WESTAS

Westas Group's stakeholder magazine 1/2022

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– Jussi Marttila



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EDITORIAL

SIGNIFICANT INVESTMENTS IN PRODUCTION

he favourable economic cycle has allowed Westas to make both new and maintenance investments. This year, too, many improvements agreed last year will be made at both sawmills.

In equipment supplies, the delivery times for new machines are significantly longer than normal. New hardware can no longer be ordered for this year, and some suppliers have already filled their order books for next year, too.

The Pihlava sawmill installed a new saw yield dimension PC system and a WINCC user interface at the start of the year. The software was supplied and installed by OT-Control Oy, Heinola. The saw yield dimension PC is used to create sawing instructions and saw yield dimensions, which are sent to the meters and automated systems which control the sawline. The program also generates reports about production and shutdowns. The WINCC user interface is a control room program that the sawline operator can use to monitor the operations of the sawline and ground floor. The interface enables manual control of hardware and can set servos, delays and timers.

During the summer maintenance shutdown, a new debarking machine feeder, delivered by Valon Kone Oy, will be installed on the sawline. The new hardware is sturdier and longer than the old one, meaning the current log and sawdust transporters must be adjusted.

At the end of last year, earthworks began for a new progressive kiln at Pihlava. The kiln is an automatic progressive kiln made of stainless steel and equipped with



an extract air heat recovery system. The erection of the building will begin in May, and the kiln will be completed in August. Valutec Oy, which has also supplied the sawmill's previous progressive kiln, is supplying the kiln. The kiln will be operated by a Valmatics 4.0 system, which is planned for installation at the sawmill's other kilns during the autumn.

At Koski TL, for its part, the crossing station of the cant return's first phase will be replaced during the summer maintenance shutdown. The new station will be fitted with a dedicated cant flipper and transfer, supplied by Jack-Steel of Kalajoki. This investment is intended to increase the security of cant transfer as the sawing speed grows.

During the summer shutdown, the modernisation of the Koski TL sawmill feed, sawline and ground floor automation will be begun. This is a similar investment to the one at Pihlava, but at Koski TL it will take place over two years. At Koski TL it will also include modernisation of servo control and a security plan for the entire mill. During the summer the sawmill's chip and sawdust transporters will also be replaced, as the growth of sawing volumes makes the transfer capacity of the old transporters insufficient. At the same time, the heating of the transporters' base will be improved to prevent freezing from disrupting production.

The overall goal of the investments at the sawmills is more efficient production. Our goal for the future is to saw 240,000 m³ at Pihlava and 250,000 m³ at Koski TL annually, which will bring us close to the half-a-million cubic metre mark. \times

> INVESTMENT GREETINGS, SAKARI VIRTANEN, PRODUCTION DIRECTOR



WESTAS

Westas is Westas Group's magazine for forest owners, customers and other stakeholder groups. It is published twice a year.

Westas Group produces high-quality spruce and pine sawn timber for the domestic market and for global export markets. The Group is one of Finland's largest private wood-processing companies. Its current mills are located in Koski and in Pori.



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FELLED PROPERLY

When a forest owner needs as many logs as possible and good harvesting, Westas is their best partner. The Marttila family farm in Laitila has come to this conclusion. Here, forests owned by the family have grown for almost three hundred years. hen the man who sits down to his dinner in the farmhouse kitchen is the ninth owner of the farm, you know that the place has a history. The Marttila farm has stood in Laitila since 1739

and gradually grown to its present size: there are over 100 ha of forest, over 60 ha of the family's own fields and about the same area again of rented fields. The original farmhouse is no more, but a newer one has stood on the same site for nearly 40 years. When **Jussi Marttila** took over the farm in 1999, it focused on rearing pigs.

– We expanded and renovated the piggery in 2000. Now, a couple of decades later, the premises would have needed a total revamp, and because the farrowing house is not very profitable, we decided to vacate it completely. When the pigs had left, we started growing more new potatoes.

In addition to the potatoes, Marttila grows barley, oats and soft winter wheat, primarily for the food industry. Marttila says the area is hilly and consists of residual gravel. The soil is rather coarse and the forests dominated by pines. The forest is one of the farm's core livelihoods, and timber is sold almost every year.

SOMETHING FOR EVERY YEAR

The forest has been a familiar place to Jussi Marttila since he was a child. As well as going on walks there with his father, he would set off there, saw in hand, to cut down trees, and the two still manage the forest together. Marttila's father mostly uses a brush cutter to thin out sapling stands, while Jussi Marttila prepares the soil with a digger and does first thinning using a tractor with a felling head. The whole family plants saplings. They outsource the final thinning and final felling. The forest was only felled with a harvester for the first time just as the farm was being handed over to the next generation in 2000.

– Dad had been sparing with his felling, so in the beginning there were a fair few stands ripe for the felling. These days I try to sell timber every year to keep the forest cycle even. I haven't thought yet about outsourcing soil preparation, planting and first thinnings, but sure you never know the way the world will go, Marttila says with a laugh.

Marttila says he has just thinned out, for the first time, a stand he had planted and done the final felling on himself. That was the same stand in which a harvester was used for the first time in Marttila's forests.

— It felt special. I'd planted and thinned it myself, but the next generation is taking over looking after it now. The forest has become an important part of life for all five of my children. We've gone on a lot of hikes there and learnt forestry together.

ABUNDANT LOGS AND GOOD HARVESTING

The farm's forestry hectarage has barely grown, even though more of it would be tempting. The price of forestry land has risen to prohibitively high levels in recent years, and the most recent purchases have been of forests bought as additions to fields.

The farm most recently sold timber to Westas in the autumn, and a four-hectare space was felled at the start of the year. The felling yielded 680 cubic metres of logs. Marttila, who has also sold timber using sale at delivery price, wants as many logs as possible from his forest. That makes cooperation with the sawmill an obvious choice. The decision was influenced by log bucking, but also the price paid for the timber and the quality of the harvesting.

 Westas's trump card in this area is the excellent contractor it uses. The Pere company is known for its excellent harvesting quality, the regional timber procurer **Teija Laukkanen** says.

Marttila nods.

– The conditions for harvesting in January were excellent, and the ground was frozen hard. I'm more than happy with the end result. The result of previous thinnings was also good: not too much and not too little was cut down. You can always cut down too little, but if you cut down too much there's nothing you can do there for decades to come.

