

# Working Wood



## DESIGN

Wooden buildings are designed to be reused

## CLT

New strategy paves the way for large-scale production

## New system for sustainable facade

The brief was low climate impact and high design ambitions – making glulam the ideal solution for Habitat 7.

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IMAGE: KASPAR HAMMARLING



IMAGE: KROK & TJÄDER

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» SUSTAINABLE FORESTRY  
IS THE SOLUTION TO MANY OF  
THE PROBLEMS FACING SOCIETY.

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Working Wood.



## EDITORIAL TEAM



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For more Setra news, visit setragroup.com and follow us on LinkedIn.





IMAGE: KASPAR HAMMARLING

**MARCUS WESTDAHL**  
President and CEO  
of Setra

Setra's vision is to create long-term profitability while contributing to the global green transition, by doing business that benefits more than just ourselves.

## Wood – a key to the green transition

**I**t is a challenging time for the wood industry, with the enduring recession putting investment in new construction on hold. However, we know that wood as a material has a bright future – and that when the wind is against us, it is even more important to stick to our long-term vision.

In this issue of Working Wood, we highlight initiatives that demonstrate the power of wood, even in a tough economic climate. Our new strategy for CLT allows for more large-scale and standardised production, while ensuring flexibility by adapting production to the current market. Our new pellet plant in Långshyttan allows us to make use of the whole log, while at the same time creating climate benefits by producing green bioenergy.

We also report on Habitat 7 in Gothenburg, where wooden facades using glulam from Setra have replaced traditional materials to significantly reduce the project's climate footprint. You can also read about research on how wooden buildings can be reused.

We are in no doubt that wood will play a key role in the green transition and our direction is clear – we want to continue to drive innovation, create long-term profitability and contribute to a more sustainable society.\*



### Setra

We manufacture and sell sawn and processed wood products of fine quality and with high delivery precision to a global market.

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# In brief

GROWTH | HOUSING | GLULAM

**GREENHOUSE STHLM** includes an extension to the Electrolux Group’s headquarters and 114 apartments in Stadshagen, Stockholm. Setra supplied the glulam and CLT frame.



IMAGE: JOHAN ELDRÖT

## Growth increasing in Swedish forests

Forest growth has picked up over the past five years, following a period of decline. This is according to official statistics from the National Forest Inventory compiled by the Swedish University of Agricultural Sciences (SLU) for 2020–2024.

“Growth is once again on the rise after having decreased since 2012. At the same time, total drain – meaning the combined volume of harvested trees and those that die from other causes

– is beginning to decline following several peak years,” says **Per-Erik Wikberg**, Head of Reporting at the Swedish National

Forest Inventory, in a press release.

The volume of pine continues to increase, having become Sweden’s most common tree species after spruce. Broadleaf trees account for 20 percent of the total wood stock. The volume of dead wood is also steadily increasing.

The Swedish National Forest Inventory at SLU has been surveying forest and land nationwide since 1923.

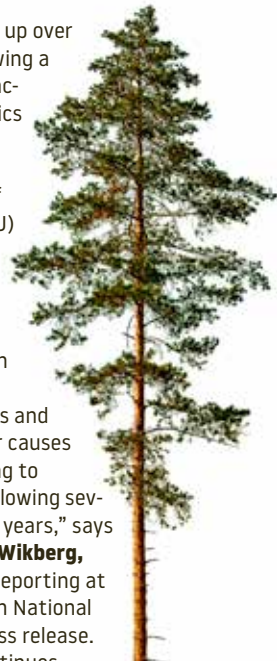


IMAGE: RADIO SWEDEN

## Wood vs concrete

A timber frame has a lower environmental impact than concrete in new buildings, according to a life cycle assessment in the first part of Sveafastigheter’s Wood vs Concrete study. The study compares two almost identical apartment blocks set to be built by Sveafastigheter, one with a timber frame and one with a concrete frame.



IMAGE: UPPSALAHEM

**ÅSA PALLIN**

*Sustainability Specialist, Uppsalaheim.*

**“As clients, we need to have the courage to make demands and drive progress in the industry.”**



IMAGE: SVEAFASTIGHETER



The Wood vs. Concrete study comprises five parts, with the next one due at the end of 2025.

**OVERALL FOREST GROWTH IS INCREASING, WHILE HARVESTING AND TOTAL DRAIN ARE DECREASING.**

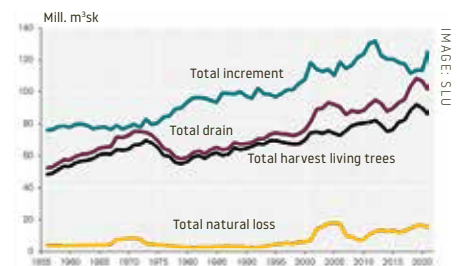


IMAGE: SLU

# 2033

According to the latest estimates from the Swedish National Board of Housing, Building and Planning (Boverket), more than 523,000 new homes need to be built by 2033 – 77,000 fewer than Boverket’s forecast in 2021 for the period 2021–2030.



