

Environmental Statement

Nymölla Mill 2022



Introduction

In many ways, 2022 was a special year for Nymölla Mill. It has been 60 years since the pulp mill was started, and 50 years since PM1, the paper mill's first paper machine, went into operation. A new chapter in the history of Nymölla Mill was also written when Stora Enso sold the mill to the US paper manufacturer Sylvamo. We are now called Sylvamo Sweden AB, and we are part of Sylvamo, the international paper group.

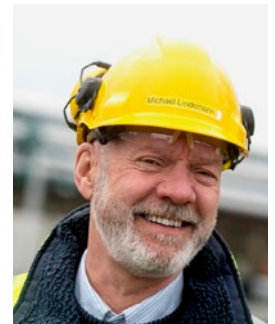
Sustainability initiatives in the forestry industry are characterized by sustainable development from the perspectives of environmental consideration, social responsibility and economic growth. Environmental consideration throughout the value chain, in the forest as well as in production. Social responsibility both as an employer and as a stakeholder in society, and economic growth through profitable business that contributes to the Swedish economy and welfare.

Looking back over the history of Nymölla Mill, we see that environmental consideration has been a key part of the mill's sustainability agenda. Despite the dramatic increases to production, today's emissions are far less compared with those of the 1960s and 1970s. Major environmental improvements have been made such as the development of chlorine-free bleaching, the introduction of biological treatment of process water, and the transition to renewable fuels and thus a drastic reduction in the use of fossil fuels. Over 90 percent of the fuel used by the mill consists of biofuels. Reducing our environmental footprint is a continuous process for us.

Improvements were made to our plant in 2022 as well. A new digester was put into operation, and the screening facility and oxygen delignification stage of the bleach plant were remodeled. The investments were made to ensure the long-term competitiveness of Nymölla Mill as a fine paper producer.

In this environmental statement, we describe our environmental efforts, the monitoring of our environmental targets and our new targets. Environmental conservation forms part of our daily activities and we constantly strive to improve in this area.

We hope you will find our Environmental Statement interesting. Any questions you may have are always welcome.



Michael Lindemann
CEO

Nymölla Mill in brief

Nymölla Mill is a modern pulp and fine paper mill that produces uncoated fine papers: office paper, digital paper, and paper for printing. Approximately 90% of fine-paper production is exported, mainly to countries in Europe, but also to other parts of the world.

At the end of 2022, the mill had approximately 530 employees and annual sales amounted to nearly SEK 5 billion.

Annual production capacity is 340,000 metric tons of pulp and 475,000 metric tons of paper.

Nymölla Mill is located on the coast, in Bromölla Municipality, in south Sweden, about 20 km east of Kristianstad. The Skräbe River, with its excellent fishing waters, flows past the plant site. The Skräbe River is the source of the mill's process water.

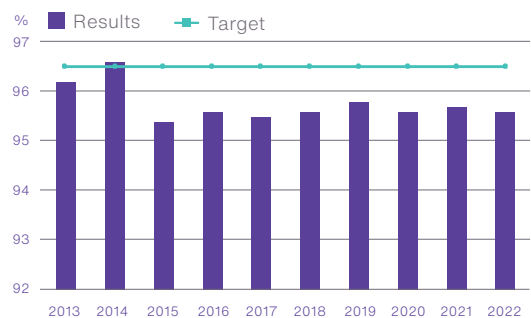
Social responsibility

Nymölla Mill is Bromölla Municipality's largest private employer. We employ a large number of contractors in the region and cooperate with the occupational health service, schools, associations and other organizations. We have a representative on the Board of Directors of the Enterprise Agency in Bromölla.

Nymölla Mill wants to support active, healthy leisure activities for children and young people. Accordingly, we support various non-profit organizations with youth activities.

Bromölla Municipality has created a number of hiking trails, of which two partially run through the grounds of Nymölla Mill. We have set land aside for this purpose and helped to establish these trails.

Healthy presence, percent/year

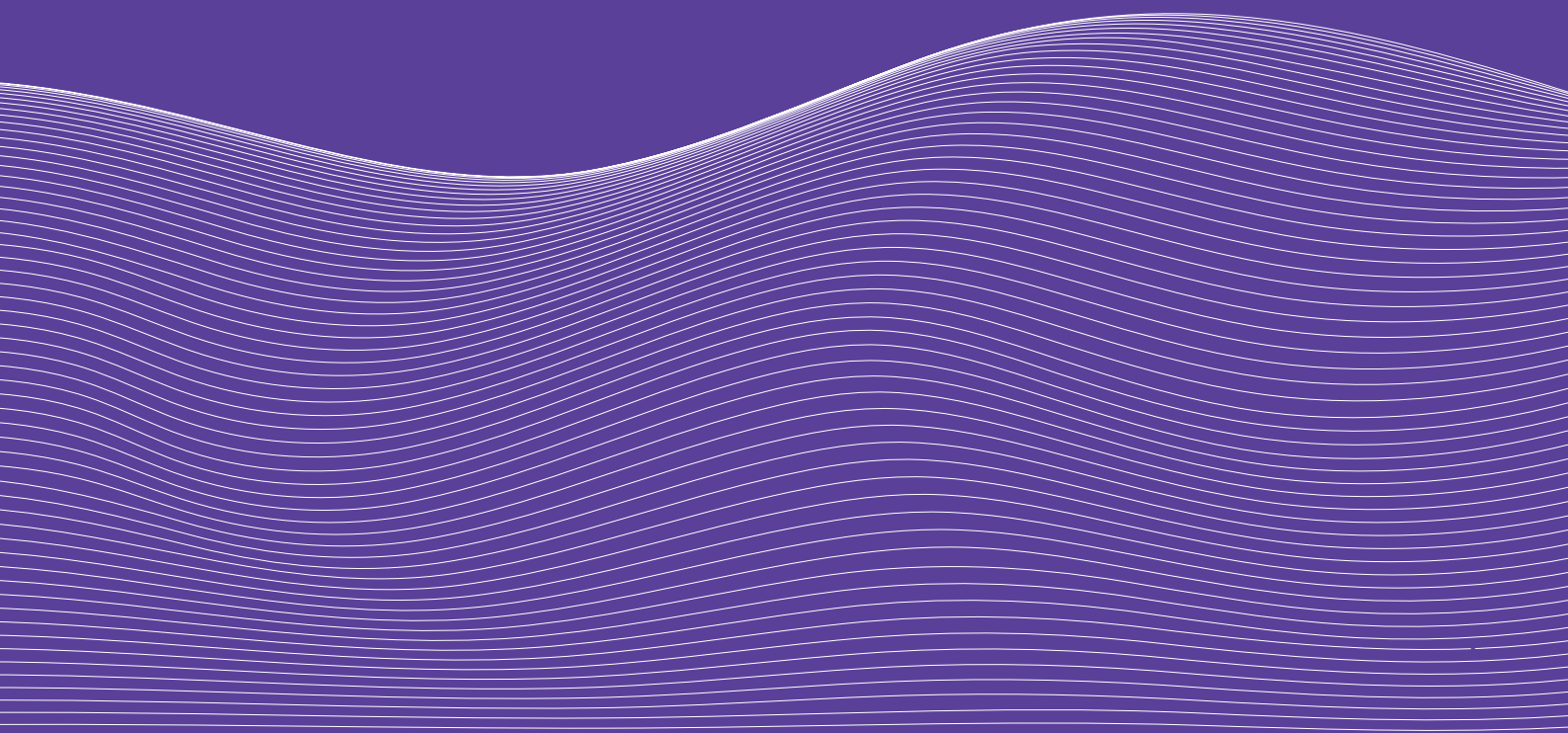


We work actively to provide a safe and secure workplace, and our occupational health and safety management system is certified in accordance with ISO 45001.

Contents

Introduction	2
Our products	4
The environmental year 2022	5
Environmental management system – a tool for continuous improvement	6
Our environmental objectives and action plans	7
Our operations	9
Impact on the environment – 2022 results and trends	10
Examination report	18
Next environmental statement	18
How to order environmental statements	18
Information	18
Contact persons at Nymölla Mill	18
Glossary	19
This is Sylvamo	20

Cover image: The entrance to Nymölla Mill is now decorated with new flags.





Our products

Our paper pulp is the basis for the high quality of our paper. By mixing short-fiber hardwood pulp with long-fiber softwood pulp, we achieve the desired characteristics for different qualities of paper.

