

Lantmännen

Green Bond Framework

April 2021

A close-up photograph of a wheat ear, showing the green and golden grains and the long, thin awns. The background is a clear blue sky with some blurred wheat stalks in the foreground.

**Lantmännen aims to mobilize debt capital
to promote the transition towards a low-carbon
and environmentally sustainable society.**

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Background

About Lantmännen

Lantmännen is an agricultural cooperative founded on the knowledge and values acquired through generations of farmers. We are Northern Europe's leader in agriculture, machinery, bioenergy and food products. With innovative and responsible use of arable land resources, Lantmännen creates value and make farming thrive.

Lantmännen is owned by 19,000 Swedish farmers. Sweden is our base with the Baltic Sea area as our expanded domestic market. We have a strong international presence with operations in more than 20 countries.

Based on farmland and operations throughout the grain value chain, we are there all the way – from sowing and harvest to the food on our table, feed for our animals and climate-smart biofuels.

We invest in research and innovation today for agriculture, bioenergy and foods of the future. Innovation is crucial for resolving the challenges of today and tomorrow, which is why Lantmännen also has its own research foundation.

The Group is divided into three Sectors and two Business Areas: Agriculture Sector, Energy Sector, Food Sector, Swecon Business Area and Real Estate Business Area.

Sustainable business development

To us, sustainable business is about creating business opportunities and managing risks. With operations throughout the grain value chain we have a unique opportunity to drive sustainable business development, which contributes to the success of our company and our members' long-term profitability.

Agriculture and food production accounts for a significant part of the world's greenhouse gas emissions. To curb climate change and ensure productive farming in the future, the climate impact must decrease, - in cultivation, food processing and transportation. As a big player within the agricultural sector, Lantmännen recognizes its responsibility for combating climate change. We have put in place ambitious environmental targets for our operations, we are committed to the principles of the United Nation's (UN) Global Compact and pursue an integrated sustainability strategy aligned with UN's Sustainable Development Goals (SDGs).

Lantmännen's strength lies in knowledge, presence and collaborations throughout the grain value chain and commitment to research and innovation. We can thereby meet

and exceed the market's demand for products with sustainable added values for health, climate and the environment.

Lantmännen is a driving force in the development towards more sustainable food and bioenergy systems. With renewable raw materials at heart we strive for circular businesses, we optimize farming potential, and increase resource efficiency with minimal impact on people and the environment.

Four focus areas

Lantmännen works within in four main areas when creating new sustainable business opportunities and managing the challenges connected to these:

- Sustainable farming: we take an active role, driving the development towards more sustainable farming practices and technologies.
- Sustainable products: Lantmännen develops and offers innovative products and services within agriculture, bio energy, food as well as bio-based materials with sustainable added values.
- Safe and resource-efficient production: Our production must be efficient, and we work constantly to optimize resources at all stages. Production must also be safe for our employees and other parties.
- Responsibility in the supply chain: We work methodically to promote responsibility in the supply chain so that participants feel confident in our knowledge and control, and minimization of negative impacts on people, animals, the environment and natural resources.

Management approach

Lantmännen's approach to responsibility and agenda for sustainability is based on our Code of Conduct. It is an integral part of our business strategy and our processes for control, implementation and follow-up. Supporting policies and directives clarify in specific issues. Responsibility and sustainability are our guiding stars, and are crucial to Lantmännen's Field to Fork 2030-strategy. There are group-wide goals for climate, environment, health and safety, employee satisfaction, leadership, and for conducting training in sustainability and business ethics.

Our approach is based on the precautionary principle and life cycle assessments. Particularly important issues are: energy consumption, emissions into the air, soil and water, impacts from transport, impacts on land and biodiversity in our operations, as well as impacts via our supply chain.

Climate targets

As early as 2009, Lantmännen set ambitious targets to reduce the climate impact from our own production, and in 2020 we achieved yet another climate target, a 40 percent reduction in relation to turnover, from 2015. Since 2009 we have reduced emissions by 71 percent/turnover and in



absolute terms by 62 percent. By 2030, we aim to reduce emissions in line with the Paris Agreement. The rate required to achieve this is to halve carbon dioxide emissions every decade from 2020, referred to as the Carbon Law curve. Actions to reach the target include fossil-free operations in Sweden, and Norway by 2025, other Nordic countries by 2030 and other European countries by 2040. A target is set for purchased transports, to reduce emissions with 70 percent in the period 2009-2030.

Working systematically towards our targets, we have already taken major steps towards more sustainable farming. In 2019, a climate target for primary production was adopted, which, like our other climate targets, follows the Carbon Law reduction rate. Our role is to develop sustainable agri-supply such as fuel, plant nutrition and plant protection, and applying the best available techniques. Lantmännen's cultivation program, Climate & Nature, with up to 30 percent lower climate impact, is a commercial proof that it is possible to reduce the climate impact and create environmental benefits in farming while maintaining a good yield. At the same time, the farmer receives an extra premium which finances the measures under the program. Customers and consumers are offered a range of products from the cultivation program, for example Kungsörnen flour and pancakes, and AXA oat flakes.