Vestlandske Limträindustri AS has its manufacturing base in Holmefjord, an hour’s drive from Bergen, Norway.

IMAGE: VESTLANDSKE



## Power to make a difference

Almost three quarters of Sweden’s surface is covered by forest, and for every tree harvested, two or three new ones are planted. The forest can help us to halt climate change, replace fossil fuels with wood-based products and allow industry to grow across the country. Scan the QR code to find out more about how the forest and the wood industry are making a difference in all sorts of areas.



## New collaboration

This autumn, Setra has entered into a new partnership with the Norwegian glulam producer Vestlandske Limträindustri AS.

**V**estlandske Limträindustri supplies laminated wood structures, roof trusses and glulam beams for the Norwegian market, and the new collaboration will see Setra supply the company with all their glulam needs.

“We’re very much looking forward to this,” says **Daniel Edman**, Sales Manager for Construction & Industrial Sector at Setra. “Having sought a partner in Norway, we’ve now launched a long-term partnership that benefits both parties.”



To be able to store and process the glulam from Setra, Vestlandske is opting for a production refit, as it phases out an ageing plant. The company has been operating in Norway since 1975.

## DID YOU KNOW...

*Readers in Sweden have until the end of the year to take advantage of the higher 50% tax rebate for home renovations. Glulam is the ultimate DIY material. Find out more at:*



IMAGE: JOHAN FOWELIN





## Forestry increasingly digital

New technology now allows harvester operators to record different types of nature conservation measures at the touch of a button during thinning or felling.



### Positioning

High-resolution geopositioning data allows for detailed maps showing exactly which trees have been saved. The purpose of the measure is also noted, providing clear and traceable documentation of nature conservation.

### Real time

The tool shows what measures are required – such as which trees to save – and registers what happens during harvesting in real time.

### Data

The tool uses existing production data from the harvester and information recorded by the machine operators. The model also includes data from aerial imagery, laser scanning and various registers and maps.

Source: Mellanskog



**SIMPLIFIES FOLLOW-UP**

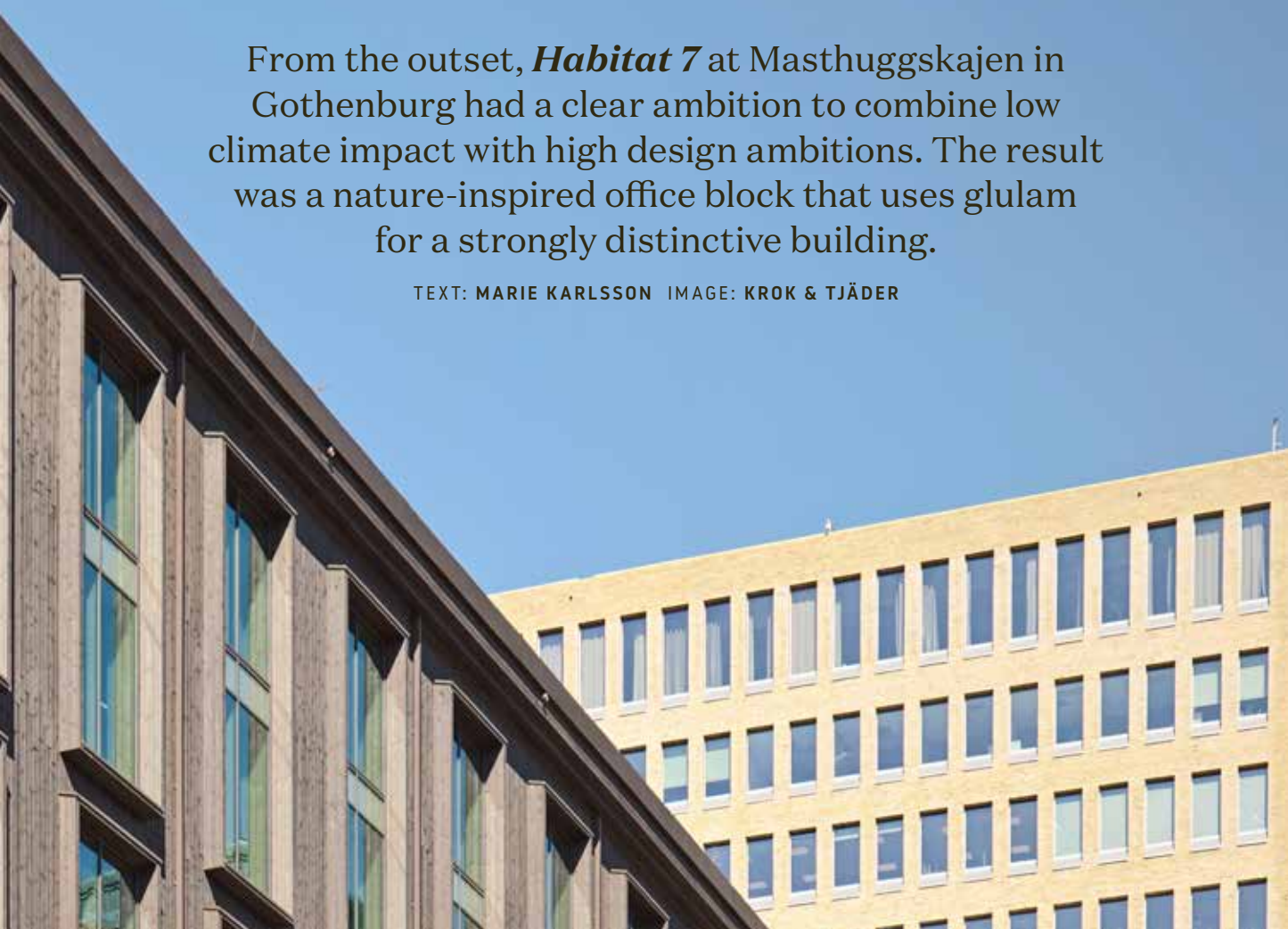
The technology makes administration, reporting and follow-up simpler, while also enabling automatic updating of forest owners' forest management plans.



