



Sustainability report



## **About Norske Skog Saugbrugs AS' operations**

Norske Skog Saugbrugs was founded in 1859, and became part of the Norske Skog Group in 1989. The company has a long tradition and high competence in making SC- (super calendered) magazine paper for the international market. Our main markets are Europe (UK, Germany, France and Poland) and North America. Today, Saugbrugs is one of the largest and most modern production facilities of SC- and UMI (uncoated mechanical improved) paper in the world.

For several decades, Norske Skog Saugbrugs has produced paper on three paper machines. From January 2021 the paper machine 5 was shut down.

The raw materials of the magazine paper are Norwegian spruce, fillers and chemical pulp. Saughrugs has made significant investments in a TMP -  $\frac{1}{2}$ 

(Thermo Mechanical Pulp) process that places the mill in a leading position within fibre quality and energy consumption. The energy consumption of the mill is based on clean Norwegian hydropower and biomass, leaving greenhouse gas emissions at a very low level.

Saugbrugs started to produce and sell biogas in 2017. The biogas production is produced from the mill's waste streams. Today, the biogas is used for utility vehicles in Halden. Saugbrugs is also actively working to develop new fibre-based products. In 2020 we launched two new fibre-based products in CEBINA and CEBICO. CEBINA is nanofibrils which adds rheology control in fluids and armouring in solid materials. CEBICO is a biocomposite made from TMP and recycled plastics. All projects are in synergy with our paper production, thus contributing to the sustainability of our mill.





360.000

tonnes per year from two paper machines



End use: catalogues, magazines, retail and advertising material

#### Market:

98%

paper export (main markets Europe and North America)



#### **Power consumption:**

100 %

electricity



#### **Design capacity biogas:**

+2.700.000

Nm³ biogas per year



#### **Wood consumption:**

100 %

of all wood comes from sustainably managed forests (FSC / PEFC certified)



#### **Turnover: NOK**

2.9

billion



### Number of employees: Approx

CONTROL VIOLENCE CONTROL CONTR

410

+ 40 apprentices/trainees



#### Norske Skog Saugbrugs AS

### and The United Nation Sustainable **Development Goals (SDGS)**

The UN Sustainable Development Goals (SDGs), adopted by world leaders in September 2015, are a call for action for all countries and businesses to promote prosperity while protecting the planet. The 17 SDGs address the global challenges we face, including those related to poverty, inequality, climate, environmental degradation, prosperity, and peace and justice. The SDGs interconnect, and it is important that the world achieves each of the SDGs and its targets set for 2030.

Norske Skog Saugbrugs supports all the 17 SDGs, but realize that some are more relevant to our business. This report explains how Norske Skog Saugbrugs relates to each of the UN Sustainable Development Goals (SDGs). The most relevant ones are those where we can make a difference and contribute positively.

#### WE HAVE DEALT WITH THE FOLLOWING QUESTIONS:

1) How do the SDGs affect our operations and business strategies? 2) How may we influence and contribute to the achievement of the specific

We realize that achieving the 17 SDGs requires changes. "As is" will not help the world reach these goals. Since 2019 we have described our ambitions and targets for the most relevant SDG's. Going forward, we will continue to develop our specific targets, thus contributing more and more to a sustainable development.

This report is prepared and approved by the Management of Norske Skog Saugbrugs AS.





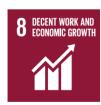
































# Sustainability and profitability go hand in hand

Norske Skog's core values of openness, honesty and cooperation as well as our policies and guidelines are built on the UN Universal Declaration of Human Rights and the 10 principles of UN Global Compact. These values also guide Norske Skog Saugbrugs' business activities and sustainability work and are, together with the leadership principles, the foundation for ethical and competitive business conduct. To demonstrate Norske Skog Saugbrugs' commitment we have prepared this report aligned with the UN Sustainability Development Goals. This report shows how Norske Skog Saugbrugs, through operations and development, contributes to a sustainable development.

Norske Skog Saugbrugs' employees are committed to produce and develop our magazine paper every day. Norske Skog Saugbrugs has also developed new energy and renewable fibre products in synergy with paper production. Our waste streams are used to produce biogas and new fibre products, CEBINA and CEBICO, are developed to replace material based on fossil sources.

Norske Skog Saugbrugs cooperates with customers, suppliers, the local community and others for sustainable development. At Norske Skog Saugbrugs sustainability and development go hand in hand.



**Per Ivar Berg** General Manager



### **Strategic priorities**

Norske Skog Saugbrugs' long-term strategy is to be an innovative, sustainable and leading producer of paper, fibre-based products and renewable energy.

Our strategic business priorities: retaining a successful and responsible core business, while developing opportunities for growth in the bio-sourced products and the bio-economy, give us a well-defined starting point for identifying the prioritized SDGs for Norske Skog Saugbrugs.

Based on our assessment of 1) the extent the SDGs affect our operations and business strategies and 2) the extent we may influence and contribute to the achievement of the specific goal, we believe that we can make the greatest difference and contribute positively through the prioritized SDGs highlighted in the illustration.

We have summarized what the prioritized SDGs mean to us in one sentence:

**Norske Skog Saugbrugs** shall create value for people and society in a responsible way, while maintaining a sustainable environment and use of natural resources.

- We create green value

### **Norske Skog Saugbrugs'** prioritized SDGs

In the overview below, we have highlighted the prioritized SDGs.

For each of the most relevant SDGs we summarize how we relate to the goals, e.g. our ambitions and relevant targets and actions initiated or planned.

The ambitions, relevant targets and planned activities are also summarized in a table in the end of the report.

For the SDGs considered less relevant to Norske Skog Saugbrugs, we provide a brief description and a summary of ambitions and actions.



































#### Ensure healthy lives and promote well-being for all at all ages

#### RUSINESS THEMES THAT NORSKE SKOG SAUGRRUGS FOCUSES ON:

- Occupational health and safety
- Increase job attendance by promoting mental health and well-being

#### **AMBITION:**

Norske Skog Saugbrugs' health, environment, safety and quality (HESQ) vision: «All employees and contractors who work at Norske Skog Saugbrugs should be in as good a physical and mental state when they go home as when they arrived at work».

Norske Skog Saugbrugs is committed to provide a safe working environment for our employees, contractors and visitors. Health and safety considerations are integrated into our day-to-day business and this applies to every activity carried out by our employees and contractors. We aim to have zero personal injuries, both LTI (Lost Time Injuries / H1) and TRI (Total Recordable Injuries / H2). Furthermore, we aim to reduce sickness absence rates and to increase focus on job attendance for all employees. We have set a specific target of short and midrange absence (1-16 days) at or below 2% and a total absence target at or below 4,2 %.

Norske Skog Saugbrugs has an occupational health service offered to all employees. This occupational health service maps employees' health and work environment and focuses on prevention so we can stay healthy and have a fully sound working environment. We have a health program "I BEDRE FORM" («IN BETTER SHAPE») to promote daily physical activities for all our employees. Our ambition is at least 30 minutes daily activity.

Norske Skog Saugbrugs' objective is to have no employees with drug, alcohol or gaming abuse problems. Employees with abuse problems will be offered a suitable treatment program.

#### PERFORMANCE:

Norske Skog Saugbrugs has a high focus on occupational safety. We see a decrease in the number of accidents and the risk level in general. Nevertheless, we are sure we can improve our performance by continuing to systematically work with our safety barriers.

Norske Skog Saugbrugs has a close follow up of all absence by working closely with personnel leaders. We have signed a letter of intent regarding a more inclusive workplace (IA Agreement with supplementary agreements) with the aim of reducing sickness absence rates and increasing focus on job attendance for all employees. The IA Agreement builds on a tripartite cooperation between the national authorities, the trade unions and Norske Skog Saugbrugs, who was the first company in Norway to sign this agreement. This cooperation ensures the participation of all parties involved. We will actively follow this IA agreement and we have revised and developed our in-house guide for absence follow up.

We perform a regular self-assessment to identify focus areas for improvement which leads into a yearly HES action plan. We will continuously work with "Visible leadership", our program for vigorous, caring and improvement oriented leadership. This is paired with our "Better leaders program", a full year training program which includes all personnel leaders and key roles.

We offer occupational health service to all employees in accordance with our ambition. Our current health program has a strong participation in all activities for promoting at least 30 minutes of daily activity. We offer different activities such as fitness facilities, every-day activity challenges and hiking in our local

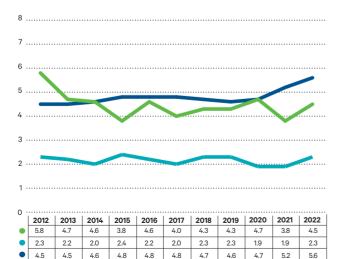
We have a smoking ban in all our facilities. We promote «stop-smoking-courses» for all our employees. Today, fewer employees smoke than five years ago.