Circular business for sustainable products

For many years, we have been a driving force in the development of sustainable food and bio-energy, through increased circularity and resource efficiency. Our research and development make it possible to lead the way towards increased value of sustainable grain from field to fork.

Lantmännen is making large investments within bio-materials innovation and the energy sector, and we are working systematically on improving efficiency at our facilities. Utilizing side streams and waste from our production processes is of great importance. In several cases, residues from our production have been used to replace fossil fuels.

The development of our recycling business, in which bread waste from bakeries and other starch-rich materials are collected for production of renewable ethanol, continues. We are improving the recipes for our already climate-efficient feed, with domestic raw materials and certified soy. In our production, we continuously look for possibilities to convert to renewable fuels.

As of today, Lantmännen is the only large-scale producer of climate-smart ethanol in the Nordic countries. Our refining process results in three main products – ethanol, protein and carbon dioxide. These products are further processed into sustainable biofuels, feed raw material and carbonic acid. Our ethanol is the most sustainable in the world with over 90 percent CO₂ reduction yield.

Sweden is and has been for a long period self-sufficient in grain. The grain surplus is exported mainly to other EU countries, but also countries outside the EU. Our green raw material is cultivated on our member's fields and about 10 percent of the wheat grown in Sweden is refined in the Norrköping plant. Grain used, is partly of qualities that do not reach food standard and partly of the Swedish production surplus from nearby fields. These volumes contribute to profitable farming in the area, and are less economically viable to transport for export, along with the environmental impact. A growing material stream to the bio-refinery is waste from the food industry.

Farming of the Future

Swedish farming is considered to be among the most sustainable in the world. Nevertheless, many challenges remain, such as reducing the climate impact, increasing environmental benefits and safeguarding biodiversity.

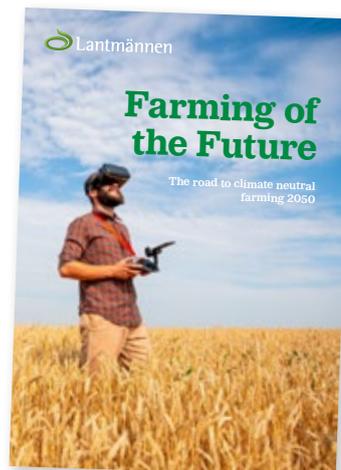
At Lantmännen, we have recently defined a climate goal for farming – to create conditions for a sustainable primary production by halving the climate impact every decade and achieving climate neutrality by 2050.

In our report, Farming of the Future, we have identified significant opportunities to increase production while reducing climate and environmental impacts by scaling up already available technologies and cultivation methods.

To do so we need to realize the potential offered by digitalization and precision farming in parallel with optimal management on the farm, including the introduction of sustainable crop rotation in the cultivation process.

Continuous investments in plant breeding and intensified development of more sustainable plant protection are required. The effects of climate change on soil, water supply, crops and pests need to be monitored and managed. Not the least, the farmer's long-term profitability needs to be ensured in the transition to farming of the future

To achieve our long-term target, we take an active role within all of the above fields. Already we will offer our business partners' products with leading climate performance, push the development of new knowledge, technology and cultivation methods, and develop products and services that enable the agricultural companies to produce even more sustainably.



¹⁾ Figures from the Swedish Board of Agriculture and Swedish Environmental Protection Agency: www.jordbruksverket.se, www.swedishepa.se

Planet

For farming to be sustainable from the perspective of the planet, a number of principles must be met:

- The climate impact must be reduced according to the Paris Agreement, aiming to keep the increase in temperature well below two degrees.
- Energy use must be efficient, renewable and sustainable.
- Biodiversity must be ensured, and farming must not systematically displace species.
- Soil fertility must be maintained or improved and more carbon sequestered in the soil.
- The need for plant nutrients must be met in a sustainable way, with nutrients fully utilized.
- The need for plant nutrients must be met, with minimal impact on surrounding ecosystems

Productivity and resource efficiency

More and more people need to get food from the same land area, while farmland is an important resource in society's fossil-free transition. Sustainable farming is therefore high-yielding based on the location-specific conditions.

Climate change is making drought, high temperatures or too much rainfall for example increasingly common. Sustainable farming must therefore be resource-efficient and "get more out of less" (in terms of proportion of farmland, per agri-supply unit such as fertilizer, etc.) and be resistant to extreme weather situations.

