in reservoir empty condition, the population that uses the lake (reservoir) for boat transport from one shore to another, as a shorter and easier way compared to the existing land road, will not be able to use the lake for these purposes. This stage is, however, limited to approximately 30 days and the local population will be notified in advance.

Public Consultation and Stakeholder Engagement

Public consultation for Potpec HPP reconstruction and capacity expansion has been carried out under its respective EIA process led by the Ministry and no complaints have been received from the local communities and NGO, nor from any other stakeholder. The public has been informed through the national newspapers and via the Ministry's website. In addition, the presentation and public consultation has been organized in the local municipality. As per Bank's requirement, the Promoter will ensure that Stakeholder engagement plan for this operation will be developed.

Other Environmental and Social Aspects

The hydropower plant envisaged for the reconstruction under the Project has been running safely for decades. The Promoter has good track record with the similar projects and has a capacity to implement stakeholder engagement during the construction phase. He has in house environmental, health and safety experts. In addition, external FIDIC/Supervision Consultant is going to monitor the technical, environmental and social aspect of the project during the project implementation.

EPS has implemented management systems in accordance with the requirements of ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 50001:2018, and ISO 27001:2013 which are certified by independent certification institutions in accordance with international certification rules.

The vulnerability assessment of the dam has been conducted as a part of the EIA. Based on the information provided and the position of the exact location of the scheme components, it is not expected that floods would affect the structural stability of the dam². However, limited impact on the annual generation figures may be present.

In line with its Environmental, Climate and Social Guidelines on Hydropower Development and best international practice, the Bank will require the promoter to conduct the climate risk and vulnerability assessment.

Conclusions and Recommendations

² The existing spillways are designed to discharge 10.000 years return period flood waters



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With the below conditions in place, the Project is considered acceptable for EIB financing in Environmental & Social terms.

Disbursement Conditions:

- None.

Undertakings:

- Prior the publishing of the tender for Works, the Promoter will ensure that the Environmental and Social Management Plan (ESMP), satisfactory to the Bank, is developed.
- The Promoter will ensure that the Stakeholder Engagement Plan (SEP), satisfactory to the Bank, is developed prior the commencement of Works.
- The Promoter will make data on downstream monitoring, hydrological inflows and outflows publicly available.
- The Promoter will form an Environmental and Social (E&S) Steering Committee or Working group which will be closely monitoring the E&S aspects of the project, and which will closely cooperate with the representatives of the local community.
- The Promoter will make publicly available Conclusions of annual surveys (reports) on the dam and hydraulic structures.
- Whenever applicable, the Promoter undertakes to fulfil the requirements of the environmental impact assessment (EIA) and of the associated environmental permits.
- The Promoter will carry out climate risk and vulnerability assessment (CRVA) for hydro power plant and associated infrastructure (dam, reservoir) by the end of 2026. Based on the CRVA results the Promoter will implement the proposed measures, within a reasonable time frame, preferably by the end of 2029.