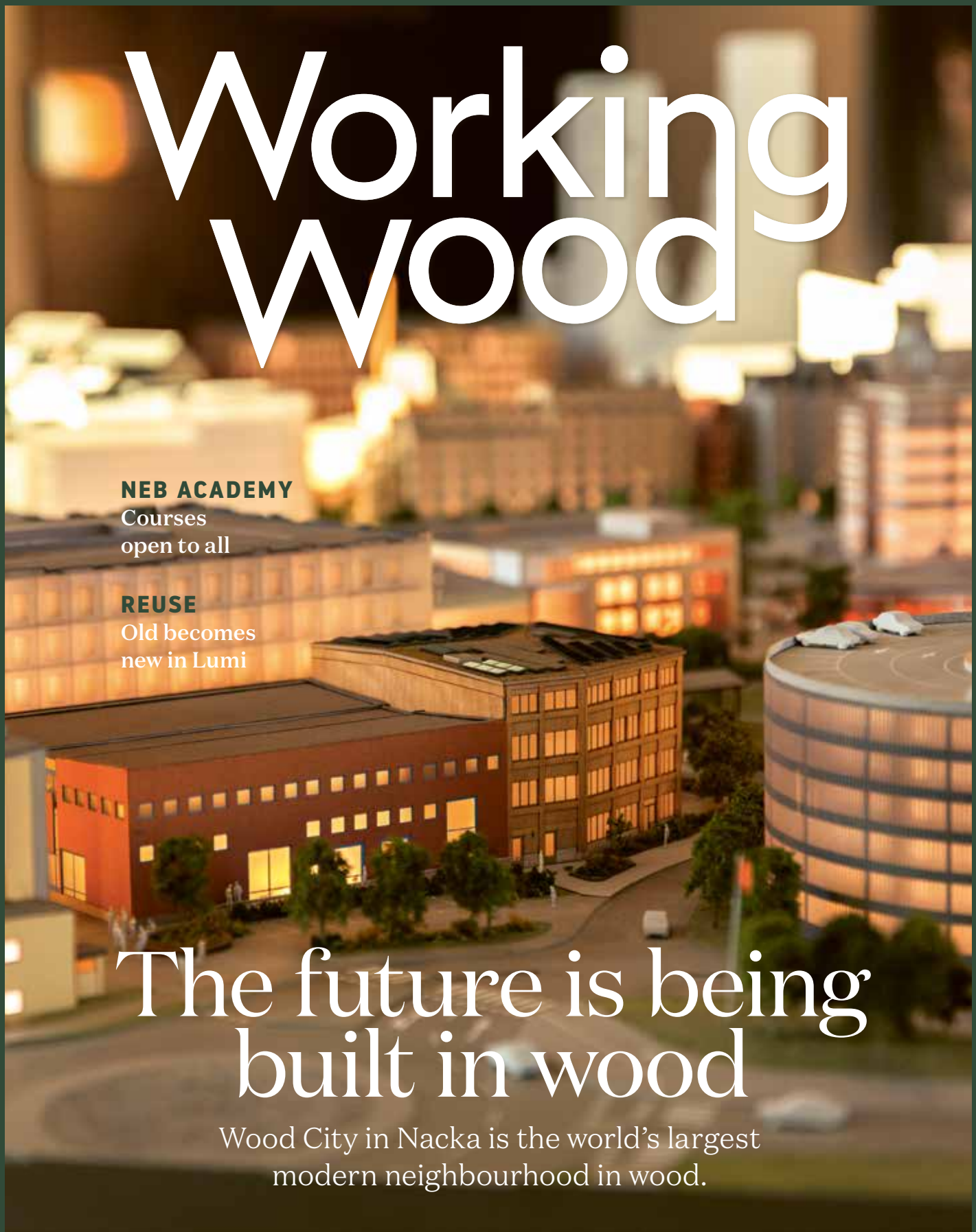
Working wood

NEB ACADEMY
Courses
open to all

REUSE
Old becomes
new in Lumi



The future is being built in wood

Wood City in Nacka is the world's largest modern neighbourhood in wood.

A MAGAZINE FROM SETRA PROMOTING GREEN BUILDING • ISSUE 1 2025

Contents

» TODAY WE LOOK AT WOOD AS A POTENTIAL MATERIAL CHOICE IN ALL OUR PROJECTS.

SUBSCRIBE!
Use the QR code to get a free subscription to the magazine Working Wood.

EDITORIAL TEAM

Working Wood is aimed at Setra's customers and stakeholders in Sweden and abroad, with a view to increasing knowledge about wood as a building material and providing inspiration. The magazine is published in Swedish and English. **CIRCULATION:** 4,800 copies **ADDRESS:** Setra Group, Box 3027, 169 03 Solna. **TEL:** +46 8 705 03 00. **E-MAIL:** workingwood@setragroup.com.**RESPONSIBLE PUBLISHER:** Melanie Sjögren. **PRODUCTION:** Chiffer AB. **EDITOR:** Iva Stepán. **ART DIRECTOR:** Anna-Karin Schröder. **REPRO:** Italgraf. **PRINTING:** Stibo **COVER:** Model of Wood City, Nacka. **PHOTOGRAPHER:** Klas Sjöberg. All unsigned material is editorial. Photos without a byline are credited to the agency. What would you like to read about in the next issue? Suggestions and ideas should be sent to workingwood@setragroup.com. For more Setra news, visit setragroup.com and follow us on LinkedIn.