Quality paper at home and at work

Paper from Nymölla Mill is used in printers, copiers and printing presses almost worldwide. Our main product category is office paper. Multicopy, which is perhaps our best-known product, comes in two varieties.

Multicopy can be used in all types of office machines, both color and black and white, and for printing.

Multicopy Zero is a carbon-neutral paper. This means that Nymölla Mill has offset the carbon emissions of all fossil greenhouse gases originating from the product during its lifetime.

The climate compensation pertains to support for two projects: Community Reforestation in Ghana and Darkwoods Forest Conservation, Canada.

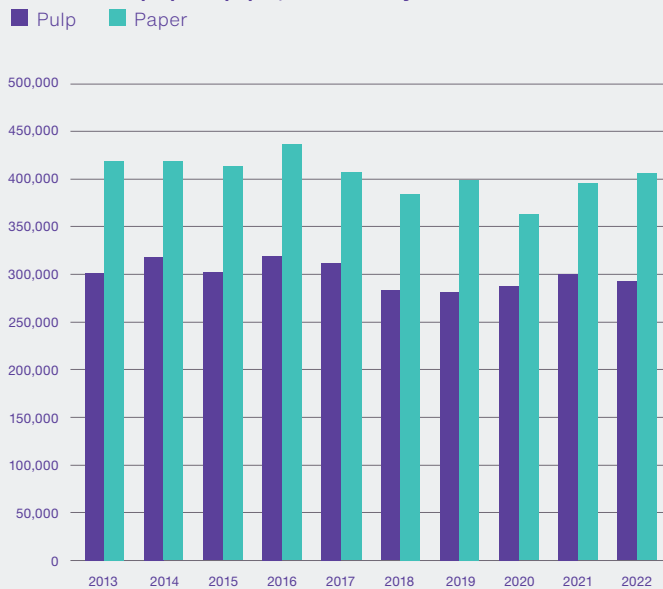
Other office papers are Ocean, Superior, ZOOM, Clio and Multilaser. BergaClassic Preprint is a suitable product for various types of preprinting such as stationery and invoices. SuperiorJet and BergaJet are papers specially designed for inkjet printing in reels and sheets. LumiSet is an uncoated offset paper for various printing products including books, brochures and reports. LumiSet S is a paper used, for example, in schoolbooks and notebooks.

For further information on our products, go to www.sylvamo.com/us/en/our-brands.

The environmental year 2022

- Production of paper pulp amounted to approximately 294,000 metric tons. Paper production totaled about 407,000 metric tons.
- All conditions established by the environmental authorities were maintained, apart from the emissions of dust from the SMV boiler, which exceeded the guideline value in conjunction with one of three measurements.
- Emissions to air decreased owing to reductions in pulp production, and emissions to water – except for nitrogen – increased compared with the preceding year, due to disruptions in the treatment plants.
- A meeting with local residents was held in December. Normally, this type of meeting is held annually to provide information on the company's environmental efforts and to discuss any disruptions from the mill.

Production of pulp and paper, metric tons/year



Environmental labels



Nordic Swan

A Nordic environmental label that takes a holistic view and includes several parameters, see www.svanen.se



EU Ecolabel

A shared EU ecolabel that takes a holistic view and, in terms of character, is rather similar to the Nordic Swan, see www.svanen.se



TCF

Totally Chlorine Free is pulp bleached without using chlorine-based chemicals.



ECF

Elementary Chlorine Free is pulp bleached without using chlorine gas.



FSC®

Forest Stewardship Council is the certification of ecologically, economically and socially responsible forestry.



PEFC

Programme for the Endorsement of Forest Certification schemes is an international system for the certification of primarily family-owned forestry.



Carbon Neutral®

An environmental label that certifies that all emissions of fossil greenhouse gases that the product gives rise to throughout its lifecycle have been offset with carbon credits, see <https://www.climateimpact.com/>

Environmental management system – a tool for continuous improvement

Nymölla Mill's environmental management system fulfills the requirements stated in the EU's environmental management and audit regulations (EMAS) and the ISO 14001 international standard. The company has held ISO 14001 certification since 1997 and has been EMAS-registered since 1998.

EMAS is an abbreviation of Eco-Management and Audit Scheme.

An environmental management system includes such elements as an environmental policy, environmental goals with action program, instructions, environmental training for all employees, documentation and reporting of environmental work. In addition to establishing the requirements for the company's own operations, the environmental management system also gives the company a constructive means to influence suppliers, transport companies and contractors to ensure that they address environmental issues in their own operations.

Sylvamo – Environmental, Health, Safety and Sustainability Policy

Our Vision is to be the world's paper company: the employer, supplier and investment of choice. We are committed to transforming renewable resources into papers that people depend on for education, communication and entertainment.

We are also committed to the long-term health of our entire ecosystem, including the forests we love, the communities where we live and those who rely on our paper.

We will remain a leader in environmental, health and safety practices. The following principles guide our operations worldwide:

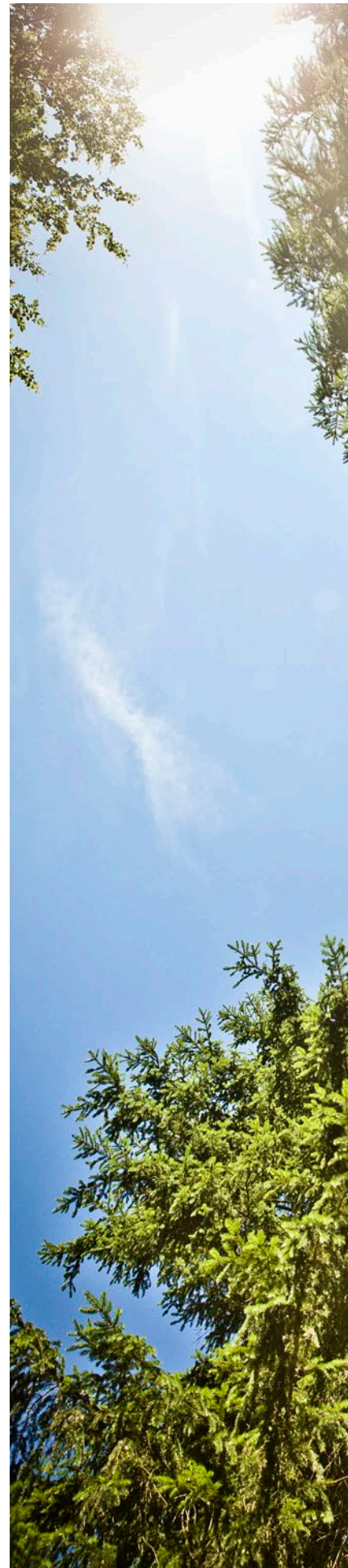
- Ensure the health and safety of all employees, contractors and visitors, with a goal of no injuries.
- Assess environmental, health and safety risks before beginning work.
- Protect our employees, contractors, customers, suppliers and communities from unacceptable risks.
- Comply with all applicable environmental, health and safety laws, regulations and company policies.
- Educate, train and engage our colleagues to work safely and in an environmentally responsible manner.
- Improve our environmental impact and our stewardship of natural resources:
 - Source fiber from sustainably managed forests
 - Reduce greenhouse emissions
 - Reduce water usage and improve our water stewardship
 - Reduce waste, reuse materials when feasible, and recycle when possible

Measure all key metrics and report transparently our progress toward key commitments, including our 2030 Goals.



Jean-Michel Ribieras

Chairman and Chief Executive Officer





Our environmental objectives and action plans

The Group has overriding environmental objectives. These are presented at www.sylvamo.com.

The mill's choice of environmental targets is determined by the Group's sustainability policy and environmental targets, and the material environmental aspects described in the sections below. The company has decided to have combined environmental and energy targets.

Objectives and outcomes 2022

- Energy-saving measures (electricity+heat) corresponding to a minimum of 10,000 MWh shall be implemented.

Outcome: The outcome was 2,929 MWh. The reason that the objective was not reached was that resources for investigation, planning, and implementation were prioritized for other projects.

- The total points for Nordic Swan and EU Ecolabel should amount to a maximum of 3.1 points and 2.7 points, respectively. These environmental labels stipulate requirements regarding chemical oxygen demand (COD) and phosphorus to water, and requirements regarding emissions of nitrogen oxides (NO_x) and sulfur dioxide (SO₂) to air.

