

Public

Environmental and Social Data Sheet¹

Overview

Project Name: *PULPAC DRY MOLDED FIBER PACKAGING*
 Project Number: *2024-0423*
 Country: *Sweden*
 Project Description: *The project concerns the financing of the promoter's RDI programme in dry molded fibre technology from 2025-2029.*

EIA required: No
 Invest EU sustainability proofing required Yes
 Project included in Carbon Footprint Exercise²: No

Environmental and Social Assessment

Environmental Assessment

The proposed operation concerns the financing of the promoter's research, development, and innovation (RDI) activities over the period 2025 - 2029. They are directed towards developing the next generation of food service and retail products based on dry molded fibre (DMF) technology, supporting the shift away from single-use plastics towards fibre-based alternatives.

The RDI activities will be carried out within existing and authorised RDI facilities, located in Sweden, that have valid operation permits approved by the national competent authorities. The promoter is leasing the RDI facilities and is neither planning to construct any new RDI facilities nor modify existing RDI facilities that would fall under the provisions of the Directive 2011/92/EU as amended by the Directive 2014/52/EU.

The project supports the implementation of the EU plastic strategy (2018) and EU Directive 2019/904 on single use plastics.

The project will primarily address the negative environmental externalities caused by single-use plastics. Given the DMF technology's lower energy and water usage compared to alternatives, the project will generate significant environmental benefits in terms of carbon emission and water savings. It will also reduce environmental

¹ 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

² 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 CO₂e/year absolute (gross) or 20,000 tonnes CO₂e/year relative (net) – both increases and savings.



pollution caused by plastic waste / microplastics and improve circularity since fibre-based materials are renewable, often biodegradable and easier to recycle. 80-96% of fibres in DMF products can be recycled and supports the possibility of recycling the fibres up to 25 times. The patented DMF technology offers material usage efficiency and 99% material usage via in-line recycling.

Climate Assessment

Dry molded fibre uses significantly less energy than wet fibre forming. The dry process significantly lowers the CO₂ footprint and is up to ten times faster than conventional wet fibre-forming. Life Cycle Analysis (LCA) for PulPac's Dry Molded Fiber (DMF) suggests that DMF is an environmentally superior alternative to conventional packaging methods. Life Cycle Assessment (LCA) conducted by an independent third party research institute indicates that the Dry Molded Fiber cutlery has an 85% lower carbon footprint compared to polypropylene cutlery. The switch to fibre-based packaging would thus allow Fast-Moving Consumer Goods (FMCG) companies to reduce their emissions significantly and reducing the end-of-life impact of the packaging they use.

As this RDI project is not investing in tangible assets or new infrastructure prone to climate-change related risks, the climate risks have been assessed as low.

The project has been assessed for Paris alignment and is considered to be aligned against low carbon goals against the policies set out in the Climate Bank Roadmap, especially in focus area 5 (striving for greener industry), which includes circular economy.

EIB Paris Alignment for Counterparties (PATH) Framework

The counterparty Pulpac is in scope and screened out of the PATH framework, because it is not considered high emitting and/or high vulnerability.

Other Environmental and Social Aspects

The promoter's environmental policy is described in its Code of conduct. It strictly prohibits any kind of forced labour, human trafficking and child labour.

As an agile R&D company, the promoter has decided not to apply a strict ISO quality system, also because there is no demand from their clients (yet) to do so. In 2023, they have published an impact report for the first time which presents data from all business areas, including environmental and social aspects, and emissions from their offices and production processes. It will be published on an annual basis, and helps to monitor E&S&C aspects.

Conclusions and Recommendations

The overall impact of the project taking into consideration the E&S&C impacts is clearly positive, as described above.

Sustainability proofing: The project is carried out in compliance with applicable national and EU environmental and social legislation. Based on the environment,



climate and social (ECS) information the project is deemed to have low residual ECS risks and impacts. No further sustainability proofing is required.

Undertakings

- The Promoter shall inform the Bank about any change/modification/extension of the project that could trigger an EIA and/or IED permitting process, following EIA directive 2011/92/EU as amended by Directive 2014/52/EU and/or Industrial Emissions Directive 2010/75/EU and submit the relevant assessment reports and permits to the Bank;
- The promoter shall comply with the Regulation (EU) 2025/40 of the European Parliament and of the Council of 19 December 2024 on packaging and packaging waste, amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904, and repealing Directive 94/62/EC (Text with EEA relevance).

Subject to the above-mentioned contractual undertakings, the project is acceptable for EIB financing in ECS terms.