

Environmental and Social Data Sheet

Overview

Project Name: *STOGIT GAS STORAGE*
 Project Number: *20130071*
 Country: *Italy*
 Project Description: Investments for the development of an underground gas storage facility in Bordolano (Lombardy region).

EIA required: yes

Project included in Carbon Footprint Exercise¹: yes

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

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

The project when complete will comprise 9 injection/withdrawal wells (drilled from two well clusters), 2 monitoring wells, flowlines from the wells and surface processing facilities (located at a central treatment site) had to undertake an environmental impact study and the competent authority has issued the required permit and at the Bank's request has issued a Form A declaration confirming no adverse impacts on Natura 2000 sites. It should be noted that the project implementation commenced on a small scale in advance of the core drilling and construction. The promoter commenced the injection of cushion gas into the reservoir in July 2010 via two existing wells, using a mobile compression unit.

The main potential impacts on the environment will relate to the disturbance to communities and fauna/flora during drilling and construction, the disposal of cuttings from the drilling of wells, visual impacts of the facilities, noise disturbance and air emissions during operations, and the risk of accident inherent to the processing and transport of high pressure gas. Groundwater will not be used for the drilling of the 7 new wells—water will be trucked in to the drilling sites. The drilling mud used for the first wells will be partially re-used for the drilling of subsequent wells thus reducing drilling waste and water requirements. The studies do not raise significant residual impacts or impacts that cannot be mitigated by the measures proposed.

The promoter is one of the EU's largest underground gas storage (UGS) operators and has considerable experience in the implementation and operation of these facilities. Appraisal confirmed the promoter's competence and management systems. In addition, the appraisal mission was able to observe the utilisation of a very modern drilling rig for the project. This rig has a much reduced horizontal and vertical footprint compared to standard rigs and is designed so as to minimise the propagation of noise from drilling activities. The promoter has procured two such rigs for the drilling activities.

The project is acceptable for Bank financing from an environmental standpoint.

Environmental and Social Assessment

Environmental Assessment

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.

Given its technical characteristics, the project, which consists of developing an underground gas storage facility (1.2 Gm³ working gas and 0.55 Gm³ cushion gas capacity), falls under Annex II of the EIA directive 2011/92/EU and has been screened in, thus required to undertake an environmental impact study. The Decreto VIA (Italian environmental approval) was issued for the project in November 2009.

Public consultations, which included sessions with the local authorities (communal and provincial), local Bordolano residents and the Province of Cremona Engineers' Association took place during 2008, questions were received and responses provided. The promoter also established an information point in the town hall of Bordolano to respond to further queries regarding the project. As required under Italian law (Decreto Marzano), a convention has been signed between the concessionaire and the neighbouring commune and the provincial authorities regarding the promoter's environmental commitments and compensatory contributions to the commune and province.

The following Natura 2000 sites are within a radius of 10 km from the project development area: i) Lanche di Azzanello (IT20A0006) ca. 4 km to the northwest; ii) Isola Uccellanda (IT20A0008) ca. 6 km to the northwest; and iii) Bosco della Marisca (IT20A0007) ca. 9 km to the northwest. The EIA studies concluded that there is an absence of potential risk of direct or indirect impact on these three areas. In particular, the results obtained by simulations on atmospheric impact and noise ruled out, for both the construction and operations phase, any type of interference from emissions or noise with sensitive ecosystems existing in the areas.

The current design for the surface facilities comply with the Seveso directive. Upon completion of construction, a validation of the compliance with the directive will be undertaken. The EIA report noted that the capacity of the compressors means that the project is subject to the requirements of Directive 2010/75/EU on industrial emissions, the permit will be issued per national procedures. A continuous emission monitoring system for carbon monoxide and nitrous oxides will be in place in order to guarantee the project's compliance with limits mandated by the Lombardy Region.

The central treatment area will be subject to a process of mitigation and environmental restoration to make the plant less visible from the outside, as well as acoustic masking which will significantly reduce the noise produced by the operations. The mitigation and restoration project has four main elements: i) acoustic and perimeter barriers; ii) the creation of embankments at different levels; iii) densely and thinly planted woods; and iv) open spaces, such as meadows and crops typical of the area.

The promoter has a well-established health, safety and environmental (HSE) management system, and is ISO 9001, ISO 14001 and OSHAS 18001 certified.

EIB Carbon Footprint Exercise

The project has these sources of CO₂e emissions: i) methane vented during maintenance, and emergency shutdown drills; ii) fugitive emissions from normal plant operations; iii) emissions from occasional flaring; and iv) emissions from fuel gas used for plant operations. The absolute emissions of the project during steady state operations is estimated to be 99 kT CO₂e/y, and since the alternative to the project is to not have an underground gas storage facility, the baseline emissions are zero. The relative emissions are therefore also 99 kT CO₂e/y.