

# **Environmental and Social Data Sheet**

## **Overview**

Project Name: AGRI-INFRASTRUCTURE AND BIOMASS POWER

**GENERATION** 

Project Number: 20160881 Country: Ukraine

Project Description: The project consists of the financing of (i) 2 inland grain silos,

(ii) a grain handling and storage port terminal (iii) 5 biomassfired CHPs and (iv) one sunflower oil crushing plant, in

different locations in Ukraine

EIA required: This operation is an investment program. Some of the

schemes may require an EIA.

Project included in Carbon Footprint Exercise<sup>1</sup>: yes

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

# **Environmental and Social Assessment**

#### **Environmental Assessment**

The proposed operation is a phased investment program. The first phase, the inland grain silos, has been fully appraised. The remaining investments are still at an early stage and will require the promoter to comply with the EIB E&S Standards and core E&S requirements as well as the E&S national laws and regulations.

#### In land Grain Silos

Each of the grain elevator component falls under Annex II (Industrial estate development projects) of EIA Directive 2014/52/EU (amending 2011/92/EU) and therefore, is subject to a case by case determination on the need for an assessment that should be carried out by the relevant competent authority.

The EIB has formally requested the promoter to provide the Bank with the corresponding EIAs in line with EIB standards.

<sup>&</sup>lt;sup>1</sup> 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.



The first EIA was received the 25th of June 2018 (N° 188-17-00.00-OBHC). The EIA for the second location was received the 10th of July 2018 (N° 69-17-OBHC). Both were satisfactory to the Bank.

Due to their location, the silos should have no likely significant effects on protected areas or equivalent.

The silos' designs were developed in compliance with national regulatory requirements and the EU (BAT) standards for emissions abatement.

The main emissions from the grain elevators operations are expected to be emissions to the air (dust and GHG from grain handling-drying operations). BAT dust abatement units (that include filters, central vacuum, cyclones, etc.) will reduce significantly dust emissions and prevent risk of dust explosion. For grain silos, waste bunkers will collect residues and dust that will be used as feedstock for bioenergy plants or animals. The silos, equipped with gas burners to dry grains, will only emit seasonally GHGs. Each elevator will have a water pond for fire security purpose and a waste water treatment unit.

## **EIB Carbon Footprint Exercise**

<u>Absolute emissions:</u> The estimated  $CO_2$  of the investment program including utilities and auxiliaries in standard year of operation are estimated to amount **16 kt CO2 equivalent**. This includes only the silos, the grain port terminal and the crushing plant. Due to fully renewable fuel, absolute  $CO_2$  emissions from the five combined heat and power units are going to be zero.

<u>Baseline:</u> Grain silos and port terminal, as well as the crushing plant, are pure capacity increase. It can be assumed for the first two, as a baseline, that without the project, alternative regional silos (including temporary ones) and dryers (including mobile ones) would have met the demand for the grain collected. Conservatively, such facilities from somewhere else were assumed to be of the same technological standards as the project's components. Concerning the crushing plant, without the project, the Bank assumed that the grain collected by the promoter would have been shipped to the Odessa's oblast to be further processed in one of the existing promoter's crushing facility. The bank therefore did calculate the CO2 baseline emissions based on facilities with similar emission profile that the new ones and added transport by rail of bulk sunflower grains to these facilities located at the port terminal.

The baseline emissions for the CHP plants are calculated assuming that electricity is generated separately from heat. Electricity-related baseline emissions result from the fact that the plant will displace existing and new (CCGT) power generators in Ukraine. Heat-related baseline emissions of CO<sub>2</sub> are emissions from a husk-fired heat-only water boiler, the most likely alternative heat generator in a crushing plant.

<u>Relative emissions:</u> Based on the Bank's carbon footprint methodology, the relative emissions (difference between absolute emissions and baseline) can therefore be assumed to be **329 kt CO2 equivalent per year of emissions savings.** 

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, where applicable

The community and occupational health & safety setup in Ukraine is developing and the government has notably ratified the ILO core labour standards.