Outcome: The total points for Nordic Swan and EU Ecolabel amounted to 3.4 points and 3.0 points, respectively. The maximum amount of total points permissible, 4.0 points, was met in accordance with the eco-labeling criteria but the objective was not achieved due mainly to increased emissions of COD substances and phosphorus.

- The amount of ash (fly ash and bottom ash) that is reused will amount to not less than 10,000 metric tons per year.

Outcome: The amount of ash that was reused amounted to 11,000 metric tons in 2022. The ash was used as a revitalizing agent in forest land. The objective was met.

Current objectives

Long-term objectives

- Contribute to the Group's climate objective of an absolute reduction of 35% of greenhouse gas emissions by 2030 compared with 2019.

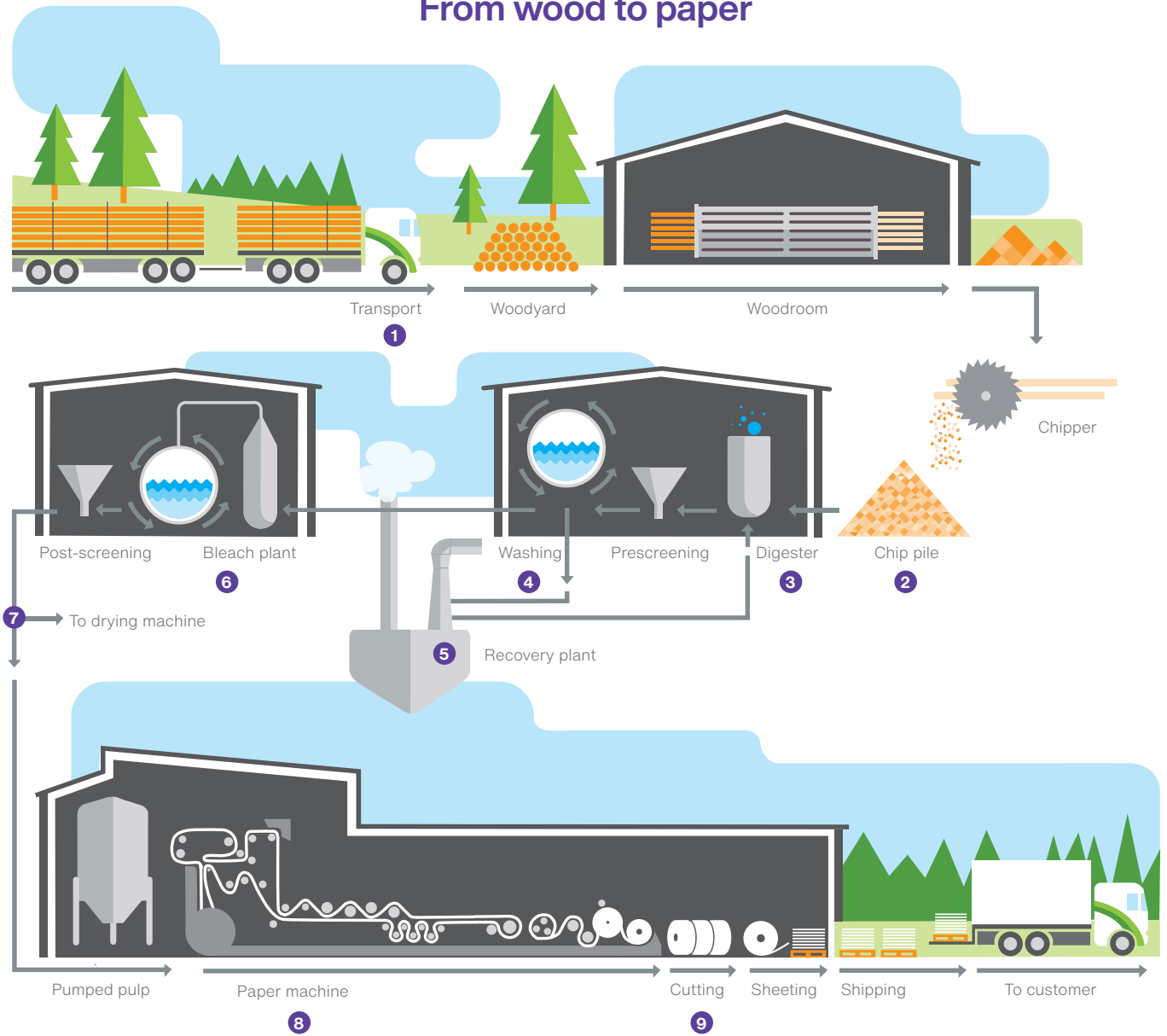
*The contribution pertains to scope 1 = Direct fossil-based CO₂e emissions from production and Scope 2 = Indirect CO₂e emissions from purchased electricity and heat.

- Process water consumption shall have a declining trend (m³/ton end product). Base year 2017.

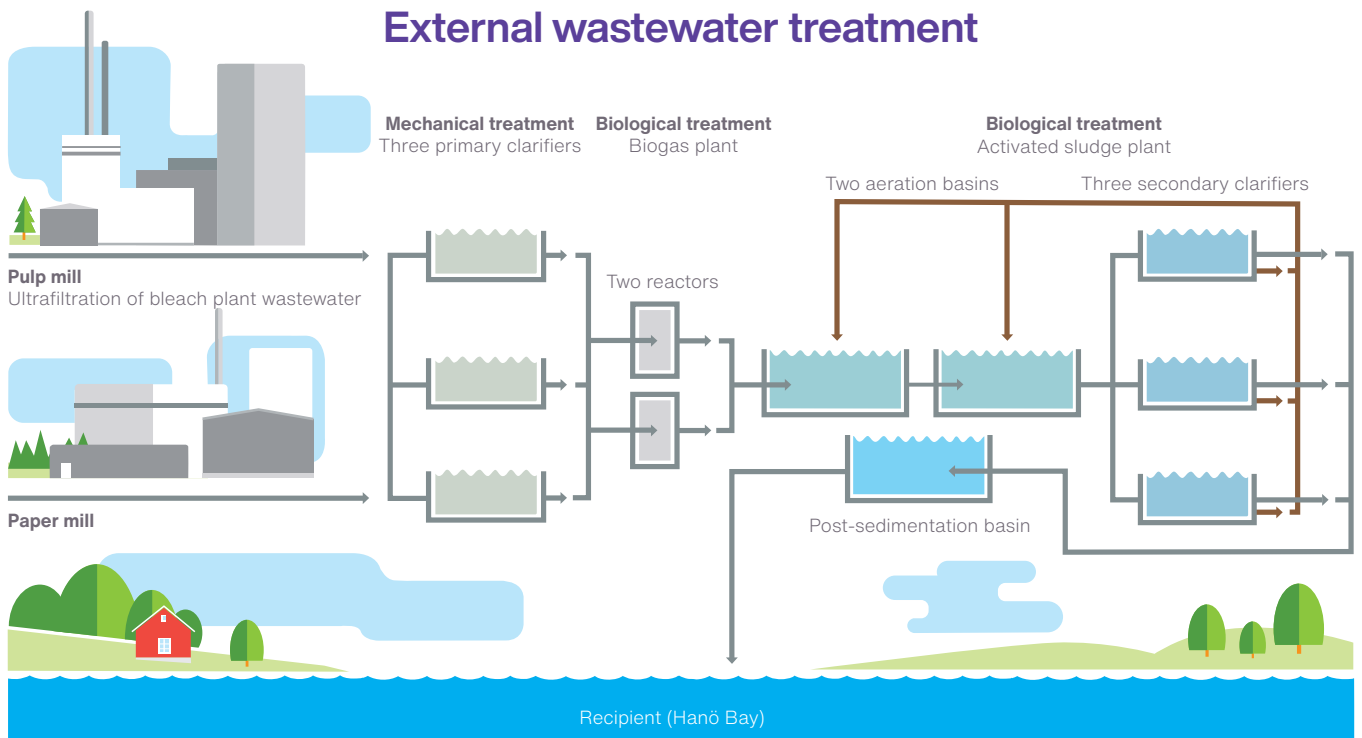
Short-term objectives: 2023–2024

- Energy-saving measures (electricity+heat) corresponding to a minimum of 8,200 MWh shall be implemented. To be completed 2024.
- Emissions of COD to the recipient are not to exceed 33 kg per ton of pulp as the average annual value for 2024.
- The amount of ash (fly ash and bottom ash) that is reused will amount to not less than 13,000 metric tons in 2023. The challenge is to identify new areas of application and stakeholders so as to enable the reuse of ash.

