

The future is built with wood



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Look beyond the figures in the climate accounts

In this report you will see that Moelven has a climate footprint that many may be envious of. The Group is what we refer to as climate-positive, because our operations are based around a renewable resource that also stores carbon. The carbon storage in the wood helps reduce the CO₂ emissions to the atmosphere when Moelven products and solutions using timber as the primary ingredient are supplied and used in permanent buildings and structures. This is part of the solution to the climate crisis faced by the world. But for Moelven, sustainability is about more than just the figures in the climate accounts.

AT MOELVEN, WE EXPERIENCE pressure. We need to deliver products and solutions that the world needs, we need to employ and develop our people and, of course, deliver results to our owners. None of this is, in and of itself, unique. What makes us experience additional pressure is that the majority of our operations are based around a renewable resource. This is a commitment.

Sustainability has been a factor at Moelven for many years, even long before the word sustainability was used. It is about using the forest's resources in the most efficient way possible. Put simply, the entire tree must be used. This has been the thinking ever since 1899, when Moelven first started producing wagon wheels that had been dipped in boiling oil.

When we look back at 2020, the year of the pandemic, it was a year in which the demand for wood products sharply increased in large parts of the world. This helps keep local communities running in Norway and Sweden, where Moelven is often a cornerstone company in a small place. It is important to Moelven that we contribute towards strengthening our workplaces by developing our expertise and our industry. To us, this is also sustainability.

The day when we say that we are sustainable enough, will be the day when we have stopped developing and started to wind up our business. Naturally, this is not something we are interested in doing. We know that our climate accounts are good. But it is not enough. That is why we, at Moelven, have decided

to use this report to speak openly about what we have achieved and what we have not succeeded in. We have set out some tough targets and changes are required to achieve them. This is a pressure that can be felt. If there is anyone who needs to be able to withstand scrutiny, it is companies like Moelven. Because of the industry we operate in. There is both commitment - and inspiration. Because we are confident that we can build a sustainable future using wood.

CEO
Morten Kristiansen



This is Moelven

Our vision

*The natural choice
for people building and
living the Scandinavian
way.*

Our personnel concept

*Moelven provides
opportunities for those
who want them.*

Our mission

*Create quality
rooms*

Sustainable

Moelven respects people and the environment. Our activities are based on renewable resources and turning sustainability and long-term thinking into competitive advantages. We are determined to take responsibility for our environment.

Reliable

Moelven can be trusted. We deliver at the agreed time and with the right quality. We focus heavily on transparency and honesty – being able to admit to weaknesses and mistakes provides a basis for progress and credibility.

Our values

Make the most of opportunities

Moelven seeks solutions. The Group has the capabilities and resources to be leading in product development and innovation. We have always been a company at the forefront and use the opportunities that shifting times provide.

Sustainability at Moelven

“Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs” has become a common way of defining sustainable development after the World Commission on Environment and Development, or Brundtland Commission, initially launched the concept in 1987. This definition takes into account people’s need to fulfil their rights and create opportunities for a better life and also emphasises the fact that there are limits as to what nature can deliver today without it affecting what it is able to deliver in the future. With our current way of life, we consume resources corresponding to what could be produced by 1.6 earths each year. Put differently, we are draining the earth of its resources. If we take a look at the Scandinavian countries in isolation and imagine that the entire world lives like us, we would have an annual resource consumption equivalent to approximately 3.6 earths. It goes without saying that this way of life cannot continue in the long term. The climate crisis and pollution issues we currently face will, over time, change both human needs and also the earth’s ability to produce the resources required to meet these needs.

The UN Sustainable Development Goals consist of 17 goals and 169 targets adopted by the UN member states in the autumn of 2015. The goals are the world’s joint plan to eradicate poverty, combat inequality, stop climate change and protect the earth’s ecosystems. The goals reflect the three dimensions of sustainable development: climate and the environment (biosphere), society and social factors and the economy.

At Moelven, we are convinced that we can do our bit and that our efforts make a difference.

For us, sustainability is about making the right choices for the world but, in order to manage this, we also need to make choices that help create long-term value for the company. If we can achieve this, we will also be part of the long-term solution and sustainability is therefore the common thread at Moelven, from our vision to our strategy.

Stakeholder analysis and materiality analysis

In 2017, a stakeholder analysis was conducted to identify the stakeholder groups that are most affected by Moelven’s operations, as well as a materiality analysis to determine which sustainability areas are most important, both for Moelven and these stakeholder groups. Moelven’s priority areas and long-term ambitions for its sustainability work have been determined on the basis of these analyses. This is how we intend to ensure that we meet our stakeholders’ expectations and are prepared for future requirements and demand, and that we can focus our efforts where they can best contribute to sustainable development, both for society in general and for Moelven as a Group.

The analysis work we conducted indicated four priority areas that sustainability efforts at Moelven could be divided into:

- Climate-smart products and services
- Safeguarding natural resources
- Focus on people
- Local assets

The Moelven sustainability strategy is based around these four priority areas and sub-topics. This is also how this report has been structured. As a further aid in prioritising this work, the topics are categorised as follows:



GLOBAL REPORTING INITIATIVE

We used the Global Reporting Initiative’s guidelines as the basis for conducting the analysis that formed the basis for the selection of the priority areas, important topics related to the priority areas and in drawing up the sustainability report.

MOELVEN
Industri AS



The big picture

Working together to achieve the goals

Individually, the UN Sustainable Development Goals can absolutely be achieved. Creating sufficient global change to achieve the goals by 2030 is becoming increasingly challenging as time passes but it is not impossible. We know what it takes and the technology to implement the changes does exist, but there may still be some shortcomings in terms of the content of UN Sustainable Development Goal no. 17 – Working together to achieve the goals.

2020 turned into a very difficult year for many, but it also demonstrated just how significant the impact of joint action can be.

Fortunately, the commitment, willingness and ability to make changes that contribute towards achieving the sustainable development goals are increasing. A growing number of countries are adopting climate laws that include and endorse ambitious improvements, not only with regard to greenhouse gas emissions but also in areas such as e.g. the use of plastic, waste, reuse and recycling. In April 2021, the EU member states also reached an agreement on an EU Climate Law. It is established through this law that net greenhouse gas emissions will be reduced by at least 55 per cent from the 1990 level by 2030, a sharp increase from the previous target of a reduction of 40 per cent.

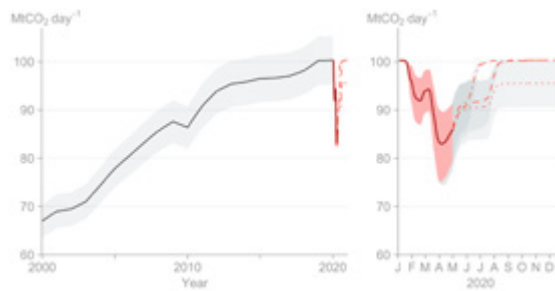
The European Green Deal and the taxonomy

A new framework, the European Green Deal, has been established within the EU, which includes an ambition for the entire EU to become carbon-neutral by 2050. One important aspect of the European Green Deal framework is the taxonomy. The taxonomy will define what a sustainable activity is.

In order to classify an activity as sustainable, the activity must meet the following criteria:

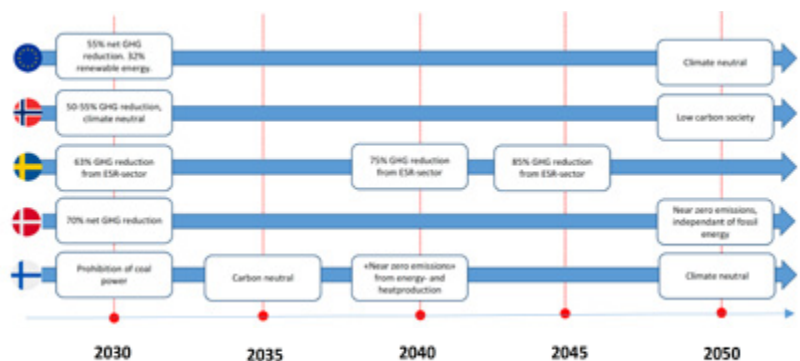
1) *Contributing significantly to at least one of six environmental objectives:*

- a. Climate change mitigation
- b. Climate change adaptation
- c. The sustainable use and protection of water and marine resources
- d. The transition to a circular economy
- e. Pollution prevention and control



Source: Le Quéré et al. Nature Climate Change (2020); Global Carbon Project

Global CO₂ emissions dropped abruptly when the COVID-19 pandemic struck in February/March 2020. For the year as a whole, emissions were approximately seven per cent lower than in 2019. After a rapid increase in emissions following the drop in the first six months, at the turn of the year we were back at the same emission rate as one year previously.



f. The protection and restoration of biodiversity and ecosystems

2) *Not causing significant harm to the other environmental objectives*

3) *Fulfilling the minimum conditions concerning social rights*

Hopefully, frameworks like this will help clarify the direction of sustainability work, thereby making it easier to work together to achieve the sustainable development goals and, not least, lead to the necessary changes being implemented more quickly. For Moelven, this means that we will perform a thorough review of our objectives to ensure that we are working in line with the framework and are playing our part in working together to achieve the goals.

Moelven's priorities

At Moelven, we have prioritised sustainability work according to its importance for the world and for us and we have also emphasised where we can best make a difference. Most of our activities are based around a natural, renewable raw material, which is

Source: The Danish Ministry of Climate, Energy and Utilities, the Finnish Ministry of Environment and Climate Change, the Norwegian Ministry of Climate and Environment, the Swedish Ministry of the Environment, Danske Bank, the European Commission

also nature's own solution for carbon capture and storage, namely wood.

The most important aspect of our sustainability strategy is therefore to work to refine the raw material with the smallest possible climate footprint and to work to ensure that the highest possible proportion of our finished products become part of permanent buildings and structures so they can continue to bind carbon for as long as possible. Around five to six times as much carbon as the company releases is bound by the Group's annual timber production. An important aspect of Moelven's sustainability strategy has been to reduce our electricity consumption. This is important both because the production of electrical power results in the emission of CO₂ but also because it represents a significant cost. During the course of 2020, it has been decided that the goal of reducing CO₂ emissions will be prioritised ahead of the goal to reduce electricity consumption. This is because the replacement of fossil fuel sources, such as diesel for trucks and construction machinery, with electricity leads to an increase in electricity consumption. Nevertheless, the goal to make our electricity consumption more efficient remains in place where possible.

The priority areas in the Group's sustainability work continue to be:

- Climate-smart products and services

In order for Moelven and the materials we produce to be climate-positive, we need to continuously work to reduce our carbon footprint and improve the efficiency of the energy consumption in our production.

- Safeguarding natural resources

In order to ensure that our company contributes to safeguarding natural resources, we must ensure that we use renewable resources and that we take full advantage of them. We do this by ensuring the certification and quality assurance of the supply chain, optimising our own production and sorting residual raw materials and waste in such a way that we can facilitate reuse and recycling.

- Focus on people

We aim to be a safe and attractive workplace and we will ensure that our business activities and

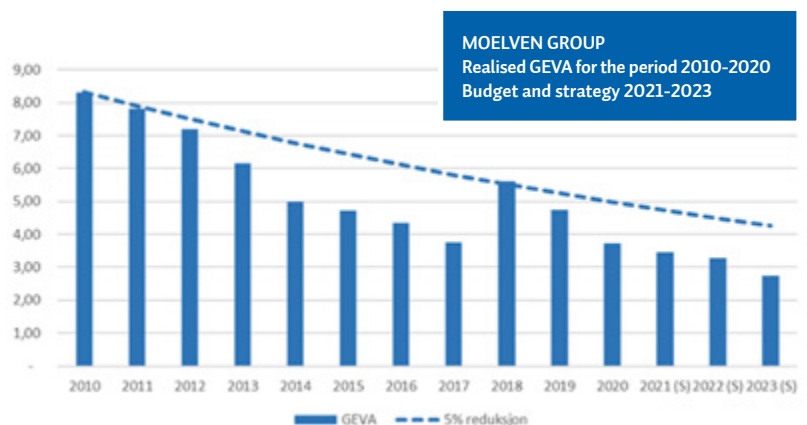
products are not harmful to people, biodiversity or ecosystems.

- Local assets

We will create more green jobs. We do this not only by ensuring long-term and green value creation in our own business activities. We also contribute to the green transition through our community contributions in the form of the taxes and charges we pay and the ripple effects that are created in local communities through our use of local subcontractors.

In the short term, we have set specific targets for what must be achieved. These are described in more detail under each topic in this report. The same period applies to the targets that applies to the current strategy plan, i.e. up to and including 2023.

One of the means Moelven uses to monitor developments in the longer term, up to 2030 and beyond, is greenhouse gas emissions measured by GEVA (greenhouse gas emissions per value added). This is an expression of the relationship between greenhouse gas emissions and added value. Calculations show that if we achieved an annual global reduction of five per cent, i.e. that greenhouse gas emissions would be less compared to value added, it would be possible to achieve several of the goals set down in the Paris Agreement at the same time. Reducing our carbon footprint helps the climate and the environment, while adding value is absolutely essential to combating poverty, among other things. Moelven has tied its sustainability strategy to the Paris Agreement and is thus committed to working towards such a reduction.



Climate-smart, sustainable value creation

MOELVEN'S CARBON FOOTPRINT:
 0.2 million tonnes of CO₂ emissions from operations
 1.6 million tonnes of CO₂ stored in finished goods

Timber stores
 3,3 mill. tonnes CO₂

Emissions from timber transport
 29,100 tonnes CO₂

Emissions from other transport
 3,900 tonnes CO₂

Use of energy
 249 Gwh el.
 3,615 tonnes CO₂

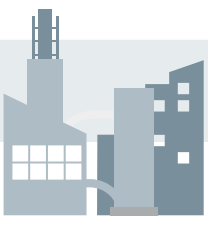
Emissions from production
 12,200 tonnes CO₂



3,391 employees
 1,707 in Sweden
 1,656 in Norway
 28 in other countries
 LTI rate = 11.7

Operating income
 11.7 bill. NOK

Operating profit
 662 mill. NOK



Steel 1,450 tonnes
 Gypsum 6,150 tonnes

Chem. 10.1 mill. litres
 Plastics 1 900 tonnes

Waste
 15,178 tonnes total
 1,063 tonnes hazardous waste
 392 tonnes plastics
 85 % sorting ratio

Bio mass
Pellets
District heating

Energy
 Bioenergy produced
 762 GWh
 Energy content of sold biomass
 1,389 GWh

System interiors
 2,019 projects

Modules
 6,160 units

Plywood
 109,000 m³

Glulam
 54,600 m³

Planed wood
 0.82 mill. m³







Sawn timber
 2.12 mill. m³

Distribution
 16 % export
 to 40 countries outside of Scandinavia

Emissions from transport to customers
 111,300 tonnes CO₂



Priority areas, goals and priorities

Four focus areas	Important topics	Results	Goals and priorities		
			2019	2020	2023
We and the materials we produce shall be climate positive 	1. Energy consumption in own production	Electricity consumption (GWh)	229	249	Implement planned increase in operations without increasing electricity consumption and carbon footprint
	2. Goods transport				
	3. Production of bioenergy	Carbon footprint (tCO ₂ e)	138,570	161,143	156,500
We shall use renewable resources and utilise the entire resource 	4. Climate benefits from forests				5 % annual reduction in carbon intensity
	5. Climate-smart design	Stored in finished goods (tCO ₂)	1,469,283	1,576,605	
	6. Waste management				
We shall be an attractive and safe workplace  	1. Sustainable materials	Timber controlled	100 %	100 %	100 %
	2. Resource optimisation	Plastics recycled (tonnes)	387	392	Increase share of bioplastic and recycled plastics as much as possible
	3. Resource-efficient design and packaging	Consumption of recycle plastics (tonnes)	1,231	1,371	
	4. Waste management in production	Consumption of other plastics (tonnes)	420	538	Work for introduction of environmentally-friendly-alternatives til plastic
		Sorting ratio	85 %	84 %	90 %
We shall create green workplaces 	1. HSE	LTI rate	11.3	11.7	< 4
	2. Engaged and competent employees	TRI rate	34.8	25.1	< 16
	3. Safe chemical use	Absence due to injury rate	207.5	256	
		Risk reports	3,208	3,843	> 1,2 per employee
		Absence due to illness	5,40 %	6,20 %	< 4.0 %
		Employees	3,399	3,391	
		Apprentices	31	30	
We shall create green workplaces 	1. Economic value creation in local communities	Total value creation in Norway and Sweden (MNOK)	828	931	Sustainability is one of four cornerstones in Moelven's strategy, and shall be included as a decision criterion in investments and further development of the Moelven group
	2. Local environment	Estimated contribution to society (MNOK)	4,235	5,004	
		Direct jobs	3,399	3,391	
		Violations of the Pollution Control Act or similar legislation that have led to fines	None	None	

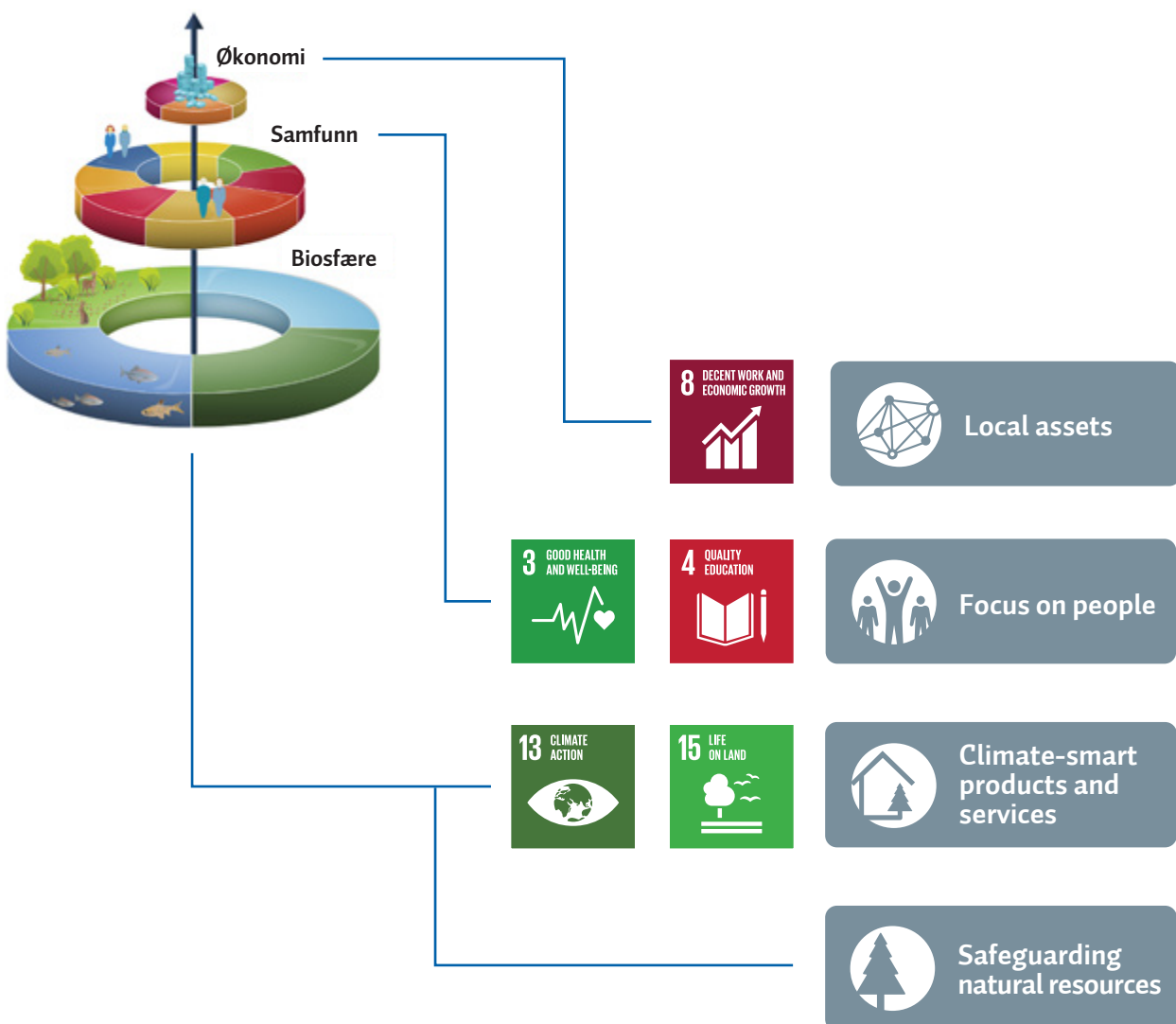


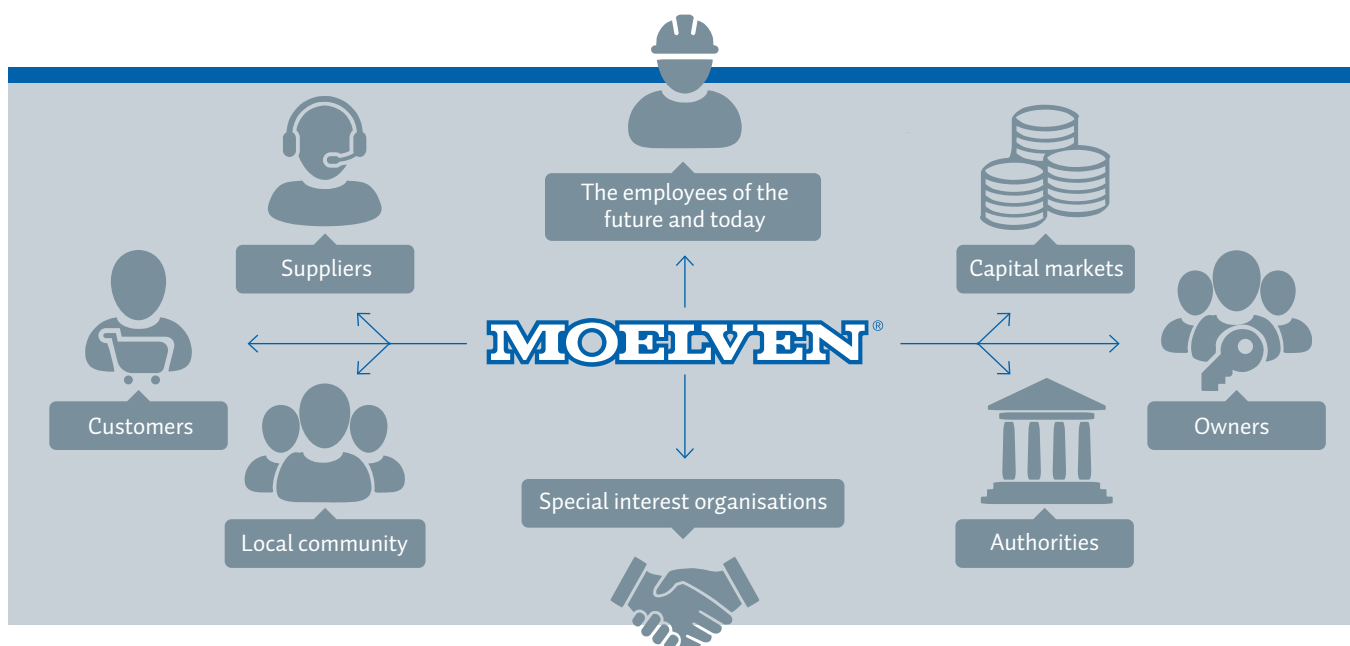
Basic premise – we are a reliable partner

Moelven and the UN Sustainable Development Goals

In order to give direction to our sustainability work and put it into a global context, we have linked the Moelven priority areas within sustainability to the UN Sustainable Development Goals. Our priority areas have been selected because they have the greatest importance both to the company and our surroundings and they are also where we have the greatest opportunity to make a difference. The Sustainable Development Goals we have chosen to prioritise are the goals that are most closely linked to these priority areas.

Five UN Sustainable Development Goals – our responsibility





Stakeholder engagement and expectations

Moelven’s sustainability strategy is based on a materiality analysis and a stakeholder analysis. The table shows the groups that have been identified as Moelven’s stakeholders, what they are interested in and how we communicate with them.