FSC www.fsc.org MIX Papper | Bidrar till ansvarsfullt skogsbruk FSC® C012075

ClimateCalc™ Denna trycksak är koldioxidkompenserad i enlighet med ClimateCalc. Kompensationen är köpt hos: Gold Standard www.climatecalc.eu CC-000001/DK

IMAGE: KASPAR HAMMARLING

MARCUS WESTDAHL
We create green value

GRÖNSAMHET
– green business for a sustainable future

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 continues its forward momentum"

It is hardly news to those of us working in the wood and construction industries that we are still in tough economic times. But we know that things are turning around and we are seeing wood construction continue its forward momentum. For example, even in these harsher times, interest in timber frames and hybrid frames remains high and is growing.

The long-term future of wood looks bright, and in this issue of Working Wood we feature several innovative wood projects that exemplify this.

An exciting development – Stockholm Wood City – is being built in Nacka. The world's largest urban neighbourhood in wood, it will also be a hub for innovation and an international showcase for the sustainable city. This hugely inspiring project seeks to play its part in solving the climate challenges of the construction sector. Setra has the privilege of participating in the project, supplying materials to Campus Sickla, among others.

We have also visited Lumi in Uppsala, a complex from the 1970s that has been completely transformed using wooden upward extensions and large-scale recycling methods.

Another sign of the times is the interview with Sara Nilsson, architect at C.F. Møller Architects, who says that unlike just a few years ago, the firm now explores wood as a material choice in all its projects. ✱

In brief

WOOD CONSTRUCTION | INVESTMENTS | BUILDING REGULATIONS

ENKÖPING'S NEW TOWN HALL will be completed in 2025. The building has an innovative hybrid frame that combines wood, concrete and steel in a flexible solution with a very low climate impact. The frame was developed in cooperation between Setra and Heidelberg Materials Precast Contiga.

IMAGE: C.F. MÖLLER ARCHITECTS

Investment in the industry

In recent years, Setra has invested almost SEK 2 billion in its facilities to develop and implement new technology for the wood processing of the future. The latest investments are a new saw line for small diameter logs in Skinnskatteberg, a new saw line in Malå, a new boiler at the sawmill in Färila and a pellet factory in Långshyttan.

The new high-efficiency saw line at the Skinnskatteberg sawmill turns small diameter logs from local forests into wood products for customers around the world.

IMAGE: ARCHUS

JOHNNIE PETTERSSON,
founder of Archus, on Electrolux's new office block in Stockholm.

"The extroverted architecture of the offices, the transparent entrance to the apartments and the use of green and wood throughout allow the interior to communicate with the city outside."

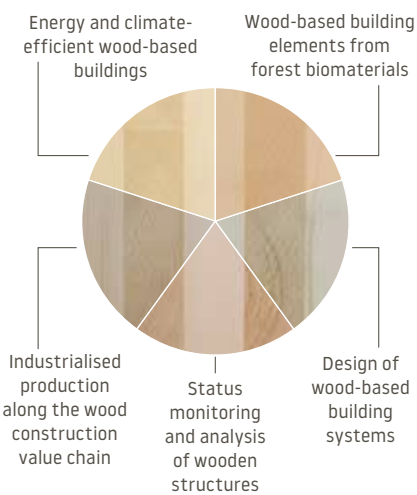
Growing knowledge

Linnæus University runs the project 'Sustainable building with wood', which aims to increase knowledge along the whole value chain for wooden structures, as well as strengthening competitiveness and promoting a climate-neutral construction sector. The project operates in cooperation with businesses and researchers.

"Setra is contributing its expertise and developing some of the products involved in the research," says Björn Kjellberg, project manager for Building Solutions at Setra. "The project is providing us with important knowledge on how we'll be able to optimise our raw material to an even greater extent, for example in terms of different strength classes."

The focus is on areas such as the development of wood-based building systems, monitoring the status of timber structures, and energy-efficient buildings. The eight-year project will run until 2031 and has a budget of SEK 119 million, funded by the Knowledge Foundation.

THE RESEARCH IS ORGANISED INTO FIVE STRANDS:



2025

The research project ‘Living forests, living communities’ is exploring how to integrate sustainable forestry and innovative wood construction. The project to develop a building system for a typical preschool runs until June 2025 and is funded by innovation agency Vinnova.

The Green House follows Linköping municipality’s policy to boost wood construction. The municipality is one of those leading the Swedish transition to more sustainable and low-carbon construction projects.

IMAGE: A-GRUPPEN

Environmental building

Linköping has a new sustainable building in the form of the Green House, which comprises 59 rental apartments above a ground floor of office and retail space.

The 3,600 square metre building boasts a roof with solar panels and a greenhouse.

“This building meets tough environmental standards in Sweden’s Miljöbyggnad certification scheme,” reports Therese Jansson, Account Manager at Setra. Setra’s deliveries of CLT and glulam total around 1,300 cubic metres.

The architectural firm A-gruppen is also the developer, in partnership with Vida Real Estate, while the building contractor is Lindstams Bygg.

“Setra was chosen as the frame supplier because of its excellent reputation in the market and offered the best solution for the project. A key factor is that Setra has previously worked closely with Tyréns, which was involved in much of the design work and planning on the Green House project,” explains purchaser Mats Claudius from Lindstams Bygg.

IMAGE: AGNASARK

ICA chooses timber frame

A new ICA Supermarket is expected to open in Leksand this summer. The project has a low climate footprint, making use of a mainly timber frame, wood cladding and green concrete. With solar panels and district heating meeting its energy needs, the property will be awarded Silver in the Miljöbyggnad certification scheme. Setra supplied the frame in glulam and CLT.

DID YOU KNOW...

The Swedish National Board of Housing, Building and Planning’s new building regulations will come into force on 1 July 2025.

Development of sustainable forestry

There is now twice as much wood in Swedish forests as a hundred years ago, due to a long-term focus on reforestation after harvesting and management measures that encourage forest growth.

