

# Annual Green Finance Reporting

**BE Bio Energy Group AG  
and the Solör Bioenergi Group**

May 2023



# BE Bio Energy Group AG and the Solör Bioenergi Group

Solör Bioenergi Holding AB is owned 60% by Nordic Infrastructure AG and 40% by Polhem Infra.

BE Bio Energy Group AG is an investment company domiciled in Switzerland owning 100% of Nordic Infrastructure AG.

Polhem Infra is owned by Första AP-fonden, Tredje AP-fonden och Fjärde AP-fonden, which manages part of the capital in Sweden's national income pension system.

Solör Bioenergi Holding AB is a Swedish leading provider of renewable energy and district heating based on forestry waste. The Solör Bioenergi Holding AB Group (the "Solör Group", or the "Group") consists of a number of subsidiaries, as further detailed in the Group's

annual report, providing essential energy services in Sweden and Norway, with a smaller presence also in Poland.

The Group produces wood-based bioenergy for the public and private sector including private households, industrial customers as well as local and regional governments. As a leading bioenergy company, the Group is operating throughout the entire value chain, from procurement, production and distribution to sale of energy in the form of district heating, industrial steam, electricity and various biomass products, including energy recovery based on impregnated and treated wood and production of wood-based biomass.



## *District heating*

The Solör Group provides essential heat infrastructure, producing and distributing district heating for the public and private sectors in Sweden, Norway and Poland, with approximately 600,000 daily customers.

In Sweden and Norway, 98% respectively of our fuels used in our district heating plants come from renewable sources, mainly biofuels based on locally sourced waste and residues from forestry and forest-based industries.

In Poland, the market is dominated by coal-based heating, and with 30% of our fuel coming from renewable sources, we are one of the leading providers of biomass-based district heating. We are also actively working to reduce the fossil component further. This is done through upgrade of existing plants to reduce coal consumption and investment in biomass boilers.

## *Local heating*

In addition to district heating, the Solör Group also provides local heating solutions in Sweden and Norway.

While district heating supplies a large network of customers, local heating involves a local heat plant that only serves one or a few buildings, with energy supply based on the specific energy demand of the particular buildings. In addition to heating, these systems can also deliver electricity and steam.

A majority of our local heating uses wood pellets as fuel. Fossil fuel is only used for peak-load and in case of unplanned break-downs. Recently, 96% of fuel was sourced through pellets and other renewable sources.

## *Biofuels*

The Solör Group produces biofuels in the form of pellets and briquettes. These are produced from forestry waste such as fir and pine cutter shavings and thinnings, making them part of the natural carbon cycle.

In addition, we are the leading company in Sweden and Norway within energy recovery from impregnated and treated wood waste, primarily from railroad and construction sectors.

We collect and sort the waste in our environmental terminals where we separate the material that can be recycled, whereas the rest is processed into biomass for sales to our own energy plants and to external energy customers.

Our environmental terminals and district heating create an integrated value chain from the suppliers of wood waste to the producers of heat to the end users of district heating.

# Sustainability

In the Solör Group, we strive to have a fossil-free production of energy with an ambition to be climate neutral. By producing renewable energy and recycling hazardous wood waste, we wish to promote the transition towards an environmentally sustainable society. We are actively working to increase the proportion of biofuels, minimize the share of fossil fuels, reduce electricity consumption and increase efficiency in our production of energy.

Our operations require compliance with strict environmental regulations and codes in the countries where we operate, as well as permits and licenses. To ensure a consistently high quality, we benchmark our production facilities to identify improvement areas and implement best practice processes for all plants. To reduce our electricity use, we are installing metering devices to monitor electricity use, we are enhancing the efficiency of existing flue gas condensers, pumps, fans and compressors, and we are installing LED lighting.

## The UN Sustainable Development Goals

The Solör Group supports the UN Sustainable Development Goals, and we have identified four of the goals where we believe we can add most value.

### Environmental aspects

*Our overall ambition is to reach a fossil-free production of energy using forest resources in the form of waste and residues from the forest industry, creating energy that is part of the natural carbon cycle.*

### Personnel, social conditions and respect for human rights

*We have a strong focus on Health, Safety and Environment (HSE) with policies in place for Work environment, Gender equality, Equal treatment, and Alcohol and drugs. We believe working condition should be marketable, competitive and based on union agreements. We have zero tolerance for corruption in all aspects of our operations.*



## Use of Proceeds

An amount equal to the net proceeds from issued Green Finance Instruments will be used to finance, in whole or in part, a portfolio of assets and projects within the Solör Group, that promote the transition toward low-carbon and climate-resilient development.

Only such assets and projects that comply with the list of Green Projects below are deemed eligible to be financed with Green Finance Instruments. Net proceeds may be used for the financing of new assets and projects, as well as for refinancing purposes.

