

SetraNews

JUNE 2018

*Learn all
about CLT*

SETRA'S WOOD
SCHOOL

SUMMER, SUN AND
PEAK SEASON FOR
OUTDOOR PRODUCTS

← SMART BUILDING
IN LINDBÄCKS' NEW
SUPER-FACTORY

The forest is a hot topic

But what do the political parties think ahead of the election?

TALKING ABOUT TIMBER: *Wood's place in future construction?*

“WHAT ARE THE PARTIES’ VIEWS ON THE FOREST, THE WOOD INDUSTRY AND THE FUTURE?”



Investing in sustainability

THINGS ARE GOING WELL FOR the wood industry and for Setra. We are investing in the future as part of our journey from a sawmill business to a modern industrial wood company. We are constantly looking at how we can add more value to our products in order to meet customer demand and increase our competitiveness. In Långshyttan, we are building a new industrial wood centre to manufacture window and door components, plus a CLT factory to produce the cross-laminated timber that is used to build both apartment blocks and industrial properties.

THIS AUTUMN SWEDEN IS HAVING a general election. What our industry needs is long-term political decisions and a clear national strategy. We have therefore asked the political parties what their views are on the forest, the wood industry and the future. How can politicians help the wood industry play its part in attaining the national goals of a vehicle fleet independent of fossil fuel by 2030 and a fossil free Sweden by 2045, while remaining commercially viable? SetraNews has all the latest.

FOR US AT SETRA, it is important to have a close dialogue with our customers. Here in the magazine, you can read about how one of our successful customers, Lindbäck's, has developed an efficient and climate-smart homebuilding process in its new factory outside Piteå.

Enjoy your read!

Hannele Arvonen
CEO

Sustainable Setra

The fact that sustainability runs through the veins of Setra's entire business is made clearer than ever in our Sustainability and Annual Report for 2017. In addition to financial information, you can read about our innovative investments and development projects on health and safety, energy saving and new products that will under-



pin the transition to a fossil-free transport sector. The Sustainability and Annual Report can be read, downloaded and ordered on our website: setragroup.com.

India interested in Swedish pine

The Indian wood industry, and specifically the furniture and joinery industry, is showing strong interest in Swedish pine. Indian architects and designers are also curious about the versatile and sustainable material. This is what industry body Swedish Wood took away from the India Wood trade show on 8–12



March, which it attended with Setra and eight other sawmill companies.

Setra has set up a new company in the UK

Setra's operations in the UK were previously split between the subsidiary M&S Softwood and Setra's sales offices. In a move to optimise and improve the current business in the UK, both operations have now been merged to form the new company Setra Wood Products Ltd. The head office will be located in King's Lynn in eastern England, where M&S had its offices.

“We expect to see many positive gains from the merger. We'll be making better use of our skills and overhauling our distribution and logistics, so we're prepared for the new product portfolio that's being introduced,” says Olle Berg, Market Director at Setra.

SETRANEWS is Setra's customer magazine. It is published in Swedish and English for customers, employees and other stakeholders in Sweden and abroad. The purpose of the magazine is to spread information about the company and tell readers the latest news.

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COVER PHOTO: Ruben Grönlund, Lindbäck's new factory in Piteå. Photo: Simon Eliasson.

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NEW FACES



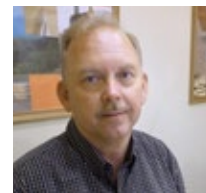
HR Manager

JOAKIM NYQVIST has been in post as Setra's new HR Director since February. Joakim was previously HR Manager for the Manufacturing business area at Nynäs AB.



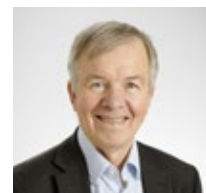
Responsible for CLT factory

ANNA-LENA GULL has been Project Manager for the construction and set-up of the CLT factory in Långshyttan since 1 May. Anna-Lena has extensive CLT experience. She joins us from her own consultancy firm, Innordica AB.



Technical Project Manager

ULF BERGQVIST began his job as senior Project Manager in the technology department in March and will be based in Gustavsbro. Ulf will mainly be involved in planning the trimming and planing line in Hasselfors.



New Board Chairman

BÖRJE BENGTSSON was elected the new Chairman of the Setra Board at the AGM on 26 April. Börje Bengtsson has been a member of the Board since 2014. Börje was CEO of Setra from 2010–2012. He is also on the Board of Mellanskog.

Pine making a comeback!

In recent years, wood has been trumpeted as a renewable building material of the future. At this year's Stockholm Furniture Fair, pine made a comeback as an indoor material and took pride of place in the Trend Exhibition.

"Pine is a versatile material that can take on many different looks, since surface treatment

is so easy. The surface of pine can be sanded and brushed, for instance, to create a range of textures. The surface can also be stained or painted with a multitude of colours and shades," explained Charlotte Dedye Apelgren, Director of Interior & Design at Swedish Wood.



"For me, the distinct growth rings and characteristic scent are the very essence of the Nordic soul"

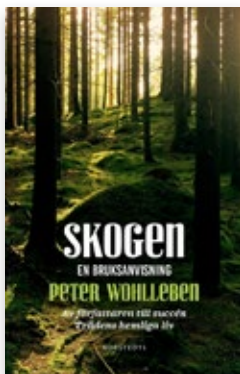
Designer Simon Legald, who created the Pine table, a coffee table in solid pine.

A user manual for the forest

Passionate forester Peter Wohlleben has written several books about forests and nature conservation, making his real public breakthrough with his book *The Hidden Life of Trees*. In his latest work, *Skogen – en bruksanvisning* (The Forest – a User Manual), he guides us and opens our eyes on a journey through the forest.