1903

In 1903 Sweden gained its first modern Forestry Act, which emphasised the importance of sustainable forestry and required harvesting to be followed by reforestation.

Certification

The environmental values of forests were first recognised in the 1970s. Forest certification was introduced in the 1990s to ensure a good balance between ecological, social and economic factors.

Environmental consideration

In 1993, the Swedish Parliament adopted new forestry legislation establishing the equal importance of the forest's environmental and production values.

Today

The EU is working on a broad forest agenda with several strategies and investigations, laws and regulations for the continuation of sustainable forest management, including the EU Forest Strategy, the Deforestation Regulation, the Forest Monitoring Framework and the Species Protection Regulation.

CLIMATE-SMART

Forests are part of the solution in the transition to a sustainable society. Renewable forest raw material is able to replace fossil fuels, while wood can make building more sustainable and climate smart.

FORESTRY IN BALANCE

Today's forestry balances the production of renewable forest raw material with the protection of biodiversity, soil and water, cultural sites and other ecosystems.

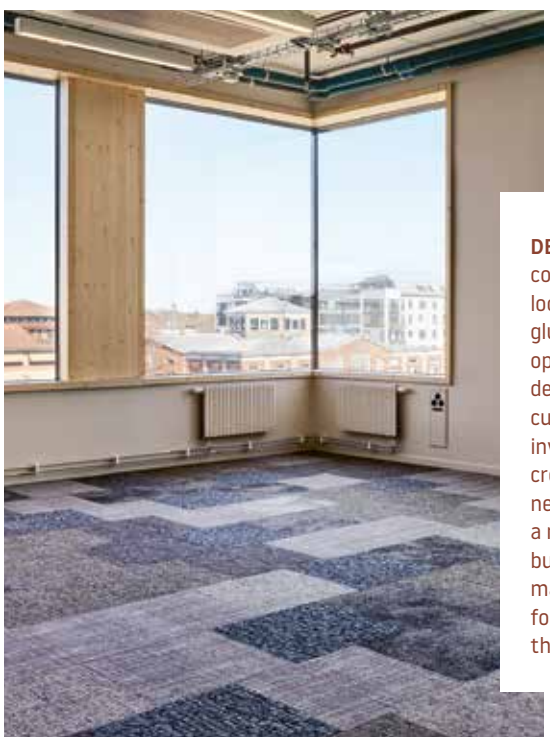
Luminous Lumi

With innovative solutions and a determined focus on circularity, Vasakronan proves that it is possible to build both sustainably and profitably. The use of ***CLT*** has been one of the key success factors.

TEXT: **MARIE KARLSSON** IMAGE: **MÅNS BERG**

Lumi is latin for “light of life”, a sentiment perfectly captured in the building’s abundance of light and its new light-filled atrium.

Lumi shows that reuse and wood-based solutions are not only possible, but economically viable and aesthetically pleasing.



Lumi, in the southern part of central Uppsala, is one of Sweden's most ambitious and eminent recycling projects, with Vasakronan taking the concept of sustainability to the extreme. As much of the original building fabric as possible has been preserved, rather than being demolished and rebuilt.

"Despite most people agreeing that the old 1970s complex couldn't be adapted for new tenants, we took the decision to leave the existing buildings standing and modernise the premises instead. We opted to save as much of the old concrete frame as possible, but otherwise we made extensive changes. However, straight renovation was not enough – to make the sums add up, we also needed to create more lettable space," says Jonas Wahlström, Project Manager at Vasakronan.

The transformation of the old concrete building into flexible and sustainable office space began in 2022. The desired increase in floor space was achieved by adding three completely new storeys. The detailed development plan stipulated a maximum height limit and a desire to avoid earthworks and ground reinforcement at all costs. More space was needed, but without more height or weight. The old foundations were able to take a little more load, but not in the form of heavy concrete.

DELIVERY: Setra was commissioned to supply locally produced CLT and glulam for the Lumi development in Uppsala. Setra's deliveries totalled 1,200 cubic metres. The project involves six beams made of cross-laminated timber for new floors in three blocks, a new atrium linking the buildings with walkways made of CLT, and glulam for the roof structure of the atrium.

“WE’VE PUSHED ALL THE PREVIOUS BOUNDARIES OF WHAT PEOPLE DARED TO RECYCLE.”

Anders Tväråna, White arkitekter.

ABOUT THE PROJECT

LOCATION: Uppsala

BUILT IN: 2022–2024

GROSS AREA: Approx. 21,000 sqm gross, 16,500 sqm usable, plus parking garage

CLIENT: Vasakronan

ARCHITECT: White Arkitekter

STRUCTURAL ENGINEER: Knut Jönson Ingenjörsbyrå

CONTRACTUAL FORM: Shared contracts, around 60

BUILDING CONTRACTOR: Tyréns Byggstyrning

ASSEMBLY: Byggstyrning AB

BUILDING MATERIALS

Recycled concrete frame, new hybrid frame using wooden floor system and steel, new levels in wood, glass roof and walkways in CLT. Wood has also been used for the staircases and internal cladding to give a warm and natural feel. New slate facade.

“Choosing to build in wood was the only solution. As a lightweight material, wood is perfectly suited to the slimline structure we wanted. Two of the three new floors are made entirely of wood, while the third is in recycled aerated concrete. A floor system using a hybrid CLT and steel frame allowed us to create the new floor space we wanted without exceeding the load-bearing capacity of the existing foundations,” explains Jonas.

