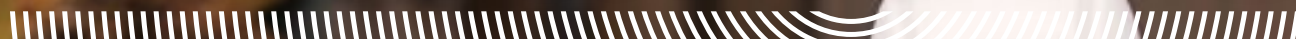


SetraNews

January 2016



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Value-creating cooperation

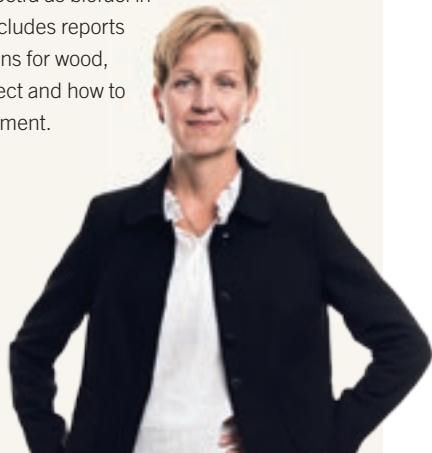
REGARDLESS OF WHETHER we are a customer or a supplier we share each other's value chain and have a shared goal: to create customer benefit at every stage. Cooperation and constructive dialogue offer major opportunities for value creation without major investment. The "4m China" project, which you can read about in this issue of SetraNews, is an excellent example of this value-creating cooperation. It shows that when our raw material suppliers provide the sawmill with the right lengths directly from the forest, sawmill production is optimised, container load factors are maximised and the standard length requirements of our customers, Chinese cladding producers, are met.

THE SWEDISH WOOD PRODUCTS Industry has major exposure to North Africa and the Middle East. These regions have been characterised by turbulence for many years and their development is of major significance for international trade in wood products. For Setra, sales in these markets account for more than 20% of total sales. These regions have major potential. Their growing, young populations want to build for the future which has resulted in strong wood consumption for some time. In our market outlook the focus in this issue is on Egypt, the export market which is Sweden's second largest after the UK for sawn wood products.

IN SETRA'S WOOD SCHOOL there is an opportunity to learn more about bioproducts – "what's left over" when we saw a log. You can also join us on a customer visit to E.ON which uses a green special mixture from Setra as biofuel in its boilers. This issue also includes reports on new innovative applications for wood, the Driver-check safety project and how to make a natural value assessment.

Enjoy the newsletter!

Hannele Arvonen
CEO



SetraNews is Setra's customer newsletter. It is published in Swedish and English for customers, employees and other stakeholders in Sweden and abroad. The purpose of the newsletter is to spread information about the company and tell readers about the latest news. **Print run:** 4,900.

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Setra invests in the units

NEW INVESTMENTS Setra decided on a number of investments in several of our units in 2015. These include a new sawmill infeed system and a new progressive kiln in Kastet, a control system and log saw in Färila, camera alignment of the trimmer in Malå as well as improved timber grading and upgrading the edger in Rolfs. Investments are also being made in the processing unit in Skutskär in the form of strength grading and precision cutting.

"These investments are intended to further improve efficiency and at the same time strengthen Setra's long-term competitiveness. They also increase our flexibility and ability to meet customer demands and further customise our offering

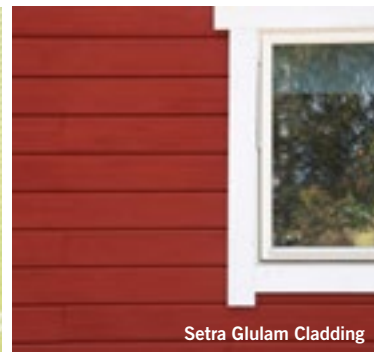


to both the building materials trade and industry," says Jonas Björnståhl, Production Director at Setra and continues:

"We need to invest in our facilities in order to create competitive productivity throughout the entire flow."



Setra Facade Cladding



Setra Glulam Cladding

Make 2016 colourful!

TREND Colourless is the last thing we can say about 2016. If the trend spotters have got it right, we will be leaving white behind us and choosing stronger tones such as rich pastels of apricot and mint green. Inspi-

ration from nature is still important and to stop us from going over the top the grey, brown and beige colour scale will still function. Preferably combined with slightly dirty, burnt tones in orange for example.

Extend – with a grill lodge!



CUSTOMER Haparanda Wood Art manufactures and sells garden and summer buildings from its own factory in Haparanda in northern Sweden. Products include summer houses, saunas and grill lodges as shown in the picture. Setra Rolfs is the sole supplier of wood products to Haparanda Wood Art. Approximately 500 grill lodges are supplied throughout Europe in a single year.

Full speed ahead for Setra Plusshus

NEW CONSTRUCTION Setra Plusshus can put an exciting 2015 behind it with a number of projects both completed and started. Industrial-scale construction is flexible, efficient and suitable for a hot housing market. Here are some current projects in the Greater Stockholm area.



Vällingby Parkstad. Developer: Andersson Company.



Gudö Park in Stockholm. Developer: Järntorget.



Furuhusen in Stockholm. Developer: Erik Wallin.



Vårvetet in Stuvsta. Developer: Erik Wallin.

BOARD GAME ABOUT VALUES AND FEEDBACK

EMPLOYEES In 2015 Setra developed a board game about Setra's values which allows behaviour and how we give each other positive feedback to be discussed in a tangible way. In the game about values, employees can train in living up to our values and finding successful behaviour that helps them in their work. This is achieved using dilemma questions and feedback cards. There are also factual questions to help people learn more about the wood in-

dustry in general – and Setra in particular. All Setra employees have played or will play this board game which is based on Setra's values: commitment, innovation and responsibility. Studies show that value-driven companies are more profitable, have higher growth and enjoy a higher level of customer satisfaction. They also experience improved cooperation and greater job satisfaction.