With enthusiasm and respect for the world he loves, Peter takes us on a detective trail that makes a trip to the forest a special and fantastic experience.

We recognise the homesickness of the spruce tree and the larch's uncertain future. We learn to navigate without a compass or GPS, avoid insect bites, track and observe wildlife and take shelter in a thunderstorm.



Thumbs up for SetraNews!

In autumn 2017, SetraNews commissioned market research company Axånd to conduct a survey of our readers. The purpose of the survey was to measure reading frequency and reactions to the magazine and its content, and also to gather information that might prompt changes to the form and content.

Overall, the results of the survey show that SetraNews is a popular source of news for its recipients. The magazine gets high marks in almost every area and some sections get very high marks indeed. The readers feel it is clear that SetraNews is a magazine from Setra and they also feel that the magazine has had a positive influence on their view of Setra.

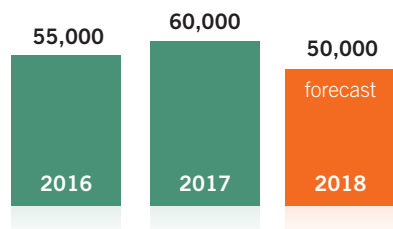
When it comes to potential for improvement, the responses indicate a possible need to change the mix of short and long articles and the mix of topics. In total, 82% of readers state that SetraNews has led to some form of action, which is a very high figure.

THREE WOOD TRENDS

Setra's Market Director Olle Berg takes the temperature of the wood market.

1 Harsh winter has created strong demand

THE LONG, COLD and snowy winter has caused major log supply problems in Sweden, Finland and the Baltics. The pace of production has generally been slow in relation to demand. This, in turn, has driven up the prices of wood products in all markets. The log supply has gradually improved, but recovery from the shortfall early in the year is unlikely to happen in the first half of 2018. Demand is good for Swedish and Finnish producers, primarily due to the lack of Russian goods on the market. With global consumption holding up and reasonable production levels, we remain positive about 2018.



2 Construction slowing

The Swedish market was very healthy in 2016 and 2017, with construction rates of over 60,000 units per year. With a slight slowdown expected in 2018, we may have seen the market reach its peak. The main cause is the turbulence in the housing market. New mortgage requirements combined with expected interest rate rises are creating uncertainty about the future. This has already manifested itself in falling house prices, particularly in the metropolitan regions.

3 Drive to increase wood construction

It is hard to say how the general election in September is going to affect the market and the industry. One positive fact for the industry is that all the parties appear to agree we must continue to build more homes to meet the underlying need. In addition, the parties largely support the idea of expanding wood construction. This guarantees the positive, long-term development of the industry and of wood construction.



Furthermore, Setra is making excellent progress on its component factory in Långshyttan, which is set to begin deliveries in autumn 2018. We have also begun to set up a CLT factory in Långshyttan. This is expected to be completed in 2020. In Hasselfors, we are installing a new trimming saw with integrated planer. This is all part of our ambition to increase our volumes of processed products by 20–25% over the next three years.

Olle Berg is Market Director at Setra. Have you missed any of Olle Berg's outlooks from previous issues? Visit www.setragroup.com/setranews to read more.



Cards on the table!

The past mandate period has been good for the forest industry. We have had a decision on 74-tonne trucks, a national Energy Policy Agreement and a focus on increasing wood construction. But we still need a number of other political decisions and policies. Magnus Berg, Head of Business Policy at the Swedish Forest Industries Federation, sums up the past few years – and draws up a wishlist for the next few.

TEXT: ANNA MATZINGER



WHAT DO THE PARTIES THINK? →

THE YEARS since the 2014 election have been good for the forest industry, largely due to a strong economy. However, the period has also seen a range of political decisions that have been good for the industry, not least in the wood construction and transport sectors. This has been driven to a great extent by unanimity on the issue of climate change.

“There is now widespread agreement that climate change is the biggest challenge of our age. All the parties share that view. There is also a broad political consensus that we need to shift to a bio-economy in order to tackle this challenge.

“The parties may differ slightly on

exactly how we do that, but everyone is on the same page about the basic issue, which creates better prospects for political decisions on this front,” says Magnus Berg.

WHAT WE'D LIKE TO SEE FROM THE NEXT GOVERNMENT

- ✓ A national bioeconomy strategy
- ✓ A national forests programme
- ✓ Rejection of the kilometre tax for HGVs
- ✓ A continued commitment to increasing wood construction
- ✓ Continued investment in research and innovation

Magnus Berg is Head of Business Policy at the Swedish Forest Industries Federation – the industry body for the pulp, paper and wood engineering industries.



6 KEY DECISIONS

Magnus Berg from the Swedish Forest Industries Federation lists six areas where significant policy decisions have been taken over the past mandate period.

1. FOREST

The proposals put forward by the government during the mandate period have focused on exempting more forest from commercial management, which is serious because a growing bioeconomy depends on us being able to use more raw material from sustainably managed forests. Decisions have included an expanded key biotope inventory nationwide and increased information about alternative, less productive forms of forest management. The Swedish Species Protection Ordinance, which is our implementation of a couple of EU nature conservation directives, is also problematic and needs to be re-examined.

2. ENVIRONMENT

On the environmental front, there have been a series of official reports on various environmental taxes, including a nitrogen oxide tax. We do not see such taxes helping to reduce environmental impact, mainly because there are better instruments for cutting emissions. They would, however, have a devastating effect on the industry's competitiveness.

3. TRANSPORT

The decision by the Parliament and the government to green-light 74-tonne trucks was an important one. The Swedish Transport Administration has drawn up a list of roads where these heavier trucks can be driven from 1 July. Having 74-tonne trucks will enable the industry to cut emissions, reduce the number of vehicles and make transport more efficient. The government has also unveiled a proposal for a kilometre tax, or road wear tax, which will be dealt with after the election. If introduced, a tax on distance would severely impact on the potential to use raw material from the forest, both as timber and biofuel.