We cooperate with AKAN (Arbeidslivets kompetansesenter for rus- og avhengighetsproblematikk) (National Committee for Treatment of Alcohol and Drug Abuse) in the prevention and treatment of drug, alcohol and gaming abuse, and arrange a yearly "AKAN Day" with special focus on the subject. Each year we have one or two colleagues attending treatment programs.

Norske Skog Saugbrugs is certified in accordance with ISO 45001.

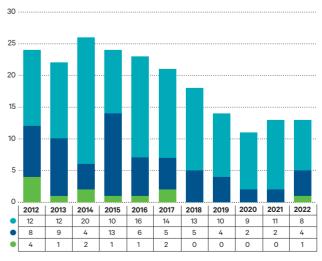
#### SICK LEAVE

Percentage



#### H1. H2 AND H3 INJURIES

number of injuries







### Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

#### **BUSINESS THEMES THAT NORSKE SKOG SAUGBRUGS FOCUSES ON:**

- Strategically develop competence
- Lifelong learning

#### AMBITION:

Norske Skog Saugbrugs' objective is that competence for all our employees shall result in increased ability to achieve:

- Continuous improvement in the business value chain Innovation leading to new products and improved processes
- Profitable commercialization of new products

Our goal is to have a broad access to qualified personnel in the short and long term. This is a requirement for employment, decent work and entrepreneurship. We also actively work directly with our personnel leaders to ensure a healthy and efficient work environment.

#### PERFORMANCE:

Our employees are our most important resource. This means that the development of our employees is a task that needs to have a high priority. In

2022, we started the work to revitalize NSOS; our operational standard.

Our competence strategy and on-job training cover a wide variety of fields:

- Apprenticeships
- Documented training, internal and external courses
- Trainee program
- Decentralized engineer training
- Industrial Ph.D.

For many years, we have had a large number of apprentices; more than 10% of our total workforce, at any one time, are apprentices. This is our single most important recruitment channel. On average, all personnel attend a minimum of 30 hours formal training each year.

We use a designated competence system, Dossier, to plan, document and track all training initiatives for most of our employees. The system lets us easily see our current competences, plan what we need, both in short and long term and perform gap analyses.



### Achieve gender equality and empower all women and girls

#### **BUSINESS THEMES THAT NORSKE SKOG SAUGBRUGS FOCUSES ON:**

- Individual competence development
- Recruitment process

#### **AMBITION:**

Norske Skog Saugbrugs' objective is that all persons have equal development possibilities. This means that women have equal opportunities to men to have leading positions in our organization. Norske Skog Saugbrugs wants to increase the number of female employees, and has set a goal to increase the number of female employees to 10% in 2025.

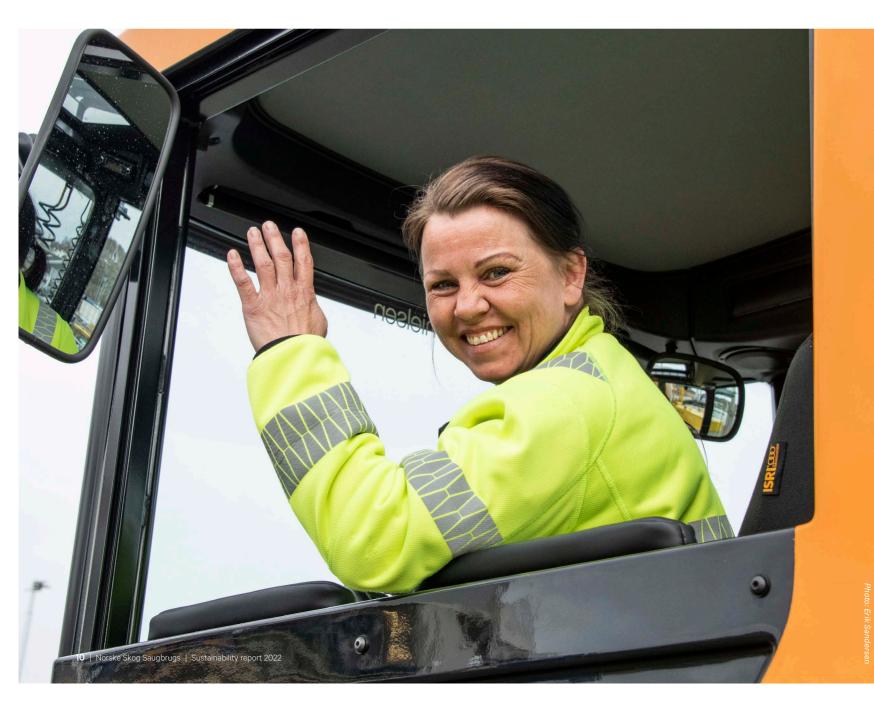
#### PERFORMANCE:

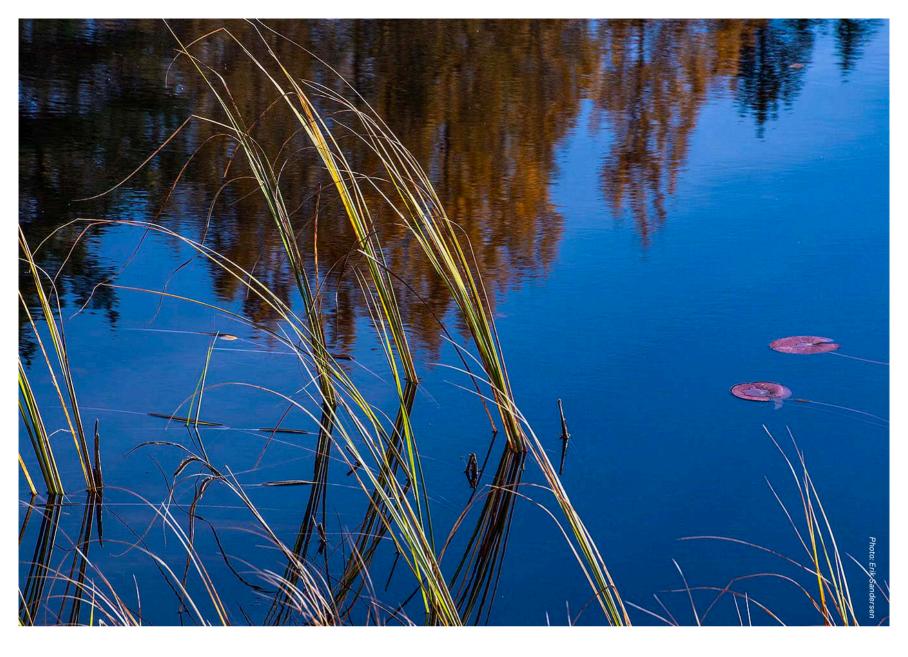
We are not satisfied with our current number of female employees, in all aspects of our organization; however, we do have female apprentices and trainees and a number of females in leading positions. We currently have 8% female employees, and we also have a number of female employees who currently are

in or have completed different specially designed programs for female talent. It is also a focus area to give female employees all possibilities regarding strengthening competence, see SDG 4.

In 2022, we established a Gender Equality and Diversity Committee, which plays a key role in supporting and providing recommendations on measures contributing to greater gender equality and diversity at every level of our organization. Initially, the committee has focused on developing a policy and action plan aimed at creating and retaining an inclusive and more diverse culture at work.

We are also working with local, regional, and national partners to promote and market our professions to young women, to increase the number of female applicants to these studies. This will give us a better chance to increase the number of female employees.







#### Ensure availability and sustainable management of water and sanitation for all

#### **BUSINESS THEMES THAT NORSKE SKOG SAUGBRUGS FOCUSES ON:**

- Improve water quality by reducing pollution and minimize the release of chemicals and materials
- Improve water quality through effluent treatment
- Sustainably manage water through reduction, reusing, recovering, recycling and replenishing

#### **AMBITION:**

Norske Skog Saugbrugs is committed to maintain a sustainable environment and a responsible use of natural resources. We are committed to foster innovation and implement continuous improvement activities in order to maintain a sustainable water management.

Our objective is to treat all waste water according to best available technology, to minimize emissions of fibre, oil and chemicals and to minimize our fresh water consumption.

