

Luxembourg, 18.7.2017

Environmental and Social Data Sheet

Overview

Project Name: ALPERIA HYDROPOWER

Project Number: 2016-0474

Country: Italy

Project Description: The refurbishment of 5 hydropower plants with a total installed capacity of 457 MW. The project will enable the Promoter to maintain and increase the production of renewable energy, to improve safety and reliability and to comply with mandatory requirements laid out in the concession agreements.

The project is located in the Autonomous Province of Bolzano in north-eastern Italy.

EIA required: Yes

Project included in Carbon Footprint Exercise¹: No

Environmental and Social Assessment

Environmental Assessment

The project consists of multiple rehabilitation schemes, which are carried out on existing premises in or near hydropower stations that have operated for decades, equivalent to over 75% of the costs. In these cases the environmental impacts are expected to be minor, temporary and limited to the plants themselves and their immediate surroundings. Typically, they concern increased levels of traffic, noise and dust during construction. Four of the five schemes, however, include components that could have an adverse impact on the environment and that all require EIAs. None of these assessments are yet finalised.

Lasa hydropower plant: A new underground penstock (almost 2.2 km long, with an average diameter of 1.7 m) shall replace the existing obsolete penstock of similar dimensions. It shall be constructed next to the existing one and once it is commissioned, the obsolete one shall be dismantled. This approach will allow maintaining the annual renewable power production during the construction period, except for an unavoidable 4-months period of change-over from old to new penstock. Contrary, if the old penstock were to be dismantled first it would cost two full years of lost power production and would also cause problems with overflow from the dam into the old riverbed so this is not a feasible option. In addition, the new penstock will require the deforestation of 1.7 ha. However, new forest of equal dimensions will be planted nearby. The scheme crosses through Stelvio (Stifserjoch) National Park, but not through the zone which is designated as a Natura 2000 area. After commissioning of the new installations, the obsolete penstock will be dismantled.

An existing 10 kV overhead line on concrete poles running in parallel to the penstock will be dismantled and replaced by an underground cable thus reducing the current visual impact.

¹ Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO2e/year absolute (gross) or 20,000 tons CO2e/year relative (net) – both increases and savings.



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Replacement of the collecting conduit pipes is divided in 2 phases. Whereas Phase 1 is already approved by the competent authorities, Phase 2 is located in a Natura 2000 area and is not yet approved, pending the final studies and plans that are expected to be available in April 2017. According to the Promoter, it is not expected that will be any particular remarks or conditions from the competent authority.

San Floriano hydropower plant: In order to improve the flood management of Avisio River and reduce the risk of damages during extreme weather conditions it has been decided to increase the dam height of the reservoir (Lake Stramentizzo) through the elevation of the existing dam spillway and of the lateral spillway by about 1 meter. As part of this scheme there will also be built two new bottom outlets from the dam and a new upstream weir across the river to retain solid material, as well as partial removal of deposited sediment. This is all included in the Promoter's new concession. These mandatory works await more studies of the technical and environmental details of the scheme, including an EIA report (expected to be available in June 2018).

<u>San Pancrazio hydropower plant</u>: Most of the works concern activities inside the power house but rehabilitation measures on the head race tunnel may require an EIA (in case, expected available in June 2018).

<u>Santa Valburga hydropower plant</u>: This scheme includes penstock refurbishment, which requires an EIA (under preparation and expected available in June 2018).

<u>Cardano hydropower plant</u>: The fifth and final scheme does not require an EIA. Since the works are within the existing buildings the scheme was screened out based on technical criteria defined in national legislation without submission to the regulatory body.

Public Consultation and Stakeholder Engagement

The schemes requiring EIAs will be presented to the so-called Conferenza dei Servizi (an institution under Italian law) and to the Assessor of the Autonomous Province of Bolzano in order to obtain the necessary permits. These institutions will inform the public about the schemes in line with the requirements of the EU EIA Directive.

Other Environmental and Social Aspects

The Promoter maintains an integrated environmental, health and safety (EHS) management system, certified under ISO 14001 (2004).

Conclusions and Recommendations

The Bank has reviewed the environmental and social capacity of the Promoter, including its organisation, processes and procedures, and deemed them to be acceptable. Based on the information available at this stage, the Project is not expected to have negative impacts that cannot be adequately mitigated – but this can only be verified once the pending documents are submitted and made available.

Conditions for disbursement:

For the project schemes for which the EIA or Natura 2000 applications are pending (i.e. Lasa, San Floriano, San Pancrazio and Santa Valburga): The Promoter shall submit to the Bank for publication an electronic copy of all pending Environmental Impact Assessments (EIAs), including Natura 2000 applications, to the satisfaction of the Bank, as well as all pending



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environmental authorisations. (Sub-schemes under these 4 schemes that do not require an EIA are exempted from this condition.)

Particular undertakings:

The Promoter undertakes not to allocate the Bank's funds to project schemes or subschemes that require an EIA or a biodiversity assessment until such assessment (if required) has been finalised, to the Bank's satisfaction, and approved by the competent authority. When the EIA report is ready for publication, an electronic copy shall be sent to the Bank.

The Promoter undertakes to take into account and implement conditions expressed in any decision or EIA consent granted by the competent authority for nature and environment.

The Promoter shall store and keep updated any documents as may be relevant for the project supporting the compliance with the provisions of the EU Water Framework, Habitat and Birds Directives (Form A/B, or equivalent declaration by the competent authority), and shall upon request promptly deliver such documents to the Bank.