Profit

A prerequisite for long-term sustainable farming is good profitability for the farmer. This enables new measures and investments to be made in response to the major challenges facing food production. With good profitability, Lantmännen believes that the value that Swedish farmers create now and in the future must be more clearly reflected in the price of the products – and consumers must realize the value of these products to a higher extent. There are already good opportunities for significant environmental and climate measures at farm level, particularly with regard to the transition to fossil-free fuels for machinery and fossil-free electricity. In a situation where profitability is already squeezed – only about 9 percent of the consumer price spent in the supermarket goes to the farmer – the Swedish farmer cannot alone bear the increased costs associated with the transition to more sustainable food production.



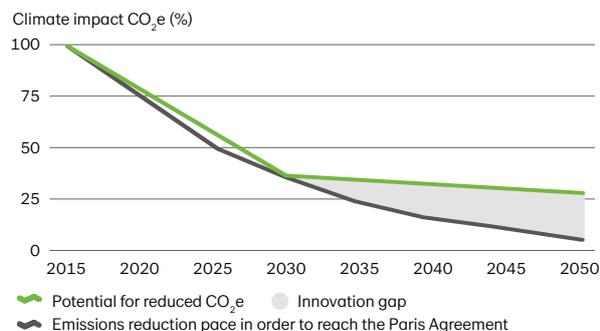
We have 29 harvests left to achieve climate neutrality by 2050

Lantmännen's calculations show that the climate impact can be reduced by 63 percent per kilo of winter wheat and the yield increased by 38 percent by 2030, provided all potential is utilized, and water and efficient, sustainable plant protection are available.

Several of the efficiency measures we have envisaged in the 2030-time perspective are feasible in the near future and can be implemented on a large scale. Technology and knowledge within for example precision farming, digitalization and optimal management are already largely in place today – but what is lacking is the financial incentive and profitability needed to enable the transition.

By 2050

Figure 1.
Potential for reduced climate impact by 2050



Potential to reduce farming's climate impact, calculated per tonne of winter wheat, and the gap to the Paris Agreement.

In the longer perspective of 2050, progress in plant breeding will be the main contributor to a harvest increase of about 48 percent compared with the base year 2015, and a further reduction of the climate impact to about 69 percent. The remaining climate impact in 2050 – the “innovation gap”, estimated at 23 percent in Figure 2 – is almost exclusively linked to biological processes and nitrous oxide emissions from farmland. At present, there is a great deal of uncertainty about the true extent of nitrous oxide emissions, as the calculation method currently used is based on global standard values, which do not take into account local conditions or farming methods. To close the innovation gap after 2030 and follow the curve down to 2050, there is a need to produce more precise quantification of the extent of nitrous oxide emissions from farmland as a first step, followed by more knowledge and innovation regarding measures that can provide the greatest effect.

Figure 2.
Measures for reduced climate impact by 2050

Actions	Potential, %
Cropping system	-5 %
Sustainable plant nutrients	-22 %
Fossil free farming	-10 %
Precision farming, digitalization, optimal management and plant breeding	-27 %
Carbon sequestration	-5 %
Total	-69 %
Innovation gap	23 %

The measures contribute to a reduced climate impact of 69 percent by 2050. To close the gap to the Paris Agreement – calculated at 23 percent – requires innovation in all measures and management of nitrous oxide emissions from land.

Green financing

As a Northern European leader in agriculture, machinery, bioenergy and food products, Lantmännen plays a major role in the transformation of the food systems towards a low-carbon sustainable food and bioenergy system. Our aim is to be a pioneer in fossil-free food chain and to make a substantial contribution to national and global goals for climate mitigation.

By setting up this document (“Green Bond Framework” or “Framework”), Lantmännen aims to mobilize debt capital to promote the transition towards a low-carbon and environmentally sustainable society. This Framework, aligned with the Green Bond Principles published in June 2018 by the International Capital Market Association (ICMA), defines the investments eligible for financing by green bonds issued by Lantmännen (“Green Bonds”).

The Framework also outlines the process used to identify, select and report on eligible projects and the set-up for managing the Green Bond proceeds. The terms and conditions of the underlying documentation for each Green Bond shall provide a reference to this Framework. Other financial products, such as Commercial Papers, loans and revolving credit facilities, might also reference this Framework.

Lantmännen has worked with Danske Bank to develop the Framework and CICERO Shades of Green has provided a second party opinion confirming the ICMA Green Bond Principle 2018 alignment, both documents are publicly available at our website. Lantmännen will assign an independent verifier to provide an annual statement that an amount equal to the Green Bond net proceeds have been allocated to projects in line with the Framework.

2021-04-06



Per Olof Nyman
Chief Executive Officer



Christian Johansson
Chief Financial Officer



Claes Johansson
Director Sustainable Development



Use of proceeds

Allocation of net proceeds

An amount equal to the net proceeds of the Green Bonds will finance or refinance, in whole or in part, investments undertaken by Lantmännen or its subsidiaries that promote the transition towards a low-carbon, climate resilient and environmentally sustainable society ("Green Projects"), in each case as determined by Lantmännen in accordance with the Green Project categories defined in the next pages. Green Projects will form a portfolio of assets eligible for financing and refinancing by Green Bonds.