4. ENERGY

A crucial achievement during the mandate period was the Energy Policy Agreement, which includes a target for 100% renewable electricity production by 2040. The agreement provides the nation with a long-term energy policy that was long-awaited and much needed. We also welcome the decision to exempt primary industry from higher energy taxes on electricity.

5. WOOD CONSTRUCTION

A strong political ambition to increase wood construction has run through the mandate period. The idea is that more wood construction will lead to a lower environmental impact and more jobs across the country, as was mentioned in both the Statement of Government Policy and the Budget Bill. Another key political measure was the funding of the stakeholder association WoodCity Sweden.

6. RESEARCH


Autumn 2016 saw the government launch Testbed Sweden, which involved investing SEK 845 million in a pooling of resources to promote innovation.

What do the


The political parties have shown great interest in Swedish forest. SetraNews has asked the parties to respond to a few forest-

The forest is currently owned by private individuals (50%), private-sector companies (25%), state-owned companies (14%), other private owners (6%) and the state (3%). Is this a good distribution? Or do you want to adjust this in any way? Why/why not?


Ownership

 We have no policies to change the ownership structure. However, we believe that forest owners and companies generally must take greater account of the environment in their forestry work. We also want to increase protection for the forest.

 We have no views on who owns the Swedish forests. Instead, our focus is on all forest being managed in a sustainable way and enough forest being protected.


 We as a party have no views on the distribution of ownership. We do believe, however, that the state-sector owners should lead the way in innovation and in taking responsibility for common interests, such as good nature conservation and preservation of biodiversity.

 For the Centre Party, the right of ownership is a fundamental right that needs to be protected and strengthened. People look after and protect the things they own. We are therefore positive about people and companies owning and managing Swedish forests. State own forests should be reduced and having more more individual forest owners increases the opportunities for growth, development and employment nationwide.

 The way ownership is distributed is not the key issue, because all forest owners have an equal responsibility to comply with the production and environmental objectives set out in Sweden's forest policy. There is, however, a lack of regulatory clarity that makes it more difficult for the

forest owners to carry out their forestry operations. Changes are therefore needed to boost the incentives for sustainable forestry. We want to see better compensation models for the formal protection of ecologically valuable forest. This might involve state-owned forest being exchanged for valuable privately owned forest that needs protecting.

 The proportion of state ownership is reasonable. We need state-owned forest not least as a resource for exchanging with natural habitats that require conservation.

 Private forest ownership has laid the foundation for much of Sweden's prosperity. Every day, Sweden's 300,000 or more forest owners work hard to ensure that we have successful forestry, vibrant rural communities and a good environment. The Moderate Party believes it is important to strengthen the ownership rights of the individual forest owners. State-owned forest can be used to protect forest of high conservation value. A good example is the policy of the coalition government, whereby Sveaskog's land was exchanged for private land.

 The Sweden Democrats feel that the current ownership structure is both unique and positive, contributing to diverse forestry and successful forest industries. We oppose the government's announced inquiry into whether it should be easier for listed companies to acquire land, as we believe this would be to the detriment of private forest ownership.

political parties think?

forests – interest that has increased in recent years as climate change has shot up the agenda. Related questions. Here you can find out – and compare – exactly where the parties stand.

What new areas of use do you foresee for the forest? How will these relate to traditional areas? How can we stimulate and encourage innovation?

Is this something you want to focus on? Why/why not? And if so, how will you drive and encourage this?

Forest as raw material

V We want to stimulate business models that shift from volume to a position higher up the value chain. We are seeing a fall in demand for paper so the forest has to be used for something else, such as more construction. There is a general move towards finding new products that are based on wood raw material and command a higher price.

G The forest's long-term production capacity relies on forestry being conducted within nature's limits. Within these constraints, the forest raw material should be used for purposes that bring most benefit as a matter of priority. Using biofuels instead of fossil fuels is also important. The government's reduction obligation quota system is a vital step in supporting biofuel production in Sweden.

S The forest has a key role to play in weaning society off fossil fuels. We are pushing for more innovation in a circular bio-based economy. The forest could be our green gold. We want to increase the requirement to mix biofuel into petrol and diesel, which will generate jobs in the forestry sector. We want to encourage the replacement of fossil raw materials and increased use of wood in construction.

G Swedish forest needs to play a major role in the transition to a sustainable society. The forest has huge potential to producing new sustainable materials and developing green chemicals. This should be encouraged. A focus on innovation in procurement and research funding is also needed. We propose investing SEK 750

million to speed up the development of air-craft biofuel from forest raw material.

L The forest is going to play an increasingly important role in the bioeconomy, through renewable materials, chemical products, textiles and energy production. Forest raw material is a limited resource and we believe that biofuels, for example, need to be prioritised for aircraft, shipping and heavy goods vehicles, where electrification is not the first option.

E The forest will continue to play a key role in the paper and wood products industry, which brings in over SEK 100 billion in export revenue, and will take on greater significance with regard to biofuel. It is likely that all sorts of new applications will be found for forest raw material in the future.

M Forest raw material can be used to replace plastics and other energy-intensive materials, and to replace fossil fuels. However, this depends on strong rights of ownership. By introducing a national bioeconomy strategy, the Moderate Party believes that the green industries can bring greater environmental and climate benefits.

F Much of the forest's value comes from it being managed and harvested to obtain traditional products such as timber, pulpwood and thermal energy. We also want to support the development of fresh products and applications through investment in new research and technology. We do not believe that politicians should micromanage the way the industry uses the raw material.