New
face



HANNA PERSSON

Hanna Persson is a new Raw Material Coordinator at Setra Malå and Setra Rolfs. She started her employment in September last year. Hanna has a Master of Forestry degree and has also studied civil engineering.

SETRA FURTHER DEVELOPS ITS PROCESSING CONCEPT

BUSINESS DEVELOPMENT Setra has adopted a strategic direction for further development of its processing business. The focus on fewer but larger and more efficient units with a clear production structure will strengthen competitiveness. In line with this focus, the planing mills in Skutskär, Malå and Rolfs will be further developed and specialised while operations at the planing mill in Valbo will be gradually phased out during 2016.

"By developing our business in this way we create better and more competitive offerings for our building materials trade customers in Scandinavia. At the same time targeted investments in existing units will provide a broader market portfolio," says Olle Berg, Market & Business Development Director at Setra, and continues:

"We are now trying to work as fast and efficiently as possible to move the product range from the planing mill in Valbo to other units which includes identifying essential improvements in the production lines in order to make this work."

Turbulence behind decline in North Africa

North Africa and the Middle East are markets whose demographics and attitude are on the right side when it comes to applications for wood. Growth has been considerable for many years. But, at the same time, political turbulence and a shortage of US dollars have led to major problems.

IN THE WAKE OF the financial crisis in 2007, the Swedish wood products industries became seriously aware of North Africa. When the flow of softwood products from Europe to North America – which before the crisis had an annual total of about 3.5 million cubic metres – more or less disappeared, the export focus was forced to change. North Africa, which was not as badly affected by the crisis, in many ways came to the rescue of both the Swedish and Finnish wood products industries. This took place at the same time as Russia turned its gaze on China and reduced its export volumes to North Africa in particular.

In 2014 four countries from North Africa/Middle East were among Setra's top ten export markets. Together Algeria, Egypt, Morocco and Saudi Arabia accounted for 16% of total sales in the same year. And development has looked very positive for many years. A growing, young population in this market had led to strong wood consumption. There has been, and remains today, a willingness to build. The market has grown by 3–4% per year.

Dollar shortage and turbulence

After the Arab Spring, with political protests and revolt, the North African market has been surprisingly stable in terms of export volumes from Sweden. However, at the beginning of 2015 problems started to appear, particularly in Egypt. The country experienced a shortage of US dollars which meant that it became increasingly difficult to get paid for wood

products exported to Egypt. The general turbulence in the region has resulted, among other things, in reduced tourism and a weaker inflow of US dollars from Saudi Arabia as well. There is local currency in the country, consumption remains high, but at the time of writing it is not possible to exchange the currency for US dollars.

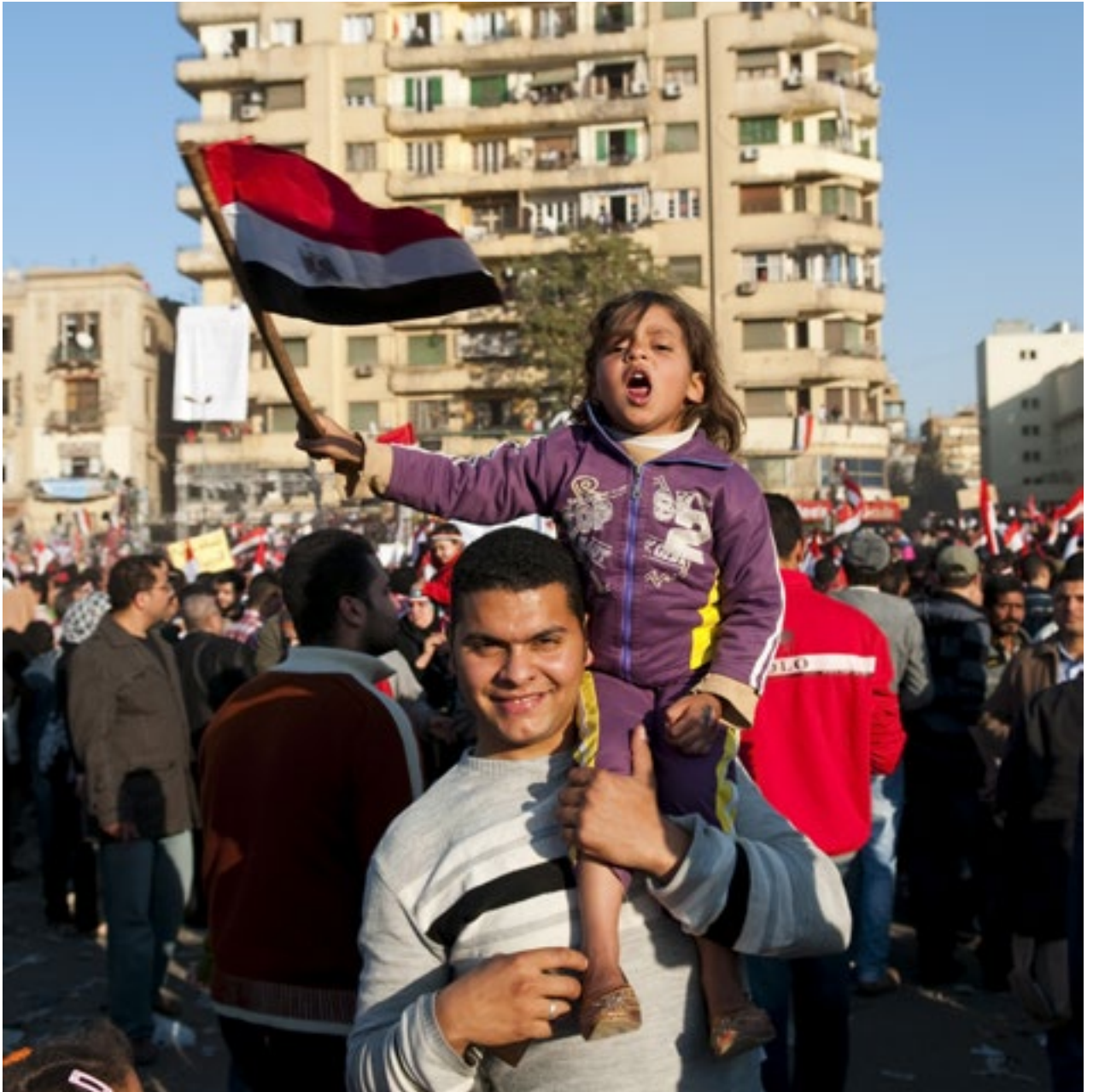
Up until August 2015 exports functioned relatively well. But during the autumn the shortage of dollars became even more apparent. And as the Russian wood products industry has now turned volumes back to North Africa, exports to China having ground to a halt, the competition is more intense. There will be price pressure throughout the entire region which will also affect countries such as Algeria and Morocco. A lower oil price has also led to lower revenues for many of the countries that receive exports from the Swedish wood products industry. This further slows progress and is a hard blow for the industry in general.

