

**Public**

## Environmental and Social Data Sheet

### Overview

**Project Name:** RENEWCELL TEXTILE RECYCLING DEMO PLANT (EDP)  
**Project Number:** 2020-0336  
**Country:** SWEDEN

**Project Description:** Financing of a first full-scale commercial plant for the recycling of waste textiles into high quality biodegradable pulp from which new textiles and subsequently clothes can be produced.

EIA required: yes

Project included in Carbon Footprint Exercise<sup>1</sup>: yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

### Environmental and Social Assessment

#### Environmental Assessment

The project concerns investments related to design, construction and operation of an innovative, full-scale cotton and viscose textile recycling plant with the capacity of approximately 60,000 tonnes of cellulose fibre (dry weight) which corresponds to approximately 70,000 tonnes of textile waste.

For the location of the planned project, an ex-ante evaluation of possible alternatives has been made. A number of different locations have been evaluated in Sweden, as well as in other European countries. The location of the project was selected in an existing industrial premises (owned by SCA Ortviken) in Sweden, Sundsvall municipality, where building and large parts of its existing infrastructure and media supply (e.g. steam, electricity, process and cooling water, chemicals, sewage treatment and compressed air) will be able to be used in the planned textile recycling.

The project falls under Annex II, point 11 b) Installations for the disposal of waste (projects not included in Annex I) and the competent authority decided that an EIA Report is required. Following this decision, the Promoter prepared and sent to the competent authority the required report.

<sup>1</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.

Luxembourg, 18 June 2021

The EIA Report contains technical description of the project and site, energy use, emission sources, emissions and waste prevention as well as the potential impacts of the project on air and water quality, soil, noise, safety, during construction and operation.

The majority of the investigated impacts were classified as being not significant. Low to increased moderate negative impacts were related mainly to the construction works and operation phase. The impact associated with water pollution (waste water contains pollutants such as organic substances, nutrients and metals that come from the textiles or chemical processes) is mitigated by restrictions on which substances may be present in the textile raw material and the treatment of the wastewater in the existing water treatment plant.

Noise sources from the site will mainly occur from transportation to and from the process steps and, as the process steps are indoors, the noise-level is assumed to be approximately equivalent or lower than the current situation. Air emissions from the process are mainly in the form of dust, ozone (used in the bleaching process) and NO<sub>x</sub>, all of which are appropriately managed with low residual risk.

For the recycling process, different types of chemicals are used, as well as chemical products for maintenance, such as oils and fats, and small amounts of chemicals for laboratory operations. To ensure safe and efficient use of chemicals, Renewcell's handling of chemicals will take place in collaboration with SCA Ortviken and in accordance with their current routines.

Cumulative impacts were assessed in view of other planned activities in the area mainly related to the development of a logistics park and a new railway line to connect the industrial area. The cumulative impacts were considered not significant and not requiring any specific mitigation measures.

The project will not have any impact on Natura 2000 sites as the nearest Natura 2000 areas Stornäset and Långharsholmen, are located almost 10 km northeast of the area of the project.

### **EIB Carbon Footprint Exercise**

The estimated emissions savings resulting from the project implementation using the EIB GHG emission calculation methodology<sup>2</sup> are estimated around 58 ktonnes CO<sub>2</sub>e per year. For the relative emission calculation, the baseline scenario being viscose stable fibres produced from Swedish managed forest pulp. The choice of raw material input is a critical one with overarching effects on life cycle analysis of environmental impacts.

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<sup>2</sup> Resulting from project scope, excluding biogenic carbon storage loss factor associated with wood pulp and additional upstream and downstream emission benefits.

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For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

### **Social Assessment, where applicable**

The project will contribute to maintaining the promoter's industrial performance and employment in the region by the direct creation of highly skilled jobs, mainly in production and maintenance functions. Additional employment will be indirectly created at the Head Office. In a second step, related to the potential capacity increase, further jobs are planned. The project provides employment opportunities for local staff, impacted by the closure of the SCA plant, which in turn gives the promoter access to experienced and qualified operations and maintenance staff.

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

As required by the national legislation, at scoping stage, consultations have been held with the County Administrative Board of Västernorrland, Sundsvall Municipality, a number of authorities, the general public and those particularly affected by the implementation of the project. All the main findings, concerns and recommendations provided by the various stakeholders during the consultation have been taken into account when preparing the EIA Report. The consultation report is attached to the EIA Report, the consultation of which is ongoing.

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

The project aims to supply the fibre/textile production supply chain with an environmentally sustainable feedstock (Circulose™), to replace the traditional highly-resource intensive forest-sourced pulp or other virgin raw material. By reducing the need for virgin raw materials in favour of recycled material and at the same time reduce the amount of textile waste deposited in landfills, the project will have a positive environmental impact and will support the targets set in the 2018 EU Circular Economy Package and the Circular Economy Action Plan.

## **Conclusions and Recommendations**

Based on the information available at appraisal stage, by implementing the mitigation measures, the project is expected to have minor negative residual impacts.

Subject to the compliance of the below conditions, the project is considered acceptable for EIB financing from an environmental and social perspective:

#### *Condition precedent to first disbursement (tranche):*

The promoter will have to provide the EIA Decision issued by the competent authorities.

#### *Condition precedent to second disbursement (tranche):*

The promoter will have to provide the building permit.