Financing and refinancing

Green Bond net proceeds can finance both existing and new Green Projects financed by Lantmännen or its subsidiaries. New financing is defined as Green Projects financed after the Green Bond has been issued, and refinancing is defined as Green Projects financed before the Green Bond issuance.

The distribution between new financing and refinancing will be reported on in Lantmännen's annual Green Bond Report. Operating expenditures qualify for refinancing with a maximum three-year look-back period before the issuance year of the Green Bond.

Exclusions

Green Bond net proceeds will not be allocated to projects for which the purpose is fossil energy production, nuclear energy generation, weapons and defence, potentially environmentally harmful resource extraction (such as rare-earth elements or fossil fuels), gambling or tobacco.

Sustainable Development Goals

The Sustainable Development Goals (SDGs) were adopted by all 193 United Nations member states in 2015 and guide governments, civil society and the private sector in a collaborative effort for change towards a sustainable development. Lantmännen contributes to several of the goals on a corporate level. In this Framework, we have mapped each Green Project category to its relevant SDGs at our discretion.



Green Project categories

Renewable energy

The financing or refinancing of the construction, operation, acquisition, expansion or upgrades/modifications of facilities that produce renewable energy, as well as associated infrastructure and related Research and Development programmes.

Biofuel

Bio-refinery in Sweden producing ethanol out of arable crops and food waste with a GHG emission reduction of more than 90 percent in relation to the relative fossil fuel comparator set out in RED II Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources.

Residue collecting facilities related to bio-fuel production is found under the Green Project category pollution prevention and control.

District heating

District heating production in Sweden and related infrastructure.

Solar power

Solar energy technologies, such as Photovoltaic systems (PV) and Concentrated Solar Power (CSP).

Wind power

Onshore and offshore wind energy generation facilities and other emerging technologies, such as wind tunnels and cubes.

Storage facilities

Facilities that store electricity, thermal energy or hydrogen.

Renewable energy from agriculture

In the early 1990s, Swedish farmers produced 75 percent of the domestic food consumption. Today, import stands for 50 percent of the food consumption²⁾. A long-term Swedish food strategy was presented in 2017 by the Swedish government, aiming for increased production with sustainability and higher self-sufficiency as core elements³⁾.

Over the last 10 years, the average grain export was approximately 30 percent of the production. In the same way as for food in general, Sweden depend on import of agri-inputs such as fuels, fertilizers and protein for feed. All fossil fuel and some 85 to 90 percent of bio-fuels used in Sweden is imported⁴⁾.

The transport sector and working machines account for close to 40 percent of Sweden's greenhouse gas emissions. With the goal to be the world's first fossil-free welfare nation by 2045, the Swedish government has launched various incentives to reduce the fossil fuel use and to support renewable energy during the years. The main incentive is based on CO₂ reduction obligations, which means that fuel suppliers must reduce greenhouse gas emissions from petrol and diesel by blending with biofuels. The Swedish government intends to make decisions on gradually increasing CO₂ quota levels in the reduction obligation until 2030. The ambition is a linear path with 2030 indicative levels of a sustainable bio-fuel mix aiming towards 28 percent CO₂ reduction for petrol and 66 percent for diesel⁵⁾. The current biofuel use is around 20 percent of the total fuel use and the indicative target for 2030 is 50 percent.

²⁾ Jordbruksverket, SCB

³⁾ <https://www.regeringen.se/regeringens-politik/en-livsmedelsstrategi-for-jobb-och-hallbar-tillvaxt-i-hela-landet/>

⁴⁾ https://www.ieabioenergy.com/wp-content/uploads/2018/10/CountryReport2018_Sweden_final.pdf

⁵⁾ <https://www.regeringen.se/pressmeddelanden/2020/09/branslebytet-forstarks-med-hogre-inblandning-av-fornybart-i-drivmedel/>

Bio refinery for increased circularity

Lantmännen Agroetanol is the Nordic region's largest bio-refinery located in Norrköping, Sweden. Based on arable crops and residue products from the food industry, the bio-refinery produces three main products: ethanol, protein and carbonic acid.

The grain is grown on our members' fields nearby the Norrköping plant. About 10 percent of the Swedish grain production is used in our bio-refinery. The bio-refinery also makes use of wheat and other grains where quality is not meeting food production standards. The amount of quality-affected grains varies from year to year depending on weather conditions. To an increasing share, we use residuals from bakeries and other starch-rich food waste, both from our own as well as from other businesses. In our own operations, we work continuously to minimize waste and make efficient use of resources, regardless fresh bread production is challenging as durability is short. The recycling of bread waste to ethanol and protein-rich animal feed is a way of feeding back into the system and creating business opportunity for us and for the sector.