# Strength the facade

From the outset, *Habitat 7* at Masthuggskajen in Gothenburg had a clear ambition to combine low climate impact with high design ambitions. The result was a nature-inspired office block that uses glulam for a strongly distinctive building.

TEXT: MARIE KARLSSON IMAGE: KROK & TJÄDER





The ambition for Habitat 7 was to create a unique office environment full of light, greenery and interiors with an outdoor feel.



**H**abitat 7 conveys a quiet, low-key confidence despite its nine storeys and 8,000 square metres of office space. It feels like the building has quickly found its place on Masthuggskajen, Gothenburg's new city centre development

site by the river. There is no need for grand gestures here. In fact the appeal lies in the opposite direction, says Anders Petterson, lead architect at Krook & Tjäder.

“The inspiration comes largely from Gothenburg's old riverside warehouses. Lovely, relatively simple buildings with distinct rooflines and timeless details. However, this classical heritage has been combined with contemporary interpretations of a wooden office block. The dark wood facades with their varied glazing are attracting interest and we've received an extremely favourable response to the building, even beyond Sweden,” says Anders.

When ncc initiated the project in 2019, the goal was clear. They wanted to build in wood, to high environmental standards, with the lowest possible climate footprint.

## ABOUT THE PROJECT

**PROJECT:** Newbuild office block in wood.  
**COMPRISES:** Nine storeys, 8,000 square metres.  
**LOCATION:** Masthuggskajen in Gothenburg.  
**BUILT IN:** 2023–2025.  
**DEVELOPER:** NCC  
**ARCHITECT:** Krook & Tjäder.  
**FRAME:** Mass timber.  
**FACADE SYSTEM:** bARK Timber Facade System, glulam and glass.

## SUSTAINABILITY

**ENVIRONMENTAL CERTIFICATIONS:**

- » BREEAM Excellent.
- » Citylab for Sustainable Urban Development.
- » NollCO<sub>2</sub>

**CLIMATE MEASURES:**

- » Timber frame with mass timber posts and beams, timber floor system.
- » Wooden facade.
- » Solar panels on roof.
- » Low-carbon concrete in stairwells and basement.
- » Recycled glass in facade.
- » Energy-efficient solutions and use of renewable energy.

A building with character and depth, extensive glazing and an exposed timber frame lend stability while reflecting the port's industrial heritage.





Replacing aluminium with glulam avoided transporting construction materials from elsewhere in Europe. The timber for the wooden facades of Habitat 7 was grown exclusively in Swedish forests.



#### ADVANTAGES OF GLULAM

##### » Light and strong

High load-bearing capacity in relation to weight, can handle large spans.

##### » Formable

Can be made into almost any shape.

##### » Dimensionally stable

Does not warp, keeps its shape over time.

##### » Eco-friendly

Renewable raw material, low energy use in manufacturing.

##### » Attractive

Adds aesthetic value to interior and exterior alike.

##### » Durable

Withstands moisture and aggressive environments well.

##### » Fire-resistant

Predictable behaviour in fire, resists longer than many other materials.

##### » Efficient use of materials

Lamellas from small trees are bonded together to form large, strong elements.

##### » Easy to work on

Adjustable on site using regular tools.

The project's ambitious sustainability goals included a BREEAM EXCELLENT rating plus NollCO<sub>2</sub> and Citylab for Sustainable Urban Development certifications. The aim was to reduce the climate footprint by 40 percent, compared to a conventional office building, in line with the NollCO<sub>2</sub> guidelines. By carefully selecting its materials, the project was able to achieve its climate goals by the time the construction phase ended.

“To minimise the climate footprint during production, you first have to understand which elements of the building have the greatest impact, and the frame and facades are crucial components. Everyone involved, not least us architects, wanted as much exposed wood as possible in Habitat 7, both inside and out, so when the option of using glulam in the glass façade was presented, everything fell into place, both aesthetically and in terms of the climate,” explains Anders.