Stakeholder group	What do they care about?	How do we communicate with them?
Customers	<ul style="list-style-type: none"> • Price and quality • Certification • Sustainable forestry • Climate • Waste 	<ul style="list-style-type: none"> • Sales and marketing • Digital media • Customer surveys • Meetings and conversations • Quarterly and annual reporting
The employees of the future and today	<ul style="list-style-type: none"> • Working conditions • Vision • Corporate social responsibility • Environment • Personal development 	<ul style="list-style-type: none"> • Meetings and conversations • Digital media • Trade fairs • Advertising
Authorities	<ul style="list-style-type: none"> • Innovation • Cooperation • Climate • Forestry • Reporting 	<ul style="list-style-type: none"> • Meetings and conversations • Cluster collaborations • Quarterly and annual reporting
Local community	<ul style="list-style-type: none"> • Environment • Jobs • Local value creation • Transparency 	<ul style="list-style-type: none"> • Marketing • Digital media • Meetings and conversations • Quarterly and annual reporting
Owners	<ul style="list-style-type: none"> • Long-term strategy • Resource optimisation • Climate and the environment 	<ul style="list-style-type: none"> • Meetings and conversations • Quarterly and annual reporting
Suppliers (including forest owners)	<ul style="list-style-type: none"> • Sustainable financial operations • Resource optimisation • Sustainable forestry 	<ul style="list-style-type: none"> • Meetings and conversations • Cluster collaborations • Digital media • Marketing
Special interest organisations	<ul style="list-style-type: none"> • Resource optimisation • Biofuel • Certification • Biodiversity 	<ul style="list-style-type: none"> • Meetings and conversations • Conferences • Cluster collaborations • Digital media
Capital markets	<ul style="list-style-type: none"> • Long-term strategy • Risk and opportunities • Transparency 	<ul style="list-style-type: none"> • Meetings and conversations • Quarterly and annual reporting

What the Sustainable Development Goals mean to us



Anne Cathrine Amdahl, Head of HSE

#3 Good health

“Ensure healthy lives and promote well-being for all at all ages.”

Moelven has a responsibility to contribute to the safety and security of everyone affected by the Group’s activities and products. It must be safe to work at Moelven, our ambition is for no-one to become sick or injured as a result of the work they perform. The same applies to those who use our products and services, from builders and professional tradespeople to the end users, who are often private individuals.



Maxim Babenok Nordal, Apprentice

#4 Quality education

“Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.”

Training and education are important globally when it comes to creating a sustainable future, but also for ensuring equality and combating poverty, discrimination and social dumping. For the Moelven Group, it is also necessary to ensure future access to the expertise and human resources required to ensure the sustainable future development of the business.



Viktoria Olofsson, Sales Assistant

#8 Decent work and economic growth

“Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.”

The number of people who live in extreme poverty has decreased in the last 20-30 years but the problem has not been eliminated. Poverty is a key obstacle to sustainable development and combating climate change. The world’s nations contribute to combating poverty through a share of their gross domestic product, which in turn is the sum of the value creation that takes place at an individual level in each country.



Helge Gunnar Volla, Operator

#13 Climate action

“Take urgent action to combat climate change and its impacts.”

By producing climate-smart products based on a natural, renewable raw material and by contributing to renewable bioenergy products, Moelven helps combat climate change. When used as materials in permanent structures, our products act as a natural carbon sink, while residual raw materials from production are included in the natural carbon cycle, which does not add new carbon to the atmosphere.



Björn Johansson, CEO

#15 Life on land

“Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests...”

As a customer of the forestry industry, Moelven has a responsibility to promote sustainable forestry. As a driving force in this promotional work, we contribute towards increasing the absorption of carbon from the atmosphere by forests. We do this through the forestry management services we offer, through communication with forest owners and by placing requirements on our suppliers in accordance with certification schemes such as PEFC™ and FSC® (1).



When you build and decorate with wood, you gain a number of health benefits with your purchase. Wood is a renewable and vibrant material that can affect both the physical indoor environment and how we experience it.



Climate-smart
products and
services

Proud success partner

Together with its partners, Moelven is building a sustainable future using wood. By contributing our expertise and new ways of thinking, we help create outstanding solutions to make the world a little greener. These are four projects that we are proud to be part of.

Mjøskanten

With the world's tallest wooden building, the Mjøsa Tower, we have shown the world what can be built from wood. Together with AB Invest, HENT and the Municipality of Ringsaker, Moelven is continuing the green transition in Brumunddal.

Moelven will produce the load-bearing glulam structure for the 3,800 sqm commercial property,

which will be erected next to the Mjøsa Tower, as well as the modules for the three apartment buildings that are being built in front of the tower. The blueprint for the new buildings is the same as for the Mjøsa Tower, Mjøsbadet and the Skibladnerpier: Sustainable materials that are sourced and produced locally.



Illustration: HENT

Boängen Preschool

When Boängen Preschool in the Municipality of Knivsta was completed in 2020, it marked the start of a long line of Swan-labelled schools and residential property projects that Moelven Byggmodul AB will build in the coming years.

“The fact that we have a Swan license means that we work continuously to become even better. The most important advantage is perhaps that you can feel confident that you will get a good, safe place to be and where the carbon footprint is small,” says Hedwig Ulander, Head of Business Development at Moelven Byggmodul AB.



Wooden windmill tower

In order to succeed in building a sustainable future using wood, it is only natural for Moelven to be responsive to research and development. Together with the innovation company Modvion, Moelven Töreboda AB has developed a 30-metre high prototype of a windmill tower made from glulam. It was erected at Björkö outside Gothenburg in April 2020. Modvion’s objective is to develop a concept that makes it possible to build 150-metre high windmill towers from wood.

“In the past two years, we have got to know the wood’s properties even better and we have performed and seen the results from a number of interesting tests. We have contributed our expertise on large, load-bearing wooden structures and have also developed our method of 3D-modelling. During the construction of the windmill tower, we have worked with different types of geometries to normal, which is knowledge we can make further use of,” says Johan Åhlén, CEO of Moelven Töreboda AB.



Photo: Sören Håkanlind

Powerhouse Telemark

Powerhouse Telemark is one of the most energy-efficient and environmentally friendly buildings in the world. Throughout its 60-year service life, the building will generate more energy than it will consume and, in 2020, the building was referred to as one of the most exciting projects of the year by CNN. Moelven has supplied complete office solutions for the 11 floors, as well as fire-impregnated Thermopine for the exterior façade.

Instead of a traditional overlapping cladding, Powerhouse Telemark has a diagonally slatted façade. This gives the building its aesthetically beautiful wooden façade, while the sustainable slats also provide shade from the sun.





“Today, I consider sustainability in most of the choices I make, particularly when it comes to my forest. For me, the forest represents the past, the present and the future. The forest I own together with my sister we inherited from our father and we want to manage it as well as possible so that we can later pass it on to our children. But the forest is much more than that. Forests are the lungs of the earth and we therefore have to look after them as well as we can. For us, it is essential that we collaborate with a partner that shares the same values as us and that can provide us with the advice we need to manage our forest in the best possible manner.”

Karin Lundqvist
Forest owner working with Moelven Skog AB



“Making sustainable choices is important to me. Running a distribution centre, we often receive returned goods that cannot be resold. Rather than throwing the goods away, we have launched outlet sales for employees and have organised sales in the local community and online. Sustainable thinking can help us change the world.”

Kamila Rutkowska
Head of Logistics, Moelven Langmoen AS



Sustainability throughout the value chain

“The fact that Moelven operates in a sustainable manner and uses only certified timber is important to me. It allows me to endorse a good product with the smallest possible climate footprint. My conscience is clear when I head home from work.”

Frode Sawert Amdahl
Production worker, Moelven Mjøsbruket AS





“We find that our customers are interested in environmentally friendly products, locally sourced goods, recycling and documentation. At the customer service centre, we work to ensure the shortest possible transport distance for goods, minimal reloading and that all goods are accompanied by documentation and certification. I am proud to work for a company that sells environmentally friendly products and that works continuously to become even more sustainable at every single level. We all need to understand the importance of contributing what we can.”

Elisabeth Nyborg
Manager, Customer Service Centre



“The fact that Moelven products are environmentally friendly and certified is important to us. Moelven is a key player and this means that we can feel confident that the products we offer to our customers are good for both people and the environment. Sustainability is an important part of our everyday life. Together, we must look after the legacy we have inherited so that we can pass it on to future generations.”

Hein Østgård
Store Manager, Byggmakker Lillehammer and Ringsaker



The Municipality of Karlstad has decided to use as much wood as possible in newbuilds and it is important to us that our suppliers manufacture the products in a sustainable manner. The raw material must be environmentally certified and, although we do not require it to be produced locally, we do consider it a major advantage.”

Sixten Westlund
Project Manager, Municipality of Karlstad



Moelven Töreboda AB is supplying the structure for the Sannafältet sports centre in Karlstad.

Climate accounts

As of 2017, Moelven's climate accounts have been drawn up in accordance with the GHG Protocol.

(Tonnes of CO ₂ equivalents)	Change %	2020	2019
Scope 1 (Emissions in the company)	-8.3%	12,235	13,345
Fuel oil		501	1,299
Biofuel oil		-	-
Diesel		10,844	10,845
Biodiesel		26	25
Petrol		13	28
LPG (gas)		845	1,143
Natural gas		-	-
Biogas		-	-
Moelven-owned goods transport (to customer)		-	-
Moelven-owned goods transport (from supplier)		5	5
Direct biobased emissions (outside scope)	2.4%	337,448	329,379
Bark		191,148	200,130
Sawdust		22,655	20,911
Hogged chips		86,293	62,132
Wood shavings		5,712	6,476
Cellulose chips		4,809	1,524
Pellets		297	163
Wood		26,509	37,697
BROT		-	333
Biofuel oil		-	-
Biodiesel		26	13
Biogas		-	-
Scope 2 (Emissions related to electricity consumption)			
Location-based calculation	7.6%	3,615	3,380
Market-based calculation	3.7%	123,406	119,141
Scope 3 (Emissions outside the company)	19.2%	145,293	121,845
Goods transport to customers performed by third parties		111,334	89,680
Third-party goods transport (from supplier to Moelven)		32,989	30,835
Air travel		109	345
Work-related car transport		861	985
Total emissions (scope 1, scope 2 location-based, scope 3)	13.8%	161,143	138,570
Total emissions (scope 1, scope 2 market-based, scope 3)	9.6%	280,934	254,331

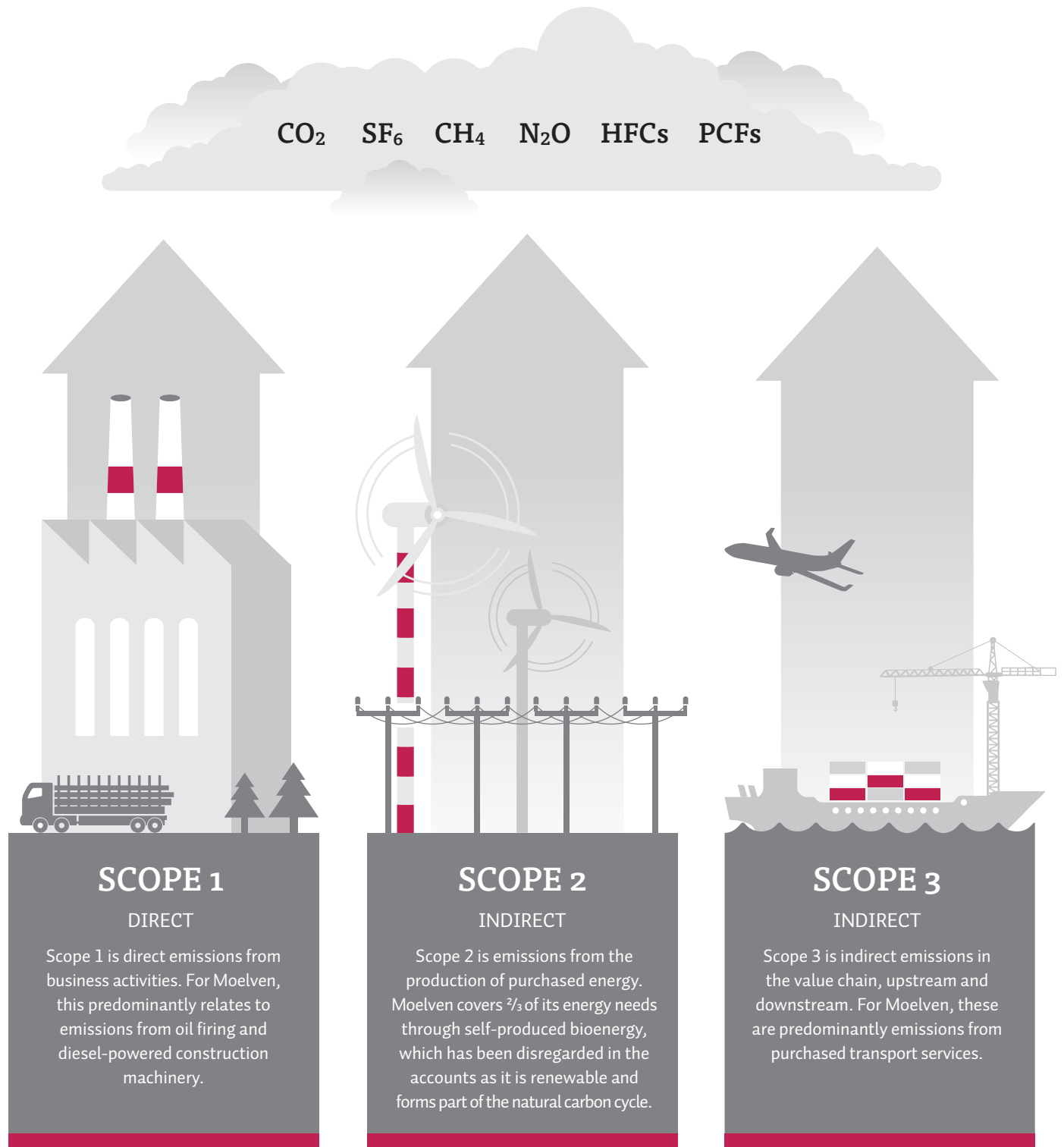
The climate accounts are based on emissions of CO₂, as no emissions of other greenhouse gases have been identified or quantified, such as CH₄, N₂O, HFC, PFC, SF₆ or NF₃. As 2017 was the first year of reporting in accordance with the GHG Protocol, 2017 has been set as the base year for future comparisons.

Emission factors have largely been obtained from Defra (Department for Environment, Food & Rural Affairs, UK). Emission factors for electricity are based on the Norwegian Water Resources and Energy Directorate's factors for Norway. For location-based emissions from Swedish companies, the IEA CO₂ Emissions from Fuel Combustion 2016 have been used, while the same emission factor as for Norwegian companies has been used for market-based emissions.

For calculations of biobased emissions, EN 16449 has been used, based on values from the Norwegian Institute of Wood Technology and Erik Eid Hohle (Bioenergy). The ownership principle, according to which Moelven is the invoice recipient for the activity, has been used for system delimitation.

The climate accounts in brief

The GHG Protocol splits climate accounts into three focus areas: Scope 1, 2 and 3.





Redecorating boom results in record sales

Never before has Moelven sold more building and interior products than in 2020.

WHEN SCANDINAVIA SHUT down in March 2020, it did not take long before a number of new terraces started appearing. From 15 March to 15 June, Moelven supplied no less than 40,000 cubic metres of decking in Norway. This is a new record and an increase of 50 per cent compared to the same period in 2019.

“We have to be honest and admit that these were not figures that we expected to see. Never before have we experienced a boom in terraces quite like this. People are not travelling as much any more due to the COVID-19 pandemic and we have noted that they are spending more money on maintenance and renovations, both in their homes and their holiday homes. This has led to high levels of activity within the building products trade in Scandinavia,” explains Morten Kristiansen, Group CEO of Moelven Industrier.

Increase of 20 per cent in 2020

The Scandinavian eagerness to redecorate and carry out maintenance lived on throughout the summer and autumn. This resulted in 2020 becoming the best ever year for the Wood Division. In 2020, we sold more than 1,086,500 cubic metres of wood-based building and interior products in Norway, Sweden and Denmark. This is an increase of more than 165,500 cubic metres from the previous year. In total, sales in 2020 corresponded to a road convoy of more than 2,450 kilometres!

“We are extremely pleased that we have been able to come out of this challenging period so well. This is something we can largely thank our employees for. They have demonstrated an impressive ability to adapt and a flexibility that has allowed us to meet the increased demand,” says Bjarne Hønningstad, Head of Division at Moelven Wood.

How much is 40,000 cubic metres of decking?

Oslo - Lofoten
round trip

4

times

Nearly
40,000
typical* Norwegian terraces.

*Approximately 30 sqm.

Up and down the
Pulpit Rock (Preikestolen)

1,300
times



Unique cabin experience at the mouth of the fjord

At the five new Flokehyttene cabins belonging to the Norwegian Trekking Association, you can get close to nature, while also being in warm and safe surroundings.

THE FIVE FLOKEHYTTENE cabins on the headland of Ryvarden in Sveio, around 20 kilometres north of Haugesund, were completed during the autumn of 2020. Panoramic windows more than five metres wide allow you to experience the vast ocean from warm and safe surroundings. With oak flooring and untreated ore-pine from Moelven, the cabins have been designed to withstand the harsh climate of Western Norway.

“These products have been designed to last for years, even under extreme natural stress. Ore-pine is used in the construction of Norwegian stave churches and the Vikings even used it to build their ships. Here, you can sleep safely while the forces of nature run wild outside,” says Winfried Schaal, Product Manager at Moelven Wood Prosjekt AS.

Fully booked until the end of 2021

The cabins have already become an attraction in Haugalandet and are fully booked for the rest of 2021.

“Naturally, this is something we take great joy in. It is an important goal for us to get people out trekking and the demand shows that we have managed this

with the cabins. The Flokehyttene cabins are completely unique, both with regard to location and the quality of the cabins themselves,” says Tore Haugen, General Manager of Haugesund Travel Association. He has spent two nights there himself. “I experienced both bad weather and clear, starry skies. Both were just as spectacular.

Natural elements affect us.

The five Flokehyttene cabins are woven into the coastal landscape and have been built without leaving any lasting traces behind in nature. The scene is set for you to relax and feel good.

“When we are surrounded by natural elements, whether in the form of sea spray or wooden interiors, we find that our pulse rate drops and we simply feel better,” says Schaal.

One of the explanations for this is that we humans have lived in nature for a long time and are predisposed to liking it and interpreting it. Natural elements provide a positive distraction which is pleasant to be around. Perhaps this is precisely why we enjoy heading off to the cabin quite so much?

The “Flokehyttene” cabins have been designed to draw in the landscape. On stormy days you can watch the waves beating against the cabin walls.



The Flokehyttene cabins are named after people associated with the Viking Floke Vilgerdsson. In the year 869 he set sail from Ryvarden and settled on the island he named Iceland.



Energy consumption in our own production

Where and why is it important?

Moelven consumes a considerable amount of energy in its production. Even though around 2/3 of the energy requirements are met by self-produced bioenergy, the proportion that is covered through the purchase of electricity remains the largest contributor to greenhouse gas emissions, together with transport. Energy consumption in our own production is important both to Moelven and its stakeholders since it represents both an environmental challenge and a major expense.

Policy and approach

Moelven works continuously to improve the efficiency of the energy consumption at its facilities. This work will be achieved by actively participating in the technological and market development of the bioenergy sector, as well as by replacing fossil fuels with more alternative and environmentally friendly energy sources in areas where this is practically feasible.

Moelven has set itself a target of providing at least 95 per cent of the thermal energy needed for the heating of premises and drying of timber from self-produced bioenergy. However, within the timber processing part of the Group, which is the most energy-intensive, there are areas in which operations are dependent upon the use of electrical energy. The main areas here are the sawing process and the operation of the electric motors for the timber dryers. The energy consumption in these areas is strongly linked to production volumes. The work to improve efficiency in these areas is therefore predominantly aimed at reducing energy requirements for each unit produced.

The Group's long-term strategy plan assumes an increase in production volumes and the aim is to achieve this increase without a corresponding increase in total electricity consumption. In order to achieve this, innovation and active use of new

technology will be important. The "Smart Digital Sawmill" project at Moelven Valåsen AB's sawmill in Karlskoga in Sweden has given Moelven knowledge and experience that are providing the basis for energy efficiency measures across the Group. A detailed energy survey has also been carried out of all of the Group's operations in Sweden. The results from these projects form the basis for the Group's target of cutting electricity consumption to 208 GWh by the end of 2022, assuming an unchanged production volume from 2017.

Moelven also has a target of reducing the carbon footprint from its business activities in line with the national climate targets in the countries where Moelven carries out its production. Relevant measures to achieve this often involve a change to using electricity as an energy source and will, viewed in isolation, therefore lead to an increase in energy consumption. During 2021, the Group's sustainability targets will be updated to ensure that the targets are both consistent with national climate targets and the EU's European Green Deal, while also clarifying the reciprocal priority between the targets.

Evaluation of results

Total energy consumption increased in 2020 as a result of increased activity levels. Both saw production and the proportion of products with a high degree of processing, which generally require more energy, increased. At the same time, the rapid increase in capacity utilisation meant that the operations became somewhat less energy-efficient than desired.

COVID-19 resulted in both infection control measures that made it difficult to implement energy efficiency measures and a significant reduction in investment activities due to the uncertainty. Overall, the consequence of the above was that the Group increased its energy consumption compared to the previous year. Viewed in isolation, electricity consumption increased by 8.7 per cent, of which 2.9 percentage points can be attributed to the new pellet factory at Sokna, which experienced its first full year of operation in 2020.

AMBITIONS:

- We will be climate-positive
- Energy consumption will be reduced
- 95 per cent of the requirements for heating premises and drying from self-produced bioenergy in the timber industry.

RESULTS:

- Fossil energy consumption decreased by 7.7 per cent in 2020.
- Bioenergy production increased by 2.1 per cent in 2020.
- Electricity consumption increased by 8.7 per cent in 2020.
- The energy survey in Sweden has been completed

MEASURES:

- Implement increased activity levels without increasing electricity consumption.
- Revise existing targets and establish more activity-specific KPIs for analysing energy consumption and energy efficiency.
- Roll out energy efficiency measures based on the "Smart Digital Sawmill" project and the energy survey in Sweden.

Description	2020	2019
Total fossil energy consumption (fuel)	36	39
Total bioenergy production in the Group (lower calorific value)	762	746
Lost bioenergy	51	72
Total electricity consumption, purchased	249	229
Purchase of district heating	88	90
Total sales of bioenergy	63	73
Total energy consumption in the Group (GWh)	959	885
Bioenergy consumption (GWh)	736	691



Patrik Svensson and Peter Rockedahl in front of the site where the new bioenergy plant at Moelven Valåsen AB will be built. The energy station will allow the company to meet its future energy needs in a sustainable manner.



Peter Rockedahl

Digital solutions to save energy

Every year, Moelven’s production units in Sweden are responsible for energy consumption corresponding to that of 22,600 detached homes. But what is all this energy used for?

“BY ACHIEVING IMPROVED control of how we use energy in our operations, we can prevent unplanned outages, improve the quality of what we do and, of course, minimise energy consumption,” says Peter Rockedahl, Technical Director of the Timber Division.

It will take extensive work to achieve such control. This work has already been ongoing for several years and Moelven is now preparing for stage two.

Four years of surveying

In 2017, work began on surveying energy consumption in Moelven’s Swedish operations. This work has now been ongoing for four years and was a consequence of the act on energy surveying in large companies that entered into force in 2014.

“In the first instance we have focused on determining how energy is used today so that we could draw up proposals for cost-effective measures,” Peter says.

Going forward, the work will focus on an assessment of which companies it would be appropriate to initiate the first measures at.

“We were, among other things, able to identify that

four of the 20 companies we have in Sweden accounted for 60 per cent of energy consumption and all four of these are sawmills. This knowledge has enabled each company to start working on measures to minimise their energy consumption,” says Peter.

Digital solutions - an important key

Many measures have been proposed to save energy but there is one area in which there is a lot of investment, namely digital solutions.

“Besides succeeding in identifying unnecessary energy consumption, there is also a goal to eventually be able to link every single plank to an energy declaration,” Peter says.

“Now is the time to adopt digital aids to gain control of energy consumption at every step of the production process. And we have already started implementing this type of digital solution at Moelven Valåsen in Karlskoga,” Peter explains.

The goal is to save ten per cent of specific energy consumption for produced goods, calculated from the base year of 2017.