#### **PERFORMANCE:**

Water is used and recovered multiple times through our pulp and papermaking

process. We have a continuous focus to minimize our water consumption. Due to a number of small initiatives and also large strategic decisions like the shutdown of paper machine 5 and the start-up of Therminator 2 project (SDG  $\,$ 7) in 2021, we have reduced our water consumption by 20 %.

We have had our own biological effluent treatment plant since 1992. The effluent treatment plant has been redesigned several times after this first installation, as a consequence of new available technology. All waste water is cleaned in our effluent treatment plant before returning to the recipient. Please refer to SDG 14 for specific emissions to water (suspended solids and Chemical Oxygen Demand (COD)).

Norske Skog Saugbrugs has an effective and well trained emergency response team in case of uncontrolled discharges. Their response will minimize the impact of uncontrolled emissions.

Permit breaches are reported and managed according to standard procedures. Any permit breaches will be continuously monitored and discussed with supervisory authorities.



#### Ensure access to affordable, reliable, sustainable and modern energy for all

#### **BUSINESS THEMES THAT NORSKE SKOG SAUGBRUGS FOCUSES ON:**

- Energy efficiency
- Renewable energy
- Circular economy with sustainable use of all materials

#### **AMBITION:**

Norske Skog Saugbrugs is committed to continuously reduce our energy consumption and to become more environmentally friendly by changing the sources of energy. Our objective is to avoid energy from fossil sources

Our objective is to ensure sustainable use of materials in our operation. We aim to utilize all waste waters and bi-process flows. We generate thermal energy in our bio fuel boiler from bi-process flows such as bio residuals and fibre sludge. We produce biogas from our waste waters and aim to stabilize biogas production at 2021 level.

#### **PERFORMANCE:**

Norske Skog Saugbrugs consumes electricity from Norwegian hydropower. Our largest consumer of electricity is the thermal mechanical pulping (TMP) process. Over the past decade, we have been able to reduce the specific energy consumption through this process by 43 %. This has been the result of strategic projects like NEXT and Therminator 2, in addition to a continuous focus on energy usage resulting in a number of smaller scale improvements.

Thermal energy is used for heating and drying of the paper. Today the generation of thermal energy consist of 99.8 % renewable energy; mostly heat recovered from the TMP process and combustion of both internal and external bio-fuel. 2022 was the first full year without the use of heavy oil at Norske Skog Saugbrugs. Heavy oil was phased out in 2021. This was an important contribution to reducing emission of greenhouse gases and air pollution in general.

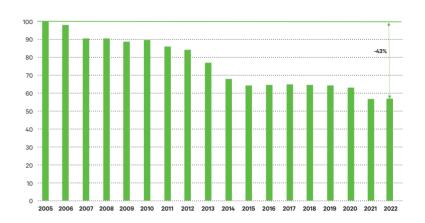
The Therminator 2 project utilize warm flows in our processes to reduce the need for thermal energy. These measures result in a yearly reduction in thermal energy of 114 MW.

Norske Skog Saugbrugs is a producer of biogas. We started production of biogas in 2017 following a redesign of our effluent treatment plant. Since the start-up year, we have continuously improved this process towards better efficiency. 2022 was the best production year since the start-up.

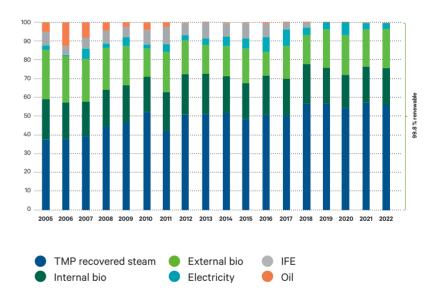
Norske Skog Saugbrugs has implemented a new vehicle policy stating that all new vehicles shall be electrical if such option exists.

Norske Skog Saugbrugs is certified in accordance with ISO 50001.

#### SPECIFIC ENERGY CONSUMPTION DURING PULLPING



#### THERMAL ENERGY GENERATION







#### Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

#### **BUSINESS THEMES THAT NORSKE SKOG SAUGBRUGS FOCUSES ON:**

- Employment
- Non-discrimination
- Elimination of forced or compulsory labor

#### **AMBITION:**

Norske Skog Saugbrugs is committed to promote diversity and inclusion by providing equal employment opportunities and treat all employees fairly and

All employees and others acting on behalf of Norske Skog Saugbrugs are expected to conduct business in an ethical manner and must comply with applicable laws and regulations at all times.

Norske Skog Saugbrugs fully complies with all Norwegian labor laws, and is an active supporter of a broad cooperation with trade unions.

Norske Skog Saugbrugs also fully complies with all laws regulating collective bargaining and recognizes the freedom of association. Our commitment to respect this freedom of association is embodied in the Global Framework Agreement on the Development of Good Working Relations, concluded by Norske Skog Group and the IndustriALL Global Union.

Norske Skog Saugbrugs respects and supports the human rights of all individuals potentially affected by our operations and subscribes to the United Nations Global Compact principles.

#### PERFORMANCE:

In 2022, unions represented 92 % of our employees for collective bargaining

purposes.

The turnover of people, excluding retirement, has been close to 2 %. Our employment levels are not subject to seasonal variations, and the share of temporary employment is around 3 % of the total workforce, mainly as cover for long term absence.

There has been no reported incidents of child labour, forced or compulsory labor in the last 40+ years. The risk of such incidents in the supply chain is considered low, and a high-level risk assessment of suppliers has not provided information or indications of any violation by our suppliers.

As mentioned above, see SDG 5, we have established a Gender Equality and Diversity Committee, which plays a key role in supporting and providing recommendations on measures contributing to greater gender equality and diversity at every level of our organization.

Continuous improvement (CI) is a well implemented way of working at Norske Skog Saugbrugs since many years back. Over the years our CI work has resulted in yearly savings of 100-200 MNOK/y. We have a dedicated CI-team to facilitate the work but the work, as such, involves the entire mill, covers all departments and the whole value chain from supply through production, maintenance and sales to outbound logistics. The work ensures an efficient way of working and an efficient and a sustainable use of resources. The CIwork has led to savings in thermal energy, electrical energy and chemical use. It has also ensured a high yield and lowest possible loss of wood and filler. The work has also resulted in the establishment of a logistical setup of incoming wood that is largely bases on train. This has not only resulted in the lowest possible cost, but also the lowest possible CO<sub>2</sub>-footprint.







### Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

#### **BUSINESS THEMES THAT NORSKE SKOG SAUGBRUGS FOCUSES ON:**

- encourage innovation by research and development
- new and improved products with better performance
- digitization

#### **AMBITION:**

Norske Skog Saugbrugs is committed to continuously improve our existing products with regards to use of natural resources and carbon footprint. Our portfolio of paper products should continuously be developed to match the paper market.

Our objective is to develop new, sustainable products outside our core business, either with new bio-based materials or energy produced from bio-based materials. We have several ongoing projects and aim to achieve 50 % of EBITDA from new business areas by 2030. We will commercialize projects and continue to explore projects within bioenergy and biomaterial that support and develop the business. We will continuously lead or participate in research and development cooperations that support our new fibre projects and energy efficiency.

#### **PERFORMANCE:**

Norske Skog Saugbrugs has been able to develop our existing products and product mix as a result of research and development in fibre production technology. As from the end of 2021, we have a portfolio of sustainable products with our NorSC Lite, NorSC Polar and Nor Opag/Nor Opag Plus.

In 2020 we introduced two new fibre-based products in CEBINA and CEBICO.

Norske Skog Saugbrugs owns and participates in several research and development programs that foster a sustainable industry and a circular economy.