So, in short, North Africa is a very turbulent market. The problem is that the wood products industry has major exposure to this market. But at the same time this is a market that still has strong potential and a need for wood. The current problems in the region probably will not be solved in the short term. Changes can only be made gradually.

Have you missed Olle Berg's outlooks in previous issues?
Visit www.setragroup.com/setranews and find out more.

Olle Berg, Market & Business Development Director, Setra.

ON THE FOLLOWING PAGES you can read an in-depth article about Egypt. We give a picture of the country and talk to Egypt-expert Hamdi Hassan to sort out the concepts and look at future prospects.



The Arab Spring which started in 2011 was a series of political protests in North Africa with demands that included democratic reforms.

A growth nation framed by unrest

There are few countries with such a myth-ridden and written-about history as Egypt. Since the Pharaohs built their pyramids the country has been ruled by several empires before gaining independence in 1922. In 2011 the protest movement that came to be called the Arab Spring swept across the region like a wildfire and President Mubarak was forced to step down. Free elections have been held but the instability continues which affected exports of wood products to the country during the autumn.

TEXT: KATARINA BRANDT

EGYPT IS THE MOST highly populated country in the Middle East and with its 88 million inhabitants is the third-largest African country in population terms after Nigeria and Ethiopia. The population is heavily concentrated to the Nile valley and the river delta is one of the most densely populated areas in the world. The previously high demographic growth has slowed but the population is still young. Every third person is under 15 and only one in twenty is over 65.



Egypt has a young population where every third person is under 15 and only one-in twenty is over 65.

Egypt has a substantial housing need but no forests of its own which means that construction timber must be imported from Europe. In 2014, Egypt was the second-largest export market for the Swedish wood products industry.



Four wars against Israel between 1948 and 1973 as well as major fluctuations in domestic politics had an adverse effect on Egypt's economy. Growth under President Nasser's successor Anwar Sadat was high but also led to increasing economic inequality and burdened the country with substantial debt.

The peace agreement with Israel at the end of the 1970s isolated Egypt from the rest of the Arab world both politically and economically. The fall in the price of oil in the 1980s and reduced revenues from the Suez Canal increased the country's dependence on loans.

Growth followed by decline

At the end of the 1990s, trade liberalisation, privatisation and deregulation had a positive economic effect at the same time as unemployment rose. These measures gave growth a boost but this then took a step back again with the 2007 global financial crisis. Egypt coped with the crisis fairly well up until the political turbulence at the beginning of 2011. This led to the closure of the stock exchange and the country's banks as

well as a fall in tax revenues. Foreign currency reserves were rapidly depleted and investment in both agriculture and industry came to a halt.

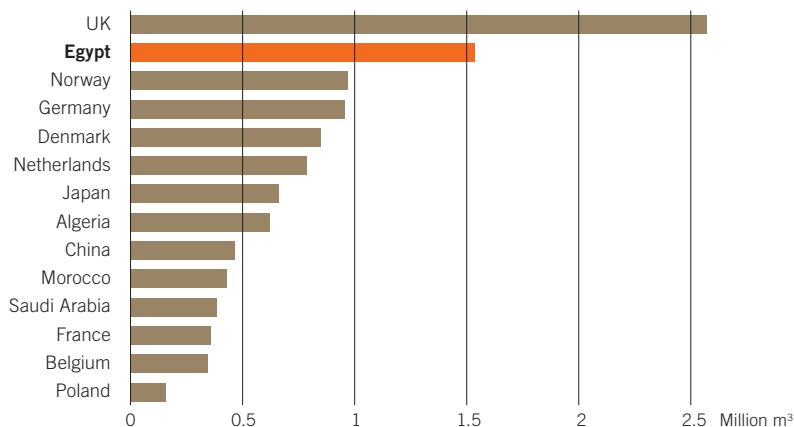
The broad-based popular insurgency in 2011, inspired by the Arab Spring, ended with President Hosni Mubarak, the country's ruler for 30 years, being forced to step down. The Egyptian military took over power until the election in 2012, when Mohammed Mursi was elected as president. Both the outside world and Egyptians themselves hoped that the presidential election would stabilise the economy and political situation. Instead the opposite happened. The newly elected president, with a background in the Islamic movement the Muslim Brotherhood, became embroiled in conflicts with his political opponents. During 2013 protests against Mursi and the Muslim Brotherhood gained momentum. In July 2013, the military intervened, ousted Mursi and appointed Adly Mansour as interim president. In May 2014 the former military leader Abdel Fattah al-Sisi won the presidential election without any real