Development of own platform - NEXUM

Vast volumes of data can currently be retrieved from production using digital solutions, but a tool that makes it possible to manage all data and that allows us to get an overview is something we have sorely lacked. Since there were no solutions for non-conforming processes available on the market, the Timber Division at Moelven decided to develop its own solution, called NEXUM. This is a digital platform that helps identify the data relationships that create value to develop the companies, among other things by minimising energy consumption and improving the quality of our products.



Installation of a new line at Moelven Component.

The trainee energy detective

Lisa Nilsson has a degree in energy and environmental engineering. She has always had a strong interest in both technology and sustainability.

IN 2020, LISA was allocated a place on the Moelven trainee programme.

Lisa is an important part of the work on the smart digital sawmill. She is determined to help identify the energy thieves in the industry today and to identify improvement measures that can have a positive impact on the planet, our wallets and machinery alike.

“I hope that my somewhat different background will help us look at things from a slightly different perspective. We currently have strict controls on how we manage our raw materials and we need to ensure the same level of control for the energy used in our operations,” Lisa says.

Lisa’s tips

Here are some of the things you can do to minimise unnecessary energy consumption:

- 1: Eco drive of trucks and other means of transport, as well as avoiding idling.
- 2: Obtain a better overview of the facilities’ heat sources. Do we heat areas that do not need heating?

Can we lower the temperature in some areas?
3: Inspect compressed air systems and seal any potential leaks in hoses and couplings





Transport of goods

Where and why is it important?

Moelven’s activities include the transport of materials and products, often in large volumes and weights and across large distances. This includes the transport of raw materials to our industrial facilities, internal transport and transport of finished goods to market.

Transport is a very important area for the Group, in terms of both the environment and finances. A number of stakeholder groups are affected by the environmental impacts of transport. These may include greenhouse gas emissions, particulate matter, noise, traffic safety, etc. Efficient and environmentally conscious logistics solutions are a prerequisite when it comes to being able to offer customers fast, accurate deliveries with as little environmental impact as possible.

Policy and approach

Moelven is a co-owner and member of several transport cooperatives that perform a large proportion of the transport jobs for the Group and may set out requirements as to how carriers run their businesses. The different industry affiliations and transport needs of the other participants in the transport cooperatives help to increase the opportunities for improving efficiency by setting up transport routes that minimise journeys with no loads.

Moelven also uses rail and sea transport to ensure the reliability of timber supply, as well as market opportunities for wood chip and energy products from regions with no local demand. Rail in particular is used for the delivery of biomass in Norway and Sweden.

Moelven’s sustainability policy sets clear targets and guidelines for transport in Moelven. This generally involves working on areas such as:

- Requirements concerning the environmental classification of vehicles. The applicable requirement for road transport in 2020 was a minimum of Euro 5. When new vehicles are acquired, these must be at least Euro 6. The goal is for all road transport to be performed using vehicles in Euro class 6 or better from 2022. These targets and guidelines have been implemented in cooperation agreements with road carriers in both Norway and Sweden.
- Actively working to improve framework conditions for transport activities. Better roads that allow higher maximum axle load limits and longer vehicles are important. This would make it possible to significantly streamline transport in terms of both environmental footprint and finances. The opportunities to use modular vehicle combinations on Norwegian roads were greatly expanded as of 2020. A modular vehicle combination can carry a greater payload than an ordinary lorry and the number of transport jobs can therefore be reduced.
- Greatest possible use of rail transport. Rail transport helps reduce carriers’ environmental footprint and is a cost-effective means of transport, where conditions permit. Moelven, together with several other industry partners, is involved in the “Godspakke Innlandet” initiative.
- Use of alternatives to fossil fuels, such as electricity and biogas. Together with the transport company LBC Logistik, Moelven began using the first biogas lorry in the Swedish forestry industry in 2020.

Road transport of goods to customers increased in 2020 as a result of increased deliveries from all of the Group’s business areas. Increases in sea transport to customers could be attributed to a general increase in deliveries to China and Asia, a trend that was further reinforced when European markets went into a partial shutdown as a result of COVID-19. The increased transport of intermediate goods for the Group’s activities can also be attributed to the increased activity levels.

AMBITIONS

- The environmental impact of transport must be minimised by coordinating and optimising product flow.
- Minimum Euro 5 environmental class for road transport, Euro 6 from 2022.
- The environment must be taken into account when choosing transport methods.
- Continuous assessment and testing of alternatives to fossil fuels

RESULTS:

- KPIs have been established for transport at company and division level.
- Biogas-powered lorries have been put into use for goods transport in Sweden.
- Modular vehicle combinations are being used to an increasing degree and reduce the number of transport jobs.

MEASURES:

- Establish a Group-wide working group for the optimisation of logistics
- Follow-up on established KPIs for transport activities
- Improve transport reporting, including in relation to the transport of products to customers.

	2020	2019
Transport of goods to customers (tkm)		
Road transport	836,348,445	700,526,176
Rail transport	119,551,312	88,146,362
Sea transport	692,653,669	483,038,684
Transport of timber to the company (tkm)		
Road transport	285,949,288	268,565,628
Rail transport	1,861,594	1,340,328
Sea transport	-	1,183,557
Transport of other goods to the company (tkm)		
Road transport	38,502,155	34,430,423



Climate benefits from the forest – carbon storage and bioenergy

Where and why is it important?

A large proportion of Moelven's climate-smart products and materials are based on using timber as a raw material. Forests are part of the natural carbon cycle. Through photosynthesis, forests absorb large amounts of CO₂ from the atmosphere, which are stored in the tree until it rots or is burned. In this way, the forest acts as a natural carbon sink. The carbon that is released when raw materials from forests are used as a bioenergy source is part of the natural, short-term carbon cycle. This means that bioenergy does not add CO₂ to the atmosphere in the same way as fossil fuels, in which carbon has been stored for millions of years before it is released.

By contributing to efficient and sustainable forestry, Moelven can help increase the ability of forests to absorb CO₂ from the atmosphere. By optimising the utilisation of raw materials so that the largest possible proportion of timber becomes products that can be used in permanent buildings, Moelven contributes to ensuring that the carbon storage that starts in the forest continues even after the tree has been processed to become construction materials. The climate impact will therefore be positive.

Policy and approach

In Sweden, large proportions of timber are bought directly from the forest owner. Moelven Skog AB is responsible for purchasing timber in Sweden and is one of the companies in the Group with the greatest opportunity to influence forestry operations. Moelven Skog AB's vision, "More TIMBER in forests", is about

how the company can help maximise the potential of forests by working with forest owners. This provides Moelven with access to more and better raw materials, while also providing forest owners with good returns. Moelven Virke AS is responsible for purchasing timber in Norway. Purchases are mainly made through forest owners' associations. Moelven Virke AS is thus not directly involved in felling or managing forests as Moelven Skog AB is. Nevertheless, as a Group, Moelven has a responsibility to its suppliers to treat and process products in a sustainable manner and, irrespective of national borders, Moelven believes that certification and traceability are very important when purchasing raw materials.

Evaluation of results

The products manufactured by Moelven's timber-consuming entities store 5-6 times as much CO₂ as the emissions generated by the business. The overall value chain, from forest to finished timber, therefore contributes to reducing the concentration of CO₂ in the atmosphere, compared with leaving the forest untouched. However, it is important to be aware that there are several uncertainty factors that affect the overall picture. Among other things, it must be assumed that a certain proportion of the products will be burned or reprocessed shortly after production so that stored CO₂ will be released into the atmosphere and there is also uncertainty around the extent of greenhouse gas emissions from soil after trees have been felled. Both the forestry and timber processing industries provide residual raw materials that can be used for the production of bioenergy. Moelven sells significant quantities of pulpwood, biomass and chip products to the bioenergy industry. The Group also produces a significant amount of thermal bioenergy itself, both for its own consumption and for sale as district heating. Using bioenergy as a substitute for fossil energy sources is an important means of reducing society's climate impact.

AMBITIONS:

- We and the materials we produce shall be climate-positive

RESULTS:

- 3.1 million tonnes of CO₂ stored in consumed timber
- 1.6 million tonnes of CO₂ stored in sawn timber and plywood
- 1,599 GWh of potential energy in biomass for external bioenergy producers

MEASURES:

- Improve the understanding of Moelven's role in the carbon cycle and document that Moelven is climate-positive

Calculation basis:

The source used for calculating CO₂ is EN 16449. The source used for density is Bramming et al. (2006). Physical and mechanical properties in Norwegian spruce and pine. An activity in the SSFF project. Treteknisk Rapport 65, 2006.

It is estimated that a cubic metre saw timber of spruce has a basic density of 363 kg/m³ and that pine has a basic density of 418 kg/m³. Basic density is dry weight of wet volume (>30% wood humidity). The carbon content is assumed to be 50 per cent of the dry weight. The percentages of spruce and pine have been set as equal to the production volumes for each species.

Spruce: $363 \cdot 0.5 \cdot 44/12 = 665.5 \text{ kg CO}_2 / \text{m}^3 \text{ saw timber}$

Pine: $418 \cdot 0.5 \cdot 44/12 = 766.3 \text{ kg CO}_2 / \text{m}^3 \text{ saw timber}$

Description	2020	2019
Total volume of timber consumed (m ³ fub)	4,327,071	4,242,623
Total volume of timber consumed - CO ₂ stored (tonnes of CO ₂ - equivalents)	3,067,860	2,994,758
Sawn timber and plywood produced (m ³)	2,231,959	2,182,134
Sawn timber produced - CO ₂ stored (tonnes of CO ₂ equivalents)	1,575,435	1,540,876
Total CO ₂ emissions, location-based (tonnes of CO ₂ equivalents)	161,143	157,519
Total CO ₂ emissions, market-based (tonnes of CO ₂ equivalents)	280,934	273,280
Biomass, including pellets for external bioenergy industry (fm ³)	1,290,374	919,559
Energy content in sold biomass, including pellets (GWh, lower calorific value)	1,599	1,563

Sustainable transport

Transport is one of the major drivers behind CO₂ emissions at Moelven. Fewer and larger transport jobs result in less emissions and more sustainable products. In addition to smart logistics with full vehicles, it is now possible to run modular vehicle combinations on a large proportion of the Norwegian road network, as well as most roads between Norway and Sweden. The development of the infrastructure for biogas filling stations is also contributing to making Moelven transport more sustainable.

Could eliminate up to 20 per cent of journeys

Following six years of lobbying, Moelven and Head of Logistics Per Børke have finally achieved the dream of more sustainable transport using larger lorries on Norwegian roads.

“IN SWEDEN, WE HAVE been able to use this type of lorry for several years. In Norway, however, the process for allowing the use of modular vehicle combinations has taken a very long time,” Børke explains.

In December, he and the rest of the Moelven transport team were able to celebrate the fact that the opportunity to use modular vehicle combinations on large parts of the most important road network and, not least, in and out of Moelven’s industrial companies, had finally become reality.

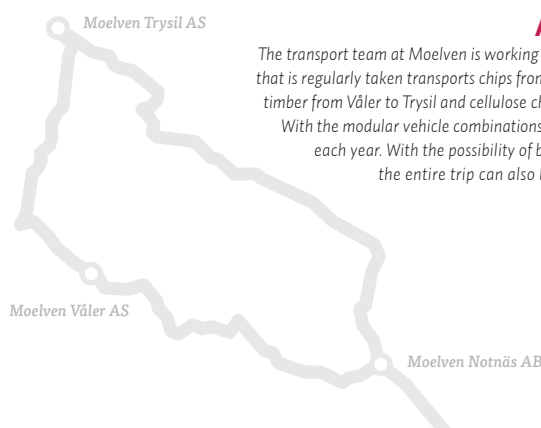
Six years of work to achieve sustainable transport

“We have worked with transport ministers, road directors, industry organisations, counties, mayors and technical directors at local government level to gain support. Political pressure and the transfer of the responsibility for national and county roads to the county municipalities meant that, from the New Year, we were able to get many important roads to allow the use of modular vehicle combinations and we can now utilise these for a much greater proportion of our transport jobs, thereby ensuring more sustainable driving,” Børke says.

The use of modular vehicle combinations undoubtedly improves the sustainability of transport jobs at Moelven. “We perform approximately 20,000 border crossings every year and with the use of modular vehicle combinations we will be able to reduce these to around 16,000,” Børke says.

The Head of Logistics now hopes that more of the companies that Moelven buys transport services

from will invest in modular vehicle combinations. “We already have ten modular vehicle combinations on the roads carrying Moelven products, but we anticipate that this number will increase sharply going forward. This would lead to a positive environmental impact through fewer lorries, as well as reduced transport costs,” Børke says.



A sustainable round trip:

The transport team at Moelven is working to achieve smarter transport. One trip that is regularly taken transports chips from Notnås to Forestia at Braskereidfoss, timber from Våler to Trysil and cellulose chips from Trysil to Skoghall in Karlstad. With the modular vehicle combinations, this trip can be taken 60 fewer times each year. With the possibility of biogas stations at Elverum and Arvika, the entire trip can also be taken using a biogas vehicle when the station is ready.

What are modular vehicle combinations?

A modular vehicle combination can be as much as 25.25 m long and the vehicle and cargo can weigh up to 60 tonnes. This is six metres longer than a traditional lorry. The modular vehicle combination can carry a load between six and eight tonnes more than a traditional lorry, which corresponds to approximately 15 m³ of additional timber. Using modular vehicle combinations would therefore allow us to make fewer trips.



Stepping on the gas towards a sustainable future

During the spring of 2020, Moelven’s first gas-powered lorry hit the roads. This was the first gas-powered lorry in the Swedish forestry industry.

A LORRY RUNNING ON biogas sees a reduction in emissions of 85–90 per cent compared to diesel. Transport is one of the major sources of greenhouse gas emissions in Sweden and Norway and accounts for one third of all emissions, according to the Swedish Environmental Protection Agency and the Norwegian Environment Agency. Road traffic contributes most of all.

“Going forward, the goal is for all of our partners to acquire more gas-powered lorries. In order for this to happen, we are reliant on the development of filling station infrastructure so that we can expand the geographical area covered by these vehicles. Today, biogas is an established technology that we know to work and for which we can see potential in the transport of both timber and other wood products in Sweden and Norway. In this way, we can offer even more climate-friendly products to our customers,” says Lars Kristen Holst, who works on the development of logistics solutions at Moelven Wood AB.

Infrastructure must be developed faster

Compressed gas has been used for local traffic for a long time. In recent years, technology has been developed for liquefied biogas (LBG), which provides opportunities for more powerful engines and a longer range.

“The technology is well known and has been thoroughly tested. What is currently lacking is better infrastructure. Under the current support schemes, biogas players struggle to develop sufficient infra-

structure quickly enough for our transport to move from pilot projects to commercial activities without taking too long,” explains Holst.

Moelven is collaborating with the gas supplier to establish filling stations at Hamar or Elverum and Arvika. “This would allow more of our longer transport jobs to run on sustainable biogas and to us, this is an important goal,” Holst says.

Morten Kristiansen believes that the biogas lorries show that Moelven is seeking solutions.

“Innovation is in Moelven’s DNA. This means we must continually be on the lookout for ways to develop our processes and products in day-to-day activities – in large things and in small. This transport measure is a good example of this,” says Kristiansen.

Lars Kristen Holst works on the development of logistics solutions at Moelven Wood AB and hopes to see more filling stations for liquid biogas so that more timber products can be transported using this sustainable fuel.

Together with the transport company LBC Logistik, Moelven Vänerbränsle AB took the initiative to introduce the first biogas lorry into the Swedish forestry industry during the spring of 2020. Biogas is produced locally from waste, fertiliser and plant remains and is fossil-free and climate-friendly.





Head of Logistics Per Børke heads up the transport team at Moelven, which is working towards increased digitalisation, cross-learning and an increased focus on sustainable logistics solutions.

Transport team knowledge sharing

Increased digitalisation, cross-learning and an increased focus on sustainable logistics solutions are the areas on which the Moelven transport team works.

Transport team knowledge sharing

Increased digitalisation, cross-learning and increased focus on sustainable logistics solutions are the work areas for the Moelven transport team.

The transport team was established in 2020, as part of an effort to consolidate and improve logistics at Moelven. “Given that we know how important logistics are in minimising both emissions and costs, it is essential that we collaborate well across the different areas in order to improve,” says Head of Logistics Per Børke.

He is a senior member of Logistics at Moelven himself and will soon be taking retirement. “It is important to Moelven to consolidate its logistical powers and to have a formal venue in place both to work on the procurement of services and to share the knowledge we possess across various areas. It is also important to ensure a transfer of expertise before I retire,” Børke says.

One of the goals is to assess how digital solutions can make logistics smarter and thereby more sustainable.

“We now have a venue in which everyone who works on logistics is gathered. We also receive input from the Group’s IT department on how increased digitalisation can help create smarter transport. Digitalisation can contribute to higher utilisation ratios in vehicles and more efficient transport between companies and customers,” Børke says.

Framework conditions essential to sustainable transport

One of the tasks of the team is to ensure that the framework conditions that would make transport

more sustainable and efficient are highlighted.

“Modular vehicle combinations are one example. The development of train terminals and tracks is another area. Framework conditions affect how efficient and environmentally friendly our transport jobs are and it is therefore important that we are clear about our needs in our dealings with politicians and other decision-makers,” Børke says.

The team also works to establish common requirements for the carriers used by Moelven, particularly in areas such as HSE, sustainability and Code of Conduct.

“We have worked towards a zero vision for injuries and this also applies to the carriers that drive for us. It is therefore essential that we have a common platform from which to work,” Børke says.

Focus areas

The transport coordination team at Moelven consists of members from all of the Moelven divisions, as well as IT.

There are six sub-teams with the following focus areas:

- Exports from Sweden and Norway
- Domestic, Norway and Sweden
- Container transport
- Sea transport and port storage



What does it mean for me that the products I buy are certified?

It means that you have bought products for which we are able to document that the raw materials originate from sustainable forestry, that the production process adheres to all industry standards and that you can be confident that the products will be of the quality we promise.



By buying certified Products, you contribute towards:

- climate-friendly forestry
- planting of new forests
- protecting valuable forests and safeguarding biodiversity
- minimising environmental impact
- acquiring knowledge of what the products contain
- a good indoor environment
- facilitation of outdoor activities and support for local communities





In the forests

PEFC™ and FSC®:

PEFC™ and FSC® are two international NGOs (non-governmental organisations) that work to promote responsible forestry. In Norway, the dominant system is PEFC™ and all Norwegian forests are certified in accordance with PEFC™ in practice. The proportion of forests in Norway that are currently FSC® certified is relatively small, but increasing. In Sweden, the ownership distribution of forests is somewhat different and the areas certified under each system are largely equal. In total, 65 per cent of Swedish forests are certified under one or both systems.

Both PEFC™ and FSC® work to promote responsible forestry and issue certificates through third-parties to those that meet the defined criteria. The systems ensure sustainable forestry, which protects valuable forests and biodiversity, prevents unlawful deforestation, minimises environmental impact and facilitates outdoor activities and supports local communities. Our companies are part of the value chain from forest to sawn products – which can be traced and identified all the way from the forest to the finished products available in the construction trade.



In industry

Depending on product type, these certifications may be subject to national or international standards. Some of the standards are voluntary, while others are statutory.

International standards

PEFC™ CoC and FSC® CoC ensure the traceability of certified raw materials throughout the industry and trade sectors. These are also referred to as Chain of Custody / CoC certificates and mean that Moelven is required to be able to trace all purchased wood-based products back to controlled origins. Both of these systems are voluntary and subject to third-party verification. In order to ensure traceability all the way to the end customer, there have been rapid developments in the Nordic region in recent years to ensure that the construction industry has also obtained traceability certificates. The proportion of certified products that are sold increases year on year. PEFC™ and FSC® certificates are currently a prerequisite for meeting many of the requirements set out by our customers. Read more about PEFC™ and FSC® on page 50.

CE (Communauté Européenne)

The CE mark is a declaration that the manufacturer, or its representative, guarantees that all of the requirements stipulated for the product in the applicable directive/regulations are regarded as having been met. A product with correct CE marking has free access to the market in the European Economic Area (EEA). All products that fall under a harmonised

European standard must be CE-marked. The various standards set out requirements concerning either self-checks or third-party inspections.

Product documentation

There are an increasing number of requirements for product documentation. The systems can vary slightly between markets, but these are the overall product documentations relevant to Moelven.

Construction product declarations (CPDs)

A construction product declaration is a standardised way of describing a product and has become an industry standard in Sweden. CPDs contain information concerning the material's origin, chemical content, environmental impact and certifications, as well as a description of the product's installation, use and how to handle it after use.

HSE and HFE documentation

(health, safety and the environment) documentation is mainly used for chemical products. HFE (health, safety factsheets and the environment) documentation is used for non-chemical products. HFE describes the working environment, indoor environment, environmental impacts and waste management.

A complete list of certifications and approvals can be found at moelven.com/certificates



OAM

OAM documentation is legally required documentation for a building that contains products that must be managed, operated or maintained during the building's service life.

Product assessment systems

Product assessment systems are largely based on product documentation and certifications. There are now numerous systems and they are largely national.

Byggarbedömningen (BVB)

BVB is a Swedish association that has developed a system for assessing building materials based on sustainability. The assessments are based on the environmental impact throughout the life cycle and the chemical content in building materials. BVB is also working on establishing an assessment system for social factors in the value chain.

BASTA

BASTA is a Swedish product certification scheme for chemical content in products. The EU requirements

in the REACH directive are at the core of BASTA's product certification.

EPD

(Environmental Product Declaration): An EPD is a brief, independently verified and registered document that communicates transparent and comparable information about the life-cycle environmental impact of products. Both the underlying life cycle assessment (LCA) and the EPD are always based on international standards. Independently verified environmental declarations ensure that environmental information is provided in accordance with the four requirements: objectivity, comparability, credibility and addability

Hea 02

In the case of interior products, the focus is on documentation with respect to air quality. Hea 02 is the BREEAM standard's way of documenting indoor air quality. The documentation is prepared on the basis of emission tests, self-declarations and certificates such as M1.



Environmental certifications for buildings

In recent years, a number of different systems have been introduced for environmental certifications for buildings and products. Unlike the product assessment systems, these systems are largely international but, due to the different standards for the assessment of products, the systems have national approaches.

BREEAM

(Building Research Establishment Environmental Assessment Method)

BREEAM is the construction industry's own environmental certification system for buildings. The system has existed since 1990 and is the most widely used system for environmental certification in Europe. Its purpose is to encourage sustainable design and construction throughout the entire construction project, from the early phases to the finished and delivered building. The national versions of BREEAM in Norway and Sweden are BREEAM-NOR and BREEAM-SE respectively. BREEAM is an effective tool for coordinating the various parties in a construction project and integrating a sustainable mindset in all links of the chain. BREEAM sets requirements for, among other things, material selection, such as deliveries of certified products in PEFC™ Chain of Custody or FSC® Chain of Custody, Environmental Product Declarations (EPDs), Eco-products and emission tests on in-

terior products (Hea 02 with M1 certificate or Agbb). Five levels of BREEAM certificate can be issued: Pass, Good, Very Good, Excellent and Outstanding.

Nordic Swan Ecolabel

The Nordic Swan Ecolabel is the Nordic region's official ecolabel and is independent of industry or financial interests. The purpose of the ecolabel is to encourage more environmentally suitable product development and minimise consumption that impacts the environment. This will be achieved by developing criteria for the environmental labelling of goods and services, approving products and providing guidance to consumers and buyers. Today, detached houses, cabins and holiday homes, semi-detached, terraced houses and apartment buildings, childcare facilities and schools can achieve the Nordic Swan Ecolabel.



Climate-smart design

Where and why is it important?

Moelven products have a low climate footprint compared to many competing materials. The products may have a climate impact during production, use and disposal. It is therefore important to consider the product's entire life cycle.

Certification is important, both as part of quality assurance routines and when it comes to providing our customers with enough information to make sustainable product and material choices.

The building and the construction industry accounts for around 40 per cent of the world's energy consumption and one third of the world's greenhouse gas emissions. Customers and consumers are increasingly concerned with the environmental and climate characteristics of the products they buy. Since the increased use of wood as a material in permanent structures contributes to reducing CO₂ emissions, Moelven has an important part to play in the production and development of climate-smart products and services that the market wants to use.