The carbon dioxide formed during the manufacturing process is used in the Norlic CO₂ plant, situated next to the bio-refinery, where it is processed to carbonic acid for the food industry and other industrial applications.

The bio-refinery operates on energy for a nearby district heating facility, producing energy on forest residuals and sorted municipality waste. The share of renewables was 95 percent 2020. Excess energy and heat from the bio-refinery are fed back to the district heating facility, heating the city of Norrköping.

Summarizing the bio-refinery production, we create value and contribute to profitability from renewable materials and reuse residues and waste products from the food industry. We offer domestic produced ethanol, protein for feed and carbonic acid - products where Sweden has an import dependency - from grain, a renewable resource that Sweden has a surplus of and residuals. The bio-refinery distracts sugar and starch from the wheat, making renewable bio-fuel for heavy duty transports, as well as for sustainable chemicals used in e.g. hand disinfections.

- The bio-refinery distracts the protein and fibre, for animal feed and ingredient in human food (a new refining process will start in 2021, see Manufacturing of eco-efficient and circular economy adapted products, production technologies and processes)
- The bio-refinery captures the carbon dioxide making carbonic acid used in soft drinks, greenhouses and industrial appliances.

The main product bioethanol has a high climate performance, in fact the Agro Cleanpower ED95 is one of the world's most sustainable fuels with a 90 percent CO₂ reduction compared to fossil diesel. The overall environmental impact is determined by the whole process, where the raw material, the extraction of carbon dioxide to carbonic acid and general energy use in the facility are contributing factors.

Bio-heat production

Lantmännen Agrovärme's mission is to provide customers with environmentally sound heating and create value through efficient operation and expansion. We produce and supply district heating and ready heat to 20 locations in central and southern Sweden with annual effect of 130 GWh. We aim to use 100 percent renewable, local fuels in our district heating production. Today the fuel mix consists of 95 percent Swedish renewable biofuels, making use of forest and agriculture residues such as wood chip, energy forest, straw and wood pellet.

Approximately half of all homes and premises in Sweden are heated by district heating. Large-scale incineration is more efficient than single use in residential areas and the emissions to air is significantly lower.

TARGET 7-2



INCREASE GLOBAL PERCENTAGE OF RENEWABLE ENERGY

TARGET 7-A



PROMOTE ACCESS TO RESEARCH, TECHNOLOGY AND INVESTMENTS IN CLEAN ENERGY



Manufacturing of eco-efficient and circular economy adapted products, production technologies and processes

The financing or refinancing of the establishment, acquisition, expansion, upgrades/modifications of facilities, the production technologies and the processes, including the cost of sourcing sustainable raw materials and the costs related to the manufacturing of eco-efficient and circular economy adapted products, as well as related Research and Development projects.

Grain based food and animal feed products

- organic products certified in compliance with the EU and national regulation, such as KRAV labelled products;
- grain based food and feed products with at least a 30 percent lower CO₂ impact than equivalent products, e.g. low-carbon grain; or,

- processing renewable- and/or sustainably sourced materials, by-products and/or residuals to produce products, material and packaging with enhanced value for sustainability, such as lower life cycle emissions, compostable and/or nutrition to depleted soils.

Costs of sourcing sustainable raw material have a look-back period of maximum one year. Manufacturing costs are an annual cost, with no potential to aggregation from year to year.



Product and process development for resource and climate efficiency

Lantmännen Agriculture offers a wide range of products for crop and livestock production, agricultural machinery and is also a major player in the grain market.

Lantmännen Food Sector develops, processes and markets flour, breakfast, pasta, frozen and fresh bread, crispbread and ready-to-eat meals products. The base is the Nordic countries, with presence in about 20 countries. The Food Sector consists of Lantmännen Cereal and Lantmännen Unibake, with approximately 45 production facilities and strong brands in the respective markets.

Lantmännen Energy, with the bio-refinery in Norrköping and plants in Kimstad and Lidköping, develops the plants for processing renewable materials for enhanced value and profitability towards a circular business model.

Lantmännen drives sustainable business development and offer innovative products with added values for health, climate and the environment.

Lantmännen is an important player in the organic value chain and in production of organic feed and food products. The strategy is to develop and drive the organic market in all parts of the value chain, aiming for increased organic grain trade. Organic feed stands for a large part of our organic business. It is produced and sold by Lantmännen Feed with production in Sweden and Finland, offering feed supplements for all farm animals. Lantmännen's climate footprint for the cattle feed range has been reduced by up to 30 percent, (base year 2015), due to innovative recipes with amino acids replacing imported protein.