Wood construction

V Yes, we want more construction in wood. Our municipalities and other public enterprises, not least our public housing companies, could be more active in demanding more buildings in wood.

G Trees bring the greatest climate benefits if they can be used in buildings and other structures to replace emission-heavy materials such as steel and concrete. From a life cycle perspective, replacing these materials with wood significantly lowers a building's environmental impact. The Green Party wants at least half of all new buildings to have a wooden carcass by 2025.

S Increasing wood construction is an important ambition that we believe municipalities can be more instrumental in achieving through planning work and targeted procurement. We can find ways of driving up demand for wooden buildings by improving awareness.

G Yes. Cutting greenhouse gas emissions from homebuilding is important. The environmental impact of buildings over their entire life cycle must be reduced if our climate goals are to be achieved. Optimum use should be made of every material, taking into account its environmental impact and function. There is potential to expand the use of wood in construction materials and structures, which could also generate new jobs nationwide.

L As economic liberals, we do not believe that politicians should set terms or demands regarding the way a market or

industry operates. Of course building in wood is a positive thing, but climate-smart solutions are driven by technology, development and businesses, not politicians.

E Building in wood offers good potential to reduce emissions from the construction sector. We believe the construction industry itself has the best solutions, as long as the right incentives and demands for energy efficiency and so on are in place.

M So far, the environmental impact of buildings has primarily focused on their operation. However, much of their impact actually occurs during construction. Awareness can and should be raised about this through life cycle analyses that take account of a building's total environmental impact from the first breaking of the ground. The Moderate Party wants to promote greater use of life cycle analysis on new projects in particular, which is then likely to encourage building in wood.

F No other construction technique has developed as quickly as modern wood construction. Building more in wood could bring growth for construction industries and companies in rural areas. It would also stimulate the forest industry. The Sweden Democrats believe that, in order to increase the amount of building in wood, we need more investment in research and development focusing on modern wood construction techniques.


What do the political parties think? – continued


How can the forest contribute to a fossil-free society? For example, what is your view on the use of forest raw material for biofuel?

Should Sweden export more timber and wood products? Why/why not?


Bioeconomy

 We see great potential in using residual products from the forest industry and agriculture to produce renewable fuels. This area needs more political decisions and steering instruments. We also need to make sure Sweden has a permanent exemption for our tax reductions on biogas, ethanol and biodiesel. We support the use of forest raw material such as branches and tree tops for biofuel, but believe that its extraction should not come into conflict with our goals for biodiversity.

 Using biofuels instead of fossil fuels is important. The government's reduction obligation quota system is a vital step in supporting biofuel production in Sweden, not least from forest raw material.

 It is imperative if we are to tackle climate change. Wood raw material will play a key role in replacing fossil fuels and materials made from fossil-based resources. However, the forestry must be sustainable and subject to robust nature conservation requirements.


 Swedish forest needs to play a major role in a sustainable and long-term bioeconomy by providing society not only with renewable fuel, but also new sustainable materials, green chemicals and wooden buildings. Requiring innovation in procurement is a means to stimulate the green transition and an important factor in developing Swedish forest production.

 The forest makes a two-pronged contribution to a fossil free society by capturing carbon and by providing raw material that can replace its fossil equivalents. The bioeconomy has

a major role to play in building a sustainable society for the long term. Expanding the use of biofuel is a positive move. Biofuel is needed in particular for aircraft, shipping and heavy goods vehicles that cannot currently be powered by electricity.

 The report from the All Party Committee on Environmental Objectives states that it is possible to increase the harvesting of forest while at the same time maintaining the objectives for nature conservation. Different parts of the tree are used for different purposes. What is not used for the production of wood products and paper can be used for biofuel.

 The forest has a central role to play in the green transition and is one of the keys to breaking our dependence on fossil-based resources. Thanks to its forests, Sweden is well placed to produce large quantities of high-quality biofuel and develop new bio-based products. We believe there is a major need to create better conditions and long-term ground rules for renewable biofuels and to secure a broad raw material base. This requires the industry to take the plunge and make larger investments in plants for the production of biofuels, for example.


 The most effective approach is probably woodchip incineration using established technology, which is generally positive. Vehicle fuel from the forest is not something we oppose as long as the technology is competitive, but it is not something the state should force into being at any price. High-tech biomaterials probably generate greater added value, but that is not really a political issue.


Export

 We would like to see Sweden export more wood products. There is a great deal to be gained from exporting wood-based products that are higher up the value chain and therefore command higher prices. With a more sustainable forest policy, the industry will need to prioritise quality over quantity.

 The amount of forest raw material that we can extract from the forest sustainably must be used where it can have the greatest environmental benefit. This thinking should inform forest policymaking and our approach to exports. However, we cannot politically determine how much forest is exported.

 For the first time in the 2000s, exports are growing in all 21 counties of Sweden. Forestry exports rose in 2017, bringing growth, jobs and prosperity. We Social Democrats want to support this positive trend. The government has therefore drawn up an export strategy and is now investing resources so that every county can have a regional export centre that supports small and medium-sized enterprises in their export work.

 Yes. Sweden's forestry needs to be sustainable over the long term, with higher production, innovations, exports and more protection for environments of high conservation value. Sweden should export both traditional wood products and processed goods such as biofuels and green chemicals, as well as knowledge about how forestry can contribute to a green transition. Creating good conditions for forest companies is fundamental to their ability to grow and export their goods. The companies' costs need to be brought down and red tape kept to a minimum.

 We are very keen to promote Swedish exports of timber and wood products, for example. The key is to make sure that Swedish companies are able to compete in a global market. And to that end, it needs to be easier to run a company, with lower taxation on jobs and enterprise.