Policy and approach

Approvals, certifications and product documentation allow customers and consumers to make informed choices and compare different products and materials. In addition to what follows from regulatory requirements, Moelven also places great emphasis on ensuring that all products have certifications and product documentation covering the various requirements and needs arising on the part of customers. Moelven is also subject to several regulatory require-

ments for certification. Generally, Moelven's products are subject to one EU directive, the Construction Products Regulation (CPR), which deals with various CE certifications. Directives such as Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and the Biocidal Products Regulation (BPR) are also relevant, but in significantly fewer areas. The raw material certification schemes PEFC™ and FSC® are key certifications that document that the wood material comes from responsible forestry. Read more about these certification schemes on page 38. In addition to certifications and regulatory requirements, Moelven also works on the marketing of its products and materials. The Group is a key player in promoting wood as a climate-smart construction material. Moelven has both a responsibility and an opportunity to influence society to make climate-smart choices by choosing Moelven's products.

Evaluation of results

A large proportion of Moelven's products and materials are certified under various certification schemes. The following pages include a summary of environmental certifications and tools that are relevant to Moelven's products and materials.

The water-repellent WeatherPly™ construction plywood helps reduce the need for covering during the construction period, for which plastic has traditionally been used.



AMBITIONS:

- Moelven's products and materials must be climate-positive.

RESULTS:

- The spruce and pine products Moelven manufactures can be sold as certified.
- The spruce and pine products Moelven manufactures come with environmental assessments or product certification.
- The spruce and pine products manufactured by Moelven are covered by EPDs.

MEASURES:

- Continue the work on surveying and preparing environmental assessments and product certifications in the Group.
- The focus on interior products and the advantages of using wood-based products will continue and will be supplemented through emission testing and comprehensive certificates.
- All relevant interior products must undergo emissions testing and also be documented with a certificate where relevant.
- All input chemicals in Moelven's products must be documented.



Production of bioenergy

Where and why is it important?

Bioenergy is energy that is produced from materials formed in ongoing biological processes. Unlike emissions from the production of fossil energy, emissions from bioenergy production are considered climate-neutral since the decomposition of biomass and release of CO₂ stored in it are part of the natural carbon cycle. Bioenergy can also replace fossil energy sources and therefore makes a positive contribution to the zero-emission society. Moelven produces bioenergy in the form of heat and utilises the majority of this heat for the drying of timber. Some is also sold externally as district heating and some is used to heat our own premises. Biomass is also sold to external customers, who use it to produce bioenergy in the form of heat for their own production, district heating or electricity. Moelven needs to exploit the entire log in order to ensure profitable operations and bioenergy is thus an important resource for creating value from wood chip and bark products.

Policy and approach

The energy potential of the annual production of chips and bark products, including cellulose chips, is between 2.5 and 3.0 TWh. This therefore represents a significant energy resource, both in terms of our own production and in terms of the opportunities for sales in a growing market for bioenergy in general.

Moelven's sustainability policy contains the following goals and guidelines:

- Moelven must reduce energy consumption at its facilities and obtain at least 95 per cent of the energy needed for heating premises and drying from self-produced bioenergy (timber industry).

- Moelven shall actively participate in technology and market developments in the bioenergy sector, and by investigating alternative energy use at those plants who use fossil fuel for heating.

Evaluation of results

In 2020, Moelven had a total consumption of 762 GWh of bioenergy in the form of heating. As described in the chapter "Energy consumption in our own production", this is mainly used for drying timber.

Moelven also purchases some bioenergy from external companies. In these cases, the bioenergy is generally produced using biomass from Moelven, but the bioenergy plant is owned by external parties. 2020 was the first full year of operation for Moelven Pellets AS. The raw material for the production of pellets is chips from timber processing activities, most of which was previously sold directly to external bioenergy industries. By now processing the raw material into pellets before transporting it to customers, we achieve higher value creation while also reducing the environmental footprint, since pellets require less transport capacity than chips.

AMBITIONS:

- Energy consumption will be reduced

RESULTS:

- 1,599 GWh (lower calorific value) of energy potential in biomass including pellets sold to external bioenergy industries
- 762 GWh of biomass consumed in own operations
- 75% of total energy needs met through bioenergy

MEASURES:

- Improve measurement and reporting of bioenergy production and consumption.

Description	2020	2019
Energy content in sold biomass, including pellets (GWh, lower calorific value)	1,599	1,563
Bioenergy produced in Moelven (GWh, lower calorific value)	762	746
Consumed self-produced bioenergy (GWh)	649	601
Bioenergy bought from companies outside the Group (GWh)	88	90
Bioenergy sold to companies outside the Group (GWh)	63	73

New life for sawdust from Moelven

Supporting innovation and identifying new ways to utilise by-products are two areas that Moelven is more than happy to contribute towards. The Wood Region is a project that makes this possible.

About The Wood Region

The Wood Region is part of the Bioinno project, which aims to promote entrepreneurship within the forestry bioeconomy in Värmland and Dalarna. The testing and development facilities in Syssebäck are a key resource for Bioinno. Innovators can use the test environment to produce large-scale prototypes using biocomposite 3D-printers.

IN THE FOREST-DENSE AREA OF northern Värmland, Moelven Notnäs Ransby AB's sawmill can be found. Here, 150,000 m³ of trees are sawn each year. This creates both wood products and by-products, such as sawdust. Sawdust is a by-product that is currently burned for energy or sold to customers that produce chipboard.

When Peter Broberg, the CEO of Moelven Notnäs Ransby, was asked whether they wanted to help support a new innovation community where technology, renewable materials and creative people could meet, the answer was simple.

"If we can use by-products for things other than fuel, then that is a positive development that could generate added value for the raw material. Naturally, this is something we wanted to contribute to. Additionally, it is extremely positive for the local community that such an initiative is taking place in Sysselebäck," Peter says.

A venue for innovation

The Wood Region is a venue where new concepts can begin their journeys. Here, there is a machine park where

3D technology and wood-based biocomposite can be used to rapidly develop prototypes, which several companies have already used in their product development.

"The great thing about The Wood Region is that it is a community that is open to everyone, subject to certain conditions. The facilities and the staff contribute technology and expertise for the development of new sustainable products through additive production, or 3D-printing as it is also known. The material consists of wood and bio-based plastic, which is degradable and recyclable," explains Annica Åman, Head of Communications at Paper Province, which part-funds The Wood Region.

What can you print?

"Nothing is impossible! Everything from sailboats to shoe heels and designer furniture is printed within the walls of The Wood Region. Here, for example, you can find the world's largest 3D-printer for biocomposite, which makes it possible to print very large items. If the prototype is wrong, it can simply be run through a grinder and you can start over again using the same materials," Annica explains.

3D-printed kayaks - for everyone

IDENTIFYING NEW methods for developing their products and concepts was something that the founder of Melker of Sweden, Pelle Stafshede, adopted when he decided to move away from traditional development methods and turn his attention to additive production using biocomposite instead.

"I wanted to find a way in which we could use new materials and production methods to develop really stylish and, if necessary, customised outdoor products in a more sustainable and climate-smart manner," Pelle explains.

By using additive production and with an ambition to create smaller production entities to carry out this production, it becomes possible to make products closer to customers and in smaller runs.

"The fact that the initial prototypes were produced in Värmland, with elements of Värmland wood, is really cool and I am grateful for the opportunity we have had to develop our products with support from The Wood Region," Pelle says.

Fleen design

3D-PRINTED CHAIR in biocomposite - a symbol of the future. You can do a lot with sawdust from Moelven Notnäs. Malin Fleen's chair is an example of how a by-product can receive an extended service life through shape-shifting using technology and innovation.

Malin's chair is 100 per cent recyclable and has attracted widespread attention from several quarters, including a spot at the Stockholm Furniture Fair in 2020.

But for Malin, it is about more than simply being a beautiful chair.

"It became a chair that would show what is possible. I consider it the starting point for a new and more sustainable way to design and produce furniture," Malin says.

New opportunities and sustainability

Producing furniture using 3D technology not only gave Malin the opportunity to test new shapes - it also meant an opportunity to combine materials in a new way.

"It seemed unnecessary to replicate something that is already built traditionally. For me, it is about attempting to optimise the possibilities of the new technology. 3D technology also allows for softer shapes that can be difficult to achieve by hand. With this technology, I can also use less materials, as the combination of the materials together is so strong," Malin says.



About Malin Fleen:

Malin Fleen has a background in the boat industry. She is a trained carpenter and sat her furniture design exams at the University of Gothenburg a couple of years ago.



Safeguarding our natural resources

The basic premise at Moelven has been the same for more than 120 years: To utilise natural resources from forests as much as possible. Head of Timber Carsten Bakke and Timber Controller Hans Haave help supply our sawmills with certified timber from sustainable forestry.





Branches and tops

Pulpwood

Saw timber

Stumps and roots

The forest binds carbon to the wood through photosynthesis. When we create products from wood or use wood as a construction material, the wood continues to act as a carbon sink.



What is the tree used for?

At Moelven, we make a living from managing a renewable natural resource and we are committed to doing so in the best possible manner. By using the various parts of the tree for what they are best suited to and by using residual raw materials for the production of e.g. pellets and biofuels, we can fully utilise the resources of the forest.



Branches and tops

“The branches and tops (BROT) of the tree are used as biofuels and thereby help replace fossil fuels. This also has several benefits for forest owners. A lorry load of BROT can heat four homes for one year. There is great potential to be found in this part of the tree and we are working to utilise this potential even more.”

Frida Axelsson, Production Manager, Forest Fuel, Moelven Skog



Pulpwood

“By processing pulpwood, the timber processing industry can create everything from hygiene products, paper and cardboard to clothing and animal feed. Pulpwood is of lower quality than saw timber and we therefore sell this part of the trunk to those who can best utilise it.”

Björn Johansson, General Manager, Moelven Skog



Saw timber

“Saw timber is the raw material for wood products with a long service life and has great climate benefits. However, only half of a log is turned into timber. The rest becomes wood chips. By, among other things, using residual raw materials for the production of pellets, we can fully utilise the resources of the forest.”

Lars Storslett, Director, Moelven Virke



Stumps and roots

“The stumps and roots are mostly left behind in the forest after felling. There, they provide homes for a variety of insects and fungi, often for several decades. They also help increase the carrying capacity of the land and bind it together.”

Jonas Karlsson, Head of Field Purchasing, Moelven Skog



Why do we fell trees?

Scandinavian forests bind around 55 per cent of our man-made CO₂ emissions. So why then is it a good thing to fell trees to produce wooden buildings and other wood products?

One important reason for this is the ability of trees to act as natural carbon sinks. As with most plants, photosynthesis enables trees to absorb carbon dioxide (CO₂). Trees use the most CO₂ as they are growing and absorb less CO₂ once they are mature. When a tree rots or is burned, the carbon dioxide is released again, but if the tree is felled and used as, for example, construction materials, it continues to act as a carbon sink. An ordinary wooden house/building will, for example, bind around 16 tonnes of CO₂ in the wood.



Why build in wood?

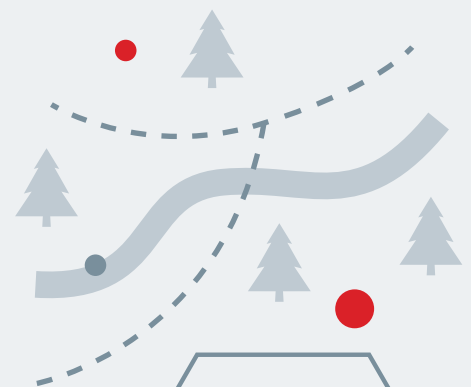
Environmental organisations say we must stop deforestation, so why is using more wood in construction a good thing?

The world's forests are gigantic carbon sinks and to avoid emissions from these sinks, deforestation must be reduced. However, there is big difference between chopping down rainforest, which is often not replaced by new forest, and the forests here in Scandinavia. For each tree that is felled in Scandinavia, two new trees are planted, which, while growing, consume more CO₂ than grown trees. This means that active forestry helps to bind more CO₂ than would be the case were the forest to be allowed to gradually die naturally. According to Trefokus, increased forest production would enable us to increase the amount of captured CO₂ from around 1.2 billion tonnes in 2013 to 1.5 billion tonnes in 60-70 years.

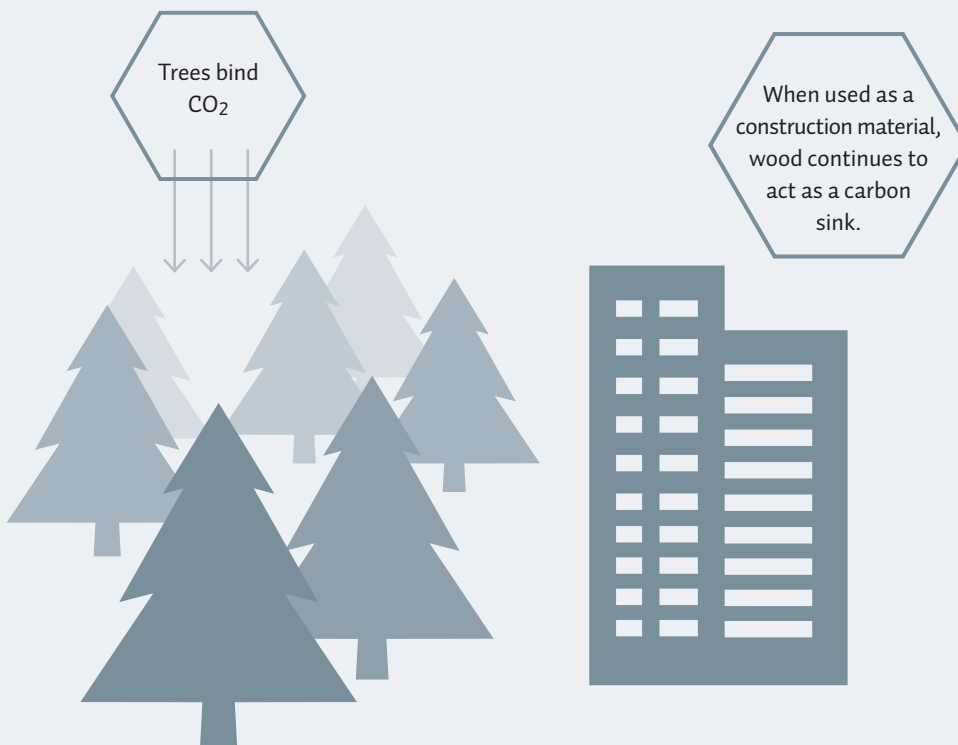


What happens to the wildlife when forest is felled?

A number of measures are implemented to ensure that forestry does not reduce a forest's biodiversity, but instead safeguards all the species that live there. Among other things, important habitats are preserved for rare and endangered species where forestry takes place and requirements have been produced that regulate how much forest must be managed for the sake of species diversity, as well as the times of year when birds and animals should not be disturbed.



Norwegian and Swedish forests are growing by around 25 million cubic metres of wood each year.



Sources: Skog – en viktig del av klimatløsningen, Skog.no, Svenskt Trä, Regjeringen.no.

CO₂

What happens to cleared areas after the trees have been felled?

In Scandinavian forests, a lot of carbon is stored in the root systems and in the soil and, during felling, CO₂ emissions from the soil increase for a period of 10–30 years until the new vegetation again ensures the net absorption of CO₂. After felling, forest owners must ensure that a new forest is established within three years. This can be done by planting, sowing or natural regeneration due to seeds. Mineral soil can be exposed in these areas in order to ensure that the new forest is established faster, grows better and has higher survival rates. Preparing the land like this disturbs the soil and can thus result in some carbon loss, but at the same time the new forest will be able to bind CO₂ again faster.

For each tree felled in Scandinavia, two new trees are planted.

Trees absorb most CO₂ as they are growing.



Will there be too little forest in Scandinavia if we use more wood in construction?

Forests cover around 38 per cent of the Norwegian mainland and these areas are home to almost eleven billion trees with a diameter of 5 cm or more. In Sweden, forests cover 70 per cent of the land area. Scandinavian forest owners have a good, long history of sustainable management. Swedish forest resources have doubled in less than 100 years. In fact, Norwegian and Swedish forests are growing by around 25–30 million cubic metres of wood each year. Moelven is a major buyer of wood and to ensure that the raw materials we use come from responsible forestry, we buy certified wood.

Does forestry produce greenhouse gas emissions?

Although the raw materials from forestry are climate-friendly, forestry does produce greenhouse gas emissions. The emissions come from sources such as the fuel consumed by forestry machinery and logging lorries that carry the wood from the forest to industrial facilities. These emissions are included when calculating the effects of replacing other construction materials with wood. The effects can be further increased by substituting biofuel for fossil fuel, and using electric forestry machinery and logging lorries when these become available.



Sustainable materials

Where and why is it important?

Moelven's sustainability policy describes how Moelven should, insofar as it is possible, use natural raw materials from forests. Moelven buys certified and controlled timber to ensure that these raw materials come from responsible forestry.

Moelven is a major purchaser of timber and thus has a responsibility to contribute to responsible forestry.

Responsible forestry helps ensure that forest management takes account of the continued use of the forest, which includes taking into account the forest's biodiversity and the conditions for outdoor recreation.

- Moelven will not buy raw materials from:
 - Illegal felling
 - Forests with a high preservation value
 - Forests where time-honoured or social rights are violated
 - Forests with genetically manipulated trees
 - Natural forests that have been harvested with the intention of using the area for plantations or non-forestry applications

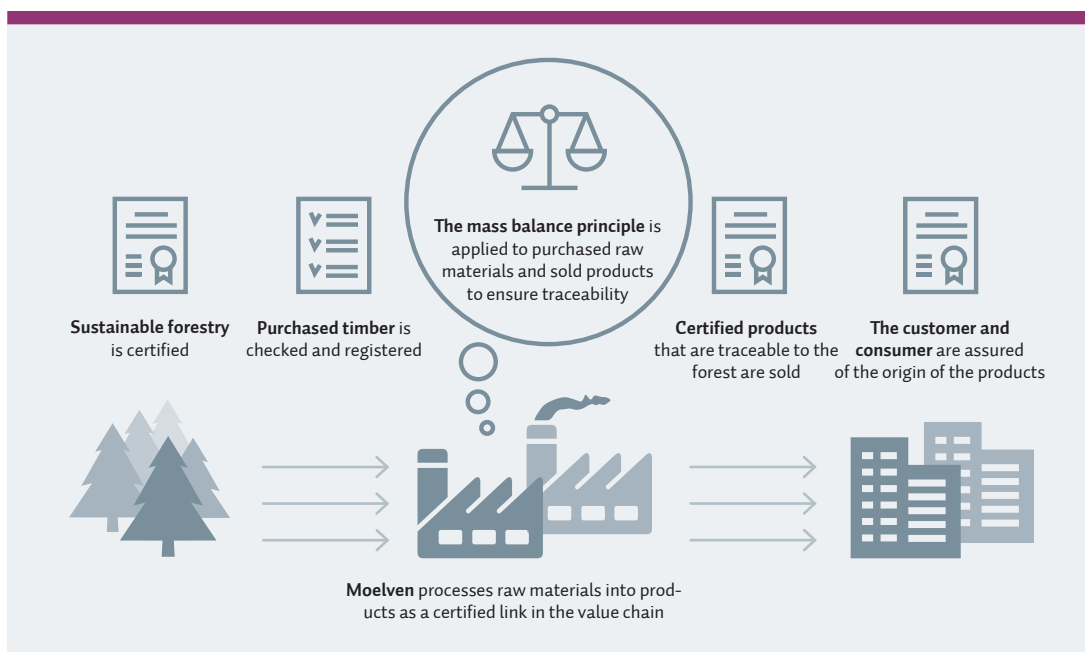
All of the companies in the Group's timber processing operations are organised and strive to meet applicable requirements for controlled wood, as well as the traceability standards of PEFC™ (Programme for the Endorsement of Forest Certification) or FSC®⁽¹⁾ certification (Forest Stewardship Council). PEFC™ is an international NGO (non-governmental organisation) that works on responsible forestry and issues certificates to parties that meet the defined criteria. The organisation promotes responsible forestry through third-party certification. Moelven is a link in the timber processing value chain and thus has a responsibility to ensure traceability in order to be able to label its products as PEFC™ Chain of Custody certified.

Like PEFC™, FSC® is also an international NGO that works on responsible forestry and issues certificates to parties that meet its requirements for responsible forestry. The difference between these two certifications lies mainly in the story of how they were developed. FSC® includes several different standards, including the FSC® Chain of Custody

Policy and approach

Moelven's sustainability policy states the following:

- Moelven must maintain and develop its systems for certified sourcing and maximise purchases and utilisation of environmentally certified raw materials from certified forestry
- Moelven must maximise the exploitation of raw materials by optimising production and utilising residual products



⁽¹⁾ FSC-C092806, FSC-C113012, FSC-C115128, FSC-C107974



100%
responsible
forestry

(CoC) and applicable requirements for controlled wood. As a minimum, all of the raw materials handled by Moelven satisfy the standard for controlled wood. In the certification, Moelven operates as a link in the value chain and the company is thus responsible for ensuring traceability. Since traceability throughout the entire production process is not feasible at an individual level, Moelven practices the mass balance principle to ensure that all of the products it sells are correctly certified. This means that Moelven cannot sell larger volumes of finished products than can be produced based on the purchased quantity of the corresponding raw material.

It is not the suppliers that are certified, it is specific product groups from each supplier.

The certification is checked at invoice level for each product line. Moelven's customers can find the certification status of the purchased products on the packing slip and invoice.

Evaluation of results

100 per cent of all the timber Moelven sources is checked in accordance with the applicable requirements for controlled wood. In Norway, all felling is in practice PEFC™ CoC certified and a proportion of it is certified twice in accordance with both PEFC™ CoC and FSC® CoC. In these circumstances, the customer must choose which certification should be entered into the account for the given volume. The principles for certified forestry are different in Sweden to those in Norway. Nevertheless, around 65 per cent of total forestry land is certified in accordance with PEFC™ or FSC® and the proportion is increasing every year. Moelven's systems for buying timber ensure that it comes from responsible forestry. Moelven also purchases processed wood products that are part of our product range. These products are purchased from several different parties who operate in different countries. Moelven is constantly working to ensure that the products come from responsible forestry.

AMBITIONS:

- Moelven must contribute to sustainable forestry and not purchase raw materials from controversial sources

RESULTS:

- 100 per cent of the timber is checked in accordance with the applicable requirements for controlled wood and a high proportion is PEFC™ certified or FSC® certified

MEASURES:

- Increase the proportion of certified timber from Swedish forests for our Swedish sawmills. Continue checks and increase the proportion of certified retail products.

Sustainability begins in the forest

Increasing the number of certified forest owners and delivering training on more considerate felling are two of Moelven Skog's priority areas. This makes us even more sustainable, from planting the tree until it is used as a construction material for your home.

IN ORDER FOR FORESTRY to generate as much climate benefit as possible, a plan is required to do so in a sustainable manner and with an aim of leaving behind as few traces as possible in nature.

"We must be more than a raw material buyer. We achieve this by supporting private forest owners in how to best manage their forests, both in terms of how much timber they yield from their forests and in terms of ensuring that the way in which they manage the forest is considerate of animals, nature and the climate," says Kjell-Åke Åslund from Moelven Skog, who is responsible for the work on the certification and training on more considerate felling.

Heading towards 70 per cent

One measure in the efforts to promote sustainable and considerate forestry is to increase the number of certified forest owners. The aim is for 70 per cent of the contractual volume purchased from the field by Moelven Skog to be certified by the end of 2021. This work is well under way.

"We can observe a continuous increase in the number of certified forest owners and the latest figures, from 2020, show that 51.2 per cent of our forest owners are now certified," Kjell-Åke says.

Certification is important since it shows that forest owners commit to running responsible and sustainable forestry. It also provides forest owners with clear regulations to adhere to with regard to both environmental considerations and the conditions for those working in the forest.

"Certification is also something that the market is requesting more frequently, so there are several dimensions to this work," Kjell-Åke says.

Will reduce the footprint

The goal of felling, whether it is a final felling, thinning, clearing or to prepare for planting, is to leave the smallest possible traces behind in nature. This is why Moelven Skog has focused on training all of its forestry contractors in considerate felling.



Kjell-Åke Åslund

"One major challenge has, for a long time, been to minimise the amount of damage caused by driving that can occur in connection with felling. Through this training, you will, among other things, acquire greater knowledge of how to avoid this," Kjell-Åke says.