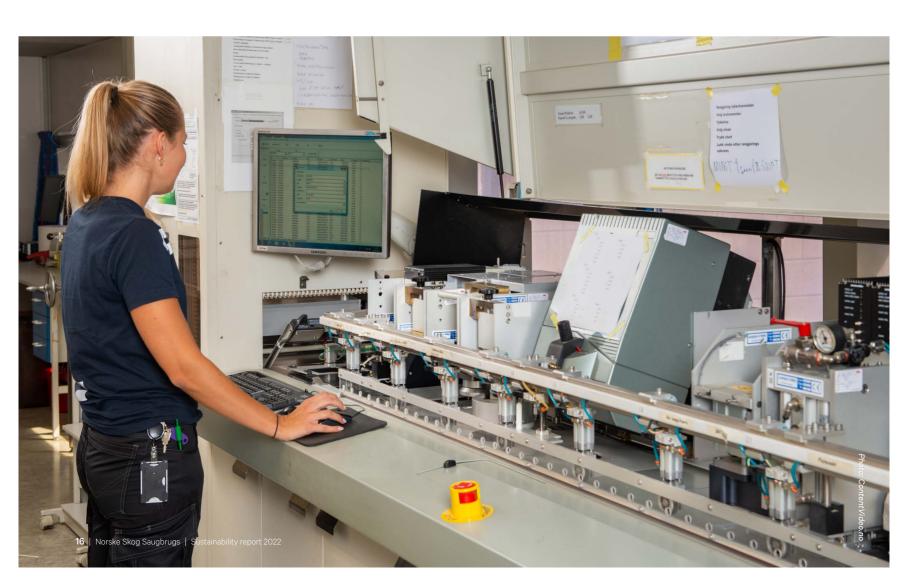
#### Ongoing internal R&D projects:

- Running the CEBICO project supported by Innovation Norway using the pilot plant for developing and to demonstrate new fibre-composite products
- Running the R&D project "Lignano" developing CEBINA products and applications
- Received funding from the Green Platform announcement jointly established
  with NFR, Innovation Norway and SIVA. This is the larges research project we
  have ever owned where the total activity has a budget of 109 MNOK over 3
  years divided between research partners (PFI, Sintef) and industrial partners.
  The project started in 2022.

#### Ongoing external R&D programs:

- Partner in the Borg CO CCS project
- Partner in Berry Alloc project, developing new bio-composite system for floors.

We develop and implement digital solutions to collect, share and use data for better efficiency and more stable processes throughout the whole life cycle. In 2021 we have defined a new digitization strategy.



### **Continued commercialization** of CEBINA

CEBINA continues to see strong customer interest. Commercial development of CEBINA has seen good progress during 2022, and the entry into coating systems is a key milestone. In addition, it represents the first sales contract with regular volume delivery.

"The sale of CEBINA into a new application is very exciting, as it provides further evidence of the wide-ranging and environmentally beneficial potential of the product. In addition, we will be able to generate regular sales and start building the financial foundation for the CEBINA business," says Hugo Harstad, Commercial Development Director of CEBINA at Norske Skog Saugbrugs.

CEBINA is a natural fibre-based product that adds rheology control in fluids and armoring in solid materials. CEBINA is produced by breaking down the wood fibre to very small parts, called cellulose nanofibrils (CNF) or micro fibrillated celluloses (MFC). One gramme of CEBINA can cover an entire tennis court or be stretched eight times around the earth. These incredible surface and length properties give CEBINA its unique qualities. Norske Skog Saugbrugs has worked closely with the R&D institutions RISE PFI, NORCE and Re-Turn. Support from The Research Council of Norway and Innovation Norway has been key to the success.

The work with CFRINA has evolved into a new area with the Master Batch applications, called CEBINA MB. Here we use CEBINA in a water free carrier in order to control reological properties of e.g. epoxy systems. As a part of the Green Platform research program we have during 2022 started the construction of a third pilot line for the development of CEBINA MB type of products. The pilot will start up during the second guarter of 2023 and will be a corner stone in the development of nano fibrils for use in organic carriers.





#### **CEBINA** used for coating of land-based salmon farming facility

In collaboration with Gjøco and BMO Entreprenør, Norske Skog has supplied CEBINA for the epoxy spray used for the coating of Salmon Evolution's first production facility in Indre Harøy, Norway.

The first phase of the innovative land-based facility includes a total of 12 tanks, where the first tank is already filled with seawater and salmon.

Due to the properties of our nanocellulose, CEBINA, the epoxy can be sprayed directly onto the wall without dripping as it hardens, reducing the application time from 2 weeks to approximately 4 days.





#### **CEBICO** pilot plant

As a more sustainable alternative to plastic, Norske Skog Saugbrugs has developed the biocomposite product, CEBICO, by combining thermomechanical pulp (TMP) with recycled plastic. By replacing 1 kg plastic with TMP, emissions are reduced by 6 kg of CO<sub>2</sub> equivalents.

During 2021 we constructed a pilot plant to produce CEBICO fibre composite, and at year end the major equipment was in place preparing for start-up early 2022. During 2022 the pilot has been ramped-up and a dedicated operational team has been established. The Innovation Norway supported project has progressed well and accelerate the development work for bio composites and prepare for market entry and grounds for future full-scale development. The pilot plant has a capacity of 300 tonnes pr year.

CEBICO can be used in standard injection molding and pipe extrusion to produce a range of products such as furniture, transportation boxes, automotive parts, drain pipes etc.

"We will revitalize Norwegian industry in a sustainable way - this great CEBICO investment is a part of that," says Minister of Industry and Trade, Jan Christian Vestre.

«Norske Skog Saugbrugs has a proud history when it comes to using Norwegian forest as a high-quality raw material. CEBICO is just one of several circular economy projects at Saugbrugs, and with a highly competent research and competence environment, we have the right tools to create an even more sustainable wood industry».

Managing Director, Per Ivar Berg, at Norske Skog Saugbrugs



Official opening of Norske Skog Saugbrugs biocomposite plant with Jan Christian Vestre

#### NOK 60 million award for research on nanocellulose and biocomposites

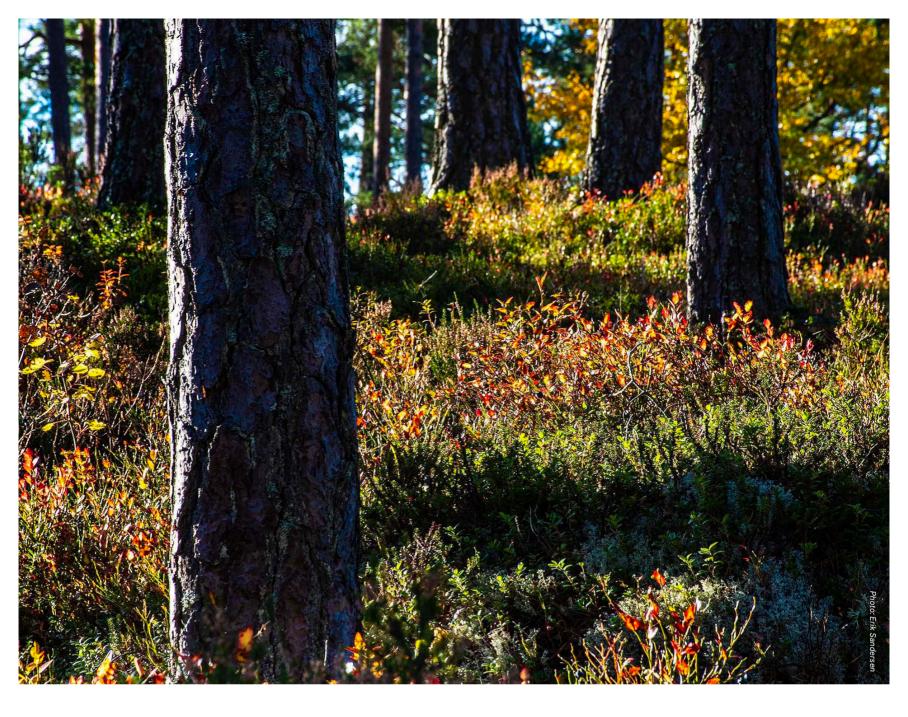
The Norwegian government's Green Platform Programme has awarded NOK 60 million to support Norske Skog Saugbrugs' research project on nanocellulose and biocomposites. The portfolio of products to be developed aims to remove or greatly reduce the use of petroleumbased raw materials and harmful materials, as well as to contribute to increased recycling of plastics.

"It is through research and innovation that we create tomorrow's sustainable society. Green platform is an important measure to ensure profitable green transition, and will help us become more skilled at scaling up and linking research to the market," says Minister of Trade and Industry Jan Christian Vestre.





Jan Christian Vestre, Minister of Trade and Industry and Sandra Borch, Minister of Agriculture and Food





### Make cities and human settlements inclusive, safe, resilient and sustainable

#### **BUSINESS THEMES THAT NORSKE SKOG SAUGBRUGS FOCUSES ON:**

- Social development
- Urban development
- Infrastructure

#### **AMBITION:**

Norske Skog Saugbrugs aims to be a strong and solid contributor in our town. This is achieved by working with the community in various ways, both authorities and private partners.

#### **PERFORMANCE:**

In 2022, Norske Skog Saugbrugs have finalized the build of a high school in cooperation with the regional authorities. Our earlier production buildings now house the school, and the project aims to develop the local urban area around the factory buildings through good infrastructure and an area to be used by the community. The new high school's location further promotes the close and

long-lasting cooperation between the school and Norske Skog Saugbrugs.