Anders Petterson, architect, Krook & Tjäder

Traditionally, facades are built with load-bearing aluminium or steel frames, and this was the original plan for Habitat 7. But just in the nick of time, a completely new facade system became available, with glulam replacing the more climate-negative materials.

»

## TOUCH WOOD

As Habitat 7 is a unique project, every single glulam beam that makes up its glass facades is cut with exacting precision. Each part fulfils a function in the vision of a waterfront office building with a distinct sustainability profile.



The solution – the bARK Timber Facade System from Fasadglas Bäcklin – fitted the project like a glove. bARK helped to reduce the total CO<sub>2</sub> load by more than 40 percent compared to traditional aluminium facade systems, says Fasadglas Bäcklin’s CEO Jan Lindholm.

“We’ve developed a proprietary system using glulam as the base for stick-built and modular facades. With its high level of flexibility, the system is ideal for modern projects that demand high standards of design, sustainability and quality – just like the vision for Habitat 7. Our wooden alternative significantly reduces the climate footprint and is also easy to use. The elements are delivered prefabricated from the factory and assembly on site is quick and straightforward,” explains Jan.

The glulam frames were produced in



**“This is a pioneering project in so many ways.”**

Jan Lindholm,  
CEO of Fasadglas Bäcklin

partnership with Setra, which manufactured all the glulam for Habitat 7. Setra delivered glulam to Fasadglas Bäcklin’s factory in Hultsfred, where it was planed, CNC machined and lacquered to meet exactly the right dimensions and specific placement and load requirements. The wooden profiles were then assembled into finished facade elements and delivered directly to Masthuggskajen.

“This is a pioneering project in so many ways. It was the first time we’d worked with Setra on this scale, but we came together during joint development work that is still ongoing. We find that Setra’s spruce timber offers more consistent quality, with fewer knots than other suppliers, which makes our processing easier,” says Jan.

Setra is now the main supplier of glulam for the bARK facade system and volumes have really taken off, with orders of 46 cubic



The building's sheltered roof terrace is a little oasis overlooking the rooftops of Linnéstaden, perfect for a coffee break, outdoor working or after-work social events.

metres in 2022 climbing to over 1,400 cubic metres in 2024 and even more in the first half of 2025.

**Daniel Edman**, Sales Manager at Setra, is pleased with the collaboration and proud of Setra's contribution to both the climate-smart facade system and the Habitat 7 office block.

"It feels great to see our glulam being refined by Fasadglas Bäcklin in this way. We're really involved in making a sustainable difference. As a keen contributor of both knowledge and raw materials, Setra makes every effort to be a reliable supplier that offers high quality and short lead times. Our flexible production makes it easy to adapt to the customer's specific wishes, which proved a great asset in the deliveries for Habitat 7," says Daniel.\*



### **ERIK STENING**

ROLE: Marketing and Sales Manager Fasadglas Bäcklin AB

CURRENT ASSIGNMENT: Involved in the development of the bARK glulam façade system

## Facade systems of the future

Innovative glulam facade systems are rapidly capturing market share from aluminium facades, and Sweden is leading the way, with long-established family business Fasadglas Bäcklin AB at the forefront.



TEXT: IVA STEPÁN IMAGE: FASADGLAS BÄCKLIN AB

**W**hen the construction industry began to focus on cutting its emissions, Fasadglas set up its own development programme, which resulted in the bARK Timber Facade System, launched in 2023. The system is built around machined and treated glulam, a strong and dimensionally stable material that meets today's climate requirements.

**What makes bARK unique compared to traditional facade systems?**

"The key features are the sustainability and the improved U-value, representing a higher degree of insulation. The total carbon footprint is half that of aluminium-based systems. The frame is made of CE-marked and FSC/PEFC-certified glulam, manufactured in a process that involves an automated planer, CNC machining, and surface treatment."

**What options are available?**

"The system can be supplied prefabricated or for on-site assembly. The prefabricated bARK Module is based on

both glazed and solid sections. bARK Stick consists of 100 percent glass with glulam load-bearing profiles. We also have a concept for our retailers whereby they can buy a Stick facade with glass as a kit with installation instructions."

**How does the system address moisture and fire-related challenges?**

"Both options are tested and approved for statics, air and water tightness in line with product standards. We also draw up a plan with the client to ensure that the installation is damp-proof."

**What is the future market outlook?**

"Today's market is very different from what it was around five years ago. Back then, about 90 percent of the systems we supplied were aluminium; now, the glulam system accounts for that same percentage. Technology shifts in the construction industry tend to rely on a major prestige project to lead the way and then the rest follow, which is what we're now seeing for wood-based facade systems."\*

# NEW STRATEGY FOR SETRA'S CLT

More large-scale, standardised production of CLT is the next step in the development of wood construction. But first, we need to get past the downturn in the construction sector. Setra's new *CLT strategy* tackles both issues head-on.