From wood to paper



External wastewater treatment



Our operations

The production process

Nymölla Mill develops and produces paper pulp and uncoated fine papers. The maximum permitted annual production is 350,000 metric tons of paper pulp and 560,000 metric tons of fine paper. The illustration shows the production process from wood to finished fine paper.

1. The wood raw material consists of roundwood (mostly spruce, pine and beech) and sawmill chips. In the woodroom, the wood is debarked and chipped. The bark is collected, dewatered and burned in the boilerhouse.
2. All the softwood chips are stored for about six weeks in chip piles. During storage, the content of pitch and other extractive matter in the chips is reduced through the activity of microorganisms. After storage, the chips are transported to the digester.
3. During the cooking of the chips, the cellulose fibers are separated from the lignin and other wood substances, which are dissolved in the digester liquor. This consists of magnesium bisulfite, which is why the pulp is called magnefite pulp. Cooking is done in batches, each of which cooks for approximately eight hours.
4. After the chips have cooked to paper pulp, the pulp is screened and washed. The digester liquid, with its content of dissolved wood substances and digester chemicals, is separated from the pulp in a form known as weak liquor.
5. The recovery process for digester chemicals includes the evaporation of the weak liquor to thick liquor, combustion of the thick liquor in two recovery boilers and the preparation of new cooking liquor from the recovered chemicals. The recovery rate for digester chemicals is at least 95%. In addition to the recovery boilers, there is a solid fuel boiler. In this, bark, twigs, screening rejects, fuel chips, ultrafiltration concentrate and sludge from the wastewater treatment plant, as well as LPG if necessary, are burned. The steam from the boilers is transported to two back-pressure turbines that produce approximately 30 MW of electrical power.
6. After screening and washing, the pulp is bleached. Oxygen, sodium hydroxide and hydrogen peroxide are used as bleaching chemicals. EDTA is added as a chelate. All the pulp produced at Nymölla is thus totally chlorine-free (TCF) pulp, since no chlorine-based chemicals are used for bleaching. The bleaching process takes from 8 to 12 hours. After bleaching, the pulp is screened one last time.
7. Following bleaching and screening, most of the pulp is then pumped to the paper mill for production of fine papers. A small portion of the pulp is dried and stored for subsequent use.
8. Fine papers are produced on two paper machines (PM1 and PM2). Softwood and hardwood pulp from the pulp plant are used as the fiber raw material, together with a certain amount of purchased pulp from other pulp mills. The paper machines produce uncoated fine paper in grammages ranging from 70–160 g/m².
9. In the conversion unit, the paper is trimmed into rolls or sheets of various sizes, and then packaged. The packaged products are then loaded for transport to our customers.

Treatment plants

Wastewater

Wastewater is treated mechanically in primary clarifiers and biologically in an activated sludge plant. As of spring 2021, a large amount of the wastewater will first be biologically treated in the biogas facility before proceeding to the activated sludge plant.

A substantial portion of the bleach plant wastewater also receives preliminary treatment in an ultrafiltration plant, where substances that are difficult to break down using biological treatment are separated out.

During ultrafiltration, the wastewater is pumped at high pressure through a membrane with extremely fine pores. Substances with a small molecular size pass through the membrane and are transported onward to the external wastewater treatment plant. The larger molecules that

remain, referred to as the concentrate, are burned in the solid fuel boiler.

Air

Flue gases from the boilers are cleaned in electrical precipitators and special flue gas scrubbers, primarily to remove sulfur dioxide and dust from the flue gases. Urea is also injected into the boilers to reduce emissions of nitrogen oxides (NO_x). Gas flows in the pulp mill that contain odor-causing substances are channeled to one of the boilers, where the odor-causing substances are burned. A portion of the flue gases is transported to a plant for producing filler (precipitated calcium carbonate) adjacent to the paper mill and used there as process gas.



The Chip pile with the activated sludge plant in the background.

Impact on the environment – 2022 results and trends

Nymölla Mill impacts the environment in various ways. We annually assess the environmental impact caused by the company's operations. We have designed an assessment model for determining the environmental aspects that are most important to focus on. Further information about the assessment model can be obtained from the contact of persons at Nymölla Mill. A review of the environmental aspects is implemented on a regular basis.

Below is a report of our significant environmental aspects.

Use of natural resources

Wood

Forest certification

Stora Enso Skog AB and Sydved AB (a partially owned subsidiary of Stora Enso Skog AB) are jointly responsible for wood procurement and transportation of wood and sawmill chips to Nymölla Mill. The goal is to increase the volume of wood originating from certified forests. Sylvamo supports forest certification everywhere the Group has operations and advocates reciprocal recognition on the part of various forest certification systems.

Due to differing situations in regard to such issues as forest ownership, there is often a need for more than one system in some regions. In Europe, Sylvamo supports both the Forest Stewardship Council, FSC®, and the Programme for the Endorsement of Forest Certification schemes, PEFC. For further information, please visit our website at: www.sylvamo.com.

Stora Enso Skog AB and Sydved AB are both certified under ISO 14001, and hold FSC and PEFC Chain of Custody certification. Stora Enso Skog and Sydved are also certified in accordance with FSC Controlled Wood. Nymölla Mill is Chain of Custody certified for FSC and PEFC, and has an FSC Controlled Wood certificate.

Both Sydved AB and Stora Enso Skog AB also offer forestry certification within the framework of their umbrella certificates for private forest owners.

Sylvamo's objective is that all of the Group's fiber sources shall be procured in accordance with the Group's fiber procurement policy; see www.sylvamo.com.

In 2022, Nymölla Mill used 1.3 million m³ sub roundwood and sawmill chips. The Swedish portion was 88%, while 12% was imported. The imported wood was mainly from Poland.

Traceability of wood

Stora Enso Skog's wood procurement unit uses traceability systems to document and verify the origin of the wood used. Traceability is one of Sylvamo's principal tools for ensuring that fiber sources are acceptable and legal. In 2022, 100% of the wood used at Nymölla Mill was traceable.

Water

Fresh water for processing is extracted from the Skräbe River, which flows out of Ivö Lake. A ruling made by the Water Court gives Nymölla Mill both the right and the obligation to regulate the water level in Ivö Lake and the water flow in the Skräbe River. According to the ruling, Nymölla Mill has a permit to draw 3 m³ water per second from the Skräbe River. Approximately 1.1 m³ per second was drawn from the river in 2022. After treatment in the wastewater treatment plant, wastewater is transported out into Hanö Bay via a wastewater tube that is 3.4 km in length.

Energy consumption

In terms of energy consumption, it is advantageous to combine both pulp and paper production at the same location, since the pulp mill's energy surplus can be used in the paper mill. Nymölla Mill also has its own

energy production. The mill is almost totally self-sufficient in terms of heat energy and normally produces approximately 40% of its electrical energy requirement. Energy use at Nymölla Mill corresponds to nearly 0.7% of Sweden's total energy consumption.

Renewable biofuel accounted for approximately 93% of Nymölla Mill's fuel requirement in 2022. The remaining need was covered by fossil fuels, meaning oil and LPG.

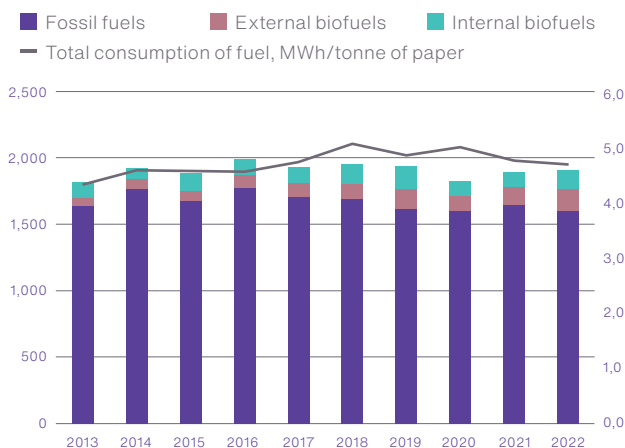
Surplus heat is supplied to the district heating network in Bromölla and Sölvesborg, and amounted to 100 GWh in 2022.

Internally produced electricity amounted to 201 GWh and procured electricity to 249 GWh. The total electricity consumption was thus 450 GWh.