opposition. The final step in the military roadmap towards civilian government took place with parliamentary elections in autumn 2015. Only 26% of Egyptians voted in the first round of elections in October. The low voter turnout gives a strong indication that the political structures in Egypt are very weak. ■



Egypt's President, Abdel Fattah al-Sisi casts his vote in the second election round at the end of November 2015.

SWEDEN'S EXPORTS OF SAWN SOFTWOOD PRODUCTS (to the largest markets)



Total exports: 12.3 million m³

Source: Statistics Sweden

EGYPT'S STRENGTHS AND WEAKNESSES



Strengths

- Financial support from the Gulf states
- Improved growth prospects
- Low foreign debt and debt service ratio

Weaknesses

- Unresolved conflict between the military-led regime and Islamists
- Public finances unsustainable over time with a large budget deficit
- Lack of access to hard currency
- Weak business climate with a lack of funding and unpredictable legal system

Source: Swedish National Export Credits Guarantee Board

Greater stability is needed to give Egypt new impetus

SetraNews had a chat with the political analyst and Egypt expert Hamdi Hassan. In his opinion, Egypt's political and economic instability combined with a lack of political vision have contributed to the problems now facing the country. TEXT: KATARINA BRANDT

SINCE PRESIDENT AL-SISI took over in 2014, Egypt has received financial support from a number of Gulf states which has temporarily improved the economic situation. However, Hamdi Hassan believes that this money has been put to the wrong use.

"The government has chosen to invest in gigantic national projects instead of doing what they did in Asia, namely encourage small businesses. It would have been better to provide loans to small and medium-sized businesses than lock up the money in these enormous projects."

One huge project that Hamdi Hassan mentions is the planned construction of a 700 square kilometre city to be located east of Cairo, closer to the Suez Canal. Today almost 20 million people live in Cairo but due to massive demographic growth the number of inhabitants is expected to double by 2050. The idea is to relocate all administrative buildings and Egypt's financial centre to the new city. This alone is expected to cost almost 400 billion Swedish kronor.

Hamdi Hassan points to three main factors that have caused economic development to grind to a halt. To start with, unease in the country has had a big impact on tourism. Revenues from the Suez Canal, which previously brought in 5 billion every year, have decreased, as has the inflow of money from the approximately 10 million Egyptians who live and work abroad.

"Now Egypt must get the tourists to return, get more vessels through the



Egypt expert Hamdi Hassan believes the government should provide loans to small and medium-sized businesses and not lock up the money in enormous projects.

"A number of structural reforms are needed which will help give hope to Egypt's young population who are the future of this country"

Suez Canal and therefore be able to cash in more transit tolls. They must build up trust in the system so that more people dare to invest in the country and deposit their money in Egyptian banks. A number of structural reforms are needed which will help give hope to Egypt's young population who are the future of this country." ■

CUSTOMISATION

LED TO EFFICIENCY IMPROVEMENTS

In the successful “4m China” project Setra has optimised timber lengths to get the best possible load factor. As well as satisfying customer requirements, the project has resulted in efficiency improvements in raw material, handling and transport. Without investments or costs. TEXT: KATARINA BRANDT PHOTO: EMIL NORDIN & CHRISTIAN LJUNG



Henrik Bertilsson, Sales Manager Asia & New Markets, Kerstin Eriksson, Product Manager Whitewood, and Magnus Olsson, Raw Material Coordinator, have worked with the 4-metre project.

THE “4M CHINA” PROJECT is a good example of how Setra works to satisfy customer requirements while increasing efficiency, improving logistics and optimising raw material utilisation. The project began in summer 2014 and six months later, in January 2015, production of the new timber length started at Setra Färila. The project team represented all steps on the production chain from raw material to market.

“It was our customers in China who make cladding that required 4-metre lengths since this would give a better load factor in the containers. We have therefore chosen to niche our production based on their requirements,” says Henrik Bertilsson, Sales Manager Asia & New Markets, who ran the project.

Lower costs and reduced handling

Work to produce the new length starts out in the forest where half the timber for Setra Färila is crosscut to a length of 4.05m. The length of the finished product is set to 3.985m which gives a few centimetres to play with when the 12-metre long container is loaded.

“It’s only one and a half centimetres off a 4-metre length which the customers don’t have a problem with. This is normal practice in the industry. As a result of our project customers only have to handle one length and there are fewer containers,” says Henrik.

From a logistics perspective the “4m China” project means that Setra Färila now loads 55 cubic metres in a container which reduces the sea-freight cost per cubic metre. The increased load factor from sawmill to port also helps to lower costs while the number of products and containers handled is reduced.



The length of the finished product is set to 3.985m which gives a few centimetres to play with when the 12-metre long container is loaded.



