

Environmental and Social Data Sheet

Overview

Project Name:	NOVOZYMES INDUSTRIAL BIOTECHNOLOGY RDI
Project Number:	2012-0615
Country:	DENMARK
Project Description:	The project entails research, development and innovation related to the discovery and development of innovative industrial enzymes for the period 2013-2015.
EIA required:	NO
Project included in Carbon Footprint Exercise ¹ :	NO

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

The project concerns R&D investments related to the discovery and development of innovative enzymes, proteins and microorganisms for i) household care (e.g. detergents), ii) food and beverages, iii) feed and other technical enzymes and iv) bioenergy enzymes that will be carried out in existing facilities without changing their already authorised scope. This type of activities is not specifically listed in the EIA Directive 2011/92/EU; therefore an Environmental Impact Assessment (EIA) is not required.

Enzyme-assisted products and processes have very positive environmental impacts while progressively replacing more environmentally intrusive conventional chemicals, or more energy-intensive processes. For example, the increased use of enzyme-driven industrial processes allowed large savings of CO₂ emissions in 2012, i.e. emission savings of 48 million tons of CO₂ were indirectly achieved through the use of the promoter's products. The project will contribute to increase these emission savings in the short term future. It is therefore acceptable to the Bank

Environmental and Social Assessment

Environmental Assessment

The promoter is ISO 9001 and ISO 14001 certified in most of its facilities, and uses a legally required and approved environmental and safety management system (MS) that includes the regular evaluation of its existing production facilities for environmental legal compliance on a quarterly basis. The MS also includes requirements for the protection of the environment, health and safety, occupational health (OH&S) and other aspects related to the safe handling of biological agents and procedures for handling genetically modified organisms. The promoter is regularly inspected for compliance by the relevant environmental and health authorities.

In addition, the promoter is also ISO 22000 certified for the production and sales of food enzymes.

Other Environmental and Social Aspects

The company develops and produces enzymes with the help of gene technology, whereby enzymes are produced using genetically-modified fungi and bacteria. The enzymes are separated from the microorganisms in the production process and there are no genetically-modified microorganisms in the company's enzyme products. All the promoter's RDI facilities

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.

are approved under risk class 1 (no or negligible risk; containment 1 category) for the handling of biological agents and genetically modified microorganisms according to the Directive 2009/41/EC on the contained use of genetically modified micro-organisms.

The company uses animals for research, safety testing of products where no acceptable alternative methods exist, as legal authorities currently require animal testing as a precondition to product registration. Still, the promoter is highly committed to apply the “3R” principle that consists in Replacing animal use by alternative methods when possible, Reducing the number of animals used as much as possible and Refining the testing methods to reduce animals’ pain and distress.

Regarding sustainability, it must be pointed out that the promoter’s performance is outstanding as it has been placed as number one in the Dow Jones’ sustainability group index for the third year in a row for its biotechnology activities (among 300 companies from 22 countries in 2012) and also as number one in the pan-European STOXX index for its healthcare activities (among 178 companies from 13 countries) in 2012.