



Public

## Environmental and Social Data Sheet<sup>1</sup>

### Overview

Project Name:	SQIM MYCELIUM TECHNOLOGY DEMO PLANT (IEU GT2)
Project Number:	2024-0894
Country:	Italy
Project Description:	The Project will finance CAPEX investments for industrialisation of innovative mycelium biobased materials production in Italy. The Project will also finance research and development activities and other expenses for the period 2026-2029 to support the company's growth.
EIA required:	no
Invest EU sustainability proofing required	yes
Project included in Carbon Footprint Exercise <sup>2</sup> :	no

### Environmental and Social Assessment

#### Environmental Assessment

The Project includes two main components, both located in the province of Varese, Lombardy region (Italy). They include:

- Capital expenditure (CAPEX) investments for the construction of a flagship DEMO plant for the upscaling of the Promoter's proprietary fungi based fermentation technology for the production of the biobased material Ephea. The Project also includes CAPEX investments in equipment for the production of the Promoter's MOGU biobased materials, for application in the interior design sector.
- Research and development activities (R&D) and other operational expenses (OPEX) to support the growth of SQIM.

A minor part of the R&D activities will be carried out in Inarzo, where the Promoter is currently located, while the bulk of the R&D and CAPEX investments will take place in Caravate, where the company is expected to relocate. Both locations are in the Varese province.

Both Project components do not require an EIA according to the Environmental Impact Assessment (EIA) Directive 2011/92/EU, as transposed into national legislation through Legislative Decree 152/06.

<sup>1</sup> The information contained in the document reflects the requirement related to the environmental, social and climate information to be provided to Investment Committee as required by the Invest EU Regulation and it represents the equivalent of the information required in the template of the InvestEU sustainability proofing summary

<sup>2</sup> Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO<sub>2</sub>e/year absolute (gross) or 20,000 tonnes CO<sub>2</sub>e/year relative (net) – both increases and savings.



The Project activities do not fall under Directive 2012/18/EU (Seveso III). The facility is not considered as an activity at risk of a major accidents, as none of the substances used are classified as hazardous according to Regulation (EC) No. 1272/2008 (CLP).

The Promoter hold all required permits for the R&D activities in Inarzo.

The Project activities in Caravate will be implemented in existing buildings which will be purposely refurbished to accommodate the production and laboratory equipment. The land use designation of these buildings falls in the category of “consolidated industrial buildings” which is consistent with the intended use of the facilities. The Project is not located in protected areas or Natura 2000 sites and is not expected to have any significant direct or indirect impact on such areas.

In terms of the environmental permitting procedure for the facility in Caravate, the Project will require an ‘Autorizzazione Unica Ambientale’ (AUA) pursuant Decree of the President of the Republic (D.P.R.) 59/2013. The competent authority for the AUA procedure is the province of Varese.

In terms of environmental emissions, the facility will be designed to be BAT compliant. The facility will fulfil the emission limits reported in the applicable legislation for wastewater and noise. The limits for atmospheric emissions for low-pollution activities (regulated by Article 272, paragraphs 2 and 3 of Legislative Decree 152/2006), such as the ones for the Project, are not defined at the national level with specific tabular values. The specific targets values for the facility will be defined during the AUA procedure.

To request the AUA, the Promoter needs to obtain several authorisations:

- Wastewater discharge from the Varese Province.
- General authorisation for low polluting activities to be requested to the Varese Province, and the ARPA Lombardia (Agenzia Regionale per la Protezione dell'Ambiente) for the technical aspects.
- Notification or clearance regarding noise impact to be released by the Caravate municipality, where the Project is located.

Once these authorisations are received, the Promoter will be able to apply for the AUA. The competent authority will issue a response within 90 days of receipt of the complete application, in parallel the promoter will be able to proceed with the ‘Certified Notice of Commencement of Activity’ (SCIA) which will allow the Promoter to start the production activities.

## Climate Assessment

The Project is an example of biomanufacturing and supports the upscaling of an innovative mycelium based biofabrication technology for the production of innovative biobased materials. Such materials can have a broad range of applications, including in the fashion/apparel industry and the interior design domain. The Project will valorise biomass feedstock to produce biobased materials. The products supported by the Project aim at providing alternatives to animal and synthetic leather, with Epeha technology, and to replace fossil-based materials (e.g., PET) in interior design products (e.g., acoustic panels, flooring solutions, etc.) with biobased alternatives such as MOGU products. As such the Project may also provide environmental benefits in terms of pollution prevention and circular economy.

The Project emissions are below 20,000 tCO<sub>2</sub>e/year for both in absolute and relative terms, and therefore the Project is not included in the threshold for the EIB Carbon Footprint Exercise.

The absolute annual emissions of the Project in a standard year of operation are estimated at 1.6 kilo-tonnes CO<sub>2</sub>e per year. This estimate comprises the Scope 1 emissions (direct emissions from production processes), Scope 2 emissions (indirect emission from energy consumption) as well as Scope 3 emissions (e.g., life cycle emissions linked to the production of raw materials). The Project will result in avoidance of CO<sub>2</sub>e emissions compared to the Project’s baseline scenario, as the Project relative emissions are estimated at -2.6 kilo-tonnes CO<sub>2</sub>e per year.



The project has been assessed for Paris alignment and is considered to be aligned to the policies set out in the Climate Bank Roadmap, notably in terms of the development and production of sustainable biomaterials, table E (Bioeconomy).

### **EIB Paris Alignment for Counterparties (PATH) Framework**

The counterparty SQIM is in scope (Corporate) and screened out of the PATH framework because it is not considered as high emitting or high vulnerability.

### **Social Assessment**

The Project is located in Italy, and therefore the promoter will comply with all the applicable labour and social legislation of the country, as well as international conventions and charters, in line with EU standards.

### **Public Consultation and Stakeholder Engagement**

The technical and administrative procedures for the AUA requires the engagement of local and regional stakeholders. The competent authority for granting the AUA is the Province of Varese and the permitting requires involvement of local stakeholders (e.g., Caravate municipality and the Province of Varese) as well as regional ones (i.e., ARPA Lombardia).

### **Other Environmental and Social Aspects**

The Project will comply with European and national regulation, including best available techniques. At present, the company does not hold any ISO certification, but the Promoter plans to obtain ISO 9001:2015 and ISO 14001:2015 certifications for the future facility in Caravate.

The Project supports the scale up of an innovative start-up, which will generate employment opportunities.

## **Conclusions and Recommendations**

### **Sustainability proofing conclusion**

Due to its characteristics and location the project will have low residual environmental, climate and social impact.

The Project does not require an EIA and is carried out in compliance with applicable EU and national environmental and social legislation. No further sustainability proofing is required.

### **Disbursement conditions**

- Provide documental proof of the successful completion of the permitting procedure, with the granting of the 'Autorizzazione Unica Ambientale' by the competent authority.

### **Undertakings**

The Promoter shall:

- notify the Bank about any subsequent change/modification/extension of the Project that could trigger an EIA-IED permitting process, following EIA directive 2014/52/EU, amending 2011/92/EU, and submit the relevant assessment reports and permits to the satisfaction of the Bank.

Subject to the above, the Project is acceptable for Bank financing in environmental and social terms