The "4m China" project has been run without investments or other extra costs.

From a market point of view Setra now sells those dimensions where there is best yield and good production. This has been well received by customers and also provided increased earnings per cubic metre compared with decreasing lengths.

"Our timber suppliers have been a great help by both simulating the changes in crosscutting and implementing the change so quickly. The inflow from the forest of 4-metre lengths is still somewhat uneven but improving all the time. The good news is that no investment or extra costs have been incurred to achieve this," says Henrik.

"The good news is that no investment or extra costs have been incurred to achieve this"



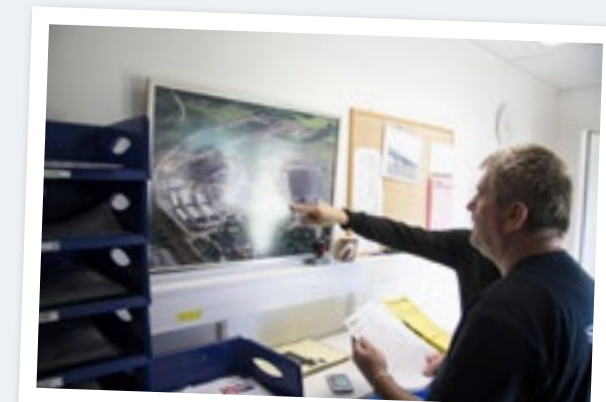
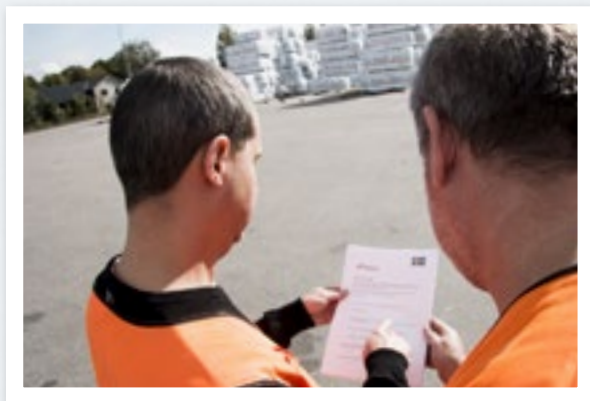
"Everybody in the production chain has participated in the "4m China" project," says Mattias Forslund, Mill Manager, Setra Färila, seen here together with forest owner Lars Larsson in the Hålsinge forest.

Working methodology behind successful implementation

Mattias Forslund is Mill Manager at Färila and has only good words for the project. He gladly names the working methodology as a contributory factor to the highly successful implementation.

"Since everybody was involved in the process we avoided unpleasant surprises later in the project. We also carried out test runs and test sorts

with smaller quantities which gave us security prior to the major changes and showed what needed to be adjusted before going live. We haven't rushed but analysed the effects already at an early stage. Everyone involved has known what was to be done and why. The bottom line is that a good basis leads to good decisions," concludes Mattias Forslund. ■



DRIVER-CHECK

An interview project about hauliers' work

In the autumn Setra carried out the Driver-check project. Lorry drivers working for Setra were interviewed about such things as the environment, working conditions and road safety.

TEXT & PHOTO: JOAKIM GERHARDSSON

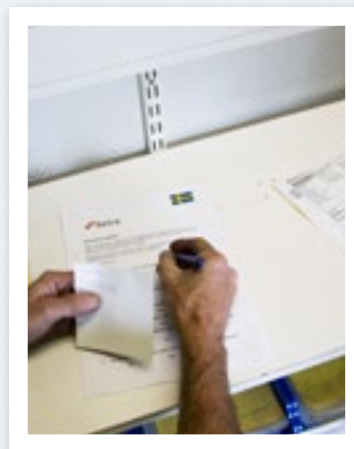
DRIVER-CHECK IS ONE step to getting a better idea of how transport companies work. During September, interviews were carried out with drivers of both domestic and export deliveries. A total of 132 drivers responded, spread across all Setra's units. The questions included the drivers' awareness of Setra's safety regulations, speed limits and rules for driving and rest times and whether these are observed.

"The drivers were extremely cooperative. Their answers gave us both good insight into how their companies work with environment and safety matters and ideas for improvements at our units. Extremely valuable and interesting," says Emil Malmgren, logistics specialist, who led the work with Driver-check together with Lotta Thedén, Setra's Environmental Manager.

Once the results of the interviews were collated, the affected hauliers were given feedback and also suggestions for identified improvements. The responses were then included in procurement of road transport for exports in 2016.

"The drivers' responses were positive overall, they generally corresponded with the answers we received from the haulage companies centrally when they were asked similar questions in last year's procurement of road transport for exports," says Emil, who would like to highlight the efforts made out in the units during the month-long project.

"All the units showed incredibly deep involvement. We look forward to building on this in other areas," he says. ■



Over 130 drivers were interviewed in project Driver-check. The pictures are from Heby.

A ROBOT THAT SMELLS GOOD

Toronto-based Bamloff has designed so-called WooBots. Like Transformers, WooBots, which consist of some twenty wooden blocks, can change shape from vehicle to robot and back. Each robot is hand-made and about twenty centimetres high.



Innovations in wood

Wood is not just planks and boards. Applications for wood as a material are constantly increasing. Innovative, functional and fun products pop up all the time. SetraNews has looked around and taken the pulse of the future of wood. Here are some exciting products that are upcoming or already in production.