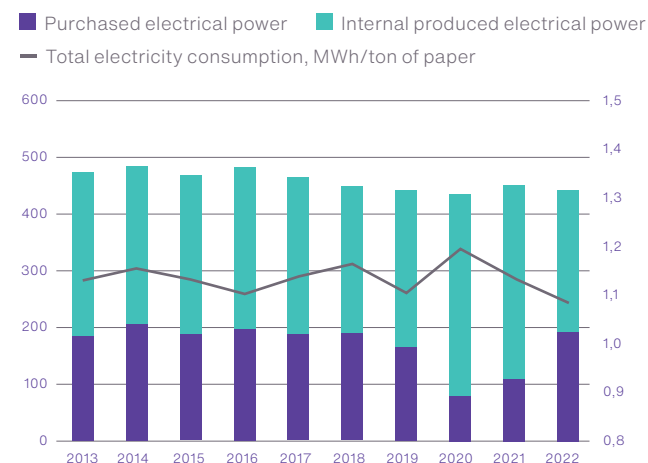
Wood raw material used in 2022 in solid cubic meters under bark

Wood raw material	Amount (m ³ sub)
Spruce	407,900
Pine	174,800
Larch	5,900
Sawmill chips (softwood)	423,100
Softwood	1,011,700
Beech	200,700
Aspen	1,500
Birch	52,000
Eucalyptus chips	43,100
Hardwood	297,300
TOTALT	1 309,000

Fuel supplied, GWh/år



Electrical power supply





Tambour change PM1

Chemical products

Process chemicals are used in both pulp and paper production. Chemicals are also used by the maintenance department and for wastewater and sludge treatment.

Chemicals must be approved by the company's chemicals group before being purchased. The chemicals group evaluates chemicals from a safety, health and environmental viewpoint. The chemicals group applies the product choice principle, which involves avoiding the use of chemical products that can be substituted by less hazardous alternatives. In 2022, continual efforts aimed at identifying alternative, less hazardous products resulted in a disinfectant that contains substances that are hazardous to health being replaced with a product that is classified as non-hazardous.

Acidification of soil and water

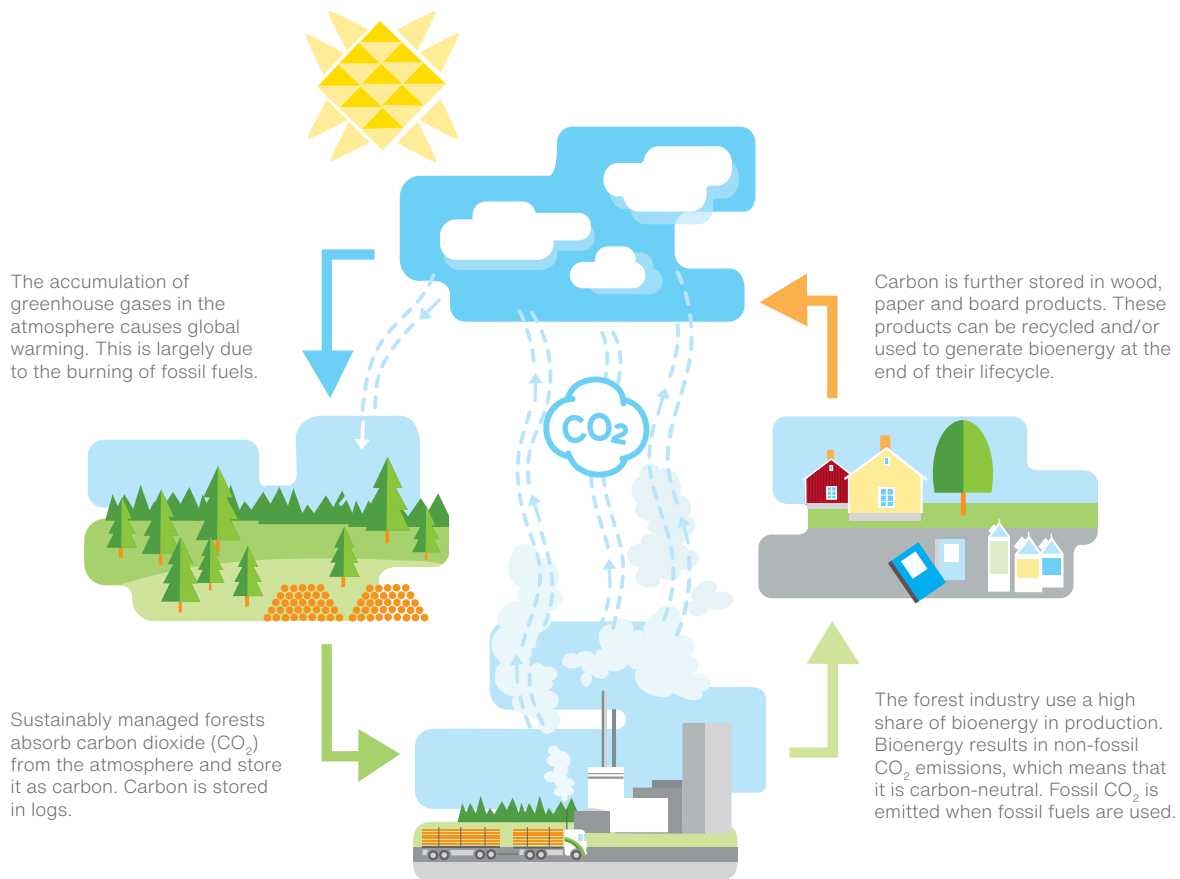
Emissions of sulfur dioxide (SO₂) and nitrogen oxides (NO_x)

During the chemical recovery process in the pulp mill, the thick liquor is burned in the recovery boilers and sulfur dioxide (SO₂) is formed. The SO₂ in the flue gases is removed by special flue-gas washers known as venturi scrubbers. The degree of purification is more than 99%.

During combustion, nitrogen oxides (NO_x) are also formed, due to both the fuel's nitrogen content and the nitrogen in the combustion air. The NO_x emissions are reduced by controlling the combustion air and also by injecting urea, with which the nitrogen oxides react to form nitrogen gas.

Low emission levels are obtained when production is sustained at a high and even level and the availability of flue-gas purification equipment is high. In 2022, emissions of both SO₂ and NO_x declined compared with the preceding year due to lower levels of pulp production.

The carbon cycle of the forest products industry



Climate impact – greenhouse effect

Emissions of carbon dioxide (CO₂)

The operations of the forest industry result in a net uptake of the greenhouse gas carbon dioxide. Forests absorb more carbon dioxide from the atmosphere than the forest industry emits. The products that the forest industry manufactures contribute indirectly to CO₂ emissions during transport and when they are burned or decomposed after use. However, it is the burning of fossil fuels that increases the level of carbon dioxide in the atmosphere and compounds the greenhouse effect.

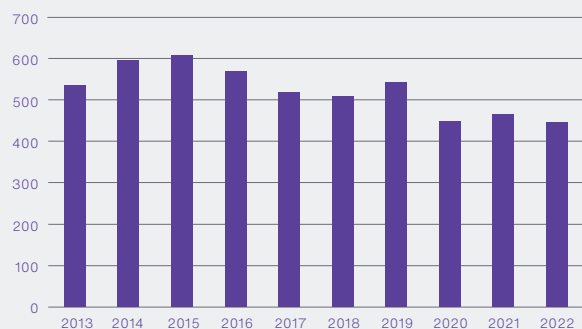
Emissions of carbon dioxide from fossil fuels result from the combustion of oil and LPG and from transportation.

Nymölla Mill delivers flue gases for the production of filler, precipitated calcium carbonate (PCC) filler. The producer is located in the area of the facility. The carbon dioxide content of the flue gases is used in the production process for PCC.

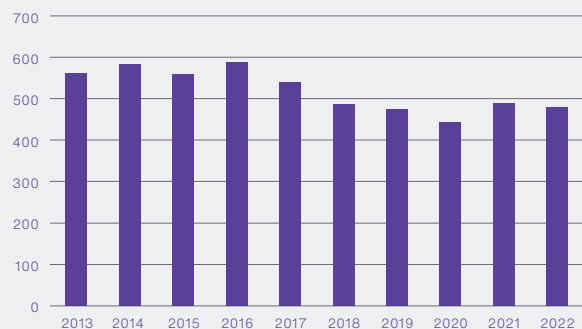
In the production of PCC, more carbon dioxide was absorbed in 2022 than the amount released in the combustion of fossil fuels.

