

# Annual Green Finance Reporting

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

March 2025



# 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 900,000 daily customers.

In Sweden 96.6% and in Norway, 97.9% of our fuels used in our district heating plants come from renewable sources, mainly bioenergy 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 47.2% 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. In 2024, 94.9% of fuel was sourced through pellets and other renewable sources.

## *Bioenergy*

The Solör Group produces bioenergy 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 2040. 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 bioenergy, 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.*



**SDG 7: Ensure access to affordable, reliable, sustainable and modern energy**



**SDG 13: Take urgent action to combat climate change and its impacts**



**SDG 3: Ensure healthy lives and promote well-being for all at all ages**



**SDG 8: Promote inclusive and sustainable economic growth, employment and decent work for all**

Solör uses different forest and wood residues:

- Wood chips based on residues from sawmill production
- Bark residues from sawmill production
- Branches and tree tops (chopped into wood chips), residues from forest industry
- Wood chips from thinnings (i.e. when smaller trees are cut down in forest industry in order to enable growth of surrounding trees)
- Wood chips from thin logs and damaged trees (due to fires, insect manages etc)
- Waste wood/recycled wood i.e. wood from construction industry and recycling stations

In general the bioenergy is sourced very locally from the countries Solör Bioenergi is active in. The forest industry usually apply a cascade principle i.e. the logs are used to produce wood products and then the rest is used by paper industry and energy industry. Bioenergy used in sites above 20 MW has to fulfil EU sustainability criteria (part of EU renewable energy directive)<sup>1</sup> and Solör Bioenergi has chosen to implement these criteria also for smaller sites. The countries of origin for our bioenergy is publicly available on our webpage<sup>2</sup>.

<sup>1</sup> <https://www.energimyndigheten.se/en/sustainability/sustainable-fuels/sustainability-criteria-for-biofuels-and-bioliquids/>, the limit will change to 7.5 MW during 2025

<sup>2</sup> Where does the biofuel come from? - Solör Bioenergi (solorbioenergi.com)

## 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**

- **Bioenergy production:** Facilities for producing bioenergy (pellets, briquettes, woodchips) 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 bioenergy 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.
- **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

Solör Bioenergi currently has green loans under The Green Finance Framework, i.e. no bonds. 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. The Green Finance Framework was updated October 2023, and we received a second opinion from S&P Global ratings. Both the Green Bond Framework and the second opinions from CICERO and S&P Global ratings can be found on the Group's website.

Amounts invested in each of the Green Project categories defined in this Green Finance Framework

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:

- Bioenergy production: 1 982MSEK
- Heat, electricity and steam generation: 16 947MSEK

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 2024 and the impact reporting is based on calendar year 2024, where relevant.

Examples for Green Projects refinanced with the proceeds are:

- Further expansion of the network in Jessheim, Norway.
- Building a new district heating power plant in Åseda, Sweden
- Building a new district heating power plant in Kalix, Sweden
- New biomass boiler in Hajnowka 2024 Poland (5.8 MW bioenergy boiler replacing 15.8 GWh coal based heat production).
- 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 Åseda. Enables local renewable electricity production.
- Construction of a new pellets boiler in Läggesta in Strängnäs
- Initiating converting natural gas boilers in Lyse to other renewable alternatives
- Filter installations to reduce dust emissions in line with the MCP directive
- Construction of three new biochar boilers (at two sites, Herrljunga and Ulricehamn)
- Acquiring 4 DH companies/targets in Sweden and Norway, with a total annual heat sale of 97 GWh

Based on the above, the following allocation is confirmed:

### Share of revenue generated by bio energy

Share from bio energy	92%
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### Share of eligible assets bio based

Share from bio energy	96%
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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 bioenergy
- Annual renewable energy generation capacity
- Annual renewable energy generation
- GHG savings

Item	Amount
Volume of produced biofuel	199 776 tons
Annual renewable energy generation capacity	856 MW
Annual renewable energy generation	2 447 791 MWh
GHG savings	381 372 tons

*\* Produced bioenergy is sold pellets, briquettes and wood chips. Renewable energy generation includes sold heat, steam and power + 15% assumed average losses. The data for Annual renewable energy generation capacity included wrong data in last years report, so it seems to only have increased marginally from last year due to previous data errors. It is assumed heat otherwise would be produced with a heat pump with a COP of 3 and assuming 0.5 ton CO<sub>2</sub>eqv emissions per MWh electricity as an average (Sweden electricity residual emissions 2023 was 0,5241ton CO<sub>2</sub>ekv/MWh, Norway's 0,59861ton CO<sub>2</sub>ekv/MWh and Poland's 0,85812ton CO<sub>2</sub>ekv/MWh). The same emissions per MWh are applied to steam and electricity but without COP.*

### Pollution Prevention and Control

- Volume of recycled wood waste
- Energy recovered from wood waste

Item	Amount
Volume of recycled wood waste	101 357 tons
Energy recovered from wood waste	340 986 MWh

*\* Out of which 102 215 MWh was recovered from wood waste woodchips which was sold externally*