Reusing a concrete frame in this way, at this scale, is unique – as are so many of the innovative recycling solutions embodied in Lumi. In addition to the frame, 570 doors, 105 tonnes of plasterboard and other materials and products were reused. Digital solutions were used to catalogue and adapt the materials to the needs of the project. This process not only saved on resources but also developed new methods for large-scale reuse, says Anders Tväråna from White Arkitekter.

“We’ve pushed all the previous boundaries of what people dared to recycle before. We’ve learnt a lot from working on Lumi and together we’ve shown that it is possible to combine recycling, modern materials and high quality design. If there’s one thing that beats even the most sustainable new construction, it’s preserving and upgrading existing buildings, and we’ve succeeded in doing that here,” says Anders.

The project has become a real success story, clearly demonstrating that reuse and circularity are not just possible, but deliver competitive advantages.

“The construction industry has gone from scepticism to enthusiasm, tenants are queuing up and Lumi is now serving as inspiration for similar projects. The project has not only minimised its climate footprint, but also offered a vision for the future of construction,” says Jonas Wahlström.*

SARA NILSSON

OCCUPATION: Architect

WORKS AT: C.F. Møller Architects

CURRENT ASSIGNMENT: Project manager for Enköping Town Hall and office manager at C.F. Møller Architects, which celebrated its centenary in 2024.

The office on Södermalm in Stockholm is housed in a wooden upward extension.

Site-specific design

In recent years, architect ***Sara Nilsson*** has noticed a shift in the industry's perception of wood as a material for building. The role of wood in reducing the climate impact of construction is now widely recognised.

TEXT: **IVA STEPÁN** IMAGE: **PÄR OLSSON**

Luna in Södertälje is a large urban development project with wooden additions. Sara Nilsson shows a miniature model.

Training at the Royal Danish Academy of Fine Arts in Copenhagen and six years as an architect at C.F. Møller Architects in the Danish capital, gave Sara Nilsson an education in Danish architecture and a particular take on architecture and urban development. When the time came to move back to Sweden in 2011, she chose to stay with the same firm of architects, but this time based in Stockholm.

"In Denmark, architecture is clearly integrated with its surroundings and informed by the natural conditions. I feel the Danes are good at taking a holistic approach and it was valuable for me to get to develop that approach in Sweden."

The vision of C.F. Møller Architects is to improve the lives of people and the planet, with sustainability as the starting point for every project.

"The building should harmonise with the site, and each project is optimised on its own merits in terms of factors such as choice of materials, reuse, life cycle analysis or energy consumption. We've developed a method for sustainability screening, where we work together with our clients in a workshop format to set the level of ambition for each project," says Sara.

"Today we look at wood as a potential material choice in all our projects."

Research and education are vital for continuing to drive progress, since greater knowledge of construction methods, fire and moisture opens up new opportunities.

"CLT is a very interesting material that opens the door to taller and more complex buildings. But all materials have their pros and cons, and sometimes hybrid solutions using 'the right material in the right place' are the best option," she says, adding:

"Today we look at wood as a potential material choice in all our projects, which wasn't the case a few years ago. But building in wood can mean thicker walls and higher storey heights, so it's important to allow extra margins in the zoning plans, and it's crucial that they're designed to allow for future structures in wood."*

CITY IN WOOD

Unique urban developments are emerging in Sickla, Nacka. ***Stockholm Wood City*** marks a new era for sustainable, large-scale and industrialised construction in wood. The ambition is to make sustainable urban development Sweden's latest export success story.

TEXT: **IVA STEPÁN** IMAGE: **ATRIUM LJUNGBERG**

Set to be the world's largest modern neighbourhood in wood, Stockholm Wood City has attracted considerable international attention. The project is frequently visited by interested parties from all over the world.

The world's largest modern neighbourhood in wood is growing fast. Atrium Ljungberg, the property company that initiated this pioneering venture, greenlit the project as recently as 2023. In total, Stockholm Wood City comprises 25 blocks of 250,000 square metres and will accommodate 7,000 new workplaces and 2,000 homes.

Atrium Ljungberg has been active in Sickla for over two decades, transforming the old industrial area into a vibrant neighbourhood with offices, housing, retail and cultural activities. The area is well served by public transport, while the introduction of the metro in 2030 creates potential for further development. This, coupled with Atrium's ambitious sustainability goals and plans for the area, led to the decision to build in wood.

Håkan Hyllengren, Business Development Manager Sickla at Atrium Ljungberg, explains:

"By 2025, we need to have halved the carbon footprint of all new buildings and by 2030 it is supposed to reach close to zero. Building with wood is currently the only way to achieve these targets. We decided to make Wood City an international showcase for the sustainable city, from the choice of materials to technical solutions for energy, battery storage, geothermal energy and waste management."

One year into the project, the mood is entirely positive and several lessons have been learnt.

"Sweden has the expertise to do this and it has all gone very smoothly so far. I find that wood projects require closer collaboration between different functions and suppliers – keeping everything on track relies on putting together the right team."

Atrium Ljungberg calculates that the project will be cost neutral compared to building with other materials.

"The costing has to be compared with sustainable materials such as green concrete and green steel. It also speeds up the completion of the buildings, and quieter workplaces reduce the levels of disturbance locally. Plus there is less transport involved, an important factor in an area like Sickla, where you have so many people moving around every day," says Håkan.

To make the wood cities of the future a reality, the industry needs to develop standardised systems for building in wood that are replicable and cost-effective.

Jesper Åkerlund, Business Manager for Building Solutions and Components at Setra, believes that the technology is in place and says that Setra is in dialogue on the subject with several property developers.

"We have industrial processes and solutions for developing property projects with a timber frame. When property developers and contractors join forces early on in the planning phase, the foundations are laid for cost-effective production and replicable building systems," says Jesper.*

"WOOD CITY IS AN INTERNATIONAL SHOWCASE FOR THE SUSTAINABLE CITY."