Nymölla Mill has signed an agreement, applicable from 2008, to purchase electricity only from climate-neutral sources.

Sulfur dioxide (SO₂), metric tons/year



Nitrogen oxides (NO_x), metric tons/year



Emissions to air and water 2022

Nymölla Mill has operating permits in accordance with the Environmental Code. The permit from the Environmental Court is conditional.

Emissions to air

Parameter	Unit	Outcome 2022	Permit cond. ¹⁾
SO ₂	Metric ton/year	444	700*
SO ₂	Kg/metric ton pulp ²⁾	1,5 ³⁾	2,2**
SO ₂	Kg/metric ton processed product ⁴⁾	1,1	-
NO _x	Metric ton/operating day	1,4	1,9***
NO _x	Kg/metric ton processed product ⁴⁾	1,2	-
Dust (solid fuel boiler)	mg/nm ³ tg (6 % O ₂ -content)	67/31/19 ⁵⁾	60****
CO ₂ (fossil-based)	Metric ton/year	0	-
CO ₂ (biofuel-based)	Metric ton/year	740,307	-

Emissions to water (Hanö Bay)

Parameter	Unit	Outcome 2022	Permit cond.**
Suspended solids (GF/A)	Metric ton/operating day	1,3	4
Suspended solids (GF/A)	Kg/metric ton processed product ¹⁾	1,1	-
COD	Metric ton/operating day	32	45
COD	Kg/metric ton processed product ¹⁾	28	-
Total phosphorus	Kg/operating day	29	50
Total phosphorus	Kg/metric ton processed product ¹⁾	0,025	-
Total nitrogen	Kg/operating day	216	500
Total nitrogen	Kg/metric ton processed product ¹⁾	0,19	-
Process wastewater flow	m ³ /operating day	75,169	-
pH of wastewater		8,1	-

1. Emissions and permit conditions cover both process emissions and energy-production emissions.
2. Kg per metric ton of pulp, including contribution from paper production, except for maintenance stoppage at pulp mill. Pulp production totaled 293,861 metric tons in 2022.
3. The average quarterly amounts were 1.7 kg/ton pulp, 1.4 kg per ton pulp, 1.2 kg per ton pulp and 1.6 kg per ton pulp.
4. Processed product = produced market pulp + packed paper production. The quantity of processed products in 2022 amounted to 407,466 metric tons.
5. The average values of the three inspections in 2022.

* limit value

** guideline value as quarterly average value

*** limit value as average annual value

**** guideline value at inspection

Oxygen consumption

Emissions of organic substances (COD)

Nymölla Mill has invested substantial resources in measures to reduce emissions of organic substances. Wastewater is treated biologically at the biogas facility and at the activated sludge plant. COD (chemical oxygen demand) is reduced by approximately 80%.

The ultrafiltration plant that treats the bleaching wastewater primarily removes substances of poor biodegradability. COD specifies the amount of oxygen needed to break down both the easily decomposed substances and those that are difficult to break down.

Problems at the ultrafiltration plant in 2022 meant COD emissions increased compared with 2021.



The oxygen delignification stage

Eutrophication of soil and water

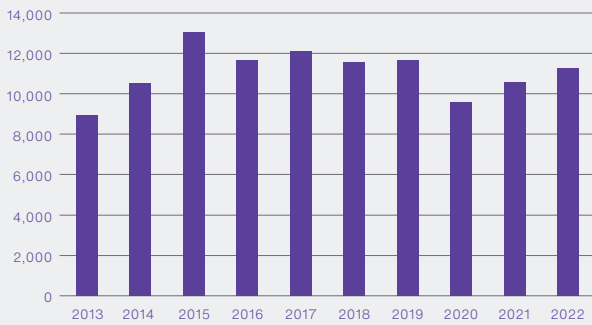
Emissions of phosphorus and nitrogen

The nutrient salts nitrogen and phosphorus derive from the wood used and from chemical additives. To ensure the optimal functioning of the wastewater treatment process, controlled amounts of nitrogen and phosphorus are added as needed in the biogas facility and activated sludge plant to provide nutrients for the microorganisms. Emissions of nitrogen to air in the form of nitrogen oxides also contribute to eutrophication.

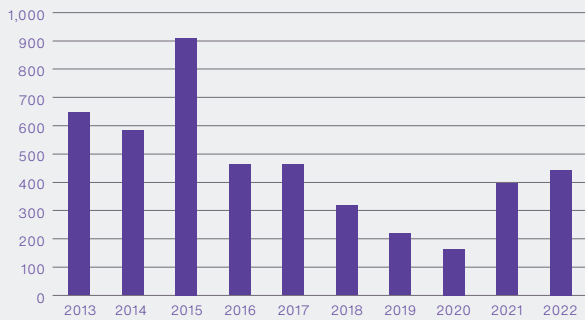
Emissions of nitrogen and phosphorus have varied in the past ten-year period. This is largely due to the sludge-escape problem in the activated sludge plant.

In 2022, emissions of phosphorus increased while emissions of nitrogen declined compared with the preceding year. The cause of the increase in phosphorus emissions was a periodic overdose in the biogas plant.

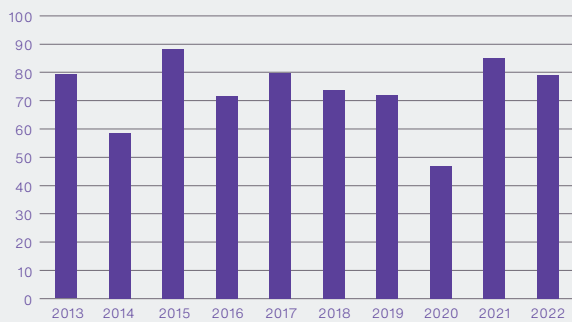
Organic substances (COD), metric tons/year



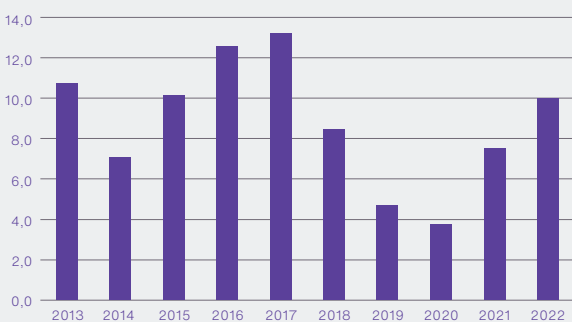
Suspended solids, metric tons/year



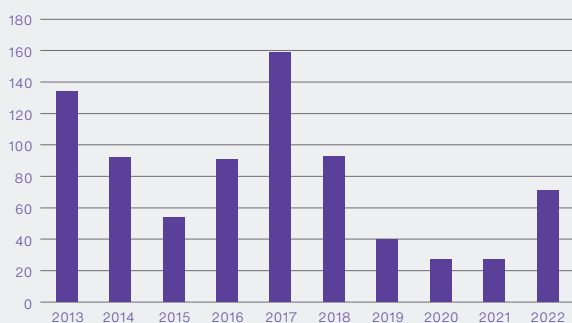
Nitrogen (Total N), metric tons/year



Phosphorus (Total P), metric tons/year



Waste to municipal landfills, metric tons/year



Impact on the marine environment

Nymölla Mill has performed analyses of seawater since the inauguration of the Mill at the beginning of the 1960s until 1991. Since 1991, the Water Conservation Association for Western Hanö Bay has coordinated monitoring activities in western Hanö Bay. The sea area off Nymölla is inspected each year. The annual report of The Water Conservation Association can be accessed via this link: <http://www.hanomiljo.se/arsrapporter> (Swedish only).

The inspection program includes both physiochemical analyses of the seawater and studies of marine animal and plant life. Among other findings, the inspections carried out in 2021 in Nymölla's discharge area have shown that:

- oxygen conditions in benthic waters were good throughout the year, with values clearly above any potential risks for benthic life;
- water transparency during the summer was good;
- the levels of phosphate followed the typical pattern with high values during the winter period and low values in conjunction with the growth season for phytoplankton and algae. However, the phosphate values were generally high in January–February and low in late summer and early autumn;
- algae was in very good condition, with a healthy appearance. Stable and favorable stands of bladder wrack and toothed wrack;
- on the whole, the amount of benthic fauna was fairly low and completely dominated by various species of mussel.