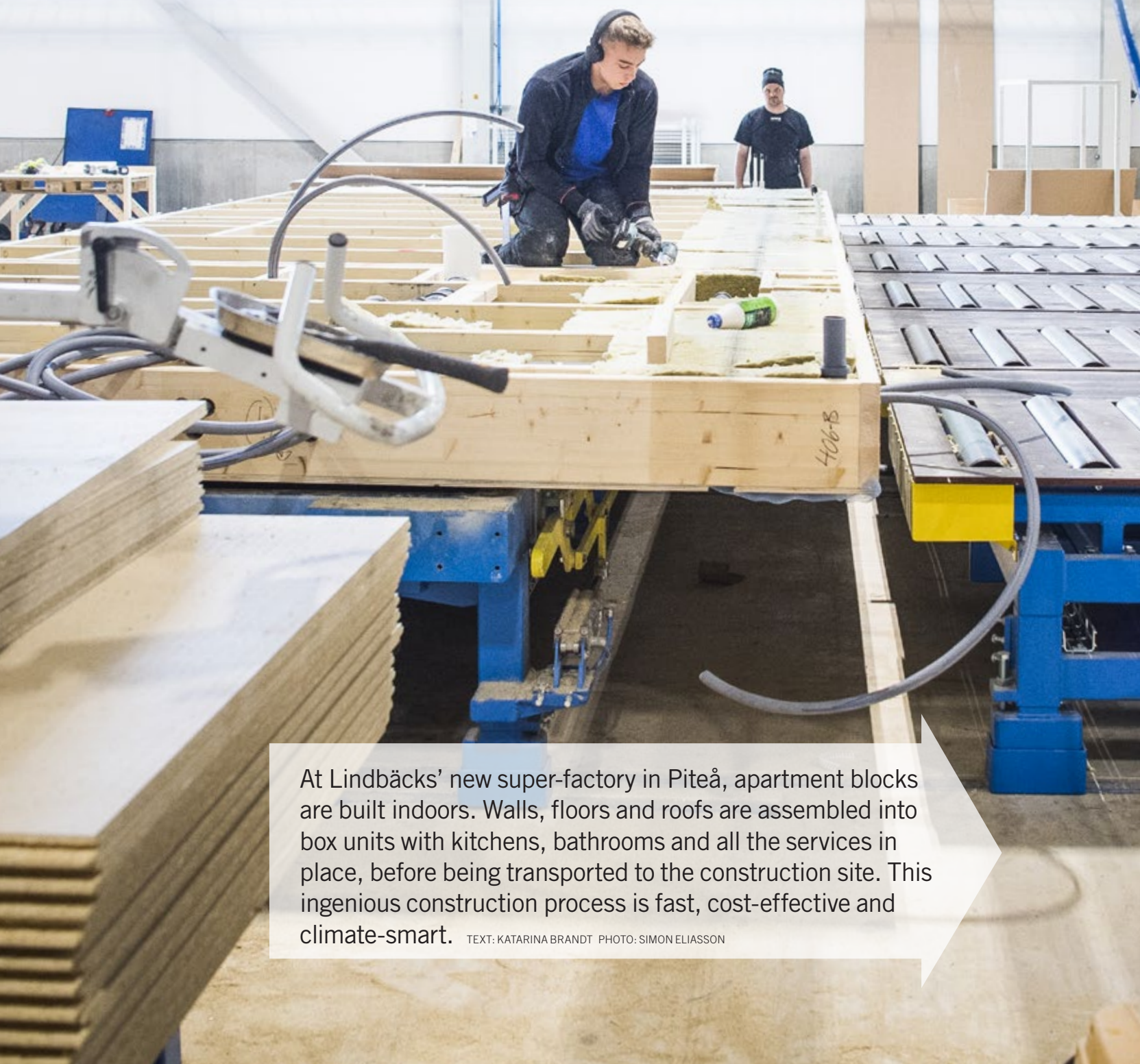
 Sweden must continue as a major exporter of timber and wood products. Ultimately, the customers decide what sells. We politicians can make things easier by creating good trading relations, for example by combatting trade barriers between countries. We are also working to ensure good competitive conditions for Swedish industry through competitive taxation, reduced red tape and lower social security contributions for companies.

 The Moderate Party welcome every export opportunity, whether for timber or wood products of different kinds. To encourage exports and boost competitiveness, we need to remove obstacles, promote free trade and ensure that the forest industry's growth is not restricted by a shortage of domestic wood raw material. Safeguarding rights of ownership and Swedish self-determination over the forests in an EU context should maintain a good supply of wood raw material long into the future.

 Definitely. Greater export revenue improves employment and prosperity. As politicians we should, however, avoid specifying the kind of exports we want to support and leave it to the market. Sweden Democrats, want to stimulate exports by boosting competitiveness via cuts to wage costs and bureaucracy, plus investment in technology and development.

Welcome to the super-factory!

A giant home for building homes



At Lindbäck's new super-factory in Piteå, apartment blocks are built indoors. Walls, floors and roofs are assembled into box units with kitchens, bathrooms and all the services in place, before being transported to the construction site. This ingenious construction process is fast, cost-effective and climate-smart.

TEXT: KATARINA BRANDT PHOTO: SIMON ELIASSON



The factory is 360 metres deep and almost 100 metres wide, with a production area of 25,000 square metres.

→ **IT HAS, TO SAY THE LEAST,** been a hectic start to 2018 for Lindbäck's Bygg. In December last year, the company opened its new factory at Haraholmen in Piteå. Now they can look back on an intense few weeks of setting up, with plenty of testing and calibration of the new machines.

“We’re properly up and running now, although it will take time to get everything fully operational,” says Purchasing Manager Lars Eriksson, who takes us on a tour of the impressive factory along with his colleague Linda Öman.