TEXT: IVA STEPÁN IMAGE: KASPAR HAMMARLING

**T**he benefits of wood in construction, including sustainability, speed and a better working environment, have allowed it to steadily take market shares from materials such as concrete. Several operators in Sweden have invested heavily in CLT in recent years and scaled up their production. The wood industry has also jointly promoted wood as a climate-smart alternative, driving positive developments that have been good for both the environment and society. However, the persistent economic downturn is now causing a headache for most CLT producers who, faced with significant overcapacity, need to rethink.

“Here at Setra, we’ve decided on a new direction and strategy for our CLT production,” says Jesper Åkerlund, Business Manager for Building Solutions and Components. “While the decision has been prompted by the challenging economic climate, it gives us the opportunity to shift production in a direction that we believe is the future of CLT.”

The relatively new CLT market in Sweden has been project-driven, meaning that each individual construction project has ordered its frames and other CLT elements based on the specific project’s needs. As CLT is a relatively new building material, awareness among developers and designers has also been low. This has led to CLT producers receiving poorly detailed orders and having to adapt the specifications to make production feasible.

Jesper Åkerlund compares this to the

European market, where CLT has been used as a building material for 10–15 years longer than in Sweden.

“Austria in particular has well-established, large-scale industrial CLT production, which is based on much more complete documentation from the client. This is exactly what we need to happen in Sweden. The key is for developers and structural engineers to have more expertise and experience in using wood as a construction material. Knowledge of CLT production needs to mature among clients so that we can have better data and more complete documentation for production planning. This would improve cost-efficiency.”

**This spring**, as a response to the slow economy, and to pave the way for a restructuring of production, Setra decided to switch from continuous to intermittent production of CLT in Långshyttan. The production of glulam continues as usual.

“Setra is a pioneer in using CLT as a component in various building systems. For example, we’ve developed staircase systems which we are usefully able to supply to our industry colleagues.”

According to Jesper, the industry’s reaction to Setra’s pivot has been positive.

“Everyone knows that Sweden has overcapacity and we need to get through this. We’re very well placed to succeed, as we prepare for a more large-scale and standardised type of production. It’s worth mentioning in this context that demand for glulam remains strong. We’re stepping up glulam production and have great opportunities to become an even stronger player and supplier of glulam,” concludes Jesper.\*



“WE’RE VERY WELL PLACED TO SUCCEED, AS WE PREPARE FOR A MORE LARGE-SCALE AND STANDARDISED TYPE OF PRODUCTION.”

**Jesper Åkerlund**,  
Business Manager for Building Solutions and Components, Setra



**VIVEKA  
BECKEMAN**

**OCCUPATION:** CEO of  
the Swedish Forest  
Industries Federation

**CAREER:** Former  
employers include  
Sveaskog, Aditro, Vinge  
law firm and Svea Court  
of Appeal. Lawyer.

**CURRENT ROLE:**  
Member of the  
Government's Forest  
Industry Council.

# The forest industry is the solution

Sustainable and active forestry is the solution to many of the problems facing society today. What we need is legislation that recognises the importance of wood as a raw material. So says *Viveka Beckeman*, CEO of the Swedish Forest Industries Federation.

TEXT: IVA STEPÁN IMAGE: ERIK THOR



Earlier this autumn, the Forest Policy Inquiry presented its final report “A robust forest policy that sees forests as a resource”. The Swedish Forest Industries Federation welcomes the report and Viveka Beckeman believes that it contains important tools for increasing growth in Swedish forests.

**V**iveka Beckeman, CEO of the Swedish Forest Industries Federation for the past five years, started her career with no connection to Sweden’s deep forests. Growing up on the plains of southern Sweden and initially following a textbook legal career in the District Court and Svea Court of Appeal, she discovered the forest industry mostly by chance.

“During my time as a lawyer at Vinge, I worked on the sale of the forestry company AssiDomän. The people I met in the process were so dedicated to the forest industry and passionate about what they did, which sparked my interest, and when I later joined Sveaskog, it really felt like coming home,” says Viveka.

She is fascinated by the history and huge potential of the Swedish forest industry.

“Before industrialisation, Sweden was one of the poorest countries in the world and our prosperity is largely rooted in the forest. And here we are now, with the forest still one of our most vital industries and a major player in the green transition.”

**“We need to dispel the myth that building with wood is more expensive than with other materials – it’s just not true.”**

As CEO of the Swedish Forest Industries Federation, she sees it as her mission to boost the competitiveness of the Swedish forest industry and create the conditions to draw maximum benefit from the forest – in terms of both climate change and economic value.

“In recent years, there has been a trend in EU legislation to see forests primarily as a carbon sink. But forests are more useful when they are able to replace fossil materials and reduce fossil emissions. We do forestry well here in Sweden, making use of the whole log to produce wood products, pulpwood and bioenergy. Wood fibre is a renewable raw material and growth in the forest exceeds the amounts harvested.”

The forest industry is an industry of the future, with Viveka predicting that industrialised wood construction will take market share from other methods over the next decade.

“What we need is a better informed industry and more training in wood construction. We also need to dispel the myth that building with wood is more expensive than with other materials – it’s just not true.”\*

# Pellets generate energy

*Långshyttan*, at the heart of the Swedish forest industry, has seen Setra take another step towards more circular and sustainable production. Here, the processing of forest raw material into pellets supports competitiveness and the climate, while also ensuring secure domestic production of bioenergy.