Waste and residual products

The predominant residual products for the mill are weak liquor, bark and ash, as well as sludge from the wastewater treatment process. A large portion of residual products is recycled, mainly through the use of chemical and energy recovery systems. At least 95% of Nymölla Mill's digester chemicals are recovered.

During 2022, 11,000 tons of ashes from the solid fuel boiler were spread on forest land.

Several residual products are source-sorted at Nymölla Mill, including burnable waste, wood, paper, metals and hazardous waste. The source-sorted materials are delivered to recycling companies for the recovery of materials or energy. The hazardous waste in 2022 comprised 44 metric tons and consisted predominantly of waste oil and oil residues. Hazardous waste is collected by approved transport companies, which move the waste to final treatment by approved companies. Waste that cannot be used for recovery of materials or energy is deposited in the municipal landfill site. Waste to landfill in 2022 amounted to 71 metric tons.

Transport activities

Every three years, an environmental study is performed of the transports activities that Nymölla Mill gives rise to, both directly and indirectly. The studies, most recently conducted in 2021, have shown that the largest environmental impact from indirect transport activities relates to wood raw material, chemical products and paper products.

Transportation of wood raw material is handled by Sydved AB. The wood is delivered to Nymölla by truck.

Transportation of paper products from Nymölla Mill to foreign customers is mainly handled by ship or rail, while transportation to customers in Sweden is by truck only. The total transport work (metric tons x km) in 2020 was distributed as follows: 64% by ship, 29% by truck and 7% by rail.

Sylvamo develops and purchases transportation services for the Group's products. This assignment includes imposing requirements during purchasing, reviewing of requirements and environmental impact assessments. Nymölla Mill does not directly own any means of transport. Essentially all transportation outside the plant area is handled by subcontractors.

Suppliers of the chemical products and packaging used by the mill are responsible for the transportation, which is conducted by truck, rail or freight vessels.

Noise

Noise originates mainly from wood handling, the wood-room, chip transports, the venturi system for preparing cooking liquor, and outdoor construction and repair work. It is primarily at night that noise from processes and from vehicles in the plant area, on their way to and from the plant, can be found disturbing by people living in the immediate vicinity.

Noise-suppression measures were undertaken on several occasions over the years. Noise levels are normally measured once a year at five control points in the vicinity. Results from the noise measurements in 2022 show that the noise condition of 50 dB(A) was maintained at all control points.

Dust

Dust arises primarily from combustion in the solid fuel boiler. The dust consists of fly ash from the burning of bark, and soot. The flue gases are treated using both electrical precipitator and scrubber (flue-gas washing).

Freons

Freons is a collective term for gases used as cooling agents in air-conditioning equipment at Nymölla Mill. Freons are greenhouse gases, some of which also affect the ozone layer. No cooling agents that affect the ozone

layer are used. Leakage of cooling agents during 2022 amounted to 58 metric tons of CO₂e. The total installed amount of cooling agents is 1,667 metric tons of CO₂e.

Sawdust

Sawdust is generated when the logs are chopped into chips. Sawdust may be dispersed to the surrounding area when chips are being blown to the chip pile, or directly from the chip pile in strong winds.

The permit conditions state that chip blowing must be halted or performed using a cyclone when the wind is blowing toward Nymölla community at more than 5 m/s, if process technology permits. For a total of 118 hours, chip blowing was not stopped despite the wind conditions, since process-technology considerations rendered this impossible.

Odor

The primary cause of unpleasant odors is sulfur compounds, such as hydrogen sulfide and organic sulfur compounds. These substances can arise both in the process and in the external wastewater treatment facility.

Suppliers, transport companies and contractors

Suppliers, transport companies and contractors are vital to Nymölla Mill. By including environmental requirements in agreements with transport companies and examining suppliers' activities in the environment area, we encourage them to develop their own environmental work.

Environmental finances

During 2022, environment and energy-related investments amounted to just over SEK 13 M. Some of the largest items were investments connected to equipment to replace an environmentally hazardous chemical product and water-saving measures. Operating and administrative costs (for personnel, energy, chemicals and maintenance), together with research and development costs, totaled approximately SEK 123 M.

Revenues from the sale of source-sorted materials amounted to roughly SEK 3 M.

External complaints 2013–2022

Below is a summary of external complaints brought to the company's attention after being addressed to the gatekeeper at the mill, the County Administrative Board or Bromölla Municipality's government offices.



The control panel PM1

Results of noise measurements 2012–2022

Equivalent noise level, dB(A)

Control point	Aug 2012	Sep 2013	Jun 2014	Aug 2015	May 2016	Nov 2017	Mar/Apr 2019	Jun 2020	May 2021	Sep 2022
Vinkelvägen 1, Nymölla	49	50	49	49	50	49	50	46	51	50
Samlingslokalen, Nymölla	52	50	49	48	50	49	50	49	50	50
Massavägen 7, Nymölla	46	50	45	46	48	49	50	48	48	47
Massavägen 1, Nymölla	46	50	45	48	50	50	50	48	49	48
Vacation home area, Oxudden	46	37	35	35	44	46	45	36	35	34

Results of external complaints 2013–2022

Complaints/number

Klagomål	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Odor	3	6	14	8	5	6	2	2	7	
Sawdust precipitation	7	10	4	4	4	12	3	1		
Noise	2	1	7	5	5	6	4	5	6	3
Chimney fallout	24	6	1	1	14	10	3			
Ash release	2		1	2	5	5	15	2	4	3
Gas emissions	1		1			2				
Other		1				1	1	2		
Total complaints	39	24	28	20	33	42	28	12	17	6

Examination report

DNV Business Assurance Finland Oy Ab (DNV) is a verifier accredited by FINAS (accreditation no. FI-V-0002) in accordance with the EMAS criteria. DNV has examined Sylvamo Sweden AB, Nymölla Mill and has verified that the company has an environmental management system that fulfills the requirements in the EMAS regulations (in regulation (EC) no. 1221/2009 and in regulation (EU) 2017/1505).

DNV has also examined the environmental statement and found it to be correct and sufficiently detailed to fulfill the requirements stated in EMAS.

Espoo, May 23, 2023

Kimmo Haarala

DNV Business Assurance Finland Oy Ab

Next environmental statement

The next environmental statement is expected to be published not later than June 2024.

How to order environmental statements

Nymölla Mill's environmental statement can be ordered from Sylvamo Sweden AB, Nymöllavägen 260-15, SE-295 73 Nymölla, Sweden. Tel: +46 (0)10 46 440 00.

Information

Nymölla Mill's Environmental Statement and Sylvamo's Sustainability Report can be accessed at: www.sylvamo.com.

Information about Sylvamo's policies, principles and practice is available at: www.sylvamo.com.

For further information about Sydved, visit www.sydved.se.

© 2023 Sylvamo. All rights reserved.



Production: Nymölla Mill.

Graphic production: Bravissimo Agency AB, Kristianstad.

Photography: Bravissimo, Nymölla Mill, Serny Pernebjör

Paper: Multicopy 115 g/m² (insert) and Multicopy 160 g/m² (cover).

Printing: MixiPrint AB, Olofström 2023.