From village sawmill to industrial group in 90 years

Wooden building manufacturer Lindbäck's began life as a small village sawmill in tiny Kallfors, just outside Piteå in the far north of Sweden, 94 years ago. Since then, the family company, whose main business is industrial wood construction, has grown into a group with almost 500 employees,



Proud employees at Lindbäck's Bygg – Linda Öman and Lars Eriksson.

production and headquarters in Öjebyn, Piteå, and offices in both Stockholm and Gothenburg.

The new factory sits right by the harbour at Haraholmen just outside Piteå, near the rail line and the main road that joins up with the E4 highway. This offers the potential to explore new transport options.

“Most of the shipments to and from the factory go by road, but we’re looking

“We want to deal with deviations and improvements early on in order to ensure good quality”

into the possibility of using other modes of transport,” explains Lars Eriksson.

Operations in the factory are planned in meticulous detail and are both logical and easy to understand. Production is one single flow here, instead of having stations spread all over the factory floor. Although this is more demanding when it comes to spotting and rectifying deviations, it has been a conscious strategy from the outset.

“Our production system operates on the Lean model and we want to deal with deviations and improvements early on in order to ensure good quality,” says Linda Öman.

The building’s load-bearing posts are 14 metres apart so that the large apart-

ment modules have space to grow step-by-step. By the time the box units reach the construction site, all the services are in place, as well as fully fitted wardrobes, kitchens and bathrooms.

Solar panels make the factory self-sufficient in electricity

The enormous factory is 360 metres deep and almost 100 metres wide, with a production area of 25,000 square metres. That is almost the size of seven football pitches.

Sustainability is a common thread that runs through the business. For example, the factory’s roof is covered with 9,500 square metres of solar panels, which will supply the business with all the electricity it needs over the year. In addition, the factory uses surplus heat from the nearby Sunpines plant, which manufactures renewable diesel from tall oil and waste products from the local paper mills.

We pass a number of wall units to which nail guns are attaching cladding at



Setra packs the glulam according to Lindbäck's wishes for a more efficient construction process.



Operators put together the volumes step-by-step at stations along the assembly line.



The new factory builds homes in a healthy and dry indoor environment.

incredible speed. They think they are soon going to need employees whose main job is to keep the machines topped up with nails at all time.

“With industrial construction, we can provide a more financially sustainable offer for our customers”

Lean philosophy unites Setra and Lindbäck

Setra has a stake in the game, with the unit in Långshyttan supplying all the glulam used by Lindbäck. Thomas Kling, glulam product specialist at Setra, sees great potential in the collaboration and looks forward to the companies developing and improving together.

“It has been interesting for us to see Lindbäck also applying the Lean philosophy to its production. Just like at Setra Långshyttan, they work on continuous improvements to drive up production efficiency. This provides an opening to exchange experiences and learn from each other,” says Thomas Kling.

Setra Långshyttan is now working on deliveries to Lindbäck in kit form. This means that instead of delivering lengths and dimensions in several packages, the packages are now tailored to Lindbäck’s



Ruben Grönlund is a team leader with responsibility for one of the stations in the factory.

wishes and transported directly to the relevant workplace. This cuts the time spent on handling materials and makes construction more efficient. Setra is also constantly working to improve and refine its product. A good example is the balcony beam that has been developed specifically for Lindbäck.

Lars Eriksson is confident that wood construction is going to increase, not least because of the housing shortage in Sweden and the fact that a modular five-storey apartment block in wood can be assembled in just 10 weeks, once the slab has been cast.

“Industrial construction also means we can improve health and safety for our employees, reduce material waste, speed up

the pace of production and ensure quality for our residents, while at the same time providing a more financially sustainable offer for our customers. In addition, we reduce the risk of exposing the structure to moisture and bad weather. I am convinced that industrial construction in wood is the future when it comes to getting more housing built,” concludes Lars Eriksson.

LINDBÄCKS' SUPER-FACTORY IN PITEÅ

Investment cost: Approx. SEK 550 million

Size: 42,000 square metres

Capacity: 1,600 apartments per year

Jobs: 150

Summer is here

TIME FOR OUTDOOR DIY

The summer sun is finally here – and so is the peak season for outdoor products. Top picks include old favourites like our Polar Decking, popular newcomer the undercoated Laminated Beam and our distinctive Laminated Wood Panel, made from slow-growing spruce.

TEXT: ANNA MATZINGER



Choose the right decking

Slow-growing pine from the Arctic Circle gives our ever-reliable Setra Polar Decking a quality, fine-knotted structure and an uncommonly attractive appearance. Lengths of up to 6.0 m make fitting a breeze and keep wastage to a minimum.



Strong character

Setra's Laminated Wood Panel is made from slow-growing spruce. It is dimensionally stable and durable, with a low tendency to split. It can be fitted vertically or horizontally. Available ready-painted or untreated, in 4.8 m lengths with dimensions of 25x225 mm.

Undercoated Laminated Beams

Hi Tomas Kling, Setra's Glulam Product Specialist! In May, you launched an undercoated Laminated Beam in seven dimensions.

"The undercoated Laminated Beam is a response to huge demand from our customers. Around 70% of the Laminated Wood Panel we sell is undercoated, and now it's the right time to offer the same service for our beams."

What are the main advantages?

"An undercoated beam ensures shorter lead times from assembly to the point when the project can be considered finished. As a builder, you're no longer so dependent on the client, with a margin of six months until final topcoating. You're basically able to erect more of an outdoor structure within the same timeframe, as you don't have the same pressure to add the topcoat."



Thomas Kling, Glulam Product Specialist, Setra Långshyttan presents the all-new undercoated Laminated Beam.

New!





The Johansson family's house is clad in horizontal Laminated Wood Panel. The boards can also be fitted vertically, or why not have a mix of both?

