



Public

Environmental and Social Data Sheet

Overview

Project Name:	NILAR BATTERY ENERGY STORAGE	
Project Number:	2020-0113	
Country:	SWEDEN	
Project Description:	Nilar is a European start-up developing NiMH batteries for Battery Energy Storage Systems ("BESS"), which has entered the commercialisation phase in 2019. The project concerns the expansion and upgrading of Nilar's manufacturing lines within existing facilities, accompanied by increased R&D and sales and marketing efforts in order to gain market share in Europe in the residential PV and storage segment and to enter the commercial and industrial segment, including EV charging.	
EIA required:	no	
Project included in Carbon Footprint Exercise ¹ :	no	

Environmental and Social Assessment

Environmental Assessment

R&D and manufacturing activities on electrical and electronic products are not listed in the annexes of the Environmental Impact Assessment (EIA) Directive 2014/52/EU amending the Directive 2011/92/EU. The factory has a permit under the Swedish environmental code to manufacture batteries that do not contain harmful materials such as cadmium, lead or mercury. It is licensed to produce a maximum of two million batteries per year. The financed activities will be carried out in this authorised existing facility and will remain within the permitted scope, thus not requiring any additional environmental permits.

Other Environmental and Social Aspects

The factory building with its utility connections (electricity, district heat, water and wastewater) pre-exists the project; the promoter rents the building without applying any significant modifications to it.

Environmental and social sustainability is high on the company's agenda. Being a start-up still in capacity expansion phase through the adding of lines, the company is today not ISO certified, but works already in accordance with ISO 14001 and OHSAS 18001.

¹ 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.

Nilar offers a patented battery technology based on materials that are safe and environmentally friendly compared to other battery technologies. Human exposure to input materials is safe. The active material can be fully recycled and re-used in new battery cells.

There are no GHG emissions caused by the manufacturing process itself. Electricity is the only form of energy used in the manufacturing process, which does not entail any heating nor drying processes (and is thus much more energy efficient than other battery manufacturing processes). The absence of pharma-grade clean rooms reduces electricity needs for air-conditioning. The electricity is taken from the Swedish grid, which has a low general emission factor. The project's manufacturing capacities are relatively small. The project's carbon footprint is therefore well below the EIB applicable thresholds for absolute and relative CO2 emissions.

The products developed and manufactured by this project also display a relatively low CO2 footprint due to the ability to extend their life much beyond the life of other batteries, and due to their full recyclability.

The products will facilitate the integration of renewable generation resources into the grid; and are thus expected to have a positive effect on the environment.

Conclusions and Recommendations

In the light of the above, the project is acceptable for EIB financing in E&S terms.