The training also covers consideration for culture and cultural heritage, how to take older trees into account and vulnerable aquatic environments. Moelven Skog now hopes that the annual check of the impact on nature when viewed in the context of felling that the company has ordered itself will show a clear improvement.

Being certified means that Moelven will not buy raw materials originating from:

- Illegal felling
- Forests deserving of preservation
- Forests where time-honoured or social rights are violated
- Forests with genetically manipulated trees
- Natural forests that have been harvested with the intention of using the area for plantations or non-forestry applications

The certifications under which Moelven works in forests are predominantly issued by the organisations FSC and PEFC.



Henrik Söderholm

The forestry contractor explains

Henrik Söderholm is one of the forestry contractors who has attended considerate felling training:

How did you find the training?

Even though I have attended a few training courses and worked on considerate felling for a long time, there was a more holistic approach to this training course. Of course, it is largely about providing the tools to minimise damage caused by driving, for example. But there was also an extensive focus on the entire value chain, in which the buyer of the wood also plays an important part.

What has been most useful in your daily work?

Thorough preparatory work on the part of the buyer of the wood makes the job easier to perform and also saves time. If, for example, the buyer of the wood has identified areas with a better carrying

capacity before we get there, those of us who do the driving can feel more confident about our choice of paths in the forest. There are also parts of the training that I apply every day, including aids and the mindset communicated through the training course. Minimising the impact on nature is important, both to me and to Moelven.

Why do you consider considerate felling to be important?

It is important both in terms of ensuring that the customer is satisfied but also in ensuring that society is happy. There are months when the weather is challenging and there are some felling areas that are more difficult than others but most things can be achieved with the correct planning. It is important to understand that everyone who uses the forest today and in the future must consider the way in which we use it. Often there are no major measures to be taken, the big difference is made by many small things.



Resource optimisation

Where and why is it important?

Moelven is a resource-intensive industrial company. For example, the industrial wood processing part of the Group has an annual raw material requirement of approximately 4.5 million m³ of saw timber. There is therefore huge potential in resource rationalisation and optimisation, even with minor production changes.

Moelven therefore works continuously to achieve optimum exploitation of resources and on ensuring that no raw materials go to waste. This is an important topic for Moelven since it affects profitability. It is an important topic for our surroundings since it involves avoiding wasting valuable natural resources.

Policy and approach

Moelven focuses on resource optimisation throughout the value chain. This applies to both the utilisation ratios for material consumption and to process efficiency. Optimisation must already start at the time of felling in the forest by ensuring that the felling machines cut the saw timber into lengths that correspond largely to the length criteria for the products that will later be made from the log. At the sawmills, the logs are analysed to ensure the optimum extraction of materials. The saw is set to ensure that what is put in as a whole log comes out divided into planks, sideboards, chips and fibre products in a mix that, overall, results in the highest value utilisation for the raw material. To achieve this, each log is analysed with respect to factors such as size, tapering, twisting and twigs. The most advanced facilities use both external 3D-scanning and X-ray scanning for this. The technology enables full traceability throughout the processing from log to the finished sawn timber.

There are significant opportunities for improvement and development in advanced data analysis, which may improve extraction on the basis of historical measurements and results.

The use of camera sorting on adjusting machinery helps improve resource utilisation. Sawn timber is sorted and, if necessary, the ends are cut using a process controlled by a computer that will visually assess each individual piece using the cameras. Experience shows that these systems result in a significantly lower level of offcuts and expense than manual sorting.

Operations at several of Moelven's entities are also based on the LEAN principles, which aim to reduce waste and increase efficiency. One of the priority areas is displaying real-time production data to the operators involved so that they have an opportunity to improve the work processes directly.

LEAN is also important with regard to safety at the facilities. Experience shows that many workplace accidents happen in abnormal operating situations and it has been proven that order and tidiness are important risk mitigation measures. More about this can be found in the chapter on Health, safety and the environment.

Evaluation of results

Resource optimisation through log selection is not only based on maximising the recovery factor, but also on maximising product value. This is because the market value of certain extracted materials can vary in relation to the volume of the materials extracted.

Exploiting the whole log is an important principle for Moelven. Regardless of how the extraction is carried out, Moelven therefore ensures that all residual raw materials, including chips and bark, are used internally or sold. Now that the pellet factory at Sokna is fully operational, the Group has increased its internal processing of residual raw materials for local business activities.

The recovery factor in 2020 was somewhat lower than desired due to higher than planned production levels in order to meet the demand for sawn timber. At the same time, especially in Sweden, a higher proportion of spruce was sawn than had been planned. This had a positive impact on the recovery factor since spruce normally yields a higher recovery factor than pine.



Mikael Pettersson at Moelven Årjäng Säg AB makes sure that raw materials are optimally exploited using technology that is new to the company.

Based on the quality criteria fed into the system, the camera sorting system automatically detects planks and boards with defects such as large knots, resin pockets, cracks, etc. The defect is subsequently cut off or the piece is discarded.

AMBITIONS:

- We will make optimum use of raw materials

RESULTS:

- Sawn yield > 51%

MEASURES:

- Follow up on LEAN projects and principles in the Group.
- Follow up on relevant KPIs in order to optimise the use of residual raw materials.



Resource-efficient design and packaging

Where and why is it important?

Moelven impacts the environment both through its own industrial operations and the use and management of products and packaging. Material use is optimised and waste quantities reduced through resource-efficient design and industrialised production in controlled environments in the factories, at the construction sites and during the usage phase. For practical reasons, many products must be stored and transported while exposed to the elements. The correct packaging is important in order to preserve quality, although this often also presents environmental challenges. Plastic has a number of good properties when used as a packaging material. At the same time, the long degradation time means that plastic that goes astray in nature leads to issues for flora and fauna and the incineration of fossil plastic results in CO₂ emissions.

Policy and approach

Moelven's sustainability policy states the following:

- The utilisation of raw materials must be optimised to improve resource efficiency and to maximise the value of the raw materials.
- Products must be designed with a focus on resource efficiency. Unnecessary packaging must be minimised.
- The use of plastic must be minimised. Alternative materials to plastic must be actively sought.

Moelven's module concept and system interiors are examples of resource-efficient design. Efficient mass production with good planning streamlines both resource usage in the factories and waste quantities, as well as simplifying the actual waste management. Both time spent and waste quantities are reduced at the construction site. The concept also provides excellent opportunities for recycling and reuse.

Exact cutting within the Group's timber processing activities contributes to reduced volumes of waste for customers. The offcuts that arise in production can be effectively managed as part of the industrial pro-

cess. In December 2020, WeatherPly™ was launched in the market. This is water-repellent construction plywood for exterior use on roofs and walls. WeatherPly™ is treated with a silicate on all sides, including tongue and groove, which makes it weather-resistant and reduces water ingress and damage caused by sun/UV rays. The product therefore contributes to reducing the need to use coverings, for which plastic has traditionally been widely used.

In connection with internal transport of goods, every effort is made to ensure that the conditions allow for transport to take place without the need for packaging. This contributes both to reducing the amount of waste and the costs. At its own facilities, Moelven can also make sure that a waste management system is in place that ensures the highest possible degree of recycling and reuse. On the other hand, Moelven is largely unable to influence what happens to the packaging used for products that are distributed in the market. It is therefore important to use as little packaging as possible and that the packaging that is used is as environmentally friendly as possible. Products developed in the timber processing industry must, in most cases, be packaged in some sort of protection against the elements. As a rule, direct deliveries straight from the manufacturer to the customer, with no intermediate storage during which the products may be exposed to precipitation, dirt or sunlight, are not possible. In order to preserve quality and thus value, packaging is used that meets specific requirements for waterproofing, UV protection and tear strength. Moelven currently uses a polythene film made from 95 per cent recycled plastic as cover packaging.

At the same time, work is being done to find alternative and even more sustainable solutions. As a substitute for traditional plastic packaging, trials are being conducted using packaging made from PE-laminated drink cartons and wax-treated sides as simple moisture protection. The trials are promising, but much development remains before this solution can replace current plastic packaging based on recycled plastic. As a substitute for plastic wrap in situations where, among other things, more elastic properties are required, trials were also conducted in 2020 on a type of wrap produced from tall oil. Tall oil is a natural by-product from the production of pulp and thus an environmentally friendly alternative to fossil oil. Trials so far have been promising.

AMBITIONS

- Climate-smart products and materials
- Utilisation of raw materials must be optimised
- Actively strive to minimise the use of plastic and find alternative materials.

RESULTS:

- 1,909 tonnes of plastic consumed
- 392 tonnes of plastic recovered
- Multiple ongoing projects to trial alternative packaging materials.

MEASURES:

- Develop resource-efficient products and production methods.
- Systematically identify opportunities for reducing waste and for alternative packaging materials

	2020	2019
Plastic packaging (tonnes)	495	377
Recycled plastic packaging (tonnes)	1,371	1,231
Bioplastic packaging (tonnes)	35	28
Polyurethane (tonnes)	7	13
Total plastic consumed (tonnes)	1,909	1,651
Plastic recovered (tonnes)	392	387
Cardboard packaging (tonnes)	90	91

The main reason behind the increase in plastic consumption in 2020 was predominantly the increase in activity levels but also, to some extent, the product mix due to increased deliveries of product categories that require more packaging based on both quality and HSE considerations.



Waste management

Where and why is it important?

Industrial, building and construction activities generate large parallel material flows that can be reused, recycled or used for energy recovery if they are processed and sorted correctly. Residual raw materials from the Group's timber processing operations, such as chips and fibre products, are resources for which processes have been established to ensure optimal utilisation. Fractions originating from packaging from purchased goods, auxiliary materials, worn tools and equipment, etc, must be managed in collaboration with external parties.

By sorting as much as possible and by facilitating reuse and recycling, Moelven helps create a more sustainable and circular material cycle. A high volume of waste and a low degree of sorting could be indications of both negative environmental impact and inefficient production, which in turn affect the costs and profitability of the Group.

Policy and approach

Moelven's sustainability policy contains the following guidelines and goals for waste:

- Moelven shall design products that focus on resource efficiency and assess the need for and environmental impact of packaging.
- Moelven shall actively work to reduce waste and achieve a minimum sorting ratio of 90 per cent for residual waste.

- Moelven shall actively work to minimise the use of plastic and strive to find sustainable alternatives to plastic.

Complying with all of the laws and regulations that apply to the Group is a fundamental prerequisite for all operations at Moelven. The sustainability policy approved by the Group's corporate management in 2020 focuses on activities and initiatives that go further than required by the legislation.

The various entities within the Moelven Group are responsible for their own waste management. In 2020, this was carried out in collaboration with local waste management companies, which have various options for managing waste. However, during the winter of 2021, the Group will conclude a tender process concerning waste management for the Group's companies in Norway and Sweden. The goal is to concentrate the agreements with the smallest possible number of parties and to collaborate more closely with these parties in order to achieve even more environmentally friendly waste management for the Group as a whole.

Several of Moelven's locations apply LEAN production methods. These are based on continuous improvement and a reduction of unnecessary waste in the organisation. Unnecessary waste impacts the cost of production and should therefore be reduced to a minimum.

Evaluation of results

Waste management is becoming an ever greater priority in the Group. Good waste management with precise sorting into as many waste fractions as possible is an important prerequisite in the trend towards a more circular economy.

	2020	2019
Hazardous waste	1,063	833
Other waste	14,115	12,014
Total volume of waste	15,178	12,846
Waste sorted as normal wood	3,467	3,144
Waste sorted as impregnated wood	372	537
Waste sorted as plastic	392	387
Other waste sorted locally	8,477	6,975
Mixed industrial waste (not sorted locally)	2,470	1,803
Total volume of waste	15,178	12,846
Sorting ratio	83.7	85.0

The total waste volume increased in 2020, largely as a result of the general activity levels but also because several entities carried out clear-up operations to facilitate better sorting procedures going forward.

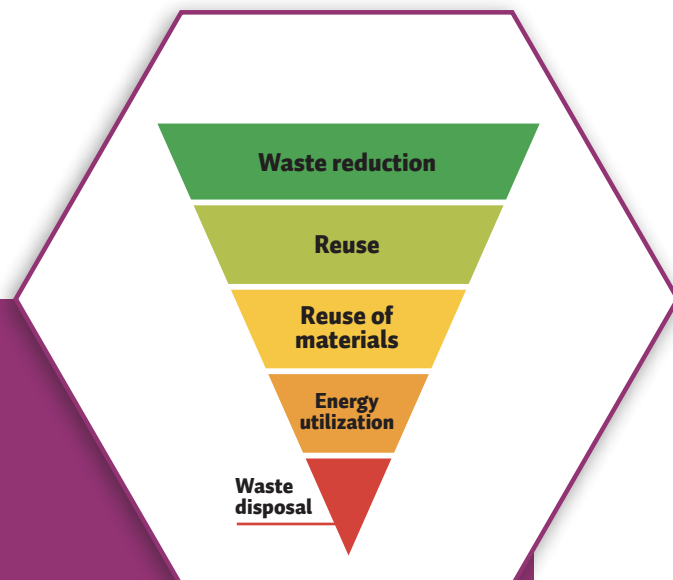
The Group's goal is to achieve a sorting ratio of at least 90 per cent. This is an ambitious target. In 2020, the sorting ratio fell to 83.7 per cent from 85.0 per cent in 2019. This is due to both the aforementioned clear-up operations but also the fact that certain entities have largely purchased sorting services from external parties and therefore have to report their waste volumes as unsorted waste.

Measuring the sorting ratio across several regions is challenging, since the definition of sorting will depend on the waste management methods that are available locally. For example, mixed waste could be defined as sorted if all of the mixed waste goes to incineration anyway. Therefore, a calculated sorting ratio is reported that is based on the proportion sorted by the company based on the total quantity of waste.

In 2021, the work from the previous years will be continued in collaboration with the waste management companies Moelven decides to enter into agreements with following the tender process that is due to be completed during the winter. The focus on an increased sorting ratio will be significant, both in order to best facilitate that what is considered waste by Moelven becomes a resource at the next stage, but also to reuse the largest possible proportion of the waste within our own industry. Measures to reduce the volume of waste, with a particular focus on waste that is sent to landfill.

The waste pyramid

The waste pyramid illustrates priorities in waste management and is endorsed in both Norwegian waste policy and the EU Framework Directive on Waste. The goal is to manage waste issues as close to the top of the pyramid as possible. When Moelven facilitates internal transport without packaging, this is an example of waste reduction – without packaging, waste is simply not generated.



An example from the lowest part of the pyramid is the delivery of ash from a heating plant to landfill. In some cases, this may be the best alternative, but it can also be avoided by identifying partners that can utilise the ash for other purposes, such as soil improvement.

AMBITIONS:

- Actively work on waste reduction and waste management in accordance with the waste pyramid priorities
- Sorting and recycling waste to the extent technically possible.

RESULTS:

- 15,178 tonnes of waste in total
- 1,063 tonnes of hazardous waste
- 392 tonnes of waste sorted as plastic
- 83.7% sorting ratio

MEASURES:

- Continue surveying waste and with the follow-up of KPIs
- Strengthened coordination of waste management across the Group as a whole and centralisation of waste management contracts.
- Continue working to increase the sorting ratio to a minimum of 90%



A sorting ratio of 95 per cent for waste

One of the best in class at Moelven when it comes to waste sorting is Moelven Mjøsbruket AS. “The key is making it as easy as possible for employees,” says operations manager, Petter Fjeld Bjerke.

SORTING OPTIONS are available in the immediate vicinity of work stations. “Of course, plastic is sorted at the Packaging department and electrical waste is sorted by the electrician. And at the workshop we have a container for waste oil from the trucks,” explains Bjerke.

The sorting ratio of the entire Moelven Group is 83.7 per cent, with a target of 90 per cent. Mjøsbruket has been working to increase the degree of sorting for several years.

“Marking is also extremely important, so that we don’t spend time wondering where different waste goes,” Bjerke says.

Positive collaboration with waste management provider

Another success factor is the positive collaboration with Østlandet gjenvinning. They have conducted multiple site visits to establish which types of waste could be sorted differently.

“Previously, we used to sort plastic packaging and green plastic tape together. But the plastic tape has to be sent for energy incineration, whereas plastic packaging is now sent for recycling,” Bjerke explains.

The positive collaboration means that together they have managed to identify optimal sorting and the number of containers needed throughout the area to ensure easy use for employees.

“We are lucky to have a sustainable material to work with, but it is important that we produce and sort waste in the most sustainable way possible. We must continue to work on identifying whether there is anything else that can be sorted into different fractions and ensure that all employees know what needs to be sorted where,” says Bjerke.

Checklist for levels of high sorting

- ✓ Good marking
- ✓ Collaboration with a waste management provider
- ✓ Proper placement of containers

“I am impressed by the sorting ratio that Moelven Mjøsbruket AS has managed to achieve. I hope that more of our companies are able to benefit from the lessons learned from their efforts on clear marking, accessible placement and continuous improvements to the fractions that can be sorted.

CEO Morten Kristiansen



Clearly visible marking is essential to ensure that waste is sorted correctly.

It is important to ensure that sorting options, such as waste oil tanks, are located in close proximity to where waste is generated, so that it is easy to sort.



Upcycling of green plastic tape

Aranan Karlsson, Operator at Moelven Langmoen AS, produces shopping bags and waste bins from green plastic tape. The plastic tape is used to secure materials. It must be sorted as normal residual waste, so this initiative is very much an example of sustainable reuse.



The Head of Purchasing in the Building Systems division, Thomas Hansen, is working on corporate agreements that may, among other things, improve Moelven's waste sorting ratio.

Buying local where possible

Smart and larger purchases result in a better climate footprint. “We established a purchasing group at Moelven in 2020. The main purpose is to consolidate all of our agreements and establish new corporate agreements in areas that have a major impact on profitability and sustainability,” says Head of Purchasing for Building Systems, Thomas Hansen.

ONE OF THE MOST IMPORTANT areas we are currently working on new agreements for is waste management. Such an agreement would have an impact on the opportunities we have at Moelven to achieve our target of a sorting ratio of 90 per cent.

“We need waste management partners that can provide excellent advice on many types of waste. Moelven companies have different products and therefore greatly differing waste. We can see that we need to get better at sorting this waste to achieve our target of a sorting ratio of 90 per cent,” says Hansen.

The search for experienced and knowledgeable waste management companies in Norway and Sweden is already under way.

Fewer transport journeys and shorter distances

Transport is one of the major drivers behind CO₂ emissions at Moelven. “We are considering whether to impose fees on orders under a certain sum in the corporate agreements to ensure that we properly plan purchases and thereby achieve fewer transport jobs,” Hansen says.

In and of itself, wood is a sustainable product, but ensuring fewer and smarter transport journeys would make Moelven products even more sustainable.

Buying primarily in Scandinavia

Moelven purchased external products and services for approximately NOK 7.4 billion in 2020. The majority of the Group's external purchases are made with local or Scandinavian suppliers.

“Locally sourced purchases help minimise our total CO₂ emissions. Our selection of suppliers and materials will always consist of an overall assessment of price, quality, access, sustainability and production-friendliness,” says Hansen.

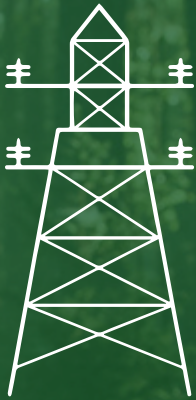
For Moelven, it is important to deliver sustainable products to consumers, who are setting increasingly high requirements for the materials and their application.

“If we are to properly succeed in this work, we are reliant on everyone throughout the entire value chain being willing to pay a little more for greener and more sustainable products. But it is not always the case that products that are more sustainable cost more. We just have to dare to challenge existing purchasing patterns from a greener perspective. I find that there is an increasing focus on greener purchases at Moelven, but there is still some way to go on being clearer about how we will emphasise sustainable products and solutions in our product and supplier selections,” Hansen says.

Corporate agreements

Consolidating a larger proportion of Moelven's purchases under corporate agreements is not only about achieving better prices and conditions for our individual companies.

Corporate agreements also provide us with greater opportunity to exert an influence in the direction of greener purchases, both with regard to material selection, order sizes and number of transport journeys, as well as more sustainable production on the part of our suppliers.



ELECTRICITY CONSUMPTION

decreased
from 229 GWh (2019)
to 206 GWh (2023)



THE WASTE SORTING RATIO

increased
from 85% (2019)
to 92% (2023)



HSE

LTI* value 11.3 (2019) to 4.0 (2023)
LTII* value 34.2 (2019) to 16.0 (2023)

* LTI rate is the number of injuries resulting in absence per million worked hours in the past 12 months. LTII rate is the number of injuries resulting and not resulting in absence per million worked hours in the past 12 months.

Moelven's green financing


If Moelven consumes less electricity, sorts more waste and has fewer injuries, the reward will be lower interest rates from the banks.

“We may not be the first to take out loans for which the conditions are linked to sustainability parameters in addition to traditional financial key figures, but we are still an early adopter. We have received a lot of positive feedback in response to us highlighting our HSE work as one of the targets linked to our loan financing. There are not all that many parties that do this yet,” says Rune F. Andersen, CFO and Head of Sustainability at the Moelven Group.

Moelven makes a living from managing a renewable resource in the best possible manner and sustainability has been a natural part of its business activities since long before the term was coined. When the Group was due to refinance its banking agreements during the spring of 2020, it focused on borrowing with DNB, Danske Bank and Handelsbanken, where interest rates are linked to some of the most important sustainable development goals.

“At Moelven, we say that sustainability is the same as competitiveness and the targets we have set for sustainability are endorsed in our corporate strategy. Of course, it is particularly motivational to seek out improvements within sustainability work when there is also a reward in the form of an interest rate discount if we succeed,” says Andersen before adding:

“The discount is not massive for a company with a revenue of more than NOK 11 billion, but it still inspires you to go further. Every little helps. Sustainability should pay,” Andersen says.

A photograph of a wood mill interior. In the foreground, there is a metal safety fence. The background shows various wooden beams and machinery. A large purple hexagonal graphic is overlaid on the image, containing the text "Focus on people". There are also three smaller white hexagonal graphics: one at the top right, one at the bottom left, and one at the top center of the purple hexagon.

Focus on
people



Many of Moelven's operations are important cornerstone companies in small locations. Around one in every eight residents of Edane works at Moelven Edanesågen AB. One of them is the planer operator Jenny Larsson.



Head of the Wood division Bjarne Hønningstad, Group CEO Morten Kristiansen and host Nina Rundsveen.

What we have learned from the pandemic

The COVID-19 pandemic has been challenging for our employees in 2020. But it has also created team spirit and new ways of working. These are some of our experiences.

“I went from meeting customers face to face several times a week to meeting them digitally only. Of course, we miss being in the same room, but the new way of working does also have its own advantages. I get more done now that I do not have to spend time travelling. I look forward to being able to meet customers again when the world reopens, but we will probably keep several of the digital meetings too.”

Sanna Hjelm
Key Account Manager, Moelven Wood AB

“When Scandinavia went into lockdown, we split the factory into 20 different bubbles of between 3 and 13 employees each. The fact that employees had to spend so much time together with the other members of their team has resulted in extremely positive team spirit and collaboration. They have been great at following the guidelines for preventing infection and, on average, we have actually experienced a decrease in absence due to illness during the pandemic.”

Tommy Grande
Production Manager, Moelven Byggmodul AS



“Once a year, we bring Moelven’s leaders together - across business areas and national borders. This was not possible in 2020, but we still wanted our leaders to be able to share their knowledge and experience with one another. The solution was a digital gathering with more than 100 participants. Firstly, we produced a talk show that was broadcast directly to all employees of the Group and then the leaders got together in digital teams, where they had the opportunity to discuss between themselves. In short, this was a great success, we learned a lot and we are now ready to use new digital venues.”

Magne Vikøren
Chief Communications Officer

“It is important to us that we are available to forest owners. During the pandemic, we therefore had to have a rethink - with great success. When we held our first webinar, we had nearly 300 forest owners attend, which is around twice as many participants as we usually get for our physical gatherings. The feedback has been extremely positive and, going forward, we intend to run a combination of webinars and physical meetings.”

Jonas Karlsson
Head of Field Purchasing, Moelven Skog

“Overnight, both the world and the working day changed significantly for most of us, but that did not prevent Moelven from achieving one of its best annual results of all time. We have made huge leaps within digitalisation and the IT department has noticed a tremendous increase in the demand for and use of digital aids this year. I think the pandemic has created lasting change to the way we will work in the future.”