LAMINATED WOOD PANEL

Beautifully simple

THE WHITE HOUSE on Skede Udde outside Linköping is home to Jimmie Johansson and his family, wife Erica and children Hampus and Filippa. They have lived here for 13 years and done the house up themselves. Three years ago, it was time to replace the facade.

“We used to have a plastic facade and that wasn't great, so when we decided on a change we drove around looking at newly built houses to get some inspiration. After a while, we agreed that horizontal cladding was the one for us,” says Jimmie.

Jimmie and Erica wanted broader wood cladding than standard, “so it wouldn't look too stripey”, and they found Setra's Laminated Wood Panel at their local builders' merchant, Beijer. As it was very new, no other house in the neighbour-

hood had the cladding, so Jimmie and Erica just had to buy a board, take it home and see what it looked like.

“We knew instantly that this was what we wanted. We put it up ourselves and it went really smoothly. Glulam is a forgiving material. All the boards are exactly the same and they don't mark as easily as regular wood, so we were very happy,” says Jimmie.

And although doing up a house never really ends, there are now no new projects on the horizon. At least if you ask Jimmie.

“My wife is bound to have a different view. If you ask her, we have at least 10 projects that we could get our teeth into. But for the moment I'd say no, we don't have any urgent jobs that need doing,” says Jimmie.



SETRA ATTENDING THE VENICE ARCHITECTURE BIENNALE

Wood and new wood construction techniques are the main theme of the Swedish pavilion at this year's huge Venice Architecture Biennale. Setra is attending, of course – and contributing materials to the exhibition in the Serra dei Giardini greenhouse. “This is a great chance to meet new target groups,” says CEO Hannele Arvonen. TEXT: LENA LIDBERG

THE PRESTIGIOUS architecture festival is held every two years and attracts hundreds of thousands of international visitors to Venice. The 2018 event opens in late May and runs until the end of November.

This year's Swedish pavilion focuses on how architects can work with wood and how new techniques can be used to build in wood. The pavilion's exhibition and programme have been put together by the professional organisation Architects Sweden, construction company Folkhem and industry body Swedish Wood.

“When Architects Sweden asked whether we'd like to be involved, we said yes straight away. The Biennale allows Setra a chance to be seen in a new context, take part in panel debates and customer visits and make important contacts for the future,” says Hannele Arvonen.

Focus on the forest

The Swedish programme is based on the 2030 Agenda and the UN's Sustainable Development Goals. There is a particular focus on the forest as a renewable resource, wood as a construction material and the advantages of this raw material in urban planning.

“We want to show how you can work with wood to achieve the climate goals. Wood can't do everything, but it is the only building material that can be planted,” Tove Dumon Wallsten, project manager for Architects Sweden and coordinator of the overall programme, points out.

Attending the Venice event is entirely in line with Setra's sustainability work, for which the 2030 Agenda and the UN's SDGs form an important foundation.

“One of our own strategic goals is that by 2025 Setra will be the wood products company with the clearest sustainability profile. By 2020, for example, we aim to make our energy use 20% more efficient,” says Setra's Sustainability Director Charlotte Thedéen.

She emphasises that there are many sides to the concept of sustainability –



Lara Lesmes and Fredrik Hellberg at Space Popular worked with Setra on the Biennale. Inspired by the crofter's cottage and its chimney, their project highlights the possibilities of decorating a house with colour and ornamentation.

including everything from responsible forestry and biodiversity to business ethics and safe workplaces.

Building relationships

In commercial terms, the Architecture Biennale is expected to raise awareness of what Setra offers in terms of cross-laminated timber (CLT) and components for use in windows and doors.

“CLT is not just a great building product – it also has many benefits relating to sustainability. The market is currently quite small, but it's growing rapidly. There's a lot of talk about CLT at the moment in Japan, the UK and Sweden,” states Setra's Market Director Olle Berg, who will be attending the opening ceremony of the Biennale in late May, alongside Charlotte

Thedéen and Hannele Arvonen.

“We'll be there to learn and to share Setra's know-how. How can we best help architects, designers and structural engineers to make their material choices? Accessing new networks is crucial in securing our long-term competitiveness,” says Hannele Arvonen.

SWEDISH PAVILION

The main theme of Sweden's pavilion is wood and new wood construction techniques. The programme, called *Greenhouse Garden – Reflect Project Connect*, is a joint venture by Architects Sweden, Swedish Wood and Folkhem, with support from the Swedish Institute.

WOOD SCHOOL

CLT revolutionises wood construction

In recent years, cross-laminated timber (CLT) has taken on an increasingly prominent role in Swedish construction. And the eco-smart material has a lot going for it, including its dimensional strength and its high load-bearing capacity in relation to its own weight. TEXT: KATARINA BRANDT

THE STRUCTURE OF CLT IS AS SIMPLE as it is ingenious. The prefabricated solid panels are made up of planed timber that is glued together in alternating layers for increased dimensional stability. The result is a structural component that is both strong and stiff in relation to its own weight. Its strength and dimensional stability allow for flexible architectural solutions. Using precision CNC technology, a great deal can be prepared in advance by the manufacturer. Large shapes or holes might be cut out in the factory, for example, to make things easier on the construction site.