ALWAYS SOMETHING SURPRISING



Teija Laukkanen graduated from Evo with a degree in forestry engineering in 2009. She began working with timber purchasing while still at college, but having enjoyed 13 years of service with the same employer, she wanted to see other kinds of organisations too. Laukkanen began working at Westas in August 2021, when she was given a procurement area of the Laitila, Mynämäki, Vehmaa, Taivassalo, Kustavi, Uusikaupunki and Pyhäranta oval.

The best thing about her working days are the surprises: the work is not humdrum, and in spite of careful planning, surprises do happen. When proper winters are rarer in her area, people have to learn to live with them.

 You have to direct the work accordingly and talk to forest owners about possible harvesting dates as soon as you close the deal.

The forest was always a big part of this farmer's daughter's life, so no one was surprised when she had the idea of a job in forestry while still at secondary school. At the start of her career, Laukkanen was something of an oddity: a young woman in a traditionally male field.

– I was called a girl a bit and they did doubt my credentials, but it's been years now since I've experienced anything like that. Through my work I've shown I'm a skilled, reliable forestry professional.

It's that creation of trust which is one of the best sides of this job. You do that by scoping things out, having conservations and keeping your promises. Laukkanen says she enjoys working with people and prefers to meet them face to face.

- Some deals are done entirely online, and I don't even get to meet all the forest owners. I think that's boring. I like to get the feel for a situation round the same table and do deals face to face. \times

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CLEAR-CUTTING ENABLES DIVERSITY

Clear-cutting inevitably changes the make-up of species in the forest. When the trees are removed, the plant species of open areas can flourish and the change in lighting conditions and resources offers habitats for many kinds of organisms.

o two sites are the same. The clearing shape, topography, location, trees and forest-owner's wishes make every cutting different.

- The solutions applied when felling always depend on the forest management choices. Those choices include whether the felling is done from the perspective of financial yield, recreational use or ecological values, says **Lauri Saaristo**, who works as a leading specialist of forest management and diversity and leads a six-person nature team.

Saaristo says that which method is the best for each site depends on each case. Clear-cutting may be an ideal option for a managed, even-aged stand with no particular natural values. It is also a good method when choosing to diversify an even-aged homogeneous forest. Saaristo points out that clear-cutting does not always mean felling all the trees in a clearing; it can be carried out in many different ways.

 There is no single type of clear-cutting. For example, adjusting the number of retention trees can lead to very different outcomes.

HABITATS AND OPTIMAL CONDITIONS

Clear-cutting done in the wrong place and the wrong fashion can be significantly damaging for diversity. Rare or endangered species may vanish entirely, and in bog forests the result may be significant hydrological burden or release of organic carbon bound in the earth into the atmosphere.

 That said, for a large number of forest organisms, clear-cutting is not as big a deal as it is for us people. Other factors are more important, Saaristo says. Finland is in the northern coniferous forest zone, where forests are by their nature "disruptive ecosystems". Thus, in their natural state forests are regenerated through various disruptions, such as forest fires, insect damage and storms. Saaristo stresses that even though clear-cutting is not comparable with natural disruptions, the species living in Finnish forests have broadly adapted to the changes in light conditions. Clear-cutting may thus offer habitats to many species.

 A fifth of our forest species, in numbers around five thousand species, find their habitats in dead timber.
For these species, the habitats created through various disruptions are vital.

Saaristo speaks of resource-orientated species, which are indifferent to light conditions but which are reliant on suitable habitats, such as decaying wood. By contrast, insects and many plants dormant in the earth's seed bank need light and warmth.

 During clear-cutting and soil preparation, the necessary seed beds for many forest plant species are created, and the soil seed bank can reveal things which had been overshadowed by the fully grown forest. Some species actually require a state of disruption. Maybe the most classic example is the Geranium bohemicum flower, which waits for controlled burning or forest fires to grow.

The forest soil is also home to dozens of various root mushroom species which are essential for the growth of trees. When the trees are felled, the mushrooms lose nutrients and die. The retention trees spared in clear-cutting offer nutrients for these organisms, however, allowing the organisms to spread back to benefit planted saplings.

 Retention trees increase the benefits of clear-cutting for nature. Some previously endangered species have thrived thanks to the retention trees not felled during clearcutting.

SIMPLE ACTS

Clear-cutting creates an open area in the forest in which the incoming light and warmth create many types of diversity potential. Soon, pioneer tree species appear, such as the pussy willow and alder, which are of low value for forest husbandry, but important for diversity.

– Four to five deciduous species usually grow in the midst of a planted spruce stand. If the forest owners want to achieve a mixed forest, the choice of these natural deciduous trees at the sapling stand management phase, with consideration for abundance ratio and the moose situation, would be an easy way to boost diversity.

Flowering plants also quickly appear in the clearings, attracting, in their turn, various pollinators: bees, bumblebees and butterflies. As the clearing is filled with growth, however, the pollinators need new places to acquire nutrients and may find alternative sites on the forest edge. – Forest roads first and foremost offer good paths for pollinators, but also the growth locations needed by certain plants. As the summer progresses, the roadside vegetation varies, with some species ending and others beginning to flower, and because pollinators need nutrition throughout the summer, verge mowing ought to be left until the end of the summer.

CORRECT FROM THE START

Done well, clear-cutting does not eliminate the location's natural value, as the trees always grow back. However, there are many issues which ought to be taken into account when conducting forest regeneration. Saaristo has an important message about soil preparation:

— Don't ask a neighbour who happens to own a digger to prepare your soil. Hire a professional in the sector with the right tools, analysis of geographical information, and professional skill. Soil preparation can permanently ruin the environment and the future yield of the forest.

An unskilled soil preparer can cause serious damage to nature and watercourses. The work should be done in an optimal fashion with regard to timber production and the environment, and the soil preparer must be able to choose a suitable and as mild as possible preparation method for each growth site.

– Forest regeneration is always a big investment, one which can be ruined before the first sapling is planted. Soil preparation and planting should be targeted on riskfree locations instead of forcing the same method on all locations in a formulaic way. Variation is permitted, and from the timber production perspective difficult or lowvalue spots should be left for nature to take its course in.

In the end, each forest owner decides independently how to act, what to do in the forest and how to consider natural values when managing the forest. If a forest owner is interested in and wants to invest in diversity, the Forest Environment Programme run by the Finnish Sawmills' Association is a good place to start.

