

Environmental and Social Data Sheet

Overview

Project Name:	<i>ASTARTA AGRI-FOOD AND CLIMATE CHANGE ADAPTATION</i>	
Project Number:	<i>2012-0142</i>	
Country:	<i>Ukraine</i>	
Project Description:	The proposed investment programme comprises the construction and operation of eight grain storage facilities with a total ~514,000 t of new storage capacity, one being linked to a soya bean crushing and oil extraction plant of 700 t/d of soya beans. The grain elevators will be built on seven different locations in Poltova, Vinnitsya and Khmelnytskyi regions in Ukraine.	
EIA required:		yes
Project included in Carbon Footprint Exercise ¹ :		no

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The grain storage and elevator facilities included in the investment program are expected to make use of standard and proven technologies. Within the EU, the elevator facilities, if standing alone, do not fall under the provisions of Annex I or II of the EIA Directive 2011/92/EU. However under a 2013 amendment of the relevant Ukrainian building planning law, though, these projects now fall under complexity level IV and will require a full EIA, including public consultation.

At the time of the appraisal, only the project components at the site in Globyino were fully designed, and the permitting, including compulsory environmental assessment, prepared. The other projects within the programme have been bundled in 2 allocations that will need to be the object of an allocation review when the promoter makes the required information available. Within this process, the services will ensure that the projects included in each of the allocations meet EIB appraisal standards, among others at the environmental and social assessment level.

Within the EU, the elevator unit at Globyino which will be integrated with a soya bean crushing and oil extraction plant would fall under the scope of Annex II of EIA Directive 2011/92/EU. The soya bean oil extraction plant will use chemical extraction technologies based on the use n-Hexane. An Environmental Impact Assessment (EIA) is required under the Ukrainian regulation (project complexity level IV or higher). At the time of appraisal the corresponding EIS had been finalised and was submitted together with the project documentation to the competent authorities on February 28th, 2013. The project has already undergone a public consultation process, mandatory under Ukrainian law. The project received a construction permit from the Ukrainian competent authority on May 23, 2012. The promoter will be requested to issue an amended EIS/OVOS to reflect improvements in the project's waste water treatment system after the submission of the project documentation for permitting, as well as the correspondent "environmental report" by the competent environmental state authority to the Bank before disbursement. The submission of the final integral operation permit will be proposed as an undertaking to the finance contract.

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.

The Environmental Impact Assessment procedure in Ukraine is not at the level of international best practice, especially with regards to permitting and public hearing procedures, the emission limits, and enforcement of emissions standards. The Promoter has mitigated these deficiencies by open discussion with local communities and is proactively organising public hearings for the projects. The Promoter will be requested to monitor and report the plant's emissions in the first 4 years of operation. The data monitoring shall be carried out according to an internationally accepted standard methodology and not exceed internationally accepted BAT (Best available Techniques) emission levels (e.g. EU).

The social and occupational health framework in Ukraine is developing and the government has ratified the ILO Core Labour Standards. The Promoter has appointed a Corporate Social Responsibility (CSR) manager and is currently working to pull its existing initiatives and procedures in this area together under one integrated CSR/OHS policy with an implementation plan. The development and implementation of the CSR/OHS policy will be an undertaking in the loan contract.

• Environmental and Social Assessment

Environmental Assessment

General for all elevator and grain storage components of investment programme:

- The main emissions expected for the plants are airborne (mainly dust from the handling and crushing) and some limited NO_x, SO₂ and mercury due to the boiler and dryer units, storm water and waste water generated by the employees and waste generated by the grain storage facilities and the crushing plant and the biomass boiler. The unit of Globino also causes some limited emissions of n-Hexane which is used for the soya bean oil extraction process (see below).
- The projects are expected to incorporate best available technology (BAT) for emissions abatement. Projects in locations isolated from the municipal sewage infrastructure will incorporate commercial waste water treatment units consisting of prefabricated sequencing batch reactor systems with a cleaning performance of >95% followed by infiltration blocks. Storm water is cleaned in a sequence of oils and grease separation pits and settling tanks, and thereafter sent to filtration units.
- The generated waste is neither significant nor of a dangerous nature and a plan for the establishment of the corresponding and appropriate disposal mechanisms has been established by the Promoter.
- According to Ukrainian environmental legislation, an operating permit with the corresponding emission limits for the proposed plant has to be issued before commissioning. Air and water emissions are expected to be at the level of international best practice and within European limits. Operating permits together with emission monitoring during the first years of operation will be an undertaking in the finance contract.

Globino oil extraction complex:

- The promoter has chosen to execute the project at Globino in two consecutive phases: Phase I: the construction of the silos and elevator complex; and Phase II: the oil extraction complex. An Environmental Impact Assessment (EIA) is required under Ukrainian regulations only for the execution of phase II as the silo project has been permitted according to state building norms before its latest amendment in 2013 that attributed to this kind of project a complexity level III. An initial Environmental Assessment was part of the planning and building permitting procedure for the elevators. The procedure concluded in December 2012 and construction followed.
- As both investments are linked together in the same industrial facility, they should be considered "integrated" and if implemented within the EU the EIA carried out for the Phase II should have taken into consideration the previous Phase I investments within the project boundary.