Håkan Hyllengren,
Business Development Manager Sickla, Atrium Ljungberg

"THE TECHNOLOGY IS IN PLACE."

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

Wood City is positioning itself as the Nordic hub for sustainability, innovation and wellbeing. The initiative seeks to enable collaboration between stakeholders and help solve climate challenges in the construction and property sector.

Focus on wood

A new extension at ***Campus Sickla,*** in the heart of Nacka municipality, shines a spotlight on wood construction. The project not only meets the demand for more upper secondary school places, but also aims to inspire as an innovative pilot project in sustainable construction.

TEXT: **MARIE KARLSSON** IMAGE: **KLAS SJÖBERG**

Campus Sickla is part of the new Wood City neighbourhood in Nacka.

»

The Campus Sickla project consists of a timber frame extension and a wooden facade, with completion planned for autumn 2025.

CAMPUS SICKLA EXTENSION

PROJECT:
New extension to upper secondary school

COMPRISES:
A four-storey building with a basement

LOCATION:
Sickla, Stockholm

BUILT IN: 2024–2025

GROSS AREA: 2,500 sqm

CLIENT: Atrium Ljungberg

STRUCTURAL ENGINEER:
Looström Konstruktionsbyrå

FRAME: Timber frame with glulam posts/beams and CLT floors

BUILDING CONTRACTOR:
TL Bygg

FRAME ASSEMBLY:
Dalahusgruppen

BUILDING MATERIALS

Timber frame, glulam posts/beams and CLT floors. Stairwell walls in exposed CLT. Staircase frame in CLT, partially exposed. Wooden façade, prefabricated curtain walls with a timber frame and prefabricated timber-framed roof elements. Basement and plinth in concrete.

QUANTITY OF WOOD:
CLT 2,311 m^2/530 m^3
Glulam 76 m^3

Sickla is an attractive neighbourhood. In addition to offering plenty of jobs and housing, it boasts a wide range of culture, services and, not least, exciting upper secondary education programmes. Campus Sickla is part of Wood City, a new neighbourhood where all the buildings are constructed using wood as the main material. One of the very first buildings on the site is the extension to the YBC (Young Business Creatives) upper secondary school, Campus Sickla.

"We're aiming to build a city for everyone, and having a wide range of educational opportunities is a vital element of that. Studying in Sickla is popular and in the face of increased demand for upper secondary school places, we saw our chance to create something really cool. A modern building that arouses interest, with sustainable solutions that inspire today's students and meet the needs of tomorrow," says Niklas Häggström, project area manager at the property company Atrium Ljungberg.

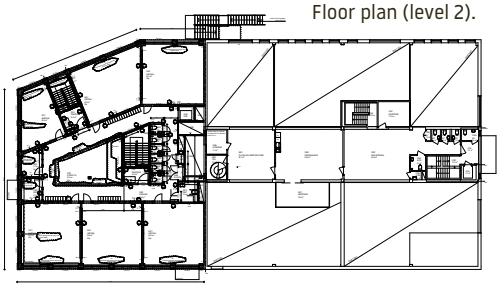
Niklas Häggström, Project Area Manager Sickla at Atrium Ljungberg, and Theres Jansson, Account Manager at Setra, on site in the future school building. The interior will feature a great deal of exposed wood.

FAST BUILD

» Wood is a particularly good choice for projects where speed is of the essence. The fact that a wooden building is relatively light also makes the foundation work easier. The next stage of the build can start as soon as the frame is in place, since wood does not require any drying time. Installations are faster as drilling into wood is so easy. Transport is also more efficient because each delivery carries so many square metres of construction elements.

The miniature model of Wood City provides a realistic picture of how the neighbourhood is going to develop. Once the extension is completed, Campus Sickla will house around 2,300 students on four or five different upper secondary programmes.

Floor plan (level 2).



“We decided to opt for a post-and-beam solution with a CLT floor system.”

Frida Tjernberg,
lead structural engineer
at Looströms Konstruktionsbyrå

The extension has a complex geometric form with a glulam frame, a CLT floor system and an interior with a great deal of exposed wood. It consists of a cubic volume with one corner cut off, giving it five corners and an angled wall. This slightly odd puzzle piece fits in perfectly with the existing school building. The extension, adding a new 2,500 square metres, comprises four floors and a new basement, explains Frida Tjernberg, lead structural engineer at Looströms Konstruktionsbyrå.

“As the existing school building has no basement, the foundations had to be laid with great care. From the ground floor upwards, a wooden structure runs all the way to the roof, including the lift shaft and stairwell. Wood minimises the weight and loads from the building. If we’d chosen a material other than wood, we would have had higher loads and needed much more complicated foundations,” says Frida.

However, there was never any question of not using wood for the extension at Campus Sickla, especially in view of the important sustainability and climate requirements. The fact that timber frames help to reduce a project’s climate footprint tipped the balance for Atrium Ljungberg, says Niklas Häggström.

“At the start of the project, we were working towards a carbon footprint of 273 kilos of carbon dioxide equivalents per square metre, about half what the existing school building generated when it was built 20 years ago. Looking at the final figures, we’ve actually got it down to 212 kilos per square metre, which is amazing. The ambitious sustainability goals that drive the entire project are also much appreciated by the school staff, who feel inspired.” »

A post-and-beam solution is often used in structures that need to support heavy loads while creating an open layout free from partitions or other obstacles. The solution is especially used in environments where large, open spaces are needed to optimise customer flow or in situations where tenant needs change over time.