As our factory is situated in the middle of Halden town, it is paramount that the relationship with our neighbors is well maintained. We continuously focus on all aspects of this relationship, e. g. noise reduction, traffic, air, water etc.

In the community, we also have regular and onetime activities. For example, each year we award an honorary prize to athletes aged 14-18. We have donated a SeaBin to the municipality - a unit that acts as a floating garbage bin skimming the surface of the water. Saugbrugs has partnered with Kirkens Bymisjon Halden, to help disadvantaged young people to give them work experience, and to help them into employment.

Norske Skog Saugbrugs also works closely with local authorities in a number of urban development projects. The biggest such project in 2022 was an area regulation for the town center south, which is still ongoing.



#### Ensure sustainable consumption and production patterns

#### BUSINESS THEMES THAT NORSKE SKOG SAUGRRUGS FOCUSES ON:

- Resource efficiency of products and services
- Materials recycling
- Circular economy
- Sustainable sourcing
- Product and service information and labelling

#### **AMBITION:**

Norske Skog Saugbrugs key objectives are efficient production processes with high yield on raw material and energy utilisation. We shall maintain 99,5 % yield of incoming wood. We will reduce waste from our operation and have set a target of no ash delivered to landfill within 2025.

Norske Skog Saugbrugs expects all of our business partners to comply with the applicable laws, regulations and principles set out in Norske Skog Group's Code of Conduct.

We will only use raw materials from sustainably managed sources. Our goal is to continue to have 100 % certified wood in our products.

Norske Skog Saugbrugs shall have an environmental performance that supports our customers in reaching their environmental objectives.

#### **PERFORMANCE:**

We have high yield on our raw material. 96 % of the incoming wood will end up in the final paper products, while the residual is used for generating thermal energy or biofuel in the shape of biogas. In total a yield on incoming woods of 99,5%.

We have taken important steps forward to start the elimination of landfill and enable a possible recirculation of fly ash into new products. During 2021 we received the necessary permits to export and use our fly ash for cement production and we have continued the work within our established cooperation with a large European cement producer. Full scale trials have been performed during 2022 and longterm trials are aimed for in 2023.

Norske Skog Saugbrugs has systems and processes to make sure that all wood used in our products comes from sustainably managed forests. We have thirdparty verified Chain of Custody (CoC) certification systems in place and all our fibre is certified according to this. Please refer to SDG 15 to read more about sustainably managed forest.

Norske Skog Saugbrugs' procurement system is a sustainable procurement system. This means that we systematically shall collect our costumer's demands to secure that our processes support our costumer's sustainability objectives. Norske Skog Saugbrugs audit our main suppliers' sustainability performance, and we are systematically assessing both environmental impact as well as social responsibility when introducing new suppliers or entering new contracts with existing suppliers. The Code of Conduct is updated during 2022, and we have introduced procurement check list also covering SDGtopics to suppliers and routines for audit of suppliers.

Our products come with an environmental product declaration for paper (Paper Profile and Carbon Footprint) which guides the paper buyer according to environmental performance on standardized environmental parameters.

Norske Skog Saugbrugs is certified in accordance with ISO 9001, 14001, 45001 and 50001.







#### Take urgent action to combat climate change and its impacts

#### **BUSINESS THEMES THAT NORSKE SKOG SAUGBRUGS FOCUSES ON:**

- Reduced Greenhouse Gas emissions
- Investments in renewable energy
- Continuously improve life-cycle impact

#### **AMBITION:**

Norske Skog Saugbrugs has integrated the reduction of greenhouse gas emissions as a key part of our business strategy. Our goal is to reduce energy consumption, change the sources of energy and to optimize the use of process chemicals and transport. We will actively participate in the work to combat climate change.

We have set a specific target to reduce the CO<sub>2</sub>-emission (EU ETS regime) by 20 % vs 2020 and to have a net zero CO<sub>2</sub>-emission kg/ton paper in 2030. Going forward we will further reduce the CO<sub>2</sub>-emission from inbound pulp wood and sawmill chips transport.

#### **PERFORMANCE:**

Norske Skog Saugbrugs is working hard to reduce our carbon footprint and in 2022 we reached a level of 969 tonnes CO<sub>2</sub>-emissions based on the EU ETS regime. This is a reduction of 98 % since 2004.

The shut down of our oil boiler in 2021 was an important contribution to reducing emission of greenhouse gases.

Our carbon footprint, based on the CEPI carbon footprint tool, covers emissions from several elements of our value chain:

- Pulp and paper production
- · Forest and recycling operations
- · Producing other raw materials and fuels
- · Purchased electricity and heat
- Transport excluding transport to final customer which is calculated on a case by case basis

In 2022 we reached a level of 160 kg CO<sub>2</sub>/tonne of paper based on this method. This is a decrease compared to the 2021 level caused by change of footprintfactor for Norwegian electricity and reduced use of some chemicals.

Norske Skog Saugbrugs is part of an industrial cluster that has carried out a feasibility study of Carbon Capture Storage. The project has carried out a pre-FEED of a value chain capture of 50 000 tons of CO<sub>2</sub>/year facility at Saughrugs. During 2022 we have investigated in the possibility to run a pilot trial with CO<sub>2</sub> capture. An application for support was sent to Gassnova late 2022. The aim is to evaluate a suitable capture technology in a 4-6 months test period.

A life cycle study made by IVL, Swedish Environmental Research Institute, concludes that paper from fresh fibres has lower environmental impact than paper from recycled fibres given that the paper is produced where the environmental impact of production electricity is low and the forests are sustainably managed. This is the situation for Norske Skog Saugbrugs' paper.

Please refer to SDG 7 to read more about energy consumption and production.

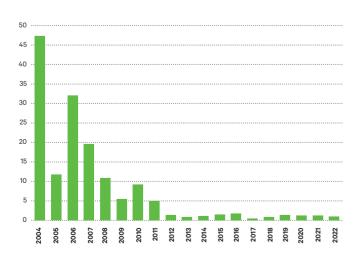
Norske Skog Saugbrugs develop logistic solutions, which reduce the effect on climate. One example is the work done on transferring timber and sawmill chips transport from road to railway.

Norske Skog Saugbrugs has over years focused on moving transport of round wood and sawmill chips from road to railway as a part of reducing our environmental impact. Through 2022 we have established one new round wood railroad terminal and introduced a third sawmill chips terminal in spring 2022. This has further reduced the number of lorries going to and from Halden by 1000 compared to our 2020 solutions.

We have established a system for performing an annual climate risk and opportunity analysis.

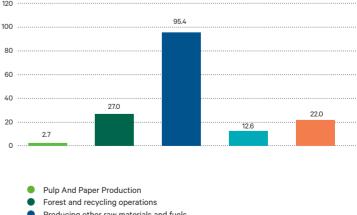
#### EU ETS CO2-EMISSIONS, FOSSILE

1000 ton/veal



#### **CEPI CARRON FOOTPRINT 2022**

ka CO<sub>2</sub>/tonnes of pape



- Producing other raw materials and fuels
- Purchased electricity and heat
- Transport excluding transport to final customer



#### Conserve and sustainably use the oceans, seas and marine resources for sustainable development

#### **BUSINESS THEMES THAT NORSKE SKOG SAUGBRUGS FOCUSES ON:**

- prevent and reduce marine pollution of all kinds
- sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts

#### **AMBITION:**

Norske Skog Saugbrugs objective is to prevent and reduce pollution of all kinds. We are committed to follow the ambitious permit given by the relevant Norwegian authorities. Our objective is to ensure sustainable impacts on marine and coastal ecosystems. .

#### **PERFORMANCE:**

With the increase of industrial effluents through the past centennial, our nearby eco-system Iddefjorden became more and more polluted. During the 1950's almost all larger organisms in the fjord died out. In the early 70s, we carried out several large environmental investments. Fish, animals at the bottom of the fjord and algae were slowly starting to recolonise the fjord. After the shutdown of the Cellulose Pulp Mill in 1991 and the start-up of our own effluent treatment plant in 1992, the conditions at the bottom of the fjord have been rapidly improved in the vicinity of Halden.

The treated wastewater from Saugbrugs is discharged into the river Tista. This can affect the river and fjord negatively. In 2015, 2018 and 2021, actionoriented monitoring according to the Water Frame Directive was carried out in Tista and the Iddefjord.