– The programme is an important and easy way to get a grasp on the topic. It includes low-cost measures with significant natural impacts. Forest diversity is a genuinely functional form of preparing for climate change and protecting your own property, Saaristo concludes. \times

"The work should be done in an optimal fashion with regard to timber production and the environment."

-Lauri Saaristo



PUTTING THE EXTRA ASIDE FOR A RAINY DAY

The timber trade at the end of 2021 went as Westas had expected. Felling volumes exceeded one million cubic metres for the first time, and deals were closed at the planned level. At times, there was even a glut of stands on offer.

The aim has been to keep stock at a certain level, and we've achieved that, says Westas' Director of Forestry **Juha Mäki**.

Due to planned investments, Westas's sawn timber volumes will rise from the autumn of 2022 onwards. Mäki says that wood procurement was prepared in good time for the growing raw material need and that the goal for procurement this year is to exceed one million cubic metres of logs.

– We already increased our own capacity at the end of last year. Wood procurement can cope with the rising sawing volumes. Our forest machinery contractors are interested in investing, and the development of machines and, consequently, felling productivity is significant, Mäki says.

A UNIQUE MOMENT

Since the start of the year, the forestry department has focused above all on harvesting winter timber, and deals are only expected to be closed in earnest when the spring gets into its stride. From the perspective of harvesting conditions, the winter has been unusual.

– Even though there has been almost a disruptive amount of snow, when it comes to harvesting, we only have good things to say. It was unusual for winter to arrive in the west of Finland as early as December. The ground was frozen, and all the planned felling could be done.

Of the services offered by Westas, Tukkitili (Log Account) has been particularly popular among forest owners. The forest owners consistently deposit the maximum permitted lodgements and been satisfied with the easy opportunity to invest their wood trade takings. There has also been demand for the forest regeneration service.

 More and more forest owners definitely expect to receive these forest management services when they sell timber. For many of them it could even be a deal breaker when closing a sale.

The demand for sawn timber has been good since the start of the year, and the positive price trend has also been reflected in the price of raw material. At the same time, however, the costs of timber harvesting and long-distance transport have risen significantly in a short time.

 Logistics costs – fuel, oil and labour – have risen so much that timber clearly costs a sawmill much more than last year, M\u00e4ki points out.

Even though the demand for sawn timber is at present good, the long-term market trend is difficult to predict. Given the state of world events, market cycles could change very quickly.

– There's still a great opportunity to take advantage of the positive cycle which has continued for an exceptionally long time. You could say that a forest owner has the opportunity to close a good deal and the chance to get good compensation for years of work. Some could even be able to put something aside for a rainy day. \times

"Forest owner has the opportunity to close a good deal and the chance to get good compensation for years of work."

– Juha Mäki



THE PIHLAVA KILN WHISPERER

The five-person kiln team at the Pihlava mill is led by a man who has combined sawmill work with his studies and his studies with sawmill work. That is in spite of the fact that his original idea was not to end up working at the sawmill.

anne Kuusikari, a farmer's son who has enjoyed spending time in the forest since he was a boy, did not originally plan a forestry career. When he qualified as an electrician, a friend's referral saw him get a summer job at a sawmill, but after his military service he continued studying at the Satakunta University of Applied Science for a degree in electrical engineering.

– I went back to working in the sawmill while I was still a student and worked nights and weekends. In 2009, when I had basically graduated bar a couple of modules and my final project, I landed a permanent job in maintenance.

Kuusikari also gained experience in packaging and as a forklift operator until he was offered a job as a summer substitute on the kiln.

– That was a lucky strike. I stayed working on the kiln and was promoted to supervisor in 2015. However, he still had a couple of uncompleted modules and his final project to do, which constantly bothered him.

However, the sawmill offered a solution. Because the modules he needed to complete were no longer being offered, he made up for them with a project about the update to the grading plant's security and emergency shutdown circuits. By contrast, his own workstation offered him a final project topic: Modernisation of the chamber kilns' air mixing fans.

FREEDOM AND RESPONSIBILITY

The role of kiln supervisor involves filling the kiln schedules, planning the kiln input and emptying, managing the covered storage of stickered loads, quality inspection and operation monitoring of heat exchangers. Close cooperation with the production planner and grading plant supervisor ensures that goods are dispatched to customers as agreed and to the promised specifications. Kuusikari sometimes also refreshes his old skills.



 I do maintenance work from time to time. It's handy that I can make use of my maintenance background at the sawmill and that I don't always have to call out an electrician, say.

Even though it was not obvious from the start that he would end up working at the sawmill, he considers Westas a good employer and the sawmill industry a stable source of employment.

– We've made a lot of investments, which creates faith in the future and that our work and sawing at Pihlava will continue. For example, last year our kiln capacity began to hit the maximum in relation to production, so at the moment we are building a fifth progressive kiln. In the summer we're commissioning a powerful progressive kiln for boards.

In addition to good people to work with, the best things in his job are freedom and responsibility. Kuusikari says that he likes that he can do his job independently, making decisions but also taking responsibility for their consequences.

- When you have the power to decide about your own job but are still responsible for what you do, that gives your work meaning.

"Power to decide about your own job and responsible for what you do, gives your work meaning."

– Janne Kuusikari

In his free time Kuusikari does forest work, fishes and exercises his dogs. Fresh air is a good counterbalance to the challenges of the workday, which include urgent orders, small batches which are unsuitable for the channels and special features of the kilns.

– Every progressive kiln and chamber kiln is its own unit, so you have to learn how they work through experience. When you learn their inner workings, you manage to get even the smallest batches into the channel and get the desired result. \times

VITALITY AND INCOMES FOR THE PROVINCES

At the end of last year, the Finnish Sawmills Association published an impact report examining a broad set of the industry's social and economic impacts on Finnish society. In addition to impact at a local level, the sawmill industry is, as the fourth-largest export industry, an important factor for the national economy.

he sawmill industry generates the most domestic added value of all the export industries. The raw material, transport chains, and technology, labour and energy used in sawmill processes are all investments in Finnish production with large local impact, particularly in small towns. Almost every export euro is

particularly in small towns. Almost every export euro is returned to the original locality as wages and stumpage earnings.