A material with many advantages

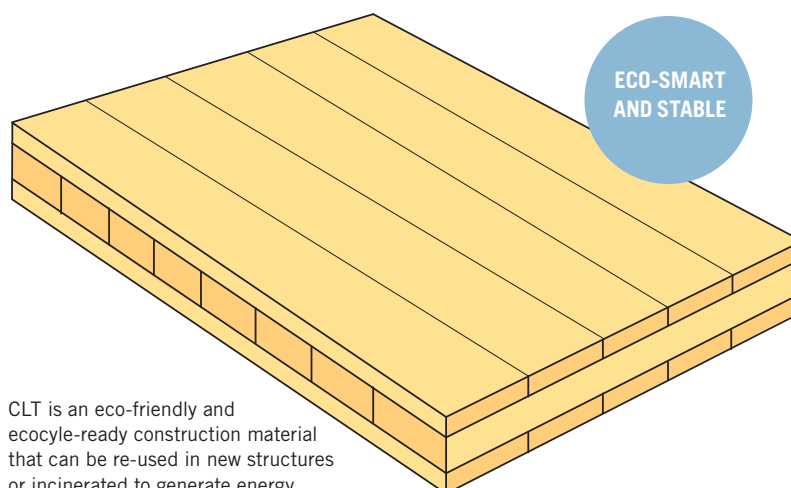
Anna-Lena Gull, who recently joined Setra as Project Manager, will be responsible for building up the new CLT factory in Långshyttan over the next two years. She will also be establishing Setra's CLT business, covering everything from manufacture and sales to logistics and peripheral services. Anna-Lena has extensive experience of working with CLT and appreciates its many advantages as a material.

"I'd like to put forward two hard and two soft benefits. First and foremost, building with CLT is quick and easy, but it is also a sustainable and climate-smart material that additionally helps to create a good work environment for the construction workers.

New approach ensures total control

CLT manufacturing takes a large sheet and then cuts it down into smaller units. Modern CNC technology produces precision cut components that fit together perfectly. This precision and simplicity make CLT a popular material among carpenters.

However, the most important arguments in favour of CLT relate not to the material's properties but to what it does for the project. Building with CLT is an entirely different approach that gives complete control from idea to completion. Logistics, delivery and installation are all



CLT is an eco-friendly and ecocycle-ready construction material that can be re-used in new structures or incinerated to generate energy.

FIND OUT MORE IN SWEDISH WOOD'S CLT HANDBOOK

Last year, Swedish Wood launched a CLT Handbook containing comprehensive information to help professionals design and plan structures using CLT. The 188-page book is just one of Swedish Wood's handbooks for building in wood. The handbook can be ordered from Swedish Wood's online store – svensktra.se/webbshop



planned in advance, resulting in fewer decisions and thus fewer errors. The sheer speed of assembly also makes the process cost-effective.

CLT can add value to the raw material

Another benefit is that you don't have to use the very finest materials to get a good product. This can add value to the raw material that traditionally goes unused when manufacturing mass timber products. Being able to use up more of the log also keeps more carbon captured within the wood. In addition, the solid CLT panels don't have to be used everywhere. In fact they work excellently in composite structures that employ other construction materials. This in turn allows for a structure to be optimised on many different fronts, such as cost, fire safety and acoustics.

"Demand for CLT has really taken off in recent years and now there is a growing interest in using the material for apartment blocks and industrial buildings. Locating the CLT factory in Långshyttan, close to the glulam production site, is good for Setra as the products have various commercial synergies," concludes Anna-Lena Gull.

A climate-smart choice

CLT is a climate-smart choice, because it is made from renewable raw materials and is manufactured using an energy-efficient process. A building that contains 60 cubic metres of CLT stores over 45 tonnes of carbon dioxide over its lifetime. That equates to the emissions of a new petrol car driven the length of Sweden 184 times.

TALKING ABOUT TIMBER

Of all the building materials, wood has a special status. It is renewable, ecological, environmentally friendly and climate-smart, which means there are plenty of good reasons to choose wood. We asked three architecture students what they think about wood's future in construction. TEXT: KATARINA BRANDT

What role do you think wood will have in future construction?



JONATAN URPIALA
IS IN HIS THIRD YEAR AT UMEÅ SCHOOL OF ARCHITECTURE

“For me, the biggest factor is still the environmental benefits”

“Wood is an important material for the future. It's a material with huge opportunities and minor limitations that are easy to be creative and play with. It's also living and renewable and offers the potential to design pleasant and healthy indoor environments. The building processes are getting shorter as industrial wood construction grows. New products such as CLT are being developed as an alternative with similar properties to concrete. For me though, the biggest factor is still the environmental benefits. We're going to need to make more informed material choices that consider their environmental impact, and I see building in wood as a good option for the future.”



GUSTAF RIDDERSTRÖM
IS IN HIS FIFTH YEAR AT CHALMERS SCHOOL OF ARCHITECTURE IN GOTHENBURG

“The move from tree to wood is not much of a leap, which makes it an easy material to understand”

“It feels to me like wood has made a comeback almost like a new material. It's a classic construction material that has taken on a new vitality and moved forward with new products and treatments. This means that the material can be used in different and exciting ways. The move from tree to wood is not much of a leap, which makes it an easy material to understand, in contrast to concrete and steel, which don't occur naturally. Wood certainly offers many options, but we also need to recognise its limitations and the fact that it's not right for every situation. Here in Sweden, I see wood as the obvious go-to material, now and in the future. It has strong associations with our landscape and our traditions.”



KARL WARROL
IS IN HIS FOURTH YEAR AT LUND SCHOOL OF ARCHITECTURE

“We have a lot of forest in Sweden and wood is a classic building material here”

“Personally, I love wood and it feels to me as if interest in wood has grown generally. We have a lot of forest in Sweden and wood is a classic building material here. It's honest somehow and a material that everyone can relate to. It also feels as if wood has really been on trend in recent years. Wood is appearing in more and more tall buildings, not least the blocks in Sundbyberg designed by Wingårdhs, which have attracted a great deal of attention. It's used in the facade cladding and the exterior structures. Of course it's also an interesting material environmentally, which is one of the reasons I believe wood has a future in architecture.”