Environmental and Social Data Sheet

Overview

Project Name: CHEMTEX 2ND GENERATION BIOREFINERY RDI

Project Number: 2013-0112

Country: Italy

Project Description: Funding of 2013-2016 RDI investments related to

development of second generation biofuels and biochemical

products.

EIA required: no Project included in Carbon Footprint Exercise¹: no

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

The proposed RDI programme pursues the construction of several pilot demonstration plants and the herewith associated RDI activities for their design, construction and operation. These RDI activities, if successful, will lead to significant positive environmental benefits.

The new pilot plants planned at the existing Rivalta R&D site are of very small size and, once in operation, will not add to the emissions to the water nor air of the existing facility. The two pilot units planned at Modugno will imply the reconversion of an industrial brownfield site into a new R&D facility. Due to their small capacity these projects do not reach the thresholds established in the EIA acquis at Member State level. Hence no EIA will be required by the competent authority for any of the two sites. The Promoter will apply for the operational permits according to the IED 2010/75/EU (Autorizzazione Integrata Ambientale) before the implementation of the projects. Rivalta will only require an amendment of the existing permit. Some of the specific RDI activities may require specific environmental permitting or notifications that will be issued during the project implementation.

Undertaking clauses to the finance contract have been proposed, to ensure that the Bank receives relevant permitting information related to project components, and in particular the amended and the new IED permits for both the Rivalta and Modugno sites respectively, before their start of operations.

Environmental and Social Assessment

Environmental Assessment

Three of the pilot units will be located within the existing RDI centre of the Promoter in Rivalta and could therefore potentially fall under Annex II of the EIA Directive 2011/92/EU and the Industrial Emissions (IED) 2010/75EU². The R&D centre in Rivalta is in compliance with the

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.

Industrial Emissions Directive 2010/75/EC entered into force on 6 January 2011 and have to be transposed into national legislation by Member States by 7 January 2013. The IED repeals the Waste Incineration (2000/76EC), Large Combustion Plants (2001/80/EC) and the IPPC (01/2008EC) Directives. The R&D Centre in Rivalta IPPC permit which will need to be reconsidered within the timelines established in the Directive.

Italian Environmental legislation (Decreto Legislativo [D.Lgs] 152/06) and Health and Safety legislation (D.Lgs 81/08) and in possession of the corresponding permits, including an integrated IPPC permit (Autorizzazione Integrata Ambientale, AIA). The new pilot plants, once in operation, will not add to the emissions to the water nor air of the existing facility. Hence the permitting for the R&D Centre will only require an amendment of the AIA/IPPC permit according to the IED 2010/75/EU.

The two pilot units at Modugno, in the Puglia region, will be built on an industrial brownfield site. This will require substantial modification of the existing buildings and facilities for the construction and operation of the corresponding process technologies. The project's potentially fall under Annex II of the EIA Directive 2011/92/EU (Chemical Industry (Projects not included in Annex I): (a) Treatment of intermediate products and production of chemicals but, due to their small capacity, do not reach the thresholds established in the D.Lgs 152/06 and hence an EIA will not be required by the competent authority. The Promoter will apply for the operational permit according to the IED 2010/75/EU (Autorizzazione Integrata Ambientale) in autumn 2013.

Effluents and waste treatment is (will be) in place for both sites to keep the small quantities of discharges and waste within regulatory limits.

The promoter company is committed to developing solutions that contribute to sustainable development.

Social Assessment, where applicable *N/A*

Public Consultation and Stakeholder Engagement, where required N/A

Other Environmental and Social Aspects

In its bioenergy and bio-polymers programmes, some of the proposed RDI programmes foresee the handling of genetically modified microorganisms (GMM) in contained environments (Programme A and Programme B at Rivalta R&D centre). GMM are commonly used in industrial processes for production of industrial chemicals, enzymes, proteins, medicines and food additives. These products are produced using selected and often genetically-modified non-pathogenic fungi, bacteria and microalgae and separated from the micro-organisms in the production process. There will be no genetically-modified microorganisms in the end products.

The use of GMM is regulated by the Council Directive 2009/41 EC and related National acquis. According to these regulations, the promoter has the obligation to notify the installation together with an assessment of the contained handling of GMM with respect to potential risks to human health and environment. This assessment shall result in the final classification of the contained uses in four risk classes, and shall establish and commit to implement measures for the treatment of waste and effluents as well as all necessary safety measures. On the basis of the assessment, the competent authority shall issue an acknowledgement notification.

The micro-organisms targeted in the concerned RDI programmes are expected to be categorised under class 1, (the lowest risk level corresponding to a level of containment of 1): no likely risk for health and environment. The notification to the competent authorities has been done during the planning and construction phase of the planned units. The Cat 1 RDI activities themselves are non-notifiable, although they are open to scrutiny by the competent authority that enforces the Regulations.

Undertaking clauses to the finance contract have been proposed to ensure that the Bank receives copy of relevant notification information related to project components that may fall under the provision's Council Directive 2009/41/EC and corresponding acknowledgement notes from the competent national authorities.