JOBS AND LIVELIHOODS

The sawmill industry has a significant effect on employment. Sawmills employ 6,000 in Finland directly, but their indirect effect on employment is up to three times that. The careers are typically long, an average of 14.5 years in independent sawmills, and very often lifelong employment is provided. The long careers speak of the sawmills as employers: employed by reliable employers, people have the confidence to commit to the area, build houses and start families. Stable, permanent jobs have a tremendous significance for the local economy and vitality of the area.

Employment is part of how sawmills bear their responsibility, and it has a positive impact outside the sawmill, too. The chain from the forest to the sawmill and from the sawmill gate to the harbours, further processing and energy conversion provides jobs for forestry professionals, logistics operators and chemical forestry industry employees. If spending on local services and the employment impact of investments are also considered, the effects on jobs and the economy become even greater.

Permanent sawmill employees are an average of 43 years old. The share of young employees has been declining, partly due to the industry's image, partly due to structural change, and partly due to educational policy. Education providing sawmill industry qualifications has been reduced, and there is only one institute left in Finland which trains engineers in wood technology. The industry bears significantly more responsibility than other industries for training new employees for the trade. It does this by participating in the development of education and offering on-the-job training at a company level. Nevertheless, concern about the availability of labour in the industry is widespread. Very often, young people have started off in summer jobs or traineeships at sawmills and then got permanent jobs there once they got more familiar with the industry as students. No, with the cutbacks in education, those kinds of career paths are rarer.

ECONOMIC RESPONSIBILITY AND FUNDING FOR THE WELFARE STATE

In small rural municipalities, an important income source and often the only source of export income is the local sawmill. Few industries make permanent impacts that are as significant and varied on the welfare of their areas and society at large as the sawmill industry does. The locations of the sawmills understand the importance of the mills, but the wider significance for the national economy and the welfare state often go unrecognised.

The value chain begins with the raw material, which is purchased near the production facilities from local forest owners. Over 100,000 timber purchases are made a year, for which approximately \in 1.4 billion (as of 2020) in stumpage earnings is paid. For the 23.5 million cubic metres of timber felled for logs (as of 2020), around \notin 400



million goes to the public purse as taxes.

The sawmill industry's payroll costs also have a significant impact on the local economy: the Finnish sawmill industry pays over €200 million in wages annually. In addition to the payroll taxes, the wages make an impact in the form of purchasing power and consumption of local products and services.

Eighty per cent of independent sawmills are family businesses which have operated without interruption for several generations and paid their taxes in Finland. At present, the tax take from independent sawmills, ϵ 280 million, represents just over half that of the industry as a whole, ϵ 0.5 billion. The corporate tax take alone is over ϵ 15 million, and when all direct and indirect taxes are also included, the sum reaches the hundreds of millions.

THE MOST FINNISH EXPORT INDUSTRY

The total production of sawn timber in 2021 in Finland was approximately 12 million cubic metres. Around threequarters of this was exported, which made sawn timber Finland's fourth largest export. The value of the exports in 2021 was €1.6 billion. In addition to the gross export, however, it is important to look at the value the industry generates in Finland. Of all the export sectors, the sawmill industry's domestic added value is relatively the largest, as the sawmill industry uses almost exclusively Finnish production inputs.

The adjusted average of operating margins in the sawmill industry has typically been around 2%. Compared to the overall average in industry, the figure is low, which is partly due to the structure of the sector and partly due to the development of the markets. The past two years have been a good indication of the industry's sensitivity to economic cycles. The Covid pandemic in 2020 and 2021 and industrial action in 2020 led to a market disruption which



caused exports to shrink by 15% from their normal level (in 2020). In 2021, for its part, an unusually high demand and price spike occurred, which was reflected in an unusually positive fashion on the profitability of the sawmill industry.

The more stable the sawmills' operating environment, the larger the contribution it can make to society. It is important to remember that the sawmill industry's roots are and will remain in Finland. Sawmills will not move their production abroad to cut production costs. Instead, they are committed to operating in their local areas from generation to generation. They build faith in the future and offer solutions for a low-carbon, fossil-free society and local well-being. \times

"Employed by reliable employers, people have the confidence to commit to the area, build houses and start families."



A YEAR OF GROWTH AND BALANCE

The past financial year was the best in Westas's history, both in terms of turnover and of profit. The company's balance sheet was strengthened and its equity ratio improved to an excellent level.

n the 2021 financial year, the Westas group consisted of the Westas Raunio Oy, Westas Pihlava Oy and Westas Bioenergia Oy subsidiaries. The consolidated turnover of the three companies in the 2021 financial year was EUR 175.2 million (in 2020: EUR 117.2 million). The consolidated operating profit was EUR 34.7 million (in 2020: EUR 3.4 million), whereas the profit was EUR 26.7 million (in 2020: EUR 2 million). Westas's consolidated balance sheet total was EUR 88.6 million (in 2020: EUR 56.9 million) and the equity ratio, taking into account capital loans, was 54.6 per cent (in 2020: 39.8%).

The parent company, Westas Group Oy, which employs just under 50 staff and provides the group's sales and administrative services, had a turnover of EUR 102.4

- The forestry department procured a total of 1.45 million cubic metres of wood for the needs of sawmills and the bioenergy business, of which sawlogs were 1.09 million cubic metres, says group CEO Pekka Kopra.

The group simplified its structure at the end of the last financial year, merging the Westas Bioenergia Oy subsidiary into the parent company. Thus, the parent company's balance sheet total of EUR 82.5 million (in 2020: EUR 39.8 million) included Westas Bioenergia Oy's balance sheet items. The parent company's equity ratio, taking into account capital loans, rose to 48.8 per cent (in 2020: 44.9 per cent).

SAWMILLS IN AN UPSWING

During the financial year, the turnover of Westas Raunio Oy, which employed an average of 59 people, was EUR 79.7 million (in 2020: EUR 50.4 million). A favourable market and efficiencies made in production, the most significant of which were the replacement of the edging line saw and a boost to drying capacity, facilitated a growth in sawing volumes of 31,000 cubic metres (in 2021: 242,000 m³, in 2020: 210,000 m³). The Westas Raunio Oy operating profit increased to EUR 19.2 million (in 2020: EUR 2.1 million).