Contact persons at Nymölla Mill



Ola Petersson
Environmental Manager

+46 104 64 41 27

ola.petersson@sylvamo.com



Carina Larsson
Sustainability Specialist

+46 104 64 42 09

carina.larsson@sylvamo.com



Lisa Sjöblom
Environmental Engineer

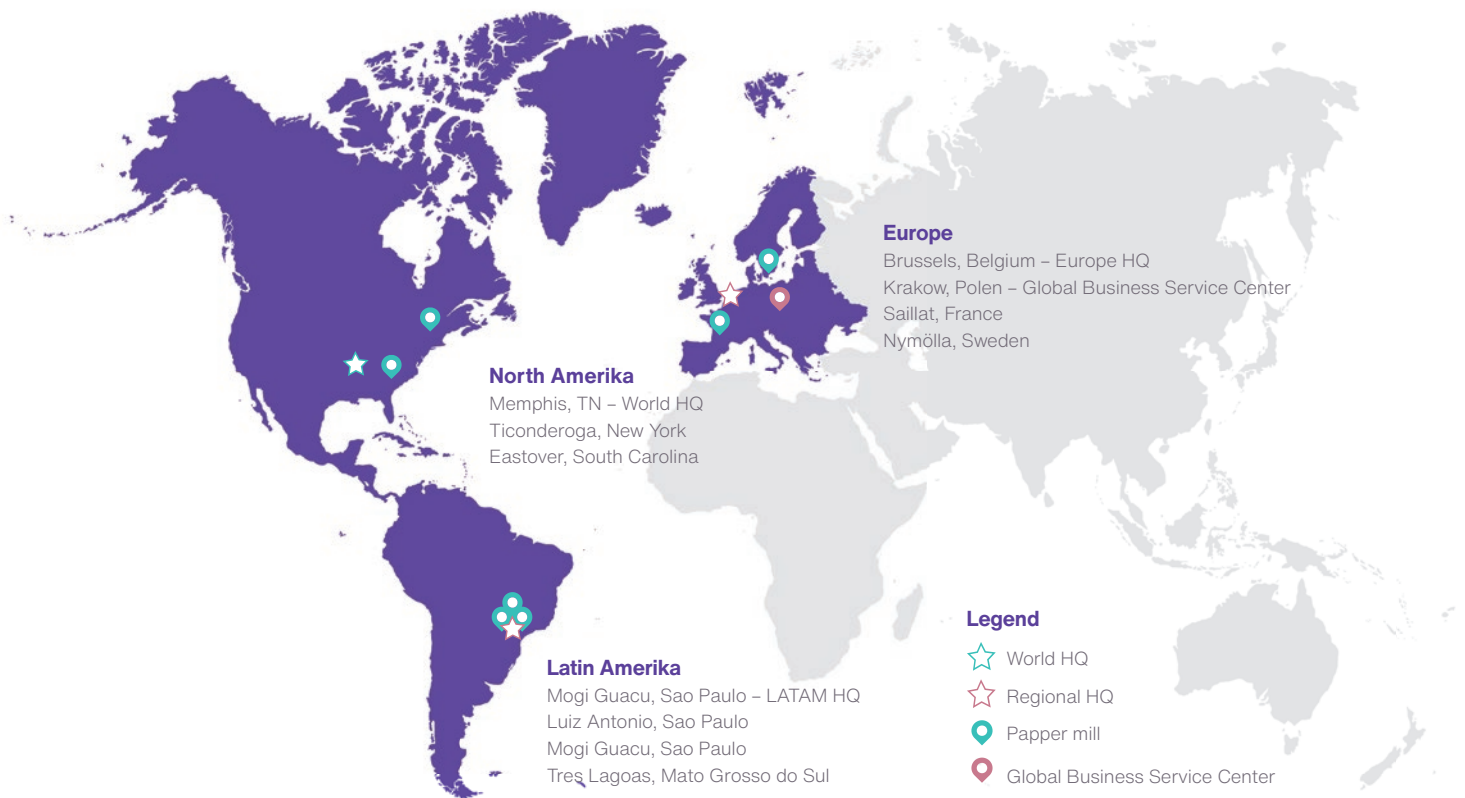
+46 104 64 48 49

lisa.sjoblom@sylvamo.com

Glossary

Biofuels	Fuels from renewable raw materials, such as bark, chips and thick liquor.
Carbon neutral	An environmental label certifying that all emissions of fossil greenhouse gases that the product gives rise to throughout its lifecycle are offset.
Chain-of-Custody certifikat	Certificate showing that traceability systems are in place to guarantee the origin of the fiber at every stage of production from forest to finished product.
Controlled wood	Term specifying that the origin of the wood was controlled pursuant to the FSC standard.
CO₂	Carbon dioxide is formed through the combustion of organic materials, such as coal and oil, and is the principal greenhouse gas, since it intensifies the greenhouse effect.
CO₂e	Carbon dioxide equivalents. By expressing greenhouse gas emissions in carbon dioxide equivalents, it is possible to compare the contributions of individual gases to the greenhouse effect.
COD	Chemical Oxygen Demand. Measure of the content of chemically degradable organic substances in wastewater. Oxygen is consumed when organic substances (wood constituents, etc.) in the wastewater break down.
dB(A)	Decibel A. Measure of A-weighted noise level. Using what is termed an A-weighting filter, a weighted noise level is obtained that takes the characteristics of human hearing into account.
EDTA	Ethylenediaminetetraacetic acid. Used as a chelate to bind metals during chlorine-free bleaching.
EMAS	Eco Management and Audit Scheme is an EU regulation for the voluntary introduction of environmental management systems.
Evaporation	Removal of water and other fluids from weak liquor by applying heat energy. This raises the dry-matter content of the liquor, transforming it into thick liquor.
Extractive substances	Resins and aromatic oils found in wood – pitch, for example.
FSC®	The Forest Stewardship Council is a certification body for ecologically, economically and socially sustainable forestry.
Greenhouse effect	The natural capacity of the atmosphere to absorb heat radiation from the earth's surface, i.e. the same effect as is caused by the glass panes in a greenhouse. The natural greenhouse effect is a precondition for life on earth. The intensification of the greenhouse effect is primarily due to the fact that the atmospheric content of carbon dioxide is increasing as a result of the burning of fossil fuels, such as coal and oil. The intensified greenhouse effect results in increased temperatures on earth, which in turn can cause climate change.
GWh	Gigawatt-hour (1 billion watt-hours)
ISO 14001	International standard that states specific requirements for environmental management systems.
ISO 45001	International standard specifying requirements for an occupational health and safety management system.
Lignin	Wood substance that makes up about 30% of the total wood content. Lignin is dissolved out during the cooking process.
m³ sub	Solid cubic meters under bark, meaning the actual volume of an entire stem or part of a stem, without the bark.
MW	Megawatt (1 million watts)
MWh	Megawatt-hour (1 million watt-hours)
NO_x	A collective term for the nitrogen oxides formed during combustion. When precipitation occurs, NO _x contributes to the acidification of soils and water. NO _x emissions also contribute to eutrophication and can react with sunlight to form ground-level ozone.
PCC	Precipitated calcium carbonate is a filler used in paper to obtain a higher opacity, i.e. reduced transparency.
PEFC	The Program for the Endorsement of Forest Certification schemes is an international system for the certification of, principally, family-owned forestry operations.
Permit conditions	Conditions for an industrial operation, such as emissions conditions, which for Nymölla Mill are set by the Land and Environmental Court. The stipulated values for Nymölla Mill may be either guideline values or limit values. When guideline values are exceeded, a consultation with the supervisory authority must be arranged and measures must be taken to comply with the guideline value. Violation of limit values can lead to prosecution under the Swedish Environmental Code.
Recipient	A sea, lake, watercourse or the atmosphere that receives emissions.
SO₂	Sulfur dioxide. Sulfur oxides are formed, for example, through the burning of sulfur-containing fuels such as coal and oil. Sulfur oxides contribute to the acidification of soils and water.
Suspended solids (GF/A)	Defines the amount of particles in wastewater, such as fibers, chalk and microorganisms, that can be separated out by filtration through a fiberglass filter with a pore size of 10 µm.
TCF	(Totally Chlorine Free). Paper pulp bleached without the use of any chemicals containing chlorine.
Thick liquor	Weak liquor that has been concentrated through evaporation.
Total phosphorus	The combined amount of dissolved inorganic phosphorus, polyphosphates, dissolved organic phosphorus and particle-bound organic and inorganic phosphorus. A high phosphorus content in water causes increased biological activity and algal growth, known as eutrophication.
Total nitrogen	The combined amount of organic nitrogen, ammonium nitrate, nitrites and nitrates. A high nitrogen content in water causes increased biological activity and algal growth, known as eutrophication.
Transport work	An internationally used term for all forms of transport (road, sea, air and rail transport) in terms of metric ton-kilometers, meaning the number of metric tons of goods transported a given distance in kilometers.
Weak liquor (spent liquor from digester)	Digester liquor containing dissolved wood substances and cooking chemicals that have been separated from the paper pulp in the washing plant.

Sylvamo Operations



This is Sylvamo

Sylvamo is a global supplier of paper and pulp, with production in seven mills on three continents. Production capacity totals approximately 3 million metric tons per year, and the number of employees is approximately 6,500.

Our vision is to be the world's paper company: the employer, supplier, and investment of choice. Our mission is to transform renewable resources into papers that people depend on for education, communication, and entertainment.



Sylvamo Sweden AB
Nymöllavägen 260-15
SE-295 73 Nymölla
Tel. +46 (0)10 46 440 00
www.sylvamo.com