TEXT: MARIE KARLSSON IMAGE: MAGNUS LAUPA AND KLAS SJÖBERG



Setra's production of wood shavings, chips, offcuts and pellets has double benefits – refining residual products to use up the whole of the log, and creating a secure domestic energy source for Sweden.

**S**etra's factory in Långshyttan, Dalarna, puts the entire log to good use. As well as manufacturing glulam beams, components and CLT, the site also produces considerable amounts of bioproducts such as wood shavings, chips and offcuts. Adding pellets to the product portfolio is both a natural and strategic investment for the long term, says **Peter Funk**, Site Manager at Långshyttan.



“Our main driver is that we want to make use of the whole log and also add value to our residual products. Pellet production increases the value of our own bioproducts, while reducing carbon emissions. We’re becoming a bigger player in bioenergy, following our own philosophy of green business. We are at our happiest when our business also benefits society and nature,” explains Peter Funk.

**The plant** has been producing wood pellets since January 2025. With high-tech capacity of around 30,000 tonnes per year and efficient logistics, the initiative has quickly become a crucial part of Setra’s business and sustainability work. The production is fully automated, from raw material infeed to truck loading, but still requires an artisanal touch.

“It’s a mix of advanced technology and traditional craftsmanship. You need to understand exactly how the pellets should look and feel. Our rapid deployment is down to



**PELLETS AND BIOENERGY**

Pellets are an important solid biofuel in Sweden and Europe. The EU’s climate target to reduce greenhouse gas emissions by 55 percent by 2030 (“Fit for 55”) promotes the continued use of bioenergy, which may increase demand for pellets in the future.

Offcuts left over from the production of glulam beams, components and CLT are turned into bioenergy.



the huge engagement from our employees; their willingness to take on board knowledge and develop operations has enabled us to achieve so much in such a short time,” says Peter Funk.

The raw material – mainly shavings and dry spruce and pine chips – comes directly from our own production. Converting wood shavings into pellets is not just a way of adding value, but also a form of transport optimisation, explains **Mikael Engström**, Sales Manager for Bioproducts at Setra.



# “WE WANT TO MAKE USE OF THE WHOLE LOG AND ADD VALUE TO OUR RESIDUAL PRODUCTS.”

Peter Funk, Site Manager at Långshyttan



## LÅNGSHYTTAN

Start January 2025.

ANNUAL CAPACITY:  
26,000 tonnes.

RAW MATERIAL: Wood shavings and dry chips, spruce and pine.

SALES: Industries and municipalities.

USE: Mainly as a renewable fuel to produce heat, hot water and sometimes electricity.

## RESOURCE-EFFICIENT PRODUCTION

- » Integrated closed-loop manufacturing reduces the risk of contamination.
- » Less transport through on-site compaction.
- » Replaces fossil fuels in industrial operations.
- » Could be used in new climate-smart products of the future such as biochar and pyrolysis oil.
- » FSC-certified raw material.

“Having fully integrated production into the factory, we’ve been able to halve our transport needs, compared with before. A truck carrying loose shavings is basically transporting air. Now that we’re able to compact the material on site, we’re no longer driving unnecessary volumes around,” explains Mikael.

The pellets from Långshyttan are of the highest quality and meet the strictest standards in the industry. Quality is tested daily, checking strength, density and moisture content. Most of the output is sold to industries and cogeneration plants such as dairies, laundries, paper manufacturers and district heating producers. And while pellets are mainly used to process steam and heat right now, Mikael believes that more applications could appear in the future.

“Pellets are a standardised, transport-optimised and climate-friendly product. In addition to being burned, they could also serve as a raw material or energy source in the production of biochar, pyrolysis oil and ethanol, for example. I can certainly see the range of uses broadening in the future.”

Demand for biofuels has increased as EU energy policies promote the transition away from fossil fuels.

“In making a product that contributes to the bioeconomy, we’re helping to drive progress. The world needs more resource-efficient solutions, and in our own modest way, Långshyttan is taking responsibility for the energy of the future,” says Mikael.\*



## Reuse of wooden buildings

What does it take to make a wooden building demountable and reusable? The research project “Design of the future – reuse of wooden buildings in a circular economy” has taken a closer look.

TEXT: IVA STEPÁN ILLUSTRATION: MADELEN LINDGREN

The growing interest in circular construction is largely driven by climate challenges and the need to reduce construction waste, with reuse and recycling of construction materials taking on an increasingly central role in the industry. It is also becoming more common for developers and clients to require that a certain percentage of the materials used are either recycled or designed for future reuse.

Karin Sandberg, senior researcher at the Wood Technology Research Unit at RISE and project manager for the study, believes that we will see greater calls for reusability and adaptability in new construction in the near future.

“We already have the technology in place for industrialised wood construction. Several suppliers are capable of handling this type of project, and circular procurement frameworks are starting

to take shape. Circular thinking in construction is going to become the norm in the future, so we need to improve client know-how in this area right now,” she says.