The promoter has a documented Corporate Social Responsibility (CSR) policy. It has internal procedures to safeguard health and safety among its staff and communities close to its sites, as well as an internal and external grievance procedure.

The promoter is also engaged in programs for the enhancement of their employee welfare. These include, for example, subsidized hot meals, financial support for housing (loans), and remuneration for birthdays and funerals.

The promoter engages with the local communities in the regions where it operates. It promotes social infrastructure and actions with the neighbouring communes and villages. Over the period 2013-2017, the promoter did spend around EUR 9m to provide assistance to the development of communities, as well as educational and medical institutions in the countryside around its facilities.

The promoter is leasing 550,000 hectares of land and pays rents to the owners of the original land tenure rights accordingly. The average contract duration is 10 years. Land swaps are available for the original land tenure holders to either use their land by themselves or lease it to someone else. The project will not trigger any involuntary resettlement.

#### **Public Consultation and Stakeholder Engagement**

The promoter has a complaint mechanism in place through a hotline, specific email addresses, dedicated mail-boxes on its industrial sites and on neighbouring villages. All allegations and complaints are recorded, reported and summarized to the Head Quarters in Kiev. The grievances are addressed directly to the promoter HQs or locally by business managers, depending on the characteristics of the requests. Corrective and preventive actions are put in place and monitored by the EHS Team.

The detailed description of the first silo and relevant information on environmental impact were published the 4th of May 2018 on a local newspaper. No objections from the public were reported to the local authorities.

The detailed description of the second silo and relevant information on environmental impact were published the 17th of February 2018 and 10th of March 2018 on a local newspaper. No objections from the public were reported to the local authorities.

#### Other Environmental and Social Aspects

The environmental legislation in Ukraine are developing, and tend to align with European requirements. A new Ukrainian EIA law has been enforced at the end of 2017.

In order to implement the new Ukrainian environmental law, EIB did ask the Promoter, as an undertaking, to implement a satisfactory roadmap in order to enhance its group environmental & labour safety organization, as well as its environmental management system (EMS), with specific milestones and KPIs (Key Performance Indicators).

Occupational Health and Safety (OHS) norms apply on all storage (grain and oil) and industrial units. The promoter has in place, for their current operating facilities, rigorous emergency response plans and SOPs, especially the ones dedicated to the use of hexane in edible oil extraction units and train car loading.



The Promoter's current crushing plants are certified ISO 9001 & 22000 and meal production units GMP+ (B1). The storage, transhipment and cargo chartering is certified under GMP+ (B3/B4). It is expected that the Promoter will swiftly certify its new facilities as well.

People are trained on a regular basis for general labour safety and fire safety.

### **Conclusions and Recommendations**

# Disbursement conditions In Land Grain Silos

Prior to the first disbursement, the promoter shall:

- For each project, submit a functional waste water treatment unit's design (including flow charts) that is satisfactory to the EIB requirements
- Provide the Bank with the specific building permits for both silos

#### Grain handling and storage port terminal, / Crushing plant / CHPs

Prior to disbursing the relevant tranche of the loan, the promoter shall:

- Where applicable, send to the Bank the corresponding EIAs (at a level satisfactory to the Bank), including satisfactory public consultations
- Provide the Bank with the specific building permits
- For each project, where applicable, submit a functional waste water treatment unit design (including flow charts) that is satisfactory to the EIB
- Specifically for the crushing plant project, submit a signed contract or LOI with the municipal waste water treatment plant that will process further the facility waste water stream.

### **Undertakings**

The promoter undertakes:

- To submit to the Bank the operating permits for the project components before the start of their operations
- To implement and operate the relevant project components in conformity with IED 2010/75/EU BAT emission thresholds
- Monitor the performance of the installations in terms of emissions into air and water
- In order to implement the new Ukrainian environmental law, to propose the Bank a satisfactory roadmap that will enhance the promoter's environmental & labour safety organization, as well as its environmental management system (EMS), with specific milestones and KPIs (Key Performance Indicators).
- For the brownfield combined heat and power (CHP) component, the promoter is required to provide information as stipulated by the Annex IIA of the EIA Directive 2014/52/EU.