Soy is a raw material with risks from a sustainability perspective, including land degradation, biodiversity and deforestation. Lantmännen works to ensure responsibly produced soy for import as a feed raw material. In line with our target, 100 percent of the soy is responsibly produced as defined by the Swedish Soy Dialogue.⁶⁾

Through our cultivation program Climate & Nature, we have achieved a up to 30 percent lower climate impact for wheat and rye flour, and oat flakes. The program is continuously updated to further decrease climate impact thus aiming to include fossil-free produced mineral fertilizer 2023-24.

Lantmännen is investing in development of the bio-refinery in Norrköping to enable production of high-performance wheat gluten protein to be used as food ingredient and high value feed component. Lantmännen is also investing both in research on the oat genome and in product development such as heat treatment of oats for products with increased protein content.

Through pyrolysis process in Lantmännen's district heating plants, we produce bio-char out of Swedish wood chips. Bio-char improves the soil quality, for example it makes micro-organisms thrive which contributes positively to the soil structure. It is also a way to sequestrate carbon.

⁶⁾ Where soy is used as the protein, the soy is defined by the Swedish Soy Dialogue. (Certification according to a credible system such as RTRS, ProTerra, organic soy according to IFOAM approved certification, Donau Soya/Europe Soya or verification through special methodology)



Sustainable land use and environmental management

The financing or refinancing of activities, research and innovation, the establishment, acquisition, expansion, upgrades/modifications of facilities, technologies and production to protect, restore and enhance crop yields, agronomic- and/or health promoting properties, ecosystems and biodiversity (aquatic as well as on land), including adaptation measures for climate change.

Products and services for farming of the future

Lantmännen is dependent on well-functioning eco systems. At the same time, we have a direct impact on the environment. The major part of our environmental impact and basis for our value creation is at the cultivation stage, on our members' fields. Our target is to create conditions for sustainable primary production, which includes the first part of the cultivation stage - what happens on the farm – with halved climate emissions every decade to reach climate neutrality by 2050. At the same time, biodiversity will be promoted, and production increased to ensure food security for a growing population.

As a business partner to farmers, we develop methods and tools for sustainable cultivation, where climate, water, biodiversity, land use and resource efficiency are important elements. We actively contribute with expertise and resources to the development of sustainable production inputs and cultivation techniques. We provide products and advice to farmers on the effective use of crop protection, plant nutrients and other inputs and how to minimize risks to users and the environment.

Research and innovation are key in the development. Every year, we invest 250-300 million SEK in own and external research and innovation projects, from shorter product and process development to long-term projects of benefit to the entire Lantmännen Group. Investments are made within the grain value chain – from plant breeding to consumption. To ensure that that we reap the maximum benefit from our investments we actively work to commercialize results from the research projects.

Managing land resources sustainably holds significant potential for climate change mitigation, including minimizing air, water and climate pollution as well as promoting biodiversity and ecosystem services. A whole series of initiatives, from all parts of the value chain, will be required if agriculture is to become more productive and even more sustainable. Lantmännen has directed the research and innovation projects towards Farming of the Future, for development of methods, products and processes to meet challenges of the future and uphold our competitiveness. Focus is on Sweden as our base market with the Baltic Sea area as our expanded domestic market.

Lantmännen has successful plant breeding facilities, where we are developing new varieties of our agricultural crops, such as wheat, barley and oats and forage, and producing seed that is well suited to the growing conditions on our customer's farms. An important challenge for the plant breeding is to enhance the crops resistance to changed growing conditions, pests and diseases that might come with climate change.

We are developing tools for data collection and precision farming, and on our own test farms we evaluate methods for sustainable farming, with a focus on crop rotation, precision farming, biological plant protection, plant nutrients och carbon sequestration. Our test farms are a part of innovation and business development, aiming to offer sustainable products to the market. Lantmännen today produce biological plant protection and non-chemically treated seed for organic and conventional cultivation in our plants. The technique of thermal treatment is expanded to new plants and countries.



Pollution prevention and control

The financing or refinancing of management or establishment, expansion or upgrades/modifications of facilities, solutions and technologies, contributing to the reduction and reuse of waste, pollution prevention and the removal of harmful substances.

Waste management

Facilities, systems and technologies contributing to a resource efficient management of waste, including collection, treatment and processing of all types of waste, for the purpose to bring back valuable raw material or refined products to the market.

Pollution prevention

Projects, process and techniques supporting pollution prevention, such as discharges of pollutants into water, land and emissions to air.

Removal of harmful substances

- Soil remediation

Resource efficiency and pollution prevention

Lantmännen uses resources efficiently and works to minimize impact and emissions to the environment and waste generation in our operations. At various stages of our production, waste and residual products arise. We are working on identifying and limiting waste, and increasing recycling of waste for other uses. We adapt and optimize our solutions for packaging, logistics and transports to environmental standards in close consultation with our partners.