The four storeys, with their many different external angles, give the building a special load-bearing system. The aim was to maximise the amount of floor space for the given building permit, and the solution had to work with the existing building. The client also explicitly requested plenty of exposed wood inside the school, as the aesthetic qualities of the material are said to create the ideal environment for learning.

"We knew that a timber frame was a suitable choice, but we had to compare the merits of different types. Under the circumstances, we decided to opt for a post-and-beam solution with a CLT floor system – a flexible solution that makes it easy to adapt the floor plan over time, ideal for schools and offices," Frida explains.

As the school needed to be completed quickly, the project has been running on an unusually tight schedule, with the frame assembly taking no more than seven weeks. In a short space of time, Setra managed to customise posts, beams and all the floor elements for adaptation to the specific shape of the building, and with meticulously planned deliveries of components, packed in assembly order, everything arrived exactly when required.

"We've delivered weather-protected wooden elements in extremely short lead times."

Victor Jacobs,
project manager Setra

"We're pleased to be supplying Campus Sickla and Wood City. We've prepared all the holes and assembly details in the factory and managed to deliver weather-protected wooden elements in extremely short lead times for the fastest and smoothest possible assembly," states Victor Jacobs, project manager at Setra.

Atrium Ljungberg has a longstanding vision to build the world's largest urban neighbourhood in wood, for a lower climate foot-

Wood was the obvious choice for the extension of Campus Sickla, with its focus on sustainability and a smaller climate footprint.

print and the prospect of a more sustainable future. “When it comes to the crunch and everything works out, it’s an amazing feeling,” says Niklas.

“It’s a well-oiled machine that has been running at an intense pace. I’ve honestly never seen a building go up as fast as this one. Deliveries are on time, packed with all the right materials, and assembly is almost silent with wood. So we’re not disturbing anyone, even though we’re in the middle of the city, which is of huge value to us. Here at Atrium Ljungberg, we’re novices in wood construction, but we’ve learnt a lot from the skilled partners we’ve had on this project,” says Niklas.*

MATHIAS FORSBERG
ROLE: Acting Director of Urban Development, Nacka municipality
CURRENT PROJECT: Development of Wood City, Nacka

A neighbourhood in wood

In the Sickla area of Nacka, a new Wood City is emerging. This is a world first, as no one has ever built an entire modern neighbourhood in wood before.

TEXT: **IVA STEPÁN** IMAGE: **LIZA SIMONSSON**

Wood City is a pioneering venture in large-scale industrial wood construction.

How is Wood City influencing urban development in Nacka?
The area is currently a shopping centre with underground parking, but Wood City will make Sickla a mixed urban environment with offices, housing, retail and services. The project is particularly important to us here in Nacka, as it promotes the use of sustainable materials, which helps to reduce carbon emissions.

What role is the municipality playing in the project?
We set requirements in the detailed development plan drawn up for the area. We’ve emphasised the municipality’s environmental and climate ambitions for urban development, which include energy-efficient, attractive and healthy construction.

How does Nacka approach sustainable construction?
We work on sustainability from all three aspects – social, environmental and economic sustainability. Wood construction fits well with these ambitions by reducing carbon emissions and creating a pleasant environment. It also has its advantages at the production stage, as wood construction allows for a higher degree of modular construction, which means shorter production times on site. This is important, as Sickla has over 13 million visitors every year and we want them to be able to continue visiting the site during the construction period.

What are Nacka’s hopes for the future of Wood City?
We want the neighbourhood to become a model for sustainable urban development and inspire other developers to take on similar projects. We’re creating a vibrant, safe and attractive neighbourhood that offers a high quality of life for residents and contributes to Nacka’s overall sustainability and innovation goals. The project is also creating jobs and attracting entrepreneurs in the green industries.*

Beautiful, sustainable and inclusive places and urban environments that accelerate the green transition are categorised as attractive living environments.

Knowledge of attractive living environments

In Europe, a transition project is underway to make the EU the world's first climate-neutral region. One element of this is the New European Bauhaus initiative, which aims to develop attractive living environments. New training courses are now available on how the construction industry can contribute to sustainable building.