For the avoidance of doubt, Green Finance Instruments will not be used to finance investments linked to fossil energy generation, nuclear energy generation, research and/or development within weapons and defense, potentially environmentally negative resource extraction, gambling or tobacco.

## Green Projects

Green Finance Instruments issued under this Framework will finance and refinance investments and related expenditures within the following Green Project Categories. This also includes investments by the owners in share capital in the Solör Group, financing and refinancing of Green Projects as defined below, and where proceeds will be directly linked to the book value of the Green Projects, adjusted for the share of equity acquired.

### **Renewable Energy**

- **Biofuel production:** Facilities for producing biofuel based on forestry waste and residues as well as from recycled wood waste, such as impregnated and treated wood.
- **Heat, electricity and steam generation:** Facilities for district heating and local heating that use at least 95% wood-based biofuel as defined above, or facilities for recovering and distributing waste heat from nearby industries. Also including investments in converting facilities currently running on fossil fuel to reach the 95% threshold.
- **Transport:** Rail related infrastructure needed for the transport, loading, off-loading and storage of biomass to and from our production plants.
- **Transmission and distribution:** Distribution systems connecting end-users with district and local heating.

### **Pollution Prevention and Control**

- **Waste management:** Recycling facilities, such as environmental terminals handling impregnated and treated wood waste enabling recycling as well as energy recovery.
- **Reduction of air and water pollutants:** Technologies and systems that reduce emissions to air and water, including nitrogen oxides, flue gas, sulphur, particle pollution and other toxic pollutants.

# Reporting

## Allocation Report

In January 2021, the Group issued its first green loan under the 2020 Green Finance Framework, for which we received a second opinion from the Norwegian climate research institute CICERO. Both the Green Bond Framework and the second opinion from CICERO can be found on the Group's website.

All of the proceeds from issued green loans have been allocated by the Group's Green Finance Committee to two green project categories within the renewable energy category:

- biofuel production and
- heat, electricity and steam generation.

100% of the proceeds have been allocated to refinancing of older eligible projects. The use of proceeds from green loans and allocation to eligible green investments outlined in this report is as per December 31st 2022 and the impact reporting is based on calendar year 2022, where relevant.

Examples for Green Projects refinanced with the proceeds are:

- Further expansion of the greenfield project in Jessheim, Norway. There the Group built and expands a new bio-based district heating power plant with additional 10 MW installed power.
- Building of a new district heating power plant in Edsbyn, Sweden.
- Further expansion of the site in Kirkenær, including a new biomass boiler, increased inflow and processing of waste wood in combination with a new Pellets production facility to serve own plants in close proximity.
- New biomass heat plant to in Grupa in Poland to replace the coal-fired old heat plant. Biomass capacity 1.44 MW. Potential reduction of coal consumption 6400 MWh per year. Investment completed in 2022.
- Ongoing project new biomass boiler in Hajnowka Poland (5.8 MW biofuel boiler replacing 15.8 GWh coal based heat production). Date of the completion of the investment is September 2023.
- Biofuel boiler 6 MW replacing fossil gas based heat production 42 GWh in Tine in Jaern
- Further expansion of the greenfield district heating network project in Ekerö, outside Stockholm in Sweden.
- ORC investments (electricity production suitable for smaller and medium heating facilities) in Skurup and Tomelilla, as well as initiating an ORC investment in Åseda. These investments enables local renewable electricity production.

Based on the above, the following allocation is confirmed:

### Share of revenue generated by bio energy

Share from bio energy	96%
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### Share of eligible assets bio based

Share from bio energy	97%
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\* The share of eligible assets that is bio based is calculated using asset value and the percental bio energy production from these assets.

## Impact Report

The impact report aims to disclose the environmental impact of the Green Projects financed under this Green Finance Framework. Impact reporting will, to some extent, be aggregated and depending on data availability, calculations will be made on a best intention basis. The impact assessment may, where applicable, be based on the metrics listed below.

### Renewable Energy

- Volume of produced biofuel
- Annual renewable energy generation capacity
- Annual renewable energy generation
- GHG savings

Item	Amount
Volume of produced biofuel	247 253 tons
Annual renewable energy generation capacity	833 MW
Annual renewable energy generation	1 932 983 MWh
GHG savings	305 411 tons

*\* Produced biofuel is sold pellets, briquettes and wood chips. Renewable energy generation includes sold heat, steam and power + 15% assumed average losses.*

### Pollution Prevention and Control

- Volume of recycled wood waste
- Energy recovered from wood waste
- Types and quantity of emissions/pollutants reduced

Item	Amount
Volume of recycled wood waste	93 786 tons
Energy recovered from wood waste	300 115 MWh

During 2022, Solör Group have installed additional 8 filters, both ESP and bag filters, to reduce particle emission from the power plants.