Waste is a resource to utilize. In our bio-refinery, we have found a way to process waste bread and starch-rich food waste into ethanol, animal feed and carbonic acid. It creates great benefits for the climate and contributes to Lantmännen's profitability. We are developing our activities for recycling of waste products and have now two plants, in Denmark and Finland, collecting and processing waste from the food industry. From the collection plants, the waste is transported to Lantmännen Agroetanol's plant in Norrköping, Sweden, for recycling. We will develop and increase the collection of food waste for recycling.

Lantmännen Real Estate business area provides Lantmännen with appropriate properties and premises, primarily in Sweden. When there is a business opportunity within land and property development, we analyze risks associated with previous use and contaminated land and impose treatment such as removal of harmful substances and soil remediation.



Green and energy efficient buildings

The financing or refinancing of the construction, acquisition, expansion, upgrade/modification and climate adaptation of buildings that meet the criteria defined below.

New buildings

The construction of new buildings designed to achieve a net primary energy demand that is at least 20 percent lower than the level required by the relevant building regulation or 20 percent lower than the level required to meet NZEB, once NZEB⁷⁾ requirements have been established.

New buildings might carry environmental certifications such as Miljöbyggnad “Silver” or Green Buildings.

In new construction LCA effects are considered, as well as climate risks and effect.

Existing buildings

Buildings meeting one of the following criteria:

- An active Energy Performance Certificate (EPC) with energy class A or B,
- Miljöbyggnad Silver or better,
- the Finnish RTS environmental classification, 2 stars or better, or
- Green Buildings certification

All buildings require an energy use at least 10 percent lower than required by the relevant national building regulation.

Where the building is a large non-residential building⁸⁾, it is or is planned to efficiently operate through energy monitoring and assessment.

Major renovations

Renovations of existing buildings that lead to a reduction in the life-cycle emissions by at least 30 percent compared to the pre-investment situation.

Individual energy efficiency measures

Direct costs (e.g. material, installation and labour costs) for installing energy efficient technologies or other energy saving measures during the construction, maintenance and service phase of a building. These measures may include energy management systems, AI and data solutions, heat exchangers, heat pumps or costs for enabling renewable energy sources. This, provided that the measure is aimed at significantly improving the energy performance with more than 30 percent, or improving life-cycle emissions of the building, construction site or in the respective area.

⁷⁾ Nearly Zero Energy-Buildings (NZEB) are buildings with a very high energy performance, as default EU Member State (mandatory for all new buildings from 2021).

⁸⁾ With an effective rated output for heating systems, systems for combined space heating and ventilation, air-conditioning systems or systems for combined air-conditioning and ventilation of over 290 kW.

Green and energy efficient buildings

The construction and real estate sector account for almost 20 percent of Sweden's total greenhouse gas (GHG) emissions (National Board of Housing, Building and Planning, 2017), due to the sector's consumption of energy and material. Investing in green and energy efficient buildings thus play a key role in the clean energy transition, in order to reconcile national and international climate target.

Lantmännen Fastigheter is one of Sweden's largest real estate companies and manages about 150 properties in 80 locations, with a surface area of about 1,200,000 m². The property portfolio is concentrated on locations of Lantmännen's own operations in Sweden and Finland.

Lantmännen's real estate is managed in a long-term perspective, with ambition of a lifecycle approach. Our roadmap includes a number of activities to lower energy use and to phase out fossil energy⁹⁾. Climate change adaptations to secure value long term is part of the continuous improvement and in development of new properties.

⁹⁾ A guideline is currently under development and will be ready ultimo April 2021.



Green Project evaluation and selection

ESG integrated in all decision-making processes

Lantmännen's overall management of environmental, social, corporate governance and financial risks is a core component of our decision-making processes. Our risk management is stated in policies, guidelines and instructions. The annual Enterprise Risk Management process covers a broad scope of sustainability and responsibility risks. The process for evaluation and selection of Green Projects will follow the same standard decision-making process.

Green Project evaluation and selection process

Green Projects shall comply with the eligibility criteria defined under the Green Project categories. This is ensured in our process to evaluate, select and allocate Green Bond proceeds to eligible Green Projects, comprising the following steps:

- i. Sustainability experts and representatives within Lantmännen evaluate potential Green Projects, their compliance with the Green Project Categories, and their environmental benefits.

- ii. A list of the potential Green Projects is presented to Lantmännen's Green Bond Committee (GBC) integrated in Lantmännen's Investment Committee. The GBC is solely responsible for the decision to acknowledge the project as green, in line with the Green Project criteria. Green Projects will be marked as green in a dedicated "Green Register". A decision to allocate net proceeds will require a consensus decision by the GBC. The decisions made by the GBC is documented and filed.

