

**Public**

## Environmental and Social Data Sheet

### Overview

Project Name:	NOVOZYMES BIOTECHNOLOGY INNOVATION II
Project Number:	2018-0291
Country:	Denmark
Project Description:	Financing of Novozymes' RDI activities for the development of biological solutions, industrial enzymes and microorganisms.
EIA required:	no
Project included in Carbon Footprint Exercise <sup>1</sup> :	no

### Environmental and Social Assessment

#### Environmental Assessment

The promoter's facilities are ISO 9001 and ISO 14001 certified, and the promoter 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. Novozymes prepares its environmental and social reporting in accordance with the following reporting standards and principles: GRI Standards, UN Global Compact and AA1000 framework for accountability.

Novozymes' technical enzymes (used for detergent, leather, fuel ethanol etc.) are regarded as chemicals and are therefore subject to the EU REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals) legislation. Novozymes implements all the requirements of the REACH legislation.

In addition, the promoter is 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

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<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 CO<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

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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 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. The promoter complies with the relevant animal testing legislation.

Regarding sustainability, it must be pointed out that the promoter's performance is outstanding as it has been awarded a Silver Class rating by RobecoSAM/Dow Jones Sustainability Indices in The Sustainability Yearbook 2017 with a score of 90 out of 100. In 2017, Novozymes ranked number 36 in an index of the 100 most sustainable corporations in the world (the Global 100) maintained by Corporate Knights. The index quantitatively compares and ranks the world's largest public companies based on key sustainability-related parameters.

## Conclusions and Recommendations

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 2014/52/EU amending Directive 2011/92/EU; therefore an Environmental Impact Assessment (EIA) is not required.

Enzyme-assisted products and processes have a positive environmental impact since they are progressively replacing more environmentally intrusive conventional chemicals, or more energy-intensive processes. The promoter estimates that the increased use of enzyme-driven industrial processes allowed large savings of CO<sub>2</sub> emissions in 2017, i.e. emission savings of 76m tons of CO<sub>2</sub> were indirectly achieved through the use of the promoter's products. This is equivalent to taking approximately 32m cars off the road. The project will contribute to increase these emission savings in the short term future.

Considering the above, the project is acceptable for Bank's financing.

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