Even Rognan Lutnæs
IT Director



Head of Field Purchasing Jonas Karlsson and Moelven Skog CEO Björn Johansson arranged a webinar for around 300 forest owners.



SOS Children's Villages chosen by Moelven employees

Moelven employees have chosen SOS Children's Villages as their new charity partner. This means that Moelven will invest half a million Norwegian kroner in the development of children and young people.

"CONTRIBUTING TO VIBRANT and sustainable local communities is important to us at Moelven. Our companies can often be found outside of large cities and towns, which is why we really appreciate the work done by SOS Children's Villages. The organisation develops strong local communities with children and young people who have been given opportunities and who can and will develop the regions in which they live," says Morten Kristiansen, Group CEO of Moelven Industrier.

Contributing to change

The approximately 3,350 Moelven employees voted that the Group would collaborate with SOS Children's Villages. The collaboration agreement has a limit of NOK 500,000 as the base amount.

Moelven and SOS Children's Villages also have several activities under way that could increase this amount further. Among other things, Moelven's corporate sports team is having an activity year in which parts of the participation fee will go to SOS Children's Villages.

"Together with SOS Children's Villages, we can help make a difference. These children can change the world and that is something we are both proud and happy to be part of," says Kristiansen.

"SOS Children's Villages is dependent on long-term partners in order to reach more children without satisfactory care. Children who have been left to fend for themselves, who do not have the opportunity to go to school, who go to bed hungry and who may have experienced violence and abuse. Together with Moelven, their employees and customers, we provide vulnerable children with a better upbringing so that they can create lasting changes in their own lives and in the communities they are part of," says Sissel Aarak, Secretary General of SOS Children's Villages.

"Together with SOS Children's Villages, we can help make a difference. These children can change the world and that is something we are both proud and happy to be part of."

Group CEO, Morten Kristiansen



Health, safety and the environment

Policy and approach

Everyone working at Moelven must get home in one piece. Through our work on active employee participation and active leadership, we will focus on a safe and health-promoting working environment featuring commitment, accountability and development of ourselves and Moelven. We actively focus on training and awareness campaigns in order to create a positive safety culture in every part of the organisation. In the Moelven framework, this is illustrated through one of the four cornerstones – PEOPLE. People are the most important resource at Moelven and people are essential for us to succeed in our work. Get home in one piece!

Systematic working environment

THERE HAVE BEEN major structural changes to HSE work at Moelven throughout 2020. Our focus has been on:

- developing joint safety requirements
- visible workwear
- follow-up of contractors and other external parties working in our companies.

The systematic HSE work has been gradually implemented through our joint HSE, quality and external environment management system – Landax. The first Landax modules were adopted by Moelven on 1 January 2020. This work will continue in the coming years and all of our employees will receive

training in and guidance on each of the modules that are being implemented.

HSE is now an integral factor throughout Moelven. HSE is the first item on the agenda for board meetings, divisional meetings in the companies and for group management team meetings. Moelven also has the safety committee and technical HSE forum as meeting venues. The safety committee consists of the group management team, the Head of HSE and employee representatives. Representatives from all divisions and the Head of HSE attend the technical HSE forum. Both forums work on relevant issues and groupwide HSE issues.

Cross-learning

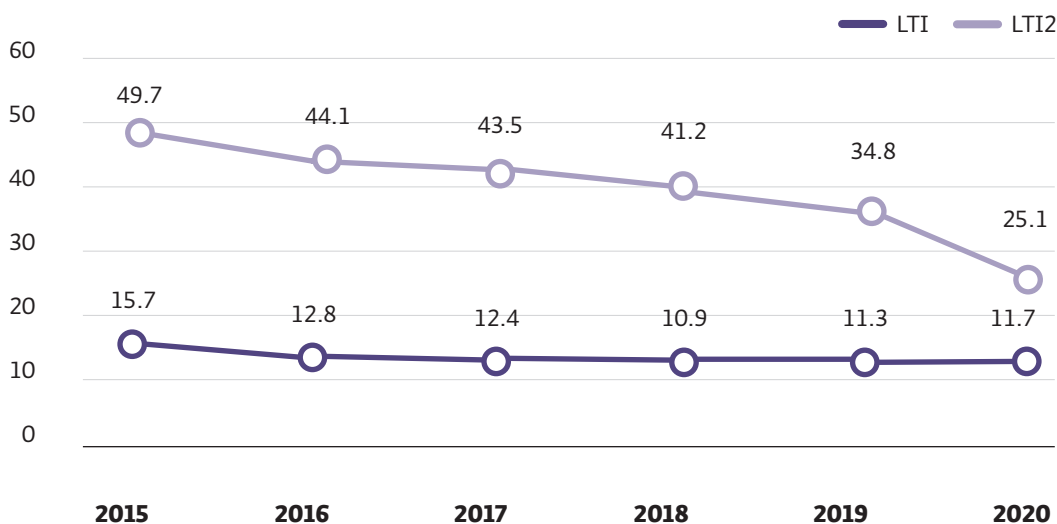
The work to learn from each other's incidents and excellent HSE efforts has been a focus at Moelven for many years. In 2019, we gave structure to this work by introducing investigation of the most serious incidents we experience. The purpose of the investigations is to ensure thorough and objective examination or investigation of the incident, as well as ensuring learning and preventive work throughout the entire Group. The outcome of an investigation is a learning sheet, on which both the incident and preventive measures are described. The learning sheets are issued to all general managers and are also published through Moelven's internal communication channel, Workplace. Workplace has a separate HSE group. Information about other incidents, training courses and other expertise-raising measures, as well as positive stories about successful colleagues, are also published here.



Moelven has target figures for four areas within HSE.

- 1. Injuries resulting in absence.**
Measured using LTI rate. (Injuries resulting in absence per million hours worked)
- 2. Total number of injuries.**
Measured using TRI rate. (Number of injuries resulting and not resulting in absence per million hours worked)
- 3. Preventive work.**
Focus on reporting of and follow-up on dangerous situations
- 4. Absence**
Absence categories and reasons are followed up

Development in number of injuries, 2015-2019



HSE towards 2023

13 August was one of the darkest days in Moelven’s history. This was the day on which we lost one of our colleagues in a work accident at Moelven Edanesången AB. The whole of Moelven was in mourning following the incident. Following the accident, a major mapping of safety work at Moelven has been carried out.

A separate taskforce identified seven clear objectives and focus areas that everyone at Moelven will be involved in.

1. Strengthen the HSE organisation and organisation of HSE work.
2. Strengthen HSE work by rolling out active leadership and active employee participation.
3. Implement risk management within operations.
4. Develop and implement HSE courses at all levels in the organisation. Establish a course portfolio of different HSE training courses.
5. Implement technical safety inspections at production facilities.
6. Establish an internal audit organisation that annually examines compliance with internal and external requirements and rules at the company level.
7. Continuous improvement and organisational learning.

COVID-19

The main focus throughout 2020 has been to keep people at Moelven healthy. Intragroup procedures have allowed us to avoid any major outbreaks at our entities.

Moelven employees have kept a distance of two

metres, washed their hands and stayed home if they experienced any symptoms. A total of eight Moelven employees were infected and 81 spent time in quarantine in 2020.

By quarantining employees and introducing a one-week production stoppage at two entities, we have managed to stop the spread of the infection internally.

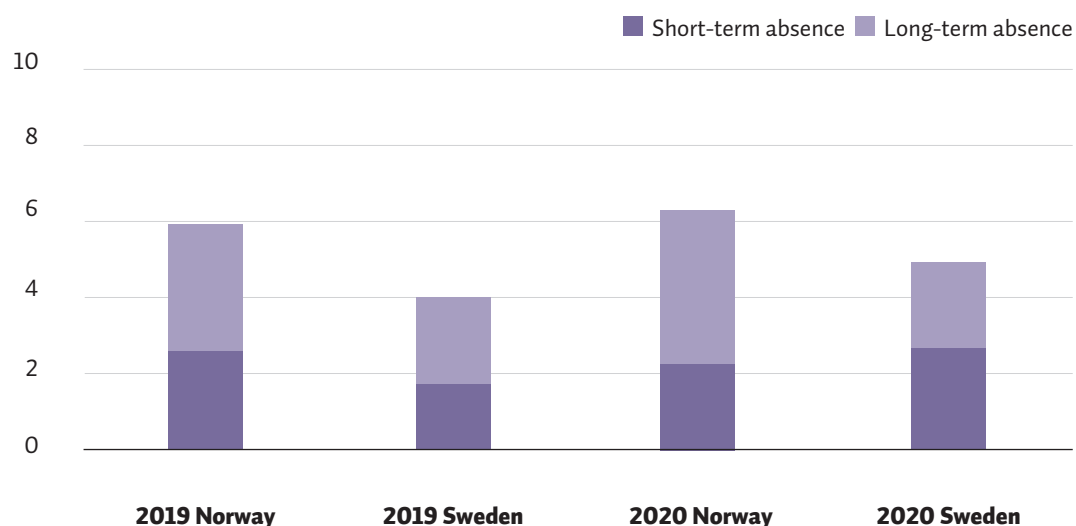
Objectives

The vision is zero injuries. In order to achieve this vision, we have milestones along the way. In 2020, Moelven’s target figure for LTI was <6 and the target figure for TRI was <24.

Moelven is also working continuously to increase reporting of dangerous situations. We know that increasing the number reported situations will increase the focus on them, which provides an opportunity to do something about situations before accidents occur. In 2020, Moelven’s target was 1 report per employee/year.

The fourth focus area within HSE at Moelven is absence due to illness. A good, safe working environment is essential for reducing absence due to illness and systematic efforts are being made through various types of healthy activities to prevent absence due to illness among our employees. In the event of absence due to illness, employees are closely followed up through dialogue and assessments of their residual capacity for work. In those cases where it is needed, Moelven has health insurance for its employees. This helps to ensure that those who need it receive quicker treatment and thereby return to work sooner. In 2020, the target figure for absence due to illness was 4.2%.

Development in number of injuries, 2015-2019





Health, safety and the environment (cont.)

Evaluation of results

Injury statistics

Moelven continuously monitors its own results and intervenes if there are any incidents that we can focus on from an overall perspective. All incidents and preventive measures are recorded in Landax. Unfortunately, Moelven has not yet achieved its target of zero injuries, but we focus on this every single day. Moelven's LTI target (number of injuries resulting in absence per million hours worked) in 2020 was <6, while 64 employees unfortunately injured themselves seriously enough to necessitate absence. This gave us an LTI result of 11.7 in 2020. Of these incidents, one was so serious that one of our employees lost their life. This is deeply tragic and something that we are working hard to prevent happening again through HSE towards 2030.

When we look at both injuries resulting and not resulting in absence in 2020, a total of 137 employees injured themselves while working for Moelven. This includes the 64 employees for which injuries resulted in absence. This gave us an TRI rate (number of injuries resulting and not resulting in absence per million hours worked) of 25.1 in 2020. Moelven's TRI target was <24 and, in this area, we have succeeded in reducing the number of injuries by a total of 57 from 2019 (194) and 104 compared to 2018 (241), although we have not achieved the target here either. We will continue our major focus on preventive safety work, health promotion and improved safety culture to further reduce the number of injuries going forward. The trend in the LTI rate is not good and we can see

that the results have stagnated in recent years. This is something we are not satisfied with and the focus on HSE work in Moelven has been further developed and intensified in 2020. We will reduce the number of injuries and will focus more on the safety of our employees going forward. Everyone must return home from work at Moelven in one piece!

On 1 January 2020, we changed the system we use to record incidents at Moelven. Increased training and focus on the purpose of incident recording was conducted for all employees. We can see that this has had an effect and we achieved our target of 1 report per employee/year in 2020. Reporting has increased by 35 per cent over the past two years.



In 2020, our employees reported 3,843 dangerous situations and near-accidents at Moelven. We have set a target of 4,080 reports in 2021.

**Anne Cathrine Amdahl,
Head of HSE at Moelven Industrier ASA**



Anne Cathrine Amdahl,
Head of HSE at Moelven
Industrier ASA

The fact that the number of dangerous situations reported has increased is a positive trend. We know that increasing the number of reported situation-will increase the focus on them, which provides an opportunity to do something about situations before accidents occur. This provides us with greater opportunity to prevent incidents.

Our reporting system also provides us with overviews of trends, who was affected, possible causes and injury types. The most adverse incidents and dangerous situations were reported in the following areas in 2020:

Trend in injuries, 2020



Absence due to illness

Absence due to illness in 2020 was 6.2% (2019: 5.4%), of which 3.0% (2019: 2.5%) was long-term absence. Some of this increase can also be attributed directly to absence due to the COVID-19 pandemic. Even though absence due to illness has increased in 2020 compared to the previous year, the long-term trend in the development of absence due to illness is declining.

Many of Moelven's businesses already had a rate of absence due to illness lower than the target of 4.2% in 2020. The long-term goal for the strategy period is a rate of absence due to illness in 2023 of < 4.0 per cent and we are actively working on, among other things, measures aimed at companies with the highest rates of absence due to illness, cooperation with the occupational health service and employee surveys.

The results for Norway and Sweden were somewhat different, with Norway having had both higher long-term and short-term levels of absence in recent years.

AMBITIONS

- U LTI: <6 in 2020
- U LTI2: <24 in 2020
- U Absence due to illness: < 4.2% in 2020
- U 3,400 risk reports

2020 RESULTS

- LTI: 11.7
- TRI: 25.1
- Absence due to illness: 6.2%
- 3,843 risk reports

MEASURES

- HSE towards 2023
- Cross-learning
- Further development of positive safety culture

From worst in class to one of the best

Over the course of 3.5 years, Moelven Byggmodul AS has gone from being among the worst in class to one of the best when it comes to HSE and has now become a modern industrial company that others seek to learn from.

“WE HAD WAY TOO MANY injuries each year. It wasn’t exactly hard to understand that we had to do something about it. Since 2017, we have worked hard to further develop our workplace,” says Rolf Johan Sørli, Factory Manager at Moelven Byggmodul AS.

This is something they have succeeded at. The company has experienced an efficiency increase of around 10 per cent from 2015 to 2020. Three years ago, Moelven Byggmodul AS experienced an average of one injury resulting in absence each month. At the time of writing, it has been 240 days since the last injury resulting in absence. With 225 employees, that corresponds to more than 50,000 days without an injury.

“From being referred to as one of the worst Moelven companies for HSE, we are now being asked for advice and used as a shining example. That is something I am proud of,” Sørli says.

This is how they have done it

Since 2017, Moelven Byggmodul AS has invested NOK 115 million to further develop the business. There have been three key topics in the company’s transition from being a “construction site under a roof” to becoming a modern industrial company:

1. Continuous improvements.
2. Creating a strategy for skills development and putting this into a system.
3. Investing in automation and robotisation.

“We have created a structure to build a culture. I still tend to say that culture eats structure for breakfast, so the most important thing we have done is to repeat what we will do ad nauseam, persevere and be stubborn. It takes time before you start to see results, but this is how we managed to create change,” Sørli says.

Better working environment

Developing leaders, further educating employees and professionalising apprentices are all part of putting expertise into a system. This has been important to the working environment at Byggmodul.

“I find that there is a greater willingness to keep going on the part of our employees now and that they want to find good solutions to achieve the targets we have set. I think this is because our information flow has improved and each employee has gained greater knowledge of how they can influence the outcomes. We all understand what role we have to play in the wider context,” Sørli says.

Even though Byggmodul has achieved excellent results in recent years, they do not allow themselves to relax.

“The day you think have reached your target, it’s time to find something else to do. We must always be curious about how we can develop even further,” says Sørli.

An important part of the working day for Factory Manager Rolf Johan Sørli and the others at Byggmodul is when they gather around the team boards and factory boards each morning. Here, they will discuss the day ahead and there is a high focus on HSE.





Everything has a fixed place at Moelven Byggmodul AS. “Working here now is completely different to what it was like five years ago. The fact that the factory is this tidy and systematic is a great improvement, both with regard to the number of injuries, the working environment and the quality of production,” says Employee Representative Joar Sollien.

What do the measures involve?

Continuous improvements:

- “We continuously focus on making the factory safer and more efficient. We therefore encourage all of our employees to add improvement suggestions to Landax and we discuss these suggestions every other week. We strive to base our decisions on facts so that we can make improvements in the right places,” Sørli says.
- One such example is 5S, a way of organising workplaces and workflows. The five S’s stand for: Sort, systematise, shine, standardise and secure. The goal is for everyone to always know where everything is and not spend time looking for things. “The teams with the best 5S score have also experienced fewer injuries. How tidy the factory is also says something about the quality of our products,” says Sørli.

Expertise:

- There is a focus on developing outstanding middle managers, further educating employees and professionalising apprentices, as well as placing skills development in a strategic context.

- “Expertise is our most important tool. Anyone can build machinery, but it is the people who make the difference,” says Sørli.

Investments:

- Since 2017, Byggmodul has invested NOK 115 million into the factory to create a structure and put modules into continuous flow production, as well as to robotise the formatting of boards and studs for element assembly and decoration.
- Continuous flow production means that the robots improve the materials for the modules in a smarter way and the modules are physically moved around on rails through the production lines.

“This requires all of the teams to work at the same pace so as to ensure that the production is not brought to a stop. In order to succeed, we need to regularly discuss improvements and implement associated measures,” says Sørli.

Developing our strengths

“Our people are the most important strategic mainstay at Moelven. We have therefore initiated work to define our shared strengths,” says Terje Melheim, Head of Employee and Management Development.

THE WORK ON developing the corporate culture is referred to as “active employee participation” and “active leadership”. More than 100 employees have helped define Moelven’s strengths and the qualities employees and managers must further develop.

“We were ready for the first round on 12 March 2020, the very same day that Norway went into lockdown. This meant that we had to have a rethink,” says Melheim.

Digitalised analogue dialogue canvas

In order to implement the programme in accordance with Moelven’s infection control guidelines and at a two metre distance, a digital version of “active employee participation” was developed, as well as a more COVID-19-friendly physical version. The discussion programme must be arranged by each manager together with their employees.

“Employee participation is about ensuring that everyone is involved in the work to further develop Moelven. This provides managers with better knowledge of the opportunities identified by employees, as well as the opportunity to have positive and trans-

parent discussions. Employees are given the time to reflect and think about how their behaviour and suggestions for improvement contribute positively to Moelven,” Melheim says.

Employees will discuss how to take responsibility, develop themselves and the business and how they can contribute by getting involved. Managers will, in turn, work on communication and how they perform as role models, how result-focused they are and how they will facilitate development and innovation.

“One of the most important aspects of “active employee participation” is creating a common understanding of the opportunities employees have to positively influence Moelven, through discussions about taking responsibility and through development and involvement,”

**Anders Lindh,
Head of Moelven Timber division**



Digital devices and pen and paper are all the instruments used in the COVID-19-friendly version of active leadership and employee participation. Here, Head of IT Operations at Moelven Geir Morten Holmen is participating in the active leadership process.



The dialogue canvas can be used on paper, as well as digitally. Through the tasks, which are completed by everyone at Moelven, the dialogue canvas contributes to positive discussions. Terje Melheim, Head of Employee and Management Development, looks forward to working on Moelven's strengths together with all of the company's 3,350 employees.



Active employee participation

These are the six strengths that have been defined by more than 100 Moelven employees as the ones we will further develop through active leadership and active employee participation.



Diversity and equality at Moelven

MOELVEN'S strategy plan stipulates that we will work to build a culture that promotes diversity through inclusion, with a particular focus on equality.

ONE OF THE objectives for developments going forward is to increase the proportion of women in management roles to 20 per cent, which would involve nearly doubling the current level. In order to achieve this target, we need to look beyond the obvious – the recruitment process itself – and think about how we can ensure that our industry is attractive to women that possess the right expertise.

Moelven's Code of Conduct states that we will have an inclusive work culture and actively work to ensure a positive working environment characterised by equality and diversity. Moelven accepts no form of harassment or discrimination on the basis of gender, race, religion, age, disability, sexual orientation, political conviction, national or ethnic origin or other factors. This has been the approach at Moelven for a number of years and guidelines and internal control procedures have been established to ensure compliance.

One of the measures is a requirement to conduct an anonymous employee survey at all Group companies at least every other year. There are also established reporting procedures in place that enable all employees to anonymously report any violations of laws, regulations, intragroup guidelines or other misconduct.

In 2020, Moelven's employee survey was further developed, largely on the basis of the knowledge and experiences gained from the active employee participation and active leadership processes. In the revised employee survey, which will be conducted at all entities within the Group during 2021 and that will subsequently be part of the annual cycle for the Group's HR strategy, the mapping of whether employees have been exposed to abusive actions and whether employees know how to reportsuch situations will be strengthened. The information that is collected will be analysed and will form an important basis for risk assessments and the planning of the continued work to ensure equality and anti-discrimination.

	Male	Female	Total
Number of employees	41	23	64
Temporary employees, including trainees	4	2	6
Part-time employees	5	3	8
Average parental leave (weeks)	19	35.5	

*The table applies to the parent company, Moelven Industrier ASA





Moelven provides opportunities for those who want them. Thea Helene Slotnæs, Elisabeth Davis and Maren Wilson are three of our approximately 3350 employees who strive to provide you with outstanding products and services every day.

Many paths to Moelven

Moelven relies on talented and committed employees to drive the business forward. We collaborate with a number of educational institutions, the public sector and various skills initiatives in the local communities where we operate in order to attract relevant employees.

Meeting with the Prime Minister and a permanent job

MAHAMED HASSAN MAHAMAD joined Moelven Numedal AS through a collaboration between NAV and Moelven and was offered a permanent role in 2020.

“We want a lot more employers like Moelven! It is great that they have decided to make use of people who have had trouble finding jobs,” said Prime Minister Erna Solberg when she visited Mahamed at work in 2019.

Traineeships are part of the collaboration between the public sector and Moelven and provide employees with the opportunity to see what it is like to work for Moelven and Moelven, as the employer, has the opportunity to familiarise itself with prospective employees and their willingness to learn.

Interesting work and language training

“Being offered a permanent job at Moelven was fantastic. I first joined as an apprentice. It was important

to show initiative and interest in the job. The collaboration between NAV and Moelven Numedal AS has now made it possible for me to get a permanent job,” Mahamed says.

The timber operator lives in Numedal in Buskerud together with his wife and children and is glad to have been offered a permanent job within the local community where his children are growing up. This job has meant a lot to Mahamad, who came to Norway in 2014.

“I really enjoy practical work and I am happy that I have now found a job.” He adds that even though the sawmill is a bit noisy, he can at least practice speaking Norwegian.

Mahamad Hassan Mahamad and General Manager Rune Frogner met Prime Minister Erna Solberg in 2019. She visited Moelven Numedal AS to learn more about their collaboration with NAV.





Hassan Jowan is now a permanent employee at Moelven Component AB.

A combination of vocational education and language lessons resulted in a permanent job

Hassan Jowan has always been interested in working with wood. When he found out from the Municipality of Karlstad that it was possible to combine vocational education in wood engineering with Swedish lessons, it was an easy choice to make.

OUT OF THE FIVE working days in a week, Hassan spent three of the days learning more about wood engineering and nine of the 13 weeks of study were spent as a trainee with Moelven Component AB.

“Being able to learn a language and a profession at the same time is a great scheme. You are motivated to perform at both,” Hassan explains.

Following the nine-week long traineeship period with Moelven Component AB, Hassan was asked whether he wanted to join as an hourly-paid employee - something he absolutely did.

“I was initially offered hourly-paid employment and, after a short period of time, this turned into a probationary employment. I am now a permanent employee of the company. Being part of Moelven Component feels great. It’s an outstanding company with helpful colleagues that allow you to quickly get involved with the work. It feels a bit like being part of a family,” Hassan says.

All trainees offered employment with Moelven

The ten trainees from the initial trainee intake have all been offered permanent jobs with the company.

MORE THAN TWO YEARS have passed since Moelven launched its own traineeship scheme and it must be said to have been a success. Following the traineeship period, every single trainee has been given a permanent job with Moelven.

“Being a trainee at Moelven was an incredible experience. I had no previous experience of the industry and I had not envisioned that I would have all of the opportunities I have had - this quickly. The tasks I was assigned were adjusted for my expertise and I had the opportunity to do the things that would best help me develop,” says Steffen Engeland.