Lantmännen Investment Committee

The Lantmännen Investment Committee constitutes of 7 members including the Director Sustainable Development, i.e. all competences needed to assess Green Projects as well as any project undertaken by Lantmännen.

The Lantmännen Investment Committee convenes every 6 months or when otherwise considered necessary. For the avoidance of doubt, the GBC holds the right to exclude any Green Project already funded by Green Bond net proceeds. If a Green Project is sold, or for other reasons loses its eligibility, funds will then follow the procedure under Management of Proceeds until reallocated to other eligible Green Projects.

Management of proceeds

Tracking of Green Bond net proceeds

Lantmännen will use a Green Register to track that an amount equal to the Green Bond net proceeds is allocated to Green Projects. The purpose of the Green Register is to ensure that Green Bond net proceeds only support the financing of Green Projects or to repay Green Bonds. The management of proceeds will be reviewed by an independent verifier appointed by Lantmännen.

Temporary holdings

Unallocated Green Bond net proceeds may temporarily be placed in the liquidity reserve and managed accordingly by Lantmännen.

Exclusions

Temporary holdings will not be placed in entities with a business plan focused on fossil energy generation, nuclear energy generation, research and/or development within weapons and defence, environmentally negative resource extraction, gambling or tobacco.

Reporting and transparency

To enable the monitoring of performance and provide insight into prioritized areas, Lantmännen will annually and until maturity of the Green Bonds issued, provide investors with a report (“Green Bond Report”) that describes the allocation of net proceeds and the environmental impact of the Green Projects. The report will be made available on our website together with this Framework.

Allocation reporting

Allocation reporting will include the following information:

- i. A summary of Green Bond developments
- ii. The outstanding amount of Green Bonds issued
- iii. The balance of the Green Projects in the Green Register (including any temporary investments and Green Bond repayments) and the available headroom in the value of the Green Projects (if any)
- iv. The total proportion of Green Bond net proceeds used to finance new Green Projects (defined as Green Projects financed after the bond issuance) and the proportion of Green Bond net proceeds used to refinance Green Projects (defined as Green Projects financed before the bond issuance)
- v. The total aggregated proportion of Green Bond net proceeds used per Green Project Category

In the event of Green Bonds in the form of Commercial Papers are outstanding, Lantmännen will report every four-month period, the value of Green Projects together with the total amount of outstanding Green Bonds on our website: www.lantmannen.com.

Impact reporting

The impact reporting aims to disclose the environmental impact of the Green Projects financed under this Framework, based on Lantmännen's financing share of each project.

As Lantmännen can finance a large number of smaller Green Projects in the same Project Category, impact reporting will, to some extent, be aggregated.

The impact assessment is provided with the reservation that not all related data can be covered, and of confidentiality reasons be disclosed. The impact reporting will therefore be on a best effort basis. Where the production site is under construction but not yet operational and/or if a product with enhanced sustainability performance is under development but not yet offered to the market, Lantmännen will provide best estimates of future performance levels.

The impact reporting will, if applicable, be based on the Key Performance Indicators (KPIs) presented in the table on the next page.



Green Project categories

Key Performance Indicators (KPIs)

Renewable energy



- Annual renewable energy generation (kWh and m³)
- GHG emissions reduced (tonnes of CO₂e emissions)
- Annual GHG emissions avoided (tonnes of CO₂e emissions)

Manufacturing of eco-efficient and circular economy adapted products, production technologies and processes



- Type of certification
- Number or other quantitative measure of products produced
- Any deliverables possible to quantify, as applicable

Sustainable land use and environmental management



- As applicable, number or other quantitative measures

Pollution prevention and control



- Type of waste that is collected, prevented, or recycled before and after the project
- Any improvements possible to quantify, of avoided emissions and discharges of pollutants into water, land and air
- Soil remediation, area of remediated land

Green and energy efficient buildings



New and existing buildings

- Building certification and/or energy performance class of the EPC
- Annual GHG emissions reduced (tonnes of CO₂e emissions)

Major renovations

- Annual energy reduced compared to the pre-investment situation (MWh)
- Annual GHG emissions reduced (tonnes of CO₂e emissions)

Individual energy efficiency measures

- Annual energy reduced (MWh)
- Annual GHG emissions reduced (tonnes of CO₂e emissions)

External review

Second party opinion

CICERO Shades of Green has provided a second opinion to this Framework verifying its credibility, impact and alignment with ICMA Green Bond Principles 2018.

Assurance

An independent verifier appointed by Lantmännen will provide, on an annual basis, a statement that an amount equal to the Green Bond net proceeds has been allocated to Green Projects or to temporary holdings.

Publicly available documents

The Green Bond Framework and the second party opinion will be publicly available on Lantmännen's website together with the annual statement from the independent verifier and the annual Green Bond Report, once those have been published.



**Together we take
responsibility
from field to fork**