**MORE NATURE ON YOUR DESKTOP**

Ordinary plastic computer mice can be really boring. Why not liven up your desktop with a mouse made of wood? Hako has produced two models which bring a little more nature into your office. Play Mouse, as it is called, is available in both light and dark versions. Do you prefer trackpads? No problem.

French design bureau Orée is responsible for Touch Slab – a trackpad with a smart wooden body that connects to your computer with Bluetooth.

**SHINE IN THE SUN**

Swedish company Woodbrand, which started only a few years ago, has invested heavily in integrating nature in fashion. All their spectacle frames are made of solid wood. All models are also handmade and some of the frames actually float if you happen to drop them in water.

**RAZOR SHARP**

Canadian design bureau The Federal thought outside the box when they got to grips with making household knives. Not just the handle, but everything except the edge, is of wood. All the wood is treated so that it is easy to clean. The knives, of which there are two models, are currently at the prototype stage.

MIND YOUR HEAD

Development company Cellutech has designed a cycle helmet which is made entirely of wood. The helmet has a shell of wood veneer with a protective foam reminiscent of Styrofoam but made from nanocellulose. The straps are made of hardwearing paper and the buckles of wood. The helmet, which has not yet been put on the market, has been developed with support from the Swedish Forest Industries Federation.





A QUIET VISIT

Setra does not own any forest but buys in all its sawlogs. Primarily through cooperation with some fifteen raw material suppliers where our owners Sveaskog and Mellanskog are among the largest. But sometimes Setra buys standing timber and carries out felling using its own contractors. SetraNews followed on the heels of timber buyer Christer Ekström on a natural value assessment in Åtvidaberg. TEXT & PHOTO: JOAKIM GERHARDSSON

THE PATTERN OF RAIN has just stopped when Christer opens the folder. He flips through it to a long checklist, takes out the pen that has been firmly wedged behind his right ear and looks out through the windscreen. We are just outside Åtvidaberg, parked on the edge of a ten hectare stand of forest.

A natural value assessment is on the agenda. This is about assessing natural values, such as the presence of red listed indicator species and key biotopes, in the forest being studied. In his role as timber buyer at Setra, Christer Ekström buys standing timber which is then felled and sent to Setra's unit in Vimmerby. The

natural value assessment is made before any purchase agreement is signed.

It is nine o'clock when we get out of the car. Christer grabs some red/yellow tape and a spray can of red paint which are used to mark smaller areas which, for example, should not be felled. Also with us on the assessment is Lotta Thedéen, Setra's Environmental Manager. When we are in the stand Christer moves sleuth-like from tree to tree. Occasionally he stops, glances at something and makes a short note. Points for possible natural values are collected in the checklist. If the sum is too great, Christer will not buy the stand.

"It's only a fraction that result in a deal. I look at many possible sites, but sometimes they aren't suitable. High natural values can be one reason," says Christer. Who usually looks for sites within a radius of 100 km around Vimmerby.

Christer is based at Setra's unit in Vimmerby and shares his time as a timber buyer with his role as raw material coordinator. The number of natural value assessments and deals made varies but Christer estimates that during 2015 it was some 40 assessments.

"On average I am out in the forest a couple of days each week. But it doesn't have to be formal natural value assess-

Above:
Lotta Thedéen,
Environmental
Manager, och
Christer Ekström,
timber buyer, during
the natural value
assessment.



Tape is used to mark natural values.



It is a wonderful feeling to both be in the countryside and take responsibility for what becomes of it," says Christer Ekström.

ments. I might meet the contractors carrying out the felling or swap experiences and advice with the landowner. It can also be an initial visual survey when I feel that a site is interesting. With my experience I can often sense if a stand can be bought. If a site exudes natural values there won't be a deal," he says.

Setra supports the development of responsible forestry. This means consideration for nature when felling and that forests and nature areas with high conservation values are set aside. All raw material that Setra buys in must meet the requirements for controlled raw material which means that the origin is traceable and meets basic demands. This also applies when Christer buys standing timber.

When we stop during the assessment there is complete silence around us with the exception of some birds twittering

a little way off. Otherwise there is just a dull rustle as we wander around the ten hectare area.

"A challenge when making a natural value assessment is borderline cases. For example, when the forest starts to get old it goes into a new phase. In general you can say that the older the forest is, the greater its natural values. Woodpeckers move in and so on," says Christer.

After a couple of hours the natural value assessment is complete. Christer stops at the top of a knoll and gazes out over the dark green carpet of treetops.

"This is what made me look for this kind of job," says Christer and is silent for a few seconds before he continues, "being out in the forest and land. It is a wonderful feeling to both be in the countryside and take responsibility for what becomes of it." ■



A points system gives a picture of the forest being studied.

Natural value assessment

A natural value assessment is intended to provide an overview of natural values in all types of forest environment, not just key biotopes and other exclusive areas. It is an aid to deciding what type of forest is being studied and how the environment has been affected by the

dynamics of natural disturbances and/or human use. The basis of the assessment is to get an idea of the conditions for biodiversity.

The methodology builds on measurements of those attributes of the forest – structure, age, topography, fertility and cultural

impact – which are significant for the numbers of vascular plants, mosses, lichens, wood fungi, birds, insects and other fauna. A points system with a checklist gives a picture of the forest being studied. A rule of thumb is that sites with over 30 points have very high

natural values, sites with 15–20 points have high natural values while those under 5–10 points mainly have quite low natural values.