- Following Ukrainian requirements, an EIA has been carried out for the Phase II. This study considered impacts of the emissions to the air of the Phase II integrated with the Phase I project elements. Aggregated emissions to air have been also considered for the modelling of the overall impact on ambient air quality. The project incorporates BAT for flue air abatement. Results indicate that the airborne emissions of all characterised pollutants, as well as noise, will be in line with international best practice as well as Ukrainian standards at end of pipe. Due to the relatively low complexity and low environmental load of the elevator part, the contribution of this part to the overall environmental impact of the overall project is to be low.
- In the area of oils extraction and distillation workshops, higher n-Hexane concentrations are expected due to diffuse and unavoidable solvent process losses. The promoter is aware of this and will establish appropriate continuous air monitoring systems which will trigger the corresponding air extraction and alarm systems to keep the concentrations below the applicable MAC of 60mg/m³. None of the affected areas are designated workplaces. Specific PPE equipment will be mandatory for exceptional works interventions in the areas of risk. The corresponding undertakings have been established. Ambient air concentration modelling has been carried out in accordance with the Ukrainian OND-86 norm and be within permitted limits. A minimum legally required safety protection zone of 100 m from the emission points has been established. Disbursement conditions in the Bank's finance contract have been proposed requiring the supply of the State Environmental Appraisal Report (equivalent to the environmental assessment) to the Bank.
- Waste water treatment concept: Natural rain and spillage water is collected and decanted in containment basins before release to infiltration units that the Promoter operates for its neighbouring sugar mills. The plant generates 52.8 m³/h of industrial waste water which will be treated at an onsite water treatment plant equipped with flocculation and flotation units, as well as biological treatment tanks. Environmental load will be reduced to BAT achievable limits. The final pollutant load will be within the limits established by internationally acceptable standards. It has to be noted that in response to a change in the design specifications by the technology provider of the seed-crushing and oil extraction line, the promoter has changed his waste water treatment concept to the set up described above after the submission of the project documentation to the authorities. Hence the OVOS/EIS that is part of this project documentation submitted to the authorities still reflects a preliminary water treatment set up which involved sending substantial higher waste water volumes to an external, existing waste water treatment plant. Disbursement clauses to the finance contract have been proposed, demanding i) an analysis from an independent auditor/expert on the issue of total waste water emissions, ii) the evaluation of the impact of this change on the state authorisation procedure and iii) submission to the Bank prior to the disbursement of the updated and re-submitted EIS/OVOS and the pertinent Environmental State Assessment Report to be issued by the competent authority prior to the granting of the integral operation permit for the plant.

Social Assessment

- The Promoter has internal procedures to safeguard health and safety among its staff and communities close to its sites, an internal grievance procedure, and engages with the local communities in the regions where it operates through the social media. The company also promotes social infrastructure and actions with the neighbouring communes and villages. A revolving 3 years social partnership plan has been agreed with the local communities for each of its new project sites. In this sense, the social partnership plan for the Globino soya bean elevator and oil extraction site has already been established. These actions include investments in housing, schools and kindergartens and infrastructure, as well as university grants and social activities at the community level. The Promoter is aware of the OHS18001 management standard. They are in the process of implementing the certification scheme at corporate level (head office level and in one of their sugar mills). He commits to apply OHAS standards in the new facilities and get the elevator facility with the soya bean crushing and oil extraction plant certified within a reasonable timeframe.

Public Consultation and Stakeholder Engagement

- A formal project announcement in the local press at the beginning of the planning phase with the key project characteristics is a legal requirement under Ukrainian building norms. All project units included in the investment programme require an EIA under Ukrainian legislation. The EIA procedure foresees a mandatory public hearing.
- At the time of the submission for approval by the EIB board, only the Globino soya bean project had entered into the permitting phase. The project announcement was published in the local press on June 2012. The Promoter carried out a first formal, preparatory, public hearing with the stakeholders (citizen and authorities) of the commune of Globino on October 9th, 2012. Announcements in the local press as well as the presentation material and minutes have been shared with Bank services. The minutes indicate that no major issue of concern was raised during this consultation process. A second official consultation, mandatory under the Ukrainian permitting law for all projects requiring an EIA, is foreseen for after the submission of the project documentation (including the EIS) to the authorities. The consultation process has been launched and the public hearings were held on May 14th, 2013. Evidence of EIA consultation for the soya bean extraction plant at Globino, including minutes of the public hearings, has been handed over.
- The presentation of the EIA, the Environmental State assessment Report, as well as satisfactory evidence for the public consultation, incl. the public hearing sessions, will be required from the Promoter as part of the allocation review to be carried out for each of the 2 other allocations defined under the programme.

Other Environmental and Social Aspects

In 2011 the Promoter developed corporate integrated system of management (CISM) standards in accordance with ISO 14001 and OHSAS 18001. The Company has implemented CISM of environmental safety in accordance with ISO 14001 at head office and one of its sugar mills and was planning to implement it also at Globino, Zhdanivka, Kobeliaky and Yareski sugar production sites.