In the river Tista, surveys were carried out at two stations, one upstream and one downstream of Saugbrugs' discharge points. The results from the years 2015, 2018 and 2021 show that the company's emissions have a significant impact on the ecological status of all biological quality elements in the river Tista. The survey also showed that the emission of total phosphorus has been considerably reduced and are 67% lower in 2021 compared to 2018, while the corresponding reduction for total nitrogen is 41%.

In 2021, both stations unstream and downstream were classified as "moderate" for the physico-chemical supporting elements. For various reasons, both stations in the river Tista are more or less unsuitable for biological sampling. The station upstream is located in slow flowing water and dominated by fine sediment, which can lead to uncertain classification. The station downstream is characterized by the possibility of large and rapid water level changes, which can affect the biology. The stations will therefore be moved to more suitable locations in the next monitoring in 2024.

The following text is taken from the summary in the report from the 2021 monitoring. The report is written by The Norwegian Institute for Water Research (NIVA) on behalf of Norske Skog Saugbrugs.

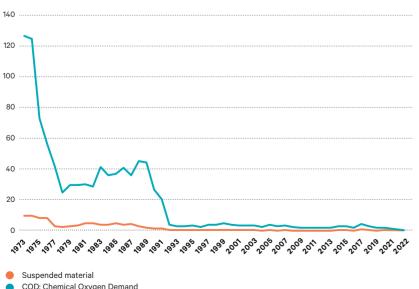
"The Iddefjord is a sill fjord where anoxic conditions regularly occur, which makes it very vulnerable, and any increase in organic matter and nutrient supplies will aggravate the situation. The natural design of the Iddefjord basin also makes it more sensitive to pollution compared to other areas. In a study of the supply of nitrogen to the Outer Oslofjord from the 1990s until 2020, it was concluded that negative environmental effects in a number of areas of the fjord are associated with very high supplies of nitrogen, including the Iddefjord. Model-based calculations of the average annual supply of nitrogen to the Iddefjord for the period 2016-2018 showed that Saugbrugs' discharges corresponded to 7.5% of the total supply of nitrogen. In regard to the bioavailable part of total nitrogen, i.e. the part that is readily available for uptake in an organism, the picture becomes different. Supply of bioavailable nitrogen to the Iddefjord was estimated to be 595 tonnes per year, of which Saugbrugs' contribution corresponded to approximately 1%. Saugbrugs has since 2018 reduced its nitrogen emissions and show a positive decreasing emission trend."

We have a continuous focus on improvement activities related to emissions of suspended solids, COD, nitrogen and phosphorus. All parameters showed a reduction in 2022.

We have financed and built a salmon cultivation facility and salmon ladders within our own premises.

#### **EMISSIONS TO WATER**

1000 ton/vea





Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

### BUSINESS THEMES THAT NORSKE SKOG SAUGBRUGS FOCUSES ON:

- Deforestation and forest degradation
- Sustainable fibre sourcing
- To prevent and reduce emissions to air

#### **AMBITION:**

Forestry and use of forest products play an important role in the combat of climate change. For the forest value chain to be a part of the climate change solution, the forests must be managed sustainably. Our goal is to maintain 100 % certified wood in our products.

Our objective is to prevent and minimize emissions of  $SO_2$  and  $NO_X$  from our operations. We are committed to follow the ambitious permit given by the Norwegian government.

#### PERFORMANCE:

Norske Skog Saugbrugs has systems and processes to make sure that all wood used in our products comes from sustainably managed forests. We have two third-party verified Chain of Custody (CoC) certification systems in place:

- PEFC
- FSC

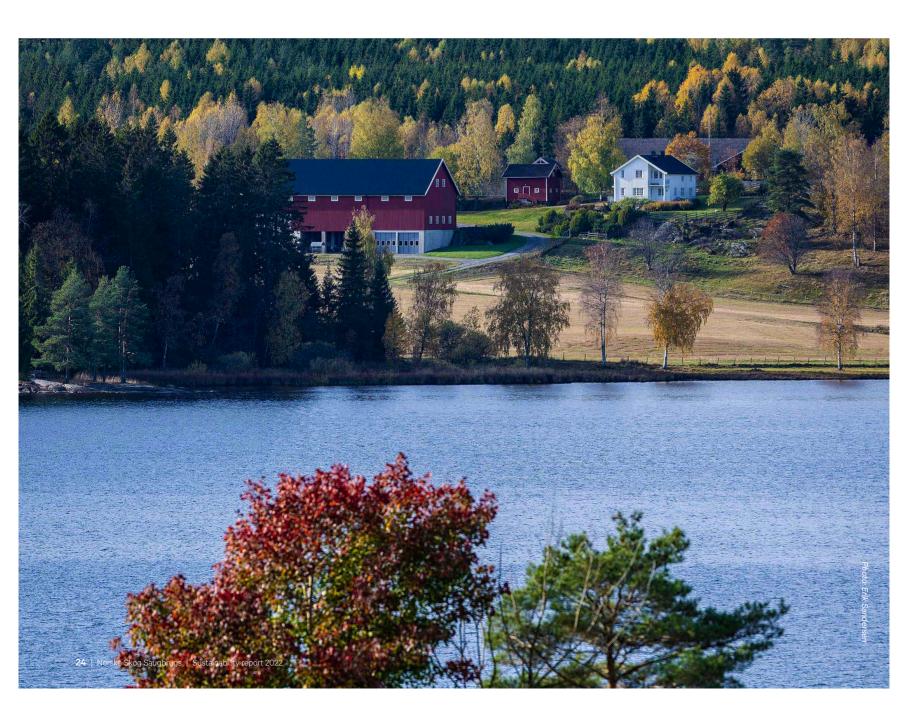
All our fibre is certified according to either the PEFC or FSC CoC certification system.

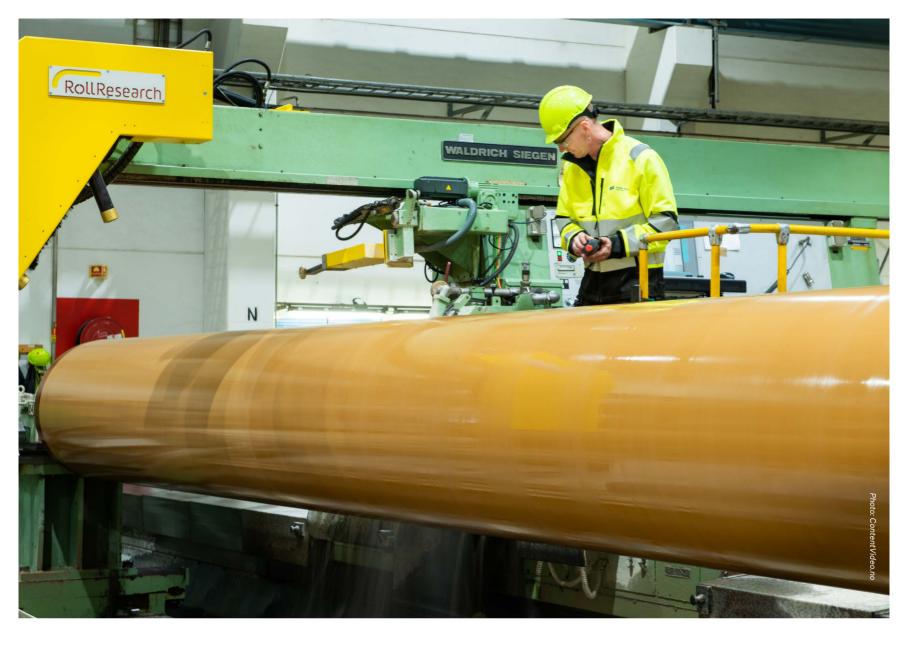
Atmospheric discharge from our boilers is continuously monitored by inline sensors and analyzed every half year by approved external contractors. To be able to maintain low  $SO_2$  emissions, we have made strategic decisions not to use sulphurous bleaching chemicals in our operations.



The mark of responsible forestry









Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

#### BUSINESS THEMES THAT NORSKE SKOG SAUGBRUGS FOCUSES ON:

- Effective, accountable and transparent governance
- Compliance with laws and regulations
- Anti-corruption

#### AMBITION:

Norske Skog Saugbrugs' goal is to create competitive shareholder values within our strategic goals. As part of the Norske Skog group, we share the important instruments for achieving this objective, which includes good principles for corporate governance and a clearly defined division of responsibilities and roles between Norske Skog's governing bodies.

All employees and others acting on behalf of Norske Skog Saugbrugs must act in compliance with applicable laws and regulations and ethical guidelines at all times. Norske Skog has a zero tolerance policy for non-compliant behavior and will take necessary actions in order to respond to any breaches that may occur.