SOURCE: SKOGSBIOLGERNA

The heat comes from the forest

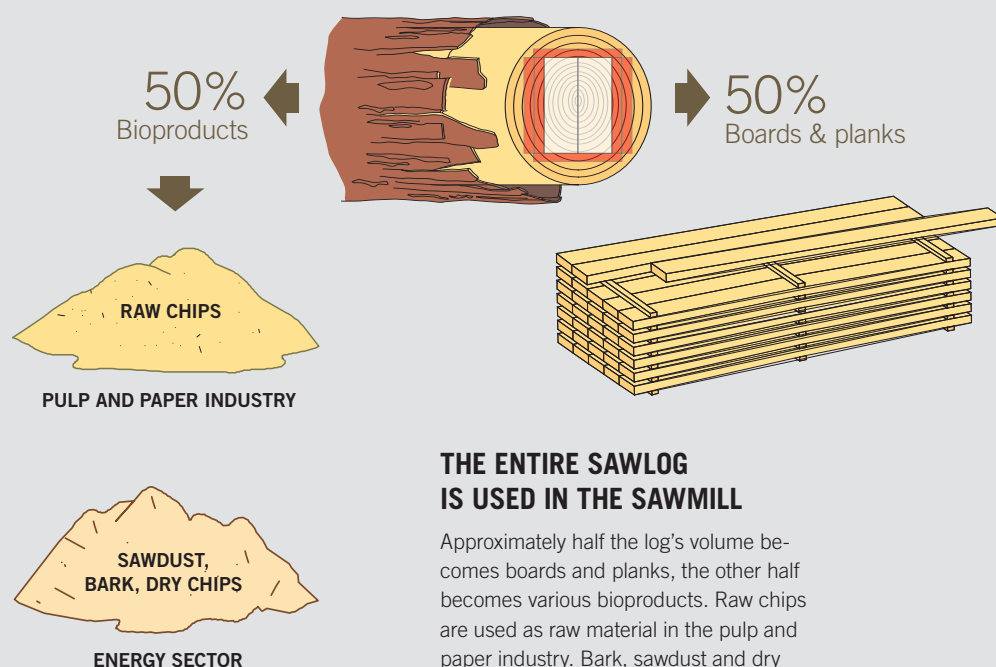
In this issue, Setra's Wood School takes a closer look at what remains of the sawlog when the mill has made wood products and the pulp industry has taken its share. Although Setra's core business is the manufacture and sale of sawn and planed redwood and white-wood products, "what's left over" is playing an increasingly important role. Not least by helping us to keep warm in the depths of winter. TEXT: KATARINA BRANDT PHOTO: SETRA

NOTHING IS WASTED at Setra's sawmills and processing plants. The entire sawlog is used. When half the log's volume has been turned into boards and planks, the other half becomes different bioproducts of which the most important are raw chips, dry chips, sawdust and bark.

About half the bioproducts are raw chips which are sold to pulp mills. Raw chips come from the outer part of the fresh log and are the most significant product by value. What remains is sawdust, dry chips and bark which in different forms are used almost exclusively for heating. Sawdust goes mainly to the pellets industry but is also used in CHP plants. The advantages of sawdust as a raw material for pellets are its cleanliness and the fact that it hardly needs any processing before being dried and turned into pellets. Shavings from planing have the further advantage that they do not need to be dried before pelletising since Setra only planes dry raw material.

Dry chips are the offcuts from dried timber and are a small but vital component in the total fuel mix of a CHP plant. Mixing in dry chips contributes to better combustion of moist fuel. On the other hand bark provides a large part of a CHP plant's total fuel raw material and is the main fuel for the sawmills' own boilers. Only a small proportion of bark finds other applications such as soil improvement products.

Today most of the sawmills' solid fuel boilers are run by external suppliers to which Setra sells biofuel and then buys back energy in the form of heating. A good example is the cooperation Setra's sawmill in Kastet has with the bio-CHP plant Bomhus Energi. They are both neighbours and each other's



THE ENTIRE SAWLOG IS USED IN THE SAWMILL

Approximately half the log's volume becomes boards and planks, the other half becomes various bioproducts. Raw chips are used as raw material in the pulp and paper industry. Bark, sawdust and dry chips mainly go to the energy sector.

ADVANTAGES OF BIOFUELS

The biggest advantage of biofuels is that they do not affect the level of carbon dioxide in the atmosphere when burnt. As opposed to fossil fuels they are part of nature's own cycle and come from renewable sources. In addition it is not very expensive to install a burner, especially if this can be done in an existing boiler. This is a convenient and simple way to burn biofuel. Pellets take up even less space than oil. Using biofuels also has socio-economic advantages.





Joel Törnebohm is Operations Coordinator at the new Sandkilsverket run by E.ON Värme.

SANDKILSVÄRKET

Sandkilsverket has an installed capacity of 49.2 MW and consists of four boilers. The largest, which is the basis of the plant, is a 13 MW biofuel fired boiler with flue gas condensation.



E.ON invests in green special mixture

In April 2015 energy company E.ON inaugurated its new, modern district heating plant, Sandkilsverket, in Åkersberga north of Stockholm. The plant is fired with 100% renewable biofuel most of which is a special mixture of bark and dry chips from Setra. TEXT: KATARINA BRANDT PHOTO: EMIL NORDIN

E.ON VÄRME IS THE largest private player in the Swedish district heating market and produces and delivers heating to approximately 21,700 customers. The company is running several projects in different municipalities in the Stockholm region designed to create cooperation for use of residual heat or renewable fuels to provide solutions that are sustainable over time.