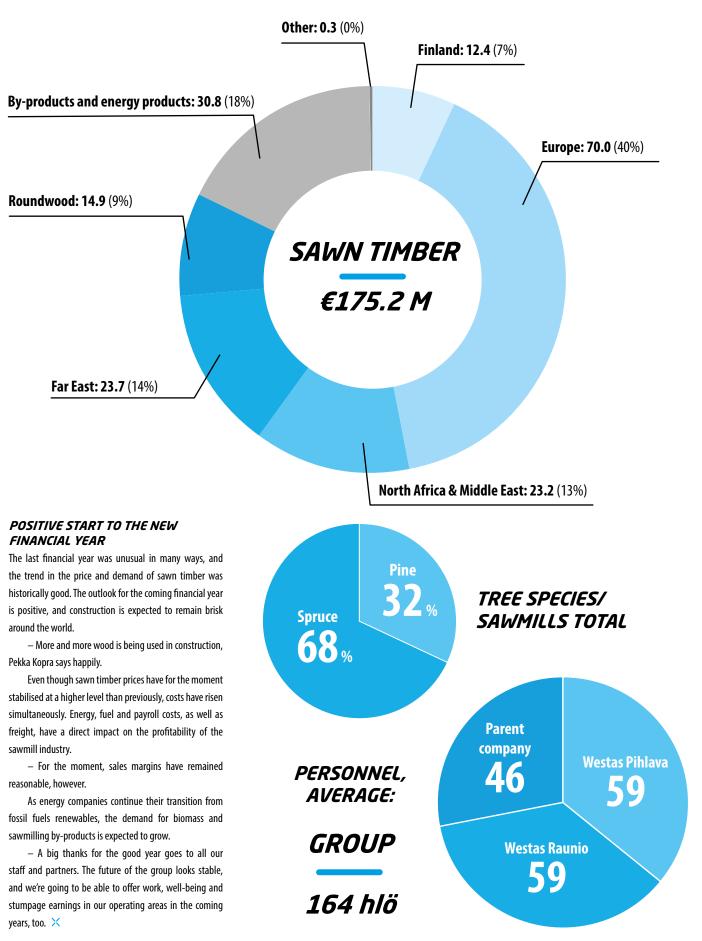
The profitability of Westas Pihlava Oy also improved significantly on the previous financial year. Turnover amounted to EUR 72 million (in 2020: EUR 47.2 million), and operating profit increased to EUR 16.7 million (in 2020: EUR 1.4 million). These developments were assisted, in a similar way to Westas Raunio Oy, by a favourable market and a growth in sawing volumes. Investments in production efficiency increased Westas Pihlava Oy's sawing output by 16 per cent on the previous financial year, from 195,000 cubic metres to 227,000 cubic metres. During the financial year, the company employed the same headcount as Westas Raunio Oy, 59 people.

The main markets for Westas's sawn timber are in Europe, the Far East and North Africa. During the financial year there was particular growth in sales in Central European countries and in Finland.

Westas Bioenergia Oy, which still operated as an independent company in the past financial year, generated turnover of EUR 17.1 million (in 2020: EUR 14 million). The strong year-end growth in demand raised the volume of fuels delivered to 0.8 TWh (in 2020: 0.65 TWh).



DISTRIBUTION OF WESTAS GROUP'S NET SALES IN 2021



BRISK START TO THE YEAR

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The sawn timber trade has got off to a busy start this year, and only a few markets have seen problems. The rest of the year is still completely open, however, as there are several risks in the air which could quickly change the direction of events if they come to pass.

n the whole, 2021 was a good year for sawn timber sales. The intense demand seen up to the autumn waned at the end of the year, and at the same time prices declined. Many clients' warehouses had filled up, and delays were also caused by expectations of further price decreases at the turn of the year. Westas reacted calmly to the market turn, however, and continued working as planned.

Q1 began with a high level of activity, and more inquiries started flooding in with each passing week. Production quickly sold out, and Westas focused on getting deliveries to customers as agreed. The good demand notwithstanding, prices did not rise in Q1 but remained lower than the previous year. Demand accelerated at the start of Q2, which is when prices also rose.

DIY BUILDING A QUESTION MARK

In Finland, Westas's largest single market, trade got off to a good start from early in the year. The Covid pandemic has increased the need for additional residential space, which has led to a growth in the number of new starts on detached houses. The DIY market has also been brisk, as money that would formerly been spent on travel has now gone to home improvements.

- The effect the easing of pandemic restrictions and reopening of travel has on people's consumption habits remains to be seen. We're unlikely to see the same kind of DIY spike as we would have been last year, Westas's Export Manager **Jari Rajakallio** says. In Japan, Westas's second-largest market, demand has remained steady, and building supplies have been exported there at regular intervals.

– The better pine grades are the main export product to Japan. Pine has once again been a more challenging tree species, in particular due to price and the weak demand in North Africa. By contrast, the situation with spruce has remained stable. The most sought-after goods are even more popular, and there are also buyers for their replacements, Rajakallio says about the differences between species.

Of the North African pine markets, the best is currently Egypt, where recent developments have been positive. Morocco is also following global market trends, but the situation in Algeria remains difficult. The country's internal market is non-functional, and even though the rise in oil and gas prices reflects positively on the national economy, the demand for sawn timber has not improved. A little further east the situation is different, however. In another oil nation, Saudi Arabia, demand has been good, and even though warehouses in Israel were fully stocked at the turn of the year and prices fell, the appetite for buying has grown stronger again.

NEARBY MARKET DOING WELL

In contrast with other markets, sawn timber exports to China have been flat since autumn 2020. Instead, the country has been importing logs from areas of Central Europe with insect damage, but those logs are now running out, leading to a resurgence in sawn timber demand in Europe.

– The significance of China for Westas's trade is quite small, but we are of course monitoring the situation. The development of our Chinese market will depend a lot on whether Central Europe sees insect damage again this summer.

The European market is continuing strongly. The UK, which became sluggish at the end of last year, has revived considerably since the start of the year, demand in the Netherlands is high, Estonia has shown surprising activity and both Germany and France are still performing well.

– Timber construction in major European markets is performing strongly and maintaining good demand. People have understood that a long rotation product such as sawn timber is the best carbon reservoir, and France even has statutory provisions for the use of timber in public-sector construction.

CHALLENGES WITH DELIVERIES

However, problems do exist. Deliveries function in Finland, but global trade is beset by a circle of three logistical disruptions: All kinds of logistics equipment – containers, trailers, bulk carriers – are in short supply, schedules are not met, and prices are constantly rising.

"Timber construction in major European markets is performing strongly and maintaining good demand."