Multitude of opportunities

During the 18-month traineeship period, trainees have the opportunity to experience two different roles at Moelven. As a recent graduate from the Norwegian University of Science and Technology at Gjøvik, Steffen had the opportunity to try his hand with both Moelven Eidsvold Værk AS and Moelven Multi3 AS, before landing his dream job as a Technical Project Manager with Moelven Wood AS.

“I feel a sense of pride of working within an industry that produces such a sustainable material as wood. At Moelven, I have had an incredible amount of opportunities and different areas of responsibility to work with and this has allowed me to learn quickly,” the 26-year old says.

Investing in expertise

Now that the traineeship period has ended, the first intake have embarked on roles such as project manager, development engineer, production technician and head of department in various Moelven companies.

Expertise Developer Jeanette Löffberg from Moelven is proud of both the trainees and her employer.

“The fact that everyone has been offered permanent roles shows that we have managed to inject relevant and sought-after expertise into the companies. The trainee scheme is important to Moelven. It is a way for us to invest in the expertise of the future, while also making an effort from a socioeconomic perspective,” she says and adds:

“The feedback we have had from the trainees shows that the experience of being new at Moelven is a positive one. You are well received and you gain a valuable network, as well as useful experience and valuable knowledge.”

Moelven is now focusing on its second and third trainee intakes.



“Moving from being a trainee to being a permanent employee was exciting, but it was also challenging as I was given more responsibility. I don’t think I would have handled it as well if I had not already been a trainee first. Some of the most important things I learned as a trainee were to take responsibility for the work you do, working independently and how to manage projects.”

Gaute Nyløkken, Production Manager, Moelven Limtre AS



“The change from being a trainee to becoming a permanent employee was not a particularly big transition. You could say that the traineeship period was more of a gradual preparation for the work I do now and allowed me to be a self-starter from day one. I now benefit greatly from the network, expertise and understanding I gained as a trainee.”

Louise Karlsson, Project Manager, Moelven Töreboda AB



“For me, the difference between being a trainee and a permanent employee was not all that great since I was given a lot of responsibility and many of the same work tasks that I currently have. As a trainee, I gained a solid foundation that allowed me to obtain a broad understanding of how the Moelven Group and Valåsen work.”

Daniel Fredriksson, Process Engineer, Moelven Valåsen AB

Moelven’s trainee programme

- Starts in September and has a duration of 18 months.
- Anyone who has recently graduated at bachelor’s or tertiary vocational level can apply.
- Trainees get to try two different jobs during the trainee period, while also taking part in a joint skills programme.
- The recruitment period runs from November to February.

Boosting expertise

In 2020, more than 20 Moelven employees completed further education and training and received their certificates of completed apprenticeship. One of them was May Britt Hauger.

“WHEN YOU ARE completing your apprenticeship to get your certificate, you have to consider things that you have never thought about before. I have learned much more than I expected to beforehand. It is good to have the opportunity to try your hand at different things and the sense of accomplishment when you receive your certificate is great. It’s proof that you are capable. I would recommend that everyone gets their certificate of completed apprenticeship. It’s never too late,” says May Britt, who has worked at Moelven Granvin Bruk since 2001.

It is important to Moelven that employees want to obtain further knowledge and expertise.

“Completing an apprenticeship and getting the certificate is a good thing for both the employee and the company. It’s crucial that we constantly continue to develop ourselves, the business and our colleagues. By completing your apprenticeship and obtaining your certificate, you can feel even more secure in your role and you also obtain new and up-to-date expertise. This ensures that you are even better equipped for a changing working life,” says Jeanette Löffberg, Expertise Developer at Moelven.



May Britt Hauger

More further education in 2021

A NUMBER OF employees are also in the process of completing further education in 2021. Jan Erik Østby, Hans Espeseth and Donatas Zilys are three of the 14 employees that are currently completing their apprenticeships in production technology in collaboration with the Norwegian Wood Cluster. They have worked at Moelven Mjøsbruket for between three and 13 years.

“We already have some work experience and we have become accustomed to doing things in certain ways. This course provides us with new perspectives – for example how we can fulfil certain work tasks in smarter or safer ways. It is very interesting and educational,” they say.



Jan Erik Østby



Hans Espeseth



Donatas Zilys

Increasing logistics expertise

Dag Moen, Kenneth Johansen and Trond Bjørtomt are three of the 13 Moelven Byggmodul AS employees who are completing their apprenticeships in logistics in 2021.

ALL THREE ALREADY hold certificates of completed apprenticeships in other disciplines but they now work in logistics. Their jobs involve feeding the production lines with the correct intermediate goods at the right time.

“Logistics is becoming an increasingly important part of our working day. It is therefore valuable for us to gain more knowledge of this field in particular and, not least, to acquire documentation of the expertise we possess. It’s also fun to learn new things,” they say.

“We have invested heavily in the further development of Moelven Byggmodul in recent years and the most important thing for us to invest in is our people. Working life is becoming increasingly complex and there is an increased level of automation and robotisation. It is therefore essential that we continuously replenish our knowledge and expertise. This also means that we work better with our machines. The

fact that most of our employees have certificates of completed apprenticeships makes us an attractive company, both for our customers and our future colleagues,” says Lars Ivar Pedersen, HSE, Quality and Expertise Manager at Moelven Byggmodul AS.



Dag Moen



Kenneth Johansen



Trond Bjørtomt





Safe chemical use

Where and why is it important?

Moelven uses chemicals in its production both to increase the service life of certain products and materials and to increase the processing rate and simplify further processing and maintenance of the products. Some of the chemicals that are used may have a potential impact on health and the environment, but they should not pose any risks when used properly.

This is an important topic for Moelven, since the chemicals may entail a risk in the event of improper handling. It is also a topic that many customers and consumers care about. It is therefore important for Moelven to provide comprehensive and clear information about the use of these chemicals in order to ensure the products are used properly and to gain the trust of end users.

Policy and approach

All relevant laws and regulations associated with the use of chemicals must of course be complied with at all times. Moelven also has the following goals:

- Moelven aims to minimise the impact on soil and water by using environmentally friendly chemicals, oils and adhesives wherever possible.
- Moelven must only handle chemicals, oils and adhesives in designated places with approved enclosures or similar installations to reduce the impact of any spills.

Moelven is also subject to a number of regulatory requirements related to the use of chemicals. One EU Directive in particular applies to Moelven's products, the Construction Products Regulation (CPR), although Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and the Biocidal Products Regulation (BPR) are also relevant. These regulatory requirements are integrated into Moelven's procedures and all of the products that Moelven manufactures must comply with the requirements that follow from these directives.

Evaluation of results

The chemicals and treatment products covered by the sustainability reporting were chosen based on consumption, potential health impacts and the stakeholder and materiality analysis.

Production volumes in impregnation, surface treatment and glulam increased significantly in 2020, which is the main reason for the increased chemical use in these areas. The production of fire-impregnated and Osmo-treated products was somewhat lower than in 2019.

Moelven Numedal AS ensures that chemicals are used and stored safely using the chemical documentation software EcoOnline.

By scanning the QR codes that the company has on display it is quick and easy for operators to find the correct datasheet in the event that an incident occurs.



AMBITIONS:

- Moelven shall, wherever possible, use safe, environmentally friendly chemicals.

RESULTS:

- The main groups of chemicals have been surveyed and are subject to reporting procedures.

MEASURES:

- Continue and improve the monitoring of chemical use, work continuously to minimise their use and explore alternatives.
- Continuously quality-assure and, if required, update the products' OAM and HSE documentation.

Name	Description	2020	2019
Impregnation fluid	<p>Area of application: Provides resistance to moisture, rot and fungus attacks and increases a product's service life.</p> <p>Potential health impacts: Moelven's Cu-impregnated products contain the element copper (Cu). Besides this, the products contain no heavy metals. The so-called "royal treatment" is done by drying the Cu-impregnated products before "boiling" them in coloured linseed oil. Moelven also supplies glulam based on TMF-impregnated materials. The impregnation fluid does not contain heavy metals and consists of biodegradable antifungicides. No negative health impacts have been identified when the pressure-impregnated products supplied by Moelven are used properly.</p>	1,215,948	1,082,847
Paint, primer and stain	<p>Area of application: Paint, primer and stain are aesthetically pleasing, provide resistance to moisture, rot and fungus attacks and increase a product's service life.</p> <p>Potential health impacts: Moelven can paint, prime and stain products more efficiently and in a safer environment than is the case if products are treated after installation. Industrial application of paints, primers and stains therefore reduces the impact on health compared to on-site application, while also ensuring that spillages and waste can be managed more efficiently.</p>	1,466,620	1,348,646
Fire impregnation	<p>Area of application: Moelven's unique Fireguard impregnation provides resistance and passive protection against fire. Used for both indoor and outdoor products.</p> <p>Potential health impacts: The product has been shown to be an environmentally friendly impregnation agent, it meets the requirements of the EU Construction Products Directive and waste can be handled as ordinary treated wood. No hazardous chemicals are emitted during use or in the event of fire.</p>	25,792	41,286
Adhesive	<p>Area of application: Adhesives are used as a binding agent in many products, for example glulam. Moelven mainly uses MUF (melamine-urea-formaldehyde) and some PRF (phenol-resorcinol-formaldehyde) in glulam. All glulam is labelled with which type of adhesive has been used.</p> <p>Potential health impacts: Moelven generally uses adhesives produced from oil that does not originate from fossil sources and thus has a low environmental impact. Glulam has no health impacts for the user when used properly.</p>	7,373,205	6,456,498
Osmo	<p>Area of application: Osmo is a wood treatment product based on natural oil and waxes. The oil penetrates the wood and protects it from within. The wax creates an elastic, microporous surface that protects the wood from external impacts and the wood thus retains its natural appearance and is protected.</p> <p>Potential health impacts: There are no known potential health impacts from using Osmo. It consists of sunflower, soya, lentil and thistle oil and is approved for use in contact with foodstuffs.</p>	8,580	9,370

Safe chemical use

Impregnation

Royal impregnation

Towards the end of 2020, it was announced that the National Office of Building Technology and Administration had conducted a market inspection of fire-treated cladding. In connection with this, indications emerged that royal-treated cladding perhaps did not qualify for classification in fire class D, which is how both Moelven and the rest of the industry have classified the product, in accordance with established practice. Moelven quickly initiated its own tests and, on the basis of these, the classification for the cladding products was changed to fire class E. At the same time, Moelven halted production and sales of royal-treated cladding and established procedures for informing and following up with customers. This change applies only to the cladding products, not the terrace products, which are the largest segment for Moelven's royal-treated products.

"The product information for and characteristics of our products must be crystal-clear. During the spring of 2021, we will be working on multiple tests in order to provide customers with better information about the consequences of the declassification of royal-treated cladding," says Bjarne Hønningstad, Head of the Moelven Wood Division.

Moelven has a market share of approximately 1-2 per cent for royal-treated cladding. Moelven and other industry players are now working closely with fire safety professionals to further document the product characteristics.

"We understand that this is difficult for our customers. We are in close dialogue with fire safety advisors and the answers we have received so far indicate that the cladding would play a less crucial role in any potential fire outbreak, since few fires start in exterior cladding. Nevertheless, we are not entirely satisfied with this and we have therefore informed all of our customers of this change and will continue to follow up with our customers," says Hønningstad.

Creosote

Moelven Limtre has developed, produced and assembled large, load-bearing glulam structures for more than 30 years. Glulam for bridges is largely produced using impregnated pine. In some cases, the bridges are also impregnated with creosote after all the processing has been completed. This is done by request from customers and is performed in a suitable pressure tank at special impregnation facilities.

Creosote is a distillation product of coal tar and glulam impregnated with creosote will therefore smell of tar. The treatment provides excellent durability and satisfies the Norwegian Public Road Administration's requirement that bridges must have a 100-year lifespan with a minimum of maintenance.

The use of creosote is strictly regulated and may be harmful to health. The risk is primarily present at the impregnation facilities and when handling beams outdoors. Since the risk increases in connection with exposure to skin contact in combination with sunlight, Moelven requires everyone who works with and in close proximity to creosote to wear sunscreen (with a high factor) to reduce the risk to health. Direct skin contact with creosote must be avoided. There are also other health and environmental risks linked to creosote, but, given the volumes and applications the substance is used for in connection with glulam bridges, these risks are negligible.

Cu-impregnated products

Cu-impregnation contains copper (Cu), an element that is found naturally in soil. Copper is a vital trace element for humans, higher animals and many plants. Contact with oxygen and moisture is what gives copper pressure-impregnated materials their characteristic green colour. In the form of soluble salts, even small quantities of copper act as a toxin to lower organisms such as algae, fungi and bacteria, which means it gives the materials a very high resistance to rot.

Small quantities of copper salts will leach out from pressure-impregnated wood during use. These will bind to the upper soil layer, where the structure is, and will remain there, which makes them largely inaccessible to plants, animals and people. Surface treatment with a terrace stain or with oil will reduce such leaching.

To preserve durability and the environment, as well as human safety in structures, Moelven is keen to ensure the proper use of wood in the right place. This will allow the amount of chemicals that are used to be minimised at all times.

Waste Cu-impregnated wood must be delivered to authorised collection points for treated wood, for example a municipal recycling station.





Glulam for bridges is largely produced using impregnated pine. In some cases, the bridges are also impregnated with creosote after all the processing has been completed.



How the Sundby family created their dream cabin

When Martin Johnsrud Sundby and his wife Marieke were building their new sanctuary, it was important for them to create a warm and comfortable atmosphere. High-quality natural materials ensured the right atmosphere and also made sure that the family received a number of additional health benefits.

MARTIN JOHNSRUD SUNDBY has a short commute to work from the cabin at Sjusjøen. The ski tracks run straight past. The surroundings also encourage him to relax and enjoy the calm together with his wife Marieke Heggeland and their sons Markus, Max and Magnus.

“Being this close to nature is incredible. When we built the cabin, it was important to us that it would be a comfortable place where the entire family could go to spend quality time together. Up here, it’s easy to head out for some exercise and the surroundings provide us with respite from our busy everyday lives,” the former world champion skier says.

Wooden interior

It is not only outside the cabin that nature is close. Nature also plays a key role inside. The majority of

the interior has been created using wood and nothing has been left to chance. Martin and Marieke have chosen Moelven’s exclusive, solid Manor Panelling for the walls and ceilings, as well as oak Manor Flooring. Everything has been stained in the same colour, kongle (cone).

“We wanted to create a warm and comfortable atmosphere and we managed to achieve this by using natural materials.

Here, all five of us are able to play board games, build Lego and enjoy spending time together. The cabin has become exactly the sanctuary we dreamed of,” says Marieke, with Martin backing her up:

“We wanted a permanent and classic cabin with properly considered and sustainable solutions. We are extremely pleased with the result.” Outside of the

Martin Johnsrud Sundby, his wife Marieke Heggeland and their sons Markus, Max and Magnus enjoy themselves at their cabin. Research shows that when we surround ourselves with natural elements, we experience a sense of well-being and less stress.



Wood can affect:

- Indoor temperature
- Humidity
- Acoustics
- Recovery
- Stress
- Well-being



cabin, the family can enjoy a terrace with a wooden roof made from Moelven ThermoPine.

Health benefits part of the deal

The young family also gained a number of health benefits as part of the deal when choosing to build and furnish using wood. Wood can affect both the physical indoor environment - in the form of indoor temperature, humidity and acoustics - and also how we experience it. Research shows that when we surround ourselves with natural elements, we experience a sense of well-being, less stress, we can become more creative and recover better.

“We prefer to surround ourselves with the materials that help us feel at our best. As an athlete, I depend on my body functioning optimally and we do not want anything less for our children. Of course you are not going to turn down the numerous health benefits that are part of the deal,” Martin Johnsrud Sundby says.

This is why wood can provide health benefits

We humans have lived in nature for a long time and are predisposed to both liking it and interpreting it. Nature or natural elements, such as wooden materials, can provide us with a positive distraction that is pleasant to look at and be surrounded by.

Natural elements that provide sensory impressions that are complex enough for us to spend time studying them, but not so challenging that we wear ourselves out, are especially beneficial to us as humans.



Martin and Marieke have chosen Moelven's exclusive, solid Manor Panelling for the walls and ceilings, as well as oak Manor Flooring for their cabin in Sjusjøen.



Local assets





MOELVEN
Kamila Rutkowska
Logistics Manager
Moelven Langmoen AS, Grønningst. 4, 2002 Brønnøysund, Norge
tlf: +47 91 12 00 00

MOELVEN

Our people are the most important resource at Moelven. Kamila Rutkowska, Head of Logistics at Moelven Langmoen AS, is one of the 3,350 employees who work every single day to provide you with excellent products and services.

Collaboration results in a simpler building process

What do you get when talented employees in Sweden and Norway collaborate across national borders, companies and disciplines?
A brand new product to simplify the building process!

WeatherPly™



The strongest construction plywood sheet on the market
- K20/70



Weather-resistant with ground-breaking surface treatment



Green for the sake of simplicity

AT THE END OF 2020, Moelven Wood AS launched WeatherPly™, a water-repellent roofing sheet made from construction plywood. The sheets protect the unfinished building against adverse weather and eliminate the need to cover the framework for up to six weeks.

Moelven Wood AB, Moelven Vänerply AB and Moelven Langmoen AS have all contributed to the value chain in the form of product development, production and distribution of the sheets. Coming up with a name for the product was also something that generated great interest across the Group. When the project team decided to run a naming competition via Workplace, Moelven's internal communication channel, they received more than 75 suggestions and the winner was WeatherPly™.

Complements the range

WeatherPly™ complements the Moelven range and the Group is now gaining an even stronger grip on the Norwegian sheet market.

"WeatherPly™ is made from Scandinavian spruce and produced at the only plywood factory in Scandinavia, Moelven Vänerply AB. Moelven's presence throughout the entire value chain - from forest to final sheets - means that we can deliver high-quality, locally sourced and sustainable products. The WeatherPly™ sheets complement our already extensive sheet range and ensure that we can offer our customers what they need throughout the entire building

process," says Simen Kristiansen, Head of Marketing at Moelven Wood AS.

Developed across national borders

Tjalling Chaudron is a Product Developer at Moelven and was involved in the development of WeatherPly™. "My job often consists of identifying the needs of the market and product managers and turning these ideas into a real product. When Moelven Wood AS made this product request, we could see the advantages of WeatherPly™ being developed across national borders," he says.

Following trials with subcontractors, the production of the prototype was awarded to Moelven Vänerply AB in Otterbäcken in Sweden.

"We sent the trial products from Moelven Vänerply AB to Norway and they were well received. There are so many advantages of working across national borders and I hope that we will see more of this going forward."



Tjalling Chaudron

"The WeatherPly™ sheets make the job easy as we don't have to cover the subroof in the event of bad weather. For us, this is a good, safe choice."

Kurt Idar Tåje
Project Manager, Oppland Bygg & Anlegg



A sustainable adhesive supplier

At the Akzo Nobel adhesive factory in Kristinehamn, there is a focus on sustainable products with low emissions. The adhesive is used in the production of plywood sheets and glulam at Moelven.

“WE HAVE taken steps to make the adhesive deliveries for Moelven Vänerply’s sheets more sustainable through the use of dedicated transport,” says Jenny Falkeling, Supply Chain & Logistics Manager at Akzo Nobel Adhesives AB.

The dedicated transport means that the lorry used to transport the adhesive does not need to be cleaned between each journey, helping the environment in terms of both water and waste.

Internal purification of production water

The water used for the production of the adhesive undergoes purification treatment at the factory using an approved treatment system.

“The water is cleaned completely and we have a permit to release the water into Väneren. This means that we choose to take responsibility for some of the natural resources we use,” says Falkeling.

Sustainability is at the forefront of activities at the company, which exclusively uses electric trucks in its production and that has set clear targets for the future.

“By 2030, we will use renewable energy only and we will have cut 50 per cent of our carbon emissions. We also have a goal of not generating any waste that cannot be recycled,” Falkeling says. As part of the efforts to use renewable energy only, the Kristinehamn factory is now looking at solar panels to get closer to its target.

Smarter use of adhesive

Several customers, including Moelven Vänerply AB, also have their own machines to mix the adhesive at

the correct ratio and quantity for their products.

“We supply two-component adhesive. The fact that components can be mixed correctly and in the correct quantities at the customer’s premises is sustainable as it avoids having to dispose of adhesive or adhesive having the wrong consistency. Our new machine system can also communicate directly with our Adhesive department to achieve smarter production,” Falkeling says.

The factory is also working to minimise emissions from the adhesive it produces. “We have developed several adhesive types that have less emissions than traditional adhesive. This benefits the environment,” says Falkeling.

About Akzo Nobel

Akzo Nobel is a large Group with factories throughout the world. Akzo Nobel Adhesives AB in Kristinehamn produce adhesives and hardening systems. The factory has 110 employees and supplies industrial customers that produce, for example, plywood, glulam, chipboard, furniture, doors and windows.

Moelven Divisions



Building systems

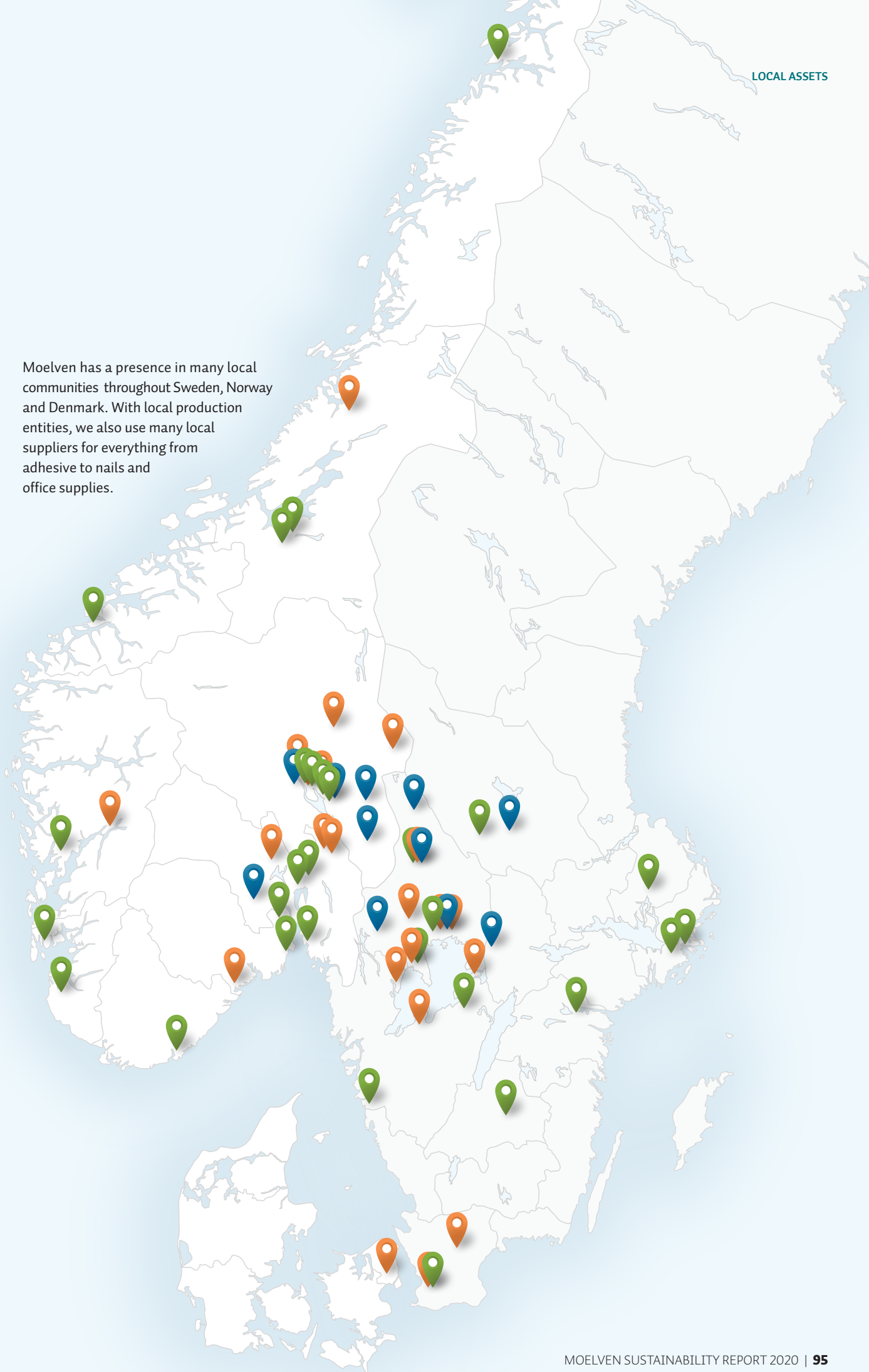


Timber



Wood

Moelven has a presence in many local communities throughout Sweden, Norway and Denmark. With local production entities, we also use many local suppliers for everything from adhesive to nails and office supplies.