Österåker's municipality north of Stockholm is growing fast and calculates that the number of inhabitants in the municipality, currently about 40,000, will increase by a further 10,000 over the next few years. The growing number of people means that the municipality needs an improved and more efficient energy supply. E.ON therefore decided to build a new, modern district heating plant, Sandkilsverket, which now supplies the whole of Österåker with even more sustainable energy.

Setra has a long cooperation with E.ON which, among other things, owns the boiler at the Hasselfors sawmill. Prior to starting up Sandkilsverket discussions were held on the possibility of providing a special mixture of bark and

dry chips for the boiler in the new plant.

"The advantage is that by mixing bark and dry chips we can adjust the moisture content to E.ON's needs and get a mixture that works all the year round," explain Johan Svensson, Raw Material coordinator, and Hanna Lindberg, Bioproducts Coordinator at Setra. The chips from the sawmill have a constant moisture content while the bark from the forest can be a little too wet during some parts of the year.

New thinking about bioproducts

The big Falu-red building blends well into the landscape and from a distance looks more like a traditional barn than an ultra-modern heating plant. Joel Törnebohm, Operations Coordinator at E.ON Värme, shows us round the plant which has a fresh smell from the forest products than are burnt here. Since 100% renewable bioproducts are used, Sandkilsverket will contribute to lowering the carbon dioxide emissions in the municipality by up to 1,000 tonnes. This corresponds to the annual emissions from 300 cars.

Currently Setra delivers some 10,000



Setra's employees Johan Svensson and Hanna Lindberg on a visit to Sandkilsverket.

tonnes of biofuel annually to the boiler at Sandkilsverket, corresponding to about 20 loads per week. Each load generates about 100 MWh which keeps the 13 MW boiler going on full power for just over seven hours.

Ulf Jonsson, fuel buyer at E.ON Värme Sverige AB, is pleased with the cooperation and appreciates Setra's new thinking about its biofuels.

"In this case Setra have not simply delivered a bioproduct. They have taken an extra step and processed the bioproduct so that it is a good fuel customised for our plant in Åkersberga."

The week after our visit Sandkilsverket are running a performance test on the biofuel boiler. The aim is to look more closely at various parameters to see if they are within the intervals specified by the supplier. They have chosen to use the special mixture from Setra for the performance test. ■



Sven-Erik Eriksson

Title: Production Planner at Setra Kastet

Age: 62

Lives: Gävle

Family: Wife and three daughters

Interests: Music, football and ice hockey

Planner who is in tune

TEXT: JOAKIM GERHARDSSON PHOTO: EMIL NORDIN

AS A PRODUCTION PLANNER you have a holistic view which comes with big challenges. Sven-Erik Eriksson, planner at Setra Kastet, is comfortable in the role. With over 40 years' experience in the sector ("I'm part of the fixtures here at Kastet") he finds problem solving appealing.

"I like to see new ways round, to have ideas that solve an unexpected situation. It's a wonderful feeling when I see that something has succeeded. As production planner you are part of the entire flow and really feel that you have an influence," he says.

Sven-Erik started to work at Kastet in the mid 70s. He had previously had a holiday job at the mill in the gap between compulsory school and upper secondary school.

"After my studies I went straight into National Service. But when that was finished I applied to return to Kastet immediately."

He was attracted by continuing to work with wood – and saw big opportunities.

"I had always thought that wood was very interesting. It has such wide application since you can use everything. It is also appealing to work with a material and a product which is so eco-friendly. It makes you proud."

Sven-Erik has been a production planner for about 25 years. Prior to that he was a foreman in the trimmer. And despite his wealth of experience it is the journey in modern time that he chooses to highlight.

"In recent years we have worked with a length programme for the Japanese market which has been unbelievably enjoyable. It's about getting the length right out in the forest. We have worked very hard and intensively to get it to work. The feeling when it all came together was fantastic. There are, of course, many other nuggets to pick out of all my years here."

At the beginning of 2015 Sven-Erik had the opportunity to travel to Japan and meet Setra's staff there and visit customers.

"Obviously a lifetime memory. Educational and great fun. Above all it was interesting to meet our Japanese customers and get an insight into the whole sector there. I will really take it with me."

It may be that Sven-Erik primarily works at a sawmill. Otherwise it is music and singing which are closest to his heart. In the autumn, following a competition, he was chosen to be Gävle's very own Frank Sinatra. At the beginning of December he performed together with, among others, Christer Sjögren at Gävle Concert Hall. When we interviewed Sven-Erik there were still a few weeks to go to the concert.

"Music has always been part of my life, so it feels really good to have this chance. It feels terribly exciting, but I expect I will be a bit nervous when I am actually on stage." ■

READ MORE: Go to setragroup.com/setranews to read more about how things went for Sven-Erik at Gävle Concert Hall.

SETRA is one of Sweden's largest wood products companies. We process raw material from responsibly managed forests and offer climate-friendly products and solutions for building and living in a global market.

Sawn and planed wood products in redwood and whitewood account for most of sales. The assortment for the building materials trade includes products such as floors, glulams, exterior claddings, interior claddings and decking.

Setra has 900 employees and annual sales of approximately SEK 4.2 billion. Exports to Europe, North Africa, the Middle East and Asia account for almost 60% of sales.

Setra Group includes nine sawmills, three wood processing units and two modular building factories.

Setra's principal owners are Sveaskog (50.0%) and Mellanskog (49.5%). The other approximately 1,500 shareholders together own 0.5% of the shares in the company.