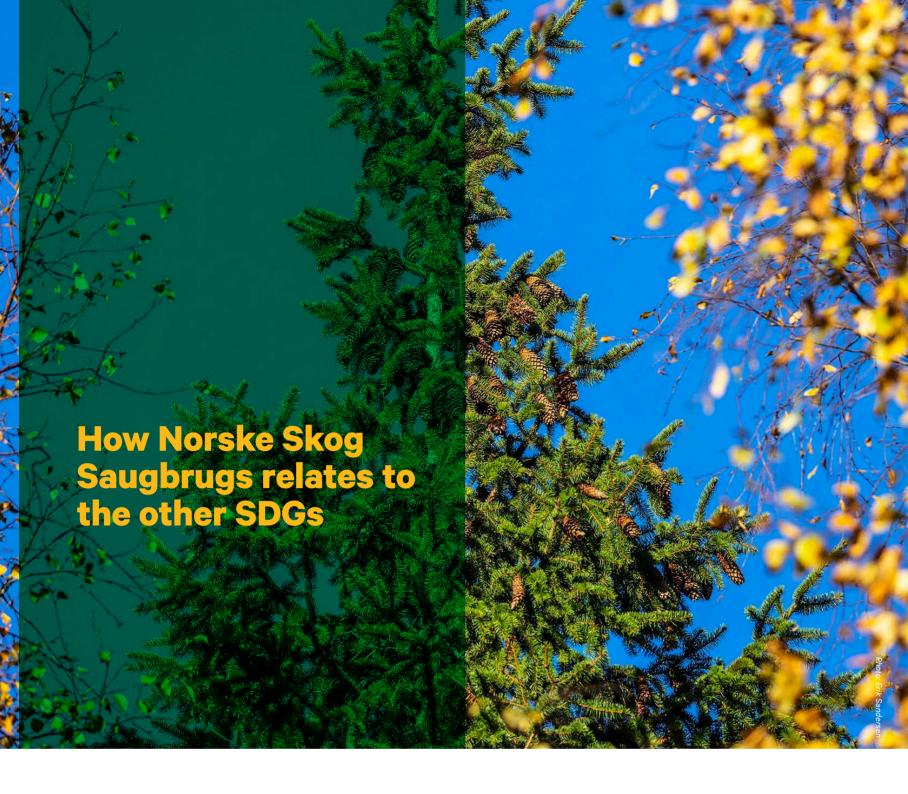
#### PERFORMANCE:

To meet future sustainability expectations, we conduct our business mandates

and activities according to the Norske Skog Groups internally developed Steering Guidelines, Power of Attorney structure and Operating Model. These provide the basic framework for our mandates and activities.

Norske Skog Saugbrugs has – as a business unit in the Norske Skog Group - a high degree of independence and accountability. Norske Skog Saugbrugs' general manager is responsible and accountable for decisions and results within the unit. The Norske Skog Group has common standards of conduct for all business units and employees through our Steering Guidelines. The group apply a uniform basis for our operations across countries and cultures with regard to HESQ (health, environment, safety and quality), people development, financial reporting and legal compliance. In these areas, our conduct must be based on the same sustainable principles to promote the shared interests of the Norske Skog Group and our stakeholders.

Norske Skog Saugbrugs has for a number of years maintained a reporting (whistle-blowing) channel, where employees and other stakeholders can report on possible unethical and/or unlawful behavior, and be assured confidential and serious treatment of the report. Any confirmed non-compliance will be followed-up with fair consequences.





End poverty in all its forms everywhere Earnings, wages and benefits

#### **AMBITION:**

We aim to maximize Norske Skog Saugbrugs' value through reliable, responsible and sustainable conduct throughout our operations

#### **PERFORMANCE:**

We have delivered a significant increase in profits in the last year and safeguarded employment for our workers. Our mill is producing profitably at full capacity.

Our company is a cornerstone of the local communities. We work closely with the local communities through an open dialogue.



End hunger, achieve food security and improved nutrition and promote sustainable agriculture

We do not have a significant impact on food systems or agriculture nor are we operating in societies with high poverty.

We deliver organic materials from production waste to agriculture for re-use.



### Reduce inequality within and among countries

# 17 PARTNERSHIPS FOR THE GOALS

### Strengthen the means of implementation and revitalize the global partnership for sustainable development

#### AMBITION:

Norske Skog Saugbrugs is committed to an inclusive work culture, and appreciates and recognizes that all people are unique and valuable and should be respected for their individual abilities and views.

Norske Skog Saugbrugs is working to implement the Norwegian Discrimination Act's objective within our business. This includes activities to promote gender equality, ensure equal opportunities and rights, and to prevent discrimination due to ethnicity, national origin, descent, skin colour, language, religion and faith.

#### **PERFORMANCE:**

Norske Skog Saugbrugs have signed a letter of intent regarding a more inclusive workplace ("IA Agreement") (with supplementary agreements). The IA Agreement builds on a tripartite cooperation between the national authorities, the trade unions and Norske Skog Saugbrugs, with the aim of reducing sickness absence rates and increasing focus on job attendance for all employees. This cooperation ensures the participation of all parties involved.

For further information about gender diversity, please see SDG 5.

The Norske Skog Group was the first international paper manufacturer to sign an agreement with the International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM) and the Norwegian United Federation of Trade Unions concerning employee rights on a global basis.

The Norske Skog Group were also an early adopter of the 10 principles in the UN Global Compact.

The Norske Skog Group's research and development work is performed at the individual business units and in cooperation with external research institutions. The work is coordinated centrally, with the aim to leverage synergies and best practices throughout the group. There is a continued focus on the evolution of paper products and new innovative green alternatives to existing resources.



#### Norske Skog joins UN Global Compact Norway

To strengthen our commitment to green growth and sustainable business practices, Norske Skog has joined UN Global Compact Norway - the world's largest corporate sustainability initiative.



Sustainability goals overview		E/S/G & E*	Ambition/ Area
		S	To increase job attendance for all employees.
3 AND WELESING	3	S	To ensure a healthy and safe working environment.
4 QUALITY COULDING  5 COUNTY	4	S	To attract and to keep top talent
			To invest in our people through training and development.
● ●	5	s	To promote gender equality throughout the organisation.
6 CLEAN WATER AND SANITATION	6	E	To sustainably manage water.
<b>V</b>			To reduce electrical energy consumption.
AFFIDDARIE IND	7	E	To use sustainable energy sources.
7 AFFORDABLE AND CLEAN ENERGY	8		To ensure sustainable use of materials in our operations - circular economy.
8 DECENT WORK AND LEDWING GROWTH			To have zero tolerance for practices such as bribery, facilitation payments, fraud, extortion, collusion, and money laundering; the offer or receipt of gifts, loans, fees, rewards, or other advantages as an inducement to do something that is dishonest, illegal, or represents a breach of trust. This also include practices such as embezzlement, trading in influence, abuse of function, illicit enrichment, concealment, and obstructing justice.
TO TO THE SECONDARY OF		G	To prohibit the use of child labor within our operations and avoid contributing to the use of child labor suppliers and customers.
			To commercialize CEBINA and CEBICO.
9 ROUSEL ROUNDS	9		Perform or participate in research and development programs that foster a sustainable industry and a sircular economy.
11 SUSTAINABLE CITIES AND COMMUNITIES		S	To understand the actual and potential impacts our operations have on local communities, and to understand their expectations and needs.
AMBOOMMUNITIES	11	E	To report the extent of development of significant infrastructure investments and services supported, both current or expected impacts on communities and local economies.
	***************************************	•	To maintain high yield on raw materials.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12	E	To reduce waste from our operations.
		G	To ensure sustainable supplier value chain handling.
13 CLIMATE ACTION	13		To reduce GHG emissions
			To handle climate risk and business opportunity understanding.
14 IPE BELOW			To prevent and reduce marine pollution of all kinds.
	14	Е	To sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts.
15 ON LAND	15	E	To ensure sustainable sourcing of raw material.
		_	To prevent and reduce emissions of SO <sub>2</sub> and NO <sub>x</sub> from our operations.
		G	To abstain from financial and in-kind political contributions.
16 PEACE JUSTICE AND STRONG INSTITUTIONS	4-	S	To ensure our customers healthy and safe working environment.
<b>Y</b>	16	G	To abstain from anti-competitive behaviour and adhere to relevant competive legislation.
		S	To have zero tolerance for discrimination on grounds of race, color, sex, religion, political opinion, national extraction, or social origin as defined by the ILO, or other relevant forms of discrimination involving internal and/or external stakeholders.
		* E/S/G&E:	Environment / Social / Governance and Economy