Creating economic value in the local community

Where and why is it important?

Moelven operates in numerous small local communities in Scandinavia where we often are a key employer and contributor to the local economy. Throughout 2020, solid businesses have been particularly important to local communities in order to ensure employment, maintain activity on the part of other business participants and contribute to stable income.

Moelven is one such player and how the Group's business activities are organised and run has direct ripple effects on local communities. At the same time, Moelven relies on positive relationships with local communities to continue developing the company, attracting the right people and creating a secure and predictable workplace that provides opportunities for those who want them.

Policy and approach

Moelven's operational activities consist of 34 legal entities across 42 production sites in Norway and Sweden. Common to most of the production companies is their geographical location in rural areas with close links to the forest and forestry industry. The companies are often important cornerstone companies in their areas. Moelven emphasises buying locally wherever possible and creating local job opportunities. By organising the company into legal entities, we generate ripple effects in the economy, since revenue, value creation and tax payments propagate in the same way with our subcontractors and employees. Together, these constitute the companies' and the Group's social contributions.

Evaluation of results

Through the use of calculation keys for social contributions, a company's social contributions can be estimated based on revenue, cost of goods, payroll costs and tax payments corrected for public subsidies. Calculations show that the total value creation for Moelven's Norwegian companies was NOK 2,546 million in 2020 and NOK 2,458 million for the Swedish companies.

The COVID-19 pandemic has been a contributing factor to increased public subsidies, particularly in Sweden. In Sweden, employers' National Insurance contributions were lowered for everyone during a specific period and 100 per cent support for sick pay costs linked to COVID-19 infections was also provided. These support schemes have been taken into account in the calculation of social contributions and result in a reduction for the Swedish part of the business compared to 2019.

The figures on the right were calculated using the Confederation of Norwegian Enterprise's social contributions calculator. The basis is the accounting data from Moelven's Norwegian and Swedish companies and these figures have been converted to NOK using the currency exchange rate at the end of the year for the Swedish companies. Because the two countries have different tax systems and access to different markets, some uncertainty naturally exists regarding the figures. The calculation only shows the direct tax the Group contributes. The model does not include secondary and tertiary effects (ripple effects) contributed by Moelven and is therefore a conservative estimate of the total social contribution. For Moelven, this effect is significant due to the number of entities operating in smaller communities in rural areas, where the importance of the ripple effects is heightened, since there are fewer opportunities for alternative value creation.

AMBITIONS:

- Creating and safeguarding secure jobs in local communities.

RESULTS:

- Estimated tax contribution of NOK 931 million in 2020

MEASURES:

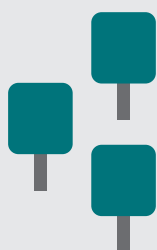
- Creating and safeguarding secure jobs that contribute positively to the local community and to building a sustainable future using wood.

	Norway	Sweden	Others	Total
Operating revenue	9,590	9,651	215	19,456
Corporation tax	57,341	47,674	853	105,868
Total paid Employer's National Insurance Contributions	122,981	211,291	978	335,251
Tax paid on wages	266,551	191,307	3,848	461,706
Public subsidies	849	9,869	305	11,023
Tax contribution	446	440	44	931
Number of employees	1,656	1,707	28	3,391

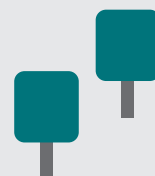
What could Moelven's tax contributions pay for?



1,731
TEACHERS



9,385 METRES
dual carriageway



22,294
days in hospital

Total tax contribution in 2020

931,000,000



The local environment

Where and why is it important?

Moelven has almost 30 incineration plants that produce thermal bioenergy both for its own industrial production and for resale to external customers. Energy produced by burning wood and chips is part of a far shorter carbon cycle than energy from fossil energy sources and is therefore defined as renewable energy. However, bioenergy production does impact the local environment through, among other things, emissions of particulate matter, NOx and CO.

Moelven also impacts the local environment through noise, transport and water consumption. Water is used for sprinkling over timber to prevent it from drying out and becoming damaged during storage. Both water consumption and runoff have an impact on the environment.

Policy and approach

Moelven also affects the local environment through various activities, such as energy production in incinerator plants, transport, waste handling and water consumption.

Moelven's sustainability policy states the following:

- Moelven shall be a natural part of the local community and contribute to economic value creation.
- Moelven shall actively work to reduce its local environmental impact by focusing on continuous improvement.
- Moelven shall not be responsible for any violation of the Pollution Control Act or equivalent legislation.

Evaluation of results

Moelven owns 28 boilers ranging in size from 1 MW to 15 MW, with an average of around 6 MW. These incineration plants mainly use biomass to produce bioenergy. The number of boilers decreased in 2020 as a result of the discontinuation of operations at Moelven Eidsvold Værk AB and a smaller boiler at Moelven Modus AB's production facility in Hulån having been decommissioned.

An annual survey of the concentration of significant exhaust gases and dust is conducted. At some facilities this is done through continuous measurement and at other facilities measurements are taken at different points during the year. Naturally, there will therefore be some variation in these measurements and analysing the figures as a whole is of little value. Follow-up takes place based on local data. High CO values indicate that an incineration process is not optimal and any reduction will therefore be considered to be a very positive thing from both an environmental and a financial perspective.

Biological raw materials from the sawmill are automatically fed from the exterior chip bins into two separate boilers of 12 MW each, which can operate independently.



AMBITIONS:

- Reduce emissions of NOx, SOx and CO.

RESULTS:

- No breaches of the Pollution Control Act or similar legislation in 2020 that resulted in fines.

MEASURES:

- Further expand the mapping of local environmental impact and compliance with applicable laws, regulations and permits linked to environmental impact.

Incinerator plants	2019	2020
Incinerator plants - total installed capacity [MW]	175	176
Average capacity per plant (boiler 1 + boiler 2) [MW]	6	6
Number of boilers reported	28	30

Moelven experienced no breaches of the Pollution Control Act or similar legislation in either 2019 or 2020 that resulted in fines.



The new bioenergy plant at Sokna was put into operation in the autumn of 2019 and supplies both Moelven Soknabruket and Moelven Pellets AS with environmentally friendly thermal energy. In 2020, the plant produced 109.9 GWh of thermal energy.

A reliable partner

Where and why is it important?

Reliability is one of our core values and Moelven must be a company people can trust. The importance of Moelven being a reliable partner has therefore been established as a fundamental prerequisite in the sustainability strategy and all of our activities must be based on this.

Moelven must have a conscious attitude to anti-corruption and competition law in all contexts and at all levels of the Group.

Moelven views anti-corruption work and compliance with competition legislation as important parts of the work aimed at achieving long-term sustainable development. This minimises the risk of ending up in situations that have a negative effect on our reputation or finances.

Policy and approach

Anti-corruption and ethics are key components of Moelven's corporate strategy. A good, reliable reputation is vital to our business activities and must ensure our credibility with customers, suppliers and other stakeholders and contribute to us being perceived as an attractive employer.

Moelven disassociates itself from all forms of corruption and improper actions that impede free competition and market balance. In the Group's business activities, there must always be a sound, ethical and moral attitude towards employees, customers, suppliers and other business partners, which means that employees must neither accept nor offer bribes or other benefits for business or personal gain.

As part of the work to establish a comprehensive approach to anti-corruption at Moelven, a Code of Conduct and a description of procedures that must be followed in the event of undesired incidents have been developed at corporate level, which must be complied with. The Code of Conduct and Moelven's attitude towards competition law have been communicated to company executives, the sales and marketing organisation and financial managers in physical meetings and have also been communicated to other employees.

Moelven has internal privacy policies and procedures to ensure compliance with the requirements of the General Data Protection Regulation (GDPR). In the Moelven Group, there must be no discrimination based on gender, ethnic origin, language, sexual orientation, religion or philosophy. Job descriptions, areas of responsibility, expertise and performance form the basis for determining pay, promotion and recruitment. In short, expertise is the only thing that counts. Moelven will also adapt conditions for people with reduced functional abilities.

Through active employee participation, all employees commit to the following:

- I contribute towards a respectful, welcoming and positive working environment
- I show consideration and trust in my colleagues
- I contribute towards transparent and honest dialogue
- I give praise and recognition
- I speak up in a respectful manner about things that are not working well



More than 100 employees have defined Moelven's strengths and the qualities employees and managers must develop further through active employee participation.

Moelven does not accept situations in suppliers' or customers' operations that constitute breaches of the UN Declaration of Human Rights or other unethical conditions, such as child labour or social dumping. An IT tool was implemented in 2020 to conduct systematic monitoring of the entire supply chain's compliance with the requirements set out by Moelven.

The Code of Conduct has been included as a part of new employees' employment contracts since 2016. This ensures that new employees familiarise themselves with the Code of Conduct from their first day. As a supplement to the work on establishing a common platform for ethics among employees, some companies in the Group have also established their own guidelines with local adaptations. Moelven Modus has, for example, developed its own e-learning programme with accompanying tests.

Moelven has also established guidelines and procedures for whistleblowing. Moelven wants to make it clear to all employees that the Group's

corporate culture is based on transparency. It must be acceptable to report concerns and wrongdoing and these concerns must be discussed and resolved. The guidelines also provide the right to anonymity and describe how reports should be submitted if the whistleblower wishes to remain anonymous.

Evaluation of results

No violations of any of the objectives within this area have been reported in 2020. Of course, these results are satisfactory, but in order to maintain this level it is necessary for us to ensure there is a continuous focus on this area. There has been no registered need to implement special measures beyond the established procedures to ensure compliance with the Code of Conduct, but the work undertaken in connection with active employee participation and active leadership will contribute to further raising the quality.

GDPR

Moelven has shared procedures in place concerning the processing of personal data. The procedures apply to all employees and others who perform work or services on behalf of Moelven. Anyone who is employed or handles personal data at Moelven has an individual responsibility and obligation to ensure that the data is processed in accordance with applicable routines and regulations. The regulations are relatively comprehensive, so guides have been produced for selected areas. Data protection officers have also been appointed at corporate, divisional, and company levels, as has a corporate-level expert privacy group.

REPORTING

The general rule at Moelven is that issues should be raised with the person concerned. If this fails to resolve the issue, or if you believe that the issue needs to be raised with someone who can do something about the situation, the Group's whistleblowing procedures should be followed. You are always entitled to notify the authorities, although in most cases it would be better to raise the issue internally first. Any reports may also be raised directly with the Group's whistleblowing ombudsman via email at varsling@moelven.com or via whistleblowing.moelven.com

A TRANSPARENT CORPORATE CULTURE

Moelven must be a reliable partner and this starts with our employees. Through active employee participation, all Moelven employees work towards a transparent corporate culture in which everyone takes responsibility for a positive working environment and contributes towards the development of themselves and the business.

AMBITIONS:

- Compliance with the UN Declaration of Human Rights and Moelven's Code of Conduct requirements throughout the entire value chain.
- No instances of discrimination or abusive treatment of employees.
- No instances of corruption or price fixing.

RESULTS:

- No reported violations of the UN Declaration of Human Rights or Moelven's Code of Conduct.
- No reported instances of discrimination or abusive treatment of employees.
- No reported instances of corruption or price fixing.

MEASURES:

- Continuation of existing work within the field of anti-corruption and ethics.
- Implementation of training programmes on competition law.
- Implementation of checks of the supply chain's compliance with the UN Declaration of Human Rights and Moelven's Code of Conduct.

Moelven GRI Index - 2020

The Global Reporting Initiative (GRI) is a network-based organisation that is behind the development of the world's most widely used sustainability reporting framework. The GRI framework contains principles, themes and indicators that can be used by organisations to measure and report economic, environmental and social performance.

Moelven reports in accordance with the GRI Standards: Core option. The table below represents Moelven's reporting in accordance with the guidelines in the GRI Standards. For more information about GRI, see www.globalreporting.org.

GRI 102 - General reporting requirements

GRI no.	Description	Source (page in annual report or website)
Description		
102-1	Name of the organisation	Group's annual report, Note 1 (p. 51)
102-2	Activities, brands, products, and services	Group's annual report, Report of the Board of Directors (pp. 11-37)
102-3	Location of headquarters	Group's annual report, Note 1 (p. 50)
102-4	Location of operations	p. 95, Group's annual report, Report of the Board of Directors (pp.16-17)
102-5	Ownership and legal form	Group's annual report, Report of the Board of Directors (p. 15) Note 1 (p. 51)
102-6	Markets served	Group's annual report, Report of the Board of Directors (p. 15) Notes 6 and 7 (pp. 65-67)
102-7	Scale of the organisation	Group's annual report, Key figures (p. 10)
102-8	Information on employees and other workers	Group's annual report, Report of the Board of Directors (p. 18) Focus on people (pp. 68-83), Note 11, p. 71
102-9	Supply chain	p. 10, pp. 20-21, pp. 50-53
102-10	Significant changes to the organisation and its supply chain	Group's annual report, Report of the Board of Directors (pp. 11-17)
102-11	Precautionary principle or approach	"Moelven applies a precautionary principle"
102-12	External initiatives	Group's annual report, Report of the Board of Directors – Innovation (pp. 29-35), Group's Sustainability Report 2020: Moelven and the UN Sustainable Development Goals (p. 12), We are a reliable partner (p. 100)
102-13	Membership of associations	Group's annual report: Report of the Board of Directors – Innovation (pp. 29-35)
Strategy		
102-14	Statement from senior decision-maker	Look beyond the figures in the climate accounts (p. 3)
102-16	Values, principles, standards and norms of behaviour	Group's annual report (p. 23), We are a reliable partner (p. 64)
Governance		
102-18	Governance structure	Group's annual report: Report of the Board of Directors – Corporate governance (pp. 38-42)
Stakeholder engagement		
102-40	List of stakeholder groups	We listen to our stakeholders (p. 13)
102-41	Collective agreements	Group's annual report: Note 3.25 (p. 57)
102-42	Identifying and selecting stakeholders	Stakeholder engagement and expectations (p. 13)
102-43	Approach to stakeholder engagement	Stakeholder engagement and expectations (p. 13)
102-44	Key topics and concerns raised	Stakeholder engagement and expectations (p. 13)
Reporting practice		
102-45	Entities included in the consolidated financial statements	Group's annual report: Note 19 (p. 76)
102-46	Defining report content and topic boundaries	Priority areas, goals and priorities (p. 11)
102-47	List of material topics	Priority areas, goals and priorities (p. 11)
102-48	Restatements of information	pp. 11, 22, 28, 32, 33, 41, 55,
102-49	Changes in reporting	
102-50	Reporting period	01/01/20-31/12/20
102-51	Date of most recent report	2020
102-52	Reporting cycle	Annual
102-53	Contact point for questions regarding the report	Rune F. Andersen - rune-f.andersen@moelven.com
102-54	Claims of reporting in accordance with the GRI Standards	Moelven GRI Index - 2020
102-55	GRI Index	Moelven GRI Index - 2020

Important topics

GRI no.	Description	Source (page in sustainability report)	Omission	Reasons for omission	Description of omission
Climate-smart products and solution – Energy consumption in own production					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	p. 28			
103-2	The management approach and its components	p. 28			
103-3	Evaluation of the management approach	p. 28			
<i>GRI 302 – Energy</i>					
302-1	Energy consumption within the organisation	p. 28, 41			
302-4	Reduction of energy consumption	p. 28			
<i>GRI 305 – Emissions</i>					
305-1	Direct (Scope 1) GHG emissions	p. 22			
305-2	Energy indirect (Scope 2) GHG emissions	p. 22			
305-3	Other indirect (Scope 3) GHG emissions	p. 22			
305-5	Reduction of GHG emissions	p. 22			
Climate-smart products and solutions – Goods transport					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	p. 32			
103-2	The management approach and its components	p. 32			
103-3	Evaluation of the management approach	p. 32			
<i>Moelven indicator</i>					
Transport accounts		p. 32			
Climate-smart products and solutions – Climate benefits from forests					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	p. 33			
103-2	The management approach and its components	p. 33			
103-3	Evaluation of the management approach	p. 33			
<i>Moelven indicator</i>					
Under development		NA	Not reported	Information not available	Work on establishing the indicator is ongoing.
Climate-smart products and solutions – Climate-smart design					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	p. 40			
103-2	The management approach and its components	p. 40			
103-3	Evaluation of the management approach	p. 40			
<i>Moelven indicator</i>					
Under development		NA	Not reported	Information not available	Work on establishing the indicator is ongoing.
Climate-smart products and solutions – Production of bioenergy					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	p. 41			
103-2	The management approach and its components	p. 41			
103-3	Evaluation of the management approach	p. 41			
<i>GRI 302 – Energy</i>					
302-1	Energy consumption within the organisation	28, 41			
Safeguarding our natural resources – Sustainable materials					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	p. 50			
103-2	The management approach and its components	p. 50			
103-3	Evaluation of the management approach	p. 50			
<i>Moelven indicator</i>					
PEFC™ and FSC® certification		p. 50	Distribution by certification type is not presented	Information not available	Reporting routines will be developed in 2019

GRI no.	Description	Source (page in sustainability report)	Omission	Reasons for omission	Description of omission
Safeguarding our natural resources – Resource optimisation					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	p. 54			
103-2	The management approach and its components	p. 54			
103-3	Evaluation of the management approach	p. 54			
<i>Moelven indicator</i>					
	Recovery factor	p. 54			
Safeguarding our natural resources – Resource-efficient design and packaging					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	p. 55			
103-2	The management approach and its components	p. 55			
103-3	Evaluation of the management approach	p. 55			
<i>GRI 301 – Materials</i>					
301-1	Materials used by weight or volume	pp. 10, 33, 55			
<i>Moelven indicator</i>					
	Under development	NA	Not reported	Information not available	Work on establishing the indicator is ongoing.
Safeguarding our natural resources – Waste management					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	p. 56			
103-2	The management approach and its components	p. 56			
103-3	Evaluation of the management approach	p. 56			
<i>GRI 306 – Effluents and waste</i>					
306-2	Waste by type and disposal method	p. 56			
Focus on people – Health, safety and the environment					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	pp. 68-71			
103-2	The management approach and its components	pp. 68-71			
103-3	Evaluation of the management approach	pp. 68-71			
<i>GRI 403 – Occupational health and safety</i>					
403-2	Hazard identification, risk assessment and incident investigation	pp. 68-71	Occupational illnesses, lost working days and statistics are not reported by gender. Moelven only reports injury statistics for its employees.	Information not available	Consideration will be given to developing reporting routines in 2019.
Focus on people – Engaged and competent employees					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	pp. 72-83			
103-2	The management approach and its components	pp. 72-83			
103-3	Evaluation of the management approach	pp. 72-83			
<i>Moelven indicator</i>					
	Under development	NA	Not reported	Information not available	Work on establishing the indicator is ongoing.
Focus on People – Safe chemical use					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	pp. 84-86			
103-2	The management approach and its components	pp. 84-86			
103-3	Evaluation of the management approach	pp. 84-86			
<i>Moelven indicator</i>					
	Consumption of chemicals	p. 84			

GRI no.	Description	Source (page in sustainability report)	Omission	Reasons for omission	Description of omission
Safeguarding local assets – Economic value creation in local communities					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	pp. 96-97			
103-2	The management approach and its components	pp. 96-97			
103-3	Evaluation of the management approach	pp. 96-97			
<i>Moelven indicator</i>					
	Tax contribution	pp. 96-97			
Safeguarding local assets – Local environment					
<i>GRI 103 – Management approach</i>					
103-1	Explanation of the material topic and its boundary	pp. 98-99			
103-2	The management approach and its components	pp. 98-99			
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KEY FIGURES FOR LAST 5 YEARS

Amounts in NOK millions	2020	2019	2018	2017	2016
THE GROUP					
Operating revenue	11,665.2	10,297.5	11,020.8	10,768.4	10,309.7
EBITDA	1,010.6	629.8	932.7	716.1	601.6
Depreciation	344.1	296.2	280.4	278.1	290.1
Impairment	4.3	-1.8	66.1	17.6	16.5
Operating profit	662.2	335.4	586.2	420.4	295.0
Financial items	-58.6	-95.8	-8.0	-46.8	-42.5
Result before tax	603.6	239.7	578.2	373.6	252.5
Total capital	5,833.0	5,518.0	5,302.3	5,044.6	4,766.8
Equity in per cent	49.1	42.9	45.9	41.5	38.0
Operating margin in per cent	5.7	3.3	5.3	3.9	2.9
Investments	271.9	478.7	497.4	357.0	275.2
Number of employees	3,391	3,399	3,524	3,546	3,492
TIMBER					
Operating revenue	3,444.9	3,118.9	3,263.3	3,118.2	3,020.6
EBITDA	365.9	243.1	449.4	266.9	181.1
Depreciation	102.7	97.4	98.7	102.7	111.1
Impairment	4.3	0.0	7.4	17.6	16.5
Operating profit	258.9	145.8	343.3	146.7	53.5
Financial items	1.0	-5.1	-4.1	-17.4	-13.1
Result before tax	259.9	140.6	339.2	129.3	40.4
Total capital	1,742.9	1,513.1	1,663.4	1,545.5	1,567.1
Operating margin in per cent	7.5	4.7	10.5	4.7	1.8
Investments	88.0	115.8	136.7	99.2	64.2
Number of employees	636	629	620	650	674
WOOD					
Operating revenue	4,730.3	4,018.1	3,977.3	3,805.6	3,529.9
EBITDA	482.3	265.4	318.5	265.7	274.5
Depreciation	110.6	102.1	108.0	110.9	113.8
Impairment	-	-1.8	58.6	0.0	0.0
Operating profit	371.7	165.1	151.9	154.8	160.6
Financial items	-18.7	-29.2	-15.6	-24.8	-24.4
Result before tax	353.0	135.9	136.2	129.9	136.2
Total capital	2,802.3	2,514.4	2,466.9	2,413.9	2,151.6
Operating margin in per cent	7.9	4.1	3.8	4.1	4.5
Investments	130.2	117.2	198.1	119.9	114.7
Number of employees	1,099	1,114	1,108	1,079	1,039
BUILDING SYSTEMS					
Operating revenue	3,346.6	3,002.7	3,743.0	3,856.4	3,616.8
EBITDA	166.2	135.0	189.0	206.7	166.3
Depreciation and impairment	89.9	78.1	60.6	52.8	51.2
Operating profit	76.4	56.8	128.3	153.9	115.1
Financial items	-5.2	-3.9	-1.0	-1.6	-1.7
Result before tax	71.2	52.9	127.4	152.3	113.4
Total capital	1,908.6	1,751.0	1,751.4	1,808.9	1,653.2
Operating margin in per cent	2.3	1.9	3.4	4.0	3.2
Investments	21.6	55.9	93.5	118.9	84.5
Number of employees	1,490	1,494	1,647	1,687	1,647
OTHER ACTIVITIES					
Operating revenue	3,802.4	3,728.0	3,547.6	3,414.6	3,388.9
EBITDA	-3.8	-13.7	-24.1	-23.2	-20.3
Depreciation and impairment	40.9	18.6	13.1	11.7	13.9
Operating profit	-44.7	-32.3	-37.2	-34.9	-34.2
Financial items	-35.8	-57.5	12.7	-2.9	-3.4
Result before tax	-80.5	-89.8	-24.5	-37.8	-37.6
Investments	32.1	189.8	69.2	19.1	11.8
Number of employees	166	162	149	130	132

Moelven strives to communicate actively and transparently with the market and to provide all interested parties with equal access to financial information. Our financial site includes performance reporting, financial status and information on the policies Moelven is governed by.

The result in the year where everything was different was one of the strongest for Moelven of all time. The Group reported an operating profit of NOK 662.2 million – an increase of almost NOK 330 million compared to the previous year.

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The world's most environmentally friendly furniture factory, The Plus in Magnor, is being built from wood.
Photo: Big/Vestre

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