TEXT: **IVA STEPÁN** BILD: **MADELEN LINDGREN**

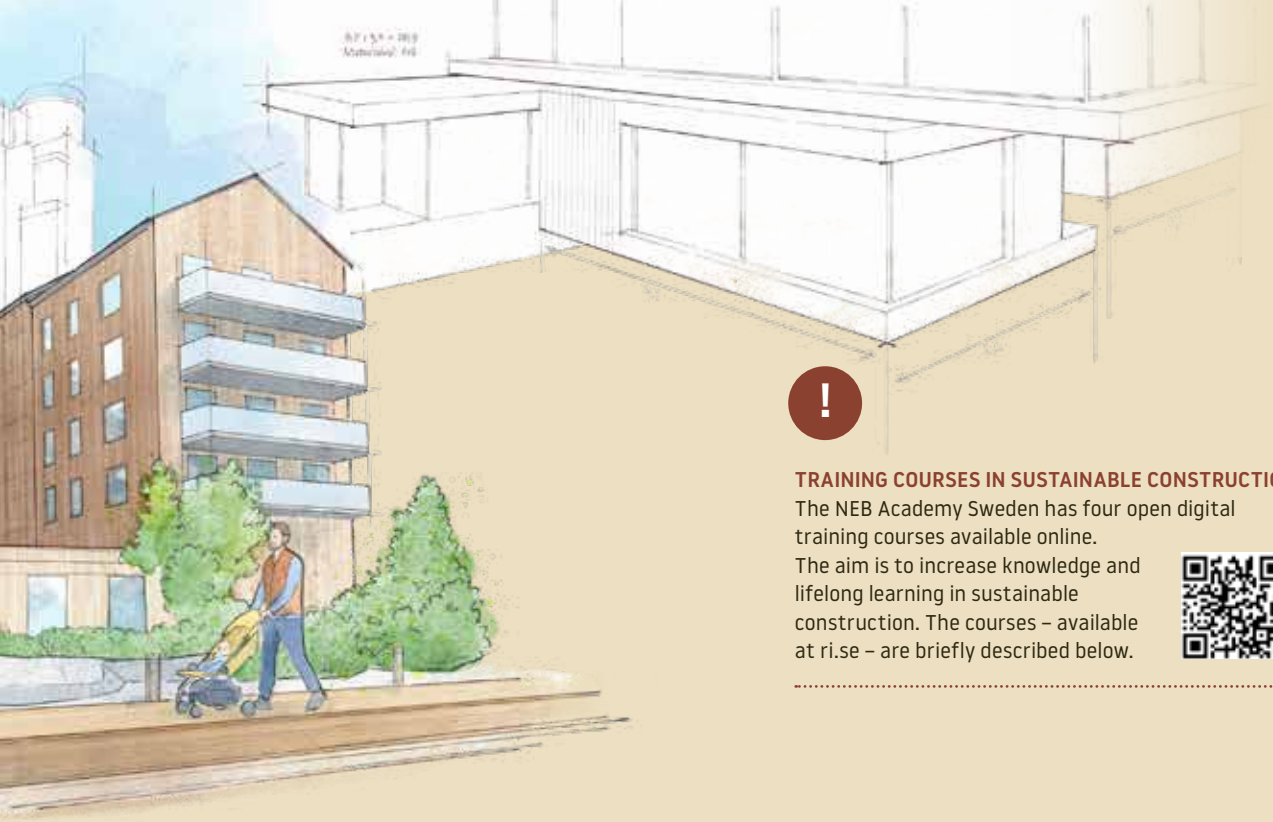
CAMILLA BERGGREN – TARRODI
ARCHITECT AND PROJECT MANAGER AT RISE

A successful transition to a sustainable society requires a skills upgrade in the construction industry, and this is being formalised in the European education network called the New European Bauhaus Academy Alliance. In Sweden, the work is led by RISE on behalf of the Swedish National Board of Housing.

"Historically, sustainability has never been much of a priority in the construction sector, and now that society needs to switch to sustainable construction, it's clear that we have a skills gap," says Camilla Berggren-Tarrodi, architect and project manager at RISE. "Knowledge of material selection, bio-based materials and optimised construction processes needs to be much better."

In a first step, NEB Academy Sweden training courses, have been developed. Experts from Wood City Sweden, the industry, municipalities and RISE are responsible for the course content. The aim of this long-term initiative is for the programmes to provide micro-credentials in an EU-wide lifelong learning credit system, and become integral parts of vocational training in the sector.

"The training programmes are aimed at different target groups, such as property owners, architects or contractors. Several training courses are in the pipeline and will be made available online as soon as they're finalised."*



!

TRAINING COURSES IN SUSTAINABLE CONSTRUCTION

The NEB Academy Sweden has four open digital training courses available online.
The aim is to increase knowledge and lifelong learning in sustainable construction. The courses – available at ri.se – are briefly described below.

1

DESIGN PROCESS FOR GREEN TRANSITION

Transforming the construction and property sector to become more sustainable requires not only changes in construction techniques and materials, but also new working processes that better promote sustainable building. The course provides an understanding of sustainable construction from an ecological perspective, with a focus on a low climate footprint.

2

TIMBER ON TOP

The development of a property can take many forms. This programme is mainly concerned with upward extensions, but the technique is equally applicable to regular extensions, expansions or the transformation of properties. Utilising what is already built can extend the lifespan of existing buildings and preserve undeveloped land.

3

WOOD FIRST – BUILDING SUSTAINABLY

What does sustainable construction actually mean and what is the effect of increasing wood construction? The course covers the benefits of building in wood, industrial wood construction, the properties of wood, Swedish examples of modern wood construction, and wood construction strategies in Växjö, Malmö and Varberg.

4

INCLUSIVE URBAN DESIGN

The course is aimed at those who want to work actively and strategically on inclusion in urban development projects and planning, and who have a basic knowledge and understanding of the urban development process. The target groups are urban planners, property developers and architects, in the municipal or private sector.

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

Houses driving demand

The outlook for wood product demand in the US looks positive for 2025, due to both demographic trends and an ageing housing stock that is driving renovation and construction projects. The share of the population aged 30–45 is increasing, and it is in this phase that many people start a family and buy a house. At the same time, 25 million houses are between 20 and 29 years old and require upgrading. Source: US Census Bureau

The world's tallest wooden building is planned for Milwaukee, USA.