– Jari Rajakallio

– Trailers that used to be in very good supply have had to be ordered many weeks in advance. Feeders have been delayed, cancelled or transferred elsewhere, bulk carriers may announce they're not coming, and there are either no containers or they are not in the right place, Rajakallio says.

The export manager says Finland's geography makes the situation even more difficult.

– We're a little distant from everywhere. It's difficult to get containers all the way here, and our location also has an impact on freight rates. Now, in the winter, sea ice adds to the problems. There aren't very many ice-classified bulk carriers that can get into ports without icebreaker assistance.

Indeed, the main concern in trade has turned from the goods themselves to their deliveries. The scheduling risks cause grey hairs, and even though the situation is the same for everyone and clients have been understanding, voices are raised when goods threaten to run out.

– There are many reasons behind the problems, the largest of which is a driver shortage. The shipping companies have started to think about remedies, but there are no quick fixes in the offing.

While the outlook for the first half of the year is good, developments in the second half are hard to predict. Covid and restrictions coloured 2021, but now, as the pandemic changes, inflation, rising interest rates, migration and geopolitical threats have entered the picture. Rajakallio believes that consumers will be decisive.

– It all boils down to trust. If trust in the economy and social stability hold, I don't see any reasons this year shouldn't on the whole be as good for sawn timber as last year. \times

TODAY AN EVENTS CENTRE, TOMORROW MAYBE EVEN A SCHOOL

Through its partners, Westas is involved in many timber construction projects. One of them, a long-term carbon reservoir and feat of environmentally friendly construction, will first be erected by the Töölönlahti inlet in Helsinki and then continue its life somewhere else in some other purpose. n the midst of the depression in the 1990s, Juhani Sjöman began to think what challenge he would take up next. His own skills and an acquaintance's experience of exporting to Germany combined into the idea of manufacturing wooden houses. Two years later, in 1996, Finn Master Haus was registered, manufacturing various outbuildings, such as garages and yard sheds for the Finnish market. Soon, machine sheds and prefabricated commercial buildings entered the picture.



– We monitor production in terms of unit volumes. Some indication of our growth comes from the fact that in 1995 we manufactured 22,000 units, which by this year will have grown to 174,000, says FM-Haus CEO Juhani Sjöman.

Nowadays, the company's most famous trademark among the wider public is probably Mestarihalli, over 1,300 of which have been delivered over the years. As business grows, the degree of product refinement has too, and the company can offer its own wood construction solutions and modules.

WOOD HAS A BRIGHT FUTURE

FM-Haus is an industrial wood builder whose wall and ceiling elements and building modules are used to build such facilities as schools, shops and nursery schools. In Sjöman's words, the company defines its customers' layouts with the help of their own products, manufactures product parts and delivers them to the building site. Around 15% of products are prefabricated units, 15% are Mestarihalli solutions and the remaining 70% are module structures evenly split between public buildings and retail spaces, such as small supermarkets.

— The average retail premise size is around 500 m², and nursery schools are about twice as large as that. Our largest order ever was when we delivered office space of a total of 6,000 m² to the Meyer Turku shipyard, the CEO says.

FM-Haus moved to its current location beside the number 10 road in 2001. The company employs around seventy people and has an annual turnover of approximately €18 million. For now, its operations have been confined to Finland, but in the future, it is going to set its sights on export. The order book is reasonably sized at present, despite the delays and cancellations to agreed projects caused by the rise in wood raw material prices.

Sjöman says that the level of wood building activity in Finland is still low. He believes that residential wood construction will grow, in addition to large commercial and public premises, and FM-Haus is taking its first steps in that direction this year. The company does not believe that everything needs to be built of wood. Instead, it is a question of what is possible and feasible to use timber in. — I believe that the future is bright and that wood will play an important role in construction. However, for the sake of resource efficiency, that requires wood being used where its most important properties can be best exploited. Improving the material cycle also plays a key role.

The company has paid special attention to reusing and recycling wood material. The EcoCompass environmental management system steers production: waste is sorted meticulously down to the last fraction and raw material is used time after time in different ways.

- For example, the wood for struts in modules is removed on site and sent back to the factory to be reused.

WOODEN PILOTS AND PROTOTYPES

A sawmill is the source of wooden structures. Westas is an essential element of the FM-Haus raw material chain, manufacturing as it does sawn timber for planed products in prefabricated elements and modules.

 The products use only first-class strength graded spruce which FM-Haus buys from selected planer partners around Finland. There are several dimensions and lengths, and we use a lot of finger-jointed products, Sjöman says. Western Finnish spruce is also found in the FM-Hausmanufactured temporary facilities for the Finlandia Hall in Helsinki, Little Finlandia. This is an events centre of 2,600 m² and four halls hosting up to 800 occupants built to the rear of the Finlandia Hall by the Töölönlahti inlet. Little Finlandia is a modern wooden building designed by Aalto University architecture students, containing several new technical and architectural solutions.

– Everything is a pilot and a prototype. Wood has been used in the floors, ceilings, walls and external cladding. We began manufacture in March last year, and the first module and element installations began in June. The structure's lead time in production was four months in total, but now the project is completed for our part.

The building is customisable, and when the renovation is complete the intention is to move it elsewhere for service as a school or nursery school. In addition to being delighted with the project's environmental friendliness, innovation with new solutions and the building's real life-cycle philosophy, the CEO is also proud of the excellent outcome.

- For us, Little Finlandia has been a real chance to shine and an excellent past project, Sjöman says. \times

"We pay special attention to reusing and recycling wood material."

– Juhani Sjöman



EVERY NINE DAYS

Smooth collaboration with a shipping company is vital for an export-focused company. The tighter the conditions on the freight market, the more valuable reliable partners become. One such partner is Mann Lines, which ships most Westas products destined for the UK. he roots of the British shipping company Mann Lines go back to the 1950s, when it was known as Mann & Son. It initially focused on forwarding and agency, but later expanded to include distribution, warehousing, shipping, stowage and freight services. In the 1980s the Binks family became the owners, and in 1992 the company opened its first shipping line from Finland via Germany to Harwich in the UK. It was then operated under the Agroman Ferry Service name, but in 2001 was renamed as Mann Lines.

The container and ro-ro shipping operator Mann Lines is a specialist in vehicle transport, but every week it ships a great deal of other freight, from unworked stone to industrial machines and from steel beams to paper. The company has always focused on export, and the share of import has now shrunk further due to Brexit. Currently, the number one British export item on the Baltic ro-ro line is sawn timber. The Mann Lines group has an annual turnover of approximately €70 million, employs more than a hundred people and mainly operates on the Baltic Sea and in Central Europe. It has offices in eight ports and its main Finnish location is in Turku.