The project created a methodology to simulate disassembly and reassembly, which was used for the development of two different wooden buildings. One project is based on industrially prefabricated volumes and the other on surface units from participating parties in the wooden buildings industry.

“The buildings are already on order, but it’s crucial to involve the suppliers early in the process to ensure efficient design and construction,” says Karin. “The project’s life cycle assessments indicate that reusing structural parts and materials could halve the climate footprint in the production phase – which represents major environmental gains.”\*



**KARIN SANDBERG**  
RESEARCHER  
AT THE WOOD  
TECHNOLOGY  
RESEARCH  
UNIT, RISE

IMAGE: JOHAN OLLSSON



### STUDY ON REUSE

The study “Design of the future – reuse of wooden buildings in a circular economy” has been carried out by RISE Research Institutes of Sweden and IVL Swedish Environmental Research Institute, together with 16 parties in the construction value chain – from clients to waste managers.



1

#### BUILDING FOR THE FUTURE

Buildings of the future should be designed to avoid new waste, enable reuse of structural components and recycling of materials, minimise energy demand and avoid landfill. It is easier to reuse larger units and components, but what can actually be reused is strongly influenced by client demands and procurement processes.



2

#### NEW WORKING PRACTICES

Circular construction methods will bring new regulations and new business models, along with new actors in recycling, dismantling and logistics. Requirements may include adaptability for future users, a specified lifetime for the structure and detailed plans for e.g. disassembly and reassembly to facilitate reuse.



3

#### TWO MODEL BUILDINGS

The study developed methods for the construction of two different model buildings:

1. Demountable wooden building using industrially prefabricated volumes with timber frame that can be disassembled and reused.
2. Flexible wooden building using surface units, designed to be modified, moved and built onto.



» Setra's markets are Sweden (32%), Europe (32%), Asia and Australia (14%), North Africa and the Middle East (13%) and the USA (9%).



IMAGE: MIKKO RASKINEN/WOOD PROGRAM AALTO UNIVERSITY

## Wood Program in Finland

Aalto University in Espoo, Finland, offers a one-year post-graduate course focusing on wooden architecture. The Wood Program is a practical course that challenges and encourages students to experiment with wood in their architectural projects. The course is aimed at architects, engineers and other students with a design background and a strong interest in wood.

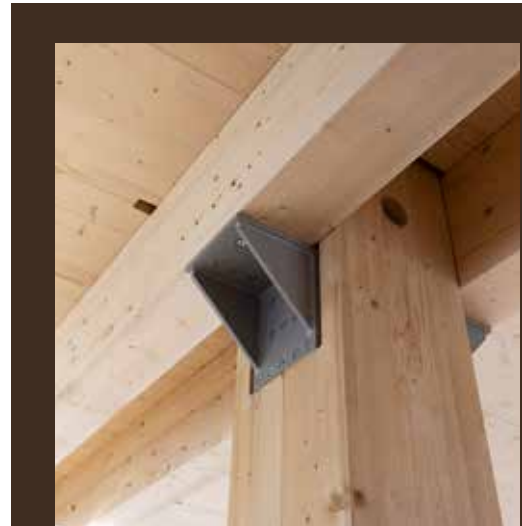


IMAGE: KLAS SJÖBERG

## Growth in Europe

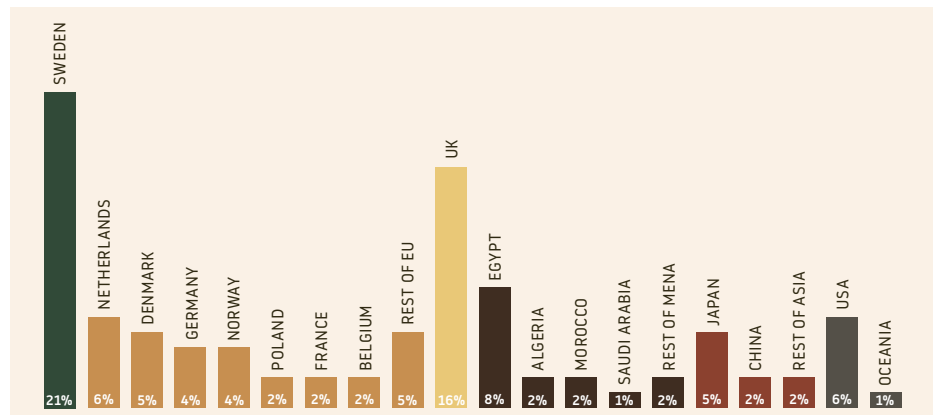
The European market for wood construction is expected to grow in the coming years, with market turnover forecast to rise from USD 5 568 million in 2024 to USD 12 830 million in 2033. This equates to a growth rate of 9.8 per cent over the period 2025–2033. While construction timber accounted for the largest proportion of sales in 2024, engineered wood products such as glulam and CLT are likely to grow fastest in the future. Germany is anticipated to see the highest growth in the region.