IMAGE: CITY OF MILWAUKEE

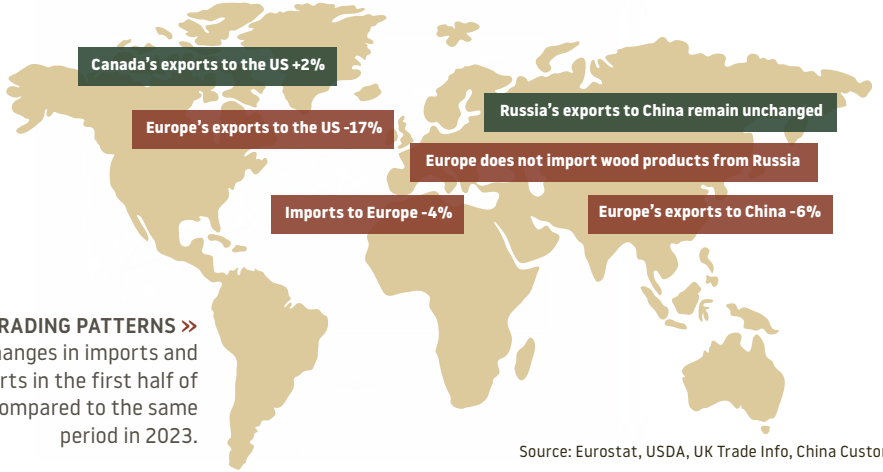
Wood reaches new heights

With an eye on sustainability, wooden skyscrapers are planned in several locations around the world. In Milwaukee, a new 55-storey tower is planned to surpass Ascent, the world's current tallest wooden building at 86.6 metres. Tokyo aims to complete W350, a 350-metre high timber building, by 2041. Kista in Stockholm has plans to build the Wood Tower, a 150-metre high wooden skyscraper. C6 in Perth will be a model for future timber buildings, while Oakwood Timber Tower in London is set to impress with its innovative robotic technology for assembling timber elements.

Sources: Domus, Illustrated Science, Byggvärlden

GLOBAL FLOWS

Global trade in wood products in 2024 was affected by factors such as Russia's war with Ukraine and economic uncertainty in Europe. For 2025, Setra expects Europe to increase its exports to the US by 15–20 percent due to increased demand.



NEW TRADING PATTERNS » Changes in imports and exports in the first half of 2024 compared to the same period in 2023.

Source: Eurostat, USDA, UK Trade Info, China Customs

The project has received several awards, including the Deutscher Ingenieurbaupreis 2024, Holzbaupreis NRW 2024 and Ernst & Sohn Ingenieurbaupreis 2024, for its design, construction, innovation, resource efficiency and sustainability.

IMAGE: DERIX

AWARD-WINNING PROJECT The new airship hangar in Mülheim, Germany, was built to house the airship Theo, but also has capacity for events with up to 1,500 participants. The hangar is over 3,400 m² in size, reaching an impressive height of 26 metres, and was constructed using around 1,560 cubic metres of wood, much of which was prefabricated into around 1,500 glulam and CLT components. These components were partially pre-assembled before delivery to the construction site, thus streamlining the construction process. The vaulted roof, spanning 42 metres, is constructed from wooden arches joined together with wooden dowels – a solution that eliminates the need for steel in the structure.

WOOD INDUSTRY CENTRE
The Långshyttan showroom displays various building solutions, and Setra's experts are on hand to provide advice. Setra's production of CLT, glulam and components is also based in Långshyttan.

Build apartment blocks

Knowledge, inspiration and exchange of experience in industrial wood construction. Setra's wood industry hub in Långshyttan, southern Dalarna, now has a showroom for apartment buildings.

TEXT: **IVA STEPÁN** IMAGE: **KLAS SJÖBERG**

Showroom for apartment blocks

For those who want to learn more about building apartment blocks in wood, Setra has created a showroom where various industrial wood construction solutions can be experienced and visualised. The showroom has been developed in cooperation with partners in flooring, facade insulation, screws and fittings, weather protection, waterproofing and assembly aids. Here, you can talk to Setra's experts and analyse which building solution is best suited to different types of project.

ADVICE
Långshyttan's showroom allows you to view different building solutions in situ and gain deeper knowledge of how the various building elements work together. Setra's experts are on hand for advice and to talk to about the projects.

Better basis for decision-making

A visit to Långshyttan supports better decision-making on industrial construction projects in wood, from planning to early design choices. Visitors gain an overview of the different stages of the construction project, an in-depth knowledge of the assembly of frames and insights into how to plan efficient construction solutions. Whether you are a property developer, builder, architect, designer or contractor, you can obtain answers to the questions that a construction project throws up.

FEEL FREE TO CONTACT US
Would you like to know more or are you interested in visiting the Långshyttan showroom? Contact Lina Emanuelsson on +46 225 635 85.

IMAGE: KLAS SJÖBERG

OLLE BERG, EVP Market and Business Development at Setra, comments on the current market situation.

"A BETTER BUT STILL CHALLENGING 2025"

Last year was a turbulent one for the global wood products market. High inflation and interest rates hit hard, resulting in low levels of new construction and few renovation projects. At the same time, global production was constrained by the continued lack of raw material supplies from Russia to Europe. This combination meant that supply and demand were actually relatively well balanced.

Looking at 2025, there is cautious optimism; falling interest rates and lower inflation should lead to a slight increase in construction activity. However, we see no immediate change in production capacity, and the current shortage of raw material and high timber prices will continue through 2025.

European markets are seeing cautiously positive development, but wood consumption in 2025 will still be low by historical standards. One concern for Europe is Germany's weak economic performance, which is having a knock-on effect on all neighbouring markets.

The US market, however, is developing more favourably. The underlying structural need for housing is high and, if interest rate cuts continue, US residential construction is likely to recover in 2025.

The Chinese market remains heavily affected by the property crisis triggered in 2024, which has hit private domestic consumption in China and also heavily impacted on wood product consumption. China's government implemented three major economic stimulus packages in 2024, but there is still some uncertainty about their effect.

The markets in North Africa look set for relatively high and steady consumption in 2025. The current oil price, combined with a number of mega-projects, makes the region look a brighter prospect from a wood consumption perspective, compared to China and Europe.

To summarise, the global timber market for 2025 looks slightly more positive compared to the previous year. In the longer term, we see a very positive future for wood products globally, due to both growing demand for housing and a focus on sustainability, with building in wood making a vital contribution to the green transition.*

JANUARY 2025 | NACKA

CAMPUS SICKLA

In Nacka, new wooden buildings are emerging under the banner of Wood City. For the upper secondary school, the development brings an extension with a timber frame and facade.