ALL-ROUND WELL-OILED COOPERATION

Mann Lines handles about 70% of Westas's shipments to the UK. Regular collaboration began around four years ago following competitive tendering and test batches. Sawn timber only used to end up on Mann Lines' ships by chance, but now the ML Freyja takes the blue packages into its hold whenever it calls at Turku. The route starts in Bremerhaven and goes via Harwich, Rotterdam, Cuxhaven and Paldiski to Turku, where the ship calls every nine days. The North Sea is stormy in winter, which is when the Kiel Canal, one of the world's busiest waterways, is a fallback route.

 We can sail via Kiel too if there are time pressures, but even though it saves time, it's an expensive route, says Timo Helanto, CEO of Mann Lines Finland.

As much as more than a thousand cubic metres of Westas' sawn timber may be loaded on the ship at any one time. For the company, the port of Harwich has an excellent location when the customers' perspective is taken.

"Our collaboration is natural; I don't have a bad word to say about it."

– Timo Helanto

- The port is near customers, and the goods reach their destinations quickly. Another advantage is that the UK's largest container port, Felixstowe, is almost directly across the River Orwell, says Westas' Logistics Manager **Arto Kuusiniemi**.

Helanto says that the companies maintain close contact and that Westas' batch sizes of several hundred cubic metres are well-suited to completing the Freyja's load.

– We go through deliveries and any priority levels they might have with Arto. Our collaboration is natural; I don't have a bad word to say about it. I wish working with everyone else were that easy!

At his desk, Kuusiniemi manages a balancing act in which sales, customers' preferences, production and shipping schedules have to be reconciled. The aim is always to place orders as early as possible based on monthly sales volumes, and the company's option of driving its own loads at its own pace directly to the Turku harbour warehouse offers flexibility. Nevertheless, from time to time they have almost been caught off quard.

- Sometimes they've accepted our goods for shipping the same day the ship is due to set sail. The service has always been first class, Kuusiniemi says.

CHALLENGES IN FREIGHT TRAFFIC

Freight prices are facing upward pressure. Alongside a sharp rise in fuel costs, increased inflation is seen in higher wages and thus prices. At the same time, the older issue of the container shortage besetting freight traffic is causing market shortages, which is bound to raise prices. Helanto says that sea logistics has been transformed, and that more and more eyes are turning to ro-ro vessels.

 When containers were cheap, nobody was interested in ocean-going ro-ros, but now goods are ever more frequently being packed on roll trailers. As a result, even they are starting to be in short supply.

Mann Lines has made efforts to ease the situation by prioritising deliveries and making internal reorganisations. To ensure the freight from Finland can be loaded on board, the company has set a limit on how much can be loaded at Paldiski in Estonia.

– The situation is tough, but in spite of it we've even managed to get some of our deliveries to the destination ahead of time, Kuusiniemi says.

On the turning day, the roll trailers, which are Mafis 2.5 m wide and 12 m long, are readily stowed in the Turku port warehouse, where it is easy to load them onto the ML Freyja, owned by the Italian Visemar shipping company. The load is measured in lane metres, which a full vessel can hold 2,800 of, or 3,000 including the decks.

Because the load is readily stowed on roll trailers, turning the ship round in the port only takes eight hours, Helanto says.

On top of the container shortage, freight traffic last year was hampered by delays, transfers and cancellations. In the UK, in particular, some ports were full due to congestion caused by a driver shortage. Helanto does not believe that the situation will ease in the near future.

 The shortage of professional drivers is severe, and young people have a high threshold for taking up underappreciated and underpaid hard work.

Helanto knows what he is talking about. Eleven years at sea and almost four decades working with seafaring have given him a good overview of the challenges of freight traffic – and of what is important in good collaboration.

– Knowing our customers is at the heart of what we do. That allows us to serve our customers, such as Westas, flexibly and with consideration for their individual needs. \times



THE ROTATING HEART OF THE SAWMILL

Many sawline operators and blade setters have a very precise idea of the kind of blade that will generate the best yield or sawn surface from the logs on their own sawline. The Toijalan Koneterä company listens carefully to its customers' wishes and tailors its circular saw blades to withstand heavy duty and high sawing speeds.

> he roots of Toijalan Koneterä are in Sulho Pietikäinen's garage and the varied career he had before that in the Toijalan Terätuote company. In 1986 Pietikäinen began to think about

starting his own blade service company, and soon his garage was full of machinery. The cousins of the current CEO, Sulho's son Juha, also came on board.

- Sulho slightly overcalculated the need for machines in the beginning, but there was soon a use for them when our old contacts started asking about new blades in addition to servicing old ones, Juha Pietikäinen remembers. have a very enerate the their own tenss carefully lar saw blades speeds. The garage also became too small very quickly, and the company first moved to a larger rental location and then to its own premises on Hallitie in the early 1990s. In the summer of 1994, during work on an extension to the premises, a fire broke out that almost completely destroyed the building.

 The situation was quite unusual. However, the company didn't stop working and we got a new roof installed before the winter, says Sales Manager Seppo Järvinen, who had started working for the company that spring.

TRUST IS CRUCIAL

Of Toijalan Koneterä's EUR 1.6 million turnover, almost 80% comes from the sawmill industry, representatives of which it serves as far away as Japan and Honduras. Blades are also supplied to the rubber, paper, plastic, panel, steel and foodstuff industries. The company has about twenty employees, the longest serving of which have worked there for thirty years. Finding new employees can be a struggle.

 No one studies to be a blade maker. It's a profession you learn on the job. We've been lucky in getting good employees, CEO Juha Pietikäinen says.

Sales Manager Seppo Järvinen says the product quality, speed and flexibility of service, and skills are success factors in a highly competitive market.

 But even if we are without a doubt the fastest manufacturer on the marker, the crucial thing is trust.
Everything is based on the strong relationship of trust we have built with our customers.

For example, the company has partnered with the Westas sawmill in Raunio for almost thirty years. This is no ordinary collaboration: while Koneterä's blades are usually dispatched by haulier to sawmills, the company travels to the Westas mill in Koski TL every Thursday itself. – We bring them fresh blades and pick up blades that are in service for intermediate sharpening and maintenance. It's also a chance for us to exchange thoughts with Westas employees and hear about any abnormalities from the horse's mouth.