Targets	Planned activities

Short and midrange absence (1-16 days) at or below 2%. Total absence at or below 4,2%.	Close follow up of all absence, work closely with personell leaders. Revise and develop our in-house guide for absence. Actively follow IA agreement, between the company, unions and government.
To reach zero occupational injuries (LTI and TRI).	Systematically work with our safety barriers.  Performing a regular self-assessment to identify focus areas for improvement. Identify a yearly HES action plan.  Continuously work with 'Visible leadership' - our program for vigorous, caring and improvementoriented leadership.
To achieve at least 85 % of new hired skilled workers to be recruited from apprentices programs by 2025.	Develop our advanced apprentice program, including extended training programs.
To continously have two trainee positions or internships for master degree students.	Cooperating with local schools and selected universities about relevant programs.
To develop and establish new training programs to secure critical competence.	Further develop leadership training programs - primarily "Better Leaders Program" - and network, and to establish and implement plans to develop core competence.
To achieve a 100 % completion rate for compentece plans in 2023.	Keep high focus throughout the organisation through yearly reviews, individual follow-up.
To provide training modules for technical core skills, "soft" skills and compliance skills.	Offering training and supplementary education for all through their entire job career, i.e. annual review of performance and revision of annual plans for training and development.
Increase number of female employees to 10% in 2025.	Promote and develop the work of the Committee on Gender Equality and Diversity, actively work with recruiting of female apprentices.
To continously reduce our fresh water consumption.	Further develop internal water usage to reduce fresh water consumption.
To continously reduce our electrical energy consumption.	Yearly energy program for reduced energy consumption.
To eliminate use of fossile energy sources.	Change internal transport means from fossile to electrical.
Stabilise biogas production at 2021 level.	Continue utilising waste waters to produce biogas. Optimise waste water treatment plant including biogas reactor.
To have no incidents of corruption in any field. To increase knowledge in the organisation regarding the issues. To thoroughly investigate all possible incidents.	In accordance with the Steering Guidelines perform mandatory compliance review and training for relevant personell and business partners and other relevant to our business periodically or when needed.
To have no incidents of child labour in any field.  To increase knowledge in the organisation and with our suppliers regarding the issues, with extra focus on countries or geographic areas with operations and suppliers considered at risk.  To thoroughly investigate all possible incidents.	In accordance with the Steering Guidelines perform mandatory compliance review and training for relevant personell and business partners and other relevant to our business periodically or when needed.
To achieve 50 % of EBITDA from new business areas by 2030.	Work with partners to demonstrate and qualify CEBINA in paints and epoxy coatings.  Secure CEBICO cooperation agreement for application in injection molding and circular solutions.  Leverage the "Green Platform" grant to accelerate growth.  Expand production capacity in line with increased demand.
Continuously lead or participate in research and development cooperations that support our new fibre projects and energy efficiency	Internal:  - Running the CEBICO project supported by Innovation Norway using the pilot plant for developing and demonstrate new fibre-composite products  - Running the R&D project Lignano" developing CEBINA products and applications  - Running the Green Platform project for CEBINA and CEBICO  External:  - Partner in the Borg CO <sub>2</sub> CCS project  - Partner in Berry Alloc project, developing new bio-composite system for floors
Report the significant social, environmental, safety and economic impacts our operations have on the local communities.	Cooperating with local community organization and being open and honest about environment, safety and economic issues with relevant community bodies.
To report examples of significant identified indirect economic impacts of the organization also in the context of external benchmarks and stakeholder priorities, such as national and international standards, protocols, and policy agendas.	Cooperating and communicating openly with the local community about company strategy and investment plans as early as possible.
To maintain 99,5 % yield on the incoming wood.	Continous activities to maintain high yield on incoming wood.
To have no ash delivered to landfill in 2025.	To continue our partnership with a large European cement producer with a common goal of bringing all the fly ash from Norske Skog Saugbrugs into their production. Full scale trials have been performed during 2022 and long
 To ensure that contracts with large suppliers cover social responsibility, energy and environmental targets. Secure that all suppliers have responded to our procurement checklist in due time.	Continue to use procurement check list also covering SDG-topics to suppliers when introducing new and reentering agreements with current suppliers. Follow routines for audit of suppliers.
To reduce CO <sub>2</sub> emission on inbound pulp wood and saw mill chips transport.	Establish terminals and move transport from road to rail.
To have net zero CO₂ emission kg/ton paper in 2030.	During 2022 we have investigated in the possibility to run a pilot trial with CO <sub>2</sub> capture. An application for support was sent to Gassnova late 2022. The aim is to evaluate a suitable capture technology in a 4-6 months test period.  All internal transport means to electrical.
To review the annual climate risk plan and business opportunity analysis.	Performing yearly climate risk and opportunity analysis.
To be compliant to emission permits and regulations.	Performing mill improvement activities related to emissions of suspended solids and COD.
To ensure sustainable impacts on marine and coastal ecosystems.	Perform the fourth action-oriented monitoring according to the Water Frame Directive in 2024. Monitoring will take place on the basis of recommendations from previous surveys. Initiate actions based on these results.
To maintain 100% certification of all wood used for our products.	External audits to verify sustainable control routines to measure and maintain the certification target.
To be compliant to emission permits and regulations. No use of sulphurous bleaching chemicals.	Performing mill improvement activities related to emissions of $SO_2$ and $NO_X$ . Maintain no use of sulphurous bleaching chemicals.
To report which political topics and influence channel the group has used.	Involving in political tasks through the Norwegian Federation of Trade and Industry, the Norwegian Pulp and Paper organization, CEPI, and through other relevant partnerships.
To continously work with customers to improve all aspects of our operation and products.	Performing reviews of relevant health and safety hazards our operation and products expose.
To have no incidents of anti-competitive behaviour of any kind.	Performing training and annual reviews with relevant personnell and agents on relevant anti-competitive legislation and Norske Skog Steering Guidelines.
To have no incidents of discrimination of any kind.	Identifying throug formal process(es) instance(s) of non-compliance to relevant non-dicriminatory Steering Document procedures, including management system audits, formal monitoring programs or grievance mechanisms (whistleblower channels). Establishing Equality and Diversity Comitee.

#### **KEY FIGURES NORSKE SKOG SAUGBRUGS**

	Enhet	2018	2019	2020	2021	2022
Production						
Production of magazine paper	tonnes	435 595	385 626	315 124	322 275	313 613
Biogas production	nm³		115 553	120 429	127 437	133 711
Production of Thermomechanical Pulp	tonnes	317 415	316 740	268 507	268 984	255 220
Consumption						
Energy consumption (electricity)	MWh per year	1 232 797	1 135 262	970 339	933 318	879 224
Water consumption	m³/tonnes of paper	16.3	17.4	18.9	15.1	14.7
Certified fibre share	%	95	95	95	100	100
Discharges to water						
Chemical Oxygen Demand	kg/tonnes	6.3	4.9	6.3	5.3	3.5
Chemical Oxygen Demand	tonnes	2 769	1 913	1 976	1 711	1 101
Suspended solids	tonnes	236	147	180	103	91
Nitrogen (Tot-N)	tonnes	71.1	66.6	51.8	41.8	31.4
Phosphorus (Tot-P)	tonnes	7.0	6.5	3.3	2.3	2.0
Emission to air						
EU ETS CO <sub>2</sub> -emissions. fossile	tonnes	806	1 372	1 185	1 208	969
CEPI Scope 1&2	kg CO <sub>2</sub> /tonnes of paper	161	143	152	188	160
NOx (biofuel boiler)	tonnes	102	88.0	76.1	25.1	38.4
SO <sub>2</sub> (biofuel boiler)	tonnes	34.6	6.8	14.0	0.81	0.52
Particles (biofuel boiler)	tonnes	0.88	0.64	0.48	0.34	1.37
Production waste						
Waste to landfill	BDkg/tonnes	13.7	17.2	20.4	9.9	7.6
Employees						
Number of employees (FTE)		466	463	459	413	413
Female share	%	7.9	7.9	7.8	8.0	8.0
Employees w/ collective agreements	%	92	92	93	92	92
Health and Safety						
Number of H1 injuries		0	0	0	0	1
Number of H2 injuries		5	4	2	2	4
Number of H3 injuries		13	10	9	11	8
Sick leave Total	%	4.3	4.3	4.7	3.8	4.5
Sick leave Midrange	%	2.3	2.3	1.9	1.9	2.3