Source: Europe Timber Construction Market Size & Outlook, 2033

## SWEDISH SAWN SOFTWOOD PRODUCTS

Almost 80 percent of Swedish sawn softwood is exported, with the rest used in Sweden. The EU internal market is the largest market, supplying two out of three sawn wood products. The UK is the single country outside Sweden that buys the most Swedish wood products.

Source: Swedish Forest Industries Federation, 2024



Traditional wooden house in Poland.



### INTEREST GROWING IN THE POLISH MARKET

The wood products market in Poland, with its 38 million inhabitants, is expected to see future growth, with several factors at work, according to **Olle Berg**, EVP Market and Business Development at Setra.

“Interest in wood as a building material is growing in Poland and we’re seeing a rise in wood construction,” he says. “The country is also in a growth phase, with an underlying demand for housing. In addition, the domestic sawmill industry is fragmented and unable to meet the full demand – despite Poland having plenty of its own forest.”

Setra’s exports largely head to geographically close areas in northern and western Poland and consist primarily of planed construction timber and sawn products for packaging, furniture and house manufacturers.



**POPULAR TIMBER**

Setra's trim saw and planing mill in Hasselfors is one of the most modern in the world. The timber is certified and meets the requirements of various national standards and markets where CLS is the main product for timber frames in single-family houses.



PHOTO: KASPAR HAMMARLING

# Planed in Hasselfors

Planed construction timber or Canadian Lumber Standard (CLS) is one of the world's most widely used wood products in the construction sector. Setra's is made in *Hasselfors*.

TEXT: IVA STEPÁN

**Standardised joists**

Planed construction timber is mainly used to stick-build standardised houses. Common uses include stud walls, ceilings and floors, especially to construct timber wall modules and house frames. The building material is planed, making it easy for both professionals and DIYers to work with, while rounded corners reduce the risk of splinters and make it safer to handle. Construction timber is usually dried to a moisture content of 16–18 percent, which reduces the risk of cracking and movement after installation.

**CANADIAN LUMBER STANDARD**

In the construction industry, CLS timber usually refers to planed construction timber that is:

- » 2–3 core dimensions, e.g. 38x89/38x140 mm.
- » A few specific lengths, such as 3.67/4.27/4.88 (USA).
- » Planed on four sides with rounded corners (regularised, rounded edge).

**Major exports**

The raw material for construction timber can be both spruce and pine. The timber is manufactured in standard dimensions and graded using the strength standards applicable for load-bearing structures in the USA, the UK, Japan and Australia. The products are sold to builders' merchants, industrial customers and major construction projects. Europe exports 3.5–4.0 million cubic metres of construction timber to the USA, and it is the largest market for Setra in this segment – accounting for 10–12 percent of Setra's total production by volume. The US builds around 1.5 million houses each year using CLS products for the frame.



**STUART NEWMAN**  
Managing Director of  
Setra Wood Products Ltd,  
shares insights on market  
development in the UK.

## BRITISH TIMBER STRATEGY BOOSTS THE MARKET

**S**ince Setra established operations in the UK nearly 30 years ago, the country has remained a key market. At Setra Wood Products (SWP), we import and distribute high-quality Nordic timber products throughout the United Kingdom.

SWP consume 85,000 m<sup>3</sup> per year. Of this 43,000 m<sup>3</sup> is supplied directly from Setra's seven sawmills – covering over 70 different dimensions. The material is shipped to our site in King's Lynn, located on the east coast of England, around 160 kilometers north of London. The site serves as our main warehouse, production facility and distribution hub.

**A third** of the material imported is further processed on site using three planing lines, two band saws and a cross cut saw. The remaining volume is distributed directly to the market, both as full packs but also break-bulk.

In total, around 670 different timber products are supplied to the UK market through SWP. These include machined softwood, sawn joinery, primed MDF mouldings, pressure-treated decking and related products, decorative mouldings, C24 and CLS. Other services include treatment, priming and bespoke machining.

The UK is traditionally not a forestry nation. 80% of the timber used in the country is imported. However, the government has expressed its ambition to strengthen domestic forest production and increase the use of timber products.

**Since 2023**, the UK Government has implemented a national timber strategy, the "Timber in Construction Roadmap". Its ambition is to strengthen the domestic timber industry and stimulate the construction sector – without compromising on quality, safety, or carbon emissions whilst building 1.5 million homes. As a result of this, SWP expects to see an increased demand for our further processed products used in the construction phase.

**We are well** prepared for this development and the future. We have recently invested in our planing line with automation to increase productivity and improved energy efficiency within our production using solar power. Today, 40–45 percent of our energy comes from our own solar panels. These recent investments have meant that SWP has increased its further processed capacity by 40 percent, and is well prepared for future market demands.\*

## HABITAT 7 MASTHUGGSKAJEN GOTHENBURG

The Habitat 7 office block was completed in the first half of 2025. The building's glulam frame played a major role in the pursuit of a reduced climate footprint. Nature takes centre stage here, with the scent of wood and a verdant entrance welcoming visitors.