MORE COMPLEX THAN IT APPEARS

A saw blade is not a mass-produced product, and barely a single blade is produced to be stored. The quality of a customised blade is ensured by top-class raw material, the consistent quality of heat treatment, straightening and tension, as well as the stability and grinding accuracy of the tips.

In a saw blade, the teeth do the real work. The correct geometry of tooth and blade ensure that the result of sawing is of consistent quality and sufficiently high yield. The blade may also contain cleaning tips whose primary duty is to keep the kerf free from sawdust to prevent the blade from warming and thus losing its tension. In addition, the cleaning tips provide a degree of stiffness to the blade body. "Heat grooves" may also be made in the blade to prevent the blade from deforming when it heats up.

The low-alloy tool steel used in the blades comes from Central Europe, and the share of raw materials in the price

"No one studies to be a blade maker. It's a profession you learn on the job. We've been lucky in getting good employees." of the finished product may be as much as half. In addition to the tree species and condition of the sawline used, the sawing speed, season and sawmill's geographical location must be considered when manufacturing and choosing blades. The sawmill's location has an impact on the timber material guality.

– When you saw in winter you often use slightly different models of blades than in the summer. The geometry of the tooth is designed for high blade impact. The blade material can also be different to a summer blade, says Production Manager Jari Hakala.

Hakala says that when the trees are frozen blades break more often than usual and that the blades are sharpened more frequently than in the summer. The tips on a single blade may be changed three to four times, but when the body of the blade wears out it reaches the end of its life cycle. The straightness and tension of every blade is always examined when the blade is serviced, and unsuitable ones are discarded.

The issues relating to the blade are of course also important for the sawing result. Toijalan Koneterä cooperates extensively with different hardware manufacturers.

– Close collaboration with machinery manufacturers is important because without a working blade the sawmill machine is practically useless. It's important to ensure how serviceable and indeed manufacturable the blade intended for the machine is before the machine plans are finalised, Hakala says.

CEO Juha Pietikäinen adds that Toijalan Koneterä also conducts continual product development.

– We look for new kinds of materials, we make small changes as the machines develop, and we strive to make our products even more durable. As a product, a circular saw blade is of course complete, but even an excellent product can always be improved. \times

– Juha Pietikäinen



WOOD ENERGY FOR EVEN MORE USERS

Over 40% of the total energy consumption in Finland is generated from renewable energy sources. The most significant source is wood-based energy, which accounts for more than 70%. The rising popularity of wood energy and the last, cold winter have meant a busy time for Westas. he year 2021 was an excellent one for Westas's bioenergy business. Delivery volumes grew by almost 20%, and growth is also expected this year. Bioenergy Manager **Juha Vahtera** lists the reasons behind the positive development.

– First of all, we had a cold winter, and both heating and power plants have been working at full power. Secondly, electricity prices, just like emission allowance prices, have been high. And with the reduced use of peat and coal, there's been demand for wood-based, zeroemissions trading value fuels. In spite of the fierce demand, the raw materials have been delivered without problems. The economic upswing has meant high output of both sawmill by-products and forest energy, and the carryover stocks after a warmer winter have been used. Compared to competing fuels, the price of wood-based fuels has remained stable, notwithstanding the price rise pressures from growing logistics costs.

TERMINALS IMPROVE SECURITY OF SUPPLY

The fuel supplied by Westas is currently being used to heat homes and workplaces in about ten municipalities in the region. For example, Westas supplies most of the woodbased fuel to the Loimaa and Paimio heat plants.

During the heating season up to a eight hundred lorryloads of fuel may be delivered a month. This equals approximately 25 loads a day. Westas supplies close to 0.8 TWh of energy to the heat and power plants in its procurement area annually, which corresponds to almost 400,000 solid cubic metres.

However, each year is different, and the need, price and availability of fuel depend on hard to predict factors. A fuel supplier must every year prepare for the harshest possible winter, but when the winter is mild, fuel remains in the warehouse. Growing stock levels, in turn, lead to oversupply and put downward pressure on prices. Last winter showed the potential of wood energy, but also problems with difficult solutions.

- The bioenergy business is seasonal, and the work of a year would be done in a period of about six months. The availability of chipping machinery and transport vehicles easily turns into a bottleneck, because contractors don't find investing in such seasonal machinery very attractive. That's why we've invested in the strategic location of terminals, Vahtera says. The company has a total of seven environmental permit-holding terminals, four rented and three proprietary. A new, four-hectare terminal area has just been opened in the Turku area and earmarked for development in the future.

 We've made significant investments in our terminals and will continue to do so. The terminals ensure our security of supply and help us guarantee ready fuel availability and immediate delivery to the plant even when the mercury creeps down to minus twenty, Vahtera stresses.

TRUST IN THE FUTURE

The past year has been an excellent one on the sawn timber market, which has naturally ensured the availability of wood energy. However, the sawing business is sensitive to economic cycles and it is likely that at some point the sawn timber volumes will decrease. How can sufficient fuel supplies be guaranteed then?

– I believe that the interface between pulpwood and energy wood will change in future. Then, if the market situation allows, raw material that meets the current measurements for pulpwood will be used as energy wood, which will level out the cyclical fluctuations, Vahtera says. Westas is a responsible market actor, fuel supplier and timber procurer: the company operates locally and procures raw material with conformity for certificate requirements, and its plants and terminals hold environmental permits which adhere to requirements. Westas also wants to reduce the carbon footprint of its operations.

– At present, we power our chipping with a combustion engine, but it's clear that electric machines will replace the current machinery over the longer term. That's not possible for the moment, but it's the direction we're inevitably going in.

Vahtera is confident that in spite of the public criticism of wood burning, there will continue to be demand for wood energy in the future. The Finnish conditions and power plant structure support this view.

— In these northern climes, we need both heat and electricity. Now and in the future district heating has to be generated by burning something, and as the use of fossil fuels wanes, only wood-based options will remain. In addition, almost all wood-burning plants in Finland were built this century, so most of them are either less than five years old or just being built. Given these factors, it's clear that the use of bioenergy is only going to grow. X

"The terminals ensure our security of supply and help us guarantee ready fuel availability."

– Juha Vahtera





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THANK YOU FOR YOUR CO-OPERATION.

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